

# Geared motors



G-motion const

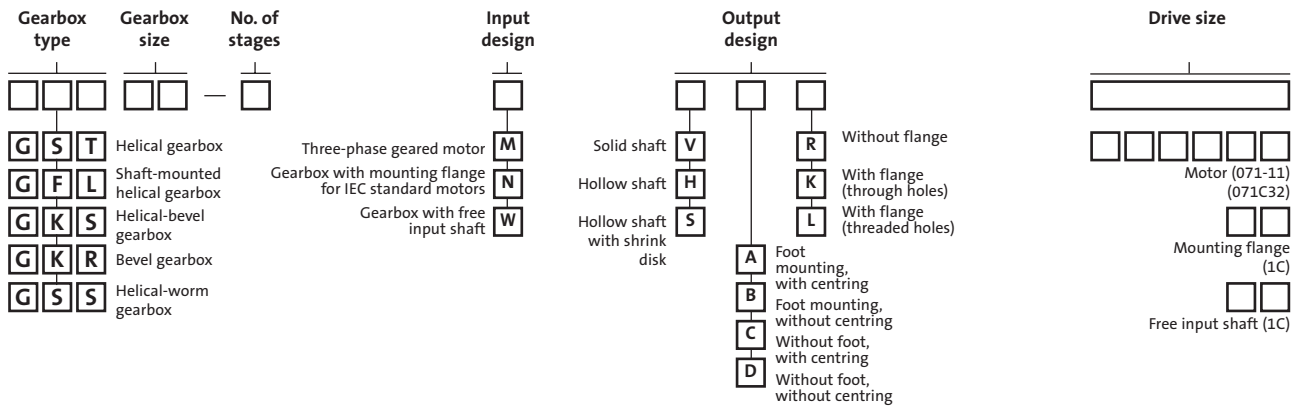
G-motion const

Lenze

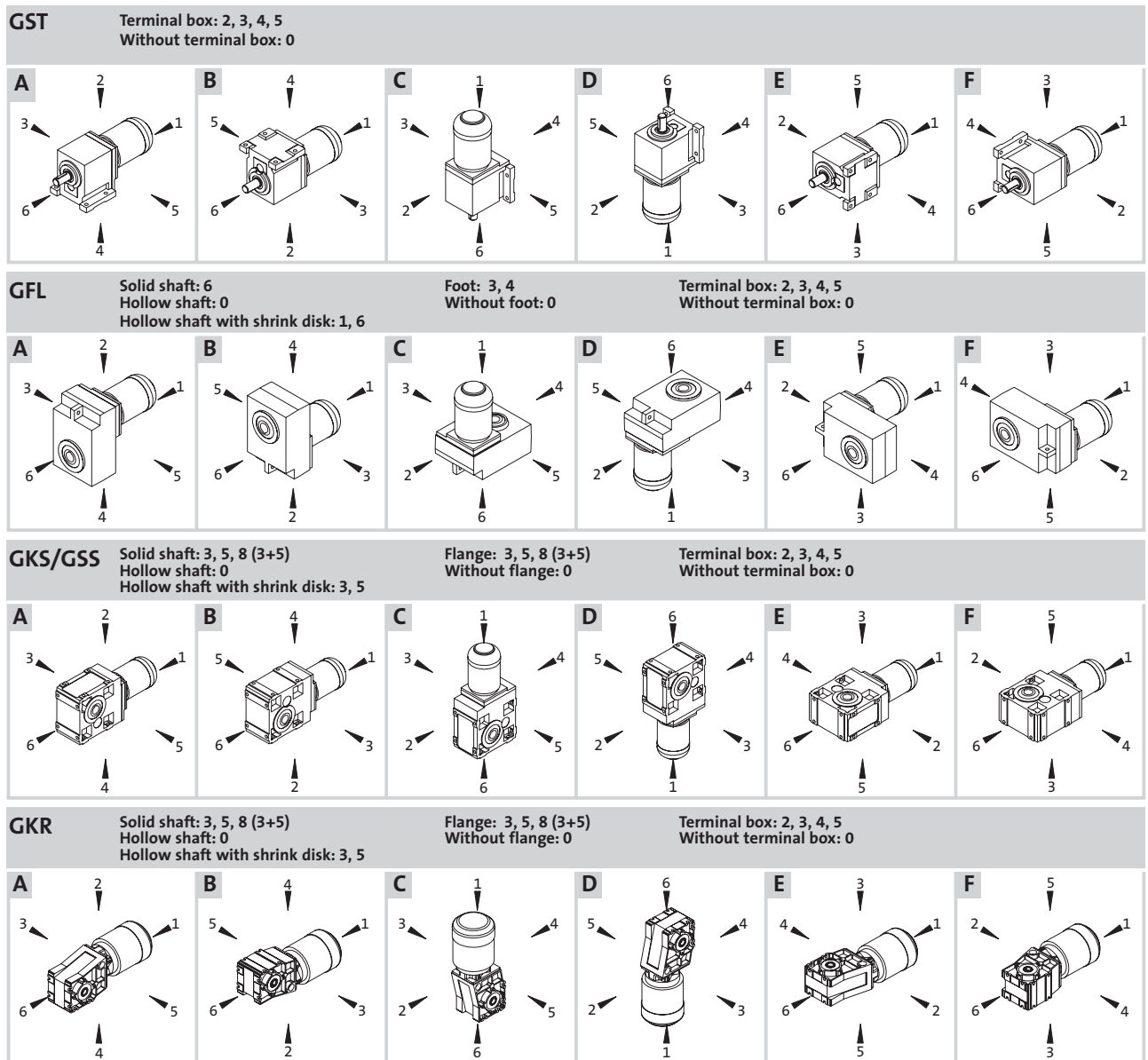
Lenze

# Product code | Geared motors

## Type designation

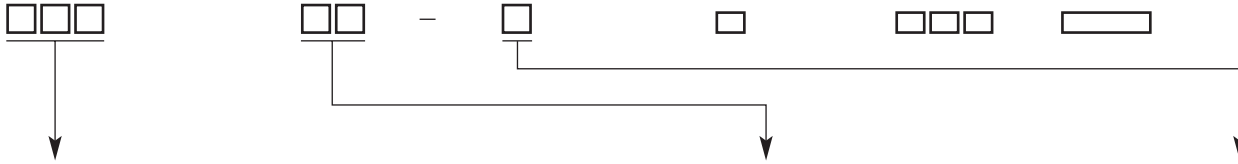



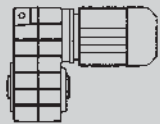
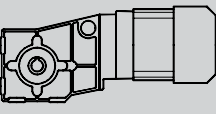
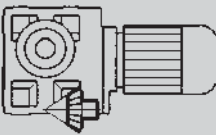
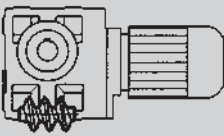
## Mounting position (A-F) and position of system elements (1-6)



# Product code | Geared motors

## Type designation



Gearbox type	Gearbox size							No. of stages	
	03	04	05	06	07	09	11	14	
<b>GST</b> 		▲	▲	▲	▲	▲			1
	▲	▲	▲	▲	▲	▲	▲	▲	2
			▲	▲	▲	▲	▲	▲	3
<b>GFL</b> 		▲	▲	▲	▲	▲	▲	▲	2
			▲	▲	▲	▲	▲	▲	3
<b>GKR</b> 	▲	▲	▲	▲					2
<b>GKS</b> 		▲	▲	▲	▲	▲	▲	▲	3
			▲	▲	▲	▲	▲	▲	4
<b>GSS</b> 		▲	▲	▲	▲				2
			▲	▲	▲				3

# Geared motors | The system

The rapid pace of development in electronic drive technology is making continuous improvement possible in industrial production processes. It is for this reason that compact distributed drive units are increasingly replacing large central drives – and providing increased speed and improved dynamics. Modern mechatronic systems like those used for example for positioning tasks, require geared motors with low wear, high efficiency and minimum backlash. Lenze can provide a complete range both for mechanical and electronic drive technology applications.

In 1995 Lenze launched the G-motion range, which comprises single-stage and two-stage GST helical gearboxes, two-stage GSS helical-worm gearboxes, two-stage GFL shaft-mounted helical gearboxes (low-profile gearboxes) and three-stage GKS helical-bevel gearboxes. 1999 saw the market launch of Lenze's two-stage GKR bevel gearboxes with aluminium housings. The entire range of geared motors is based on a modular system, which makes it possible to find the ideal operating point for every

customer application. Tried and tested standard products can be used as component parts in custom applications. This G-motion const catalog contains information about geared motors with constant output speed in the power range from 0.06 ... 45 kW. Drives from 0.06 ... 45 kW can be selected in easy-to-use selection tables.

The complete G-motion range also includes solutions for distributed drive systems and servo technology as well as geared motors with mechanical speed control.



## New in this catalog:

### ► Gearboxes

Bevel gearboxes  
GKR 06-2M/2N

### ► Motors

New 4-pole motors in the  
power range  
2.2 ... 9.2 kW.



*Helical geared motors (GST)*



*Shaft-mounted helical geared motors (GFL)*



*Helical-bevel geared motors (GKS)*

# G-motion | The range

## Geared motors and gearboxes with constant output speeds

- ▶ Helical geared motors
- ▶ Shaft-mounted helical geared motors
- ▶ Bevel geared motors
- ▶ Helical-bevel geared motors
- ▶ Helical-worm geared motors

## G-motion const



## Geared motors with built-in 8200 motec frequency inverter

- ▶ Helical geared motors
- ▶ Shaft-mounted helical geared motors
- ▶ Bevel geared motors
- ▶ Helical-bevel geared motors
- ▶ Helical-worm geared motors

## G-motion motec



## Geared motors with dynamics

- ▶ Helical geared motors
- ▶ Shaft-mounted helical geared motors
- ▶ Bevel geared motors
- ▶ Helical-bevel geared motors
- ▶ Helical-worm geared motors

## G-motion servo



## Geared motors with mechanical speed control

- ▶ Planetary variable speed drives
- ▶ Belt variable speed drives
- ▶ Variable speed pulleys

## G-motion m-var



*Bevel geared motors (GKR)*



*Helical-worm geared motors (GSS)*

# Contents | G-motion const

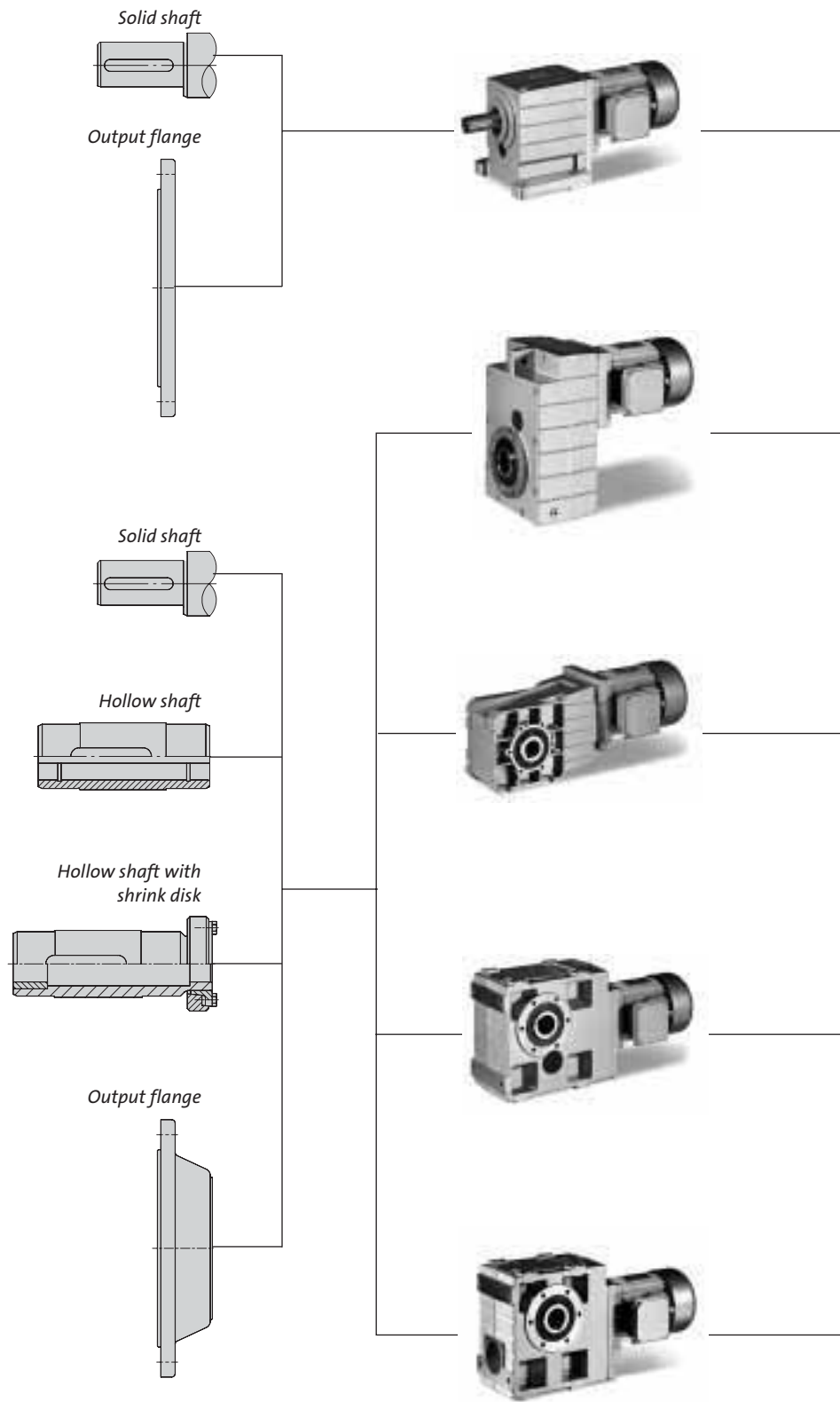
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# General | G-motion const

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Geared motors for constant output speeds with high functionality due to numerous gearbox and motor options.

1





**Helical geared motors  
GST**

0.06 to 45 kW  
Parallel-axial solid shaft geared motors with foot and flange mounting. As on all other models, the optimised tooth geometry ensures that the gearboxes run particularly smoothly.

**Shaft-mounted helical geared motors GFL**

0.12 to 45 kW  
Recommended for use as compact helical geared motors with hollow shaft mounting. Interference connections without keyways and high quality teeth minimise output backlash on Lenze geared motors.

**Bevel geared motors  
GKR**

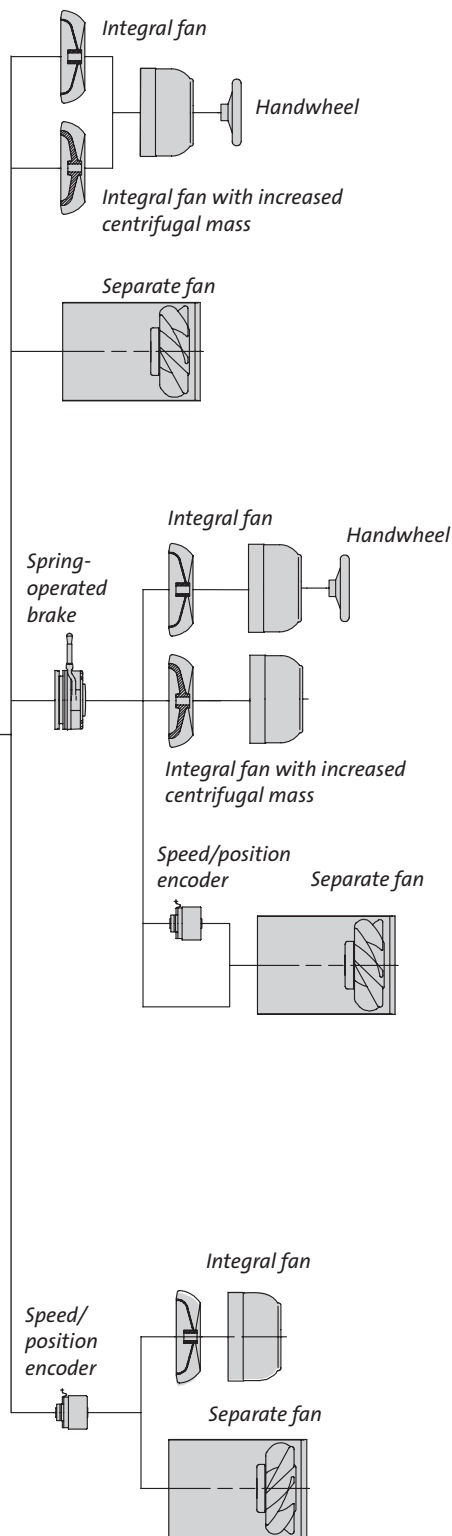
0.06 to 7.5 kW  
Right-angle geared motors in the low torque range with wear-free bevel gears. The comparatively high efficiency means that even in this power range, energy savings can be made.

**Helical-bevel geared motors  
GKS**

0.12 to 45 kW  
Comparatively high-efficiency solid shaft or hollow shaft right-angle geared motors. Pinpoint output speeds are possible due to the ratio range, which has been carefully stepped.

**Helical-worm geared motors  
GSS**

0.12 to 15 kW  
Comparatively inexpensive right-angle geared motors with high power density. They can be easily integrated into the machine structure due to an output side pitch circle and mounting surfaces on three sides.



### Geared motors

Our quality standards in development, material selection, production and assembly mean that Lenze geared motors in the G□□motion range are able to meet the highest requirements in terms of a durable drive system. The striking design – cubic and compact – fits perfectly with modern industrial design trends.

- ▶ **Geared motors power range**  
Lenze geared motors are available in a power range from 0.06 ... 45 kW.
- ▶ **Operational reliability for use in industrial applications**  
Even under harsh application conditions, the reliability of the motors is ensured by:
  - Insulation class F
  - IP 55
- ▶ **Options**  
Motor options can be supplied for motors from 0.37 ... 9.2 kW and with some limitations for 0.06 ... 0.25 and 11 ... 45 kW.
  - Spring-operated brake
  - Separate fan
  - Variants for thermal monitoring
  - Pluggable connectors
  - Speed/position encoder
  - Increased centrifugal mass
  - Handwheel
  - Second shaft end
  - Condensation drain holes
  - Protection cover
- ▶ **Drive controller compatibility**  
The double-coated wire winding with additional phase insulation provides extremely high dielectric strength and has excellent mechanical resistance.

### Gearboxes

- ▶ **Compact**  
The modular concept and the high power density due to ground gears with optimised gear profiles make extremely compact designs possible.
- ▶ **Adaptable and compatible**  
Numerous input and output designs mean that Lenze gearboxes can be adapted to almost any drive task.
- ▶ **Easy to integrate**  
The highly functional housings enable Lenze gearboxes to be integrated easily into the machine environment.
- ▶ **Quiet**  
The optimum teeth geometry reduces the generation of noise.
- ▶ **Carefully stepped output speeds**  
The wide ratio range of the gearboxes combined with the small ratio step  $\varphi = 1.12$  enables the required output speed range to be selected with precision.
- ▶ **Reduced play**  
The two-stage basic concept (helical-bevel gearboxes are three-stage), connecting elements with reduced play and the high quality of the toothing due to precision manufacturing results in reduced output backlash in comparison with similar geared motors.

### Abbreviations used in this catalog

$\alpha$		Angle of radial force	$M_r$	[Nm]	Rated torque
$c$		Load capacity of gearboxes/geared motors	$M_\Delta$	[Nm]	Motor starting torque
$d_w$	[mm]	Effective diameter of the transmission element	$M_B$	[Nm]	Holding torque of brake
$\cos\varphi$		Power factor of the motor	$M_{cont}$	[Nm]	Continuous torque
$\cos\varphi_N$		Power factor for asynchronous motors	$M_{stall}$	[Nm]	Stall torque of motor
$F_a$	[N]	Applied axial force	$M_l$		Maximum torque factor
$F_a$	[N]	Permissible axial force	$M_{max}$	[Nm]	Maximum torque
$F_{a Tab}$	[N]	Table value of axial force	$M_{perm}$	[Nm]	Permissible torque
$f_{ch}$	[kHz]	Switching frequency	$n_1$	[min <sup>-1</sup> ]	Input speed
$f_d$	[Hz]	Field frequency	$n_2$	[min <sup>-1</sup> ]	Output speed
$F_l$		Mass acceleration factor	$n_r$	[min <sup>-1</sup> ]	Rated speed
$f_{max}$	[Hz]	Set maximum frequency	$n_{max}$	[min <sup>-1</sup> ]	Maximum speed
$f_r$	[Hz]	Rated frequency	$P_1$	[kW]	Input power
$F_r$	[N]	Applied radial force	$P_2$	[kW]	Output power
$F_{r Tab}$	[N]	Table value of radial force	$P_r$	[kW]	Rated power
$F_{r perm}$	[N]	Permissible radial force	$P_V$	[kW]	Inverter power loss
$f_w$		Additional load factor of applied radial force	$R$	[Ω]	Resistance
$f_\alpha$		Effective direction factor of applied radial force	$S_r$	[kW]	Inverter output power
$f_z$		Additional radial force factor of the transmission element	$T_A$	[°C]	Ambient temperature during operation
$i$		Transmission ratio	$U_{DC}$	[V]	DC bus voltage
$\varphi$		Ratio step	$U_r$	[V]	Rated voltage
$\eta$		Mechanical efficiency	$U_{mains}$	[V]	Mains voltage
$I_0$	[A]	Continuous standstill current	IP		International protection code
$I_A$	[A]	Motor starting current	IEC		International Electrotechnical Commission
$I_{max}$	[A]	Maximum output current	DIN		Deutsches Institut für Normung
$I_r$	[A]	Rated current	VDE		Verband deutscher Elektrotechniker
$I_{mains}$	[A]	Rated mains current	USDA		United States Department of Agriculture
$J_{ext}$	[kgm <sup>2</sup> ]	Moment of inertia of the machine to be driven, reduced to the motor shaft	NEMA		National Electrical Manufacturers Association
$J_{load}$	[kgm <sup>2</sup> ]	Moment of inertia of the loaded machine	AC		Alternating current/voltage
$J_{mot}$	[kgm <sup>2</sup> ]	Moment of inertia of the motor	DC		Direct current/voltage
$J_A$	[kgm <sup>2</sup> ]	Moment of inertia of the drive, reduced to the input shaft	EMC		Electromagnetic compatibility
$J_B$	[kgm <sup>2</sup> ]	Moment of inertia of the brake	EN		European standard
$k$		Application factor (according to DIN 3990)	CE		Communauté Européene
$L$	[mH]	Inductance	IM		International Mounting Code
$m$	[kg]	Mass			
$M_0$	[Nm]	Continuous standstill torque			
$M_1$	[Nm]	Input torque			
$M_2$	[Nm]	Output torque			

### General information about the data provided in this catalog

#### Ratings, torques and speeds

The ratings, torques and speeds specified in this catalog are rounded values and are valid under the following conditions:

- ▶ Running time/day = 8h (100% DT)
- ▶ Duty class I at 10 switching operations/h
- ▶ Mounting positions and models in this catalog
- ▶ Standard lubricant
- ▶  $f_{\text{mains}} = 50 \text{ Hz}$  constant
- ▶  $T_{\text{amb}} = 20^\circ\text{C}$  for gearboxes  
40°C for motors (in accordance with EN 60034)
- ▶ Installation height  $< = 1000 \text{ m}$  above mean sea level  
The rated power specified for motors and geared motors applies to operating mode S1 in accordance with EN 60034.

If your operating conditions differ, the values that can be obtained may deviate from those specified.

If you are operating under extreme conditions, please contact your nearest Lenze representative.

#### Load capacity $c$ of gearboxes

Parameter for the load capacity of Lenze gearboxes and geared motors.

- ▶  $c$  is the ratio of the permissible rated torque of the gearbox to the rated torque supplied by the drive component (e.g. the built-in Lenze motor).
- ▶ The value of  $c$  must always be greater than the value of the operating factor  $k$  calculated for the application.

#### Operating factor $k$ (corresponding to DIN 3990)

Takes into account the influence of temporally variable loads which are actually present during the anticipated operating time of gearboxes and geared motors.

$k$  is determined by

- ▶ the type of load
- ▶ the load intensity
- ▶ temporal factors

**We want to be sure that you receive the correct products in good time. In order to help us to do this, please make sure you provide complete ordering data. Use the checklist below and the order information to help you.**

#### Checklist

In order to receive the correct products in good time, please provide the following information:

- ▶ Your address and ordering data
- ▶ Our product code for the individual products in this catalog
- ▶ Your delivery data, i.e. delivery date and delivery address

#### How to order

Please use this step-by-step guide and the fax form to ensure that you provide all the necessary information in the correct format. It makes ordering your tailor-made drive extremely easy:

- ▶ Make a copy of the fax order form.  
See Section 9.
- ▶ Enter the order data.
- ▶ Post or fax the form to your Lenze sales office.  
A list of Lenze sales offices can be found at the end of this catalog.

#### Delivery

- ▶ All products are packed appropriately and of course checked prior to delivery.

## A step-by-step guide to ordering your drive

- Cross-reference
- Result

1

### 1. Dimension the drive system

- Dimensioning section

### 2. Specify the type designation

- Product code, selection table
- Gearbox type, gearbox frame size, no. of stages  
Example: GST 07-2
- Drive design, motor frame size  
Example: M, 090C32

### 3. Specify the ratio

- Selection table  
Example:  $i = 56.250$

### 4. Specify the output end design

- Product code  
Drive dimensioning section, **Gearbox designs**
- Solid shaft, housing with foot, without flange  
Example: V, B, R

### 5. Specify the mounting position and position of system elements

- Product code  
Example: Mounting position A  
Terminal box in position 5

### 6. Specify the colour

- Drive dimensioning section, **Gearbox designs**  
Example: Paint colour RAL 9018

### 7. Specify the gearbox options

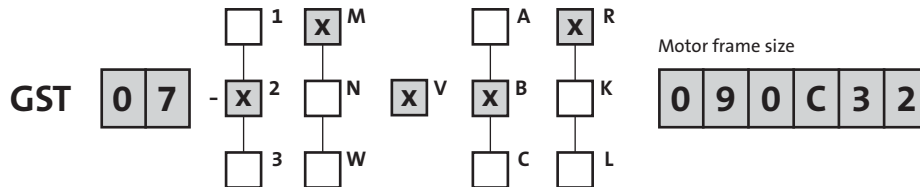
- Drive dimensioning section, **Gearbox designs**  
Example: Gearbox with ventilation

### 8. Specify the motor options

- Motors section  
Example: Separate fan 3~
- Product code  
Example: Separate fan terminal box in position 2

## A step-by-step guide to ordering your drive

Items      i =



### Additional ordering data

#### Dimensions

Flange a2 =  mm

#### Mounting position

<sup>A</sup>  <sup>B</sup>  <sup>C</sup>  <sup>D</sup>  <sup>E</sup>  <sup>F</sup>

#### Position of system elements

Terminal box  
2  3  4  5

#### Colour

Standard  
GST 03  No paint (aluminium housing)  
GST 04...14  RAL 9018 paint (papyrus white)  Grey primer

### Options

#### Ventilation

Ventilation units for frame sizes 05...07  Compensator for frame sizes 09...14 in mounting position C

### Motor options

#### Combination

Separate fan  Brake + integral fan  Brake + separate fan

#### Separate fan

1~  3~  
Separate fan terminal box in position  <sup>2</sup>  <sup>3</sup>  <sup>4</sup>  <sup>5</sup>

## Dimensioning

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### How the duty cycle affects rated data

The operating mode is important when selecting a motor. For example, the temperature rise on a motor subject to short-term load will be lower than that on a motor subject to long-term load and can therefore be set to a lower value. Duty cycles S1 to S8 to EN 60034 apply.

Operation at increased power is possible in duty cycles other than S1. The table below contains guide values for increased power  $P_{perm}$  for operating modes S2, S3 and S6.

#### Continuous operation S1

The operating time at rated power is long enough for the machine to reach steady-state temperature. The motor operates continuously at rated power.

#### Short-term operation S2

In comparison with the subsequent pause, the operating time is too short for the machine to reach steady-state temperature. During the subsequent lengthy pause, the motor cools down to the initial temperature.

#### Intermittent operation S3, S4, S5

Cycles of the same type combine to form a sequence. The cycle time is usually 10 minutes.

- ▶ S3: The start-up current is not significant for the temperature rise of the motor.
- ▶ S4: The start-up current contributes to the temperature rise of the motor.
- ▶ S5: The start-up current and braking current contribute to the temperature rise of the motor.

#### Continuous operation with intermittent loading S6

The motor continues to be ventilated during the no-load phases, enabling it to cool down.

#### Uninterrupted operation with acceleration and braking S7

The motor runs almost without pauses.

#### Uninterrupted operation S8 with pole-changing

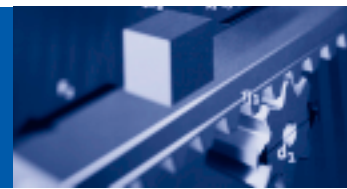
The machine runs constantly under load but with frequent speed variation.

### Increased power in duty cycles S2, S3 and S6

Duty cycle S2		Duty cycle S3		Duty cycle S6	
Operating time [min]	$\frac{P_{perm}}{P_r}$	Operating time [%]	$\frac{P_{perm}}{P_r}$	Operating time [%]	$\frac{P_{perm}}{P_r}$
10	1.4 ... 1.5	15	1.4 ... 1.5	15	1.5 ... 1.6
30	1.15 ... 1.2	25	1.3 ... 1.4	25	1.4 ... 1.5
60	1.07 ... 1.1	40	1.15 ... 1.2	40	1.3 ... 1.4
90	1.0 ... 1.05	60	1.05 ... 1.1	60	1.15 ... 1.2

### How the operating frequency affects rated data

Frequency	Voltage	Power	Speed	Torque	Starting torque
f in Hz	$\frac{U}{U_r}$ in %	$\frac{P}{P_r}$ in %	$\frac{n}{n_r}$ in %	$\frac{M}{M_r}$ in %	$\frac{M_A}{M_{Ar}}$ in %
50	100	100	100	100	100
60	100	100	120	83	70
60	120	120	120	100	100



### Power derating

#### Effect of the installation height

How the installation height above mean sea level affects rated power				
H [m]	≤ 1000	2000	3000	4000
$\frac{P_h}{P_r}$	1	0.95	0.90	0.85

#### Effect of the ambient operating temperature

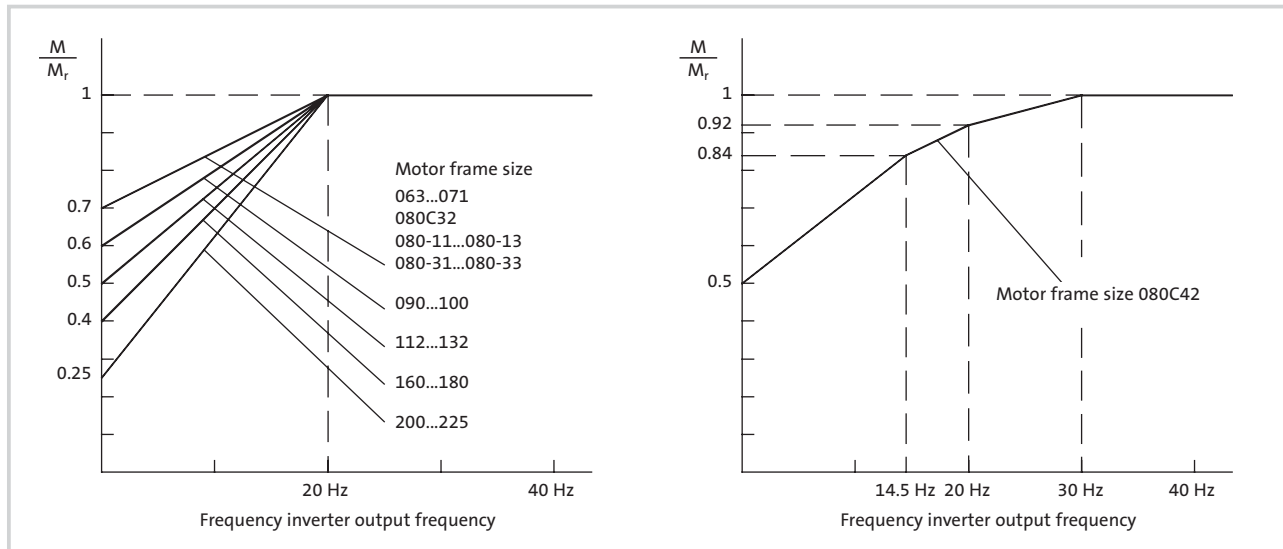
How the ambient operating temperature $T_{amb}$ affects rated power					
$T_{amb}$ [°C]	≤ 40	45	50	55	60
$\frac{P_{\vartheta}}{P_r}$	1	0.95	0.90	0.85	0.80

#### Calculating the derated power

$$P_{red} = \frac{P_h}{P_r} \cdot \frac{P_{\vartheta}}{P_r} \cdot P_r$$

### Torque derating

Torque derating dependent upon motor frame size with self-ventilation and operation on frequency inverter



### Thermal power limit

The permissible gearbox continuous power is restricted by:

- ▶ The mechanical rating, defined by the material strength of the individual components or
- ▶ The thermal power limit, defined by the heat balance.

The thermal power limit may be lower than the mechanical rating indicated in the selection tables.

The thermal power limit is determined by:

- ▶ Losses in the lubricant. These are determined by the mounting position and the circumferential speed of the gears.
- ▶ The load and the speed
- ▶ The ambient conditions: Temperature, air circulation, heat input or dissipation via shafts and the substructure.

2

Please contact Lenze

- ▶ If you are using the following gearbox model, size and ratio combinations at input speed  $n_1 > 1500$  rpm:

Gearbox model	Gearbox sizes	Ratios $i \leq$
Helical gearbox GST	07, 09, 11, 14	10
Shaft-mounted helical gearbox GFL	09, 11, 14	16
Helical-bevel gearbox GKS	09, 11, 14	25

... or if the input speeds  $n_1$  listed are exceeded:

		Drive size		
Input design	M	063 ... 100	112 ... 132	160 ... 225
	N, W	□A ... □E	□F ... □G	□H ... □K
$n_1$ for mounting positions A, B, E, F		4000 rpm	3000 rpm	2000 rpm
$n_1$ for mounting positions C, D		3000 rpm	1500 rpm	1500 rpm

### Possible ways of extending the field of operation

What to do	
Increase the permissible temperature range of the gearbox	<ul style="list-style-type: none"> <li>▶ Synthetic lubricant (option)</li> <li>▶ Shaft sealing rings made from FP material/Viton (option)</li> </ul>
Reduce the power loss	<ul style="list-style-type: none"> <li>▶ Synthetic lubricant (option)</li> <li>▶ Reduce the amount of lubricant used</li> </ul>
Increase the heat dissipation	<ul style="list-style-type: none"> <li>▶ Possible air convection on the machine/system</li> <li>▶ Fan cooling (for example pneumatic supply line of the driving motor)</li> <li>▶ Oil cooling</li> </ul>

### 1. Calculate the required load capacity

Work out the output torque  $M_2$  and speed  $n_2$  required

Calculate the required motor power  $P_1 = \frac{M_2 \cdot n_2}{9550 \cdot \eta}$

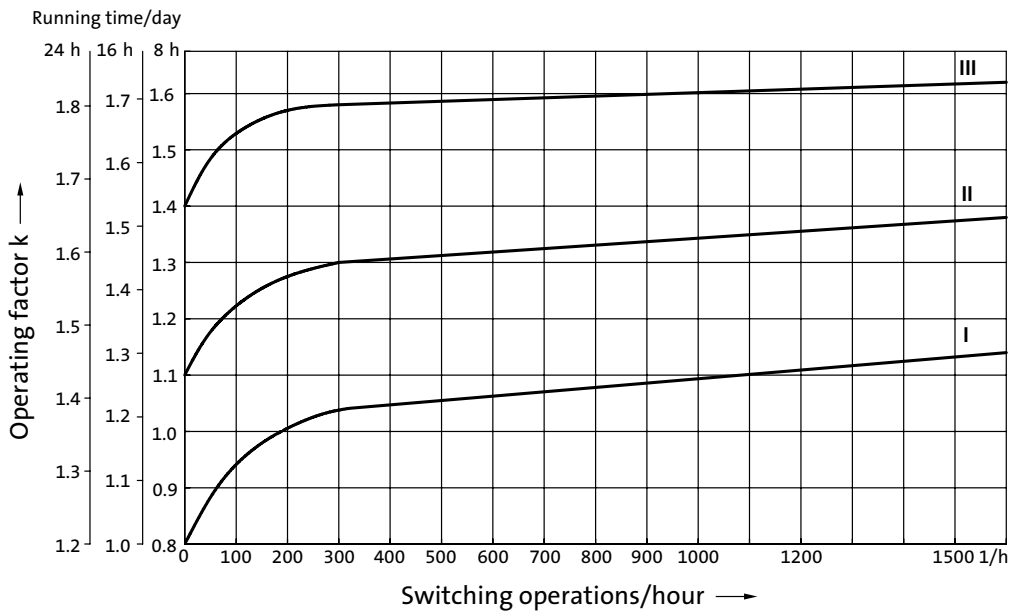
Calculate the duty class:

Duty class	Type of load	Intensity	
I	Smooth running, minor or negligible shocks	$F_I \leq 1.25$	$F_I$ (geared motor) = $\frac{J_{ext} + J_{mot}}{J_{mot}}$
II	Irregular running, average shocks	$1.25 < F_I \leq 4$	
III	Irregular running, major shocks and/or alternating loads	$F_I > 4$	$F_I$ (gearbox) = $\frac{J_{ext} + J_A}{J_A}$

Calculate the temporal factors:

- ▶ Running time/day
- ▶ Switching operations/hour

Use the diagram to determine the operating factor  $k$  of the machine



Requirement for geared motor:  $c$  (selection table)  $\geq k$   
 Requirement for gearbox:  $M_{2\text{ perm}}$  (selection table)  $\geq M_2 \cdot k$



## 2. Calculate the axial and radial forces applied to the gearbox shaft

Work out the axial and radial forces applied  
Approximate calculation of radial forces:

$$F_r = 2000 \cdot \frac{M_2 \cdot f_z}{d_w [\text{mm}]}$$

$f_z$	Transmission element
1.12	Gears
1.25 ... 1.4	Chain wheels
1.5	Toothed-belt pulleys
1.5 ... 2.0	Small V-belt pulleys depending on pretension

Requirement:

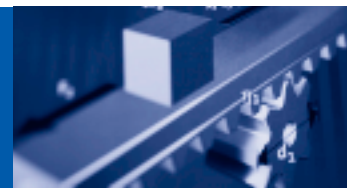
- ▶  $F_{rperm} \geq F_r$   
( $F_{rperm}$  taken from gearbox-specific data)
- ▶  $F_{aperm} \geq F_a$   
( $F_{aperm}$  taken from gearbox-specific data)

# Drive dimensioning

## Gearbox versions

### General data

		GST	GFL	GKR	GKS	GSS
<b>Housing</b>	Version	Cuboid				
	Material	Aluminium/Cast iron				
<b>Solid shaft</b>	Version	With featherkey to DIN 6885				
	Tolerance	k6 (d ≤ 50 mm) m6 (d > 50 mm)				
	Material	Tempered steel C45/42CrMo4				
<b>Hollow shaft</b>	Version	–	H: With keyway S: Smooth			
	Tolerance	–	Bore H7			
	Material	–	Tempered steel C45			
<b>Toothed parts</b>	Version	Optimised tooth flanks and profile geometry Ground tooth flanks				
	Material	Case hardened steel				
<b>Shaft-hub connection</b>		1st stage/prestage/helical (bevel) gearbox: Friction-type connection Output stage (= 2nd, 3rd or 4th stage): Friction-type or positive-fit connection				
<b>Shaft sealing rings</b>	Version	With dust protection lip				
	Material	NB/FP				
<b>Bearings</b>	Version	Ball bearing/tapered-roller bearing depending on size and version				
<b>Lubricants</b>	Version	In accordance with DIN 51502				
	Fill volumes	Depends on the mounting position ⇨ Operating Instructions				
<b>Mechanical efficiency</b>	At rated torque	0.95 ≤ η ≤ 0.97	0.95 ≤ η ≤ 0.97	0.95 ≤ η ≤ 0.96	0.92 ≤ η ≤ 0.95	0.75 ≤ η ≤ 0.90 ▶ Not dep. on transmiss. ratio ▶ At n <sub>1</sub> = 1400 rpm ▶ Housing at operating temperature and teeth run in
	<b>Noise</b>	Does not exceed the emission values specified in VDI Guideline 2159				



### Basic versions

Gearbox type	Gearbox size	No. of stages	Input design	Output design										Ventilation units	Lubricants		Colour				
				Shafts [mm]			Housing				Flange [mm]				Possible combinations Housing with flange	Mineral CLP 460	Synthetic CLP PG 460	Paint RAL 9018 (papyrus white)	Grey primer		
				Solid shaft	Hollow shaft	Hollow shaft with shrink disk	Foot mounting with centring and pitch circle	Foot mounting without centring	With centring and pitch circle	With pitch circle	Without flange	With flange (through holes)	With flange (threaded holes)								
Product code	V	H	S	A	B	C	D	R	K	L											
GST	03	2	M	N	14x28														1)		
					20x40																
	04	1	M	N	16x32																
					20x40				▲	▲	▲				120/140						
	05	1	M	N	20x40																
					25x50				▲	▲	▲				120/140	120/140					
	06	1	M	N	25x50																
					30x60				▲	▲	▲				160/200	160/200					
	07	1	M	W	30x60																
					40x80				▲	▲	▲				200/250	200/250					
	09	1	M	W	40x80																
					50x100				▲	▲	▲				250/300	250/300					
	11	2/3	M	W	60x120																
					80x160				▲	▲	▲				300/350	300/350					
14	2/3	M	W	80x160																	
								▲	▲	▲				350/400	350/400						
GFL	04	2	M	N	25x50	25/30	25/30														
					30x60	30/35	35														
	06	2/3	M	N	40x80	40/45	40														
					50x100	50/55	50	Feet in position 3 or 4 Centring and pitch circle in position 6	Feet in position 3 or 4 Pitch circle in position 6	Centring and pitch circle in position 6	Pitch circle in position 6										
	09	2/3	M	W	60x120	60/70	65														
					80x160	70/80	80														
	11	2/3	M	W	80x160	70/80	80														
100x200					100	100															
GKR	03	2	M	N	20x40	18/20	20														
					20x40	20/25	20	Feet in position 4+6 Centring and pitch circle in position 3+5	Feet in position 4+6 Pitch circle in position 3+5												
	05	2	M	N	30x60	30/35	30/35														
					35x70	40/45	40														
	06	2	M	N																	
GKS	04	3	M	N	25x50	25/30	25/30														
					30x60	30/35	35														
	06	3/4	M	N	40x80	40/45	40														
					50x100	50/55	50	Feet in position 2+4+6 Centring and pitch circle in position 3+5	Feet in position 2+4+6 Pitch circle in position 3+5												
	09	3/4	M	W	60x120	60/70	65														
					80x160	70/80	80														
	14	3/4	M	W	100x200	100	100														
GSS	04	2	M	N	25x50	25/30	25/30														
					30x60	30/35	35														
	06	2/3	M	W	40x80	40/45	40														
					50x100	50/55	50	Feet in pos. 2+4+6 Centring and pitch circle in position 3+5	Feet in pos. 2+4+6 Pitch circle in position 3+5												

1) Without painting (aluminium housing)

2) Without painting / primer (aluminium housing) for version "Drive M"

### Options

				Shaft			Options						Lubricants		Colour				
Gearbox type	Gearbox size	No. of stages	Input design	2nd solid shaft end	Reinforced shaft bearing	Shaft sealing ring FP (Viton)	Rubber buffer set	Torque plate on pitch circle	Torque plate on housing foot	Hollow shaft jet-proof cover	Shrink disc cover	Ventilation units	Reservoir (ventilation) for mounting position C	Synthetic CLP HC 320	Food-compatible CLP HC 220	Special paint to RAL number	Grey primer		
Product code				V															
GST	03	2	M														▲		
	04	1	N																
		2																	
	05	1	M		▲														
		2/3																	
	06	1	N			▲								▲		▲			
		2/3																	
	07	1	W																
		2/3																	
	09	1	M																
		2/3																	
	11	2/3	N																
		2/3																	
	14	2/3	W																
2/3																			
GFL	04	2	M																
	05	2/3																	
		2/3																	
	07	2/3		N		2)	▲	▲											
		2/3																	
	09	2/3		W															
2/3																			
14	2/3																		
	2/3																		
GKR	03	2	M				▲	▲											
	04	2																	
		2																	
	06	2																	
GKS	04	3	M																
	05	3/4																	
		3/4																	
	07	3/4		N		2)	▲												
		3/4																	
	09	3/4		W															
3/4																			
14	3/4																		
	3/4																		
GSS	04	2	M																
	05	2/3																	
		2/3																	
	07	2/3																	

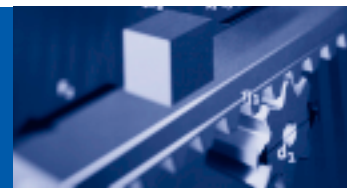
1) Standard bearing

2) On request

3) Torque derating required:  $M_2 \text{ perm.} = M_2 \cdot 0.8$

4) For version "drive N" basic design





### Gearboxes with mounting flange Version N

#### Mounting flange:

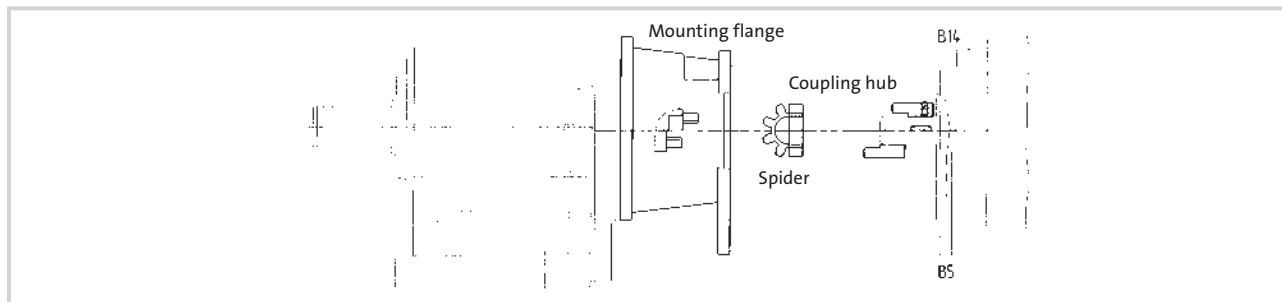
- ▶ Flange dimensions suitable for motors to IEC 72/DIN 42948
- ▶ Shaft in two bearings
- ▶ Gearbox half-coupling integrated into the shaft

#### Spider (coupling element):

- ▶ Torsionally stiff
- ▶ Angle-synchronous
- ▶ Reduced backlash (no backlash with clamping hub/ clamping ring hub)

#### Coupling hub:

- ▶ Standard: Coupling hub with keyway for motor shafts to IEC
- ▶ Optional coupling hubs for frequent shocks and alternating load or reduced coupling backlash:
  - Clamping hub with tangential clamping screw for motor shafts with keyway, no backlash
  - Clamping hub with tangential clamping screw for motor shafts with featherkey, no backlash



### Geometric assignments for motors

See the selection tables for gearboxes with mounting flanges for the permissible input ratings and output torques.

Lenze Drive size	IEC motors		Lenze				Coupling hub		Dimensions			Motor shaft		
	Size	Design	Servo motors		DC motors		Standard clamping hub	Clamping ring hub	Mounting flange			d	I <sub>min</sub>	I <sub>max</sub>
			Size	Design	Size	Design			Flange size a3	Pitch circle e3	Centring b3			
1A	63	B14	MD□K□ 036	B5			▲	▲	C90	75	60	11	23	23
1B	71	B14	MD□K□ 056	B14			▲	▲	C105	85	70	14	30	30
2B	63	B14	MD□K□ 036	B5			▲	▲	C90	75	60	11	23	23
1C	80	B14	MD□K□ 071	B14/B5	MGFQ□ 63	B34	▲	▲	C160	130	110	19	25	40
2C							▲	▲	C160	130	110	14	25	40
3C	71	B14	MD□K□ 056	B14			▲	▲	C105	85	70	14	25	40
4C	71	B14	MD□K□ 056	B5			▲	▲	C120	100	80	14	25	40
1D	90	B14	MD□KA 080 MD□KA 090	B14	MGFRK 90 MGFQ□ 80	B14 B34	▲	▲	C160	130	110	24	50	50
2D	80	B14	MD□K□ 071	B14/B5	MGFQ□ 63	B34	▲	▲	C160	130	110	19	40	50
1E	100 112	B14	MD□KA 100	B14	MGFRK 100 MGFRK 112 MGFQ□ 100	B14 B14 B34	▲	▲	C160	130	110	28	30	60
2E	90	B14	MD□KA 080 MD□KA 090	B14	MGFRK 90 MGFQ□ 80	B14 B34	▲	▲	C160	130	110	24	30	60
3E	80	B14	MD□K□ 071	B14/B5	MGFQ□ 63	B34	▲	▲	C160	130	110	19	30	60
1F	100 112	B14	MD□KA 100	B14	MGFRK 100 MGFRK 112 MGFQ□ 100	B14 B14 B34	▲	▲	C160	130	110	28	30	60
2F	90	B14	MD□KA 080 MD□KA 090	B14	MGFRK 90 MGFQ□ 80	B14 B34	▲	▲	C160	130	110	24	30	60
1G	132	B5	MD□KA 112 MDFQA 100 MDFQA 112	B5 B5 B35	MGFRK 132 MGFQ□ 112 MGFQ□ 132	B5 B35 B35	▲	▲	A300	265	230	38	80	80
2G	100/112	B5	MD□KA 100	B5	MGFQ□ 100	B35	▲	▲	A250	215	180	28	60	60
3G			MD□KA 112 MDFQA 110	B5 B5			▲	▲	A250	215	180	38	80	80
1H	160	B5			MGFRK 160	B5	▲		A350	300	250	42	110	110
2H	180	B5			MGFRK 180	B5	▲		A350	300	250	48	110	110
3H	132	B5	MD□KA 112 MDFQA 100 MDFQA 112	B5 B5 B35	MGFRK 132 MGFQ□ 112 MGFQ□ 132	B5 B35 B35	▲	▲	A300	265	230	38	80	80
1K	200	B5	MDFQA 132	B5	MGFRK 200 MGFQ□ 160	B5	▲		A400	350	300	55	110	110
2K	225	B5			MGFRK 225	B5	▲		A450	400	350	60	140	140

Dimensions in [mm]

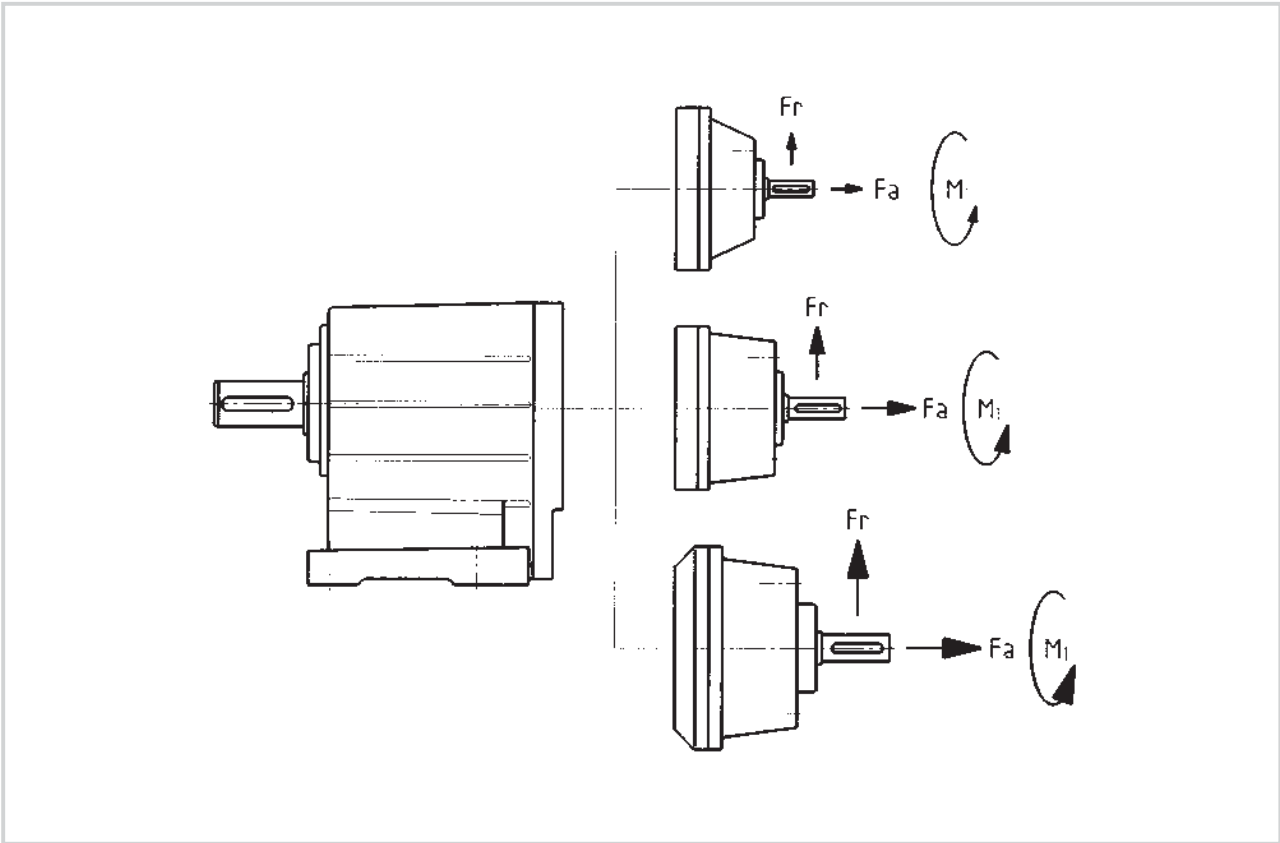
### Gearboxes with free input shaft Version W

#### Possible combinations

Various drive sizes are available for selection for every gearbox size (except for GST 03, GKR).

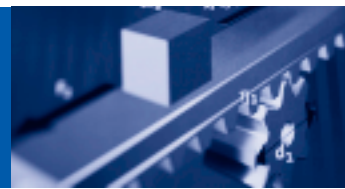
They differ in terms of:

- ▶ Transferrable torque
- ▶ Permissible radial and axial forces
- ▶ Shaft geometry
- ▶ The modified overall dimensions of the gearbox (see dimension drawings)



Lenze Drive size	Input shaft	
	d	l
1A	14	35
1B	14	35
1C	14	40
1D	19	50
1E	24	60
1F	28	80
1G	38	100
1H	42	110
1K	48	110

Dimensions in [mm]



### Gearboxes with ventilation

#### Gearbox sizes 03 to 07

Ventilation does not need to be provided on size 03/04 and GKR 05/06 gearboxes.

If you are using gearbox sizes 05 to 07 you will not need to provide special means of ventilation in most cases. In borderline cases, e.g. at input speeds > 2000 rpm we recommend the use of ventilation units, which we can supply separately.

#### Gearbox sizes 09 to 14

Ventilation units are always supplied with these gearbox sizes.

#### Special precautions for mounting position C (motor on top)

We recommend the use of an oil compensation reservoir for gearbox sizes 09 to 14 in this mounting position.

See the Technical data, Ventilation section for diagram and dimensions. This product can be ordered separately. It is not required at high ratios or low input speeds.

Please contact Lenze if this affects your application.

### Lubricants

Lenze gearboxes and geared motors are supplied ready for operation containing drive-specific and type-specific lubricant. The lubricant delivered with the product will have been taken from the column for the relevant Lenze unit. When ordering your product, please specify the mounting position and design as this will determine the amount of lubricant.

We would like to draw your attention to the fact that if Lenze recommends an oil/grease or includes it in a Lenze

lubricants table, this does not make Lenze liable in any way for any damage due to incompatibilities with the materials used.

The lubricants listed in the lubricants table on the following page may be used for Lenze drives. Special lubricants have to be used e. g. in the event of long-term storage or extraordinary operating conditions.

Please note the following key for the lubricant table when selecting lubricants:

CLP = Mineral oil

CLP PG = Polyglycol oil

CLP HC = Synthetic hydrocarbons/poly-alpha-olefin oil

CLP E = Diester oil (water pollution class WGK 1)

1) = Currently, we do not have any performance test data for the lubricants listed for lubricating worm gearboxes. When using these oils, the permissible torque values in the catalog should be reduced by 20%.

2) = Polyglycol oil cannot be mixed with other types of oil.

3) = At ambient temperatures above 40°C, please contact Lenze to discuss the exact application conditions.

4) = Note critical starting performance at low temperatures. At temperatures below -25°C, special measures are required for the motor bearing and NBR shaft sealing rings.



= Food-compatible oil (approved to USDA-H1)



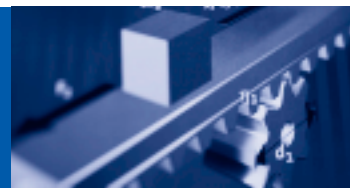
= Bio oil (lubricant for forestry, farming and water management)  
(water pollution class 1)



= Low-temperature oils, note critical starting performance at low temperatures



= Lenze lubricants used during factory assembly



### Lubricant table

	Ambient temperature			DIN 51517-3: CLP ISO 12925-1: CKC/CKD	GST, GFL, GKS, GKR		GSS
	-50	0°C	+50				
	0		+40		CLP	VG 460	Omala 460
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Omala HD 320
	-10		+50 <sup>3)</sup>		CLP HC	VG 460	Cassida Fluid GL 460
	-20		+40		CLP HC	VG 220	Cassida Fluid GL 220
	-20		+40		CLP PG	VG 220	Tivela S 220 <sup>2)</sup>
	-20		+40		CLP PG	VG 460	Tivela S 460 <sup>2)</sup>
	-40	0		<sup>4)</sup>	CLP HC	VG 46	Cassida HF 46
	-20		+40		CLP PG	VG 320	Cassida Fluid WG 320 <sup>1) 2)</sup>
	-20		+50 <sup>3)</sup>		CLP E	VG 320	Omala EPB 320 <sup>1)</sup>
	0		+40		CLP	VG 460	Klüberoil GEM1 460
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Klübersynth EG 4-320
	-20		+40		CLP PG	VG 460	Klübersynth GH 6-460 <sup>2)</sup>
	-20		+40		CLP PG	VG 220	Klübersynth GH 6-220 <sup>2)</sup>
	-30	0		<sup>4)</sup>	CLP PG	VG 32	Klübersynth GH 6-32 <sup>1) 2)</sup>
	-40	0		<sup>4)</sup>	CLP HC	VG 46	Klüber Summit HySyn FG-46
	-20		+40		CLP HC	VG 220	Klüberoil 4 UH1-220 N
	-20		+40		CLP PG	VG 320	Klübersynth UH1 6-320 <sup>1) 2)</sup>
	-20		+50 <sup>3)</sup>		CLP E	VG 320	Klübersynth GEM 2-320 <sup>1)</sup>
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Renolin Unisyn CLP 320
	-20		+40		CLP E	VG 320	Plantogear 320 S
	-20		+40		CLP PG	VG 460	Plantogear 320 S <sup>1)</sup>
	0		+40		CLP	VG 460	Renolin CLP 460
	-10		+50 <sup>3)</sup>		CLP HC	VG 460	Eural Gear 460
	-25		+40		CLP HC	VG 220	Eural Gear 220
	-20		+40		CLP PG	VG 460	Degol GS 460 <sup>1) 2)</sup>
	0		+40		CLP	VG 460	Degol BG 460
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Degol PAS 320
	0		+40		CLP	VG 460	Blasia 460
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Blasia SX 320
	0		+40		CLP	VG 460	Energol GR-XP 460
	-20		+50 <sup>3)</sup>		CLP HC	VG 320	Energol HTX 320
	0		+40		CLP	VG 460	Alpha MW 460
	0		+40		CLP	VG 460	Alpha SP 460
	-20		+40		CLP PG	VG 460	Alpha PG 460 <sup>2)</sup>
	0		+40		CLP	VG 460	Falcon CLP 460
	-20		+40		CLP PG	VG 460	Polydea PGLP 460 <sup>1) 2)</sup>
	-20		+50 <sup>3)</sup>		CLP E	VG 320	Ergon ELP 320 <sup>1) 2)</sup>
	0		+40		CLP	VG 460	Spartan EP 460
	-20		+40		CLP PG	VG 460	Spartan Synthetic EP 320
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Mobilgear 634
	0		+40		CLP	VG 460	Mobilgear 634
	-20		+40		CLP PG	VG 460	Mobil Glygoyle HE 460 <sup>1) 2)</sup>
	-20		+50 <sup>3)</sup>		CLP HC	VG 320	Mobilgear SHC XMP 320
	0		+40		CLP	VG 460	Turmogearoil 460 OM
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Turmofluid GV 320
	-20		+40		CLP PG	VG 460	Turmpololil 460 EP <sup>1)</sup>
	-20		+40		CLP PG	VG 220	Turmpololil 220 EP <sup>1)</sup>
	-40	0		<sup>4)</sup>	CLP HC	VG 46	Turmofluid GV 46
	-20		+40		CLP HC	VG 220	Turmosynthoil GV 220
	-20		+40		CLP PG	VG 460	Turmosynthoil PG 460 <sup>1) 2)</sup>
	-20		+50 <sup>3)</sup>		CLP E	VG 320	Turmofluid Biolube CLP 320
	-20		+50 <sup>3)</sup>		CLP E	VG 320	Turmofluid Biolube CLP 320 <sup>1)</sup>
	0		+40		CLP	VG 460	Optigear BM 460
	-25		+50 <sup>3)</sup>		CLP HC	VG 320	Optigear Synthetic A 320
	0		+40		CLP	VG 460	Tribol 1100/460
	-20		+40		CLP PG	VG 460	Tribol 800/460 <sup>1) 2)</sup>
	-25		+40		CLP HC	VG 320	Tribol 1510/320
	-20		+40		CLP	VG 220	Food Proof 1810/220
	-20		+50 <sup>3)</sup>		CLP PG	VG 460	Food Proof 1800/460 <sup>1) 2)</sup>

### Roller bearing grease

The roller bearings on Lenze motors and gearboxes are filled with the following greases in the factory:

	Ambient temperature	Manufacturer	Type
<b>Gearbox roller bearings</b> GST, GFL, GKS, GKR	-30 ... +50 °C -30 ... +80 °C -40 ... +60 °C	Fuchs Klüber Klüber	Renolit H 443 Petamo 133N Microlube GHY 72
<b>Gearbox roller bearings</b> GSS	-30 ... +80 °C -15 ... +60 °C	Klüber Klüber	Petamo 133N Klüberplex BE 11-462
<b>Motor roller bearings</b>	-30 ... +70 °C	Lubcon	Thermoplex 2TML
	-40 ... +80 °C	Klüber	Asonic GHY 72
<b>Special greases for gearbox roller bearings</b>			
Low-temperature grease, note critical starting performance at low temperatures	-40 ... +80 °C	Klüber	Asonic GHY 72
Bio grease (lubricant for forestry, farming and water management)	-40 ... +50 °C	Fuchs	Plantogel 0120S



### General data

<b>Standards</b>	The motors meet the requirements of applicable DIN and IEC standards EC conformance to Low Voltage Directive
<b>Operating mode</b>	Designed for duty cycle S1 (continuous operation with constant load at rated power)
<b>Enclosure</b>	IP55 (self-ventilated)
<b>Thermal class (EN 60034)</b>	Insulation system to thermal class F Utilisation to thermal class B
<b>Insulation resistance</b>	Maximum voltage amplitude $\bar{U} = 1.5 \text{ kV}$ Maximum rate of voltage rise $du/dt = 5 \text{ kV}/\mu\text{s}$
<b>Temperature monitoring</b>	Temperature sensor (NC contact)
<b>Temperature range</b>	-20 ... +40°C without power derating
<b>Installation height</b>	Up to 1000 m amsl without power derating
<b>Terminal box</b>	Motor connection to terminal board, accessory connections on terminal block, brake rectifier can be integrated into terminal box
<b>Bearing</b>	Deep-groove ball bearing with 2 caps

# Drive dimensioning

## 4-pole motor versions

### Basic versions

Motor frame size	063		071	080	090	100	112	132	160	180	200	225
<b>Versions</b>												
<b>4-pole</b>	063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22 112C32	132C22 132C32	160-22 160-32	180-22 180-32	200N32	225N12 225N22
Mech. integrated into Lenze gearbox	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
<b>Cooling</b>												
Integral fan		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Self-ventilated	▲											
<b>Enclosure</b>												
IP 55	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Motor protection</b>												
Thermal class F	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Temperature sensor: thermal contact (NC contact)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Motor connection</b>												
Terminal box	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

### Options (note possible combinations)

<b>Cooling</b>												
Separate fan	Not required for inverter operation	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Motor protection</b>												
Temperature sensor PTC thermistor	PTC	PTC	PTC	PTC	PTC	PTC	PTC	PTC	PTC	PTC	PTC	PTC
Continuous temperature sensor	KTY	KTY	KTY	KTY	KTY	KTY	KTY	KTY	KTY	KTY	KTY	KTY
<b>Motor connection</b>												
starttec motor starter		▲ <sup>1)</sup>	▲	▲	▲	▲	▲					
ICN connector (motor without additional options)	▲	▲	▲	▲	▲	▲	▲					
<b>Holding systems</b>												
Spring-operated brake Mains or 24 V DC connection	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Speed/position encoder</b>												
Resolver	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
Incremental encoder	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
<b>Additional options</b>												
Increased centrifugal mass (cast iron fan)			▲	▲	▲	▲	▲	▲				
Handwheel			▲	▲	▲	▲	▲	▲				
Condensation drain hole	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Protection cover for integral fan			▲	▲	▲	▲	▲	▲	▲			
Protection cover for separate fan		▲	▲	▲	▲	▲	▲	▲	▲			
2nd shaft end (acc. to definition)			▲	▲	▲	▲	▲	▲				

<sup>1)</sup> Only for motor frame size 063C42





### Possible combinations for options

Possible combinations	Motor frame size											
	063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22 112C32	132C22 132C32	160-22 160-32	180-22 180-32	200N32	225N12 225N22
Separate fan		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Brake	▲											
Brake + integral fan		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Brake + separate fan		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Brake + centrifugal mass (integral fan)			▲	▲	▲	▲	▲					
Brake + integral fan + handwheel/ 2nd shaft end			▲	▲	▲	▲	▲					
Brake* + speed/pos. encoder		▲										
Brake* + speed/pos. encoder + integral fan		▲	▲	▲ <sup>1)</sup>	▲ <sup>1)</sup>	▲ <sup>1)</sup>	▲ <sup>1)</sup>	▲ <sup>1)</sup>				
Brake* + speed/pos. encoder + separate fan		▲	▲	▲	▲	▲	▲	▲	▲	▲		
Speed/ position encoder	▲											
Speed/ position encoder + integral fan		▲	▲	▲	▲	▲	▲	▲	▲			
Speed/ position encoder + separate fan		▲	▲	▲	▲	▲	▲	▲	▲	▲		
Integral fan + handwheel/ 2nd shaft end			▲	▲	▲	▲	▲					
Centrifugal mass (integral fan)			▲	▲	▲	▲	▲					
Centrifugal mass + handwheel/ 2nd shaft end			▲	▲	▲	▲	▲					

<sup>1)</sup> On request

\* Brake in low-noise design

# Drive dimensioning

## 2-pole and 6-pole motor versions

### Basic versions

Motor frame size	063	071	080	090	100	112	132
<b>Versions</b>							
<b>2-pole</b>	063-11 063-31	071-11 071-31	080-11 080-31	090-11 090-31	100-31 100-41	112-31 112-41	132-21
<b>6-pole</b>		071-13 071-33	080-13 080-33				
Mech. integrated into Lenze gearbox	▲	▲	▲	▲	▲	▲	▲
<b>Cooling</b>							
Integral fan	▲	▲	▲	▲	▲	▲	▲
<b>Enclosure</b>							
IP 55	▲	▲	▲	▲	▲	▲	▲
<b>Motor protection</b>							
Thermal class F	▲	▲	▲	▲	▲	▲	▲
Temperature sensor: thermal contact (NC contact)	▲	▲	▲	▲	▲	▲	▲
<b>Motor connection</b>							
Terminal box	▲	▲	▲	▲	▲	▲	▲

### Options (note possible combinations)

<b>Cooling</b>							
Separate fan	▲	▲	▲	▲	▲	▲	▲
<b>Motor protection</b>							
Temperature sensor PTC thermistor	PTC	PTC	PTC	PTC	PTC	PTC	PTC
Continuous temperature sensor	KTY	KTY	KTY	KTY	KTY	KTY	KTY
<b>Motor connection</b>							
starttec motor starter		▲	▲	▲	▲		
ICN connector (motor without additional options)	▲	▲	▲	▲	▲	▲	
<b>Holding systems</b>							
Spring-operated brake Mains or 24 V DC connection	▲	▲	▲	▲	▲	▲	▲
<b>Speed/position encoder</b>							
Resolver	▲	▲	▲	▲	▲	▲	▲
Incremental encoder	▲	▲	▲	▲	▲	▲	▲
<b>Additional options</b>							
Increased centrifugal mass (cast iron fan)		▲	▲	▲	▲	▲	▲
Handwheel		▲	▲	▲	▲	▲	▲
Condensation drain hole	▲	▲	▲	▲	▲	▲	▲
Protection cover for integral fan		▲	▲	▲	▲	▲	▲
Protection cover for separate fan	▲	▲	▲	▲	▲	▲	▲
2nd shaft end (acc. to definition)		▲	▲	▲	▲	▲	▲



### Possible combinations for options

Motor frame size	063-11 063-31	071-11 071-31 071-13 071-33	080-11 080-31 080-13 080-33	090-11 090-31	100-31 100-41	112-31 112-41	132-21
Separate fan	▲	▲	▲	▲	▲	▲	▲
Brake + integral fan	▲	▲	▲	▲	▲	▲	▲
Brake + separate fan	▲	▲	▲	▲	▲	▲	▲
Brake + centrifugal mass (integral fan)		▲	▲	▲	▲	▲	▲
Brake + integral fan + handwheel/ 2nd shaft end		▲	▲	▲	▲	▲	▲
Brake* + speed/pos. encoder + separate fan	▲	▲	▲	▲	▲	▲	▲
Speed/ position encoder + integral fan	▲	▲	▲	▲	▲	▲	▲
Speed/ position encoder + separate fan	▲	▲	▲	▲	▲	▲	▲
Integral fan + handwheel/ 2nd shaft end		▲	▲	▲	▲	▲	▲
Centrifugal mass (integral fan)		▲	▲	▲	▲	▲	▲
Centrifugal mass + handwheel/ 2nd shaft end		▲	▲	▲	▲	▲	▲

\* Brake in low-noise design

### Configuration aid

Option		Function	Possible applications
<b>Cooling</b>	Separate fan	Operation at rated torque at low speeds	▶ Wide operational speed range with rated torque
<b>Motor protection</b>	Thermal contact NC contact	Protects the motor against thermal overload	▶ Monitoring the motor winding temperature ▶ Switching a motor relay
	Temperature sensor PTC thermistor/PTC	Protects the motor against thermal overload	▶ PTCs operate in conjunction with a control unit ▶ Unlike the thermal contact, can be reset quickly.
	Continuous temperature sensor KTY	Protects the motor against thermal overload	▶ Measuring the temperature of the motor winding
<b>Motor connection</b>	ICN connector	Geared motor connection via a pluggable connector	▶ The motor can be replaced/dismantled more quickly and easily
<b>Holding systems</b>	Spring-operated brake	Brakes the motor	▶ Decelerating loads ▶ Holding loads ▶ Braking torque available in de-energised state
<b>Additional options</b>	Condensation drain hole	Drains condensation	▶ Operation in extreme climatic conditions ▶ Outdoor installation
	Protection cover	Protects against foreign matter falling into the fan cover	▶ Protecting the air inlet opening against foreign matter if the drive is installed vertically with the motor shaft downwards

## Technical data

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# Technical data - Helical gearboxes

## Permissible radial and axial forces – output

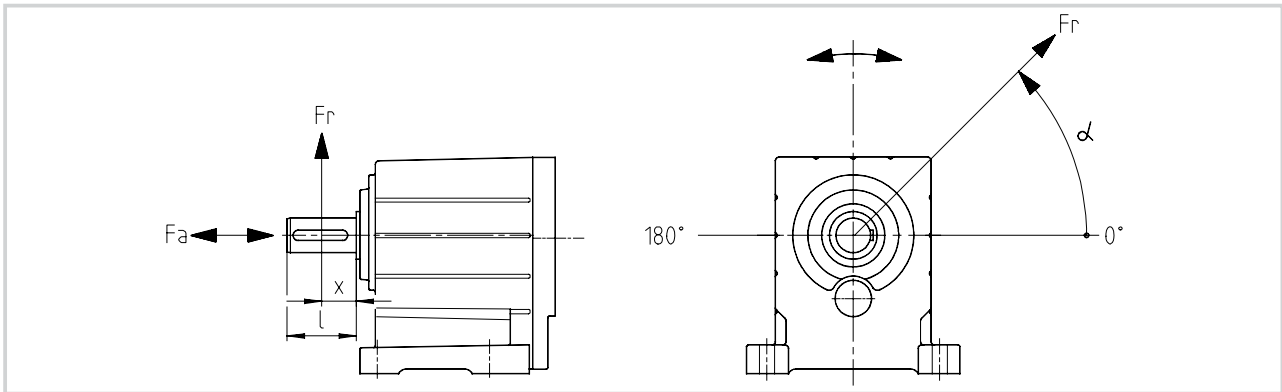
### Permissible radial force

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

### Permissible axial force

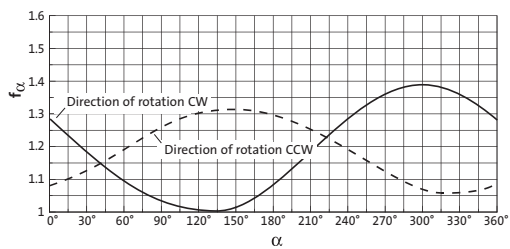
$$F_{Aperm} = F_{ATab} \quad \text{if } F_R = 0$$

Contact Lenze  $\quad$  if  $F_R$  and  $F_A \neq 0$



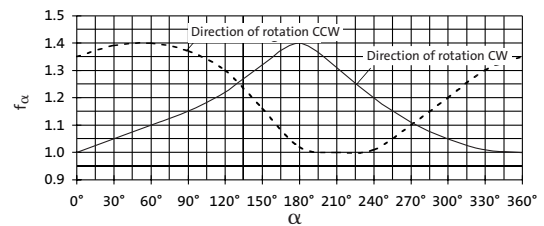
**$f_\alpha$**  Effective direction factor  $f_\alpha$  at output shaft

1-stage helical gearbox GST □□-1



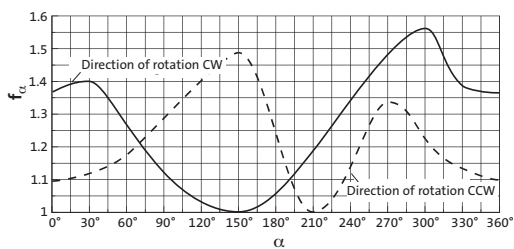
**$f_\alpha$**  Effective direction factor  $f_\alpha$  at output shaft

2-stage helical gearbox GST 03 - 2



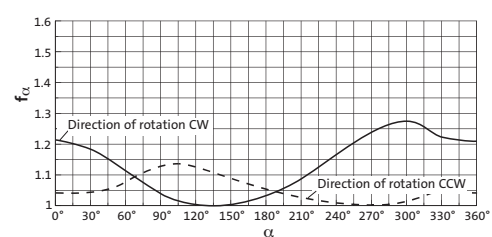
**$f_\alpha$**  Effective direction factor  $f_\alpha$  at output shaft

2 and 3-stage helical gearbox GST 04...09 - 2, 3



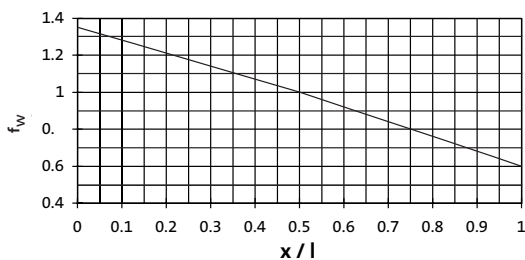
**$f_\alpha$**  Effective direction factor  $f_\alpha$  at output shaft

2 and 3-stage helical gearbox GST 11...14 - 2, 3

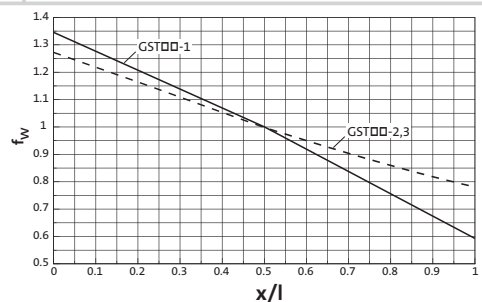


**$f_w$**  Additional load factor  $f_w$  at output shaft

2-stage helical gearbox GST 03 - 2



**$f_w$**  Additional load factor  $f_w$  at output shaft



# Technical data - Helical gearboxes

## Permissible radial and axial forces – output



### GST □□-1

V □□	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$									
	GST 04		GST 05		GST 06		GST 07		GST 09	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
1000	440	1000	550	1400	800	1500	1200	2000	2500	4300
600	600	1300	750	2000	800	2000	1300	2700	2500	5700
400	850	1400	1400	2000	1100	2500	1900	3300	3500	6800
200	1050	1400	2000	2000	2200	2500	3000	3700	6200	7000
125	1050	1400	2300	2000	2900	2500	3900	3700	7900	7000
80	1050	1400	2300	2000	3500	2500	4700	3700	9000	7000
≤ 50	1050	1400	2300	2000	3500	2500	5300	3700	9500	7000
$F_{r max.}$	1050	–	2300	–	3500	–	5300	–	9500	–

### GST □□-2, 3 with standard bearing

V □□	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$															
	GST 03		GST 04		GST 05		GST 06		GST 07		GST 09		GST 11		GST 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	630	600	1250	1100	1950	2000	2350	850	3400	1900	6800	2300	17000	9500	24000	15000
250	710	700	1450	1300	2200	2300	2600	900	3800	2200	7600	2800	19000	10000	27000	16000
160	800	800	1700	1650	2600	2650	3100	1250	4500	2900	9400	4000	21000	11000	31000	18000
100	920	900	2100	2000	3000	3100	3600	1800	5400	3900	11500	5600	21000	14000	36000	20000
63	1100	1000	2500	2000	3500	3600	4300	2600	6400	5300	11500	8900	21000	16000	39000	20000
40	1400	1000	2650	2000	3800	3600	4350	3600	7600	7000	11500	11000	21000	16000	40000	20000
25	1500	1000	2650	2000	3900	3600	4350	4800	9100	7000	11500	12000	21000	16000	40000	20000
≤ 16	1500	1000	2650	2000	3900	3600	4350	4800	9500	7000	11500	12000	21000	16000	40000	20000
$F_{r max.}$	1500	–	2650	–	3900	–	4350	–	9500	–	11500	–	21000	–	40000	–

### GST □□-2, 3 with reinforced bearing

V □□	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$										GST 11	GST 14
	GST 04		GST 05		GST 06		GST 07		GST 09			
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]		
400	2850	1700	4900	3600	6300	3500	8500	5500	16500	8000	The standard bearing is a reinforced bearing.	
250	3150	1900	5400	3900	7000	3600	9500	6100	17000	9000		
160	3550	2200	5400	4300	7700	4200	10500	7100	17000	10500		
100	3750	2500	5400	4500	7700	4900	12500	8300	17000	12500		
63	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
40	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
25	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
≤ 16	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
$F_{r max.}$	3750	–	5400	–	7700	–	13000	–	17000	–		

# Technical data - Helical gearboxes

## Permissible radial and axial forces – input

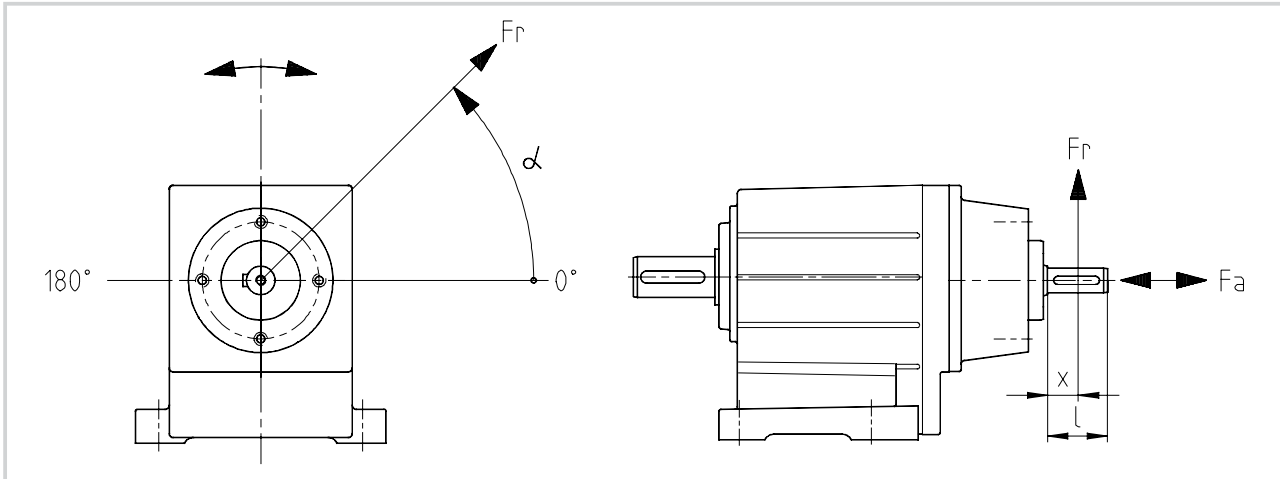
### Permissible radial force

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

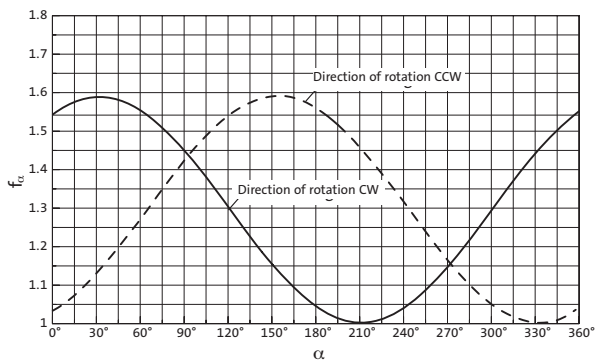
### Permissible axial force

$$F_{Aperm} = F_{ATab} \quad \text{at } F_r = 0$$

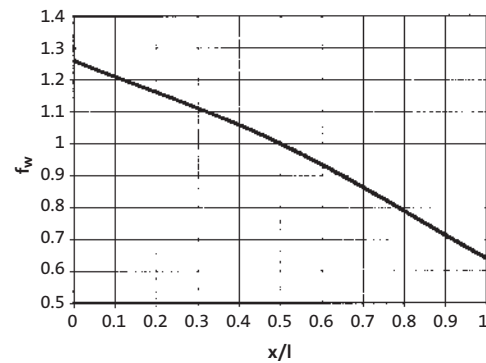
Contact Lenze if  $F_r$  and  $F_a \neq 0$



**f<sub>α</sub>** Effective direction factor at input shaft



**f<sub>w</sub>** Additional load factor at input shaft



**W**

Application of force  $F_r$ : Centre of shaft journal ( $x = l/2$ )  
 $F_{aTab}$  only valid for  $F_r = 0$

$n_1$ [min <sup>-1</sup> ]	Drive size															
	1A 1B		1C		1D		1E		1F		1G		1H		1K	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
700	830	1200	1150	1400	1470	1500	2140	1600	3200	2800	4000	4500	5000	6000	8500	10000
1400	570	770	780	900	1000	740	1400	800	2200	1700	3200	2000	4000	2500	7000	5300
2800	440	530	590	620	770	470	940	460	1700	1100	2300	1600	3000	2000	5000	3500
$F_{Rmax}$	1850	–	1650	–	3000	–	4900	–	5600	–	8000	–	10000	–	12000	–

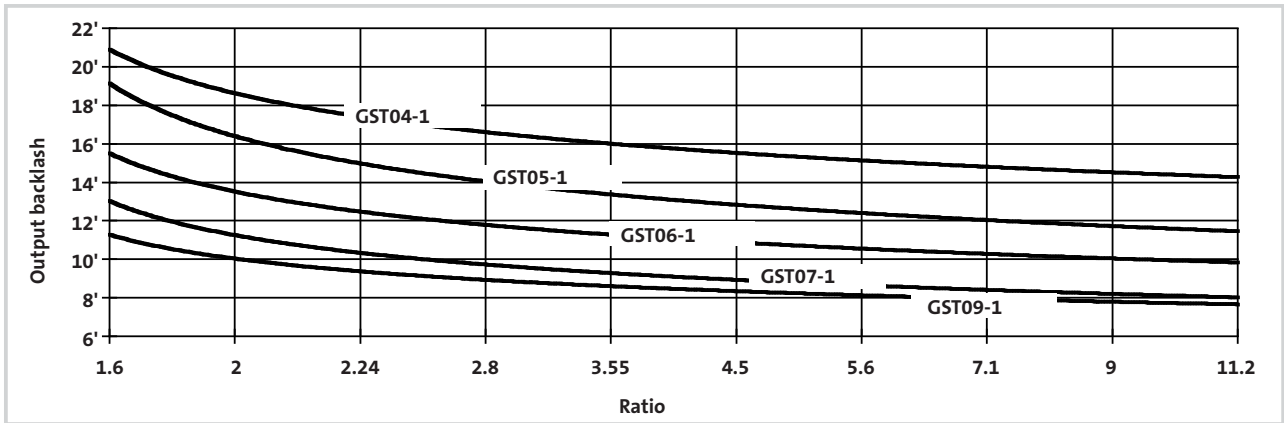


# Technical data - Helical gearboxes

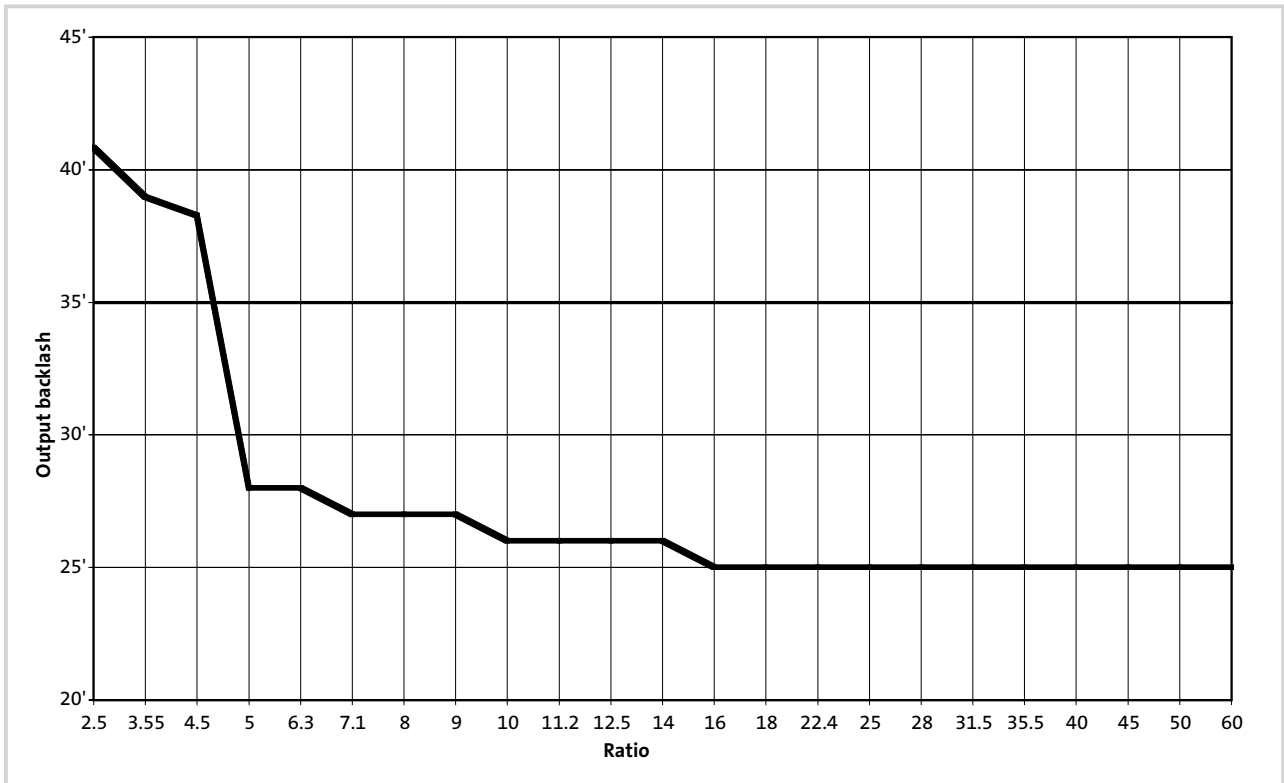
## Output backlash in angular minutes



GST 00-1



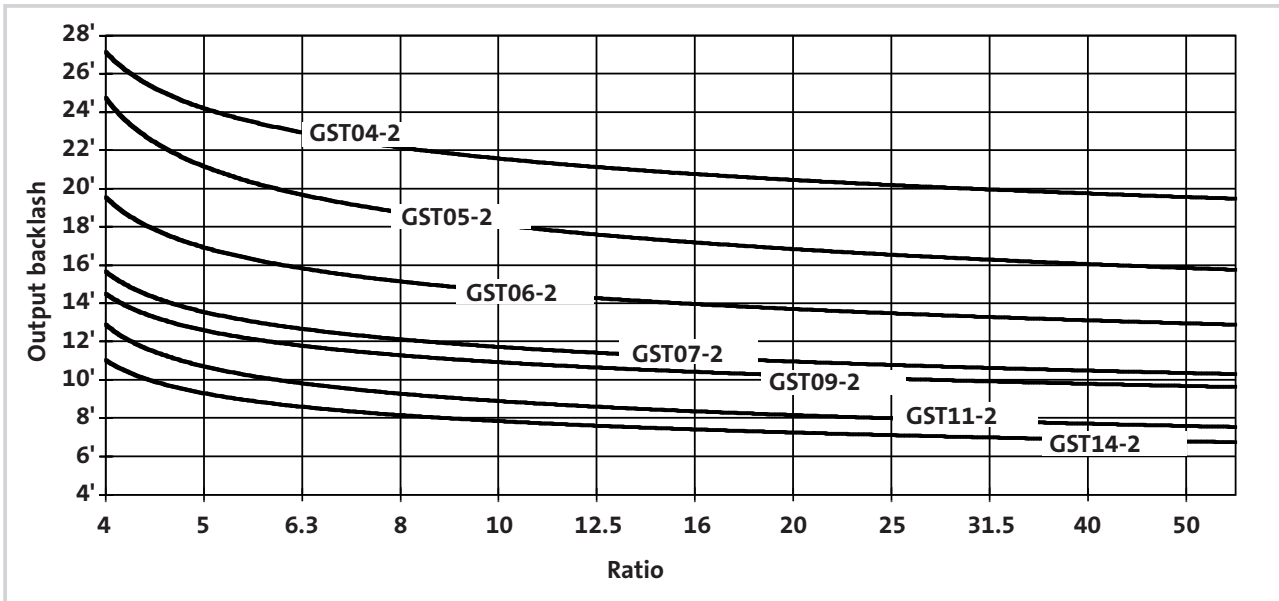
GST 03 - 2



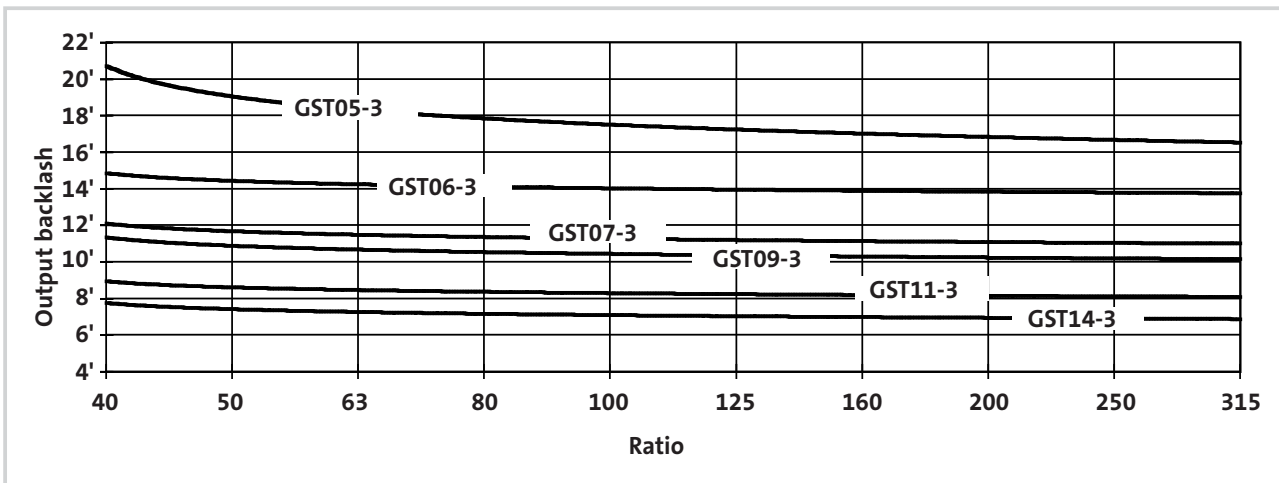
# Technical data - Helical gearboxes

## Output backlash in angular minutes

GST 04 ... 14-2



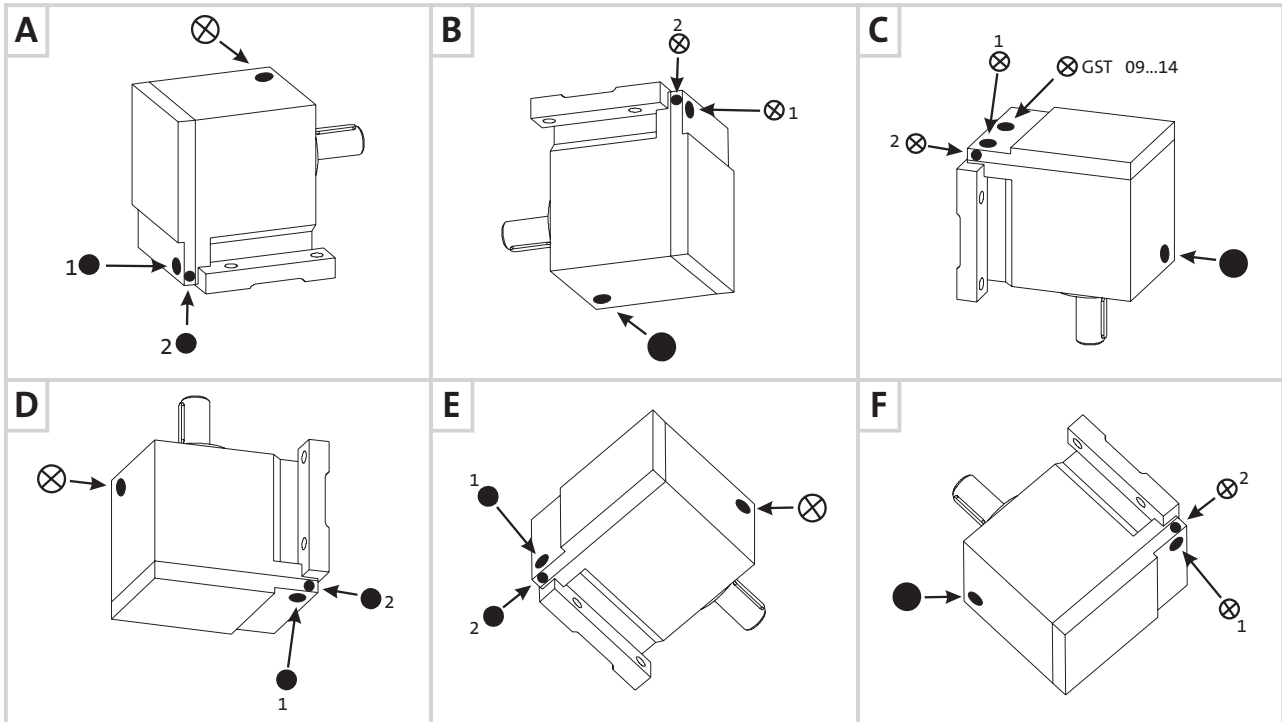
GST 04 ... 14-3



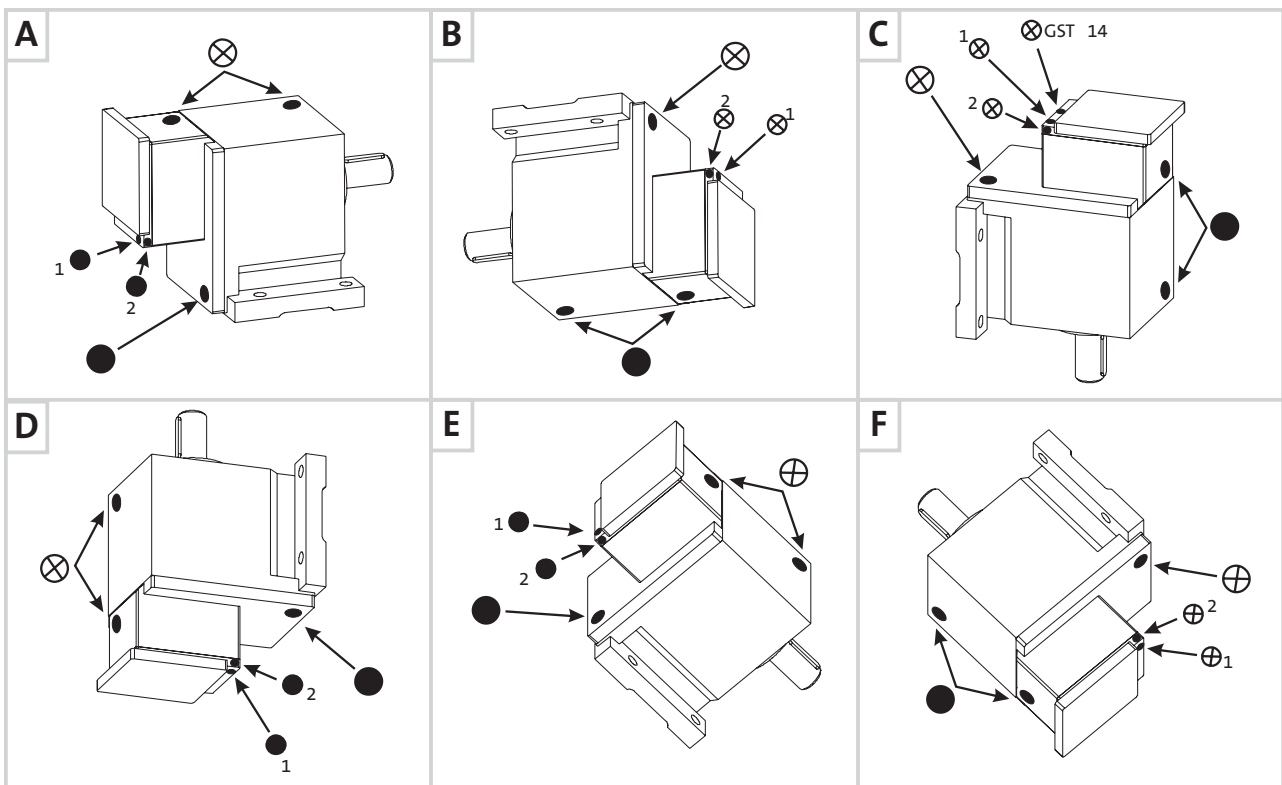


### Position of ventilation, oil filler plug and oil drain plug

Helical gearbox GST 05 ... 09-1 and GST 05 ... 14-2



Helical gearbox GST 05 ... 14-3



(A ... F) Mounting position

⊗ Ventilation/oil filler plug  
● Oil drain plug

Pos. 1 or 2 depending on version  
(see table on page 3-8)

On the **versions listed** in the table, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.

On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

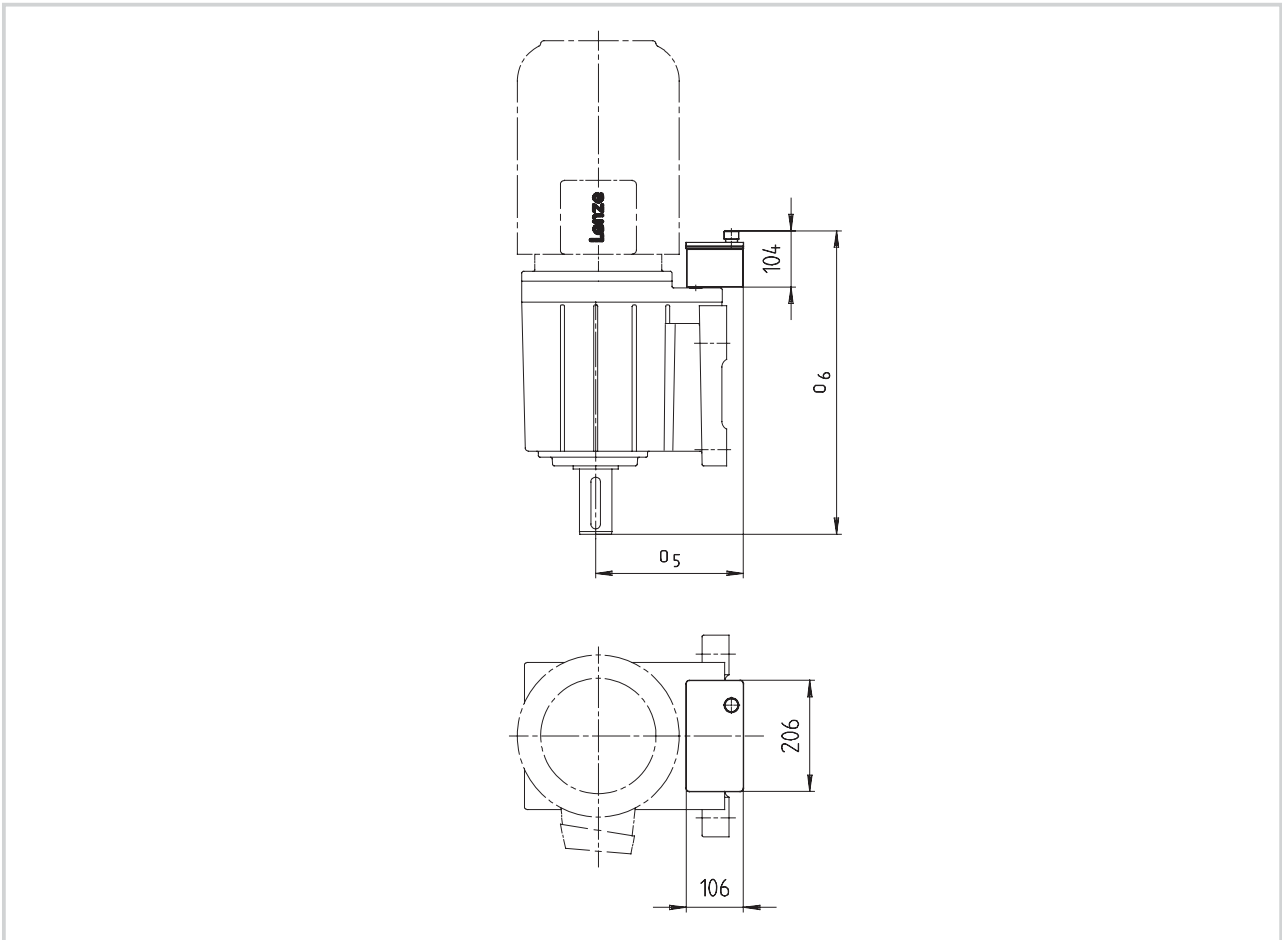
### Helical gearboxes

GST	05	-1	M	□□□	090 100
			N	□□□	1D/2D 1E/2E/3E
		-2	M	□□□	090 100
			N	□□□	1D/2D 1E/2E/3E
	06	-1	M	□□□	112
			W	□□□	1F
		-2	M	□□□	112
			W	□□□	1F
	07	-1	M	□□□	160
			N	□□□	1H/3H
		-2	M	□□□	160
			N	□□□	1H/3H
		-3	M	□□□	090 100
			N	□□□	1D/2D 1E/2E/3E
09	-3	M	□□□	112	
		W	□□□	1F	



## Reservoir for mounting position C

### Helical gearbox GST



3

Helical gearbox	Motor frame size / Drive size				
	090 / 100	112	132 / 180	160 / 200 / 225	
GST□□ - 2 M	□□ / □E / □F		□G / □H	□K	
GST□□ - 2 N	1E	1F / 1G		1H / 1K	
GST□□ - 2 W					
09	o <sub>5</sub>	208	230	251	266
	o <sub>6</sub>	473	473	473	473
11	o <sub>5</sub>	210	232	256	270
	o <sub>6</sub>	532	536	536	536
14	o <sub>5</sub>		254	284	284
	o <sub>6</sub>		636	636	636

Terminal box position 4 not permitted.

### Helical gearbox GST □□-1

Gearbox size	Geared motors												
	GST□□-1M VBR with motor frame size												
	063	071	080	090	100	112		132	160		180		200 N32
						C22/-31	C32/-41		-22	-32	-22	-32	
04	8	11	15	22									
05	12	14	19	26	33								
06	16	19	23	30	37	50	56						
07			32	40	47	59	65	92	136	156			
09				54	61	73	79	107	151	171	250	260	346
GST□□-1M VCR													
04	8	10	15	21									
05	11	13	18	25	32								
06	15	17	21	29	36	48	54						
07			29	36	43	56	62	89	133	153			
09				50	57	69	75	102	146	166	245	255	342

Gearbox size	Gearbox with mounting flange for IEC motors												Gearbox with free input shaft							
	GST□□-1N VBR with drive size												GST□□-1W VBR with drive size							
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	2H	3H	1K	1A	1B	1C	1D	1E	1F	1G	1H
04	7	8	11	13								5	6	8						
05		11	14	17	19								10	11	13					
06		16	18	22	24	26								15	18	21	30			
07			28	31	33	35	58	55	66		62				27	30	39	44		
09				45	48	49	73	70	81	85	77	101					44	53	59	74
GST□□-1N VCR												GST□□-1W VCR								
04	6	7	10	13								5	5	7						
05		10	13	16	18								9	10	12					
06		14	16	20	22	24								14	16	19	28			
07			25	28	30	32	55	52	63		59				24	27	36	41		
09				41	43	44	68	65	76	80	72	97					40	48	54	69

Weights in [kg] with oil capacity for mounting position A. All data is approximate  
Observe extra weights on page 3-12!



### Helical gearbox GST □□-2

Gearbox size	Geared motors														
	GST□□-2M VAR/VBR with motor frame size														
	063	071	080	090	100	112		132	160		180		200	225	
						C22/-31	C32/-41		-22	-32	-22	-32	N32	N12	N22
03	6	8													
04	10	13	17	24											
05	15	18	22	29	36										
06	23	25	29	37	44	56	62								
07			45	52	59	71	77	104	148	168					
09				79	86	98	104	131	175	195	274	284	371		
11					132	143	149	176	220	240	319	329	415	467	537
14						235	241	265	309	329	408	418	503	555	625
	GST□□-2M VCR														
03	6	8													
04	10	12	17	23											
05	14	16	21	28	35										
06	20	22	27	34	41	54	60								
07			40	47	54	67	73	99	143	163					
09				70	77	89	95	123	167	187	266	276	362		
11					117	128	134	161	205	225	304	314	400	452	522
14						207	213	237	281	301	380	390	475	527	597

Gearbox size	Gearbox with mounting flange for IEC motors GST□□-2N VAR/VBR with drive size												Gearbox with free input shaft GST□□-2W VAR/VBR with drive size										
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	2H	3H	1K	2K	1A	1B	1C	1D	1E	1F	1G	1H	1K	
03	5																						
04	9	10	13	15										7	8	10							
05		15	18	20	23										13	15	17						
06		22	25	28	30	32									22	24	28	36					
07			40	43	45	47	70	67	78		74					39	42	51	56				
09				70	72	73	97	94	105	109	101	126					69	77	83	98			
11					118	119	142	139	150	154	146	170	177					123	128	143	158		
14							231	228	239	243	235	258	265							217	232	246	
	GST□□-2N VCR												GST□□-2W VCR										
03	5																						
04	8	9	12	14										7	7	9							
05		13	16	19	21										12	13	15						
06		19	22	25	28	29									19	22	25	33					
07			35	38	41	43	65	62	73		69					35	38	47	51				
09				61	64	65	89	86	97	101	93	117					60	69	75	90			
11					103	104	127	124	135	139	131	155	162					108	113	128	143		
14							203	200	211	215	207	230	237							189	204	218	

Weights in [kg] with oil capacity for mounting position A. All data is approximate  
Observe extra weights on page 3-12!

### Helical gearbox GST □□-3

Gearbox size	Geared motors											
	GST□□-3M VAR/VBR with motor frame size											
	063	071	080	090	100	112		132	160		180	
						C22/-31	C32/-41		-22	-32	-22	-32
05	16	19	24									
06	26	29	34	40								
07	46	48	53	60	67							
09	78	80	84	92	99	111	117					
11			139	146	153	166	172	198	242	262		
14				252	259	271	277	305	349	369	404	414
	GST□□-3M VCR											
05	15	17	22	29								
06	23	26	31	37								
07	41	44	48	55	62							
09	69	72	76	83	90	103	109					
11			124	131	138	151	157	183	227	247		
14				224	231	243	249	277	321	341	376	386

Gearbox size	Gearbox with mounting flange for IEC motors											Gearbox with free input shaft							
	GST□□-3N VAR/VBR with drive size											GST□□-3W VAR/VBR with drive size							
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	2H	3H	1A	1B	1C	1D	1E	1F	1G	1H
05	15	16	19	21								13	14	16					
06	25	26	29	31								23	25	26					
07		45	48	51	53								44	45	47				
09		77	80	83	85	87								77	80	83	91		
11			134	137	139	141	164	161							134	137	145	150	
14				243	246	247	271	268	279	283	275					242	251	257	272
	GST□□-3N VCR											GST□□-3W VCR							
05	13	15	17	20								12	13	14					
06	22	23	26	28								21	22	23					
07		41	43	46	49								39	41	43				
09		69	71	75	77	79								68	71	74	83		
11			119	122	125	126	149	146							119	122	130	135	
14				215	218	219	243	240	251	255	247					214	223	229	244

### Extra weights

Gearbox size	Flange VCK/VAL
03	0.8
04	1.0
05	1.5
06	3.0
07	4.0
09	7.0
11	10.5
14	15.5

Weights in [kg] with oil capacity for mounting position A. All data is approximate



# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.06 kW</b> n <sub>1</sub> =1425					<b>GST □□ - 2M</b>	3-111
	75	7	5.6	19.013	GST03 - 2M□□□ 063C02	
	67	8	5.3	21.350	GST03 - 2M□□□ 063C02	
	58	10	4.7	24.595	GST03 - 2M□□□ 063C02	
	52	11	4.2	27.618	GST03 - 2M□□□ 063C02	
	45	13	3.6	32.000	GST03 - 2M□□□ 063C02	
	40	14	3.2	35.933	GST03 - 2M□□□ 063C02	
	34	16	2.8	41.455	GST03 - 2M□□□ 063C02	
	31	18	2.5	46.550	GST03 - 2M□□□ 063C02	
	27	21	2.2	52.909	GST03 - 2M□□□ 063C02	
24	23	1.9	59.413	GST03 - 2M□□□ 063C02		
<b>0.09 kW</b> n <sub>1</sub> =1375					<b>GST □□ - 2M</b>	3-111
	137	6	5.7	10.033	GST03 - 2M□□□ 063C22	
	120	7	5.1	11.429	GST03 - 2M□□□ 063C22	
	107	8	4.8	12.833	GST03 - 2M□□□ 063C22	
	93	9	4.3	14.836	GST03 - 2M□□□ 063C22	
	83	10	4.1	16.660	GST03 - 2M□□□ 063C22	
	72	12	3.6	19.013	GST03 - 2M□□□ 063C22	
	64	13	3.4	21.350	GST03 - 2M□□□ 063C22	
	56	15	3.0	24.595	GST03 - 2M□□□ 063C22	
	50	17	2.7	27.618	GST03 - 2M□□□ 063C22	
	43	19	2.3	32.000	GST03 - 2M□□□ 063C22	
	38	22	2.1	35.933	GST03 - 2M□□□ 063C22	
	33	25	1.8	41.455	GST03 - 2M□□□ 063C22	
	30	28	1.6	46.550	GST03 - 2M□□□ 063C22	
	26	32	1.4	52.909	GST03 - 2M□□□ 063C22	
23	36	1.2	59.413	GST03 - 2M□□□ 063C22		
<b>0.12 kW</b> n <sub>1</sub> =1425					<b>GST □□ - 1M</b>	3-102
	636	2	5.4	2.240	GST04 - 1M□□□ 063C12	
	499	2	5.0	2.857	GST04 - 1M□□□ 063C12	
	324	4	5.5	4.400	GST04 - 1M□□□ 063C12	
	252	5	4.6	5.667	GST04 - 1M□□□ 063C12	
	198	6	4.0	7.182	GST04 - 1M□□□ 063C12	
	158	7	3.3	9.000	GST04 - 1M□□□ 063C12	
	120	9	1.7	11.857	GST04 - 1M□□□ 063C12	
					<b>GST □□ - 2M</b>	3-111
	223	5	5.4	6.400	GST04 - 2M□□□ 063C12	
	204	5	5.4	6.982	GST03 - 2M□□□ 063C12	
	182	6	5.2	7.840	GST03 - 2M□□□ 063C12	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.12 kW</b> n <sub>1</sub> =1425					<b>GST □□ - 2M</b>	<b>3-111</b>	
	160	7	4.7	8.935	GST03 - 2M□□□ 063C12		
	142	8	4.4	10.033	GST03 - 2M□□□ 063C12		
	125	9	4.0	11.429	GST03 - 2M□□□ 063C12		
	111	10	3.8	12.833	GST03 - 2M□□□ 063C12		
	96	12	3.4	14.836	GST03 - 2M□□□ 063C12		
	86	13	3.2	16.660	GST03 - 2M□□□ 063C12		
	75	15	2.8	19.013	GST03 - 2M□□□ 063C12		
	74	15	4.7	19.360	GST04 - 2M□□□ 063C12		
	67	17	2.7	21.350	GST03 - 2M□□□ 063C12		
	58	19	2.3	24.595	GST03 - 2M□□□ 063C12		
	52	22	2.1	27.618	GST03 - 2M□□□ 063C12		
	50	22	2.9	28.333	GST04 - 2M□□□ 063C12		
	45	25	1.8	32.000	GST03 - 2M□□□ 063C12		
	45	25	2.9	31.600	GST04 - 2M□□□ 063C12		
	40	28	1.6	35.933	GST03 - 2M□□□ 063C12		
	40	28	2.3	35.909	GST04 - 2M□□□ 063C12		
	34	32	1.4	41.455	GST03 - 2M□□□ 063C12		
	36	31	2.4	39.600	GST04 - 2M□□□ 063C12		
	31	36	1.2	46.550	GST03 - 2M□□□ 063C12		
	32	35	1.9	45.000	GST04 - 2M□□□ 063C12		
	27	41	1.1	52.909	GST03 - 2M□□□ 063C12		
	27	41	1.7	52.171	GST04 - 2M□□□ 063C12		
	24	46	1.0	59.413	GST03 - 2M□□□ 063C12		
	24	46	1.4	59.286	GST04 - 2M□□□ 063C12		
					<b>GST □□ - 3M</b>	<b>3-122</b>	
		23	49	3.0	63.467		GST05 - 3M□□□ 063C12
		20	55	3.1	71.238		GST05 - 3M□□□ 063C12
		18	62	2.4	80.952		GST05 - 3M□□□ 063C12
		16	71	2.4	91.746		GST05 - 3M□□□ 063C12
		12	89	1.9	116.277		GST05 - 3M□□□ 063C12
		11	96	1.6	124.667		GST05 - 3M□□□ 063C12
		9.8	112	1.5	145.714		GST05 - 3M□□□ 063C12
	8.9	123	1.2	160.556	GST05 - 3M□□□ 063C12		
	8.9	123	2.8	160.556	GST06 - 3M□□□ 063C12		
	8.0	138	1.2	179.067	GST05 - 3M□□□ 063C12		
	8.0	138	2.7	179.067	GST06 - 3M□□□ 063C12		
	7.4	148	1.2	191.973	GST05 - 3M□□□ 063C12		
	7.0	156	2.2	203.485	GST06 - 3M□□□ 063C12		
	6.4	173	1.0	224.400	GST05 - 3M□□□ 063C12		
	6.2	178	2.1	231.733	GST06 - 3M□□□ 063C12		
	5.6	196	1.8	255.000	GST06 - 3M□□□ 063C12		
	4.9	223	1.7	290.400	GST06 - 3M□□□ 063C12		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>0.12 kW</b> n1=1425					<b>GST □□ - 3M</b>	3-122		
	4.3	254	1.4	330.000	GST06 - 3M□□□ 063C12			
	3.7	294	1.3	382.590	GST06 - 3M□□□ 063C12			
	3.3	334	1.1	434.762	GST06 - 3M□□□ 063C12			
<b>0.18 kW</b> n1=1365					<b>GST □□ - 1M</b>	3-102		
	609	3	3.4	2.240	GST04 - 1M□□□ 063C32			
	478	4	3.2	2.857	GST04 - 1M□□□ 063C32			
	310	6	3.5	4.400	GST04 - 1M□□□ 063C32			
	241	7	2.9	5.667	GST04 - 1M□□□ 063C32			
	190	9	2.6	7.182	GST04 - 1M□□□ 063C32			
	152	11	2.1	9.000	GST04 - 1M□□□ 063C32			
	115	15	1.1	11.857	GST04 - 1M□□□ 063C32			
	n1=870	97	18	1.3	9.000		GST04 - 1M□□□ 071-13	
		98	17	2.4	8.900		GST05 - 1M□□□ 071-13	
		77	22	1.4	11.375		GST05 - 1M□□□ 071-13	
		77	22	2.8	11.250		GST06 - 1M□□□ 071-13	
	n1=2760						<b>GST □□ - 2M</b>	3-111
		431	4	5.7	6.400		GST04 - 2M□□□ 063-11	
280		6	5.7	9.856	GST04 - 2M□□□ 063-11			
246		7	5.7	11.200	GST04 - 2M□□□ 063-11			
220		8	5.3	12.571	GST04 - 2M□□□ 063-11			
193		9	5.3	14.286	GST04 - 2M□□□ 063-11			
143		12	5.6	19.360	GST04 - 2M□□□ 063-11			
126		13	4.3	22.000	GST04 - 2M□□□ 063-11			
111		15	4.4	24.933	GST04 - 2M□□□ 063-11			
97		17	3.4	28.333	GST04 - 2M□□□ 063-11			
87		19	3.5	31.600	GST04 - 2M□□□ 063-11			
77		22	2.7	35.909	GST04 - 2M□□□ 063-11			
70		24	2.8	39.600	GST04 - 2M□□□ 063-11			
61		27	2.4	45.000	GST04 - 2M□□□ 063-11			
53	32	2.2	52.171	GST04 - 2M□□□ 063-11				
47	36	1.8	59.286	GST04 - 2M□□□ 063-11				
n1=1365	526	3	5.7	2.597	GST03 - 2M□□□ 063C32			
	400	4	4.6	3.413	GST03 - 2M□□□ 063C32			
	313	5	3.9	4.368	GST03 - 2M□□□ 063C32			
	257	7	4.1	5.312	GST03 - 2M□□□ 063C32			
	229	7	3.9	5.965	GST03 - 2M□□□ 063C32			
	196	9	3.5	6.982	GST03 - 2M□□□ 063C32			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.18 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=1365	174	10	3.3	7.840	GST03 - 2M□□□ 063C32	
	153	11	3.0	8.935	GST03 - 2M□□□ 063C32	
	136	12	2.8	10.033	GST03 - 2M□□□ 063C32	
	119	14	2.5	11.429	GST03 - 2M□□□ 063C32	
	106	16	2.4	12.833	GST03 - 2M□□□ 063C32	
	109	15	3.2	12.571	GST04 - 2M□□□ 063C32	
	92	18	2.2	14.836	GST03 - 2M□□□ 063C32	
	96	18	3.2	14.286	GST04 - 2M□□□ 063C32	
	82	20	2.0	16.660	GST03 - 2M□□□ 063C32	
	72	23	1.8	19.013	GST03 - 2M□□□ 063C32	
	71	24	3.0	19.360	GST04 - 2M□□□ 063C32	
	64	26	1.7	21.350	GST03 - 2M□□□ 063C32	
	62	27	2.3	22.000	GST04 - 2M□□□ 063C32	
	56	30	1.5	24.595	GST03 - 2M□□□ 063C32	
	55	31	2.3	24.933	GST04 - 2M□□□ 063C32	
	49	34	1.3	27.618	GST03 - 2M□□□ 063C32	
	48	35	1.8	28.333	GST04 - 2M□□□ 063C32	
	43	39	1.2	32.000	GST03 - 2M□□□ 063C32	
	43	39	1.9	31.600	GST04 - 2M□□□ 063C32	
	38	44	1.0	35.933	GST03 - 2M□□□ 063C32	
	38	44	1.5	35.909	GST04 - 2M□□□ 063C32	
	33	51	0.9	41.455	GST03 - 2M□□□ 063C32	
	35	48	1.5	39.600	GST04 - 2M□□□ 063C32	
	30	55	1.2	45.000	GST04 - 2M□□□ 063C32	
	26	64	1.1	52.171	GST04 - 2M□□□ 063C32	
	23	72	0.9	59.286	GST04 - 2M□□□ 063C32	
n1=870	22	76	1.0	39.600	GST04 - 2M□□□ 071-13	
	22	75	2.2	39.160	GST05 - 2M□□□ 071-13	
	20	85	1.7	44.500	GST05 - 2M□□□ 071-13	
	17	96	1.4	50.050	GST05 - 2M□□□ 071-13	
	18	95	2.8	49.500	GST06 - 2M□□□ 071-13	
	15	109	1.4	56.875	GST05 - 2M□□□ 071-13	
	16	108	2.8	56.250	GST06 - 2M□□□ 071-13	
n1=1365					<b>GST □□ - 3M</b>	<b>3-122</b>
	22	76	1.9	63.467	GST05 - 3M□□□ 063C32	
	19	86	2.0	71.238	GST05 - 3M□□□ 063C32	
	17	97	1.5	80.952	GST05 - 3M□□□ 063C32	
	17	97	3.2	80.952	GST06 - 3M□□□ 063C32	
	15	110	1.5	91.746	GST05 - 3M□□□ 063C32	
	12	140	1.2	116.277	GST05 - 3M□□□ 063C32	
	12	132	2.8	109.707	GST06 - 3M□□□ 063C32	
	11	150	1.0	124.667	GST05 - 3M□□□ 063C32	
	11	150	2.3	124.667	GST06 - 3M□□□ 063C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.18 kW</b>					<b>GST □□ - 3M</b>	<b>3-122</b>	
n1=1365	9.4	175	1.0	145.714	GST05 - 3M□□□ 063C32		
	9.7	170	2.2	141.289	GST06 - 3M□□□ 063C32		
	8.5	193	1.8	160.556	GST06 - 3M□□□ 063C32		
	7.6	216	1.7	179.067	GST06 - 3M□□□ 063C32		
	6.7	245	1.4	203.485	GST06 - 3M□□□ 063C32		
	5.9	279	1.3	231.733	GST06 - 3M□□□ 063C32		
	5.4	307	1.1	255.000	GST06 - 3M□□□ 063C32		
	4.7	350	1.1	290.400	GST06 - 3M□□□ 063C32		
	4.1	397	0.9	330.000	GST06 - 3M□□□ 063C32		
	3.6	460	0.8	382.590	GST06 - 3M□□□ 063C32		
n1=870	3.5	469	1.5	248.458	GST07 - 3M□□□ 071-13		
	3.2	508	1.4	268.889	GST07 - 3M□□□ 071-13		
	3.2	508	3.2	268.889	GST09 - 3M□□□ 071-13		
	2.7	616	1.2	326.333	GST07 - 3M□□□ 071-13		
	2.7	616	2.6	326.333	GST09 - 3M□□□ 071-13		
	2.4	693	1.0	367.033	GST07 - 3M□□□ 071-13		
	2.4	685	2.4	363.000	GST09 - 3M□□□ 071-13		
	2.1	788	0.9	417.083	GST07 - 3M□□□ 071-13		
	2.1	779	2.1	412.500	GST09 - 3M□□□ 071-13		
	<b>0.25 kW</b>				<b>GST □□ - 1M</b>		<b>3-102</b>
n1=1370	856	3	4.5	1.600	GST04 - 1M□□□ 063C42		
	669	4	5.2	2.048	GST04 - 1M□□□ 063C42		
	612	4	4.5	2.240	GST05 - 1M□□□ 063C42		
	480	5	4.8	2.857	GST04 - 1M□□□ 063C42		
	391	6	4.2	3.500	GST04 - 1M□□□ 063C42		
	311	8	3.3	4.400	GST04 - 1M□□□ 063C42		
	242	10	2.6	5.667	GST04 - 1M□□□ 063C42		
	191	12	2.0	7.182	GST04 - 1M□□□ 063C42		
	152	15	1.2	9.000	GST04 - 1M□□□ 063C42		
	154	15	2.8	8.900	GST05 - 1M□□□ 063C42		
	154	15	3.2	8.900	GST06 - 1M□□□ 063C42		
	120	20	1.4	11.375	GST05 - 1M□□□ 063C42		
	122	19	2.6	11.250	GST06 - 1M□□□ 063C42		
	n1=920	102	23	1.0	9.000		GST04 - 1M□□□ 071-33
		103	23	1.9	8.900		GST05 - 1M□□□ 071-33
103		23	2.7	8.900	GST06 - 1M□□□ 071-33		
81		29	1.1	11.375	GST05 - 1M□□□ 071-33		
82		29	2.2	11.250	GST06 - 1M□□□ 071-33		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.25 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n <sub>1</sub> =2760	431	5	4.1	6.400	GST04 - 2M□□□ 063-31	
	280	8	4.1	9.856	GST04 - 2M□□□ 063-31	
	246	9	4.1	11.200	GST04 - 2M□□□ 063-31	
	220	11	3.8	12.571	GST04 - 2M□□□ 063-31	
	193	12	3.8	14.286	GST04 - 2M□□□ 063-31	
	143	16	4.0	19.360	GST04 - 2M□□□ 063-31	
	126	19	3.1	22.000	GST04 - 2M□□□ 063-31	
	111	21	3.2	24.933	GST04 - 2M□□□ 063-31	
	97	24	2.5	28.333	GST04 - 2M□□□ 063-31	
	87	27	2.5	31.600	GST04 - 2M□□□ 063-31	
	77	30	2.0	35.909	GST04 - 2M□□□ 063-31	
	70	33	2.0	39.600	GST04 - 2M□□□ 063-31	
	61	38	1.7	45.000	GST04 - 2M□□□ 063-31	
	53	44	1.6	52.171	GST04 - 2M□□□ 063-31	
	47	50	1.3	59.286	GST04 - 2M□□□ 063-31	
n <sub>1</sub> =1370	528	4	4.1	2.597	GST03 - 2M□□□ 063C42	
	464	5	4.5	2.956	GST04 - 2M□□□ 063C42	
	401	6	3.3	3.413	GST03 - 2M□□□ 063C42	
	338	7	4.5	4.053	GST04 - 2M□□□ 063C42	
	314	7	2.8	4.368	GST03 - 2M□□□ 063C42	
	258	9	3.0	5.312	GST03 - 2M□□□ 063C42	
	234	10	5.2	5.850	GST04 - 2M□□□ 063C42	
	230	10	2.8	5.965	GST03 - 2M□□□ 063C42	
	196	12	2.5	6.982	GST03 - 2M□□□ 063C42	
	175	13	2.4	7.840	GST03 - 2M□□□ 063C42	
	153	15	2.2	8.935	GST03 - 2M□□□ 063C42	
	137	17	2.0	10.033	GST03 - 2M□□□ 063C42	
	120	19	1.8	11.429	GST03 - 2M□□□ 063C42	
	122	19	3.2	11.200	GST04 - 2M□□□ 063C42	
	107	22	1.7	12.833	GST03 - 2M□□□ 063C42	
	92	25	1.6	14.836	GST03 - 2M□□□ 063C42	
	96	24	2.5	14.286	GST04 - 2M□□□ 063C42	
	82	28	1.5	16.660	GST03 - 2M□□□ 063C42	
	89	26	2.7	15.400	GST04 - 2M□□□ 063C42	
	72	32	1.3	19.013	GST03 - 2M□□□ 063C42	
	78	30	2.1	17.500	GST04 - 2M□□□ 063C42	
	71	33	2.1	19.360	GST04 - 2M□□□ 063C42	
	64	36	1.2	21.350	GST03 - 2M□□□ 063C42	
	62	37	1.7	22.000	GST04 - 2M□□□ 063C42	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.25 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>	
n1=1370	56	42	1.1	24.595	GST03 - 2M□□□ 063C42		
	55	42	1.7	24.933	GST04 - 2M□□□ 063C42		
	50	47	1.0	27.618	GST03 - 2M□□□ 063C42		
	48	48	1.3	28.333	GST04 - 2M□□□ 063C42		
	48	48	3.1	28.333	GST05 - 2M□□□ 063C42		
	43	54	0.8	32.000	GST03 - 2M□□□ 063C42		
	43	53	1.4	31.600	GST04 - 2M□□□ 063C42		
	43	55	3.0	32.267	GST05 - 2M□□□ 063C42		
	38	61	1.1	35.909	GST04 - 2M□□□ 063C42		
	37	62	2.4	36.667	GST05 - 2M□□□ 063C42		
	35	67	1.1	39.600	GST04 - 2M□□□ 063C42		
	35	66	2.5	39.160	GST05 - 2M□□□ 063C42		
	35	66	3.2	39.160	GST06 - 2M□□□ 063C42		
	30	76	0.9	45.000	GST04 - 2M□□□ 063C42		
	31	75	2.0	44.500	GST05 - 2M□□□ 063C42		
	31	75	3.2	44.500	GST06 - 2M□□□ 063C42		
	27	85	1.4	50.050	GST05 - 2M□□□ 063C42		
	28	84	2.6	49.500	GST06 - 2M□□□ 063C42		
	24	96	1.4	56.875	GST05 - 2M□□□ 063C42		
	24	95	2.6	56.250	GST06 - 2M□□□ 063C42		
n1=920	24	99	1.7	39.160	GST05 - 2M□□□ 071-33		
	24	99	2.7	39.160	GST06 - 2M□□□ 071-33		
	21	112	1.3	44.500	GST05 - 2M□□□ 071-33		
	21	112	2.7	44.500	GST06 - 2M□□□ 071-33		
	18	126	1.1	50.050	GST05 - 2M□□□ 071-33		
	19	125	2.2	49.500	GST06 - 2M□□□ 071-33		
	16	143	1.0	56.875	GST05 - 2M□□□ 071-33		
	16	142	2.2	56.250	GST06 - 2M□□□ 071-33		
	<b>GST □□ - 3M</b>						
	n1=1370	24	94	1.6	56.667		GST05 - 3M□□□ 063C42
22		106	1.4	63.467	GST05 - 3M□□□ 063C42		
20		113	3.2	67.760	GST06 - 3M□□□ 063C42		
19		119	1.4	71.238	GST05 - 3M□□□ 063C42		
20		117	3.1	70.156	GST06 - 3M□□□ 063C42		
17		135	1.1	80.952	GST05 - 3M□□□ 063C42		
17		135	2.5	80.952	GST06 - 3M□□□ 063C42		
15		153	1.1	91.746	GST05 - 3M□□□ 063C42		
16		145	2.5	87.267	GST06 - 3M□□□ 063C42		
14		165	0.9	99.167	GST05 - 3M□□□ 063C42		
14		165	2.0	99.167	GST06 - 3M□□□ 063C42		
12		194	0.9	116.277	GST05 - 3M□□□ 063C42		
13		183	2.1	109.707	GST06 - 3M□□□ 063C42		
11		208	1.6	124.667	GST06 - 3M□□□ 063C42		
9.7		235	1.6	141.289	GST06 - 3M□□□ 063C42		
9.8	232	3.0	139.211	GST07 - 3M□□□ 063C42			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>0.25 kW</b>					<b>GST □□ - 3M</b>	<b>3-122</b>		
n1=1370	8.5	267	1.3	160.556	GST06 - 3M□□□ 063C42			
	8.7	263	2.7	158.194	GST07 - 3M□□□ 063C42			
	7.7	298	1.3	179.067	GST06 - 3M□□□ 063C42			
	7.6	300	2.4	180.156	GST07 - 3M□□□ 063C42			
	6.7	339	1.0	203.485	GST06 - 3M□□□ 063C42			
	6.7	341	2.1	204.722	GST07 - 3M□□□ 063C42			
	5.9	386	1.0	231.733	GST06 - 3M□□□ 063C42			
	5.8	394	1.8	236.622	GST07 - 3M□□□ 063C42			
	5.4	425	0.8	255.000	GST06 - 3M□□□ 063C42			
	5.5	414	1.7	248.458	GST07 - 3M□□□ 063C42			
	5.4	420	3.2	252.167	GST09 - 3M□□□ 063C42			
	5.1	448	1.6	268.889	GST07 - 3M□□□ 063C42			
	4.2	544	1.3	326.333	GST07 - 3M□□□ 063C42			
	4.2	544	3.0	326.333	GST09 - 3M□□□ 063C42			
	3.7	611	1.2	367.033	GST07 - 3M□□□ 063C42			
	3.8	605	2.6	363.000	GST09 - 3M□□□ 063C42			
	3.3	695	1.0	417.083	GST07 - 3M□□□ 063C42			
	3.3	687	2.4	412.500	GST09 - 3M□□□ 063C42			
n1=920	2.8	809	0.9	326.333	GST07 - 3M□□□ 071-33			
	2.8	809	2.0	326.333	GST09 - 3M□□□ 071-33			
	2.5	900	1.8	363.000	GST09 - 3M□□□ 071-33			
	2.2	1023	1.6	412.500	GST09 - 3M□□□ 071-33			
<b>0.37 kW</b>				<b>GST □□ - 1M</b>	<b>3-102</b>			
n1=1410	881	4	4.0	1.600	GST04 - 1M□□□ 071C32			
	689	5	4.5	2.048	GST04 - 1M□□□ 071C32			
	630	6	4.0	2.240	GST05 - 1M□□□ 071C32			
	494	7	3.5	2.857	GST04 - 1M□□□ 071C32			
	403	9	2.9	3.500	GST04 - 1M□□□ 071C32			
	321	11	2.3	4.400	GST04 - 1M□□□ 071C32			
	249	14	1.8	5.667	GST04 - 1M□□□ 071C32			
	249	14	3.2	5.667	GST05 - 1M□□□ 071C32			
	196	18	1.4	7.182	GST04 - 1M□□□ 071C32			
	192	18	2.6	7.333	GST05 - 1M□□□ 071C32			
	192	18	3.2	7.333	GST06 - 1M□□□ 071C32			
	157	22	1.0	9.000	GST04 - 1M□□□ 071C32			
	158	22	1.9	8.900	GST05 - 1M□□□ 071C32			
	158	22	2.8	8.900	GST06 - 1M□□□ 071C32			
	124	28	1.1	11.375	GST05 - 1M□□□ 071C32			
	125	28	2.2	11.250	GST06 - 1M□□□ 071C32			
	n1=900	123	28	1.6	7.333		GST05 - 1M□□□ 080-13	
		101	34	1.2	8.900		GST05 - 1M□□□ 080-13	
101		34	2.5	8.900	GST06 - 1M□□□ 080-13			
80		44	1.5	11.250	GST06 - 1M□□□ 080-13			
80		44	2.6	11.250	GST07 - 1M□□□ 080-13			

Thermal power limit not considered (see page2-4)



# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2840	444	8	5.8	6.400	GST04 - 2M□□□ 071-11	
	403	9	5.4	7.040	GST04 - 2M□□□ 071-11	
	355	10	4.9	8.000	GST04 - 2M□□□ 071-11	
	315	11	4.7	9.010	GST04 - 2M□□□ 071-11	
	288	12	4.4	9.856	GST04 - 2M□□□ 071-11	
	254	14	3.6	11.200	GST04 - 2M□□□ 071-11	
	226	15	3.7	12.571	GST04 - 2M□□□ 071-11	
	199	17	2.9	14.286	GST04 - 2M□□□ 071-11	
	184	19	3.4	15.400	GST04 - 2M□□□ 071-11	
	162	21	2.7	17.500	GST04 - 2M□□□ 071-11	
	147	23	2.8	19.360	GST04 - 2M□□□ 071-11	
	129	27	2.2	22.000	GST04 - 2M□□□ 071-11	
	114	30	2.2	24.933	GST04 - 2M□□□ 071-11	
	100	34	1.7	28.333	GST04 - 2M□□□ 071-11	
	90	38	1.7	31.600	GST04 - 2M□□□ 071-11	
	79	43	1.4	35.909	GST04 - 2M□□□ 071-11	
	78	44	3.1	36.667	GST05 - 2M□□□ 071-11	
	72	48	1.4	39.600	GST04 - 2M□□□ 071-11	
	73	47	3.2	39.160	GST05 - 2M□□□ 071-11	
	63	54	1.2	45.000	GST04 - 2M□□□ 071-11	
	64	54	2.8	44.500	GST05 - 2M□□□ 071-11	
	57	60	2.2	50.050	GST05 - 2M□□□ 071-11	
	50	69	2.2	56.875	GST05 - 2M□□□ 071-11	
n1=1410	543	6	2.8	2.597	GST03 - 2M□□□ 071C32	
	477	7	4.0	2.956	GST04 - 2M□□□ 071C32	
	413	8	2.3	3.413	GST03 - 2M□□□ 071C32	
	348	10	4.0	4.053	GST04 - 2M□□□ 071C32	
	323	11	2.0	4.368	GST03 - 2M□□□ 071C32	
	265	13	2.1	5.312	GST03 - 2M□□□ 071C32	
	241	14	3.7	5.850	GST04 - 2M□□□ 071C32	
	236	15	2.0	5.965	GST03 - 2M□□□ 071C32	
	202	17	1.7	6.982	GST03 - 2M□□□ 071C32	
	180	19	1.7	7.840	GST03 - 2M□□□ 071C32	
	176	19	3.0	8.000	GST04 - 2M□□□ 071C32	
	158	22	1.5	8.935	GST03 - 2M□□□ 071C32	
	157	22	2.9	9.010	GST04 - 2M□□□ 071C32	
	141	24	1.4	10.033	GST03 - 2M□□□ 071C32	
	143	24	2.7	9.856	GST04 - 2M□□□ 071C32	
	123	28	1.3	11.429	GST03 - 2M□□□ 071C32	
	126	27	2.2	11.200	GST04 - 2M□□□ 071C32	

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=1410	110	31	1.2	12.833	GST03 - 2M□□□ 071C32	
	112	31	2.3	12.571	GST04 - 2M□□□ 071C32	
	95	36	1.1	14.836	GST03 - 2M□□□ 071C32	
	99	35	1.8	14.286	GST04 - 2M□□□ 071C32	
	98	35	3.2	14.356	GST05 - 2M□□□ 071C32	
	85	41	1.0	16.660	GST03 - 2M□□□ 071C32	
	92	37	1.9	15.400	GST04 - 2M□□□ 071C32	
	87	39	3.2	16.190	GST05 - 2M□□□ 071C32	
	74	46	0.9	19.013	GST03 - 2M□□□ 071C32	
	81	43	1.5	17.500	GST04 - 2M□□□ 071C32	
	73	47	1.5	19.360	GST04 - 2M□□□ 071C32	
	66	52	0.9	21.350	GST03 - 2M□□□ 071C32	
	64	54	1.2	22.000	GST04 - 2M□□□ 071C32	
	62	55	2.6	22.778	GST05 - 2M□□□ 071C32	
	57	61	1.2	24.933	GST04 - 2M□□□ 071C32	
	57	61	2.7	24.933	GST05 - 2M□□□ 071C32	
	50	69	0.9	28.333	GST04 - 2M□□□ 071C32	
	50	69	2.1	28.333	GST05 - 2M□□□ 071C32	
	45	77	0.9	31.600	GST04 - 2M□□□ 071C32	
	44	78	2.1	32.267	GST05 - 2M□□□ 071C32	
	44	78	3.2	32.267	GST06 - 2M□□□ 071C32	
	39	89	1.7	36.667	GST05 - 2M□□□ 071C32	
	39	89	3.2	36.667	GST06 - 2M□□□ 071C32	
	36	95	1.7	39.160	GST05 - 2M□□□ 071C32	
	36	95	2.8	39.160	GST06 - 2M□□□ 071C32	
	32	108	1.4	44.500	GST05 - 2M□□□ 071C32	
	32	108	2.8	44.500	GST06 - 2M□□□ 071C32	
	28	122	1.1	50.050	GST05 - 2M□□□ 071C32	
	29	120	2.2	49.500	GST06 - 2M□□□ 071C32	
	25	138	1.1	56.875	GST05 - 2M□□□ 071C32	
	25	137	2.2	56.250	GST06 - 2M□□□ 071C32	
n1=900	25	140	1.1	36.667	GST05 - 2M□□□ 080-13	
	25	140	2.3	36.667	GST06 - 2M□□□ 080-13	
	23	149	1.1	39.160	GST05 - 2M□□□ 080-13	
	23	149	2.5	39.160	GST06 - 2M□□□ 080-13	
	20	170	0.9	44.500	GST05 - 2M□□□ 080-13	
	20	170	1.9	44.500	GST06 - 2M□□□ 080-13	
	18	189	1.5	49.500	GST06 - 2M□□□ 080-13	
	18	189	2.6	49.500	GST07 - 2M□□□ 080-13	
	16	214	1.5	56.250	GST06 - 2M□□□ 080-13	
	16	214	2.6	56.250	GST07 - 2M□□□ 080-13	
n1=1410					<b>GST □□ - 3M</b>	<b>3-122</b>
	25	136	1.1	56.667	GST05 - 3M□□□ 071C32	
	22	152	1.0	63.467	GST05 - 3M□□□ 071C32	
	21	162	2.2	67.760	GST06 - 3M□□□ 071C32	
	20	171	1.0	71.238	GST05 - 3M□□□ 071C32	
	20	168	2.1	70.156	GST06 - 3M□□□ 071C32	

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b>					<b>GST □□ - 3M</b>	<b>3-122</b>
n <sub>1</sub> =1410	17	194	1.7	80.952	GST06 - 3M□□□ 071C32	
	16	209	1.8	87.267	GST06 - 3M□□□ 071C32	
	14	238	1.4	99.167	GST06 - 3M□□□ 071C32	
	13	263	1.4	109.707	GST06 - 3M□□□ 071C32	
	13	268	2.6	111.915	GST07 - 3M□□□ 071C32	
	11	299	1.1	124.667	GST06 - 3M□□□ 071C32	
	11	305	2.3	127.176	GST07 - 3M□□□ 071C32	
	10	338	1.1	141.289	GST06 - 3M□□□ 071C32	
	10	333	2.1	139.211	GST07 - 3M□□□ 071C32	
	8.8	385	0.9	160.556	GST06 - 3M□□□ 071C32	
	8.9	379	1.9	158.194	GST07 - 3M□□□ 071C32	
	7.9	429	0.9	179.067	GST06 - 3M□□□ 071C32	
	7.8	431	1.6	180.156	GST07 - 3M□□□ 071C32	
	7.7	438	3.2	182.844	GST09 - 3M□□□ 071C32	
	6.9	490	1.4	204.722	GST07 - 3M□□□ 071C32	
	6.8	498	3.2	207.778	GST09 - 3M□□□ 071C32	
	6.0	567	1.2	236.622	GST07 - 3M□□□ 071C32	
	6.0	567	2.8	236.622	GST09 - 3M□□□ 071C32	
	5.7	595	1.2	248.458	GST07 - 3M□□□ 071C32	
	5.6	604	2.7	252.167	GST09 - 3M□□□ 071C32	
	5.2	644	1.1	268.889	GST07 - 3M□□□ 071C32	
	5.2	644	2.5	268.889	GST09 - 3M□□□ 071C32	
	4.3	782	0.9	326.333	GST07 - 3M□□□ 071C32	
	4.3	782	2.1	326.333	GST09 - 3M□□□ 071C32	
	3.8	879	0.8	367.033	GST07 - 3M□□□ 071C32	
	3.9	869	1.9	363.000	GST09 - 3M□□□ 071C32	
	3.4	988	1.6	412.500	GST09 - 3M□□□ 071C32	
n <sub>1</sub> =900	3.4	1009	1.6	268.889	GST09 - 3M□□□ 080-13	
	3.4	1009	2.8	268.889	GST11 - 3M□□□ 080-13	
	2.8	1224	1.3	326.333	GST09 - 3M□□□ 080-13	
	2.8	1224	2.3	326.333	GST11 - 3M□□□ 080-13	
	2.5	1362	1.2	363.000	GST09 - 3M□□□ 080-13	
	2.5	1362	2.0	363.000	GST11 - 3M□□□ 080-13	
	2.2	1548	1.0	412.500	GST09 - 3M□□□ 080-13	
	2.2	1548	1.8	412.500	GST11 - 3M□□□ 080-13	
<b>0.55 kW</b>					<b>GST □□ - 1M</b>	<b>3-102</b>
n <sub>1</sub> =1405	878	6	3.3	1.600	GST04 - 1M□□□ 071C42	
	686	8	3.0	2.048	GST04 - 1M□□□ 071C42	
	627	8	3.0	2.240	GST04 - 1M□□□ 071C42	
	492	11	2.4	2.857	GST04 - 1M□□□ 071C42	
	401	13	1.9	3.500	GST04 - 1M□□□ 071C42	
	319	16	1.5	4.400	GST04 - 1M□□□ 071C42	
	308	17	3.2	4.556	GST05 - 1M□□□ 071C42	

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b>					<b>GST □□ - 1M</b>	<b>3-102</b>
n1=1405	248	21	1.2	5.667	GST04 - 1M□□□ 071C42	
	248	21	2.6	5.667	GST05 - 1M□□□ 071C42	
	248	21	3.2	5.667	GST06 - 1M□□□ 071C42	
	192	27	1.7	7.333	GST05 - 1M□□□ 071C42	
	192	27	2.9	7.333	GST06 - 1M□□□ 071C42	
	158	33	1.3	8.900	GST05 - 1M□□□ 071C42	
	158	33	2.4	8.900	GST06 - 1M□□□ 071C42	
	125	41	1.4	11.250	GST06 - 1M□□□ 071C42	
n1=900	123	42	1.1	7.333	GST05 - 1M□□□ 080-33	
	123	42	2.3	7.333	GST06 - 1M□□□ 080-33	
	123	42	2.5	7.333	GST07 - 1M□□□ 080-33	
	101	51	0.8	8.900	GST05 - 1M□□□ 080-33	
	101	51	1.7	8.900	GST06 - 1M□□□ 080-33	
	101	51	2.2	8.900	GST07 - 1M□□□ 080-33	
	80	65	1.0	11.250	GST06 - 1M□□□ 080-33	
	80	65	1.8	11.250	GST07 - 1M□□□ 080-33	
n1=2840					<b>GST □□ - 2M</b>	<b>3-111</b>
	961	5	4.3	2.956	GST04 - 2M□□□ 071-31	
	852	6	4.3	3.333	GST04 - 2M□□□ 071-31	
	701	7	4.3	4.053	GST04 - 2M□□□ 071-31	
	621	8	4.3	4.571	GST04 - 2M□□□ 071-31	
	548	9	4.3	5.187	GST04 - 2M□□□ 071-31	
	485	11	4.1	5.850	GST04 - 2M□□□ 071-31	
	444	12	3.9	6.400	GST04 - 2M□□□ 071-31	
	403	13	3.6	7.040	GST04 - 2M□□□ 071-31	
	355	14	3.3	8.000	GST04 - 2M□□□ 071-31	
	315	16	3.1	9.010	GST04 - 2M□□□ 071-31	
	288	18	3.0	9.856	GST04 - 2M□□□ 071-31	
	254	20	2.4	11.200	GST04 - 2M□□□ 071-31	
	226	23	2.5	12.571	GST04 - 2M□□□ 071-31	
	199	26	1.9	14.286	GST04 - 2M□□□ 071-31	
	184	28	2.3	15.400	GST04 - 2M□□□ 071-31	
	162	31	1.8	17.500	GST04 - 2M□□□ 071-31	
	147	35	1.9	19.360	GST04 - 2M□□□ 071-31	
	129	40	1.4	22.000	GST04 - 2M□□□ 071-31	
	125	41	3.2	22.778	GST05 - 2M□□□ 071-31	
	114	45	1.5	24.933	GST04 - 2M□□□ 071-31	
	100	51	1.1	28.333	GST04 - 2M□□□ 071-31	
	100	51	2.7	28.333	GST05 - 2M□□□ 071-31	
	90	57	1.2	31.600	GST04 - 2M□□□ 071-31	
	88	58	2.6	32.267	GST05 - 2M□□□ 071-31	

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.55 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>	
n1=2840	79	64	0.9	35.909	GST04 - 2M□□□ 071-31		
	78	66	2.1	36.667	GST05 - 2M□□□ 071-31		
	72	71	0.9	39.600	GST04 - 2M□□□ 071-31		
	73	70	2.2	39.160	GST05 - 2M□□□ 071-31		
	63	81	0.8	45.000	GST04 - 2M□□□ 071-31		
	64	80	1.9	44.500	GST05 - 2M□□□ 071-31		
	57	90	1.5	50.050	GST05 - 2M□□□ 071-31		
	57	89	3.0	49.500	GST06 - 2M□□□ 071-31		
	50	102	1.5	56.875	GST05 - 2M□□□ 071-31		
	51	101	3.0	56.250	GST06 - 2M□□□ 071-31		
	n1=1405	541	9	1.9	2.597	GST03 - 2M□□□ 071C42	
		475	11	3.6	2.956	GST04 - 2M□□□ 071C42	
		412	12	1.6	3.413	GST03 - 2M□□□ 071C42	
		347	15	3.1	4.053	GST04 - 2M□□□ 071C42	
322		16	1.3	4.368	GST03 - 2M□□□ 071C42		
307		17	2.9	4.571	GST04 - 2M□□□ 071C42		
265		19	1.4	5.312	GST03 - 2M□□□ 071C42		
271		19	2.7	5.187	GST04 - 2M□□□ 071C42		
240		21	2.5	5.850	GST04 - 2M□□□ 071C42		
236		22	1.3	5.965	GST03 - 2M□□□ 071C42		
220		23	2.4	6.400	GST04 - 2M□□□ 071C42		
201		25	1.2	6.982	GST03 - 2M□□□ 071C42		
200		26	2.2	7.040	GST04 - 2M□□□ 071C42		
179		28	1.1	7.840	GST03 - 2M□□□ 071C42		
176		29	2.0	8.000	GST04 - 2M□□□ 071C42		
157		32	1.0	8.935	GST03 - 2M□□□ 071C42		
156		33	1.9	9.010	GST04 - 2M□□□ 071C42		
140		36	0.9	10.033	GST03 - 2M□□□ 071C42		
143		36	1.8	9.856	GST04 - 2M□□□ 071C42		
123		41	0.9	11.429	GST03 - 2M□□□ 071C42		
125		41	1.5	11.200	GST04 - 2M□□□ 071C42		
125		41	3.1	11.200	GST05 - 2M□□□ 071C42		
110		47	0.8	12.833	GST03 - 2M□□□ 071C42		
112		46	1.5	12.571	GST04 - 2M□□□ 071C42		
108		47	2.9	13.016	GST05 - 2M□□□ 071C42		
98		52	1.2	14.286	GST04 - 2M□□□ 071C42		
98		52	2.7	14.356	GST05 - 2M□□□ 071C42		
91		56	1.2	15.400	GST04 - 2M□□□ 071C42		
87		59	2.5	16.190	GST05 - 2M□□□ 071C42		
80		64	1.0	17.500	GST04 - 2M□□□ 071C42		
80		64	2.2	17.500	GST05 - 2M□□□ 071C42		
73		70	1.0	19.360	GST04 - 2M□□□ 071C42		
70	73	2.2	20.044	GST05 - 2M□□□ 071C42			
62	83	1.7	22.778	GST05 - 2M□□□ 071C42			
56	90	1.8	24.933	GST05 - 2M□□□ 071C42			
56	90	3.2	24.933	GST06 - 2M□□□ 071C42			

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>0.55 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>		
n1=1405	50	103	1.4	28.333	GST05 - 2M□□□ 071C42			
	50	103	3.1	28.333	GST06 - 2M□□□ 071C42			
	44	117	1.4	32.267	GST05 - 2M□□□ 071C42			
	44	117	2.9	32.267	GST06 - 2M□□□ 071C42			
	38	133	1.1	36.667	GST05 - 2M□□□ 071C42			
	38	133	2.4	36.667	GST06 - 2M□□□ 071C42			
	36	142	1.2	39.160	GST05 - 2M□□□ 071C42			
	36	142	2.4	39.160	GST06 - 2M□□□ 071C42			
	32	161	0.9	44.500	GST05 - 2M□□□ 071C42			
	32	161	2.0	44.500	GST06 - 2M□□□ 071C42			
	28	180	1.4	49.500	GST06 - 2M□□□ 071C42			
	25	204	1.4	56.250	GST06 - 2M□□□ 071C42			
	n1=900	25	208	1.6	36.667		GST06 - 2M□□□ 080-33	
		25	208	2.5	36.667		GST07 - 2M□□□ 080-33	
23		222	1.7	39.160	GST06 - 2M□□□ 080-33			
23		222	2.2	39.160	GST07 - 2M□□□ 080-33			
20		252	1.3	44.500	GST06 - 2M□□□ 080-33			
20		252	2.2	44.500	GST07 - 2M□□□ 080-33			
18		280	1.0	49.500	GST06 - 2M□□□ 080-33			
18		280	1.8	49.500	GST07 - 2M□□□ 080-33			
16		319	1.0	56.250	GST06 - 2M□□□ 080-33			
16		319	1.8	56.250	GST07 - 2M□□□ 080-33			
n1=1405					<b>GST □□ - 3M</b>	<b>3-122</b>		
	21	242	1.5	67.760	GST06 - 3M□□□ 071C42			
	22	233	3.0	65.079	GST07 - 3M□□□ 071C42			
	20	251	1.4	70.156	GST06 - 3M□□□ 071C42			
	20	251	2.8	70.156	GST07 - 3M□□□ 071C42			
	17	289	1.1	80.952	GST06 - 3M□□□ 071C42			
	18	285	2.5	79.762	GST07 - 3M□□□ 071C42			
	16	312	1.2	87.267	GST06 - 3M□□□ 071C42			
	16	307	2.3	85.983	GST07 - 3M□□□ 071C42			
	14	354	0.9	99.167	GST06 - 3M□□□ 071C42			
	14	349	2.0	97.708	GST07 - 3M□□□ 071C42			
	13	392	1.0	109.707	GST06 - 3M□□□ 071C42			
	13	400	1.8	111.915	GST07 - 3M□□□ 071C42			
	11	454	1.6	127.176	GST07 - 3M□□□ 071C42			
	10	497	1.4	139.211	GST07 - 3M□□□ 071C42			
	9.9	505	3.2	141.289	GST09 - 3M□□□ 071C42			
	8.9	565	1.3	158.194	GST07 - 3M□□□ 071C42			
	8.8	574	2.8	160.556	GST09 - 3M□□□ 071C42			
	7.8	644	1.1	180.156	GST07 - 3M□□□ 071C42			
	7.7	653	2.5	182.844	GST09 - 3M□□□ 071C42			
6.9	731	1.0	204.722	GST07 - 3M□□□ 071C42				
6.8	742	2.2	207.778	GST09 - 3M□□□ 071C42				
5.9	845	0.8	236.622	GST07 - 3M□□□ 071C42				
5.9	845	1.9	236.622	GST09 - 3M□□□ 071C42				

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page			
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c						
<b>0.55 kW</b>	n <sub>1</sub> =1405				<b>GST □□ - 3M</b>	3-122			
		5.6	901	1.8	252.167		GST09 - 3M□□□ 071C42		
		5.2	961	1.7	268.889		GST09 - 3M□□□ 071C42		
		4.3	1166	1.4	326.333		GST09 - 3M□□□ 071C42		
		3.9	1297	1.2	363.000		GST09 - 3M□□□ 071C42		
		3.4	1474	1.1	412.500		GST09 - 3M□□□ 071C42		
	n <sub>1</sub> =900	3.4	1500	1.1	268.889		GST09 - 3M□□□ 080-33		
		3.4	1500	1.9	268.889		GST11 - 3M□□□ 080-33		
		2.8	1820	0.9	326.333		GST09 - 3M□□□ 080-33		
		2.8	1820	1.6	326.333		GST11 - 3M□□□ 080-33		
		2.5	2024	1.3	363.000		GST11 - 3M□□□ 080-33		
		2.2	2301	1.2	412.500		GST11 - 3M□□□ 080-33		
		<b>0.75 kW</b>	n <sub>1</sub> =1410					<b>GST □□ - 1M</b>	3-102
				881	8		2.4	1.600	
689	10			2.2	2.048	GST04 - 1M□□□ 080C32			
630	11			2.2	2.240	GST04 - 1M□□□ 080C32			
494	14			1.7	2.857	GST04 - 1M□□□ 080C32			
403	18			1.4	3.500	GST04 - 1M□□□ 080C32			
403	18			3.1	3.500	GST05 - 1M□□□ 080C32			
321	22			1.1	4.400	GST04 - 1M□□□ 080C32			
310	23			2.4	4.556	GST05 - 1M□□□ 080C32			
249	28			0.9	5.667	GST04 - 1M□□□ 080C32			
249	28			1.9	5.667	GST05 - 1M□□□ 080C32			
249	28			2.9	5.667	GST06 - 1M□□□ 080C32			
192	37			1.3	7.333	GST05 - 1M□□□ 080C32			
192	37			2.6	7.333	GST06 - 1M□□□ 080C32			
192	37			2.9	7.333	GST07 - 1M□□□ 080C32			
158	45			0.9	8.900	GST05 - 1M□□□ 080C32			
158	45			1.9	8.900	GST06 - 1M□□□ 080C32			
158	45			2.5	8.900	GST07 - 1M□□□ 080C32			
125	56		1.1	11.250	GST06 - 1M□□□ 080C32				
125	56		2.0	11.250	GST07 - 1M□□□ 080C32				
n <sub>1</sub> =2850						<b>GST □□ - 2M</b>	3-111		
	964		7	4.4	2.956	GST04 - 2M□□□ 080-11			
	855		8	4.2	3.333	GST04 - 2M□□□ 080-11			
	703		10	3.7	4.053	GST04 - 2M□□□ 080-11			
	623		11	3.5	4.571	GST04 - 2M□□□ 080-11			
	549		13	3.2	5.187	GST04 - 2M□□□ 080-11			
	487		14	3.0	5.850	GST04 - 2M□□□ 080-11			
	445		16	2.8	6.400	GST04 - 2M□□□ 080-11			
	405	17	2.7	7.040	GST04 - 2M□□□ 080-11				
	356	20	2.4	8.000	GST04 - 2M□□□ 080-11				

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2850	316	22	2.3	9.010	GST04 - 2M□□□ 080-11	
	289	24	2.2	9.856	GST04 - 2M□□□ 080-11	
	255	27	1.8	11.200	GST04 - 2M□□□ 080-11	
	227	31	1.8	12.571	GST04 - 2M□□□ 080-11	
	200	35	1.4	14.286	GST04 - 2M□□□ 080-11	
	199	35	3.2	14.356	GST05 - 2M□□□ 080-11	
	185	38	1.7	15.400	GST04 - 2M□□□ 080-11	
	163	43	1.3	17.500	GST04 - 2M□□□ 080-11	
	163	43	3.1	17.500	GST05 - 2M□□□ 080-11	
	147	47	1.4	19.360	GST04 - 2M□□□ 080-11	
	142	49	3.0	20.044	GST05 - 2M□□□ 080-11	
	130	54	1.1	22.000	GST04 - 2M□□□ 080-11	
	125	56	2.4	22.778	GST05 - 2M□□□ 080-11	
	114	61	1.1	24.933	GST04 - 2M□□□ 080-11	
	114	61	2.4	24.933	GST05 - 2M□□□ 080-11	
	101	69	0.8	28.333	GST04 - 2M□□□ 080-11	
	101	69	2.0	28.333	GST05 - 2M□□□ 080-11	
	88	79	1.9	32.267	GST05 - 2M□□□ 080-11	
	78	89	1.5	36.667	GST05 - 2M□□□ 080-11	
	73	96	1.6	39.160	GST05 - 2M□□□ 080-11	
	64	109	1.4	44.500	GST05 - 2M□□□ 080-11	
	64	109	3.0	44.500	GST06 - 2M□□□ 080-11	
	58	121	2.3	49.500	GST06 - 2M□□□ 080-11	
	51	137	2.3	56.250	GST06 - 2M□□□ 080-11	
n1=1410	477	15	2.7	2.956	GST04 - 2M□□□ 080C32	
	423	16	2.5	3.333	GST04 - 2M□□□ 080C32	
	348	20	2.3	4.053	GST04 - 2M□□□ 080C32	
	308	23	2.1	4.571	GST04 - 2M□□□ 080C32	
	272	26	2.0	5.187	GST04 - 2M□□□ 080C32	
	241	29	1.8	5.850	GST04 - 2M□□□ 080C32	
	220	32	1.7	6.400	GST04 - 2M□□□ 080C32	
	200	35	1.6	7.040	GST04 - 2M□□□ 080C32	
	195	36	3.0	7.238	GST05 - 2M□□□ 080C32	
	176	39	1.5	8.000	GST04 - 2M□□□ 080C32	
	173	40	2.9	8.163	GST05 - 2M□□□ 080C32	
	157	44	1.4	9.010	GST04 - 2M□□□ 080C32	
	157	44	2.7	9.010	GST05 - 2M□□□ 080C32	
	143	49	1.3	9.856	GST04 - 2M□□□ 080C32	
	141	49	2.5	10.000	GST05 - 2M□□□ 080C32	
	126	55	1.1	11.200	GST04 - 2M□□□ 080C32	
	126	55	2.3	11.200	GST05 - 2M□□□ 080C32	
	112	62	1.1	12.571	GST04 - 2M□□□ 080C32	
	108	64	2.1	13.016	GST05 - 2M□□□ 080C32	

Thermal power limit not considered (see page2-4)



# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.75 kW</b> n <sub>1</sub> =1410	<b>GST □□ - 2M</b>					3-111	
	99	70	0.9	14.286	GST04 - 2M□□□ 080C32		
	98	71	2.0	14.356	GST05 - 2M□□□ 080C32		
	92	76	0.9	15.400	GST04 - 2M□□□ 080C32		
	87	80	1.9	16.190	GST05 - 2M□□□ 080C32		
	81	86	1.6	17.500	GST05 - 2M□□□ 080C32		
	70	99	1.6	20.044	GST05 - 2M□□□ 080C32		
	62	112	1.3	22.778	GST05 - 2M□□□ 080C32		
	62	112	2.8	22.778	GST06 - 2M□□□ 080C32		
	57	123	1.3	24.933	GST05 - 2M□□□ 080C32		
	57	123	2.9	24.933	GST06 - 2M□□□ 080C32		
	50	140	1.1	28.333	GST05 - 2M□□□ 080C32		
	50	140	2.3	28.333	GST06 - 2M□□□ 080C32		
	44	159	1.0	32.267	GST05 - 2M□□□ 080C32		
	44	159	2.3	32.267	GST06 - 2M□□□ 080C32		
	44	159	2.9	32.267	GST07 - 2M□□□ 080C32		
	39	181	0.8	36.667	GST05 - 2M□□□ 080C32		
	39	181	1.8	36.667	GST06 - 2M□□□ 080C32		
	39	181	2.9	36.667	GST07 - 2M□□□ 080C32		
	36	193	0.9	39.160	GST05 - 2M□□□ 080C32		
	36	193	1.9	39.160	GST06 - 2M□□□ 080C32		
	36	193	2.5	39.160	GST07 - 2M□□□ 080C32		
	32	219	1.5	44.500	GST06 - 2M□□□ 080C32		
	32	219	2.5	44.500	GST07 - 2M□□□ 080C32		
	29	244	1.1	49.500	GST06 - 2M□□□ 080C32		
	29	244	2.0	49.500	GST07 - 2M□□□ 080C32		
	25	277	1.1	56.250	GST06 - 2M□□□ 080C32		
	25	277	2.0	56.250	GST07 - 2M□□□ 080C32		
	<b>GST □□ - 3M</b>						3-122
	21	329	1.1	67.760	GST06 - 3M□□□ 080C32		
	22	316	2.2	65.079	GST07 - 3M□□□ 080C32		
	20	341	1.1	70.156	GST06 - 3M□□□ 080C32		
	20	341	2.1	70.156	GST07 - 3M□□□ 080C32		
	17	393	0.8	80.952	GST06 - 3M□□□ 080C32		
	18	387	1.8	79.762	GST07 - 3M□□□ 080C32		
	16	424	0.9	87.267	GST06 - 3M□□□ 080C32		
	16	417	1.7	85.983	GST07 - 3M□□□ 080C32		
	14	474	1.5	97.708	GST07 - 3M□□□ 080C32		
	13	543	1.3	111.915	GST07 - 3M□□□ 080C32		
	12	551	2.9	113.585	GST09 - 3M□□□ 080C32		
	11	617	1.2	127.176	GST07 - 3M□□□ 080C32		
	11	627	2.6	129.074	GST09 - 3M□□□ 080C32		
10	676	1.0	139.211	GST07 - 3M□□□ 080C32			
10.0	686	2.4	141.289	GST09 - 3M□□□ 080C32			
8.9	768	0.9	158.194	GST07 - 3M□□□ 080C32			
8.8	779	2.1	160.556	GST09 - 3M□□□ 080C32			
7.8	875	0.8	180.156	GST07 - 3M□□□ 080C32			
7.7	888	1.8	182.844	GST09 - 3M□□□ 080C32			

Thermal power limit not considered (see page2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b>					<b>GST □□ - 3M</b>	<b>3-122</b>
n1=1410	6.8	1009	1.6	207.778	GST09 - 3M□□□ 080C32	
	6.8	1009	2.8	207.778	GST11 - 3M□□□ 080C32	
	6.0	1149	1.4	236.622	GST09 - 3M□□□ 080C32	
	6.0	1149	2.3	236.622	GST11 - 3M□□□ 080C32	
	5.6	1224	1.3	252.167	GST09 - 3M□□□ 080C32	
	5.6	1224	2.3	252.167	GST11 - 3M□□□ 080C32	
	5.2	1305	1.2	268.889	GST09 - 3M□□□ 080C32	
	5.2	1305	2.2	268.889	GST11 - 3M□□□ 080C32	
	4.3	1584	1.0	326.333	GST09 - 3M□□□ 080C32	
	4.3	1584	1.8	326.333	GST11 - 3M□□□ 080C32	
	3.9	1762	0.9	363.000	GST09 - 3M□□□ 080C32	
	3.9	1762	1.5	363.000	GST11 - 3M□□□ 080C32	
	3.4	2002	0.8	412.500	GST09 - 3M□□□ 080C32	
	3.4	2002	1.4	412.500	GST11 - 3M□□□ 080C32	
<b>1.1 kW</b>					<b>GST □□ - 1M</b>	<b>3-102</b>
n1=1390	869	12	1.6	1.600	GST04 - 1M□□□ 080C42	
	679	15	1.5	2.048	GST04 - 1M□□□ 080C42	
	621	17	1.5	2.240	GST04 - 1M□□□ 080C42	
	621	17	3.2	2.240	GST05 - 1M□□□ 080C42	
	487	21	1.2	2.857	GST04 - 1M□□□ 080C42	
	487	21	2.5	2.857	GST05 - 1M□□□ 080C42	
	397	26	1.0	3.500	GST04 - 1M□□□ 080C42	
	397	26	2.1	3.500	GST05 - 1M□□□ 080C42	
	305	34	1.6	4.556	GST05 - 1M□□□ 080C42	
	305	34	3.1	4.556	GST06 - 1M□□□ 080C42	
	245	42	1.3	5.667	GST05 - 1M□□□ 080C42	
	245	42	2.5	5.667	GST06 - 1M□□□ 080C42	
	249	42	3.1	5.583	GST07 - 1M□□□ 080C42	
	190	55	1.8	7.333	GST06 - 1M□□□ 080C42	
	190	55	2.9	7.333	GST07 - 1M□□□ 080C42	
	156	66	1.3	8.900	GST06 - 1M□□□ 080C42	
	156	66	2.3	8.900	GST07 - 1M□□□ 080C42	
	124	84	1.4	11.250	GST07 - 1M□□□ 080C42	
					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2810	951	11	3.0	2.956	GST04 - 2M□□□ 080-31	
	843	12	2.8	3.333	GST04 - 2M□□□ 080-31	
	693	15	2.5	4.053	GST04 - 2M□□□ 080-31	
	615	17	2.3	4.571	GST04 - 2M□□□ 080-31	
	542	19	2.2	5.187	GST04 - 2M□□□ 080-31	
	480	21	2.0	5.850	GST04 - 2M□□□ 080-31	
	439	23	1.9	6.400	GST04 - 2M□□□ 080-31	
	399	26	1.8	7.040	GST04 - 2M□□□ 080-31	
	351	29	1.6	8.000	GST04 - 2M□□□ 080-31	
	344	30	3.2	8.163	GST05 - 2M□□□ 080-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2810	312	33	1.6	9.010	GST04 - 2M□□□ 080-31	
	312	33	2.9	9.010	GST05 - 2M□□□ 080-31	
	285	36	1.5	9.856	GST04 - 2M□□□ 080-31	
	281	36	2.8	10.000	GST05 - 2M□□□ 080-31	
	251	41	1.2	11.200	GST04 - 2M□□□ 080-31	
	251	41	2.5	11.200	GST05 - 2M□□□ 080-31	
	224	46	1.2	12.571	GST04 - 2M□□□ 080-31	
	216	47	2.4	13.016	GST05 - 2M□□□ 080-31	
	197	52	1.0	14.286	GST04 - 2M□□□ 080-31	
	196	52	2.2	14.356	GST05 - 2M□□□ 080-31	
	183	56	1.1	15.400	GST04 - 2M□□□ 080-31	
	174	59	2.3	16.190	GST05 - 2M□□□ 080-31	
	161	64	0.9	17.500	GST04 - 2M□□□ 080-31	
	161	64	2.1	17.500	GST05 - 2M□□□ 080-31	
	145	70	0.9	19.360	GST04 - 2M□□□ 080-31	
	140	73	2.0	20.044	GST05 - 2M□□□ 080-31	
	123	83	1.6	22.778	GST05 - 2M□□□ 080-31	
	113	90	1.7	24.933	GST05 - 2M□□□ 080-31	
	99	103	1.3	28.333	GST05 - 2M□□□ 080-31	
	99	103	2.8	28.333	GST06 - 2M□□□ 080-31	
	87	117	1.3	32.267	GST05 - 2M□□□ 080-31	
	87	117	2.9	32.267	GST06 - 2M□□□ 080-31	
	77	133	1.0	36.667	GST05 - 2M□□□ 080-31	
	77	133	2.2	36.667	GST06 - 2M□□□ 080-31	
	72	142	1.1	39.160	GST05 - 2M□□□ 080-31	
	72	142	2.4	39.160	GST06 - 2M□□□ 080-31	
	72	142	3.2	39.160	GST07 - 2M□□□ 080-31	
	63	161	0.9	44.500	GST05 - 2M□□□ 080-31	
63	161	2.0	44.500	GST06 - 2M□□□ 080-31		
57	180	1.5	49.500	GST06 - 2M□□□ 080-31		
57	180	2.7	49.500	GST07 - 2M□□□ 080-31		
50	204	1.5	56.250	GST06 - 2M□□□ 080-31		
50	204	2.7	56.250	GST07 - 2M□□□ 080-31		
n1=1390	470	22	1.8	2.956	GST04 - 2M□□□ 080C42	
	470	22	2.9	2.956	GST05 - 2M□□□ 080C42	
	417	24	1.7	3.333	GST04 - 2M□□□ 080C42	
	417	24	3.2	3.333	GST05 - 2M□□□ 080C42	
	343	30	1.5	4.053	GST04 - 2M□□□ 080C42	
	343	30	2.7	4.053	GST05 - 2M□□□ 080C42	
	304	34	1.4	4.571	GST04 - 2M□□□ 080C42	
	304	34	2.7	4.571	GST05 - 2M□□□ 080C42	
	268	38	1.3	5.187	GST04 - 2M□□□ 080C42	
	268	38	2.4	5.187	GST05 - 2M□□□ 080C42	
	238	43	1.2	5.850	GST04 - 2M□□□ 080C42	
	238	43	2.4	5.850	GST05 - 2M□□□ 080C42	
	217	47	1.2	6.400	GST04 - 2M□□□ 080C42	
	217	47	2.2	6.400	GST05 - 2M□□□ 080C42	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>1.1 kW</b> n <sub>1</sub> =1390					<b>GST □□ - 2M</b>	3-111	
	197	52	1.1	7.040	GST04 - 2M□□□ 080C42		
	192	53	2.0	7.238	GST05 - 2M□□□ 080C42		
	174	59	1.0	8.000	GST04 - 2M□□□ 080C42		
	170	60	1.9	8.163	GST05 - 2M□□□ 080C42		
	154	66	0.9	9.010	GST04 - 2M□□□ 080C42		
	154	66	1.8	9.010	GST05 - 2M□□□ 080C42		
	141	72	0.9	9.856	GST04 - 2M□□□ 080C42		
	139	73	1.7	10.000	GST05 - 2M□□□ 080C42		
	124	82	1.6	11.200	GST05 - 2M□□□ 080C42		
	107	95	1.4	13.016	GST05 - 2M□□□ 080C42		
	111	92	3.2	12.571	GST06 - 2M□□□ 080C42		
	97	105	1.3	14.356	GST05 - 2M□□□ 080C42		
	97	105	2.9	14.286	GST06 - 2M□□□ 080C42		
	86	119	1.3	16.190	GST05 - 2M□□□ 080C42		
	90	113	2.8	15.400	GST06 - 2M□□□ 080C42		
	79	128	1.1	17.500	GST05 - 2M□□□ 080C42		
	79	128	2.4	17.500	GST06 - 2M□□□ 080C42		
	69	147	1.1	20.044	GST05 - 2M□□□ 080C42		
	69	147	2.4	20.044	GST06 - 2M□□□ 080C42		
	61	167	0.9	22.778	GST05 - 2M□□□ 080C42		
	61	167	1.9	22.778	GST06 - 2M□□□ 080C42		
	56	183	0.9	24.933	GST05 - 2M□□□ 080C42		
	56	183	2.0	24.933	GST06 - 2M□□□ 080C42		
	57	180	3.1	24.567	GST07 - 2M□□□ 080C42		
	49	208	1.5	28.333	GST06 - 2M□□□ 080C42		
	50	205	3.1	27.917	GST07 - 2M□□□ 080C42		
	43	237	1.5	32.267	GST06 - 2M□□□ 080C42		
	43	237	2.9	32.267	GST07 - 2M□□□ 080C42		
	38	269	1.2	36.667	GST06 - 2M□□□ 080C42		
	38	269	2.6	36.667	GST07 - 2M□□□ 080C42		
	36	287	1.3	39.160	GST06 - 2M□□□ 080C42		
	36	287	2.3	39.160	GST07 - 2M□□□ 080C42		
	31	326	1.0	44.500	GST06 - 2M□□□ 080C42		
	31	326	2.2	44.500	GST07 - 2M□□□ 080C42		
	28	363	1.4	49.500	GST07 - 2M□□□ 080C42		
	25	412	1.4	56.250	GST07 - 2M□□□ 080C42		
					<b>GST □□ - 3M</b>		3-122
	24	419	4.5	57.968	GST11 - 3M□□□ 080C42		
	21	470	1.5	65.079	GST07 - 3M□□□ 080C42		
	20	507	1.4	70.156	GST07 - 3M□□□ 080C42		
	19	519	2.8	71.867	GST09 - 3M□□□ 080C42		
17	576	1.2	79.762	GST07 - 3M□□□ 080C42			
17	590	2.7	81.667	GST09 - 3M□□□ 080C42			
16	621	1.1	85.983	GST07 - 3M□□□ 080C42			
15	676	2.4	93.541	GST09 - 3M□□□ 080C42			
14	706	1.0	97.708	GST07 - 3M□□□ 080C42			
14	716	2.2	99.167	GST09 - 3M□□□ 080C42			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GST □□ - 3M</b>	<b>3-122</b>
n <sub>1</sub> =1390	12	808	0.9	111.915	GST07 - 3M□□□ 080C42	
	12	820	2.0	113.585	GST09 - 3M□□□ 080C42	
	11	932	1.7	129.074	GST09 - 3M□□□ 080C42	
	11	932	3.0	129.074	GST11 - 3M□□□ 080C42	
	9.8	1020	1.6	141.289	GST09 - 3M□□□ 080C42	
	9.5	1062	2.5	146.993	GST11 - 3M□□□ 080C42	
	8.7	1160	1.4	160.556	GST09 - 3M□□□ 080C42	
	8.8	1143	2.5	158.194	GST11 - 3M□□□ 080C42	
	7.6	1321	1.2	182.844	GST09 - 3M□□□ 080C42	
	7.7	1301	2.1	180.156	GST11 - 3M□□□ 080C42	
	6.7	1501	1.1	207.778	GST09 - 3M□□□ 080C42	
	6.7	1501	1.9	207.778	GST11 - 3M□□□ 080C42	
	5.9	1709	0.9	236.622	GST09 - 3M□□□ 080C42	
	5.9	1709	1.6	236.622	GST11 - 3M□□□ 080C42	
	5.5	1821	0.9	252.167	GST09 - 3M□□□ 080C42	
	5.5	1821	1.5	252.167	GST11 - 3M□□□ 080C42	
	5.2	1942	0.8	268.889	GST09 - 3M□□□ 080C42	
	5.2	1942	1.5	268.889	GST11 - 3M□□□ 080C42	
	4.3	2357	1.2	326.333	GST11 - 3M□□□ 080C42	
	3.8	2622	1.0	363.000	GST11 - 3M□□□ 080C42	
	3.4	2979	1.0	412.500	GST11 - 3M□□□ 080C42	
<b>1.5 kW</b>					<b>GST □□ - 1M</b>	<b>3-102</b>
n <sub>1</sub> =1390	869	16	1.2	1.600	GST04 - 1M□□□ 090C32	
	869	16	2.8	1.600	GST05 - 1M□□□ 090C32	
	679	21	1.1	2.048	GST04 - 1M□□□ 090C32	
	679	21	2.5	2.048	GST05 - 1M□□□ 090C32	
	621	23	1.1	2.240	GST04 - 1M□□□ 090C32	
	621	23	2.3	2.240	GST05 - 1M□□□ 090C32	
	487	29	0.9	2.857	GST04 - 1M□□□ 090C32	
	487	29	1.8	2.857	GST05 - 1M□□□ 090C32	
	487	29	3.2	2.857	GST06 - 1M□□□ 090C32	
	397	36	1.5	3.500	GST05 - 1M□□□ 090C32	
	397	36	2.9	3.500	GST06 - 1M□□□ 090C32	
	305	46	1.2	4.556	GST05 - 1M□□□ 090C32	
	305	46	2.3	4.556	GST06 - 1M□□□ 090C32	
	245	58	0.9	5.667	GST05 - 1M□□□ 090C32	
	245	58	1.8	5.667	GST06 - 1M□□□ 090C32	
	249	57	2.8	5.583	GST07 - 1M□□□ 090C32	
	190	74	1.3	7.333	GST06 - 1M□□□ 090C32	
	190	74	2.4	7.333	GST07 - 1M□□□ 090C32	
	190	74	2.8	7.333	GST09 - 1M□□□ 090C32	
	156	90	0.9	8.900	GST06 - 1M□□□ 090C32	
	156	90	2.0	8.900	GST07 - 1M□□□ 090C32	
	156	90	2.5	8.900	GST09 - 1M□□□ 090C32	
	124	114	1.2	11.250	GST07 - 1M□□□ 090C32	
	124	114	1.9	11.250	GST09 - 1M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2840	961	15	2.2	2.956	GST04 - 2M□□□ 090-11	
	852	16	2.1	3.333	GST04 - 2M□□□ 090-11	
	701	20	1.8	4.053	GST04 - 2M□□□ 090-11	
	621	22	1.7	4.571	GST04 - 2M□□□ 090-11	
	548	25	1.6	5.187	GST04 - 2M□□□ 090-11	
	548	25	2.9	5.187	GST05 - 2M□□□ 090-11	
	485	29	1.5	5.850	GST04 - 2M□□□ 090-11	
	485	29	2.9	5.850	GST05 - 2M□□□ 090-11	
	444	31	1.4	6.400	GST04 - 2M□□□ 090-11	
	444	31	2.7	6.400	GST05 - 2M□□□ 090-11	
	403	35	1.3	7.040	GST04 - 2M□□□ 090-11	
	392	35	2.5	7.238	GST05 - 2M□□□ 090-11	
	355	39	1.2	8.000	GST04 - 2M□□□ 090-11	
	348	40	2.3	8.163	GST05 - 2M□□□ 090-11	
	315	44	1.1	9.010	GST04 - 2M□□□ 090-11	
	315	44	2.2	9.010	GST05 - 2M□□□ 090-11	
	288	48	1.1	9.856	GST04 - 2M□□□ 090-11	
	284	49	2.1	10.000	GST05 - 2M□□□ 090-11	
	254	55	0.9	11.200	GST04 - 2M□□□ 090-11	
	254	55	1.9	11.200	GST05 - 2M□□□ 090-11	
	226	62	0.9	12.571	GST04 - 2M□□□ 090-11	
	218	64	1.7	13.016	GST05 - 2M□□□ 090-11	
	198	70	1.6	14.356	GST05 - 2M□□□ 090-11	
	184	75	0.8	15.400	GST04 - 2M□□□ 090-11	
	175	79	1.7	16.190	GST05 - 2M□□□ 090-11	
	162	86	1.5	17.500	GST05 - 2M□□□ 090-11	
	142	98	1.5	20.044	GST05 - 2M□□□ 090-11	
	125	112	1.2	22.778	GST05 - 2M□□□ 090-11	
	125	112	2.6	22.778	GST06 - 2M□□□ 090-11	
	114	122	1.2	24.933	GST05 - 2M□□□ 090-11	
	114	122	2.7	24.933	GST06 - 2M□□□ 090-11	
	100	139	1.0	28.333	GST05 - 2M□□□ 090-11	
	100	139	2.1	28.333	GST06 - 2M□□□ 090-11	
	88	158	2.1	32.267	GST06 - 2M□□□ 090-11	
	78	179	1.6	36.667	GST06 - 2M□□□ 090-11	
	73	192	1.8	39.160	GST06 - 2M□□□ 090-11	
	64	218	1.5	44.500	GST06 - 2M□□□ 090-11	
	64	218	3.2	44.500	GST07 - 2M□□□ 090-11	
	57	242	2.5	49.500	GST07 - 2M□□□ 090-11	
	51	275	2.5	56.250	GST07 - 2M□□□ 090-11	
n1=1390	470	30	1.3	2.956	GST04 - 2M□□□ 090C32	
	470	30	2.1	2.956	GST05 - 2M□□□ 090C32	
	417	33	1.3	3.333	GST04 - 2M□□□ 090C32	
	417	33	2.3	3.333	GST05 - 2M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n <sub>1</sub> =1390	343	41	1.1	4.053	GST04 - 2M□□□ 090C32	
	343	41	2.0	4.053	GST05 - 2M□□□ 090C32	
	304	46	1.1	4.571	GST04 - 2M□□□ 090C32	
	304	46	2.0	4.571	GST05 - 2M□□□ 090C32	
	268	52	1.0	5.187	GST04 - 2M□□□ 090C32	
	268	52	1.7	5.187	GST05 - 2M□□□ 090C32	
	238	59	0.9	5.850	GST04 - 2M□□□ 090C32	
	238	59	1.7	5.850	GST05 - 2M□□□ 090C32	
	217	64	0.9	6.400	GST04 - 2M□□□ 090C32	
	217	64	1.6	6.400	GST05 - 2M□□□ 090C32	
	197	70	0.8	7.040	GST04 - 2M□□□ 090C32	
	192	72	1.5	7.238	GST05 - 2M□□□ 090C32	
	170	82	1.4	8.163	GST05 - 2M□□□ 090C32	
	170	82	3.1	8.163	GST06 - 2M□□□ 090C32	
	154	90	1.3	9.010	GST05 - 2M□□□ 090C32	
	154	90	2.9	9.010	GST06 - 2M□□□ 090C32	
	139	100	1.2	10.000	GST05 - 2M□□□ 090C32	
	139	100	2.7	10.000	GST06 - 2M□□□ 090C32	
	124	112	1.1	11.200	GST05 - 2M□□□ 090C32	
	124	112	2.5	11.200	GST06 - 2M□□□ 090C32	
	107	130	1.1	13.016	GST05 - 2M□□□ 090C32	
	111	126	2.3	12.571	GST06 - 2M□□□ 090C32	
	97	144	1.0	14.356	GST05 - 2M□□□ 090C32	
	97	143	2.1	14.286	GST06 - 2M□□□ 090C32	
	86	162	0.9	16.190	GST05 - 2M□□□ 090C32	
	90	154	2.1	15.400	GST06 - 2M□□□ 090C32	
	79	175	0.8	17.500	GST05 - 2M□□□ 090C32	
	79	175	1.8	17.500	GST06 - 2M□□□ 090C32	
	69	200	1.7	20.044	GST06 - 2M□□□ 090C32	
	61	228	1.4	22.778	GST06 - 2M□□□ 090C32	
	61	228	3.0	22.778	GST07 - 2M□□□ 090C32	
	56	249	1.4	24.933	GST06 - 2M□□□ 090C32	
	57	246	2.8	24.567	GST07 - 2M□□□ 090C32	
	49	283	1.1	28.333	GST06 - 2M□□□ 090C32	
	50	279	2.5	27.917	GST07 - 2M□□□ 090C32	
	43	323	1.1	32.267	GST06 - 2M□□□ 090C32	
	43	323	2.2	32.267	GST07 - 2M□□□ 090C32	
	43	323	2.8	32.267	GST09 - 2M□□□ 090C32	
	38	367	0.9	36.667	GST06 - 2M□□□ 090C32	
	38	367	1.9	36.667	GST07 - 2M□□□ 090C32	
	38	367	2.8	36.667	GST09 - 2M□□□ 090C32	
	36	392	0.9	39.160	GST06 - 2M□□□ 090C32	
	36	392	1.8	39.160	GST07 - 2M□□□ 090C32	
	36	392	2.5	39.160	GST09 - 2M□□□ 090C32	
	31	445	1.6	44.500	GST07 - 2M□□□ 090C32	
	31	445	2.5	44.500	GST09 - 2M□□□ 090C32	
	28	495	1.2	49.500	GST07 - 2M□□□ 090C32	
	28	495	1.9	49.500	GST09 - 2M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b> n <sub>1</sub> =1390					<b>GST □□ - 2M</b>	3-111
	25	562	1.2	56.250	GST07 - 2M□□□ 090C32	
	25	562	1.9	56.250	GST09 - 2M□□□ 090C32	
					<b>GST □□ - 3M</b>	3-122
	24	571	4.1	57.968	GST11 - 3M□□□ 090C32	
	21	641	1.1	65.079	GST07 - 3M□□□ 090C32	
	23	594	2.6	60.278	GST09 - 3M□□□ 090C32	
	20	691	1.0	70.156	GST07 - 3M□□□ 090C32	
	19	708	2.1	71.867	GST09 - 3M□□□ 090C32	
	17	786	0.9	79.762	GST07 - 3M□□□ 090C32	
	17	804	2.0	81.667	GST09 - 3M□□□ 090C32	
	16	847	0.8	85.983	GST07 - 3M□□□ 090C32	
	15	921	1.8	93.541	GST09 - 3M□□□ 090C32	
	14	977	1.6	99.167	GST09 - 3M□□□ 090C32	
	12	1119	1.4	113.585	GST09 - 3M□□□ 090C32	
	11	1271	1.3	129.074	GST09 - 3M□□□ 090C32	
	11	1271	2.2	129.074	GST11 - 3M□□□ 090C32	
	9.8	1391	1.2	141.289	GST09 - 3M□□□ 090C32	
	9.5	1448	1.9	146.993	GST11 - 3M□□□ 090C32	
	8.7	1581	1.0	160.556	GST09 - 3M□□□ 090C32	
	8.8	1558	1.8	158.194	GST11 - 3M□□□ 090C32	
	7.6	1801	0.9	182.844	GST09 - 3M□□□ 090C32	
	7.7	1774	1.5	180.156	GST11 - 3M□□□ 090C32	
	6.7	2046	1.4	207.778	GST11 - 3M□□□ 090C32	
	6.8	2016	2.8	204.722	GST14 - 3M□□□ 090C32	
	5.9	2330	1.2	236.622	GST11 - 3M□□□ 090C32	
	5.9	2330	2.5	236.622	GST14 - 3M□□□ 090C32	
	5.5	2483	1.1	252.167	GST11 - 3M□□□ 090C32	
5.6	2447	2.4	248.458	GST14 - 3M□□□ 090C32		
5.2	2648	1.1	268.889	GST11 - 3M□□□ 090C32		
5.2	2648	2.2	268.889	GST14 - 3M□□□ 090C32		
4.3	3214	0.9	326.333	GST11 - 3M□□□ 090C32		
4.3	3214	1.8	326.333	GST14 - 3M□□□ 090C32		
3.8	3575	1.6	363.000	GST14 - 3M□□□ 090C32		
3.4	4062	1.5	412.500	GST14 - 3M□□□ 090C32		
<b>2.2 kW</b> n <sub>1</sub> =1440					<b>GST □□ - 1M</b>	3-102
	900	23	1.9	1.600	GST05 - 1M□□□ 100C12	
	900	23	2.7	1.600	GST06 - 1M□□□ 100C12	
	703	29	1.8	2.048	GST05 - 1M□□□ 100C12	
	703	29	2.5	2.048	GST06 - 1M□□□ 100C12	
	643	32	1.6	2.240	GST05 - 1M□□□ 100C12	
	643	32	2.4	2.240	GST06 - 1M□□□ 100C12	
	504	41	1.3	2.857	GST05 - 1M□□□ 100C12	
	504	41	2.3	2.857	GST06 - 1M□□□ 100C12	
	411	50	1.1	3.500	GST05 - 1M□□□ 100C12	
	411	50	2.1	3.500	GST06 - 1M□□□ 100C12	

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GST □□ - 1M</b>	<b>3-102</b>
n1=1440	316	66	1.6	4.556	GST06 - 1M□□□ 100C12	
	316	66	2.8	4.556	GST07 - 1M□□□ 100C12	
	254	81	1.3	5.667	GST06 - 1M□□□ 100C12	
	258	80	2.4	5.583	GST07 - 1M□□□ 100C12	
	196	105	1.9	7.333	GST07 - 1M□□□ 100C12	
	196	105	2.8	7.333	GST09 - 1M□□□ 100C12	
	162	128	1.4	8.900	GST07 - 1M□□□ 100C12	
	162	128	2.3	8.900	GST09 - 1M□□□ 100C12	
	128	162	1.8	11.250	GST09 - 1M□□□ 100C12	
n1=2840					<b>GST □□ - 2M</b>	<b>3-111</b>
	961	21	1.5	2.956	GST04 - 2M□□□ 090-31	
	961	21	2.4	2.956	GST05 - 2M□□□ 090-31	
	852	24	1.4	3.333	GST04 - 2M□□□ 090-31	
	852	24	2.6	3.333	GST05 - 2M□□□ 090-31	
	701	29	1.3	4.053	GST04 - 2M□□□ 090-31	
	701	29	2.3	4.053	GST05 - 2M□□□ 090-31	
	621	33	1.2	4.571	GST04 - 2M□□□ 090-31	
	621	33	2.3	4.571	GST05 - 2M□□□ 090-31	
	548	37	1.1	5.187	GST04 - 2M□□□ 090-31	
	548	37	2.0	5.187	GST05 - 2M□□□ 090-31	
	485	42	1.0	5.850	GST04 - 2M□□□ 090-31	
	485	42	2.0	5.850	GST05 - 2M□□□ 090-31	
	444	46	1.0	6.400	GST04 - 2M□□□ 090-31	
	444	46	1.8	6.400	GST05 - 2M□□□ 090-31	
	403	51	0.9	7.040	GST04 - 2M□□□ 090-31	
	392	52	1.7	7.238	GST05 - 2M□□□ 090-31	
	355	57	0.8	8.000	GST04 - 2M□□□ 090-31	
	348	59	1.6	8.163	GST05 - 2M□□□ 090-31	
	315	65	1.5	9.010	GST05 - 2M□□□ 090-31	
	284	72	1.4	10.000	GST05 - 2M□□□ 090-31	
	284	72	3.0	10.000	GST06 - 2M□□□ 090-31	
	254	80	1.3	11.200	GST05 - 2M□□□ 090-31	
	254	80	2.8	11.200	GST06 - 2M□□□ 090-31	
	218	93	1.2	13.016	GST05 - 2M□□□ 090-31	
	226	90	2.6	12.571	GST06 - 2M□□□ 090-31	
	198	103	1.1	14.356	GST05 - 2M□□□ 090-31	
	199	103	2.4	14.286	GST06 - 2M□□□ 090-31	
	175	116	1.2	16.190	GST05 - 2M□□□ 090-31	
	184	111	2.6	15.400	GST06 - 2M□□□ 090-31	
	162	126	1.0	17.500	GST05 - 2M□□□ 090-31	
	162	126	2.3	17.500	GST06 - 2M□□□ 090-31	
142	144	1.0	20.044	GST05 - 2M□□□ 090-31		
142	144	2.2	20.044	GST06 - 2M□□□ 090-31		
125	164	0.8	22.778	GST05 - 2M□□□ 090-31		
125	164	1.8	22.778	GST06 - 2M□□□ 090-31		
114	179	0.8	24.933	GST05 - 2M□□□ 090-31		
114	179	1.8	24.933	GST06 - 2M□□□ 090-31		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2840	100	203	1.4	28.333	GST06 - 2M□□□ 090-31	
	102	200	3.2	27.917	GST07 - 2M□□□ 090-31	
	88	232	1.4	32.267	GST06 - 2M□□□ 090-31	
	88	232	2.8	32.267	GST07 - 2M□□□ 090-31	
	78	263	1.1	36.667	GST06 - 2M□□□ 090-31	
	78	263	2.5	36.667	GST07 - 2M□□□ 090-31	
	73	281	1.2	39.160	GST06 - 2M□□□ 090-31	
	73	281	2.3	39.160	GST07 - 2M□□□ 090-31	
	73	281	3.2	39.160	GST09 - 2M□□□ 090-31	
	64	319	1.0	44.500	GST06 - 2M□□□ 090-31	
	64	319	2.2	44.500	GST07 - 2M□□□ 090-31	
	57	355	1.7	49.500	GST07 - 2M□□□ 090-31	
	57	355	2.7	49.500	GST09 - 2M□□□ 090-31	
	51	404	1.7	56.250	GST07 - 2M□□□ 090-31	
	51	404	2.7	56.250	GST09 - 2M□□□ 090-31	
	n1=1440	487	42	1.5	2.956	GST05 - 2M□□□ 100C12
432		47	1.7	3.333	GST05 - 2M□□□ 100C12	
355		57	1.4	4.053	GST05 - 2M□□□ 100C12	
346		59	3.2	4.160	GST06 - 2M□□□ 100C12	
315		65	1.4	4.571	GST05 - 2M□□□ 100C12	
315		65	3.1	4.571	GST06 - 2M□□□ 100C12	
278		73	1.2	5.187	GST05 - 2M□□□ 100C12	
271		75	2.8	5.324	GST06 - 2M□□□ 100C12	
246		83	1.2	5.850	GST05 - 2M□□□ 100C12	
246		83	2.7	5.850	GST06 - 2M□□□ 100C12	
225		91	1.2	6.400	GST05 - 2M□□□ 100C12	
225		91	2.5	6.400	GST06 - 2M□□□ 100C12	
199		103	1.1	7.238	GST05 - 2M□□□ 100C12	
205		100	2.4	7.040	GST06 - 2M□□□ 100C12	
176		116	1.0	8.163	GST05 - 2M□□□ 100C12	
176		116	2.2	8.163	GST06 - 2M□□□ 100C12	
160		128	0.9	9.010	GST05 - 2M□□□ 100C12	
160		128	2.0	9.010	GST06 - 2M□□□ 100C12	
144		142	0.9	10.000	GST05 - 2M□□□ 100C12	
144		142	1.9	10.000	GST06 - 2M□□□ 100C12	
129		159	0.8	11.200	GST05 - 2M□□□ 100C12	
129		159	1.8	11.200	GST06 - 2M□□□ 100C12	
115		178	1.7	12.571	GST06 - 2M□□□ 100C12	
101		202	1.5	14.286	GST06 - 2M□□□ 100C12	
101		202	3.2	14.286	GST07 - 2M□□□ 100C12	
94		218	1.5	15.400	GST06 - 2M□□□ 100C12	
94	218	3.0	15.400	GST07 - 2M□□□ 100C12		
82	248	1.3	17.500	GST06 - 2M□□□ 100C12		
82	248	2.7	17.500	GST07 - 2M□□□ 100C12		
72	284	1.2	20.044	GST06 - 2M□□□ 100C12		
72	284	2.4	20.044	GST07 - 2M□□□ 100C12		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b> n <sub>1</sub> =1440	<b>GST □□ - 2M</b>					3-111
	63	322	1.0	22.778	GST06 - 2M□□□ 100C12	
	63	322	2.1	22.778	GST07 - 2M□□□ 100C12	
	58	353	1.0	24.933	GST06 - 2M□□□ 100C12	
	59	348	2.0	24.567	GST07 - 2M□□□ 100C12	
	52	395	1.7	27.917	GST07 - 2M□□□ 100C12	
	45	457	1.5	32.267	GST07 - 2M□□□ 100C12	
	45	457	2.8	32.267	GST09 - 2M□□□ 100C12	
	39	519	1.4	36.667	GST07 - 2M□□□ 100C12	
	39	519	2.8	36.667	GST09 - 2M□□□ 100C12	
	37	554	1.3	39.160	GST07 - 2M□□□ 100C12	
	37	554	2.3	39.160	GST09 - 2M□□□ 100C12	
	37	554	2.9	39.160	GST11 - 2M□□□ 100C12	
	32	630	1.1	44.500	GST07 - 2M□□□ 100C12	
	32	630	2.3	44.500	GST09 - 2M□□□ 100C12	
	32	630	2.9	44.500	GST11 - 2M□□□ 100C12	
	29	701	1.8	49.500	GST09 - 2M□□□ 100C12	
	29	701	2.3	49.500	GST11 - 2M□□□ 100C12	
	26	796	1.8	56.250	GST09 - 2M□□□ 100C12	
	26	796	2.3	56.250	GST11 - 2M□□□ 100C12	
	<b>GST □□ - 3M</b>					3-122
	25	808	3.2	57.968	GST11 - 3M□□□ 100C12	
	24	840	1.9	60.278	GST09 - 3M□□□ 100C12	
	24	854	3.2	61.250	GST11 - 3M□□□ 100C12	
	20	1002	1.5	71.867	GST09 - 3M□□□ 100C12	
	20	990	2.7	71.011	GST11 - 3M□□□ 100C12	
	18	1139	1.4	81.667	GST09 - 3M□□□ 100C12	
	18	1125	2.5	80.694	GST11 - 3M□□□ 100C12	
	15	1304	1.2	93.541	GST09 - 3M□□□ 100C12	
	17	1217	2.2	87.267	GST11 - 3M□□□ 100C12	
	15	1383	1.2	99.167	GST09 - 3M□□□ 100C12	
	15	1383	2.0	99.167	GST11 - 3M□□□ 100C12	
	13	1584	1.0	113.585	GST09 - 3M□□□ 100C12	
	13	1575	1.7	112.933	GST11 - 3M□□□ 100C12	
	11	1800	0.9	129.074	GST09 - 3M□□□ 100C12	
	11	1800	1.6	129.074	GST11 - 3M□□□ 100C12	
	10	1970	0.8	141.289	GST09 - 3M□□□ 100C12	
	9.8	2049	1.3	146.993	GST11 - 3M□□□ 100C12	
	10	1941	3.0	139.211	GST14 - 3M□□□ 100C12	
	9.1	2206	1.3	158.194	GST11 - 3M□□□ 100C12	
	9.1	2206	2.7	158.194	GST14 - 3M□□□ 100C12	
	8.0	2512	1.1	180.156	GST11 - 3M□□□ 100C12	
8.4	2386	2.5	171.111	GST14 - 3M□□□ 100C12		
6.9	2897	1.0	207.778	GST11 - 3M□□□ 100C12		
7.0	2854	2.1	204.722	GST14 - 3M□□□ 100C12		
6.1	3299	0.8	236.622	GST11 - 3M□□□ 100C12		
6.1	3299	1.8	236.622	GST14 - 3M□□□ 100C12		
5.8	3464	1.7	248.458	GST14 - 3M□□□ 100C12		
5.4	3749	1.6	268.889	GST14 - 3M□□□ 100C12		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>2.2 kW</b> n1=1440					<b>GST □□ - 3M</b>	3-122		
	4.4	4550	1.3	326.333	GST14 - 3M□□□ 100C12			
	4.0	5061	1.1	363.000	GST14 - 3M□□□ 100C12			
	3.5	5751	1.0	412.500	GST14 - 3M□□□ 100C12			
<b>3 kW</b> n1=1430					<b>GST □□ - 1M</b>	3-102		
	894	32	1.4	1.600	GST05 - 1M□□□ 100C32			
	894	32	1.9	1.600	GST06 - 1M□□□ 100C32			
	698	40	1.3	2.048	GST05 - 1M□□□ 100C32			
	698	40	1.8	2.048	GST06 - 1M□□□ 100C32			
	715	40	3.1	2.000	GST07 - 1M□□□ 100C32			
	638	44	1.2	2.240	GST05 - 1M□□□ 100C32			
	638	44	1.8	2.240	GST06 - 1M□□□ 100C32			
	638	44	3.0	2.240	GST07 - 1M□□□ 100C32			
	501	56	0.9	2.857	GST05 - 1M□□□ 100C32			
	501	56	1.6	2.857	GST06 - 1M□□□ 100C32			
	501	56	2.8	2.857	GST07 - 1M□□□ 100C32			
	409	69	1.5	3.500	GST06 - 1M□□□ 100C32			
	409	69	2.5	3.500	GST07 - 1M□□□ 100C32			
	314	90	1.2	4.556	GST06 - 1M□□□ 100C32			
	314	90	2.1	4.556	GST07 - 1M□□□ 100C32			
	306	92	2.9	4.667	GST09 - 1M□□□ 100C32			
	252	112	0.9	5.667	GST06 - 1M□□□ 100C32			
	256	110	1.8	5.583	GST07 - 1M□□□ 100C32			
	252	112	2.5	5.667	GST09 - 1M□□□ 100C32			
	195	145	1.4	7.333	GST07 - 1M□□□ 100C32			
	195	145	2.0	7.333	GST09 - 1M□□□ 100C32			
	161	176	1.0	8.900	GST07 - 1M□□□ 100C32			
	161	176	1.7	8.900	GST09 - 1M□□□ 100C32			
	127	222	1.3	11.250	GST09 - 1M□□□ 100C32			
	<b>n1=2850</b>						<b>GST □□ - 2M</b>	3-111
		964	29	1.8	2.956		GST05 - 2M□□□ 100-31	
		855	33	1.9	3.333		GST05 - 2M□□□ 100-31	
		703	40	1.7	4.053		GST05 - 2M□□□ 100-31	
		623	45	1.7	4.571		GST05 - 2M□□□ 100-31	
549		51	1.4	5.187	GST05 - 2M□□□ 100-31			
535		52	3.2	5.324	GST06 - 2M□□□ 100-31			
487		57	1.4	5.850	GST05 - 2M□□□ 100-31			
487		57	3.1	5.850	GST06 - 2M□□□ 100-31			
445		62	1.4	6.400	GST05 - 2M□□□ 100-31			
445		62	3.0	6.400	GST06 - 2M□□□ 100-31			
394		71	1.2	7.238	GST05 - 2M□□□ 100-31			
405		69	2.8	7.040	GST06 - 2M□□□ 100-31			
349		80	1.2	8.163	GST05 - 2M□□□ 100-31			
349		80	2.6	8.163	GST06 - 2M□□□ 100-31			
316		88	1.1	9.010	GST05 - 2M□□□ 100-31			
316		88	2.4	9.010	GST06 - 2M□□□ 100-31			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2850	285	98	1.0	10.000	GST05 - 2M□□□ 100-31	
	285	98	2.2	10.000	GST06 - 2M□□□ 100-31	
	255	109	0.9	11.200	GST05 - 2M□□□ 100-31	
	255	109	2.1	11.200	GST06 - 2M□□□ 100-31	
	227	123	1.9	12.571	GST06 - 2M□□□ 100-31	
	200	139	1.8	14.286	GST06 - 2M□□□ 100-31	
	185	150	1.9	15.400	GST06 - 2M□□□ 100-31	
	163	171	1.7	17.500	GST06 - 2M□□□ 100-31	
	142	196	1.6	20.044	GST06 - 2M□□□ 100-31	
	125	222	1.3	22.778	GST06 - 2M□□□ 100-31	
	125	222	2.8	22.778	GST07 - 2M□□□ 100-31	
	114	243	1.4	24.933	GST06 - 2M□□□ 100-31	
	116	240	2.7	24.567	GST07 - 2M□□□ 100-31	
	101	276	1.1	28.333	GST06 - 2M□□□ 100-31	
	102	272	2.3	27.917	GST07 - 2M□□□ 100-31	
	88	315	2.1	32.267	GST07 - 2M□□□ 100-31	
	78	358	1.8	36.667	GST07 - 2M□□□ 100-31	
	73	382	1.7	39.160	GST07 - 2M□□□ 100-31	
	73	382	3.1	39.160	GST09 - 2M□□□ 100-31	
	64	434	1.6	44.500	GST07 - 2M□□□ 100-31	
58	483	2.7	49.500	GST09 - 2M□□□ 100-31		
51	549	2.7	56.250	GST09 - 2M□□□ 100-31		
n1=1430	484	57	1.1	2.956	GST05 - 2M□□□ 100C32	
	471	59	2.8	3.033	GST06 - 2M□□□ 100C32	
	429	65	1.2	3.333	GST05 - 2M□□□ 100C32	
	429	65	2.7	3.333	GST06 - 2M□□□ 100C32	
	353	79	1.0	4.053	GST05 - 2M□□□ 100C32	
	344	81	2.4	4.160	GST06 - 2M□□□ 100C32	
	313	89	1.0	4.571	GST05 - 2M□□□ 100C32	
	313	89	2.2	4.571	GST06 - 2M□□□ 100C32	
	276	101	0.9	5.187	GST05 - 2M□□□ 100C32	
	269	104	2.0	5.324	GST06 - 2M□□□ 100C32	
	244	114	0.9	5.850	GST05 - 2M□□□ 100C32	
	244	114	2.0	5.850	GST06 - 2M□□□ 100C32	
	223	124	0.8	6.400	GST05 - 2M□□□ 100C32	
	223	124	1.8	6.400	GST06 - 2M□□□ 100C32	
	203	137	1.7	7.040	GST06 - 2M□□□ 100C32	
	175	159	1.6	8.163	GST06 - 2M□□□ 100C32	
	159	175	1.5	9.010	GST06 - 2M□□□ 100C32	
	163	171	3.1	8.800	GST07 - 2M□□□ 100C32	
	143	194	1.4	10.000	GST06 - 2M□□□ 100C32	
	145	192	2.9	9.856	GST07 - 2M□□□ 100C32	
128	218	1.3	11.200	GST06 - 2M□□□ 100C32		
128	218	2.7	11.200	GST07 - 2M□□□ 100C32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b> n <sub>1</sub> =1430	<b>GST □□ - 2M</b>					<b>3-111</b>
	114	244	1.2	12.571	GST06 - 2M□□□ 100C32	
	114	244	2.5	12.571	GST07 - 2M□□□ 100C32	
	100	278	1.1	14.286	GST06 - 2M□□□ 100C32	
	100	278	2.3	14.286	GST07 - 2M□□□ 100C32	
	93	299	1.1	15.400	GST06 - 2M□□□ 100C32	
	93	299	2.2	15.400	GST07 - 2M□□□ 100C32	
	82	340	0.9	17.500	GST06 - 2M□□□ 100C32	
	82	340	2.0	17.500	GST07 - 2M□□□ 100C32	
	71	390	0.9	20.044	GST06 - 2M□□□ 100C32	
	71	390	1.8	20.044	GST07 - 2M□□□ 100C32	
	70	399	2.9	20.533	GST09 - 2M□□□ 100C32	
	63	443	1.5	22.778	GST07 - 2M□□□ 100C32	
	61	454	2.9	23.333	GST09 - 2M□□□ 100C32	
	58	478	1.5	24.567	GST07 - 2M□□□ 100C32	
	57	485	2.5	24.933	GST09 - 2M□□□ 100C32	
	51	543	1.3	27.917	GST07 - 2M□□□ 100C32	
	51	551	2.5	28.333	GST09 - 2M□□□ 100C32	
	44	627	1.1	32.267	GST07 - 2M□□□ 100C32	
	44	627	2.0	32.267	GST09 - 2M□□□ 100C32	
	44	627	2.5	32.267	GST11 - 2M□□□ 100C32	
	39	713	1.0	36.667	GST07 - 2M□□□ 100C32	
	39	713	2.0	36.667	GST09 - 2M□□□ 100C32	
	39	713	2.5	36.667	GST11 - 2M□□□ 100C32	
	37	761	0.9	39.160	GST07 - 2M□□□ 100C32	
	37	761	1.7	39.160	GST09 - 2M□□□ 100C32	
	37	761	2.1	39.160	GST11 - 2M□□□ 100C32	
	32	865	0.8	44.500	GST07 - 2M□□□ 100C32	
	32	865	1.7	44.500	GST09 - 2M□□□ 100C32	
	32	865	2.1	44.500	GST11 - 2M□□□ 100C32	
	29	962	1.3	49.500	GST09 - 2M□□□ 100C32	
	29	962	1.7	49.500	GST11 - 2M□□□ 100C32	
25	1093	1.3	56.250	GST09 - 2M□□□ 100C32		
25	1093	1.7	56.250	GST11 - 2M□□□ 100C32		
<b>GST □□ - 3M</b>					<b>3-122</b>	
25	1110	2.3	57.968	GST11 - 3M□□□ 100C32		
24	1154	1.4	60.278	GST09 - 3M□□□ 100C32		
23	1173	2.3	61.250	GST11 - 3M□□□ 100C32		
20	1376	1.1	71.867	GST09 - 3M□□□ 100C32		
20	1360	1.9	71.011	GST11 - 3M□□□ 100C32		
18	1564	1.0	81.667	GST09 - 3M□□□ 100C32		
18	1545	1.8	80.694	GST11 - 3M□□□ 100C32		
15	1791	0.9	93.541	GST09 - 3M□□□ 100C32		
16	1671	1.6	87.267	GST11 - 3M□□□ 100C32		
15	1791	2.9	93.541	GST14 - 3M□□□ 100C32		
14	1899	0.8	99.167	GST09 - 3M□□□ 100C32		
14	1899	1.5	99.167	GST11 - 3M□□□ 100C32		
13	2162	1.2	112.933	GST11 - 3M□□□ 100C32		
14	2035	2.9	106.296	GST14 - 3M□□□ 100C32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>3 kW</b> n1=1430					<b>GST □□ - 3M</b>	3-122		
	11	2471	1.1	129.074	GST11 - 3M□□□ 100C32			
	11	2494	2.4	130.278	GST14 - 3M□□□ 100C32			
	9.7	2814	1.0	146.993	GST11 - 3M□□□ 100C32			
	10	2665	2.2	139.211	GST14 - 3M□□□ 100C32			
	9.0	3029	0.9	158.194	GST11 - 3M□□□ 100C32			
	9.0	3029	2.0	158.194	GST14 - 3M□□□ 100C32			
	8.4	3276	1.8	171.111	GST14 - 3M□□□ 100C32			
	7.0	3920	1.5	204.722	GST14 - 3M□□□ 100C32			
	6.0	4530	1.3	236.622	GST14 - 3M□□□ 100C32			
	5.8	4757	1.2	248.458	GST14 - 3M□□□ 100C32			
	5.3	5148	1.2	268.889	GST14 - 3M□□□ 100C32			
	4.4	6248	0.9	326.333	GST14 - 3M□□□ 100C32			
3.9	6950	0.8	363.000	GST14 - 3M□□□ 100C32				
<b>4 kW</b> n1=1450					<b>GST □□ - 1M</b>	3-102		
	906	42	1.5	1.600	GST06 - 1M□□□ 112C22			
	892	42	2.5	1.625	GST07 - 1M□□□ 112C22			
	708	53	1.4	2.048	GST06 - 1M□□□ 112C22			
	725	52	2.4	2.000	GST07 - 1M□□□ 112C22			
	647	58	1.4	2.240	GST06 - 1M□□□ 112C22			
	647	58	2.3	2.240	GST07 - 1M□□□ 112C22			
	508	74	1.2	2.857	GST06 - 1M□□□ 112C22			
	508	74	2.1	2.857	GST07 - 1M□□□ 112C22			
	414	91	1.2	3.500	GST06 - 1M□□□ 112C22			
	414	91	1.9	3.500	GST07 - 1M□□□ 112C22			
	318	118	1.6	4.556	GST07 - 1M□□□ 112C22			
	311	121	2.6	4.667	GST09 - 1M□□□ 112C22			
	260	145	1.4	5.583	GST07 - 1M□□□ 112C22			
	256	147	2.2	5.667	GST09 - 1M□□□ 112C22			
	198	190	1.7	7.333	GST09 - 1M□□□ 112C22			
	163	231	1.5	8.900	GST09 - 1M□□□ 112C22			
	<b>4 kW</b> n1=2830						<b>GST □□ - 2M</b>	3-111
		958	39	1.3	2.956		GST05 - 2M□□□ 100-41	
849		44	1.4	3.333	GST05 - 2M□□□ 100-41			
849		44	3.2	3.333	GST06 - 2M□□□ 100-41			
698		53	1.2	4.053	GST05 - 2M□□□ 100-41			
680		55	2.8	4.160	GST06 - 2M□□□ 100-41			
619		60	1.2	4.571	GST05 - 2M□□□ 100-41			
619		60	2.7	4.571	GST06 - 2M□□□ 100-41			
546		68	1.1	5.187	GST05 - 2M□□□ 100-41			
532		70	2.4	5.324	GST06 - 2M□□□ 100-41			
484		77	1.1	5.850	GST05 - 2M□□□ 100-41			
484		77	2.3	5.850	GST06 - 2M□□□ 100-41			
442		84	1.0	6.400	GST05 - 2M□□□ 100-41			
442	84	2.2	6.400	GST06 - 2M□□□ 100-41				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b> n1=2830					<b>GST □□ - 2M</b>	<b>3-111</b>
	391	95	0.9	7.238	GST05 - 2M□□□ 100-41	
	402	92	2.1	7.040	GST06 - 2M□□□ 100-41	
	347	107	0.9	8.163	GST05 - 2M□□□ 100-41	
	347	107	1.9	8.163	GST06 - 2M□□□ 100-41	
	314	118	0.8	9.010	GST05 - 2M□□□ 100-41	
	314	118	1.8	9.010	GST06 - 2M□□□ 100-41	
	283	131	1.7	10.000	GST06 - 2M□□□ 100-41	
	253	147	1.5	11.200	GST06 - 2M□□□ 100-41	
	225	165	1.5	12.571	GST06 - 2M□□□ 100-41	
	225	165	3.0	12.571	GST07 - 2M□□□ 100-41	
	198	187	1.3	14.286	GST06 - 2M□□□ 100-41	
	198	187	2.8	14.286	GST07 - 2M□□□ 100-41	
	184	202	1.4	15.400	GST06 - 2M□□□ 100-41	
	184	202	2.9	15.400	GST07 - 2M□□□ 100-41	
	162	229	1.3	17.500	GST06 - 2M□□□ 100-41	
	162	229	2.7	17.500	GST07 - 2M□□□ 100-41	
	141	263	1.2	20.044	GST06 - 2M□□□ 100-41	
	141	263	2.4	20.044	GST07 - 2M□□□ 100-41	
	124	298	1.0	22.778	GST06 - 2M□□□ 100-41	
	124	298	2.1	22.778	GST07 - 2M□□□ 100-41	
	114	327	1.0	24.933	GST06 - 2M□□□ 100-41	
	115	322	2.0	24.567	GST07 - 2M□□□ 100-41	
	101	366	1.7	27.917	GST07 - 2M□□□ 100-41	
	88	423	1.5	32.267	GST07 - 2M□□□ 100-41	
	88	423	2.7	32.267	GST09 - 2M□□□ 100-41	
	77	480	1.3	36.667	GST07 - 2M□□□ 100-41	
	77	480	2.7	36.667	GST09 - 2M□□□ 100-41	
	72	513	1.3	39.160	GST07 - 2M□□□ 100-41	
	72	513	2.3	39.160	GST09 - 2M□□□ 100-41	
	72	513	2.9	39.160	GST11 - 2M□□□ 100-41	
	64	583	1.2	44.500	GST07 - 2M□□□ 100-41	
	64	583	2.5	44.500	GST09 - 2M□□□ 100-41	
64	583	3.1	44.500	GST11 - 2M□□□ 100-41		
57	648	2.0	49.500	GST09 - 2M□□□ 100-41		
57	648	2.5	49.500	GST11 - 2M□□□ 100-41		
50	737	2.0	56.250	GST09 - 2M□□□ 100-41		
50	737	2.5	56.250	GST11 - 2M□□□ 100-41		
n1=1450	478	78	2.1	3.033	GST06 - 2M□□□ 112C22	
	435	85	2.0	3.333	GST06 - 2M□□□ 112C22	
	349	106	1.8	4.160	GST06 - 2M□□□ 112C22	
	317	117	1.7	4.571	GST06 - 2M□□□ 112C22	
	272	136	1.5	5.324	GST06 - 2M□□□ 112C22	
	279	133	3.2	5.200	GST07 - 2M□□□ 112C22	
	248	150	1.5	5.850	GST06 - 2M□□□ 112C22	
	254	146	3.1	5.714	GST07 - 2M□□□ 112C22	

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n <sub>1</sub> =1450	227	164	1.4	6.400	GST06 - 2M□□□ 112C22	
	227	164	2.8	6.400	GST07 - 2M□□□ 112C22	
	206	180	1.3	7.040	GST06 - 2M□□□ 112C22	
	203	183	2.7	7.150	GST07 - 2M□□□ 112C22	
	178	209	1.2	8.163	GST06 - 2M□□□ 112C22	
	179	208	2.6	8.125	GST07 - 2M□□□ 112C22	
	161	230	1.1	9.010	GST06 - 2M□□□ 112C22	
	165	225	2.3	8.800	GST07 - 2M□□□ 112C22	
	145	256	1.1	10.000	GST06 - 2M□□□ 112C22	
	147	252	2.2	9.856	GST07 - 2M□□□ 112C22	
	130	286	1.0	11.200	GST06 - 2M□□□ 112C22	
	130	286	2.1	11.200	GST07 - 2M□□□ 112C22	
	115	321	0.9	12.571	GST06 - 2M□□□ 112C22	
	115	321	1.9	12.571	GST07 - 2M□□□ 112C22	
	102	365	0.8	14.286	GST06 - 2M□□□ 112C22	
	102	365	1.8	14.286	GST07 - 2M□□□ 112C22	
	94	394	0.8	15.400	GST06 - 2M□□□ 112C22	
	94	394	1.6	15.400	GST07 - 2M□□□ 112C22	
	83	447	1.5	17.500	GST07 - 2M□□□ 112C22	
	84	440	3.1	17.222	GST09 - 2M□□□ 112C22	
	72	512	1.4	20.044	GST07 - 2M□□□ 112C22	
	71	525	2.6	20.533	GST09 - 2M□□□ 112C22	
	72	519	3.2	20.289	GST11 - 2M□□□ 112C22	
	64	582	1.2	22.778	GST07 - 2M□□□ 112C22	
	62	596	2.5	23.333	GST09 - 2M□□□ 112C22	
	63	589	3.2	23.056	GST11 - 2M□□□ 112C22	
	59	628	1.1	24.567	GST07 - 2M□□□ 112C22	
	58	637	2.2	24.933	GST09 - 2M□□□ 112C22	
	58	637	2.7	24.933	GST11 - 2M□□□ 112C22	
	52	714	1.0	27.917	GST07 - 2M□□□ 112C22	
	51	724	2.1	28.333	GST09 - 2M□□□ 112C22	
	51	724	2.7	28.333	GST11 - 2M□□□ 112C22	
	45	825	1.7	32.267	GST09 - 2M□□□ 112C22	
	45	825	2.2	32.267	GST11 - 2M□□□ 112C22	
	45	825	2.7	32.267	GST14 - 2M□□□ 112C22	
	40	937	1.6	36.667	GST09 - 2M□□□ 112C22	
	40	937	2.2	36.667	GST11 - 2M□□□ 112C22	
	40	937	2.7	36.667	GST14 - 2M□□□ 112C22	
	37	1001	1.4	39.160	GST09 - 2M□□□ 112C22	
	37	1001	1.8	39.160	GST11 - 2M□□□ 112C22	
	37	1001	2.3	39.160	GST14 - 2M□□□ 112C22	
	33	1137	1.4	44.500	GST09 - 2M□□□ 112C22	
	33	1137	1.8	44.500	GST11 - 2M□□□ 112C22	
	33	1137	2.3	44.500	GST14 - 2M□□□ 112C22	
	29	1265	1.4	49.500	GST11 - 2M□□□ 112C22	
	29	1265	1.8	49.500	GST14 - 2M□□□ 112C22	
	26	1438	1.4	56.250	GST11 - 2M□□□ 112C22	
	26	1438	1.8	56.250	GST14 - 2M□□□ 112C22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b> n1=1450					<b>GST □□ - 3M</b>	3-122
	25	1459	1.8	57.968	GST11 - 3M□□□ 112C22	
	24	1518	1.0	60.278	GST09 - 3M□□□ 112C22	
	24	1542	1.8	61.250	GST11 - 3M□□□ 112C22	
	20	1809	0.8	71.867	GST09 - 3M□□□ 112C22	
	20	1788	1.5	71.011	GST11 - 3M□□□ 112C22	
	21	1738	2.8	69.042	GST14 - 3M□□□ 112C22	
	18	2032	1.4	80.694	GST11 - 3M□□□ 112C22	
	19	1975	2.8	78.457	GST14 - 3M□□□ 112C22	
	17	2197	1.2	87.267	GST11 - 3M□□□ 112C22	
	16	2355	2.3	93.541	GST14 - 3M□□□ 112C22	
	15	2497	1.1	99.167	GST11 - 3M□□□ 112C22	
	15	2421	2.4	96.157	GST14 - 3M□□□ 112C22	
	13	2843	0.9	112.933	GST11 - 3M□□□ 112C22	
	14	2676	2.2	106.296	GST14 - 3M□□□ 112C22	
	11	3250	0.9	129.074	GST11 - 3M□□□ 112C22	
	11	3280	1.8	130.278	GST14 - 3M□□□ 112C22	
	10	3505	1.6	139.211	GST14 - 3M□□□ 112C22	
	9.2	3983	1.5	158.194	GST14 - 3M□□□ 112C22	
	8.5	4308	1.4	171.111	GST14 - 3M□□□ 112C22	
7.1	5154	1.1	204.722	GST14 - 3M□□□ 112C22		
6.1	5957	1.0	236.622	GST14 - 3M□□□ 112C22		
5.8	6255	0.9	248.458	GST14 - 3M□□□ 112C22		
5.4	6769	0.9	268.889	GST14 - 3M□□□ 112C22		
<b>5.5 kW</b> n1=1445					<b>GST □□ - 1M</b>	3-102
	903	57	1.1	1.600	GST06 - 1M□□□ 112C32	
	889	58	1.8	1.625	GST07 - 1M□□□ 112C32	
	706	73	1.0	2.048	GST06 - 1M□□□ 112C32	
	723	72	1.7	2.000	GST07 - 1M□□□ 112C32	
	645	80	1.0	2.240	GST06 - 1M□□□ 112C32	
	645	80	1.7	2.240	GST07 - 1M□□□ 112C32	
	619	84	3.1	2.333	GST09 - 1M□□□ 112C32	
	506	102	0.9	2.857	GST06 - 1M□□□ 112C32	
	506	102	1.6	2.857	GST07 - 1M□□□ 112C32	
	514	101	2.8	2.810	GST09 - 1M□□□ 112C32	
	413	125	0.8	3.500	GST06 - 1M□□□ 112C32	
	413	125	1.4	3.500	GST07 - 1M□□□ 112C32	
	420	123	2.4	3.444	GST09 - 1M□□□ 112C32	
	317	163	1.1	4.556	GST07 - 1M□□□ 112C32	
	310	167	1.9	4.667	GST09 - 1M□□□ 112C32	
	259	200	1.0	5.583	GST07 - 1M□□□ 112C32	
	255	203	1.6	5.667	GST09 - 1M□□□ 112C32	
	197	263	1.3	7.333	GST09 - 1M□□□ 112C32	
	162	319	1.1	8.900	GST09 - 1M□□□ 112C32	
<b>n1=2890</b>					<b>GST □□ - 2M</b>	3-111
	953	54	2.5	3.033	GST06 - 2M□□□ 112-31	
	867	59	2.4	3.333	GST06 - 2M□□□ 112-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n <sub>1</sub> =2890					<b>GST □□ - 2M</b>	3-111
	695	73	2.1	4.160	GST06 - 2M□□□ 112-31	
	632	81	2.0	4.571	GST06 - 2M□□□ 112-31	
	543	94	1.8	5.324	GST06 - 2M□□□ 112-31	
	494	103	1.7	5.850	GST06 - 2M□□□ 112-31	
	452	113	1.6	6.400	GST06 - 2M□□□ 112-31	
	411	124	1.5	7.040	GST06 - 2M□□□ 112-31	
	404	126	3.1	7.150	GST07 - 2M□□□ 112-31	
	354	144	1.4	8.163	GST06 - 2M□□□ 112-31	
	356	143	3.0	8.125	GST07 - 2M□□□ 112-31	
	321	159	1.3	9.010	GST06 - 2M□□□ 112-31	
	328	155	2.7	8.800	GST07 - 2M□□□ 112-31	
	289	176	1.2	10.000	GST06 - 2M□□□ 112-31	
	293	174	2.5	9.856	GST07 - 2M□□□ 112-31	
	258	198	1.1	11.200	GST06 - 2M□□□ 112-31	
	258	198	2.4	11.200	GST07 - 2M□□□ 112-31	
	230	222	1.1	12.571	GST06 - 2M□□□ 112-31	
	230	222	2.2	12.571	GST07 - 2M□□□ 112-31	
	202	252	1.0	14.286	GST06 - 2M□□□ 112-31	
	202	252	2.0	14.286	GST07 - 2M□□□ 112-31	
	188	272	1.1	15.400	GST06 - 2M□□□ 112-31	
	188	272	2.2	15.400	GST07 - 2M□□□ 112-31	
	165	309	0.9	17.500	GST06 - 2M□□□ 112-31	
	165	309	2.0	17.500	GST07 - 2M□□□ 112-31	
	144	353	1.8	20.044	GST07 - 2M□□□ 112-31	
	127	402	1.6	22.778	GST07 - 2M□□□ 112-31	
	118	433	1.5	24.567	GST07 - 2M□□□ 112-31	
	116	440	2.9	24.933	GST09 - 2M□□□ 112-31	
	104	492	1.3	27.917	GST07 - 2M□□□ 112-31	
	102	500	2.8	28.333	GST09 - 2M□□□ 112-31	
	90	569	2.3	32.267	GST09 - 2M□□□ 112-31	
	90	569	2.9	32.267	GST11 - 2M□□□ 112-31	
	79	647	2.2	36.667	GST09 - 2M□□□ 112-31	
	79	647	2.9	36.667	GST11 - 2M□□□ 112-31	
	74	691	1.9	39.160	GST09 - 2M□□□ 112-31	
	74	691	2.4	39.160	GST11 - 2M□□□ 112-31	
	74	691	3.0	39.160	GST14 - 2M□□□ 112-31	
	65	785	2.0	44.500	GST09 - 2M□□□ 112-31	
	65	785	2.6	44.500	GST11 - 2M□□□ 112-31	
	58	873	2.1	49.500	GST11 - 2M□□□ 112-31	
	58	873	2.6	49.500	GST14 - 2M□□□ 112-31	
	51	992	2.1	56.250	GST11 - 2M□□□ 112-31	
51	992	2.6	56.250	GST14 - 2M□□□ 112-31		
n <sub>1</sub> =1445	476	107	1.6	3.033	GST06 - 2M□□□ 112C32	
	474	108	3.0	3.048	GST07 - 2M□□□ 112C32	
	434	118	1.5	3.333	GST06 - 2M□□□ 112C32	
	431	118	3.0	3.350	GST07 - 2M□□□ 112C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=1445	347	147	1.3	4.160	GST06 - 2M□□□ 112C32	
	342	149	2.7	4.225	GST07 - 2M□□□ 112C32	
	316	161	1.2	4.571	GST06 - 2M□□□ 112C32	
	311	164	2.5	4.643	GST07 - 2M□□□ 112C32	
	271	188	1.1	5.324	GST06 - 2M□□□ 112C32	
	278	183	2.3	5.200	GST07 - 2M□□□ 112C32	
	247	206	1.1	5.850	GST06 - 2M□□□ 112C32	
	253	202	2.2	5.714	GST07 - 2M□□□ 112C32	
	226	226	1.0	6.400	GST06 - 2M□□□ 112C32	
	226	226	2.1	6.400	GST07 - 2M□□□ 112C32	
	217	235	3.1	6.667	GST09 - 2M□□□ 112C32	
	205	248	1.0	7.040	GST06 - 2M□□□ 112C32	
	202	252	1.9	7.150	GST07 - 2M□□□ 112C32	
	198	258	2.8	7.305	GST09 - 2M□□□ 112C32	
	177	288	0.9	8.163	GST06 - 2M□□□ 112C32	
	178	287	1.9	8.125	GST07 - 2M□□□ 112C32	
	180	283	2.8	8.027	GST09 - 2M□□□ 112C32	
	160	318	0.8	9.010	GST06 - 2M□□□ 112C32	
	164	310	1.7	8.800	GST07 - 2M□□□ 112C32	
	147	348	1.6	9.856	GST07 - 2M□□□ 112C32	
	141	362	3.1	10.267	GST09 - 2M□□□ 112C32	
	129	395	1.5	11.200	GST07 - 2M□□□ 112C32	
	124	411	2.9	11.667	GST09 - 2M□□□ 112C32	
	115	443	1.4	12.571	GST07 - 2M□□□ 112C32	
	117	436	2.8	12.362	GST09 - 2M□□□ 112C32	
	101	504	1.3	14.286	GST07 - 2M□□□ 112C32	
	103	495	2.6	14.048	GST09 - 2M□□□ 112C32	
	94	543	1.2	15.400	GST07 - 2M□□□ 112C32	
	95	535	2.4	15.156	GST09 - 2M□□□ 112C32	
	83	617	1.1	17.500	GST07 - 2M□□□ 112C32	
	84	607	2.3	17.222	GST09 - 2M□□□ 112C32	
	72	707	1.0	20.044	GST07 - 2M□□□ 112C32	
	70	724	1.9	20.533	GST09 - 2M□□□ 112C32	
	71	716	2.4	20.289	GST11 - 2M□□□ 112C32	
	63	803	0.8	22.778	GST07 - 2M□□□ 112C32	
	62	823	1.8	23.333	GST09 - 2M□□□ 112C32	
	63	813	2.4	23.056	GST11 - 2M□□□ 112C32	
	59	866	0.8	24.567	GST07 - 2M□□□ 112C32	
	58	879	1.6	24.933	GST09 - 2M□□□ 112C32	
	58	879	2.0	24.933	GST11 - 2M□□□ 112C32	
	51	999	1.5	28.333	GST09 - 2M□□□ 112C32	
	51	999	2.0	28.333	GST11 - 2M□□□ 112C32	
	45	1138	1.3	32.267	GST09 - 2M□□□ 112C32	
	45	1138	1.6	32.267	GST11 - 2M□□□ 112C32	
	45	1138	2.0	32.267	GST14 - 2M□□□ 112C32	
	39	1293	1.2	36.667	GST09 - 2M□□□ 112C32	
	39	1293	1.6	36.667	GST11 - 2M□□□ 112C32	
	39	1293	2.0	36.667	GST14 - 2M□□□ 112C32	
	37	1381	1.0	39.160	GST09 - 2M□□□ 112C32	
	37	1381	1.3	39.160	GST11 - 2M□□□ 112C32	
	37	1381	1.6	39.160	GST14 - 2M□□□ 112C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page			
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c						
<b>5.5 kW</b> n <sub>1</sub> =1445					<b>GST □□ - 2M</b>		3-111		
	33	1569	1.0	44.500	GST09 - 2M□□□ 112C32				
	33	1569	1.3	44.500	GST11 - 2M□□□ 112C32				
	33	1569	1.6	44.500	GST14 - 2M□□□ 112C32				
	29	1746	1.1	49.500	GST11 - 2M□□□ 112C32				
	29	1746	1.3	49.500	GST14 - 2M□□□ 112C32				
	26	1984	1.1	56.250	GST11 - 2M□□□ 112C32				
	26	1984	1.3	56.250	GST14 - 2M□□□ 112C32				
					<b>GST □□ - 3M</b>			3-122	
	25	2014	1.3	57.968	GST11 - 3M□□□ 112C32				
	24	2128	1.3	61.250	GST11 - 3M□□□ 112C32				
	24	2061	2.4	59.321	GST14 - 3M□□□ 112C32				
	20	2467	1.1	71.011	GST11 - 3M□□□ 112C32				
	21	2398	2.1	69.042	GST14 - 3M□□□ 112C32				
	18	2803	1.0	80.694	GST11 - 3M□□□ 112C32				
	18	2725	2.1	78.457	GST14 - 3M□□□ 112C32				
	17	3031	0.9	87.267	GST11 - 3M□□□ 112C32				
	15	3249	1.7	93.541	GST14 - 3M□□□ 112C32				
	15	3445	0.8	99.167	GST11 - 3M□□□ 112C32				
	15	3340	1.8	96.157	GST14 - 3M□□□ 112C32				
14	3692	1.6	106.296	GST14 - 3M□□□ 112C32					
11	4525	1.3	130.278	GST14 - 3M□□□ 112C32					
10	4836	1.2	139.211	GST14 - 3M□□□ 112C32					
9.1	5495	1.1	158.194	GST14 - 3M□□□ 112C32					
8.4	5944	1.0	171.111	GST14 - 3M□□□ 112C32					
7.1	7111	0.8	204.722	GST14 - 3M□□□ 112C32					
<b>7.5 kW</b> n <sub>1</sub> =1455					<b>GST □□ - 1M</b>		3-102		
	895	79	1.3	1.625	GST07 - 1M□□□ 132C22				
	728	97	1.3	2.000	GST07 - 1M□□□ 132C22				
	650	109	1.2	2.240	GST07 - 1M□□□ 132C22				
	509	139	1.1	2.857	GST07 - 1M□□□ 132C22				
	518	136	3.1	2.810	GST09 - 1M□□□ 132C22				
	416	170	1.0	3.500	GST07 - 1M□□□ 132C22				
	422	167	2.7	3.444	GST09 - 1M□□□ 132C22				
	312	226	1.7	4.667	GST09 - 1M□□□ 132C22				
	257	275	1.7	5.667	GST09 - 1M□□□ 132C22				
					<b>GST □□ - 2M</b>			3-111	
	n <sub>1</sub> =2900	956	73	1.8	3.033	GST06 - 2M□□□ 112-41			
		870	80	1.7	3.333	GST06 - 2M□□□ 112-41			
		697	100	1.5	4.160	GST06 - 2M□□□ 112-41			
		686	101	3.2	4.225	GST07 - 2M□□□ 112-41			
634		110	1.5	4.571	GST06 - 2M□□□ 112-41				
625	111	3.0	4.643	GST07 - 2M□□□ 112-41					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>7.5 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2900	545	128	1.3	5.324	GST06 - 2M□□□ 112-41	
	558	125	2.8	5.200	GST07 - 2M□□□ 112-41	
	496	140	1.3	5.850	GST06 - 2M□□□ 112-41	
	508	137	2.6	5.714	GST07 - 2M□□□ 112-41	
	453	153	1.2	6.400	GST06 - 2M□□□ 112-41	
	453	153	2.4	6.400	GST07 - 2M□□□ 112-41	
	412	169	1.1	7.040	GST06 - 2M□□□ 112-41	
	406	171	2.3	7.150	GST07 - 2M□□□ 112-41	
	355	196	1.0	8.163	GST06 - 2M□□□ 112-41	
	357	195	2.2	8.125	GST07 - 2M□□□ 112-41	
	322	216	1.0	9.010	GST06 - 2M□□□ 112-41	
	330	211	2.0	8.800	GST07 - 2M□□□ 112-41	
	290	240	0.9	10.000	GST06 - 2M□□□ 112-41	
	294	236	1.9	9.856	GST07 - 2M□□□ 112-41	
	259	268	0.8	11.200	GST06 - 2M□□□ 112-41	
	259	268	1.8	11.200	GST07 - 2M□□□ 112-41	
	231	301	1.6	12.571	GST07 - 2M□□□ 112-41	
	203	342	1.5	14.286	GST07 - 2M□□□ 112-41	
	206	337	3.1	14.048	GST09 - 2M□□□ 112-41	
	188	369	1.6	15.400	GST07 - 2M□□□ 112-41	
	191	363	3.2	15.156	GST09 - 2M□□□ 112-41	
	166	419	1.5	17.500	GST07 - 2M□□□ 112-41	
	168	413	3.0	17.222	GST09 - 2M□□□ 112-41	
	145	480	1.3	20.044	GST07 - 2M□□□ 112-41	
	141	492	2.5	20.533	GST09 - 2M□□□ 112-41	
	143	486	3.2	20.289	GST11 - 2M□□□ 112-41	
	127	546	1.1	22.778	GST07 - 2M□□□ 112-41	
	124	559	2.5	23.333	GST09 - 2M□□□ 112-41	
	126	552	3.2	23.056	GST11 - 2M□□□ 112-41	
	118	589	1.1	24.567	GST07 - 2M□□□ 112-41	
	116	597	2.1	24.933	GST09 - 2M□□□ 112-41	
	116	597	2.6	24.933	GST11 - 2M□□□ 112-41	
	104	669	0.9	27.917	GST07 - 2M□□□ 112-41	
	102	679	2.0	28.333	GST09 - 2M□□□ 112-41	
	102	679	2.6	28.333	GST11 - 2M□□□ 112-41	
	90	773	1.7	32.267	GST09 - 2M□□□ 112-41	
	90	773	2.1	32.267	GST11 - 2M□□□ 112-41	
	90	773	2.6	32.267	GST14 - 2M□□□ 112-41	
	79	879	1.6	36.667	GST09 - 2M□□□ 112-41	
	79	879	2.1	36.667	GST11 - 2M□□□ 112-41	
	79	879	2.6	36.667	GST14 - 2M□□□ 112-41	
	74	938	1.4	39.160	GST09 - 2M□□□ 112-41	
	74	938	1.8	39.160	GST11 - 2M□□□ 112-41	
	74	938	2.2	39.160	GST14 - 2M□□□ 112-41	
	65	1066	1.5	44.500	GST09 - 2M□□□ 112-41	
	65	1066	1.9	44.500	GST11 - 2M□□□ 112-41	
	65	1066	2.4	44.500	GST14 - 2M□□□ 112-41	
	59	1186	1.5	49.500	GST11 - 2M□□□ 112-41	
	59	1186	1.9	49.500	GST14 - 2M□□□ 112-41	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>7.5 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n <sub>1</sub> =2900	52	1348	1.5	56.250	GST11 - 2M□□□ 112-41	
	52	1348	1.9	56.250	GST14 - 2M□□□ 112-41	
n <sub>1</sub> =1455	477	146	2.4	3.048	GST07 - 2M□□□ 132C22	
	434	160	2.3	3.350	GST07 - 2M□□□ 132C22	
	344	202	2.0	4.225	GST07 - 2M□□□ 132C22	
	313	222	1.9	4.643	GST07 - 2M□□□ 132C22	
	280	248	1.7	5.200	GST07 - 2M□□□ 132C22	
	255	273	1.6	5.714	GST07 - 2M□□□ 132C22	
	227	306	1.5	6.400	GST07 - 2M□□□ 132C22	
	204	342	1.4	7.150	GST07 - 2M□□□ 132C22	
	199	349	3.2	7.305	GST09 - 2M□□□ 132C22	
	179	388	1.4	8.125	GST07 - 2M□□□ 132C22	
	181	383	3.0	8.027	GST09 - 2M□□□ 132C22	
	165	420	1.3	8.800	GST07 - 2M□□□ 132C22	
	162	430	2.6	9.010	GST09 - 2M□□□ 132C22	
	148	471	1.2	9.856	GST07 - 2M□□□ 132C22	
	142	490	2.4	10.267	GST09 - 2M□□□ 132C22	
	130	535	1.1	11.200	GST07 - 2M□□□ 132C22	
	125	557	2.2	11.667	GST09 - 2M□□□ 132C22	
	116	600	1.0	12.571	GST07 - 2M□□□ 132C22	
	118	590	2.1	12.362	GST09 - 2M□□□ 132C22	
	102	682	0.9	14.286	GST07 - 2M□□□ 132C22	
	104	671	1.9	14.048	GST09 - 2M□□□ 132C22	
	95	736	0.9	15.400	GST07 - 2M□□□ 132C22	
	96	724	1.9	15.156	GST09 - 2M□□□ 132C22	
	83	836	0.8	17.500	GST07 - 2M□□□ 132C22	
	85	823	1.7	17.222	GST09 - 2M□□□ 132C22	
	71	981	1.5	20.533	GST09 - 2M□□□ 132C22	
	72	969	2.8	20.289	GST11 - 2M□□□ 132C22	
	62	1114	1.4	23.333	GST09 - 2M□□□ 132C22	
	63	1101	2.6	23.056	GST11 - 2M□□□ 132C22	
	58	1191	1.3	24.933	GST09 - 2M□□□ 132C22	
	58	1191	2.3	24.933	GST11 - 2M□□□ 132C22	
	51	1353	1.1	28.333	GST09 - 2M□□□ 132C22	
51	1353	2.2	28.333	GST11 - 2M□□□ 132C22		
45	1541	1.8	32.267	GST11 - 2M□□□ 132C22		
45	1541	3.1	32.267	GST14 - 2M□□□ 132C22		
40	1751	1.7	36.667	GST11 - 2M□□□ 132C22		
40	1751	3.1	36.667	GST14 - 2M□□□ 132C22		
37	1870	1.5	39.160	GST11 - 2M□□□ 132C22		
37	1870	2.6	39.160	GST14 - 2M□□□ 132C22		
33	2125	1.4	44.500	GST11 - 2M□□□ 132C22		
33	2125	2.6	44.500	GST14 - 2M□□□ 132C22		
29	2364	1.8	49.500	GST14 - 2M□□□ 132C22		
26	2686	1.8	56.250	GST14 - 2M□□□ 132C22		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>7.5 kW</b> n1=1455					<b>GST □□ - 3M</b>	3-122	
	25	2727	0.9	57.968	GST11 - 3M□□□ 132C22		
	24	2881	0.9	61.250	GST11 - 3M□□□ 132C22		
	25	2791	1.9	59.321	GST14 - 3M□□□ 132C22		
	21	3248	1.5	69.042	GST14 - 3M□□□ 132C22		
	19	3691	1.5	78.457	GST14 - 3M□□□ 132C22		
	16	4400	1.3	93.541	GST14 - 3M□□□ 132C22		
	15	4523	1.3	96.157	GST14 - 3M□□□ 132C22		
	14	5000	1.2	106.296	GST14 - 3M□□□ 132C22		
	11	6128	1.0	130.278	GST14 - 3M□□□ 132C22		
11	6549	0.9	139.211	GST14 - 3M□□□ 132C22			
<b>9.2 kW</b> n1=1450	892	97	1.1	1.625	GST07 - 1M□□□ 132C32	3-102	
	930	93	3.0	1.560	GST09 - 1M□□□ 132C32		
	725	119	1.0	2.000	GST07 - 1M□□□ 132C32		
	708	122	2.8	2.048	GST09 - 1M□□□ 132C32		
	647	134	1.0	2.240	GST07 - 1M□□□ 132C32		
	621	139	2.7	2.333	GST09 - 1M□□□ 132C32		
	508	171	0.9	2.857	GST07 - 1M□□□ 132C32		
	516	168	2.5	2.810	GST09 - 1M□□□ 132C32		
	414	209	0.8	3.500	GST07 - 1M□□□ 132C32		
	421	206	2.2	3.444	GST09 - 1M□□□ 132C32		
	311	279	1.4	4.667	GST09 - 1M□□□ 132C32		
	256	338	1.4	5.667	GST09 - 1M□□□ 132C32		
	n1=2925	960	89	3.2	3.048	GST07 - 2M□□□ 132-21	3-111
		873	98	3.0	3.350	GST07 - 2M□□□ 132-21	
		692	123	2.6	4.225	GST07 - 2M□□□ 132-21	
		630	135	2.4	4.643	GST07 - 2M□□□ 132-21	
		563	152	2.3	5.200	GST07 - 2M□□□ 132-21	
		512	167	2.2	5.714	GST07 - 2M□□□ 132-21	
		457	187	2.0	6.400	GST07 - 2M□□□ 132-21	
		409	208	1.9	7.150	GST07 - 2M□□□ 132-21	
360		237	1.8	8.125	GST07 - 2M□□□ 132-21		
332		256	1.6	8.800	GST07 - 2M□□□ 132-21		
297		287	1.5	9.856	GST07 - 2M□□□ 132-21		
285		299	3.2	10.267	GST09 - 2M□□□ 132-21		
261		326	1.5	11.200	GST07 - 2M□□□ 132-21		
251		340	2.8	11.667	GST09 - 2M□□□ 132-21		
233		366	1.3	12.571	GST07 - 2M□□□ 132-21		
237		360	2.8	12.362	GST09 - 2M□□□ 132-21		
205	416	1.2	14.286	GST07 - 2M□□□ 132-21			
208	409	2.5	14.048	GST09 - 2M□□□ 132-21			

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>9.2 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=2925	190	449	1.3	15.400	GST07 - 2M□□□ 132-21	
	193	442	2.8	15.156	GST09 - 2M□□□ 132-21	
	167	510	1.2	17.500	GST07 - 2M□□□ 132-21	
	170	502	2.5	17.222	GST09 - 2M□□□ 132-21	
	143	598	2.3	20.533	GST09 - 2M□□□ 132-21	
	125	680	2.0	23.333	GST09 - 2M□□□ 132-21	
	117	727	2.0	24.933	GST09 - 2M□□□ 132-21	
	103	826	1.7	28.333	GST09 - 2M□□□ 132-21	
	103	826	3.2	28.333	GST11 - 2M□□□ 132-21	
	91	940	2.7	32.267	GST11 - 2M□□□ 132-21	
	80	1069	2.5	36.667	GST11 - 2M□□□ 132-21	
	75	1141	2.3	39.160	GST11 - 2M□□□ 132-21	
	66	1297	2.3	44.500	GST11 - 2M□□□ 132-21	
	59	1443	3.0	49.500	GST14 - 2M□□□ 132-21	
	52	1639	3.0	56.250	GST14 - 2M□□□ 132-21	
	n1=1450	476	179	2.0	3.048	GST07 - 2M□□□ 132C32
433		197	1.9	3.350	GST07 - 2M□□□ 132C32	
343		248	1.6	4.225	GST07 - 2M□□□ 132C32	
312		273	1.5	4.643	GST07 - 2M□□□ 132C32	
279		306	1.4	5.200	GST07 - 2M□□□ 132C32	
272		313	3.2	5.324	GST09 - 2M□□□ 132C32	
254		336	1.3	5.714	GST07 - 2M□□□ 132C32	
248		344	3.0	5.850	GST09 - 2M□□□ 132C32	
227		376	1.2	6.400	GST07 - 2M□□□ 132C32	
218		392	2.7	6.667	GST09 - 2M□□□ 132C32	
203		420	1.2	7.150	GST07 - 2M□□□ 132C32	
199		429	2.6	7.305	GST09 - 2M□□□ 132C32	
179		478	1.1	8.125	GST07 - 2M□□□ 132C32	
181		472	2.4	8.027	GST09 - 2M□□□ 132C32	
165		517	1.0	8.800	GST07 - 2M□□□ 132C32	
161		530	2.1	9.010	GST09 - 2M□□□ 132C32	
147		579	0.9	9.856	GST07 - 2M□□□ 132C32	
141		604	2.0	10.267	GST09 - 2M□□□ 132C32	
130		658	0.9	11.200	GST07 - 2M□□□ 132C32	
124		686	1.8	11.667	GST09 - 2M□□□ 132C32	
115		739	0.8	12.571	GST07 - 2M□□□ 132C32	
117		727	1.7	12.362	GST09 - 2M□□□ 132C32	
103		826	1.6	14.048	GST09 - 2M□□□ 132C32	
102		840	3.1	14.286	GST11 - 2M□□□ 132C32	
96		891	1.5	15.156	GST09 - 2M□□□ 132C32	
94		905	3.0	15.400	GST11 - 2M□□□ 132C32	
84	1012	1.4	17.222	GST09 - 2M□□□ 132C32		
83	1029	2.7	17.500	GST11 - 2M□□□ 132C32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>9.2 kW</b> n <sub>1</sub> =1450					<b>GST □□ - 2M</b>	3-111	
	71	1207	1.2	20.533	GST09 - 2M□□□ 132C32		
	72	1193	2.3	20.289	GST11 - 2M□□□ 132C32		
	62	1372	1.1	23.333	GST09 - 2M□□□ 132C32		
	63	1355	2.1	23.056	GST11 - 2M□□□ 132C32		
	58	1466	1.1	24.933	GST09 - 2M□□□ 132C32		
	58	1466	1.9	24.933	GST11 - 2M□□□ 132C32		
	59	1444	3.1	24.567	GST14 - 2M□□□ 132C32		
	51	1666	0.9	28.333	GST09 - 2M□□□ 132C32		
	51	1666	1.8	28.333	GST11 - 2M□□□ 132C32		
	52	1641	3.1	27.917	GST14 - 2M□□□ 132C32		
	45	1897	1.5	32.267	GST11 - 2M□□□ 132C32		
	45	1897	2.5	32.267	GST14 - 2M□□□ 132C32		
	40	2155	1.4	36.667	GST11 - 2M□□□ 132C32		
	40	2155	2.5	36.667	GST14 - 2M□□□ 132C32		
	37	2302	1.2	39.160	GST11 - 2M□□□ 132C32		
	37	2302	2.1	39.160	GST14 - 2M□□□ 132C32		
	33	2616	1.1	44.500	GST11 - 2M□□□ 132C32		
	33	2616	2.1	44.500	GST14 - 2M□□□ 132C32		
	29	2910	1.5	49.500	GST14 - 2M□□□ 132C32		
	26	3307	1.5	56.250	GST14 - 2M□□□ 132C32		
					<b>GST □□ - 3M</b>		3-122
	24	3435	1.5	59.321	GST14 - 3M□□□ 132C32		
21	3998	1.2	69.042	GST14 - 3M□□□ 132C32			
19	4543	1.2	78.457	GST14 - 3M□□□ 132C32			
16	5416	1.0	93.541	GST14 - 3M□□□ 132C32			
15	5568	1.1	96.157	GST14 - 3M□□□ 132C32			
14	6155	1.0	106.296	GST14 - 3M□□□ 132C32			
<b>11 kW</b> n <sub>1</sub> =1460					<b>GST □□ - 1M</b>	3-102	
	899	115	0.9	1.625	GST07 - 1M□□□ 160-22		
	936	111	2.5	1.560	GST09 - 1M□□□ 160-22		
	730	142	0.9	2.000	GST07 - 1M□□□ 160-22		
	713	145	2.3	2.048	GST09 - 1M□□□ 160-22		
	652	159	0.8	2.240	GST07 - 1M□□□ 160-22		
	626	165	2.2	2.333	GST09 - 1M□□□ 160-22		
	520	199	2.1	2.810	GST09 - 1M□□□ 160-22		
	424	244	1.8	3.444	GST09 - 1M□□□ 160-22		
					<b>GST □□ - 2M</b>		3-111
	479	213	1.7	3.048	GST07 - 2M□□□ 160-22		
	436	234	1.6	3.350	GST07 - 2M□□□ 160-22		
	346	295	1.3	4.225	GST07 - 2M□□□ 160-22		
	360	283	3.1	4.056	GST09 - 2M□□□ 160-22		
	315	324	1.3	4.643	GST07 - 2M□□□ 160-22		
	328	311	3.0	4.457	GST09 - 2M□□□ 160-22		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>11 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=1460	281	363	1.2	5.200	GST07 - 2M□□□ 160-22	
	274	372	2.7	5.324	GST09 - 2M□□□ 160-22	
	256	399	1.1	5.714	GST07 - 2M□□□ 160-22	
	250	408	2.5	5.850	GST09 - 2M□□□ 160-22	
	228	447	1.0	6.400	GST07 - 2M□□□ 160-22	
	219	465	2.3	6.667	GST09 - 2M□□□ 160-22	
	204	499	1.0	7.150	GST07 - 2M□□□ 160-22	
	200	510	2.2	7.305	GST09 - 2M□□□ 160-22	
	180	567	1.0	8.125	GST07 - 2M□□□ 160-22	
	182	560	2.0	8.027	GST09 - 2M□□□ 160-22	
	166	614	0.9	8.800	GST07 - 2M□□□ 160-22	
	162	629	1.8	9.010	GST09 - 2M□□□ 160-22	
	142	717	1.6	10.267	GST09 - 2M□□□ 160-22	
	125	814	1.5	11.667	GST09 - 2M□□□ 160-22	
	130	782	3.0	11.200	GST11 - 2M□□□ 160-22	
	118	863	1.5	12.362	GST09 - 2M□□□ 160-22	
	116	878	2.9	12.571	GST11 - 2M□□□ 160-22	
	104	981	1.3	14.048	GST09 - 2M□□□ 160-22	
	102	997	2.6	14.286	GST11 - 2M□□□ 160-22	
	96	1058	1.3	15.156	GST09 - 2M□□□ 160-22	
	95	1075	2.5	15.400	GST11 - 2M□□□ 160-22	
	85	1202	1.1	17.222	GST09 - 2M□□□ 160-22	
	83	1222	2.3	17.500	GST11 - 2M□□□ 160-22	
	72	1416	1.9	20.289	GST11 - 2M□□□ 160-22	
	63	1609	1.8	23.056	GST11 - 2M□□□ 160-22	
	64	1590	3.2	22.778	GST14 - 2M□□□ 160-22	
	59	1741	1.6	24.933	GST11 - 2M□□□ 160-22	
	59	1715	3.1	24.567	GST14 - 2M□□□ 160-22	
	52	1978	1.5	28.333	GST11 - 2M□□□ 160-22	
	52	1949	2.7	27.917	GST14 - 2M□□□ 160-22	
	45	2252	2.4	32.267	GST14 - 2M□□□ 160-22	
	40	2560	2.3	36.667	GST14 - 2M□□□ 160-22	
	37	2734	2.0	39.160	GST14 - 2M□□□ 160-22	
	33	3106	1.9	44.500	GST14 - 2M□□□ 160-22	
					<b>GST □□ - 3M</b>	<b>3-122</b>
	30	3327	1.5	48.386	GST14 - 3M□□□ 160-22	
	28	3654	1.3	53.148	GST14 - 3M□□□ 160-22	
	25	4079	1.3	59.321	GST14 - 3M□□□ 160-22	
	21	4747	1.0	69.042	GST14 - 3M□□□ 160-22	
	19	5395	1.0	78.457	GST14 - 3M□□□ 160-22	
	15	6612	0.9	96.157	GST14 - 3M□□□ 160-22	
<b>15 kW</b>					<b>GST □□ - 1M</b>	<b>3-102</b>
n1=1460	936	151	1.8	1.560	GST09 - 1M□□□ 160-32	
	713	198	1.7	2.048	GST09 - 1M□□□ 160-32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>15 kW</b> n <sub>1</sub> =1460					<b>GST □□ - 1M</b>	3-102
	626	226	1.6	2.333	GST09 - 1M□□□ 160-32	
	520	272	1.5	2.810	GST09 - 1M□□□ 160-32	
	424	333	1.3	3.444	GST09 - 1M□□□ 160-32	
					<b>GST □□ - 2M</b>	3-111
	479	290	1.2	3.048	GST07 - 2M□□□ 160-32	
	436	319	1.2	3.350	GST07 - 2M□□□ 160-32	
	346	402	1.0	4.225	GST07 - 2M□□□ 160-32	
	360	386	2.3	4.056	GST09 - 2M□□□ 160-32	
	315	442	0.9	4.643	GST07 - 2M□□□ 160-32	
	328	424	2.2	4.457	GST09 - 2M□□□ 160-32	
	281	495	0.9	5.200	GST07 - 2M□□□ 160-32	
	274	507	2.0	5.324	GST09 - 2M□□□ 160-32	
	274	507	3.1	5.324	GST11 - 2M□□□ 160-32	
	256	544	0.8	5.714	GST07 - 2M□□□ 160-32	
	250	557	1.8	5.850	GST09 - 2M□□□ 160-32	
	250	557	3.2	5.850	GST11 - 2M□□□ 160-32	
	219	635	1.7	6.667	GST09 - 2M□□□ 160-32	
	228	609	3.0	6.400	GST11 - 2M□□□ 160-32	
	200	695	1.6	7.305	GST09 - 2M□□□ 160-32	
	213	653	3.2	6.864	GST11 - 2M□□□ 160-32	
	182	764	1.5	8.027	GST09 - 2M□□□ 160-32	
	187	743	2.8	7.800	GST11 - 2M□□□ 160-32	
	162	858	1.3	9.010	GST09 - 2M□□□ 160-32	
	162	858	2.6	9.010	GST11 - 2M□□□ 160-32	
	142	977	1.2	10.267	GST09 - 2M□□□ 160-32	
	148	938	2.5	9.856	GST11 - 2M□□□ 160-32	
	125	1111	1.1	11.667	GST09 - 2M□□□ 160-32	
	130	1066	2.2	11.200	GST11 - 2M□□□ 160-32	
	118	1177	1.1	12.362	GST09 - 2M□□□ 160-32	
	116	1197	2.1	12.571	GST11 - 2M□□□ 160-32	
	104	1337	1.0	14.048	GST09 - 2M□□□ 160-32	
	102	1360	1.9	14.286	GST11 - 2M□□□ 160-32	
	104	1337	3.2	14.048	GST14 - 2M□□□ 160-32	
	96	1443	0.9	15.156	GST09 - 2M□□□ 160-32	
	95	1466	1.8	15.400	GST11 - 2M□□□ 160-32	
	96	1443	3.1	15.156	GST14 - 2M□□□ 160-32	
	85	1639	0.8	17.222	GST09 - 2M□□□ 160-32	
	83	1666	1.7	17.500	GST11 - 2M□□□ 160-32	
	85	1639	2.8	17.222	GST14 - 2M□□□ 160-32	
72	1931	1.4	20.289	GST11 - 2M□□□ 160-32		
73	1908	2.6	20.044	GST14 - 2M□□□ 160-32		
63	2195	1.3	23.056	GST11 - 2M□□□ 160-32		
64	2168	2.3	22.778	GST14 - 2M□□□ 160-32		
59	2373	1.2	24.933	GST11 - 2M□□□ 160-32		
59	2339	2.2	24.567	GST14 - 2M□□□ 160-32		
52	2697	1.1	28.333	GST11 - 2M□□□ 160-32		
52	2657	2.0	27.917	GST14 - 2M□□□ 160-32		
45	3071	1.8	32.267	GST14 - 2M□□□ 160-32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>15 kW</b> n <sub>1</sub> =1460					<b>GST □□ - 2M</b>	3-111	
	40	3490	1.7	36.667	GST14 - 2M□□□ 160-32		
	37	3728	1.5	39.160	GST14 - 2M□□□ 160-32		
		33	4236	1.4	44.500	GST14 - 2M□□□ 160-32	3-122
		30	4537	1.1	48.386	<b>GST □□ - 3M</b>	
		28	4983	1.0	53.148	GST14 - 3M□□□ 160-32	
		25	5562	0.9	59.321	GST14 - 3M□□□ 160-32	
<b>18.5 kW</b> n <sub>1</sub> =1470	942	185	1.5	1.560	<b>GST □□ - 1M</b>	3-102	
	718	242	1.4	2.048	GST09 - 1M□□□ 180-22		
	630	276	1.3	2.333	GST09 - 1M□□□ 180-22		
	523	333	1.3	2.810	GST09 - 1M□□□ 180-22		
	427	408	1.1	3.444	GST09 - 1M□□□ 180-22		
		362	473	1.9	4.056	<b>GST □□ - 2M</b>	3-111
		362	473	3.2	4.056	GST09 - 2M□□□ 180-22 GST11 - 2M□□□ 180-22	
		330	520	1.8	4.457	GST09 - 2M□□□ 180-22	
		330	520	3.1	4.457	GST11 - 2M□□□ 180-22	
		276	621	1.6	5.324	GST09 - 2M□□□ 180-22	
		276	621	2.6	5.324	GST11 - 2M□□□ 180-22	
		251	682	1.5	5.850	GST09 - 2M□□□ 180-22	
		251	682	2.6	5.850	GST11 - 2M□□□ 180-22	
		221	777	1.4	6.667	GST09 - 2M□□□ 180-22	
		230	746	2.4	6.400	GST11 - 2M□□□ 180-22	
		201	852	1.3	7.305	GST09 - 2M□□□ 180-22	
		214	800	2.6	6.864	GST11 - 2M□□□ 180-22	
		183	936	1.2	8.027	GST09 - 2M□□□ 180-22	
		189	910	2.3	7.800	GST11 - 2M□□□ 180-22	
		163	1051	1.1	9.010	GST09 - 2M□□□ 180-22	
		163	1051	2.2	9.010	GST11 - 2M□□□ 180-22	
		143	1197	1.0	10.267	GST09 - 2M□□□ 180-22	
		149	1149	2.0	9.856	GST11 - 2M□□□ 180-22	
		149	1148	3.1	9.841	GST14 - 2M□□□ 180-22	
		126	1360	0.9	11.667	GST09 - 2M□□□ 180-22	
		131	1306	1.8	11.200	GST11 - 2M□□□ 180-22	
		134	1283	3.1	11.000	GST14 - 2M□□□ 180-22	
		119	1441	0.9	12.362	GST09 - 2M□□□ 180-22	
		117	1466	1.7	12.571	GST11 - 2M□□□ 180-22	
		119	1441	2.9	12.362	GST14 - 2M□□□ 180-22	
		103	1666	1.5	14.286	GST11 - 2M□□□ 180-22	
		105	1638	2.6	14.048	GST14 - 2M□□□ 180-22	
	96	1796	1.5	15.400	GST11 - 2M□□□ 180-22		
	97	1767	2.5	15.156	GST14 - 2M□□□ 180-22		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>18.5 kW</b> n1=1470					<b>GST □□ - 2M</b>	3-111
	84	2041	1.4	17.500	GST11 - 2M□□□ 180-22	
	85	2008	2.3	17.222	GST14 - 2M□□□ 180-22	
	73	2366	1.2	20.289	GST11 - 2M□□□ 180-22	
	73	2337	2.1	20.044	GST14 - 2M□□□ 180-22	
	64	2688	1.1	23.056	GST11 - 2M□□□ 180-22	
	65	2656	1.9	22.778	GST14 - 2M□□□ 180-22	
	59	2907	1.0	24.933	GST11 - 2M□□□ 180-22	
	60	2865	1.8	24.567	GST14 - 2M□□□ 180-22	
	52	3304	0.9	28.333	GST11 - 2M□□□ 180-22	
	53	3255	1.6	27.917	GST14 - 2M□□□ 180-22	
	46	3762	1.4	32.267	GST14 - 2M□□□ 180-22	
	40	4275	1.3	36.667	GST14 - 2M□□□ 180-22	
	38	4566	1.2	39.160	GST14 - 2M□□□ 180-22	
33	5189	1.1	44.500	GST14 - 2M□□□ 180-22		
				<b>GST □□ - 3M</b>	3-122	
30	5557	0.9	48.386	GST14 - 3M□□□ 180-22		
<b>22 kW</b> n1=1465					<b>GST □□ - 1M</b>	3-102
	939	220	1.3	1.560	GST09 - 1M□□□ 180-32	
	716	289	1.2	2.048	GST09 - 1M□□□ 180-32	
	628	330	1.1	2.333	GST09 - 1M□□□ 180-32	
	521	397	1.1	2.810	GST09 - 1M□□□ 180-32	
	425	487	0.9	3.444	GST09 - 1M□□□ 180-32	
					<b>GST □□ - 2M</b>	3-111
	361	564	1.6	4.056	GST09 - 2M□□□ 180-32	
	361	564	2.6	4.056	GST11 - 2M□□□ 180-32	
	329	620	1.5	4.457	GST09 - 2M□□□ 180-32	
	329	620	2.6	4.457	GST11 - 2M□□□ 180-32	
	275	741	1.3	5.324	GST09 - 2M□□□ 180-32	
	275	741	2.2	5.324	GST11 - 2M□□□ 180-32	
	282	724	3.2	5.200	GST14 - 2M□□□ 180-32	
	250	814	1.3	5.850	GST09 - 2M□□□ 180-32	
	250	814	2.2	5.850	GST11 - 2M□□□ 180-32	
	256	795	3.2	5.714	GST14 - 2M□□□ 180-32	
	220	928	1.1	6.667	GST09 - 2M□□□ 180-32	
	229	890	2.0	6.400	GST11 - 2M□□□ 180-32	
	233	875	3.1	6.286	GST14 - 2M□□□ 180-32	
	201	1016	1.1	7.305	GST09 - 2M□□□ 180-32	
	213	955	2.2	6.864	GST11 - 2M□□□ 180-32	
	183	1117	1.0	8.027	GST09 - 2M□□□ 180-32	
	188	1085	1.9	7.800	GST11 - 2M□□□ 180-32	
	183	1117	2.9	8.027	GST14 - 2M□□□ 180-32	
	163	1254	0.9	9.010	GST09 - 2M□□□ 180-32	
163	1254	1.8	9.010	GST11 - 2M□□□ 180-32		
167	1224	3.1	8.800	GST14 - 2M□□□ 180-32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>22 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=1465	143	1428	0.8	10.267	GST09 - 2M□□□ 180-32	
	149	1371	1.7	9.856	GST11 - 2M□□□ 180-32	
	149	1369	2.6	9.841	GST14 - 2M□□□ 180-32	
	131	1558	1.5	11.200	GST11 - 2M□□□ 180-32	
	133	1531	2.6	11.000	GST14 - 2M□□□ 180-32	
	117	1749	1.4	12.571	GST11 - 2M□□□ 180-32	
	119	1720	2.4	12.362	GST14 - 2M□□□ 180-32	
	103	1988	1.3	14.286	GST11 - 2M□□□ 180-32	
	104	1955	2.2	14.048	GST14 - 2M□□□ 180-32	
	95	2143	1.3	15.400	GST11 - 2M□□□ 180-32	
	97	2109	2.1	15.156	GST14 - 2M□□□ 180-32	
	84	2435	1.1	17.500	GST11 - 2M□□□ 180-32	
	85	2396	1.9	17.222	GST14 - 2M□□□ 180-32	
	72	2823	1.0	20.289	GST11 - 2M□□□ 180-32	
	73	2789	1.8	20.044	GST14 - 2M□□□ 180-32	
	64	3208	0.9	23.056	GST11 - 2M□□□ 180-32	
	64	3169	1.6	22.778	GST14 - 2M□□□ 180-32	
	59	3469	0.8	24.933	GST11 - 2M□□□ 180-32	
	60	3418	1.5	24.567	GST14 - 2M□□□ 180-32	
	53	3884	1.4	27.917	GST14 - 2M□□□ 180-32	
	45	4489	1.2	32.267	GST14 - 2M□□□ 180-32	
	40	5102	1.1	36.667	GST14 - 2M□□□ 180-32	
	37	5448	1.0	39.160	GST14 - 2M□□□ 180-32	
	33	6191	0.9	44.500	GST14 - 2M□□□ 180-32	
<b>30 kW</b>					<b>GST □□ - 1M</b>	<b>3-102</b>
n1=1465	939	301	0.9	1.560	GST09 - 1M□□□ 200N32	
	716	394	0.9	2.048	GST09 - 1M□□□ 200N32	
					<b>GST □□ - 2M</b>	<b>3-111</b>
	361	770	1.1	4.056	GST09 - 2M□□□ 200N32	
	361	770	1.9	4.056	GST11 - 2M□□□ 200N32	
	347	802	2.0	4.225	GST14 - 2M□□□ 200N32	
	329	846	1.1	4.457	GST09 - 2M□□□ 200N32	
	329	846	1.9	4.457	GST11 - 2M□□□ 200N32	
	316	881	2.0	4.643	GST14 - 2M□□□ 200N32	
	275	1010	1.0	5.324	GST09 - 2M□□□ 200N32	
	275	1010	1.6	5.324	GST11 - 2M□□□ 200N32	
	282	987	2.0	5.200	GST14 - 2M□□□ 200N32	
	250	1110	0.9	5.850	GST09 - 2M□□□ 200N32	
	250	1110	1.6	5.850	GST11 - 2M□□□ 200N32	
	256	1084	2.0	5.714	GST14 - 2M□□□ 200N32	
	229	1214	1.5	6.400	GST11 - 2M□□□ 200N32	
	233	1193	2.0	6.286	GST14 - 2M□□□ 200N32	
	213	1302	1.6	6.864	GST11 - 2M□□□ 200N32	
	205	1357	2.0	7.150	GST14 - 2M□□□ 200N32	
	188	1480	1.4	7.800	GST11 - 2M□□□ 200N32	
	183	1523	2.0	8.027	GST14 - 2M□□□ 200N32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>30 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=1465	163	1709	1.3	9.010	GST11 - 2M□□□ 200N32	
	167	1670	2.0	8.800	GST14 - 2M□□□ 200N32	
	149	1870	1.2	9.856	GST11 - 2M□□□ 200N32	
	149	1867	2.0	9.841	GST14 - 2M□□□ 200N32	
	131	2125	1.1	11.200	GST11 - 2M□□□ 200N32	
	133	2087	1.9	11.000	GST14 - 2M□□□ 200N32	
	117	2385	1.1	12.571	GST11 - 2M□□□ 200N32	
	119	2345	1.8	12.362	GST14 - 2M□□□ 200N32	
	103	2710	1.0	14.286	GST11 - 2M□□□ 200N32	
	104	2665	1.6	14.048	GST14 - 2M□□□ 200N32	
	95	2922	0.9	15.400	GST11 - 2M□□□ 200N32	
	97	2875	1.6	15.156	GST14 - 2M□□□ 200N32	
	84	3320	0.8	17.500	GST11 - 2M□□□ 200N32	
	85	3268	1.4	17.222	GST14 - 2M□□□ 200N32	
	73	3803	1.3	20.044	GST14 - 2M□□□ 200N32	
	64	4322	1.2	22.778	GST14 - 2M□□□ 200N32	
<b>37 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n1=1470	362	946	1.6	4.056	GST11 - 2M□□□ 225N12	
	348	985	1.6	4.225	GST14 - 2M□□□ 225N12	
	330	1039	1.5	4.457	GST11 - 2M□□□ 225N12	
	317	1083	1.6	4.643	GST14 - 2M□□□ 225N12	
	276	1242	1.3	5.324	GST11 - 2M□□□ 225N12	
	283	1213	1.6	5.200	GST14 - 2M□□□ 225N12	
	251	1364	1.3	5.850	GST11 - 2M□□□ 225N12	
	257	1333	1.6	5.714	GST14 - 2M□□□ 225N12	
	230	1493	1.2	6.400	GST11 - 2M□□□ 225N12	
	234	1466	1.6	6.286	GST14 - 2M□□□ 225N12	
	214	1601	1.3	6.864	GST11 - 2M□□□ 225N12	
	206	1667	1.6	7.150	GST14 - 2M□□□ 225N12	
	189	1819	1.2	7.800	GST11 - 2M□□□ 225N12	
	183	1872	1.6	8.027	GST14 - 2M□□□ 225N12	
	163	2101	1.1	9.010	GST11 - 2M□□□ 225N12	
	167	2052	1.6	8.800	GST14 - 2M□□□ 225N12	
	149	2298	1.0	9.856	GST11 - 2M□□□ 225N12	
	149	2295	1.6	9.841	GST14 - 2M□□□ 225N12	
	131	2612	0.9	11.200	GST11 - 2M□□□ 225N12	
	134	2565	1.5	11.000	GST14 - 2M□□□ 225N12	
	117	2932	0.9	12.571	GST11 - 2M□□□ 225N12	
	119	2883	1.4	12.362	GST14 - 2M□□□ 225N12	
	105	3276	1.3	14.048	GST14 - 2M□□□ 225N12	
	97	3534	1.3	15.156	GST14 - 2M□□□ 225N12	
	85	4016	1.1	17.222	GST14 - 2M□□□ 225N12	
	73	4674	1.0	20.044	GST14 - 2M□□□ 225N12	
	65	5312	0.9	22.778	GST14 - 2M□□□ 225N12	

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>45 kW</b>					<b>GST □□ - 2M</b>	<b>3-111</b>
n <sub>1</sub> =1470	362	1150	1.3	4.056	GST11 - 2M□□□ 225N22	
	348	1198	1.3	4.225	GST14 - 2M□□□ 225N22	
	330	1264	1.3	4.457	GST11 - 2M□□□ 225N22	
	317	1317	1.3	4.643	GST14 - 2M□□□ 225N22	
	276	1510	1.1	5.324	GST11 - 2M□□□ 225N22	
	283	1475	1.3	5.200	GST14 - 2M□□□ 225N22	
	251	1659	1.1	5.850	GST11 - 2M□□□ 225N22	
	257	1621	1.3	5.714	GST14 - 2M□□□ 225N22	
	230	1815	1.0	6.400	GST11 - 2M□□□ 225N22	
	234	1783	1.3	6.286	GST14 - 2M□□□ 225N22	
	214	1947	1.1	6.864	GST11 - 2M□□□ 225N22	
	206	2028	1.3	7.150	GST14 - 2M□□□ 225N22	
	189	2212	1.0	7.800	GST11 - 2M□□□ 225N22	
	183	2277	1.3	8.027	GST14 - 2M□□□ 225N22	
	163	2555	0.9	9.010	GST11 - 2M□□□ 225N22	
	167	2496	1.3	8.800	GST14 - 2M□□□ 225N22	
	149	2795	0.8	9.856	GST11 - 2M□□□ 225N22	
	149	2791	1.3	9.841	GST14 - 2M□□□ 225N22	
	134	3120	1.3	11.000	GST14 - 2M□□□ 225N22	
	119	3506	1.2	12.362	GST14 - 2M□□□ 225N22	
	105	3984	1.1	14.048	GST14 - 2M□□□ 225N22	
	97	4298	1.0	15.156	GST14 - 2M□□□ 225N22	
	85	4885	0.9	17.222	GST14 - 2M□□□ 225N22	
	73	5685	0.9	20.044	GST14 - 2M□□□ 225N22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 45 \text{ Nm}$

		GST 03 - 2 N			Dimensions page 3-132	
$n_1$		2800 min <sup>-1</sup>	1400 min <sup>-1</sup>	700 min <sup>-1</sup>		
IEC connection		63	63	63		
For the geometrical assignment of servo/DC motors see section 2						
Drive size		1A	1A	1A		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]					
2.597	P <sub>1</sub> M <sub>2</sub>	1.70 15	1.05 18	0.52 18		
3.413	P <sub>1</sub> M <sub>2</sub>	1.39 16	0.85 19	0.43 19		
4.368	P <sub>1</sub> M <sub>2</sub>	1.18 17	0.73 21	0.36 21		
5.312	P <sub>1</sub> M <sub>2</sub>	1.24 22	0.76 27	0.38 27		
5.965	P <sub>1</sub> M <sub>2</sub>	1.18 23	0.73 29	0.36 29		
6.982	P <sub>1</sub> M <sub>2</sub>	1.04 24	0.64 30	0.32 30		
7.840	P <sub>1</sub> M <sub>2</sub>	0.99 26	0.61 32	0.30 32		
8.935	P <sub>1</sub> M <sub>2</sub>	0.89 26	0.55 33	0.28 33		
10.033	P <sub>1</sub> M <sub>2</sub>	0.85 28	0.52 35	0.26 35		
11.429	P <sub>1</sub> M <sub>2</sub>	0.76 29	0.47 35	0.23 35		
12.833	P <sub>1</sub> M <sub>2</sub>	0.72 31	0.44 38	0.22 38		
14.836	P <sub>1</sub> M <sub>2</sub>	0.65 32	0.40 39	0.20 39		
16.660	P <sub>1</sub> M <sub>2</sub>	0.69 38	0.37 41	0.19 41		
19.013	P <sub>1</sub> M <sub>2</sub>	0.61 39	0.33 42	0.17 42		
21.350	P <sub>1</sub> M <sub>2</sub>	0.58 41	0.31 44	0.16 44		
24.595	P <sub>1</sub> M <sub>2</sub>	0.51 42	0.28 45	0.14 45		
27.618	P <sub>1</sub> M <sub>2</sub>	0.45 42	0.25 45	0.12 45		
32.000	P <sub>1</sub> M <sub>2</sub>	0.39 42	0.21 45	0.11 45		
35.933	P <sub>1</sub> M <sub>2</sub>	0.35 42	0.19 45	0.10 45		
41.455	P <sub>1</sub> M <sub>2</sub>	0.30 42	0.16 45	0.08 45		
46.550	P <sub>1</sub> M <sub>2</sub>	0.29 45	0.15 45	0.07 45		
52.909	P <sub>1</sub> M <sub>2</sub>	0.26 45	0.13 45	0.06 45		
59.412	P <sub>1</sub> M <sub>2</sub>	0.23 45	0.11 45	0.06 45		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 25 \text{ Nm}$

<b>GST 04 - 1 N</b>													Dimensions page 3-128			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>						
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80			
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D			
i	$P_{1\text{perm}}$ [kW]															
	$M_{2\text{perm}}$ [Nm]															
1.600	$P_1$		2.23	2.90	2.90		1.37	1.79	1.79		0.73	0.89	0.89			
	$M_2$		12	16	16		15	19	19		16	19	19			
2.048	$P_1$		2.23	2.69	2.69		1.37	1.66	1.66		0.78	0.83	0.83			
	$M_2$		15	19	19		19	23	23		21	23	23			
2.240	$P_1$	1.03	2.23	2.67	2.67	0.64	1.37	1.64	1.64	0.32	0.74	0.82	0.82			
	$M_2$	8	17	20	20	10	21	25	25	10	22	25	25			
2.857	$P_1$	0.96	2.03	2.12	2.12	0.59	1.25	1.30	1.30	0.30	0.63	0.65	0.65			
	$M_2$	9	19	20	20	11	24	25	25	11	24	25	25			
3.500	$P_1$		1.73	1.73	1.73		1.06	1.06	1.06		0.53	0.53	0.53			
	$M_2$		20	20	20		25	25	25		25	25	25			
4.400	$P_1$	1.05	1.37	1.37		0.65	0.85	0.85		0.32	0.42	0.42				
	$M_2$	16	20	20		19	25	25		19	25	25				
5.667	$P_1$	0.88	1.07	1.07		0.54	0.66	0.66		0.27	0.33	0.33				
	$M_2$	17	20	20		21	25	25		21	25	25				
7.182	$P_1$	0.77	0.84			0.47	0.52			0.24	0.26					
	$M_2$	19	20			23	25			23	25					
9.000	$P_1$	0.62	0.62			0.38	0.38			0.19	0.19					
	$M_2$	19	19			23	23			23	23					
11.857	$P_1$	0.33				0.20				0.10						
	$M_2$	13				16				16						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 73 \text{ Nm}$

GST 04 - 2 N												Dimensions page 3-132			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]														
2.956	P <sub>1</sub> M <sub>2</sub>		2.23 22	3.04 30	3.25 32		1.37 27	1.87 37	2.00 39		0.73 28	1.00 39	1.00 39		
3.333	P <sub>1</sub> M <sub>2</sub>		2.23 25	3.04 33	3.08 34		1.37 30	1.87 41	1.89 42		0.73 32	0.95 42	0.95 42		
4.053	P <sub>1</sub> M <sub>2</sub>		2.23 30	2.72 37	2.72 37		1.37 37	1.68 45	1.68 45		0.73 39	0.84 45	0.84 45		
4.571	P <sub>1</sub> M <sub>2</sub>		2.23 34	2.58 39	2.58 39		1.37 42	1.59 48	1.59 48		0.73 44	0.79 48	0.79 48		
5.187	P <sub>1</sub> M <sub>2</sub>		2.23 38	2.37 41	2.37 41		1.37 47	1.46 50	1.46 50		0.73 50	0.73 50	0.73 50		
5.850	P <sub>1</sub> M <sub>2</sub>		2.23 43	2.23 43	2.23 43		1.37 53	1.38 53	1.38 53		0.69 53	0.69 53	0.69 53		
6.400	P <sub>1</sub> M <sub>2</sub>	1.03 22	2.11 45	2.11 45	2.11 45	0.64 27	1.30 55	1.30 55	1.30 55	0.32 27	0.65 55	0.65 55	0.65 55		
7.040	P <sub>1</sub> M <sub>2</sub>		1.98 46	1.98 46	1.98 46		1.22 57	1.22 57	1.22 57		0.61 57	0.61 57	0.61 57		
8.000	P <sub>1</sub> M <sub>2</sub>		1.80 48	1.80 48	1.80 48		1.11 59	1.11 59	1.11 59		0.56 59	0.56 59	0.56 59		
9.010	P <sub>1</sub> M <sub>2</sub>		1.71 51	1.71 51	1.71 51		1.05 63	1.05 63	1.05 63		0.53 63	0.53 63	0.53 63		
9.856	P <sub>1</sub> M <sub>2</sub>	1.03 34	1.61 53	1.61 53	1.61 53	0.64 41	0.99 65	0.99 65	0.99 65	0.32 41	0.50 65	0.50 65	0.50 65		
11.200	P <sub>1</sub> M <sub>2</sub>	1.03 38	1.32 49	1.32 49	1.32 49	0.64 47	0.81 60	0.81 60	0.81 60	0.32 47	0.41 60	0.41 60	0.41 60		
12.571	P <sub>1</sub> M <sub>2</sub>	0.96 40	1.35 56	1.35 56	1.35 56	0.59 49	0.83 69	0.83 69	0.83 69	0.30 49	0.42 69	0.42 69	0.42 69		
14.286	P <sub>1</sub> M <sub>2</sub>	0.96 45	1.05 49	1.05 49	1.05 49	0.59 56	0.64 61	0.64 61	0.64 61	0.30 56	0.32 61	0.32 61	0.32 61		
15.400	P <sub>1</sub> M <sub>2</sub>		1.26 64	1.26 64	1.26 64		0.68 70	0.68 70	0.68 70		0.34 70	0.34 70	0.34 70		
17.500	P <sub>1</sub> M <sub>2</sub>		0.98 57	0.98 57	0.98 57		0.53 62	0.53 62	0.53 62		0.27 62	0.27 62	0.27 62		
19.360	P <sub>1</sub> M <sub>2</sub>	1.01 65	1.01 65	1.01 65		0.55 70	0.55 70	0.55 70		0.28 70	0.28 70	0.28 70			
22.000	P <sub>1</sub> M <sub>2</sub>	0.79 57	0.79 57	0.79 57		0.43 62	0.43 62	0.43 62		0.21 62	0.21 62	0.21 62			
24.933	P <sub>1</sub> M <sub>2</sub>	0.80 66	0.80 66	0.80 66		0.43 71	0.43 71	0.43 71		0.22 71	0.22 71	0.22 71			
28.333	P <sub>1</sub> M <sub>2</sub>	0.62 59	0.62 59	0.62 59		0.34 63	0.34 63	0.34 63		0.17 63	0.17 63	0.17 63			
31.600	P <sub>1</sub> M <sub>2</sub>	0.64 67	0.64 67			0.35 72	0.35 72			0.17 72	0.17 72				
35.909	P <sub>1</sub> M <sub>2</sub>	0.50 59	0.50 59			0.27 64	0.27 64			0.14 64	0.14 64				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 73 \text{ Nm}$

GST 04 -2 N												Dimensions page 3-132	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
39.600	$P_1$	0.52	0.52			0.28	0.28			0.14	0.14		
	$M_2$	67	67			73	73			73	73		
45.000	$P_1$	0.44	0.44			0.22	0.22			0.11	0.11		
	$M_2$	65	65			65	65			65	65		
52.171	$P_1$	0.40				0.20				0.10			
	$M_2$	69				69				69			
59.286	$P_1$	0.34				0.17				0.08			
	$M_2$	66				66				66			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 54 \text{ Nm}$

GST 05 - 1 N													Dimensions page 3-128	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	
For the geometrical assignment of servo/DC motors see section 2														
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E	
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]													
1.600	$P_1$ $M_2$			3.75 20	6.75 36			2.31 25	4.16 45			1.54 33	2.08 45	
2.048	$P_1$ $M_2$		3.04 21	3.75 26	6.20 43		1.87 26	2.31 32	3.82 53		1.25 34	1.54 42	1.91 53	
2.240	$P_1$ $M_2$	2.23 17	3.04 23	3.75 28	5.72 43	1.37 21	1.87 28	2.31 35	3.52 53	0.73 22	1.25 38	1.54 46	1.76 53	
2.857	$P_1$ $M_2$	2.23 21	3.04 29	3.75 36	4.48 43	1.37 26	1.87 36	2.31 44	2.76 53	0.77 30	1.20 46	1.38 53	1.38 53	
3.500	$P_1$ $M_2$		3.04 36	3.73 44	3.73 44		1.87 44	2.30 54	2.30 54		1.03 49	1.15 54	1.15 54	
4.556	$P_1$ $M_2$	1.73 27	2.70 41	2.87 44		1.07 33	1.66 51	1.76 54		0.53 33	0.83 51	0.88 54		
5.667	$P_1$ $M_2$	1.45 28	2.25 43	2.30 44		0.89 34	1.39 53	1.42 54		0.45 34	0.69 53	0.71 54		
7.333	$P_1$ $M_2$	1.16 29	1.54 38			0.72 35	0.95 47			0.36 35	0.47 47			
8.900	$P_1$ $M_2$	0.97 29	1.14 34			0.60 36	0.70 42			0.30 36	0.35 42			
11.375	$P_1$ $M_2$	0.66 25				0.40 31				0.20 31				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 165 Nm**

<b>GST 05 - 2 N</b>												Dimensions page 3-132	
n <sub>1</sub>		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]												
2.956	P <sub>1</sub> M <sub>2</sub>			3.75 37	5.24 51			2.31 45	3.23 63			1.54 60	1.61 63
3.333	P <sub>1</sub> M <sub>2</sub>			3.75 41	5.74 63			2.31 51	3.54 78			1.54 68	1.77 78
4.053	P <sub>1</sub> M <sub>2</sub>			3.75 50	4.92 66			2.31 62	3.03 81			1.51 81	1.51 81
4.571	P <sub>1</sub> M <sub>2</sub>			3.75 57	4.90 74			2.31 70	3.02 91			1.51 91	1.51 91
5.187	P <sub>1</sub> M <sub>2</sub>		3.04 52	3.75 64	4.25 73		1.87 64	2.31 79	2.62 90		1.25 86	1.31 90	1.31 90
5.850	P <sub>1</sub> M <sub>2</sub>		3.04 59	3.75 73	4.25 82		1.87 72	2.31 89	2.62 101		1.25 96	1.31 101	1.31 101
6.400	P <sub>1</sub> M <sub>2</sub>	2.23 47	3.04 64	3.75 79	4.02 85	1.37 58	1.87 79	2.31 98	2.47 105	0.73 62	1.24 105	1.24 105	1.24 105
7.238	P <sub>1</sub> M <sub>2</sub>	2.23 53	3.04 73	3.67 88	3.67 88	1.37 66	1.87 90	2.26 108	2.26 108	0.77 74	1.13 108	1.13 108	1.13 108
8.163	P <sub>1</sub> M <sub>2</sub>	2.23 60	3.04 82	3.46 93	3.46 93	1.37 74	1.87 101	2.13 115	2.13 115	0.77 83	1.07 115	1.07 115	1.07 115
9.010	P <sub>1</sub> M <sub>2</sub>		3.04 91	3.24 96	3.24 96		1.87 111	1.99 119	1.99 119		1.00 119	1.00 119	1.00 119
10.000	P <sub>1</sub> M <sub>2</sub>		3.04 100	3.05 101	3.05 101		1.87 124	1.88 124	1.88 124		0.94 124	0.94 124	0.94 124
11.200	P <sub>1</sub> M <sub>2</sub>	2.23 83	2.80 104	2.80 104	2.80 104	1.37 102	1.72 128	1.72 128	1.72 128	0.73 108	0.86 128	0.86 128	0.86 128
13.016	P <sub>1</sub> M <sub>2</sub>	1.73 75	2.59 111	2.59 111		1.07 92	1.59 137	1.59 137		0.53 92	0.80 137	0.80 137	
14.356	P <sub>1</sub> M <sub>2</sub>	1.45 69	2.25 107	2.39 113		0.89 85	1.39 132	1.47 140		0.45 85	0.69 132	0.74 140	
16.191	P <sub>1</sub> M <sub>2</sub>	1.65 88	2.56 137	2.56 137		0.89 96	1.39 148	1.39 148		0.45 96	0.69 148	0.69 148	
17.500	P <sub>1</sub> M <sub>2</sub>		2.26 131	2.26 131	2.26 131		1.23 142	1.23 142	1.23 142		0.61 142	0.61 142	0.61 142
20.044	P <sub>1</sub> M <sub>2</sub>	1.97 131	2.22 147	2.22 147		1.07 142	1.20 159	1.20 159		0.53 142	0.60 159	0.60 159	
22.778	P <sub>1</sub> M <sub>2</sub>	1.76 133	1.76 133	1.76 133		0.96 144	0.96 144	0.96 144		0.48 144	0.48 144	0.48 144	
24.933	P <sub>1</sub> M <sub>2</sub>	1.65 136	1.81 149	1.81 149		0.89 147	0.98 162	0.98 162		0.45 147	0.49 162	0.49 162	
28.333	P <sub>1</sub> M <sub>2</sub>	1.45 136	1.45 136	1.45 136		0.78 147	0.78 147	0.78 147		0.39 147	0.39 147	0.39 147	
32.267	P <sub>1</sub> M <sub>2</sub>	1.32 141	1.42 151			0.72 153	0.77 164			0.36 153	0.38 164		
36.667	P <sub>1</sub> M <sub>2</sub>	1.13 137	1.13 137			0.61 148	0.61 148			0.31 148	0.31 148		
39.160	P <sub>1</sub> M <sub>2</sub>	1.10 143	1.18 152			0.60 155	0.64 165			0.30 155	0.32 165		
44.500	P <sub>1</sub> M <sub>2</sub>	1.01 149	1.01 149			0.51 149	0.51 149			0.25 149	0.25 149		
50.050	P <sub>1</sub> M <sub>2</sub>	0.82 136				0.41 136				0.21 136			
56.875	P <sub>1</sub> M <sub>2</sub>	0.80 150				0.40 150				0.20 150			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 172 \text{ Nm}$

GST 05 - 3 N										Dimensions page 3-138		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		63	71 63	80 71	63	71 63	80 71	63	71 63	80 71		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		1A	□B	□C	1A	□B	□C	1A	□B	□C		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
36.267	P <sub>1</sub>		1.05	1.05		0.57	0.57		0.28	0.28		
	M <sub>2</sub>		124	124		134	134		134	134		
46.259	P <sub>1</sub>		0.96	0.96		0.48	0.48		0.24	0.24		
	M <sub>2</sub>		145	145		145	145		145	145		
56.667	P <sub>1</sub>		0.84	0.84		0.42	0.42		0.21	0.21		
	M <sub>2</sub>		155	155		155	155		155	155		
63.467	P <sub>1</sub>		0.71	0.71		0.35	0.35		0.18	0.18		
	M <sub>2</sub>		146	146		146	146		146	146		
71.238	P <sub>1</sub>	0.72	0.72	0.72	0.36	0.36	0.36	0.18	0.18	0.18		
	M <sub>2</sub>	167	167	167	167	167	167	167	167	167		
80.952	P <sub>1</sub>		0.56	0.56		0.28	0.28		0.14	0.14		
	M <sub>2</sub>		147	147		147	147		147	147		
91.746	P <sub>1</sub>	0.57	0.57	0.57	0.29	0.29	0.29	0.14	0.14	0.14		
	M <sub>2</sub>	170	170	170	170	170	170	170	170	170		
99.167	P <sub>1</sub>		0.46	0.46		0.23	0.23		0.11	0.11		
	M <sub>2</sub>		148	148		148	148		148	148		
116.277	P <sub>1</sub>	0.45	0.45		0.23	0.23		0.11	0.11			
	M <sub>2</sub>	170	170		170	170		170	170			
124.667	P <sub>1</sub>	0.37	0.37	0.37	0.18	0.18	0.18	0.09	0.09	0.09		
	M <sub>2</sub>	149	149	149	149	149	149	149	149	149		
145.714	P <sub>1</sub>	0.36	0.36		0.18	0.18		0.09	0.09			
	M <sub>2</sub>	170	170		170	170		170	170			
160.556	P <sub>1</sub>	0.29	0.29	0.29	0.14	0.14	0.14	0.07	0.07	0.07		
	M <sub>2</sub>	150	150	150	150	150	150	150	150	150		
179.067	P <sub>1</sub>	0.29	0.29		0.14	0.14		0.07	0.07			
	M <sub>2</sub>	167	167		167	167		167	167			
191.973	P <sub>1</sub>	0.27			0.14			0.07				
	M <sub>2</sub>	170			170			170				
224.400	P <sub>1</sub>	0.23	0.23		0.12	0.12		0.06	0.06			
	M <sub>2</sub>	169	169		169	169		169	169			
255.000	P <sub>1</sub>	0.18	0.18		0.09	0.09		0.05	0.05			
	M <sub>2</sub>	152	152		152	152		152	152			
295.638	P <sub>1</sub>	0.18			0.09			0.05				
	M <sub>2</sub>	172			172			172				
335.952	P <sub>1</sub>	0.14			0.07			0.04				
	M <sub>2</sub>	154			154			154				

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 105 \text{ Nm}$

GST 06 - 1 N															Dimensions page 3-128				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F			
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																		
1.600	P <sub>1</sub> M <sub>2</sub>																		
2.048	P <sub>1</sub> M <sub>2</sub>																		
2.240	P <sub>1</sub> M <sub>2</sub>																		
2.857	P <sub>1</sub> M <sub>2</sub>	3.04 29	3.75 36	7.82 75	7.82 75		1.87 36	2.31 44	4.81 92	4.81 92		1.25 48	1.54 59	2.41 92	2.41 92				
3.500	P <sub>1</sub> M <sub>2</sub>																		
4.556	P <sub>1</sub> M <sub>2</sub>	3.04 46	3.75 57	5.57 85			1.87 57	2.31 71	3.43 105			1.02 63	1.36 83	1.72 105					
5.667	P <sub>1</sub> M <sub>2</sub>	2.78 53	3.69 70	4.48 85			1.71 65	2.27 87	2.76 105			0.86 65	1.14 87	1.38 105					
7.333	P <sub>1</sub> M <sub>2</sub>	1.43 35	2.23 55	2.97 73		0.88 43	1.37 68	1.83 90			0.44 43	0.69 68	0.91 90						
8.900	P <sub>1</sub> M <sub>2</sub>	1.20 36	1.86 56	2.31 69		0.74 44	1.15 69	1.43 85			0.37 44	0.57 69	0.71 85						
11.250	P <sub>1</sub> M <sub>2</sub>	0.96 36	1.36 51			0.59 45	0.84 63				0.30 45	0.42 63							

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 368 \text{ Nm}$

GST 06 - 2 N											Dimensions page 3-132					
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]															
3.033	$P_1$ $M_2$				10.7 108	10.7 108				6.60 132	6.60 132				4.14 166	4.14 166
3.333	$P_1$ $M_2$				10.7 118	10.7 118				6.60 146	6.60 146				3.94 174	3.94 174
4.160	$P_1$ $M_2$				10.7 148	10.7 148				6.60 182	6.60 182				3.47 191	3.47 191
4.571	$P_1$ $M_2$				10.7 162	10.7 162				6.60 200	6.60 200				3.30 200	3.30 200
5.324	$P_1$ $M_2$			3.75 66	9.56 168	9.56 168			2.31 81	5.88 207	5.88 207			1.54 108	2.94 207	2.94 207
5.850	$P_1$ $M_2$			3.75 73	9.30 180	9.30 180			2.31 89	5.73 222	5.73 222			1.54 119	2.86 222	2.86 222
6.400	$P_1$ $M_2$			3.75 79	8.79 186	8.79 186			2.31 98	5.41 229	5.41 229			1.54 130	2.71 229	2.71 229
7.040	$P_1$ $M_2$				8.24 192	8.24 192				5.07 236	5.07 236				2.54 236	2.54 236
8.163	$P_1$ $M_2$	3.04 82	3.75 101	7.56 204	7.56 204		1.87 101	2.31 125	4.66 252	4.66 252		1.25 135	1.54 166	2.33 252	2.33 252	
9.010	$P_1$ $M_2$			3.75 112	7.11 212	7.11 212			2.31 138	4.38 261	4.38 261			1.54 184	2.19 261	2.19 261
10.000	$P_1$ $M_2$			3.75 124	6.61 219	6.61 219			2.31 153	4.07 269	4.07 269			1.54 204	2.03 269	2.03 269
11.200	$P_1$ $M_2$			3.75 139	6.14 228	6.14 228			2.31 171	3.78 280	3.78 280			1.54 228	1.89 280	1.89 280
12.571	$P_1$ $M_2$	3.04 126	3.75 156	5.76 240	5.76 240		1.87 156	2.31 192	3.55 295	3.55 295		1.25 207	1.54 256	1.77 295	1.77 295	
14.286	$P_1$ $M_2$	3.04 144	3.75 177	5.27 249	5.27 249		1.87 177	2.31 218	3.24 307	3.24 307		1.25 236	1.54 291	1.62 307	1.62 307	
15.400	$P_1$ $M_2$			4.26 217	5.76 293	5.76 293			2.31 235	3.12 318	3.12 318			1.54 314	1.56 318	1.56 318
17.500	$P_1$ $M_2$			4.26 247	4.99 289	4.99 289			2.31 267	2.70 313	2.70 313			1.35 313	1.35 313	1.35 313
20.044	$P_1$ $M_2$	3.45 229	4.26 283	4.87 323			1.87 248	2.31 306	2.64 350			1.02 271	1.32 350	1.32 350		
22.778	$P_1$ $M_2$	3.45 260	3.86 291	3.86 291			1.87 282	2.09 315	2.09 315			1.02 308	1.05 315	1.05 315		
24.933	$P_1$ $M_2$	3.16 260	4.03 332	4.03 332			1.71 282	2.18 360	2.18 360			0.86 282	1.09 360	1.09 360		
28.333	$P_1$ $M_2$	3.12 293	3.12 293	3.12 293			1.69 317	1.69 317	1.69 317			0.85 317	0.85 317	0.85 317		
32.267	$P_1$ $M_2$	1.63 174	2.53 271	3.14 335			0.88 188	1.37 293	1.70 363			0.44 188	0.69 293	0.85 363		
36.667	$P_1$ $M_2$	1.63 197	2.45 297	2.45 297			0.88 214	1.33 322	1.33 322			0.44 214	0.66 322	0.66 3220		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**$M_2 \text{ perm} \leq 368 \text{ Nm}$**

<b>GST 06 - 2 N</b>															Dimensions page 3-132				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		71	80	90	100/112	100/112	71	80	90	100/112	100/112	71	80	90	100/112	100/112			
			71	80	80/90	90		71	80	80/90	90		71	80	80/90	90			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		1B	1C	1D	1E	1F	1B	1C	1D	1E	1F	1B	1C	1D	1E	1F			
i	$P_{1perm}$ [kW]																		
	$M_{2perm}$ [Nm]																		
39.160	$P_1$	1.36	2.11	2.62												0.37	0.57	0.71	
	$M_2$	176	274	340												191	297	368	
44.500	$P_1$	1.47	2.21	2.21												0.37	0.55	0.55	
	$M_2$	217	325	325												217	325	325	
49.500	$P_1$	1.18	1.70													0.30	0.42		
	$M_2$	193	278													193	278		
56.250	$P_1$	1.18	1.70													0.30	0.42		
	$M_2$	220	316													220	316		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 375 \text{ Nm}$

GST 06 - 3 N												Dimensions page 3-138			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]														
39.200	P <sub>1</sub>		2.32	2.32	2.32		1.26	1.26	1.26		0.63	0.63	0.63		
	M <sub>2</sub>		296	296	296		321	321	321		321	321	321		
44.000	P <sub>1</sub>		2.15	2.34	2.34		1.08	1.17	1.17		0.54	0.58	0.58		
	M <sub>2</sub>		308	335	335		308	335	335		308	335	335		
51.022	P <sub>1</sub>		1.95	1.95	1.95		0.98	0.98	0.98		0.49	0.49	0.49		
	M <sub>2</sub>		325	325	325		325	325	325		325	325	325		
53.900	P <sub>1</sub>		1.99	1.99	1.99		0.99	0.99	0.99		0.50	0.50	0.50		
	M <sub>2</sub>		349	349	349		349	349	349		349	349	349		
67.760	P <sub>1</sub>	1.29	1.65	1.65		0.65	0.83	0.83		0.32	0.41	0.41			
	M <sub>2</sub>	286	365	365		286	365	365		286	365	365			
70.156	P <sub>1</sub>		1.57	1.57	1.57		0.79	0.79	0.79		0.39	0.39	0.39		
	M <sub>2</sub>		359	359	359		359	359	359		359	359	359		
80.952	P <sub>1</sub>		1.26	1.26	1.26		0.63	0.63	0.63		0.32	0.32	0.32		
	M <sub>2</sub>		332	332	332		332	332	332		332	332	332		
87.267	P <sub>1</sub>		1.30	1.30	1.30		0.65	0.65	0.65		0.33	0.33	0.33		
	M <sub>2</sub>		370	370	370		370	370	370		370	370	370		
99.167	P <sub>1</sub>		1.04	1.04	1.04		0.52	0.52	0.52		0.26	0.26	0.26		
	M <sub>2</sub>		335	335	335		335	335	335		335	335	335		
109.707	P <sub>1</sub>	1.05	1.05	1.05		0.52	0.52	0.52		0.26	0.26	0.26			
	M <sub>2</sub>	375	375	375		375	375	375		375	375	375			
124.667	P <sub>1</sub>	0.84	0.84	0.84		0.42	0.42	0.42		0.21	0.21	0.21			
	M <sub>2</sub>	339	339	339		339	339	339		339	339	339			
141.289	P <sub>1</sub>	0.81	0.81	0.81		0.41	0.41	0.41		0.20	0.20	0.20			
	M <sub>2</sub>	375	375	375		375	375	375		375	375	375			
160.556	P <sub>1</sub>	0.65	0.65	0.65		0.33	0.33	0.33		0.16	0.16	0.16			
	M <sub>2</sub>	342	342	342		342	342	342		342	342	342			
179.067	P <sub>1</sub>	0.64	0.64			0.32	0.32			0.16	0.16				
	M <sub>2</sub>	375	375			375	375			375	375				
203.485	P <sub>1</sub>	0.52	0.52			0.26	0.26			0.13	0.13				
	M <sub>2</sub>	346	346			346	346			346	346				
231.733	P <sub>1</sub>	0.50	0.50			0.25	0.25			0.12	0.12				
	M <sub>2</sub>	375	375			375	375			375	375				
255.000	P <sub>1</sub>	0.42	0.42			0.21	0.21			0.11	0.11				
	M <sub>2</sub>	349	349			349	349			349	349				
290.400	P <sub>1</sub>	0.40	0.40			0.20	0.20			0.10	0.10				
	M <sub>2</sub>	375	375			375	375			375	375				
330.000	P <sub>1</sub>	0.33	0.33			0.16	0.16			0.08	0.08				
	M <sub>2</sub>	352	352			352	352			352	352				
382.591	P <sub>1</sub>	0.30				0.15				0.08					
	M <sub>2</sub>	375				375				375					
434.762	P <sub>1</sub>	0.26				0.13				0.06					
	M <sub>2</sub>	361				361				361					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 185 Nm**

<b>GST 07 - 1 N</b>														Dimensions page 3-128					
<b>n<sub>1</sub></b>		<b>2800 min<sup>-1</sup></b>						<b>1400 min<sup>-1</sup></b>						<b>700 min<sup>-1</sup></b>					
IEC connection		80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160
		71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																		
1.625	P <sub>1</sub>																		
	M <sub>2</sub>																		
2.000	P <sub>1</sub>																		
	M <sub>2</sub>																		
2.240	P <sub>1</sub>																		
	M <sub>2</sub>																		
2.857	P <sub>1</sub>																		
	M <sub>2</sub>																		
3.500	P <sub>1</sub>																		
	M <sub>2</sub>																		
4.556	P <sub>1</sub>																		
	M <sub>2</sub>																		
5.583	P <sub>1</sub>																		
	M <sub>2</sub>																		
7.333	P <sub>1</sub>																		
	M <sub>2</sub>																		
8.900	P <sub>1</sub>																		
	M <sub>2</sub>																		
11.250	P <sub>1</sub>																		
	M <sub>2</sub>																		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 707 \text{ Nm}$

GST 07 - 2 N														Dimensions page 3-132					
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>					
IEC connection		80 71	90 80	100/112 80/90	100/112 90	132 100/112	160 132	80 71	90 80	100/112 80/90	100/112 90	132 100/112	160 132	80 71	90 80	100/112 80/90	100/112 90	132 100/112	160 132
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
3.048	P <sub>1</sub>	10.7 28.3 28.3						6.60 17.4 17.4						4.40 8.71 8.71					
	M <sub>2</sub>	108 285 285						133 351 351						177 351 351					
3.350	P <sub>1</sub>	10.7 26.9 26.9						6.60 16.5 16.5						4.40 8.27 8.27					
	M <sub>2</sub>	119 298 298						146 367 367						195 367 367					
4.225	P <sub>1</sub>	10.7 23.1 23.1						6.60 14.2 14.2						4.40 7.11 7.11					
	M <sub>2</sub>	150 323 323						184 398 398						246 398 398					
4.643	P <sub>1</sub>	10.7 21.9 21.9						6.60 13.5 13.5						4.40 6.74 6.74					
	M <sub>2</sub>	165 336 336						203 414 414						270 414 414					
5.200	P <sub>1</sub>	10.7	10.7	20.2	20.2							6.60	6.60	12.4	12.4	4.40	4.40	6.21	6.21
	M <sub>2</sub>	184	184	347	347							227	227	427	427	303	303	427	427
5.714	P <sub>1</sub>	10.7 10.7 19.3 19.3						6.60 6.60 11.9 11.9						4.40 4.40 5.93 5.93					
	M <sub>2</sub>	203 203 364 364						249 249 448 448						333 333 448 448					
6.400	P <sub>1</sub>	10.7 10.7 17.8 17.8						6.60 6.60 10.9 10.9						4.40 4.40 5.47 5.47					
	M <sub>2</sub>	227 227 376 376						279 279 463 463						373 373 463 463					
7.150	P <sub>1</sub>	10.7 16.8 16.8						6.60 10.3 10.3						4.40 5.16 5.16					
	M <sub>2</sub>	254 397 397						312 488 488						416 488 488					
8.125	P <sub>1</sub>	10.7 16.3 16.3						6.60 10.0 10.0						4.40 5.01 5.01					
	M <sub>2</sub>	288 438 438						355 539 539						473 539 539					
8.800	P <sub>1</sub>	10.7	10.7	14.7	14.7							6.60	6.60	9.05	9.05	4.40	4.40	4.53	4.53
	M <sub>2</sub>	312	312	428	428							384	384	527	527	512	512	527	527
9.856	P <sub>1</sub>	10.7 10.7 13.7 13.7						6.60 6.60 8.42 8.42						4.21 4.21 4.21 4.21					
	M <sub>2</sub>	349 349 446 446						430 430 549 549						549 549 549 549					
11.200	P <sub>1</sub>	10.7 10.7 13.1 13.1						6.60 6.60 8.07 8.07						4.04 4.04 4.04 4.04					
	M <sub>2</sub>	397 397 486 486						489 489 598 598						598 598 598 598					
12.571	P <sub>1</sub>	3.75	10.7	10.7	11.7							2.31	6.60	6.60	7.22	1.54	3.61	3.61	3.61
	M <sub>2</sub>	156	446	446	488							192	549	549	600	256	600	600	600
14.286	P <sub>1</sub>	3.75	10.7	10.7	11.0							2.31	6.60	6.60	6.79	1.54	3.39	3.39	3.39
	M <sub>2</sub>	177	507	507	521							218	624	624	642	291	642	642	642
15.400	P <sub>1</sub>	11.7 11.7 11.7						6.32 6.32 6.32						3.16 3.16 3.16					
	M <sub>2</sub>	594 594 594						644 644 644						644 644 644					
17.500	P <sub>1</sub>	10.8 10.8 10.8						5.87 5.87 5.87						2.93 2.93 2.93					
	M <sub>2</sub>	627 627 627						680 680 680						680 680 680					
20.044	P <sub>1</sub>	4.26	9.65	9.65							2.31	5.23	5.23						
	M <sub>2</sub>	283	640	640							306	694	694						
22.778	P <sub>1</sub>	4.26 8.35 8.35						2.31 4.52 4.52						1.54 2.26 2.26					
	M <sub>2</sub>	321 629 629						348 682 682						464 682 682					
24.567	P <sub>1</sub>	4.26 8.01 8.01						2.31 4.34 4.34						1.43 2.17 2.17					
	M <sub>2</sub>	346 651 651						375 706 706						465 706 706					
27.917	P <sub>1</sub>	4.26 6.90 6.90						2.31 3.74 3.74						1.43 1.87 1.87					
	M <sub>2</sub>	394 638 638						427 691 691						529 691 691					
32.267	P <sub>1</sub>	3.11	4.14	6.10							1.69	2.24	3.31						
	M <sub>2</sub>	332	442	651							360	479	706						
36.667	P <sub>1</sub>	3.11	4.14	5.34							1.69	2.24	2.89						
	M <sub>2</sub>	377	502	648							409	544	702						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**$M_2 \text{ perm} \leq 707 \text{ Nm}$**

<b>GST 07 - 2 N</b>														Dimensions page 3-132											
$n_1$	<b>2800 min<sup>-1</sup></b>						<b>1400 min<sup>-1</sup></b>						<b>700 min<sup>-1</sup></b>												
IEC connection	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160							
For the geometrical assignment of servo/DC motors see section 2																									
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H						
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																								
39.160	$P_1$ $M_2$	2.60 336	3.46 448	5.03 651							1.41 365	1.87 485	2.72 706							0.70 365	0.94 485	1.36 706			
44.500	$P_1$ $M_2$	2.81 414	3.74 551	4.80 707							1.41 414	1.87 551	2.40 707							0.70 414	0.94 551	1.20 707			
49.500	$P_1$ $M_2$	2.26 370	3.00 492							1.13 370	1.50 492							0.56 370	0.75 492						
56.250	$P_1$ $M_2$	2.26 420	3.00 559							1.13 420	1.50 559							0.56 420	0.75 559						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 710 \text{ Nm}$

GST 07 - 3 N										Dimensions page 3-138			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]												
39.200	P <sub>1</sub>	2.54	3.45	4.26	4.99	1.37	1.87	2.31	2.71	0.73	1.25	1.35	1.35
	M <sub>2</sub>	324	441	544	638	351	478	590	692	371	637	692	692
44.000	P <sub>1</sub>		3.74	4.62	4.92		1.87	2.31	2.46		1.03	1.23	1.23
	M <sub>2</sub>		536	662	706		536	662	706		593	706	706
51.022	P <sub>1</sub>	2.75	3.74	4.21	4.21	1.37	1.87	2.10	2.10	0.73	1.05	1.05	1.05
	M <sub>2</sub>	457	622	700	700	457	622	700	700	483	700	700	700
53.900	P <sub>1</sub>		3.74	4.02	4.02		1.87	2.01	2.01		1.01	1.01	1.01
	M <sub>2</sub>		657	706	706		657	706	706		706	706	706
65.079	P <sub>1</sub>	2.13	3.32	3.34		1.07	1.66	1.67		0.53	0.83	0.83	
	M <sub>2</sub>	453	704	707		453	704	707		453	704	707	
70.156	P <sub>1</sub>		3.09	3.09	3.09		1.54	1.54	1.54		0.77	0.77	0.77
	M <sub>2</sub>		706	706	706		706	706	706		706	706	706
79.762	P <sub>1</sub>	2.73	2.73	2.73	2.73	1.37	1.37	1.37	1.37	0.68	0.68	0.68	0.68
	M <sub>2</sub>	710	710	710	710	710	710	710	710	710	710	710	710
85.983	P <sub>1</sub>		2.52	2.52	2.52		1.26	1.26	1.26		0.63	0.63	0.63
	M <sub>2</sub>		706	706	706		706	706	706		706	706	706
97.708	P <sub>1</sub>		2.23	2.23	2.23		1.12	1.12	1.12		0.56	0.56	0.56
	M <sub>2</sub>		710	710	710		710	710	710		710	710	710
111.915	P <sub>1</sub>	1.94	1.94	1.94		0.97	0.97	0.97		0.48	0.48	0.48	
	M <sub>2</sub>	706	706	706		706	706	706		706	706	706	
127.176	P <sub>1</sub>	1.71	1.71	1.71		0.86	0.86	0.86		0.43	0.43	0.43	
	M <sub>2</sub>	710	710	710		710	710	710		710	710	710	
139.211	P <sub>1</sub>	1.56	1.56	1.56		0.78	0.78	0.78		0.39	0.39	0.39	
	M <sub>2</sub>	706	706	706		706	706	706		706	706	706	
158.194	P <sub>1</sub>	1.38	1.38	1.38		0.69	0.69	0.69		0.34	0.34	0.34	
	M <sub>2</sub>	710	710	710		710	710	710		710	710	710	
180.156	P <sub>1</sub>	1.20	1.20			0.60	0.60			0.30	0.30		
	M <sub>2</sub>	706	706			706	706			706	706		
204.722	P <sub>1</sub>	1.06	1.06			0.53	0.53			0.27	0.27		
	M <sub>2</sub>	710	710			710	710			710	710		
236.622	P <sub>1</sub>	0.92	0.92			0.46	0.46			0.23	0.23		
	M <sub>2</sub>	706	706			706	706			706	706		
248.458	P <sub>1</sub>	0.88	0.88			0.44	0.44			0.22	0.22		
	M <sub>2</sub>	710	710			710	710			710	710		
268.889	P <sub>1</sub>	0.81	0.81			0.41	0.41			0.20	0.20		
	M <sub>2</sub>	710	710			710	710			710	710		
326.333	P <sub>1</sub>	0.67	0.67			0.33	0.33			0.17	0.17		
	M <sub>2</sub>	710	710			710	710			710	710		
367.033	P <sub>1</sub>	0.59				0.30				0.15			
	M <sub>2</sub>	706				706				706			
417.083	P <sub>1</sub>	0.52				0.26				0.13			
	M <sub>2</sub>	710				710				710			

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 443 Nm**

GST 09 - 1 N													Dimensions page 3-128								
n <sub>1</sub>		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>									
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200		
For the geometrical assignment of servo/DC motors see section 2																					
Drive size		□D	□E	□F	□G	□H	1K	□D	□E	□F	□G	□H	1K	□D	□E	□F	□G	□H	1K		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																				
1.560	P <sub>1</sub>	28.6				42.9	42.9					17.6	26.4	26.4					11.7	13.2	13.2
	M <sub>2</sub>	150				225	225					184	277	277					246	277	277
2.048	P <sub>1</sub>	10.7		28.6	39.9	39.9					6.60	17.6	24.6	24.6	4.40		11.7	12.3	12.3		
	M <sub>2</sub>	74		197	275	275					91	242	338	338	121		323	338	338		
2.333	P <sub>1</sub>	10.7		28.6	38.3					6.60	17.6	23.6					4.40	10.9	11.8		
	M <sub>2</sub>	84		224	301					103	276	370					138	342	370		
2.810	P <sub>1</sub>	10.7	10.7	28.6	36.0					6.60	6.60	17.6	22.1	4.40		4.40	9.59	11.1			
	M <sub>2</sub>	101	101	270	339					125	125	332	418	166		166	362	418			
3.444	P <sub>1</sub>	10.7		26.8	31.1					6.60	16.5	19.1					4.40	8.25	9.57		
	M <sub>2</sub>	124		310	360					153	382	443					204	382	443		
4.667	P <sub>1</sub>	10.7	10.7	19.6					6.60	6.60	12.1					3.31	3.49	6.04			
	M <sub>2</sub>	168	168	308					207	207	379					208	219	379			
5.667	P <sub>1</sub>	9.24	9.73	18.0					5.69	5.99	11.1					2.84	3.00	5.54			
	M <sub>2</sub>	176	185	343					217	228	422					217	228	422			
7.333	P <sub>1</sub>	3.75	7.42	7.81					2.31	4.57	4.81					1.39	2.28	2.40			
	M <sub>2</sub>	92	183	192					114	225	237					137	225	237			
8.900	P <sub>1</sub>	3.75	6.19	6.52					2.31	3.81	4.01					1.16	1.91	2.01			
	M <sub>2</sub>	112	185	195					138	228	240					138	228	240			
11.250	P <sub>1</sub>	3.02	4.97					1.86	3.06					0.93	1.53						
	M <sub>2</sub>	114	188					140	231					140	231						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 1582 \text{ Nm}$

GST 09 - 2 N														Dimensions page 3-132					
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>					
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		DD	DE	DF	DG	DH	1K	DD	DE	DF	DG	DH	1K	DD	DE	DF	DG	DH	1K
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
4.056	$P_1$ $M_2$				28.6 384	53.1 713	53.1 713				17.6 472	32.7 878	32.7 878				11.7 630	16.4 878	16.4 878
4.457	$P_1$ $M_2$				28.6 421	51.3 756	51.3 756				17.6 519	31.6 931	31.6 931				11.7 692	15.8 931	15.8 931
5.324	$P_1$ $M_2$			10.7 189	28.6 503	45.8 806	45.8 806			6.60 232	17.6 620	28.2 993	28.2 993		4.40 310	11.7 826	14.1 993	14.1 993	
5.850	$P_1$ $M_2$			10.7 207	28.6 553	42.8 828	42.8 828			6.60 255	17.6 681	26.3 1020	26.3 1020		4.40 341	11.7 908	13.2 1020	13.2 1020	
6.667	$P_1$ $M_2$			10.7 236	28.6 630	39.2 865				6.60 291	17.6 776	24.1 1065			4.40 388	10.9 962	12.1 1065		
7.305	$P_1$ $M_2$		10.7 259	10.7 259	28.6 691	37.1 896			6.60 319	6.60 319	17.6 850	22.8 1103		4.40 425	4.40 425	9.59 927	11.4 1103		
8.027	$P_1$ $M_2$		10.7 285	10.7 285	28.6 759	34.7 920			6.60 350	6.60 350	17.6 935	21.3 1133		4.40 467	4.40 467	9.59 1019	10.7 1133		
9.010	$P_1$ $M_2$			10.7 319	28.6 852	30.7 916	30.7 916			6.60 393	17.6 1049	18.9 1128	18.9 1128		4.40 524	9.46 1128	9.46 1128	9.46 1128	9.46 1128
10.267	$P_1$ $M_2$			10.7 364	28.2 957	28.2 957			6.60 448	17.3 1178	17.3 1178			4.40 598	8.67 1178	8.67 1178			
11.667	$P_1$ $M_2$			10.7 414	25.4 979	25.4 979			6.60 509	15.6 1206	15.6 1206			4.40 679	7.81 1206	7.81 1206			
12.362	$P_1$ $M_2$		10.7 438	10.7 438	24.9 1017	24.9 1017			6.60 540	6.60 540	15.3 1253	15.3 1253		4.40 720	4.40 720	7.66 1253	7.66 1253		
14.048	$P_1$ $M_2$		10.7 498	10.7 498	22.4 1042	22.4 1042			6.60 613	6.60 613	13.8 1283	13.8 1283		4.40 818	4.40 818	6.90 1283	6.90 1283		
15.156	$P_1$ $M_2$			12.2 611	24.7 1237	24.7 1237			6.60 662	13.4 1340	13.4 1340			4.40 882	6.68 1340	6.68 1340			
17.222	$P_1$ $M_2$			12.2 694	22.2 1266	22.2 1266			6.60 752	12.0 1373	12.0 1373			4.40 1003	6.02 1373	6.02 1373			
20.533	$P_1$ $M_2$		12.2 827	12.2 827	20.2 1369			6.60 896	6.60 896	10.9 1484				3.31 900	3.49 949	5.46 1484			
23.333	$P_1$ $M_2$		12.2 940	12.2 940	18.0 1391			6.60 1019	6.60 1019	9.76 1508				3.31 1023	3.49 1079	4.88 1508			
24.933	$P_1$ $M_2$		10.5 866	11.1 912	17.7 1460			5.69 939	5.99 988	9.59 1582				2.84 939	3.00 988	4.79 1582			
28.333	$P_1$ $M_2$		10.5 984	11.1 1036	15.0 1402			5.69 1067	5.99 1123	8.10 1519				2.84 1067	3.00 1123	4.05 1519			
32.267	$P_1$ $M_2$	4.26 455	8.43 900	8.87 947				2.31 493	4.57 975	4.81 1027				1.39 592	2.28 975	2.40 1027			
36.667	$P_1$ $M_2$	4.26 517	8.43 1023	8.87 1076				2.31 560	4.57 1109	4.81 1167				1.39 673	2.28 1109	2.40 1167			
39.160	$P_1$ $M_2$	4.26 552	7.04 912	7.41 960				2.31 598	3.81 988	4.01 1040				1.16 600	1.91 988	2.01 1040			
44.500	$P_1$ $M_2$	4.62 680	7.63 1123	8.03 1182				2.31 680	3.81 1123	4.01 1182				1.16 682	1.91 1123	2.01 1182			
49.500	$P_1$ $M_2$	3.72 608	6.12 1002					1.86 608	3.06 1002					0.93 608	1.53 1002				
56.250	$P_1$ $M_2$	3.72 691	6.12 1138					1.86 691	3.06 1138					0.93 691	1.53 1138				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 1623 Nm**

<b>GST 09 - 3 N</b>											Dimensions page 3-138					
n <sub>1</sub>		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]															
40.136	P <sub>1</sub> M <sub>2</sub>	3.45 451	4.26 557	9.48 1240	9.48 1240		1.87 489	2.31 604	5.14 1344	5.14 1344		1.25 652	1.54 805	2.57 1344	2.57 1344	
43.267	P <sub>1</sub> M <sub>2</sub>		4.62 651	9.15 1290	9.15 1290			2.31 651	4.57 1290	4.57 1290			1.54 868	2.29 1290	2.29 1290	
49.167	P <sub>1</sub> M <sub>2</sub>		4.62 740	9.15 1466	9.15 1466			2.31 740	4.57 1466	4.57 1466			1.54 987	2.29 1466	2.29 1466	
53.044	P <sub>1</sub> M <sub>2</sub>		4.62 798	7.98 1379	7.98 1379			2.31 798	3.99 1379	3.99 1379			1.54 1065	1.99 1379	1.99 1379	
60.278	P <sub>1</sub> M <sub>2</sub>		4.62 907	7.96 1565	7.96 1565			2.31 907	3.98 1565	3.98 1565			1.54 1210	1.99 1565	1.99 1565	
71.867	P <sub>1</sub> M <sub>2</sub>		4.62 1082	6.31 1477	6.31 1477			2.31 1082	3.15 1477	3.15 1477			1.54 1442	1.58 1477	1.58 1477	
81.667	P <sub>1</sub> M <sub>2</sub>		4.62 1229	5.95 1584	5.95 1584			2.31 1229	2.97 1584	2.97 1584			1.49 1584	1.49 1584	1.49 1584	
93.541	P <sub>1</sub> M <sub>2</sub>	3.74 1140	4.62 1408	5.29 1613			1.87 1140	2.31 1408	2.65 1613			1.02 1247	1.32 1613	1.32 1613		
99.167	P <sub>1</sub> M <sub>2</sub>		4.62 1493	4.94 1596	4.94 1596			2.31 1493	2.47 1596	2.47 1596			1.23 1596	1.23 1596	1.23 1596	
113.585	P <sub>1</sub> M <sub>2</sub>	3.74 1384	4.36 1613	4.36 1613			1.87 1384	2.18 1613	2.18 1613			1.02 1515	1.09 1613	1.09 1613		
129.074	P <sub>1</sub> M <sub>2</sub>	3.74 1573	3.83 1612	3.83 1612			1.87 1573	1.92 1612	1.92 1612			0.96 1612	0.96 1612	0.96 1612		
141.289	P <sub>1</sub> M <sub>2</sub>	3.42 1575	3.50 1613	3.50 1613			1.71 1575	1.75 1613	1.75 1613			0.86 1575	0.88 1613	0.88 1613		
160.556	P <sub>1</sub> M <sub>2</sub>	3.10 1623	3.10 1623	3.10 1623			1.55 1623	1.55 1623	1.55 1623			0.78 1623	0.78 1623	0.78 1623		
182.845	P <sub>1</sub> M <sub>2</sub>	1.76 1050	2.71 1613	2.71 1613			0.88 1050	1.35 1613	1.35 1613			0.44 1050	0.68 1613	0.68 1613		
207.778	P <sub>1</sub> M <sub>2</sub>	1.76 1194	2.40 1623	2.40 1623			0.88 1194	1.20 1623	1.20 1623			0.44 1194	0.60 1623	0.60 1623		
236.622	P <sub>1</sub> M <sub>2</sub>	1.76 1359	2.09 1613	2.09 1613			0.88 1359	1.05 1613	1.05 1613			0.44 1359	0.52 1613	0.52 1613		
252.167	P <sub>1</sub> M <sub>2</sub>	1.47 1210	1.98 1623	1.98 1623			0.74 1210	0.99 1623	0.99 1623			0.37 1210	0.49 1623	0.49 1623		
268.889	P <sub>1</sub> M <sub>2</sub>	1.76 1545	1.85 1623	1.85 1623			0.88 1545	0.93 1623	0.93 1623			0.44 1545	0.46 1623	0.46 1623		
326.333	P <sub>1</sub> M <sub>2</sub>	1.47 1566	1.53 1623	1.53 1623			0.74 1566	0.76 1623	0.76 1623			0.37 1566	0.38 1623	0.38 1623		
363.000	P <sub>1</sub> M <sub>2</sub>	1.18 1396	1.36 1613				0.59 1396	0.68 1613				0.30 1396	0.34 1613			
412.500	P <sub>1</sub> M <sub>2</sub>	1.18 1586	1.21 1623				0.59 1586	0.60 1623				0.30 1586	0.30 1623			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 2933 \text{ Nm}$

GST 11 - 2 N															Dimensions page 3-132				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		OE	OF	OG	OH	OK	OE	OF	OG	OH	OK	OE	OF	OG	OH	OK			
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																		
4.056	P <sub>1</sub> M <sub>2</sub>				80.4 1079	90.2 1210				49.5 1328	55.5 1490				27.8 1490	27.8 1490			
4.457	P <sub>1</sub> M <sub>2</sub>				80.4 1185	88.5 1305				49.5 1459	54.5 1606				27.2 1606	27.2 1606			
5.324	P <sub>1</sub> M <sub>2</sub>				73.5 1295	73.5 1295				45.2 1594	45.2 1594				22.6 1594	22.6 1594			
5.850	P <sub>1</sub> M <sub>2</sub>				74.3 1439	74.3 1439				45.8 1772	45.8 1772				22.9 1772	22.9 1772			
6.400	P <sub>1</sub> M <sub>2</sub>			28.6 605	69.1 1462	69.1 1462			17.6 745	42.5 1801	42.5 1801			11.7 994	21.3 1801	21.3 1801			
6.864	P <sub>1</sub> M <sub>2</sub>				73.9 1677	73.9 1677				45.5 2065	45.5 2065				22.7 2065	22.7 2065			
7.800	P <sub>1</sub> M <sub>2</sub>				66.5 1717	66.5 1717				40.9 2114	40.9 2114				20.5 2114	20.5 2114			
9.010	P <sub>1</sub> M <sub>2</sub>				61.6 1835	61.6 1835				37.9 2259	37.9 2259				19.0 2259	19.0 2259			
9.856	P <sub>1</sub> M <sub>2</sub>			28.6 932	57.9 1889	57.9 1889			17.6 1148	35.7 2325	35.7 2325			11.7 1530	17.8 2325	17.8 2325			
11.200	P <sub>1</sub> M <sub>2</sub>			28.6 1059	52.1 1933	52.1 1933			17.6 1304	32.1 2380	32.1 2380			11.7 1739	16.1 2380	16.1 2380			
12.571	P <sub>1</sub> M <sub>2</sub>		10.7 446	28.6 1189	49.2 2047	49.2 2047		6.60 549	17.6 1464	30.3 2520	30.3 2520		4.40 732	11.7 1943	15.2 2520	15.2 2520			
14.286	P <sub>1</sub> M <sub>2</sub>		10.7 507	28.6 1351	44.3 2094	44.3 2094		6.60 624	17.6 1663	27.3 2579	27.3 2579		4.40 832	11.7 2208	13.6 2579	13.6 2579			
15.400	P <sub>1</sub> M <sub>2</sub>			32.5 1654	48.8 2486	48.8 2486			17.6 1793	26.4 2695	26.4 2695			10.1 2051	13.2 2695	13.2 2695			
17.500	P <sub>1</sub> M <sub>2</sub>			32.5 1880	43.9 2545	43.9 2545			17.6 2037	23.8 2758	23.8 2758			10.1 2331	11.9 2758	11.9 2758			
20.289	P <sub>1</sub> M <sub>2</sub>		12.2 817	29.9 2006	37.9 2543			6.60 886	16.2 2173	20.5 2756			4.37 1175	8.09 2173	10.3 2756				
23.056	P <sub>1</sub> M <sub>2</sub>		12.2 929	29.9 2279	35.2 2688			6.60 1007	16.2 2470	19.1 2913			4.37 1335	8.09 2470	9.55 2913				
24.933	P <sub>1</sub> M <sub>2</sub>		12.2 1005	25.0 2060	31.1 2563			6.60 1089	13.5 2232	16.8 2777			3.66 1207	6.76 2232	8.42 2777				
28.333	P <sub>1</sub> M <sub>2</sub>		12.2 1141	25.0 2341	28.9 2706			6.60 1237	13.5 2537	15.6 2933			3.66 1371	6.76 2537	7.82 2933				
32.267	P <sub>1</sub> M <sub>2</sub>	10.2 1094	10.8 1157	20.1 2141				5.55 1185	5.87 1254	10.9 2320			2.78 1185	2.94 1254	5.43 2320				
36.667	P <sub>1</sub> M <sub>2</sub>	10.2 1243	10.8 1315	20.1 2433				5.55 1347	5.87 1425	10.9 2637			2.78 1347	2.94 1425	5.43 2637				
39.160	P <sub>1</sub> M <sub>2</sub>	8.56 1109	9.05 1173	16.8 2170				4.64 1202	4.90 1271	9.07 2352			2.32 1202	2.45 1271	4.54 2352				
44.500	P <sub>1</sub> M <sub>2</sub>	9.27 1366	9.81 1444	18.2 2673				4.64 1366	4.90 1444	9.07 2673			2.32 1366	2.45 1444	4.54 2673				
49.500	P <sub>1</sub> M <sub>2</sub>	7.44 1219	7.86 1288					3.72 1219	3.93 1288				1.86 1219	1.97 1288					
56.250	P <sub>1</sub> M <sub>2</sub>	7.44 1385	7.86 1464					3.72 1385	3.93 1464				1.86 1385	1.97 1464					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 2848 Nm**

GST 11 - 3 N											Dimensions page 3-138					
n <sub>1</sub>		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		80	90	100/112	100/112	132	80	90	100/112	100/112	132	80	90	100/112	100/112	132
		71	80	80/90	90	100/112	71	80	80/90	90	100/112	71	80	80/90	90	100/112
For the geometrical assignment of servo/DC motors see section 2																
Drive size		□C	□D	□E	□F	□G	□C	□D	□E	□F	□G	□C	□D	□E	□F	□G
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]															
40.816	P <sub>1</sub>	4.26	12.2	12.2	17.7	2.31	6.60	6.60	9.58	1.54	3.97	4.15	4.79			
	M <sub>2</sub>	567	1620	1620	2353	614	1755	1755	2550	819	2111	2209	2550			
44.000	P <sub>1</sub>	4.62	13.2	13.2	16.8	2.31	6.60	6.60	8.40	1.54	3.97	4.15	4.20			
	M <sub>2</sub>	662	1892	1892	2410	662	1892	1892	2410	883	2276	2381	2410			
50.000	P <sub>1</sub>	4.62	13.2	13.2	16.7	2.31	6.60	6.60	8.36	1.54	3.97	4.15	4.18			
	M <sub>2</sub>	753	2150	2150	2725	753	2150	2150	2725	1003	2586	2706	2725			
57.968	P <sub>1</sub>	4.62	13.2	13.2	13.6	2.31	6.60	6.60	6.82	1.54	3.41	3.41	3.41			
	M <sub>2</sub>	873	2493	2493	2577	873	2493	2493	2577	1163	2577	2577	2577			
61.250	P <sub>1</sub>	13.2	13.2	13.7	6.60	6.60	6.83	3.41	3.41	3.41	2.725	2.725	2.725			
	M <sub>2</sub>	2634	2634	2725	2634	2634	2725	2725	2725	2725	2725	2725	2725			
71.011	P <sub>1</sub>	11.4	11.4	11.4	5.70	5.70	5.70	2.85	2.85	2.85	2.637	2.637	2.637			
	M <sub>2</sub>	2637	2637	2637	2637	2637	2637	2637	2637	2637	2637	2637	2637			
80.694	P <sub>1</sub>	10.6	10.6	10.6	5.30	5.30	5.30	2.65	2.65	2.65	2.787	2.787	2.787			
	M <sub>2</sub>	2787	2787	2787	2787	2787	2787	2787	2787	2787	2787	2787	2787			
87.267	P <sub>1</sub>	9.34	9.34	9.34	4.67	4.67	4.67	2.34	2.34	2.34	2.656	2.656	2.656			
	M <sub>2</sub>	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656			
99.167	P <sub>1</sub>	8.69	8.69	8.69	4.35	4.35	4.35	2.17	2.17	2.17	2.810	2.810	2.810			
	M <sub>2</sub>	2810	2810	2810	2810	2810	2810	2810	2810	2810	2810	2810	2810			
112.933	P <sub>1</sub>	7.32	7.32	7.32	3.66	3.66	3.66	1.83	1.83	1.83	2.695	2.695	2.695			
	M <sub>2</sub>	2695	2695	2695	2695	2695	2695	2695	2695	2695	2695	2695	2695			
129.074	P <sub>1</sub>	4.62	6.68	6.68	2.31	3.34	3.34	1.54	1.67	1.67	1943	2810	2810			
	M <sub>2</sub>	1943	2810	2810	1943	2810	2810	2590	2810	2810	2590	2810	2810			
146.993	P <sub>1</sub>	4.62	5.63	5.63	2.31	2.81	2.81	1.41	1.41	1.41	2213	2695	2695			
	M <sub>2</sub>	2213	2695	2695	2213	2695	2695	2695	2695	2695	2695	2695	2695			
158.194	P <sub>1</sub>	4.62	5.45	5.45	2.31	2.73	2.73	1.36	1.36	1.36	2381	2810	2810			
	M <sub>2</sub>	2381	2810	2810	2381	2810	2810	2810	2810	2810	2810	2810	2810			
180.156	P <sub>1</sub>	4.59	4.59	4.59	2.30	2.30	2.30	1.15	1.15	1.15	2695	2695	2695			
	M <sub>2</sub>	2695	2695	2695	2695	2695	2695	2695	2695	2695	2695	2695	2695			
207.778	P <sub>1</sub>	3.37	4.15	4.15	1.69	2.08	2.08	0.84	1.04	1.04	2282	2810	2810			
	M <sub>2</sub>	2282	2810	2810	2282	2810	2810	2282	2810	2810	2282	2810	2810			
236.622	P <sub>1</sub>	3.37	3.49	3.49	1.69	1.75	1.75	0.84	0.87	0.87	2598	2695	2695			
	M <sub>2</sub>	2598	2695	2695	2598	2695	2695	2598	2695	2695	2598	2695	2695			
252.167	P <sub>1</sub>	2.81	3.42	3.42	1.41	1.71	1.71	0.70	0.86	0.86	2312	2810	2810			
	M <sub>2</sub>	2312	2810	2810	2312	2810	2810	2312	2810	2810	2312	2810	2810			
268.889	P <sub>1</sub>	3.25	3.25	3.25	1.63	1.63	1.63	0.81	0.81	0.81	2848	2848	2848			
	M <sub>2</sub>	2848	2848	2848	2848	2848	2848	2848	2848	2848	2848	2848	2848			
326.333	P <sub>1</sub>	2.68	2.68	2.68	1.34	1.34	1.34	0.67	0.67	0.67	2848	2848	2848			
	M <sub>2</sub>	2848	2848	2848	2848	2848	2848	2848	2848	2848	2848	2848	2848			
363.000	P <sub>1</sub>	2.26	2.28	1.13	1.14	0.56	0.57	2.669	2.695							
	M <sub>2</sub>	2669	2695	2669	2695	2669	2695	2669	2695							
412.500	P <sub>1</sub>	2.12	2.12	1.06	1.06	0.53	0.53	2848	2848							
	M <sub>2</sub>	2848	2848	2848	2848	2848	2848	2848	2848							

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 5786 \text{ Nm}$

GST 14 - 2 N										Dimensions page 3-132		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		□G	□H	□K	□G	□H	□K	□G	□H	□K		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
4.225	P <sub>1</sub> M <sub>2</sub>			93.8 1311			57.7 1614			38.5 2152		
4.643	P <sub>1</sub> M <sub>2</sub>			93.8 1441			57.7 1774			38.5 2365		
5.200	P <sub>1</sub> M <sub>2</sub>		80.4 1383	93.8 1613		49.5 1703	57.7 1987		33.0 2270	38.5 2649		
5.714	P <sub>1</sub> M <sub>2</sub>		80.4 1520	93.8 1773		49.5 1871	57.7 2183		33.0 2495	38.5 2911		
6.286	P <sub>1</sub> M <sub>2</sub>		80.4 1672	93.8 1950		49.5 2058	57.7 2401		32.5 2702	38.5 3202		
7.150	P <sub>1</sub> M <sub>2</sub>			93.8 2218			57.7 2731			36.9 3490		
8.027	P <sub>1</sub> M <sub>2</sub>		80.4 2135	93.8 2491		49.5 2629	57.7 3067		28.7 3048	35.6 3783		
8.800	P <sub>1</sub> M <sub>2</sub>		80.4 2340	93.8 2730		49.5 2882	57.7 3362		32.1 3737	32.1 3737		
9.841	P <sub>1</sub> M <sub>2</sub>		80.4 2617	93.8 3053		49.5 3223	57.7 3760		24.8 3223	29.7 3873		
11.000	P <sub>1</sub> M <sub>2</sub>		80.4 2925	87.9 3200		49.5 3602	54.1 3940		27.1 3940	27.1 3940		
12.362	P <sub>1</sub> M <sub>2</sub>		80.4 3288	82.9 3391		49.5 4048	51.0 4176		25.5 4176	25.5 4176		
14.048	P <sub>1</sub> M <sub>2</sub>		74.6 3468	74.6 3468		45.9 4270	45.9 4270		23.0 4270	23.0 4270		
15.156	P <sub>1</sub> M <sub>2</sub>		82.2 4121	82.2 4121		44.5 4466	44.5 4466		22.3 4466	22.3 4466		
17.222	P <sub>1</sub> M <sub>2</sub>		73.9 4212	73.9 4212		40.1 4565	40.1 4565		20.0 4565	20.0 4565		
20.044	P <sub>1</sub> M <sub>2</sub>	32.5 2153	68.2 4523	68.2 4523	17.6 2334	37.0 4902	37.0 4902	9.76 2590	18.5 4902	18.5 4902		
22.778	P <sub>1</sub> M <sub>2</sub>	32.5 2447	61.3 4623	61.3 4623	17.6 2652	33.2 5010	33.2 5010	9.76 2944	16.6 5010	16.6 5010		
24.567	P <sub>1</sub> M <sub>2</sub>	30.9 2514	59.4 4832		16.8 2724	32.2 5236		8.38 2724	16.1 5236			
27.917	P <sub>1</sub> M <sub>2</sub>	30.9 2857	53.5 4941		16.8 3096	29.0 5355		8.38 3096	14.5 5355			
32.267	P <sub>1</sub> M <sub>2</sub>	24.3 2591	47.0 5016		13.2 2808	25.5 5436		6.57 2808	12.7 5436			
36.667	P <sub>1</sub> M <sub>2</sub>	24.3 2944	43.9 5323		13.2 3191	23.8 5768		6.57 3191	11.9 5768			
39.160	P <sub>1</sub> M <sub>2</sub>	20.3 2627	38.8 5031		11.0 2847	21.0 5452		5.49 2847	10.5 5452			
44.500	P <sub>1</sub> M <sub>2</sub>	22.0 3235	39.3 5786		11.0 3235	19.7 5786		5.49 3235	9.82 5786			
49.500	P <sub>1</sub> M <sub>2</sub>	17.6 2888			8.82 2888			4.41 2888				
56.250	P <sub>1</sub> M <sub>2</sub>	17.6 3282			8.82 3282			4.41 3282				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 5920 Nm**

<b>GST 14 - 3 N</b>															Dimensions page 3-138				
n <sub>1</sub>		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□D	□E	□F	□G	□H	□D	□E	□F	□G	□H	□D	□E	□F	□G	□H			
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																		
40.185	P <sub>1</sub>			12.2	31.5	31.5			6.60	17.1	17.1			4.40	8.54	8.54			
	M <sub>2</sub>			1595	4130	4130			1728	4476	4476			2304	4476	4476			
42.580	P <sub>1</sub>		13.2	13.2	30.7	30.7		6.60	6.60	15.4	15.4		4.40	4.40	7.68	7.68			
	M <sub>2</sub>		1831	1831	4262	4262		1831	1831	4262	4262		2442	2442	4262	4262			
48.386	P <sub>1</sub>		13.2	13.2	30.7	30.7		6.60	6.60	15.4	15.4		4.40	4.40	7.68	7.68			
	M <sub>2</sub>		2081	2081	4843	4843		2081	2081	4843	4843		2774	2774	4843	4843			
53.148	P <sub>1</sub>			13.2	27.6	27.6			6.60	13.8	13.8			4.40	6.90	6.90			
	M <sub>2</sub>			2286	4779	4779			2286	4779	4779			3048	4779	4779			
59.321	P <sub>1</sub>			13.2	27.2	27.2			6.60	13.6	13.6			4.40	6.81	6.81			
	M <sub>2</sub>			2551	5267	5267			2551	5267	5267			3401	5267	5267			
69.042	P <sub>1</sub>			13.2	21.9	21.9			6.60	10.9	10.9			4.40	5.46	5.46			
	M <sub>2</sub>			2969	4917	4917			2969	4917	4917			3959	4917	4917			
78.457	P <sub>1</sub>			13.2	21.9	21.9			6.60	10.9	10.9			4.40	5.46	5.46			
	M <sub>2</sub>			3374	5587	5587			3374	5587	5587			4499	5587	5587			
93.541	P <sub>1</sub>		13.2	13.2	18.1			6.60	6.60	9.06			3.31	3.49	4.53				
	M <sub>2</sub>		4023	4023	5524			4023	4023	5524			4041	4261	5524				
96.157	P <sub>1</sub>			13.2	18.8	18.8			6.60	9.38	9.38			4.40	4.69	4.69			
	M <sub>2</sub>			4135	5882	5882			4135	5882	5882			5514	5882	5882			
106.296	P <sub>1</sub>		13.2	13.2	17.1			6.60	6.60	8.54			3.31	3.49	4.27				
	M <sub>2</sub>		4571	4571	5920			4571	4571	5920			4592	4842	5920				
130.278	P <sub>1</sub>		13.2	13.2	13.9			6.60	6.60	6.97			3.31	3.49	3.49				
	M <sub>2</sub>		5603	5603	5920			5603	5603	5920			5628	5920	5920				
139.211	P <sub>1</sub>		11.4	12.0	12.6			5.69	5.99	6.32			2.84	3.00	3.16				
	M <sub>2</sub>		5162	5436	5736			5162	5436	5736			5162	5436	5736				
158.194	P <sub>1</sub>		11.4	11.5	11.5			5.69	5.74	5.74			2.84	2.87	2.87				
	M <sub>2</sub>		5866	5920	5920			5866	5920	5920			5866	5920	5920				
171.111	P <sub>1</sub>		10.6	10.6	10.6			5.31	5.31	5.31			2.65	2.65	2.65				
	M <sub>2</sub>		5920	5920	5920			5920	5920	5920			5920	5920	5920				
204.722	P <sub>1</sub>	4.62	8.87	8.87			2.31	4.44	4.44			1.39	2.22	2.22					
	M <sub>2</sub>	3081	5920	5920			3081	5920	5920			3700	5920	5920					
236.622	P <sub>1</sub>	4.62	7.49	7.49			2.31	3.75	3.75			1.39	1.87	1.87					
	M <sub>2</sub>	3562	5779	5779			3562	5779	5779			4276	5779	5779					
248.458	P <sub>1</sub>	4.62	7.31	7.31			2.31	3.66	3.66			1.16	1.83	1.83					
	M <sub>2</sub>	3740	5920	5920			3740	5920	5920			3749	5920	5920					
268.889	P <sub>1</sub>	4.62	6.76	6.76			2.31	3.38	3.38			1.39	1.69	1.69					
	M <sub>2</sub>	4047	5920	5920			4047	5920	5920			4859	5920	5920					
326.333	P <sub>1</sub>	4.62	5.57	5.57			2.31	2.78	2.78			1.16	1.39	1.39					
	M <sub>2</sub>	4912	5920	5920			4912	5920	5920			4924	5920	5920					
363.000	P <sub>1</sub>	3.72	4.88				1.86	2.44				0.93	1.22						
	M <sub>2</sub>	4395	5779				4395	5779				4395	5779						
412.500	P <sub>1</sub>	3.72	4.40				1.86	2.20				0.93	1.10						
	M <sub>2</sub>	4995	5920				4995	5920				4995	5920						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 25 \text{ Nm}$

		GST 04 - 1 W						Dimensions page 3-142		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]									
1.600	$P_1$		2.36	2.90		1.45	1.79		0.73	0.89
	$M_2$		13	16		16	19		6	19
2.048	$P_1$		2.69	2.69		1.66	1.66		0.83	0.83
	$M_2$		19	19		23	23		23	23
2.240	$P_1$		2.67	2.67		1.64	1.64		0.82	0.82
	$M_2$		20	20		25	25		25	25
2.857	$P_1$		2.12	2.12		1.30	1.30		0.65	0.65
	$M_2$		20	20		25	25		25	25
3.500	$P_1$		1.73	1.73		1.06	1.06		0.53	0.53
	$M_2$		20	20		25	25		25	25
4.400	$P_1$	1.05	1.37	1.37	0.65	0.85	0.85	0.32	0.42	0.42
	$M_2$	16	20	20	19	25	25	19	25	25
5.667	$P_1$	0.88	1.07	1.07	0.54	0.66	0.66	0.27	0.33	0.33
	$M_2$	17	20	20	21	25	25	21	25	25
7.182	$P_1$	0.77	0.84		0.47	0.52		0.24	0.26	
	$M_2$	19	20		23	25		23	25	
9.000	$P_1$	0.62	0.62		0.38	0.38		0.19	0.19	
	$M_2$	19	19		23	23		23	23	
11.857	$P_1$	0.33			0.20			0.10		
	$M_2$	13			16			16		

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 73 \text{ Nm}$

GST 04 - 2 W										Dimensions page 3-143		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
2.956	P <sub>1</sub>		2.36	3.25		1.45	2.00		0.73	1.00		
	M <sub>2</sub>		23	32		28	39		28	39		
3.333	P <sub>1</sub>		2.36	3.08		1.45	1.89		0.73	0.95		
	M <sub>2</sub>		26	34		32	42		32	42		
4.053	P <sub>1</sub>		2.36	2.72		1.45	1.68		0.73	0.84		
	M <sub>2</sub>		32	37		39	45		39	45		
4.571	P <sub>1</sub>		2.36	2.58		1.45	1.59		0.73	0.79		
	M <sub>2</sub>		36	39		44	48		44	48		
5.187	P <sub>1</sub>		2.37	2.37		1.46	1.46		0.73	0.73		
	M <sub>2</sub>		41	41		50	50		50	50		
5.850	P <sub>1</sub>		2.23	2.23		1.38	1.38		0.69	0.69		
	M <sub>2</sub>		43	43		53	53		53	53		
6.400	P <sub>1</sub>		2.11	2.11		1.30	1.30		0.65	0.65		
	M <sub>2</sub>		45	45		55	55		55	55		
7.040	P <sub>1</sub>		1.98	1.98		1.22	1.22		0.61	0.61		
	M <sub>2</sub>		46	46		57	57		57	57		
8.000	P <sub>1</sub>		1.80	1.80		1.11	1.11		0.56	0.56		
	M <sub>2</sub>		48	48		59	59		59	59		
9.010	P <sub>1</sub>		1.71	1.71		1.05	1.05		0.53	0.53		
	M <sub>2</sub>		51	51		63	63		63	63		
9.856	P <sub>1</sub>		1.61	1.61		0.99	0.99		0.50	0.50		
	M <sub>2</sub>		53	53		65	65		65	65		
11.200	P <sub>1</sub>		1.32	1.32		0.81	0.81		0.41	0.41		
	M <sub>2</sub>		49	49		60	60		60	60		
12.571	P <sub>1</sub>		1.35	1.35		0.83	0.83		0.42	0.42		
	M <sub>2</sub>		56	56		69	69		69	69		
14.286	P <sub>1</sub>		1.05	1.05		0.64	0.64		0.32	0.32		
	M <sub>2</sub>		49	49		61	61		61	61		
15.400	P <sub>1</sub>		1.11	1.11		0.68	0.68		0.34	0.34		
	M <sub>2</sub>		57	57		70	70		70	70		
17.500	P <sub>1</sub>		0.87	0.87		0.53	0.53		0.27	0.27		
	M <sub>2</sub>		50	50		62	62		62	62		
19.360	P <sub>1</sub>	0.89	0.89	0.89	0.55	0.55	0.55	0.28	0.28	0.28		
	M <sub>2</sub>	57	57	57	70	70	70	70	70	70		
22.000	P <sub>1</sub>	0.70	0.70	0.70	0.43	0.43	0.43	0.21	0.21	0.21		
	M <sub>2</sub>	51	51	51	62	62	62	62	62	62		
24.933	P <sub>1</sub>	0.70	0.70	0.70	0.43	0.43	0.43	0.22	0.22	0.22		
	M <sub>2</sub>	58	58	58	71	71	71	71	71	71		
28.333	P <sub>1</sub>	0.55	0.55	0.55	0.34	0.34	0.34	0.17	0.17	0.17		
	M <sub>2</sub>	51	51	51	63	63	63	63	63	63		
31.600	P <sub>1</sub>	0.56	0.56		0.35	0.35		0.17	0.17			
	M <sub>2</sub>	59	59		72	72		72	72			
35.909	P <sub>1</sub>	0.44	0.44		0.27	0.27		0.14	0.14			
	M <sub>2</sub>	52	52		64	64		64	64			
39.600	P <sub>1</sub>	0.45	0.45		0.28	0.28		0.14	0.14			
	M <sub>2</sub>	59	59		73	73		73	73			
45.000	P <sub>1</sub>	0.36	0.36		0.22	0.22		0.11	0.11			
	M <sub>2</sub>	53	53		65	65		65	65			
52.171	P <sub>1</sub>	0.33			0.20			0.10				
	M <sub>2</sub>	56			69			69				
59.286	P <sub>1</sub>	0.27			0.17			0.08				
	M <sub>2</sub>	54			66			66				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 54 \text{ Nm}$

GST 05 - 1 W										Dimensions page 3-142		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
1.600	P <sub>1</sub> M <sub>2</sub>	6.75 36			4.16 45			2.08 45				
2.048	P <sub>1</sub> M <sub>2</sub>	4.04 28	6.20 43		2.49 34	3.82 53		1.24 34	1.91 53			
2.240	P <sub>1</sub> M <sub>2</sub>	2.36 18	3.86 29	5.72 43	1.45 22	2.38 36	3.52 53	0.73 22	1.19 36	1.76 53		
2.857	P <sub>1</sub> M <sub>2</sub>	2.31 22	3.26 31	4.48 43	1.42 27	2.01 38	2.76 53	0.71 27	1.00 38	1.38 53		
3.500	P <sub>1</sub> M <sub>2</sub>		2.80 33	3.73 44		1.72 41	2.30 54		0.86 41	1.15 54		
4.556	P <sub>1</sub> M <sub>2</sub>	1.61 25	2.25 34	2.87 44	0.99 30	1.38 42	1.76 54	0.50 30	0.69 42	0.88 54		
5.667	P <sub>1</sub> M <sub>2</sub>	1.35 26	1.88 36	2.30 44	0.83 32	1.16 44	1.42 54	0.42 32	0.58 44	0.71 54		
7.333	P <sub>1</sub> M <sub>2</sub>	1.09 27	1.51 37		0.67 33	0.93 46		0.34 33	0.46 46			
8.900	P <sub>1</sub> M <sub>2</sub>	0.91 27	1.14 34		0.56 33	0.70 42		0.28 33	0.35 42			
11.375	P <sub>1</sub> M <sub>2</sub>	0.66 25			0.40 31			0.20 31				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 165 \text{ Nm}$

GST 05 - 2 W										Dimensions page 3-143		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
2.956	$P_1$ $M_2$			5.24 51			3.23 63			1.61 63		
3.333	$P_1$ $M_2$			5.74 63			3.54 78			1.77 78		
4.053	$P_1$ $M_2$			4.92 66			3.03 81			1.51 81		
4.571	$P_1$ $M_2$			4.90 74			3.02 91			1.51 91		
5.187	$P_1$ $M_2$		4.04 69	4.25 73		2.49 85	2.62 90		1.24 85	1.31 90		
5.850	$P_1$ $M_2$		4.04 78	4.25 82		2.49 96	2.62 101		1.24 96	1.31 101		
6.400	$P_1$ $M_2$	2.36 50	3.86 82	4.02 85	1.45 62	2.38 101	2.47 105	0.73 62	1.19 101	1.24 105		
7.238	$P_1$ $M_2$	2.31 55	3.26 78	3.67 88	1.42 68	2.01 96	2.26 108	0.71 68	1.00 96	1.13 108		
8.163	$P_1$ $M_2$	2.31 62	3.26 88	3.46 93	1.42 77	2.01 108	2.13 115	0.71 77	1.00 108	1.07 115		
9.010	$P_1$ $M_2$		3.24 96	3.24 96		1.99 119	1.99 119		1.00 119	1.00 119		
10.000	$P_1$ $M_2$		2.80 93	3.05 101		1.72 114	1.88 124		0.86 114	0.94 124		
11.200	$P_1$ $M_2$	2.36 87	2.80 104	2.80 104	1.45 108	1.72 128	1.72 128	0.73 108	0.86 128	0.86 128		
13.016	$P_1$ $M_2$	1.61 69	2.25 97	2.59 111	0.99 85	1.38 119	1.59 137	0.50 85	0.69 119	0.80 137		
14.356	$P_1$ $M_2$	1.35 64	1.88 89	2.39 113	0.83 79	1.16 110	1.47 140	0.42 79	0.58 110	0.74 140		
16.191	$P_1$ $M_2$	1.35 72	1.88 101	2.25 121	0.83 89	1.16 124	1.39 148	0.42 89	0.58 124	0.69 148		
17.500	$P_1$ $M_2$		1.99 115	1.99 115		1.23 142	1.23 142		0.61 142	0.61 142		
20.044	$P_1$ $M_2$	1.61 107	1.95 129	1.95 129	0.99 131	1.20 159	1.20 159	0.50 131	0.60 159	0.60 159		
22.778	$P_1$ $M_2$	1.55 117	1.55 117	1.55 117	0.96 144	0.96 144	0.96 144	0.48 144	0.48 144	0.48 144		
24.933	$P_1$ $M_2$	1.35 111	1.60 132	1.60 132	0.83 137	0.98 162	0.98 162	0.42 137	0.49 162	0.49 162		
28.333	$P_1$ $M_2$	1.27 119	1.27 119	1.27 119	0.78 147	0.78 147	0.78 147	0.39 147	0.39 147	0.39 147		
32.267	$P_1$ $M_2$	1.09 116	1.25 133		0.67 143	0.77 164		0.34 143	0.38 164			
36.667	$P_1$ $M_2$	0.99 120	0.99 120		0.61 148	0.61 148		0.31 148	0.31 148			
39.160	$P_1$ $M_2$	0.91 118	1.03 134		0.56 145	0.64 165		0.28 145	0.32 165			
44.500	$P_1$ $M_2$	0.82 121	0.82 121		0.51 149	0.51 149		0.25 149	0.25 149			
50.050	$P_1$ $M_2$	0.67 110			0.41 136			0.21 136				
56.875	$P_1$ $M_2$	0.65 122			0.40 150			0.20 150				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 170 \text{ Nm}$

		GST 05 - 3 W						Dimensions page 3-144		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]									
36.267	P <sub>1</sub>		0.92	0.92		0.57	0.57		0.28	0.28
	M <sub>2</sub>		109	109		134	134		134	134
46.259	P <sub>1</sub>		0.78	0.78		0.48	0.48		0.24	0.24
	M <sub>2</sub>		118	118		145	145		145	145
56.667	P <sub>1</sub>		0.68	0.68		0.42	0.42		0.21	0.21
	M <sub>2</sub>		126	126		155	155		155	155
63.467	P <sub>1</sub>		0.57	0.57		0.35	0.35		0.18	0.18
	M <sub>2</sub>		119	119		146	146		146	146
71.238	P <sub>1</sub>	0.59	0.59	0.59	0.36	0.36	0.36	0.18	0.18	0.18
	M <sub>2</sub>	136	136	136	167	167	167	167	167	167
80.952	P <sub>1</sub>		0.45	0.45		0.28	0.28		0.14	0.14
	M <sub>2</sub>		119	119		147	147		147	147
91.746	P <sub>1</sub>	0.46	0.46	0.46	0.29	0.29	0.29	0.14	0.14	0.14
	M <sub>2</sub>	138	138	138	170	170	170	170	170	170
99.167	P <sub>1</sub>		0.37	0.37		0.23	0.23		0.11	0.11
	M <sub>2</sub>		120	120		148	148		148	148
116.277	P <sub>1</sub>	0.37	0.37		0.23	0.23		0.11	0.11	
	M <sub>2</sub>	138	138		170	170		170	170	
124.667	P <sub>1</sub>	0.30	0.30	0.30	0.18	0.18	0.18	0.09	0.09	0.09
	M <sub>2</sub>	121	121	121	149	149	149	149	149	149
145.714	P <sub>1</sub>	0.29	0.29		0.18	0.18		0.09	0.09	
	M <sub>2</sub>	138	138		170	170		170	170	
160.556	P <sub>1</sub>	0.23	0.23	0.23	0.14	0.14	0.14	0.07	0.07	0.07
	M <sub>2</sub>	122	122	122	150	150	150	150	150	150
179.067	P <sub>1</sub>	0.23	0.23		0.14	0.14		0.07	0.07	
	M <sub>2</sub>	136	136		167	167		167	167	
191.973	P <sub>1</sub>	0.22			0.14			0.07		
	M <sub>2</sub>	138			170			170		
224.400	P <sub>1</sub>	0.19	0.19		0.12	0.12		0.06	0.06	
	M <sub>2</sub>	137	137		169	169		169	169	
255.000	P <sub>1</sub>	0.15	0.15		0.09	0.09		0.05	0.05	
	M <sub>2</sub>	123	123		152	152		152	152	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 105 \text{ Nm}$

GST 06 - 1 W												Dimensions page 3-142			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
1.600	P <sub>1</sub>			9.28	9.28			5.71	5.71			2.86	2.86		
	M <sub>2</sub>			50	50			61	61			61	61		
2.048	P <sub>1</sub>		7.56	8.55	8.55		4.66	5.26	5.26		2.33	2.63	2.63		
	M <sub>2</sub>		52	59	59		64	72	72		64	72	72		
2.240	P <sub>1</sub>		7.27	8.47	8.47		4.48	5.22	5.22		2.24	2.61	2.61		
	M <sub>2</sub>		55	64	64		67	79	79		67	79	79		
2.857	P <sub>1</sub>	4.01	6.18	7.82	7.82	2.47	3.80	4.81	4.81	1.23	1.90	2.41	2.41		
	M <sub>2</sub>	38	59	75	75	47	73	92	92	47	73	92	92		
3.500	P <sub>1</sub>		5.34	7.23	7.23		3.29	4.45	4.45		1.65	2.23	2.23		
	M <sub>2</sub>		63	85	85		77	105	105		77	105	105		
4.556	P <sub>1</sub>	2.77	4.31	5.57		1.71	2.65	3.43		0.85	1.33	1.72			
	M <sub>2</sub>	42	66	85		52	81	105		52	81	105			
5.667	P <sub>1</sub>	2.32	3.62	4.48		1.43	2.23	2.76		0.71	1.11	1.38			
	M <sub>2</sub>	44	69	85		54	85	105		54	85	105			
7.333	P <sub>1</sub>	1.79	2.91			1.10	1.79			0.55	0.90				
	M <sub>2</sub>	44	72			54	88			54	88				
8.900	P <sub>1</sub>	1.55	2.31			0.96	1.43			0.48	0.71				
	M <sub>2</sub>	46	69			57	85			57	85				
11.250	P <sub>1</sub>	1.24				0.77				0.38					
	M <sub>2</sub>	47				58				58					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft

$M_2 \text{ perm} \leq 368 \text{ Nm}$

GST 06 - 2 W												Dimensions page 3-143			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
3.033	P <sub>1</sub>			13.5	13.5			8.29	8.29			4.14	4.14		
	M <sub>2</sub>			135	135			166	166			166	166		
3.333	P <sub>1</sub>			12.8	12.8			7.89	7.89			3.94	3.94		
	M <sub>2</sub>			141	141			174	174			174	174		
4.160	P <sub>1</sub>			11.3	11.3			6.94	6.94			3.47	3.47		
	M <sub>2</sub>			155	155			191	191			191	191		
4.571	P <sub>1</sub>			10.7	10.7			6.60	6.60			3.30	3.30		
	M <sub>2</sub>			162	162			200	200			200	200		
5.324	P <sub>1</sub>		7.56	9.56	9.56		4.66	5.88	5.88		2.33	2.94	2.94		
	M <sub>2</sub>		133	168	168		164	207	207		164	207	207		
5.850	P <sub>1</sub>		7.56	9.30	9.30		4.66	5.73	5.73		2.33	2.86	2.86		
	M <sub>2</sub>		146	180	180		180	222	222		180	222	222		
6.400	P <sub>1</sub>		7.27	8.79	8.79		4.48	5.41	5.41		2.24	2.71	2.71		
	M <sub>2</sub>		154	186	186		190	229	229		190	229	229		
7.040	P <sub>1</sub>			8.24	8.24			5.07	5.07			2.54	2.54		
	M <sub>2</sub>			192	192			236	236			236	236		
8.163	P <sub>1</sub>	4.01	6.18	7.56	7.56	2.47	3.80	4.66	4.66	1.23	1.90	2.33	2.33		
	M <sub>2</sub>	108	167	204	204	133	206	252	252	133	206	252	252		
9.010	P <sub>1</sub>		7.11	7.11	7.11		4.38	4.38	4.38		2.19	2.19	2.19		
	M <sub>2</sub>		212	212	212		261	261	261		261	261	261		
10.000	P <sub>1</sub>		5.34	6.61	6.61		3.29	4.07	4.07		1.65	2.03	2.03		
	M <sub>2</sub>		177	219	219		218	269	269		218	269	269		
11.200	P <sub>1</sub>		6.14	6.14	6.14		3.78	3.78	3.78		1.89	1.89	1.89		
	M <sub>2</sub>		228	228	228		280	280	280		280	280	280		
12.571	P <sub>1</sub>	4.01	5.76	5.76	5.76	2.47	3.55	3.55	3.55	1.23	1.77	1.77	1.77		
	M <sub>2</sub>	167	240	240	240	205	295	295	295	205	295	295	295		
14.286	P <sub>1</sub>	4.01	5.27	5.27	5.27	2.47	3.24	3.24	3.24	1.23	1.62	1.62	1.62		
	M <sub>2</sub>	189	249	249	249	233	307	307	307	233	307	307	307		
15.400	P <sub>1</sub>		5.07	5.07	5.07		3.12	3.12	3.12		1.56	1.56	1.56		
	M <sub>2</sub>		258	258	258		318	318	318		318	318	318		
17.500	P <sub>1</sub>		4.39	4.39	4.39		2.70	2.70	2.70		1.35	1.35	1.35		
	M <sub>2</sub>		254	254	254		313	313	313		313	313	313		
20.044	P <sub>1</sub>	2.77	4.29	4.29		1.71	2.64	2.64		0.85	1.32	1.32			
	M <sub>2</sub>	184	284	284		226	350	350		226	350	350			
22.778	P <sub>1</sub>	2.77	3.39	3.39		1.71	2.09	2.09		0.85	1.05	1.05			
	M <sub>2</sub>	209	256	256		257	315	315		257	315	315			
24.933	P <sub>1</sub>	2.32	3.54	3.54		1.43	2.18	2.18		0.71	1.09	1.09			
	M <sub>2</sub>	191	292	292		235	360	360		235	360	360			
28.333	P <sub>1</sub>	2.32	2.75	2.75		1.43	1.69	1.69		0.71	0.85	0.85			
	M <sub>2</sub>	217	257	257		267	317	317		267	317	317			
32.267	P <sub>1</sub>	1.79	2.76			1.10	1.70			0.55	0.85				
	M <sub>2</sub>	191	295			235	363			235	363				
36.667	P <sub>1</sub>	1.79	2.16			1.10	1.33			0.55	0.66				
	M <sub>2</sub>	217	262			267	322			267	322				
39.160	P <sub>1</sub>	1.55	2.31			0.96	1.42			0.48	0.71				
	M <sub>2</sub>	201	299			247	368			247	368				
44.500	P <sub>1</sub>	1.55	1.79			0.96	1.10			0.48	0.55				
	M <sub>2</sub>	228	264			281	325			281	325				
49.500	P <sub>1</sub>	1.24				0.77				0.38					
	M <sub>2</sub>	204				251				251					
56.250	P <sub>1</sub>	1.24				0.77				0.38					
	M <sub>2</sub>	231				285				285					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 375 \text{ Nm}$

GST 06 - 3 W										Dimensions page 3-144		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
39.200	$P_1$		2.04	2.04		1.26	1.26		0.63	0.63		
	$M_2$		261	261		321	321		321	321		
44.000	$P_1$		1.90	1.90		1.17	1.17		0.58	0.58		
	$M_2$		272	272		335	335		335	335		
51.022	$P_1$		1.59	1.59		0.98	0.98		0.49	0.49		
	$M_2$		264	264		325	325		325	325		
53.900	$P_1$		1.61	1.61		0.99	0.99		0.50	0.50		
	$M_2$		283	283		349	349		349	349		
67.760	$P_1$	1.05	1.34	1.34	0.65	0.83	0.83	0.32	0.41	0.41		
	$M_2$	232	296	296	286	365	365	286	365	365		
70.156	$P_1$		1.27	1.27		0.79	0.79		0.39	0.39		
	$M_2$		291	291		359	359		359	359		
80.952	$P_1$		1.02	1.02		0.63	0.63		0.32	0.32		
	$M_2$		270	270		332	332		332	332		
87.267	$P_1$		1.06	1.06		0.65	0.65		0.33	0.33		
	$M_2$		300	300		370	370		370	370		
99.167	$P_1$		0.84	0.84		0.52	0.52		0.26	0.26		
	$M_2$		272	272		335	335		335	335		
109.707	$P_1$	0.85	0.85	0.85	0.52	0.52	0.52	0.26	0.26	0.26		
	$M_2$	305	305	305	375	375	375	375	375	375		
124.667	$P_1$	0.68	0.68	0.68	0.42	0.42	0.42	0.21	0.21	0.21		
	$M_2$	275	275	275	339	339	339	339	339	339		
141.289	$P_1$	0.66	0.66	0.66	0.41	0.41	0.41	0.20	0.20	0.20		
	$M_2$	305	305	305	375	375	375	375	375	375		
160.556	$P_1$	0.53	0.53	0.53	0.33	0.33	0.33	0.16	0.16	0.16		
	$M_2$	278	278	278	342	342	342	342	342	342		
179.067	$P_1$	0.52	0.52		0.32	0.32		0.16	0.16			
	$M_2$	305	305		375	375		375	375			
203.485	$P_1$	0.42	0.42		0.26	0.26		0.13	0.13			
	$M_2$	281	281		346	346		346	346			
231.733	$P_1$	0.40	0.40		0.25	0.25		0.12	0.12			
	$M_2$	305	305		375	375		375	375			
255.000	$P_1$	0.34	0.34		0.21	0.21		0.11	0.11			
	$M_2$	283	283		349	349		349	349			
290.400	$P_1$	0.32	0.32		0.20	0.20		0.10	0.10			
	$M_2$	305	305		375	375		375	375			
330.000	$P_1$	0.27	0.27		0.16	0.16		0.08	0.08			
	$M_2$	286	286		352	352		352	352			
382.591	$P_1$	0.24			0.15			0.08				
	$M_2$	305			375			375				
434.762	$P_1$	0.21			0.13			0.06				
	$M_2$	294			361			361				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 196 \text{ Nm}$

GST 07 - 1 W												Dimensions page 3-142			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
1.625	P <sub>1</sub>			15.8	15.8			9.72	9.72			4.86	4.86		
	M <sub>2</sub>			86	86			106	106			106	106		
2.000	P <sub>1</sub>		15.0	15.0	15.0		9.21	9.21	9.21		4.61	4.61	4.61		
	M <sub>2</sub>		101	101	101		124	124	124		124	124	124		
2.240	P <sub>1</sub>		14.2	14.5	14.5		8.73	8.94	8.94		4.37	4.47	4.47		
	M <sub>2</sub>		107	109	109		131	135	135		131	135	135		
2.857	P <sub>1</sub>	7.37	12.0	13.4	13.4	4.54	7.38	8.26	8.26	2.27	3.69	4.13	4.13		
	M <sub>2</sub>	71	115	129	129	87	142	159	159	87	142	159	159		
3.500	P <sub>1</sub>		10.3	11.9	11.9		6.35	7.31	7.31		3.18	3.66	3.66		
	M <sub>2</sub>		121	140	140		149	172	172		149	172	172		
4.556	P <sub>1</sub>	5.17	8.35	9.87		3.18	5.14	6.08		1.59	2.57	3.04			
	M <sub>2</sub>	79	128	151		97	157	186		97	157	186			
5.583	P <sub>1</sub>	4.46	7.10	8.49		2.74	4.37	5.23		1.37	2.19	2.61			
	M <sub>2</sub>	84	133	159		103	164	196		103	164	196			
7.333	P <sub>1</sub>	3.51	5.60			2.16	3.45			1.08	1.72				
	M <sub>2</sub>	86	138			106	170			106	170				
8.900	P <sub>1</sub>	2.94	4.71			1.81	2.90			0.90	1.45				
	M <sub>2</sub>	88	141			108	173			108	173				
11.250	P <sub>1</sub>	2.36				1.45				0.73					
	M <sub>2</sub>	89				110				110					

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 707 \text{ Nm}$

GST 07 - 2 W												Dimensions page 3-143			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
3.048	P <sub>1</sub>			26.2	28.3			16.1	17.4			8.07	8.71		
	M <sub>2</sub>			264	285			325	351			325	351		
3.350	P <sub>1</sub>			26.2	26.9			16.1	16.5			8.07	8.27		
	M <sub>2</sub>			290	298			358	367			358	367		
4.225	P <sub>1</sub>			23.1	23.1			14.2	14.2			7.11	7.11		
	M <sub>2</sub>			323	323			398	398			398	398		
4.643	P <sub>1</sub>			21.9	21.9			13.5	13.5			6.74	6.74		
	M <sub>2</sub>			336	336			414	414			414	414		
5.200	P <sub>1</sub>		15.3	20.2	20.2		9.39	12.4	12.4		4.69	6.21	6.21		
	M <sub>2</sub>		262	347	347		323	427	427		323	427	427		
5.714	P <sub>1</sub>		15.3	19.3	19.3		9.39	11.9	11.9		4.69	5.93	5.93		
	M <sub>2</sub>		288	364	364		355	448	448		355	448	448		
6.400	P <sub>1</sub>		14.2	17.8	17.8		8.73	10.9	10.9		4.37	5.47	5.47		
	M <sub>2</sub>		300	376	376		370	463	463		370	463	463		
7.150	P <sub>1</sub>			16.8	16.8			10.3	10.3			5.16	5.16		
	M <sub>2</sub>			397	397			488	488			488	488		
8.125	P <sub>1</sub>			16.3	16.3			10.0	10.0			5.01	5.01		
	M <sub>2</sub>			438	438			539	539			539	539		
8.800	P <sub>1</sub>		14.7	14.7	14.7		9.05	9.05	9.05		4.53	4.53	4.53		
	M <sub>2</sub>		428	428	428		527	527	527		527	527	527		
9.856	P <sub>1</sub>		13.7	13.7	13.7		8.42	8.42	8.42		4.21	4.21	4.21		
	M <sub>2</sub>		446	446	446		549	549	549		549	549	549		
11.200	P <sub>1</sub>		13.1	13.1	13.1		8.07	8.07	8.07		4.04	4.04	4.04		
	M <sub>2</sub>		486	486	486		598	598	598		598	598	598		
12.571	P <sub>1</sub>	7.37	11.7	11.7	11.7	4.54	7.22	7.22	7.22	2.27	3.61	3.61	3.61		
	M <sub>2</sub>	307	488	488	488	378	600	600	600	378	600	600	600		
14.286	P <sub>1</sub>	7.37	11.0	11.0	11.0	4.54	6.79	6.79	6.79	2.27	3.39	3.39	3.39		
	M <sub>2</sub>	349	521	521	521	429	642	642	642	429	642	642	642		
15.400	P <sub>1</sub>		10.3	10.3	10.3		6.32	6.32	6.32		3.16	3.16	3.16		
	M <sub>2</sub>		523	523	523		644	644	644		644	644	644		
17.500	P <sub>1</sub>		9.53	9.53	9.53		5.87	5.87	5.87		2.93	2.93	2.93		
	M <sub>2</sub>		552	552	552		680	680	680		680	680	680		
20.044	P <sub>1</sub>	5.17	8.35	8.50		3.18	5.14	5.23		1.59	2.57	2.62			
	M <sub>2</sub>	343	554	564		422	682	694		422	682	694			
22.778	P <sub>1</sub>	5.17	7.35	7.35		3.18	4.52	4.52		1.59	2.26	2.26			
	M <sub>2</sub>	390	554	554		480	682	682		480	682	682			
24.567	P <sub>1</sub>	4.46	7.05	7.05		2.74	4.34	4.34		1.37	2.17	2.17			
	M <sub>2</sub>	362	573	573		446	706	706		446	706	706			
27.917	P <sub>1</sub>	4.46	6.08	6.08		2.74	3.74	3.74		1.37	1.87	1.87			
	M <sub>2</sub>	412	561	561		507	691	691		507	691	691			
32.267	P <sub>1</sub>	3.51	5.37			2.16	3.31			1.08	1.65				
	M <sub>2</sub>	375	573			461	706			461	706				
36.667	P <sub>1</sub>	3.51	4.70			2.16	2.89			1.08	1.45				
	M <sub>2</sub>	426	570			524	702			524	702				
39.160	P <sub>1</sub>	2.94	4.42			1.81	2.72			0.90	1.36				
	M <sub>2</sub>	380	573			468	706			468	706				
44.500	P <sub>1</sub>	2.94	3.90			1.81	2.40			0.90	1.20				
	M <sub>2</sub>	432	574			532	707			532	707				
49.500	P <sub>1</sub>	2.36				1.45				0.73					
	M <sub>2</sub>	386				476				476					
56.250	P <sub>1</sub>	2.36				1.45				0.73					
	M <sub>2</sub>	439				541				541					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 710 \text{ Nm}$

GST 07 - 3 W										
Dimensions page 3-144										
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]									
39.200	P <sub>1</sub>	2.36	3.86	4.40	1.45	2.38	2.71	0.73	1.19	1.35
	M <sub>2</sub>	301	493	562	371	607	692	371	607	692
44.000	P <sub>1</sub>		2.80	4.00		1.72	2.46		0.86	1.23
	M <sub>2</sub>		402	573		495	706		495	706
51.022	P <sub>1</sub>	2.36	3.42	3.42	1.45	2.10	2.10	0.73	1.05	1.05
	M <sub>2</sub>	392	568	568	483	700	700	483	700	700
53.900	P <sub>1</sub>		2.80	3.26		1.72	2.01		0.86	1.01
	M <sub>2</sub>		492	573		606	706		606	706
65.079	P <sub>1</sub>	1.61	2.25	2.71	0.99	1.38	1.67	0.50	0.69	0.83
	M <sub>2</sub>	341	477	575	420	587	707	420	587	707
70.156	P <sub>1</sub>		2.51	2.51		1.54	1.54		0.77	0.77
	M <sub>2</sub>		573	573		706	706		706	706
79.762	P <sub>1</sub>	2.22	2.22	2.22	1.37	1.37	1.37	0.68	0.68	0.68
	M <sub>2</sub>	577	577	577	710	710	710	710	710	710
85.983	P <sub>1</sub>		2.05	2.05		1.26	1.26		0.63	0.63
	M <sub>2</sub>		573	573		706	706		706	706
97.708	P <sub>1</sub>		1.81	1.81		1.12	1.12		0.56	0.56
	M <sub>2</sub>		577	577		710	710		710	710
111.915	P <sub>1</sub>	1.57	1.57	1.57	0.97	0.97	0.97	0.48	0.48	0.48
	M <sub>2</sub>	573	573	573	706	706	706	706	706	706
127.176	P <sub>1</sub>	1.39	1.39	1.39	0.86	0.86	0.86	0.43	0.43	0.43
	M <sub>2</sub>	577	577	577	710	710	710	710	710	710
139.211	P <sub>1</sub>	1.26	1.26	1.26	0.78	0.78	0.78	0.39	0.39	0.39
	M <sub>2</sub>	573	573	573	706	706	706	706	706	706
158.194	P <sub>1</sub>	1.12	1.12	1.12	0.69	0.69	0.69	0.34	0.34	0.34
	M <sub>2</sub>	577	577	577	710	710	710	710	710	710
180.156	P <sub>1</sub>	0.98	0.98		0.60	0.60		0.30	0.30	
	M <sub>2</sub>	573	573		706	706		706	706	
204.722	P <sub>1</sub>	0.86	0.86		0.53	0.53		0.27	0.27	
	M <sub>2</sub>	577	577		710	710		710	710	
236.622	P <sub>1</sub>	0.74	0.74		0.46	0.46		0.23	0.23	
	M <sub>2</sub>	573	573		706	706		706	706	
248.458	P <sub>1</sub>	0.71	0.71		0.44	0.44		0.22	0.22	
	M <sub>2</sub>	577	577		710	710		710	710	
268.889	P <sub>1</sub>	0.66	0.66		0.41	0.41		0.20	0.20	
	M <sub>2</sub>	577	577		710	710		710	710	
326.333	P <sub>1</sub>	0.54	0.54		0.33	0.33		0.17	0.17	
	M <sub>2</sub>	577	577		710	710		710	710	
367.033	P <sub>1</sub>	0.48			0.30			0.15		
	M <sub>2</sub>	573			706			706		
417.083	P <sub>1</sub>	0.42			0.26			0.13		
	M <sub>2</sub>	577			710			710		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 465 \text{ Nm}$

GST 09 - 1 W												Dimensions page 3-142			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
1.560	P <sub>1</sub>			42.9	42.9			26.4	26.4			13.2	13.2		
	M <sub>2</sub>			225	225			277	277			277	277		
2.048	P <sub>1</sub>		28.4	39.9	39.9		17.5	24.6	24.6		8.73	12.3	12.3		
	M <sub>2</sub>		195	275	275		240	338	338		240	338	338		
2.333	P <sub>1</sub>		25.6	38.3	38.3		15.8	23.6	23.6		7.88	11.8	11.8		
	M <sub>2</sub>		201	301	301		247	370	370		247	370	370		
2.810	P <sub>1</sub>	14.9	22.5	36.0	36.0	9.16	13.9	22.1	22.1	4.58	6.93	11.1	11.1		
	M <sub>2</sub>	140	212	339	339	173	261	418	418	173	261	418	418		
3.444	P <sub>1</sub>		19.4	31.1	31.1		11.9	19.1	19.1		5.96	9.57	9.57		
	M <sub>2</sub>		224	360	360		276	443	443		276	443	443		
4.667	P <sub>1</sub>	10.1	15.2	19.6		6.22	9.34	12.1		3.11	4.67	6.04			
	M <sub>2</sub>	158	238	308		195	293	379		195	293	379			
5.667	P <sub>1</sub>	8.64	13.0	19.8		5.32	8.01	12.2		2.66	4.01	6.11			
	M <sub>2</sub>	164	248	378		202	305	465		202	305	465			
7.333	P <sub>1</sub>	6.94	10.4			4.27	6.43			2.14	3.21				
	M <sub>2</sub>	171	257			210	317			210	317				
8.900	P <sub>1</sub>	5.83	8.72			3.59	5.37			1.79	2.68				
	M <sub>2</sub>	174	261			215	321			215	321				
11.250	P <sub>1</sub>	4.70				2.89				1.45					
	M <sub>2</sub>	178				219				219					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft

$M_2 \text{ perm} \leq 1582 \text{ Nm}$

GST 09 - 2 W												Dimensions page 3-143			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
4.056	$P_1$			53.1	53.1			32.7	32.7			16.4	16.4		
	$M_2$			713	713			878	878			878	878		
4.457	$P_1$			51.3	51.3			31.6	31.6			15.8	15.8		
	$M_2$			756	756			931	931			931	931		
5.324	$P_1$		28.4	45.8	45.8		17.5	28.2	28.2		8.73	14.1	14.1		
	$M_2$		500	806	806		615	993	993		615	993	993		
5.850	$P_1$		28.4	42.8	42.8		17.5	26.3	26.3		8.73	13.2	13.2		
	$M_2$		549	828	828		676	1020	1020		676	1020	1020		
6.667	$P_1$		25.6	39.2	39.2		15.8	24.1	24.1		7.88	12.1	12.1		
	$M_2$		565	865	865		695	1065	1065		695	1065	1065		
7.305	$P_1$	14.9	22.5	37.1	37.1	9.16	13.9	22.8	22.8	4.58	6.93	11.4	11.4		
	$M_2$	360	544	896	896	443	670	1103	1103	443	670	1103	1103		
8.027	$P_1$	14.9	22.5	34.7	34.7	9.16	13.9	21.3	21.3	4.58	6.93	10.7	10.7		
	$M_2$	395	598	920	920	487	736	1133	1133	487	736	1133	1133		
9.010	$P_1$		28.4	30.7	30.7		17.5	18.9	18.9		8.73	9.46	9.46		
	$M_2$		846	916	916		1041	1128	1128		1041	1128	1128		
10.267	$P_1$		25.6	28.2	28.2		15.8	17.3	17.3		7.88	8.67	8.67		
	$M_2$		870	957	957		1071	1178	1178		1071	1178	1178		
11.667	$P_1$		25.4	25.4	25.4		15.6	15.6	15.6		7.81	7.81	7.81		
	$M_2$		979	979	979		1206	1206	1206		1206	1206	1206		
12.362	$P_1$	14.9	22.5	24.9	24.9	9.16	13.9	15.3	15.3	4.58	6.93	7.66	7.66		
	$M_2$	609	920	1017	1017	750	1133	1253	1253	750	1133	1253	1253		
14.048	$P_1$	14.9	22.4	22.4	22.4	9.16	13.8	13.8	13.8	4.58	6.90	6.90	6.90		
	$M_2$	692	1042	1042	1042	852	1283	1283	1283	852	1283	1283	1283		
15.156	$P_1$		19.4	21.7	21.7		11.9	13.4	13.4		5.96	6.68	6.68		
	$M_2$		971	1088	1088		1195	1340	1340		1195	1340	1340		
17.222	$P_1$		19.4	19.6	19.6		11.9	12.0	12.0		5.96	6.02	6.02		
	$M_2$		1103	1115	1115		1358	1373	1373		1358	1373	1373		
20.533	$P_1$	10.1	15.2	17.7		6.22	9.34	10.9		3.11	4.67	5.46			
	$M_2$	686	1031	1205		845	1269	1484		845	1269	1484			
23.333	$P_1$	10.1	15.2	15.9		6.22	9.34	9.76		3.11	4.67	4.88			
	$M_2$	780	1172	1224		960	1443	1508		960	1443	1508			
24.933	$P_1$	8.64	13.0	15.6		5.32	8.01	9.59		2.66	4.01	4.79			
	$M_2$	713	1074	1285		877	1322	1582		877	1322	1582			
28.333	$P_1$	8.64	13.0	13.2		5.32	8.01	8.10		2.66	4.01	4.05			
	$M_2$	810	1220	1234		997	1502	1519		997	1502	1519			
32.267	$P_1$	6.94	10.4			4.27	6.43			2.14	3.21				
	$M_2$	741	1115			912	1373			912	1373				
36.667	$P_1$	6.94	10.3			4.27	6.32			2.14	3.16				
	$M_2$	842	1246			1036	1535			1036	1535				
39.160	$P_1$	5.83	8.72			3.59	5.37			1.79	2.68				
	$M_2$	755	1130			930	1391			930	1391				
44.500	$P_1$	5.83	8.53			3.59	5.25			1.79	2.63				
	$M_2$	858	1256			1056	1546			1056	1546				
49.500	$P_1$	4.70				2.89				1.45					
	$M_2$	770				948				948					
56.250	$P_1$	4.70				2.89				1.45					
	$M_2$	875				1077				1077					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 1623 \text{ Nm}$

GST 09 - 3 W										Dimensions page 3-144			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
40.136	P <sub>1</sub> M <sub>2</sub>	4.01 524	6.18 808	8.34 1092	8.34 1092	2.47 646	3.80 995	5.14 1344	5.14 1344	1.23 646	1.90 995	2.57 1344	2.57 1344
43.267	P <sub>1</sub> M <sub>2</sub>		5.34 754	7.43 1047	7.43 1047		3.29 928	4.57 1290	4.57 1290		1.65 928	2.29 1290	2.29 1290
49.167	P <sub>1</sub> M <sub>2</sub>		5.34 856	7.43 1190	7.43 1190		3.29 1054	4.57 1466	4.57 1466		1.65 1054	2.29 1466	2.29 1466
53.044	P <sub>1</sub> M <sub>2</sub>		5.34 924	6.48 1120	6.48 1120		3.29 1138	3.99 1379	3.99 1379		1.65 1138	1.99 1379	1.99 1379
60.278	P <sub>1</sub> M <sub>2</sub>		5.34 1050	6.47 1271	6.47 1271		3.29 1293	3.98 1565	3.98 1565		1.65 1293	1.99 1565	1.99 1565
71.867	P <sub>1</sub> M <sub>2</sub>		5.12 1200	5.12 1200	5.12 1200		3.15 1477	3.15 1477	3.15 1477		1.58 1477	1.58 1477	1.58 1477
81.667	P <sub>1</sub> M <sub>2</sub>		4.83 1286	4.83 1286	4.83 1286		2.97 1584	2.97 1584	2.97 1584		1.49 1584	1.49 1584	1.49 1584
93.541	P <sub>1</sub> M <sub>2</sub>	2.77 844	4.30 1310	4.30 1310		1.71 1040	2.65 1613	2.65 1613		0.85 1040	1.32 1613	1.32 1613	
99.167	P <sub>1</sub> M <sub>2</sub>		4.01 1296	4.01 1296	4.01 1296		2.47 1596	2.47 1596	2.47 1596		1.23 1596	1.23 1596	1.23 1596
113.585	P <sub>1</sub> M <sub>2</sub>	2.77 1025	3.54 1310	3.54 1310		1.71 1263	2.18 1613	2.18 1613		0.85 1263	1.09 1613	1.09 1613	
129.074	P <sub>1</sub> M <sub>2</sub>	2.77 1165	3.11 1309	3.11 1309		1.71 1435	1.92 1612	1.92 1612		0.85 1435	0.96 1612	0.96 1612	
141.289	P <sub>1</sub> M <sub>2</sub>	2.32 1066	2.85 1310	2.85 1310		1.43 1313	1.75 1613	1.75 1613		0.71 1313	0.88 1613	0.88 1613	
160.556	P <sub>1</sub> M <sub>2</sub>	2.32 1212	2.52 1318	2.52 1318		1.43 1492	1.55 1623	1.55 1623		0.71 1492	0.78 1623	0.78 1623	
182.845	P <sub>1</sub> M <sub>2</sub>	1.79 1066	2.20 1310			1.10 1312	1.35 1613			0.55 1312	0.68 1613		
207.778	P <sub>1</sub> M <sub>2</sub>	1.79 1211	1.95 1318			1.10 1491	1.20 1623			0.55 1491	0.60 1623		
236.622	P <sub>1</sub> M <sub>2</sub>	1.70 1310	1.70 1310			1.05 1613	1.05 1613			0.52 1613	0.52 1613		
252.167	P <sub>1</sub> M <sub>2</sub>	1.55 1275	1.60 1318			0.96 1570	0.99 1623			0.48 1570	0.49 1623		
268.889	P <sub>1</sub> M <sub>2</sub>	1.50 1318	1.50 1318			0.93 1623	0.93 1623			0.46 1623	0.46 1623		
326.333	P <sub>1</sub> M <sub>2</sub>	1.24 1318	1.24 1318			0.76 1623	0.76 1623			0.38 1623	0.38 1623		
363.000	P <sub>1</sub> M <sub>2</sub>	1.11 1310				0.68 1613				0.34 1613			
412.500	P <sub>1</sub> M <sub>2</sub>	0.98 1318				0.60 1623				0.30 1623			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft

$M_2 \text{ perm} \leq 2933 \text{ Nm}$

GST 11 - 2 W												Dimensions page 3-143			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1F	1G	1H	1K	1F	1G	1H	1K	1F	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
4.056	$P_1$ $M_2$			90.2 1210	90.2 1210			55.5 1490	55.5 1490			27.8 1490	27.8 1490		
4.457	$P_1$ $M_2$			88.5 1305	88.5 1305			54.5 1606	54.5 1606			27.2 1606	27.2 1606		
5.324	$P_1$ $M_2$			73.5 1295	73.5 1295			45.2 1594	45.2 1594			22.6 1594	22.6 1594		
5.850	$P_1$ $M_2$			74.3 1439	74.3 1439			45.8 1772	45.8 1772			22.9 1772	22.9 1772		
6.400	$P_1$ $M_2$		53.6 1134	69.1 1462	69.1 1462		33.0 1397	42.5 1801	42.5 1801		16.5 1397	21.3 1801	21.3 1801		
6.864	$P_1$ $M_2$			73.9 1677	73.9 1677			45.5 2065	45.5 2065			22.7 2065	22.7 2065		
7.800	$P_1$ $M_2$			66.5 1717	66.5 1717			40.9 2114	40.9 2114			20.5 2114	20.5 2114		
9.010	$P_1$ $M_2$			61.6 1835	61.6 1835			37.9 2259	37.9 2259			19.0 2259	19.0 2259		
9.856	$P_1$ $M_2$		53.6 1747	57.9 1889	57.9 1889		33.0 2151	35.7 2325	35.7 2325		16.5 2151	17.8 2325	17.8 2325		
11.200	$P_1$ $M_2$		52.1 1933	52.1 1933	52.1 1933		32.1 2380	32.1 2380	32.1 2380		16.1 2380	16.1 2380	16.1 2380		
12.571	$P_1$ $M_2$	27.3 1135	45.3 1886	49.2 2047	49.2 2047	16.8 1398	27.9 2322	30.3 2520	30.3 2520	8.40 1398	14.0 2322	15.2 2520	15.2 2520		
14.286	$P_1$ $M_2$	27.3 1290	44.3 2094	44.3 2094	44.3 2094	16.8 1588	27.3 2579	27.3 2579	27.3 2579	8.40 1588	13.6 2579	13.6 2579	13.6 2579		
15.400	$P_1$ $M_2$		39.1 1991	42.9 2188	42.9 2188		24.1 2452	26.4 2695	26.4 2695		12.0 2452	13.2 2695	13.2 2695		
17.500	$P_1$ $M_2$		38.7 2240	38.7 2240	38.7 2240		23.8 2758	23.8 2758	23.8 2758		11.9 2758	11.9 2758	11.9 2758		
20.289	$P_1$ $M_2$	19.0 1275	31.5 2115	33.3 2239		11.7 1570	19.4 2604	20.5 2756		5.85 1570	9.70 2604	10.3 2756			
23.056	$P_1$ $M_2$	19.0 1449	31.0 2366	31.0 2366		11.7 1784	19.1 2913	19.1 2913		5.85 1784	9.55 2913	9.55 2913			
24.933	$P_1$ $M_2$	15.9 1310	26.4 2179	27.3 2256		9.77 1613	16.3 2684	16.8 2777		4.89 1613	8.13 2684	8.42 2777			
28.333	$P_1$ $M_2$	15.9 1488	25.4 2382	25.4 2382		9.77 1832	15.6 2933	15.6 2933		4.89 1832	7.82 2933	7.82 2933			
32.267	$P_1$ $M_2$	12.8 1362	21.2 2267			7.85 1676	13.1 2791			3.93 1676	6.54 2791				
36.667	$P_1$ $M_2$	12.8 1547	19.6 2382			7.85 1905	12.1 2933			3.93 1905	6.04 2933				
39.160	$P_1$ $M_2$	10.7 1380	17.7 2295			6.55 1699	10.9 2826			3.28 1699	5.45 2826				
44.500	$P_1$ $M_2$	10.7 1568	16.2 2382			6.55 1930	9.96 2933			3.28 1930	4.98 2933				
49.500	$P_1$ $M_2$	8.54 1399				5.26 1722				2.63 1722					
56.250	$P_1$ $M_2$	8.54 1589				5.26 1957				2.63 1957					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 2848 \text{ Nm}$

GST 11 - 3 W										Dimensions page 3-144			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
40.816	P <sub>1</sub>	7.37	12.0	15.6	15.6	4.54	7.38	9.58	9.58	2.27	3.69	4.79	4.79
	M <sub>2</sub>	981	1594	2071	2071	1208	1963	2550	2550	1208	1963	2550	2550
44.000	P <sub>1</sub>	7.37	12.0	13.7	13.7	4.54	7.38	8.40	8.40	2.27	3.69	4.20	4.20
	M <sub>2</sub>	1057	1718	1957	1957	1302	2116	2410	2410	1302	2116	2410	2410
50.000	P <sub>1</sub>	7.37	12.0	13.6	13.6	4.54	7.38	8.36	8.36	2.27	3.69	4.18	4.18
	M <sub>2</sub>	1202	1953	2213	2213	1479	2404	2725	2725	1479	2404	2725	2725
57.968	P <sub>1</sub>	7.37	11.1	11.1	11.1	4.54	6.82	6.82	6.82	2.27	3.41	3.41	3.41
	M <sub>2</sub>	1393	2093	2093	2093	1715	2577	2577	2577	1715	2577	2577	2577
61.250	P <sub>1</sub>		10.3	11.1	11.1		6.35	6.83	6.83		3.18	3.41	3.41
	M <sub>2</sub>		2059	2213	2213		2535	2725	2725		2535	2725	2725
71.011	P <sub>1</sub>		9.25	9.25	9.25		5.70	5.70	5.70		2.85	2.85	2.85
	M <sub>2</sub>		2141	2141	2141		2637	2637	2637		2637	2637	2637
80.694	P <sub>1</sub>		8.60	8.60	8.60		5.30	5.30	5.30		2.65	2.65	2.65
	M <sub>2</sub>		2263	2263	2263		2787	2787	2787		2787	2787	2787
87.267	P <sub>1</sub>		7.59	7.59	7.59		4.67	4.67	4.67		2.34	2.34	2.34
	M <sub>2</sub>		2157	2157	2157		2656	2656	2656		2656	2656	2656
99.167	P <sub>1</sub>		7.06	7.06	7.06		4.35	4.35	4.35		2.17	2.17	2.17
	M <sub>2</sub>		2282	2282	2282		2810	2810	2810		2810	2810	2810
112.933	P <sub>1</sub>		5.95	5.95	5.95		3.66	3.66	3.66		1.83	1.83	1.83
	M <sub>2</sub>		2189	2189	2189		2695	2695	2695		2695	2695	2695
129.074	P <sub>1</sub>	5.17	5.42	5.42		3.18	3.34	3.34		1.59	1.67	1.67	
	M <sub>2</sub>	2175	2282	2282		2678	2810	2810		2678	2810	2810	
146.993	P <sub>1</sub>	4.57	4.57	4.57		2.81	2.81	2.81		1.41	1.41	1.41	
	M <sub>2</sub>	2189	2189	2189		2695	2695	2695		2695	2695	2695	
158.194	P <sub>1</sub>	4.43	4.43	4.43		2.73	2.73	2.73		1.36	1.36	1.36	
	M <sub>2</sub>	2282	2282	2282		2810	2810	2810		2810	2810	2810	
180.156	P <sub>1</sub>	3.73	3.73	3.73		2.30	2.30	2.30		1.15	1.15	1.15	
	M <sub>2</sub>	2189	2189	2189		2695	2695	2695		2695	2695	2695	
207.778	P <sub>1</sub>	3.37	3.37			2.08	2.08			1.04	1.04		
	M <sub>2</sub>	2282	2282			2810	2810			2810	2810		
236.622	P <sub>1</sub>	2.84	2.84			1.75	1.75			0.87	0.87		
	M <sub>2</sub>	2189	2189			2695	2695			2695	2695		
252.167	P <sub>1</sub>	2.78	2.78			1.71	1.71			0.86	0.86		
	M <sub>2</sub>	2282	2282			2810	2810			2810	2810		
268.889	P <sub>1</sub>	2.64	2.64			1.63	1.63			0.81	0.81		
	M <sub>2</sub>	2313	2313			2848	2848			2848	2848		
326.333	P <sub>1</sub>	2.18	2.18			1.34	1.34			0.67	0.67		
	M <sub>2</sub>	2313	2313			2848	2848			2848	2848		
363.000	P <sub>1</sub>	1.85				1.14				0.57			
	M <sub>2</sub>	2189				2695				2695			
412.500	P <sub>1</sub>	1.72				1.06				0.53			
	M <sub>2</sub>	2313				2848				2848			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 5786 \text{ Nm}$

GST 14 - 2 W										Dimensions page 3-143		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1G	1H	1K	1G	1H	1K	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
4.225	$P_1$			158.1			97.4			48.7		
	$M_2$			2211			2722			2722		
4.643	$P_1$			154.5			95.1			47.6		
	$M_2$			2374			2923			2923		
5.200	$P_1$		107.8	143.7		66.4	88.5		33.2	44.2		
	$M_2$		1855	2473		2284	3045		2284	3045		
5.714	$P_1$		107.8	139.5		66.4	85.9		33.2	43.0		
	$M_2$		2038	2638		2510	3249		2510	3249		
6.286	$P_1$		105.5	132.6		65.0	81.7		32.5	40.8		
	$M_2$		2195	2759		2702	3397		2702	3397		
7.150	$P_1$			119.8			73.8			36.9		
	$M_2$			2834			3490			3490		
8.027	$P_1$		91.0	115.7		56.0	71.2		28.0	35.6		
	$M_2$		2418	3072		2977	3783		2977	3783		
8.800	$P_1$		104.2	104.2		64.2	64.2		32.1	32.1		
	$M_2$		3035	3035		3737	3737		3737	3737		
9.841	$P_1$		78.6	96.6		48.4	59.5		24.2	29.7		
	$M_2$		2559	3145		3151	3873		3151	3873		
11.000	$P_1$		87.9	87.9		54.1	54.1		27.1	27.1		
	$M_2$		3200	3200		3940	3940		3940	3940		
12.362	$P_1$		82.9	82.9		51.0	51.0		25.5	25.5		
	$M_2$		3391	3391		4176	4176		4176	4176		
14.048	$P_1$		74.6	74.6		45.9	45.9		23.0	23.0		
	$M_2$		3468	3468		4270	4270		4270	4270		
15.156	$P_1$		72.3	72.3		44.5	44.5		22.3	22.3		
	$M_2$		3627	3627		4466	4466		4466	4466		
17.222	$P_1$		65.1	65.1		40.1	40.1		20.0	20.0		
	$M_2$		3708	3708		4565	4565		4565	4565		
20.044	$P_1$	38.1	60.0	60.0	23.4	37.0	37.0	11.7	18.5	18.5		
	$M_2$	2524	3981	3981	3108	4902	4902	3108	4902	4902		
22.778	$P_1$	38.1	54.0	54.0	23.4	33.2	33.2	11.7	16.6	16.6		
	$M_2$	2868	4069	4069	3532	5010	5010	3532	5010	5010		
24.567	$P_1$	32.6	52.3		20.0	32.2		10.0	16.1			
	$M_2$	2646	4252		3258	5236		3258	5236			
27.917	$P_1$	32.6	47.1		20.0	29.0		10.0	14.5			
	$M_2$	3007	4349		3703	5355		3703	5355			
32.267	$P_1$	25.7	41.4		15.8	25.5		7.90	12.7			
	$M_2$	2739	4415		3373	5436		3373	5436			
36.667	$P_1$	25.7	38.6		15.8	23.8		7.90	11.9			
	$M_2$	3113	4685		3833	5768		3833	5768			
39.160	$P_1$	21.5	34.2		13.2	21.0		6.62	10.5			
	$M_2$	2787	4428		3431	5452		3431	5452			
44.500	$P_1$	21.5	31.9		13.2	19.7		6.62	9.82			
	$M_2$	3167	4699		3899	5786		3899	5786			
49.500	$P_1$	17.3			10.7			5.33				
	$M_2$	2836			3492			3492				
56.250	$P_1$	17.3			10.7			5.33				
	$M_2$	3223			3969			3969				

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical gearboxes

## Gearbox with free input shaft



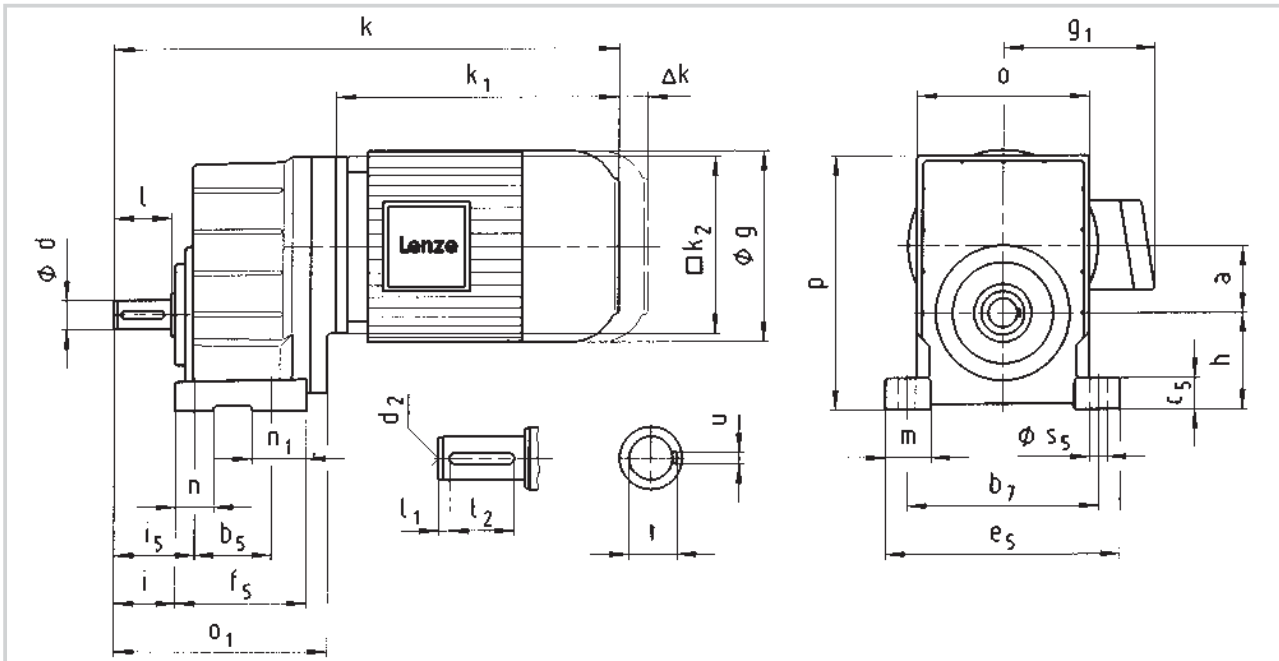
**M<sub>2</sub> perm ≤ 5920 Nm**

<b>GST 14 - 3 W</b>										Dimensions page 3-144			
n <sub>1</sub>		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]												
40.185	P <sub>1</sub> M <sub>2</sub>		25.6 3353	27.8 3635	27.8 3635		15.8 4129	17.1 4476	17.1 4476		7.88 4129	8.54 4476	8.54 4476
42.580	P <sub>1</sub> M <sub>2</sub>	14.9 2066	22.5 3122	24.9 3461	24.9 3461	9.16 2543	13.9 3844	15.4 4262	15.4 4262	4.58 2543	6.93 3844	7.68 4262	7.68 4262
48.386	P <sub>1</sub> M <sub>2</sub>	14.9 2347	22.5 3548	24.9 3933	24.9 3933	9.16 2890	13.9 4368	15.4 4843	15.4 4843	4.58 2890	6.93 4368	7.68 4843	7.68 4843
53.148	P <sub>1</sub> M <sub>2</sub>		22.4 3881	22.4 3881	22.4 3881		13.8 4779	13.8 4779	13.8 4779		6.90 4779	6.90 4779	6.90 4779
59.321	P <sub>1</sub> M <sub>2</sub>		19.4 3743	22.1 4277	22.1 4277		11.9 4609	13.6 5267	13.6 5267		5.96 4609	6.81 5267	6.81 5267
69.042	P <sub>1</sub> M <sub>2</sub>		17.7 3993	17.7 3993	17.7 3993		10.9 4917	10.9 4917	10.9 4917		5.46 4917	5.46 4917	5.46 4917
78.457	P <sub>1</sub> M <sub>2</sub>		17.7 4538	17.7 4538	17.7 4538		10.9 5587	10.9 5587	10.9 5587		5.46 5587	5.46 5587	5.46 5587
93.541	P <sub>1</sub> M <sub>2</sub>	10.1 3079	14.7 4487	14.7 4487		6.22 3791	9.06 5524	9.06 5524		3.11 3791	4.53 5524	4.53 5524	
96.157	P <sub>1</sub> M <sub>2</sub>		15.2 4777	15.2 4777	15.2 4777		9.38 5882	9.38 5882	9.38 5882		4.69 5882	4.69 5882	4.69 5882
106.296	P <sub>1</sub> M <sub>2</sub>	10.1 3499	13.9 4808	13.9 4808		6.22 4308	8.54 5920	8.54 5920		3.11 4308	4.27 5920	4.27 5920	
130.278	P <sub>1</sub> M <sub>2</sub>	10.1 4288	11.3 4808	11.3 4808		6.22 5280	6.97 5920	6.97 5920		3.11 5280	3.49 5920	3.49 5920	
139.211	P <sub>1</sub> M <sub>2</sub>	8.64 3919	10.3 4658	10.3 4658		5.32 4825	6.32 5736	6.32 5736		2.66 4825	3.16 5736	3.16 5736	
158.194	P <sub>1</sub> M <sub>2</sub>	8.64 4453	9.32 4808	9.32 4808		5.32 5483	5.74 5920	5.74 5920		2.66 5483	2.87 5920	2.87 5920	
171.111	P <sub>1</sub> M <sub>2</sub>	8.62 4808	8.62 4808	8.62 4808		5.31 5920	5.31 5920	5.31 5920		2.65 5920	2.65 5920	2.65 5920	
204.722	P <sub>1</sub> M <sub>2</sub>	6.94 4629	7.21 4808			4.27 5699	4.44 5920			2.14 5699	2.22 5920		
236.622	P <sub>1</sub> M <sub>2</sub>	6.09 4693	6.09 4693			3.75 5779	3.75 5779			1.87 5779	1.87 5779		
248.458	P <sub>1</sub> M <sub>2</sub>	5.83 4719	5.94 4808			3.59 5810	3.66 5920			1.79 5810	1.83 5920		
268.889	P <sub>1</sub> M <sub>2</sub>	5.49 4808	5.49 4808			3.38 5920	3.38 5920			1.69 5920	1.69 5920		
326.333	P <sub>1</sub> M <sub>2</sub>	4.52 4808	4.52 4808			2.78 5920	2.78 5920			1.39 5920	1.39 5920		
363.000	P <sub>1</sub> M <sub>2</sub>	3.97 4693				2.44 5779				1.22 5779			
412.500	P <sub>1</sub> M <sub>2</sub>	3.58 4808				2.20 5920				1.10 5920			

Thermal power limit not considered (see page 2-4)

# Dimensions - Helical gearboxes

Geared motors (4-pole)



Geared motor

**GST □□ - 1 M VBR**

Motor frame size

Geared motor		Motor frame size																		
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22								
		063C32	071C42	080C42		100C32			132C32											
		063C42																		
Motor	g	123	138	156	176	196		220	261	310	355									
	g <sub>1</sub>	Without option	100	109	141	146	157		167	195	207	226								
		Brake motor	107	116	130	135	146		156	195	207	226								
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592								
	k <sub>2</sub>	120	120	145	180	180		222	265	300	300									
	Δk**	Brake	40	52	73	70	79		90	109	96	83								
Separate fan		130	128	128	127	109		102	115	96	83									
Separate fan + brake		170	165	184	180	170		183	201	208	198									
Gearbox size	Gearbox					Total length														
	o*	o <sub>1</sub>	p*	h*	a	k														
04	100	134	138	50	36	331	351	373	434											
05	115	165	168	63	45	352	372	394	455	489										
06	145	191	211	80	56	375	395	417	478	512	528	572								
07	180	223	264	100	70			446	507	541	557	601	649	726	770					
09	222	271	329	125	89				550	584	600	644	692	769	813	885				

Gearbox size	Solid shaft								Foot									
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
04	16	32	6	20	M5	5	18	55	105	17	128	80	35	45	24	20	25	9
05	20	40	6	28	M6	6	22.5	70	125	22	154	99	43	56	32	26	29	11
06	25	50	4	40	M10	8	28	72	160	27	194	115	53	68	37	30	43	13.5
07	30	60	7.5	45	M10	8	33	80	200	35	245	137	64	84	47.5	40	57	18
09	40	80	8.5	63	M16	12	43	105	245	43	296	161	84	107	50.5	45	56	18

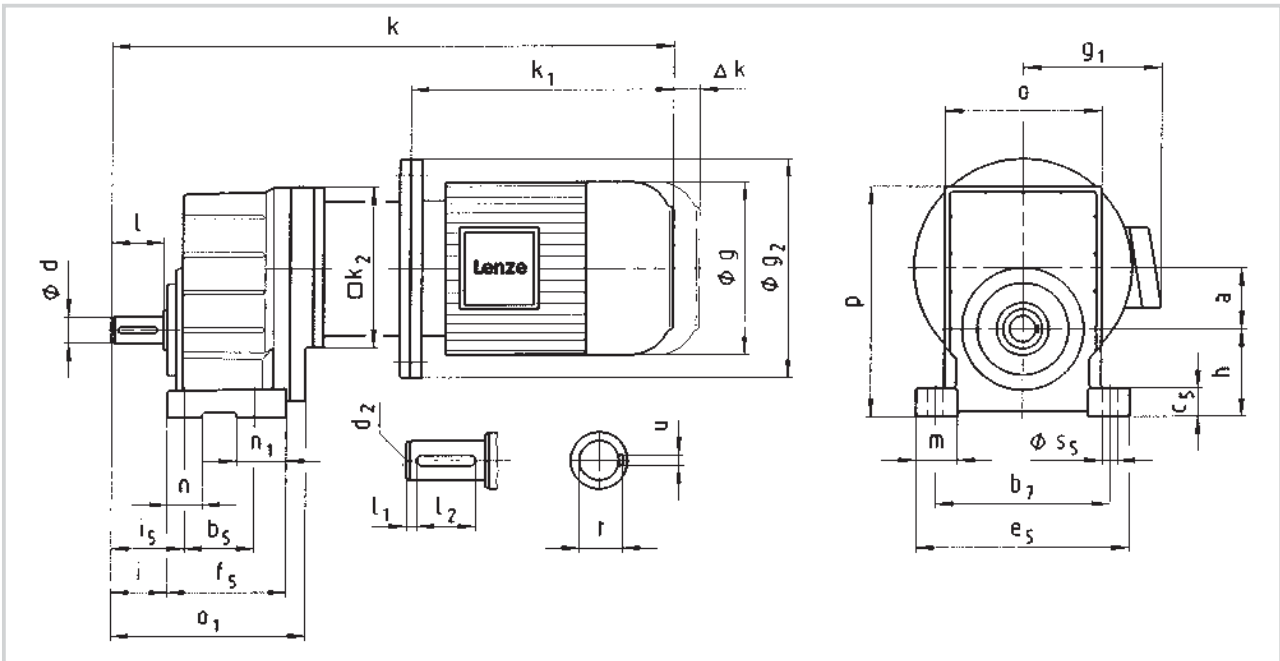
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h+a

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size	
<b>GST□□ - 1 M VBR</b>		<b>200N32</b>	
Motor	g		388
	g <sub>1</sub>	Without option	291
		Brake motor	309
	g <sub>2</sub>		400
	k <sub>1</sub>		300
	k <sub>2</sub>		300
	Δk	Brake	175
Separate fan		387	
Separate fan + brake		507	
Gearbox size		Total length	
	o*    o <sub>1</sub> p*    h    a	k	
09	222    271    329    125    89	1198	

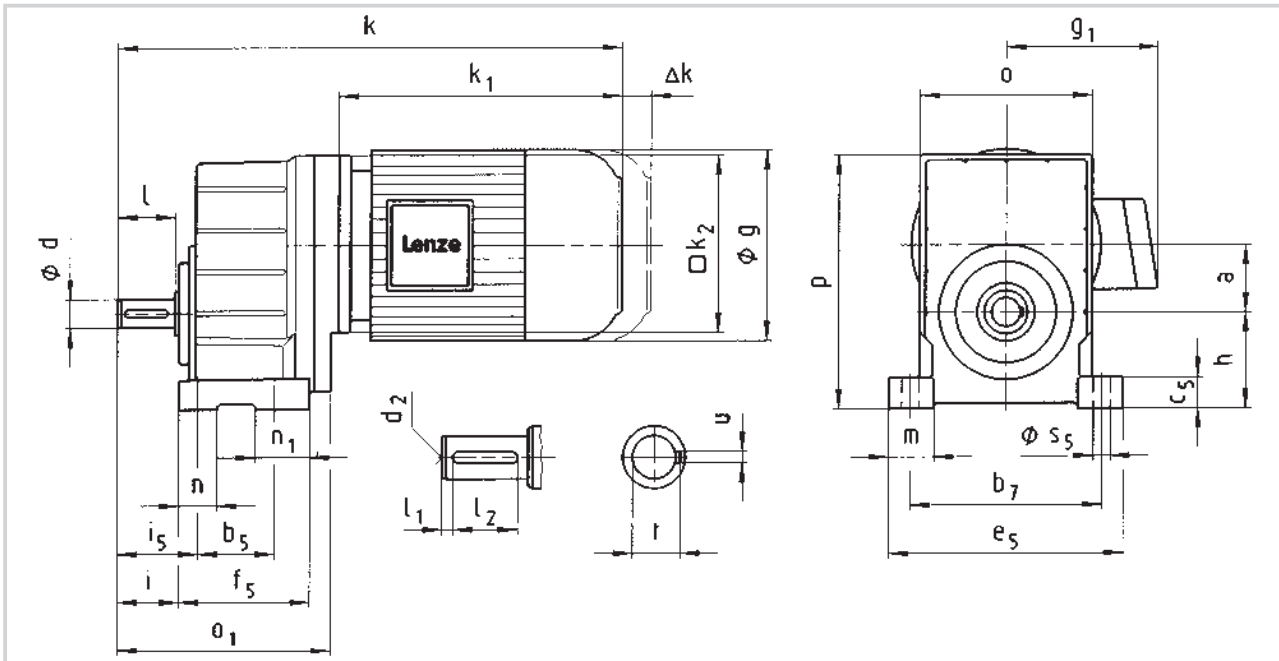
Gearbox size	Solid shaft								Foot									
	d k <sub>6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
09	40	80	8.5	63	M16	12	43	105	245	43	296	161	84	107	50.5	45	56	17.5

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



3

Geared motor		Motor frame size																
<b>GST □□ - 1 M VBR</b>		063-11	063-31	071-□□ 071-3□	080-1□ 080-3□	090-11	100-31	100-41	112-31 112-41	132-21								
Motor	g		129	142	156	178		194	222	262								
	g <sub>1</sub>	Without option	105	131	131	141		158	165	197								
		Brake motor	105	131	131	140		159	165	197								
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409							
	k <sub>2</sub>		100	145	145	180		180	222	265								
	Δk**	Brake		56	66	68	74		94	101	127							
Separate fan			71	80	94	101		97	95	104								
Separate fan + brake			118	134	150	164		169	183	218								
Gearbox size	Gearbox					Total length												
	o*	o <sub>1</sub>	p*	h*	a	k												
04	100	134	138	50	36	311	322											
05	115	165	168	63	45			345	394	422	460	490						
06	145	191	211	80	56			368	417	445	483	513	531					
07	180	223	264	100	70				446	474	512	542	560	655				
09	222	271	329	125	89					517	555	585	603	698				

Gearbox size	Solid shaft								Foot									
	d k <sub>6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
04	16	32	6	20	M5	5	18	55	105	17	128	80	35	45	24	20	25	9
05	20	40	6	28	M6	6	22.5	70	125	22	154	99	43	56	32	26	29	11
06	25	50	4	40	M10	8	28	72	160	27	194	115	53	68	37	30	43	13.5
07	30	60	7.5	45	M10	8	33	80	200	35	245	137	64	84	47.5	40	57	18
09	40	80	8.5	63	M16	12	43	105	245	43	296	161	84	107	50.5	45	56	18

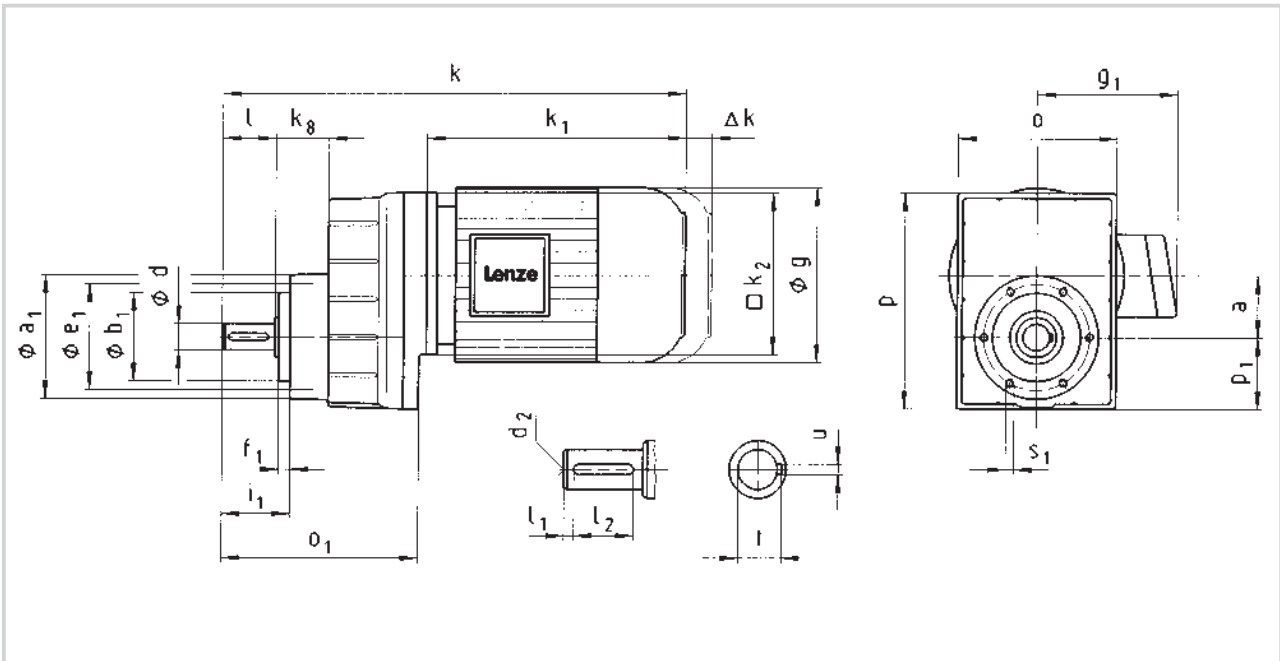
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h+a

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size															
		063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32	180-22 180-32					
Motor	g	123	138	156	176	196	220	261	310	355							
	g <sub>1</sub>	Without option	110	109	141	146	157	167	195	207	226						
		Brake motor	107	116	130	135	146	156	195	207	226						
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592					
	k <sub>2</sub>	120	120	145	180	180	222	265	300	300							
	Δk**	Brake	40	52	73	70	79	90	109	96	83						
Separate fan		130	128	128	127	109	102	115	96	83							
Separate fan + brake		170	165	184	180	170	183	201	208	198							
Gearbox size	Gearbox						Total length										
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k <sub>g</sub>	k										
	04	100	134	129	41	36	35	331	351	373	434						
	05	115	165	156	51	45	43	352	372	394	455	489					
	06	145	191	194	63	56	48	375	395	417	478	512	528	572			
	07	180	223	245	82	70	60			446	507	541	557	601	649	726	770
09	222	271	304	101	89	74				550	584	600	644	692	769	813	885

Gearbox size	Solid shaft							Pitch circle						
	d k <sub>6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
04	16	32	6	20	M5	5	18	72	48	61	8	43	M5x10	
05	20	40	6	28	M6	6	22.5	88	58	74	9	52	M6x12	
06	25	50	4	40	M10	8	28	109	70	90	11	64	M8x14	
07	30	60	7.5	45	M10	8	33	140	100	120	13	77	M10x18	
09	40	80	8.5	63	M16	12	43	174	120	145	15	100	M12x20	

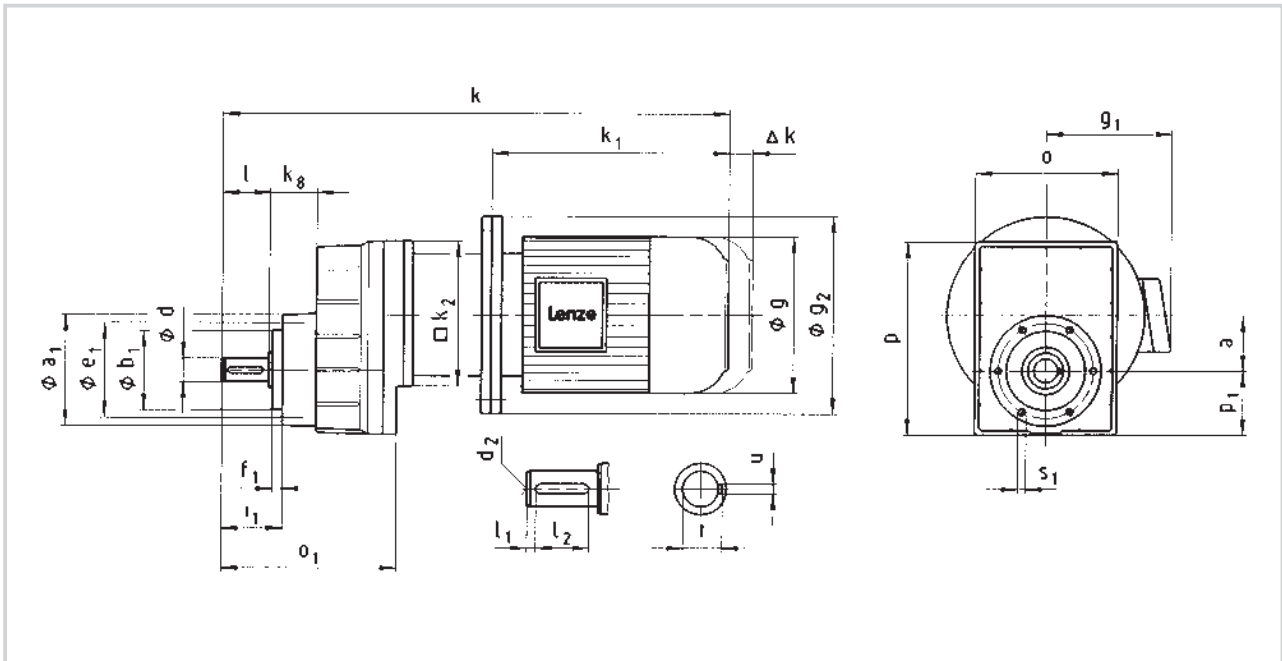
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor							Motor frame size	
<b>GST□□ - 1 M VCR</b>							<b>200N32</b>	
Motor	g						388	
	g <sub>1</sub>	Without option					291	
		Brake motor					309	
	g <sub>2</sub>						400	
	k <sub>1</sub>						661	
	k <sub>2</sub>						300	
	Δk	Brake					175	
Separate fan					387			
Separate fan + brake					507			
Gearbox size		Gearbox					Total length	
		o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k <sub>8</sub>	k
09		222	271	304	101	89	74	1198

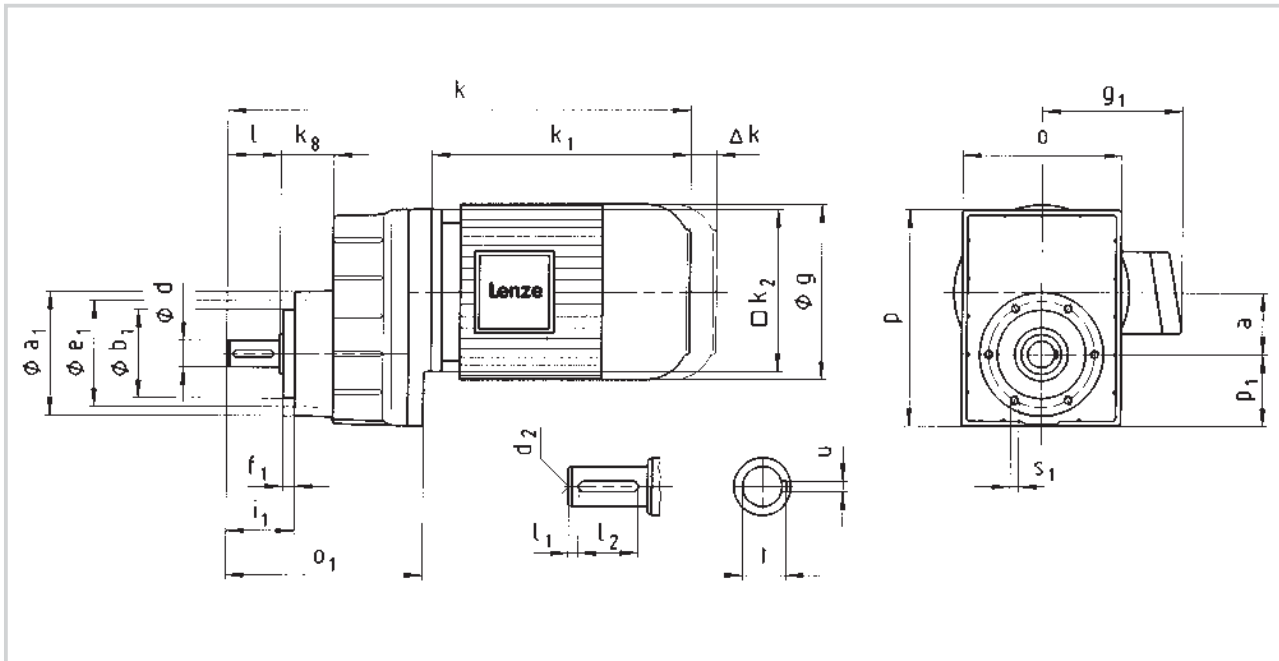
Gearbox size	Solid shaft								Pitch circle					
	d k <sub>6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h <sub>7</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
09	40	80	8.5	63	M16	12	43	174	120	145	15	100	M12x20	

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size													
<b>GST □□ - 1 M VCR</b>		063-11	063-31	071-□□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21					
Motor	g		129	142	156	178	194		222	262					
	g <sub>1</sub>	Without option	105	131	131	141		158		165	197				
		Brake motor	105	131	131	140		159		165	197				
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409				
	k <sub>2</sub>			100	145	145	180		180	222	265				
	Δk**	Brake		56	66	68	74		94	101	127				
Separate fan			71	80	94	101		97	95	104					
Separate fan + brake			118	134	150	164		169	183	218					
Gearbox size	Gearbox						Total length								
	o*	o <sub>1</sub>	p <sub>1</sub> *	h*	a	k <sub>g</sub>	k								
04	100	134	129	41	36	35	311	322							
05	115	165	156	51	45	43			345	394	422	460	490		
06	145	191	194	63	56	48			368	417	445	483	513	531	
07	180	223	245	82	70	60				446	474	512	542	560	655
09	222	271	304	101	89	74					517	555	585	603	698

Gearbox size	Solid shaft							Pitch circle					
	d k <sub>6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°
04	16	32	6	20	M5	5	18	72	48	61	8	43	M5x10
05	20	40	6	28	M6	6	22.5	88	58	74	9	52	M6x12
06	25	50	4	40	M10	8	28	109	70	90	11	64	M8x14
07	30	60	7.5	45	M10	8	33	140	100	120	13	77	M10x18
09	40	80	8.5	63	M16	12	43	174	120	145	15	100	M12x20

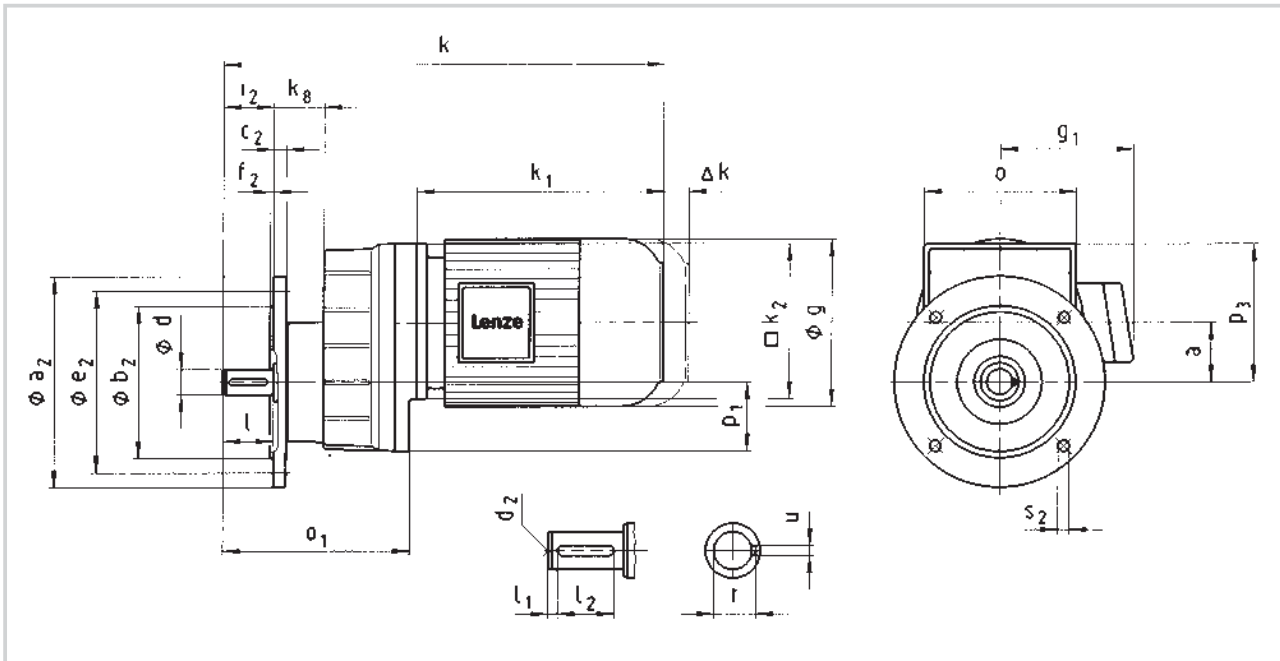
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor

**GST □□ - 1 M VCK**

Motor frame size

		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22					
		063C32	071C42	080C42		100C32			132C32			180-32					
		063C42															
Motor	g	123	138	156	176	196	220		261	310		355					
	g <sub>1</sub>	Without option		100	109	141	146	157		167	195		226				
		Brake motor		107	116	130	135	146		156	195		226				
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592					
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300					
	Δk**	Brake		40	52	73	70	79		90	109		96	83			
Separate fan		130	128	128	127	109		102	115		96	83					
Separate fan + brake		170	165	184	180	170		183	201		208	198					
Gearbox size	Gearbox						Total length										
	o*	o <sub>1</sub>	p <sub>1</sub>	p <sub>3</sub> *	a	k <sub>8</sub>	k										
	04	100	134	41	88	36	35	331	351	373	434						
	05	115	165	51	105	45	43	352	372	394	455	489					
	06	145	191	63	131	56	48	375	395	417	478	512	528	572			
	07	180	223	82	164	70	60			446	507	541	557	601	649	726	770
09	222	271	101	204	89	74				550	584	600	644	692	769	813	885

Gearbox size	Solid shaft								Output flange					
	d <sub>k6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
04	16	32	6	20	M5	5	18	120	80	10	100	3	32	7
								140	95		115	3		9
								160	110		130	3.5		9
05	20	40	6	28	M6	6	22.5	120	80	10	100	3	40	7
								140	95	10	115	3		9
								160	110	10	130	3.5		9
								200	130	12	165	3.5		11
06	25	50	4	40	M10	8	28	160	110	12	130	3.5	50	9
								200	130		165			11
07	30	60	7.5	45	M10	8	33	200	130	14	165	3.5	60	11
								250	180	15	215	4		13.5
09	40	80	8.5	63	M16	12	43	250	180	16	215	4	80	13.5
								300	230	18	265			

Dimensions in [mm]

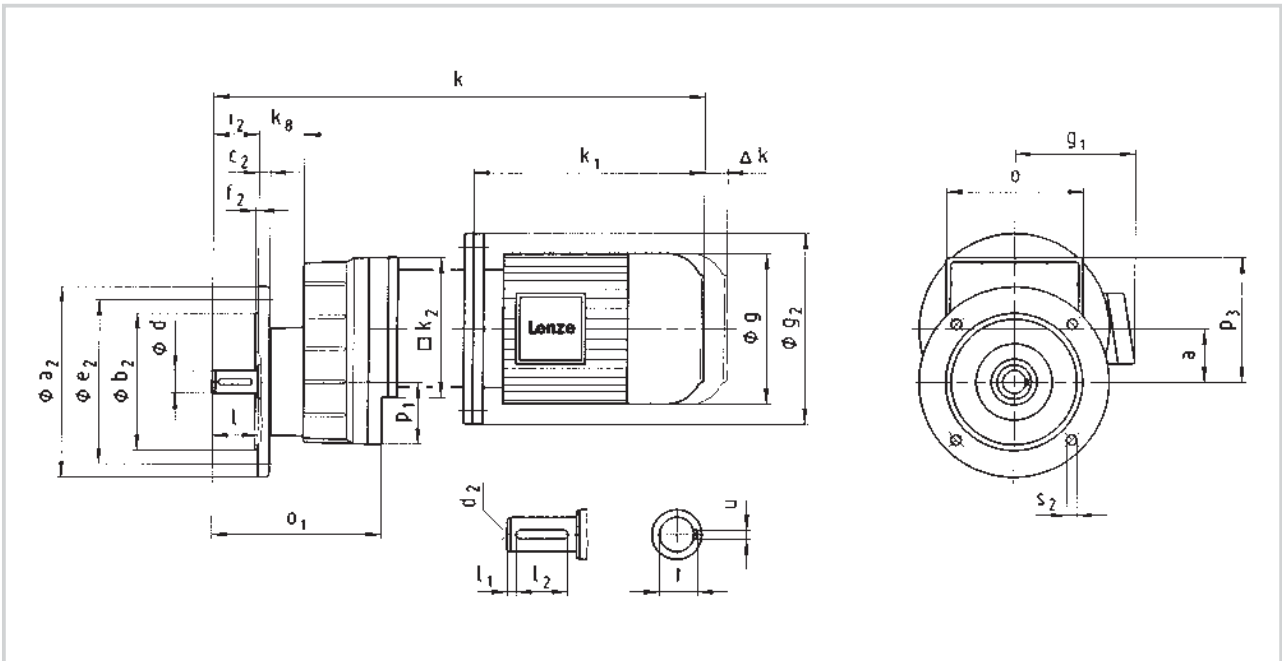
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8



# Dimensions - Helical gearboxes

## Geared motors (4-pole)



3

Geared motor		Motor frame size				
<b>GST□□ - 1 M VCK</b>		<b>200N32</b>				
Motor	g	388				
	g <sub>1</sub>	Without option	291			
		Brake motor	309			
	g <sub>2</sub>	400				
	k <sub>1</sub>	661				
	k <sub>2</sub>	300				
	Δk	Brake	175			
Separate fan		387				
Separate fan + brake		507				
Gearbox size		Total length				
	Gearbox					k
	o*	o <sub>1</sub>	p <sub>1</sub>	p <sub>3</sub> *	a	k <sub>8</sub>
09	222	271	101	204	89	74
						1198

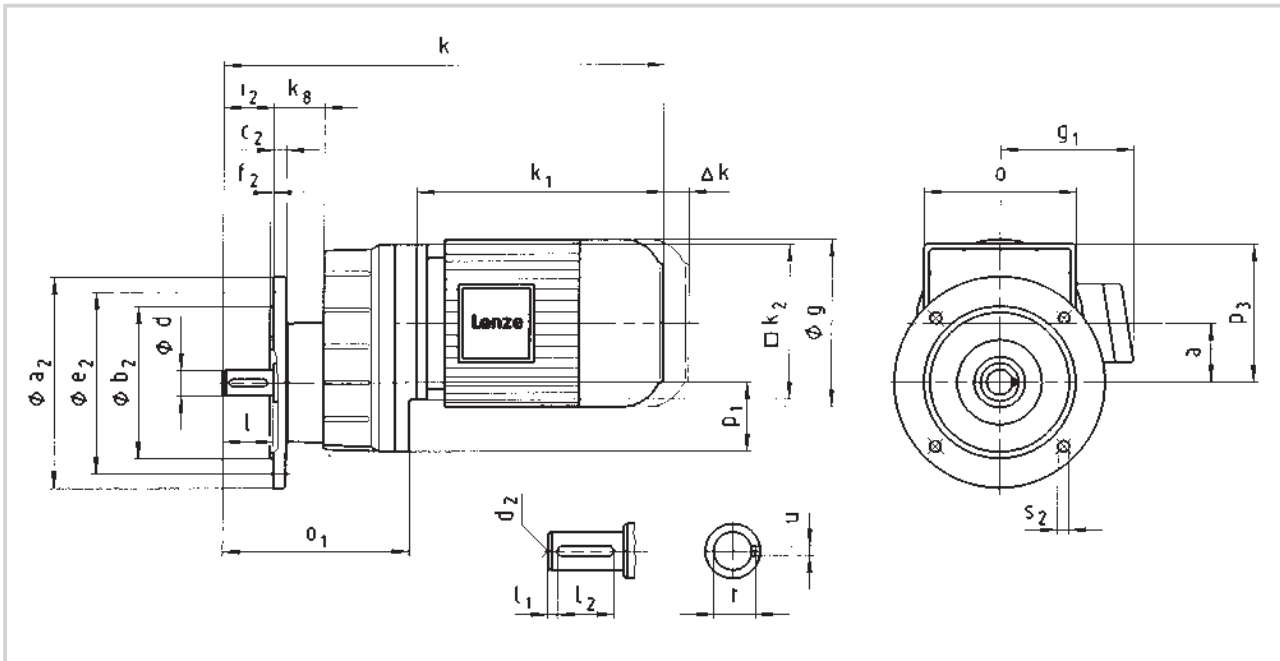
Gearbox size	Solid shaft								Output flange						
	d k <sub>6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°	
09	40	80	8.5	63	M16	12	43	250 300	180 230	16 18	215 265	4	80	13.5	

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



3

Geared motor		Motor frame size													
<b>GST □□ - 1 M VCK</b>		063-11	063-31	071-□ 071-3□	080-1□ 080-3□	090-11	100-31	100-41	112-31 112-41	132-21					
Motor	g		129	142	156	178		194	222	262					
	g <sub>1</sub>	Without option	105	131	131	141		158	165	197					
		Brake motor	105	131	131	140		159	165	197					
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409				
	k <sub>2</sub>			100	145	145	180		180	222	265				
	Δk**	Brake		56	66	68	74		94	101	127				
Separate fan			71	80	94	101		97	95	104					
Separate fan + brake			118	134	150	164		169	183	218					
Gearbox size	Gearbox						Total length								
	o*	o <sub>1</sub>	p <sub>1</sub>	p <sub>3</sub> *	a	k <sub>g</sub>	k								
04	100	134	41	88	36	35	311	322							
05	115	165	51	105	45	43			345	394	422	460	490		
06	145	191	63	131	56	48			368	417	445	483	513	531	
07	180	223	82	164	70	60				446	474	512	542	560	655
09	222	271	101	204	89	74					517	555	585	603	698

Gearbox size	Solid shaft							Output flange						
	d <sub>k6</sub>	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
04	16	32	6	20	M5	5	18	120	80	10	100	3	32	7
								140	95		115	3		9
								160	110		130	3.5		9
05	20	40	6	28	M6	6	22.5	120	80	10	100	3	40	7
								140	95		115	3		9
								160	110		130	3.5		9
								200	130		12	165		3.5
06	25	50	4	40	M10	8	28	160	110	12	130	3.5	50	9
								200	130		165	11		
07	30	60	7.5	45	M10	8	33	200	130	14	165	3.5	60	11
								250	180		15	215		4
09	40	80	8.5	63	M16	12	43	250	180	16	215	4	80	13.5
								300	230		18	265		

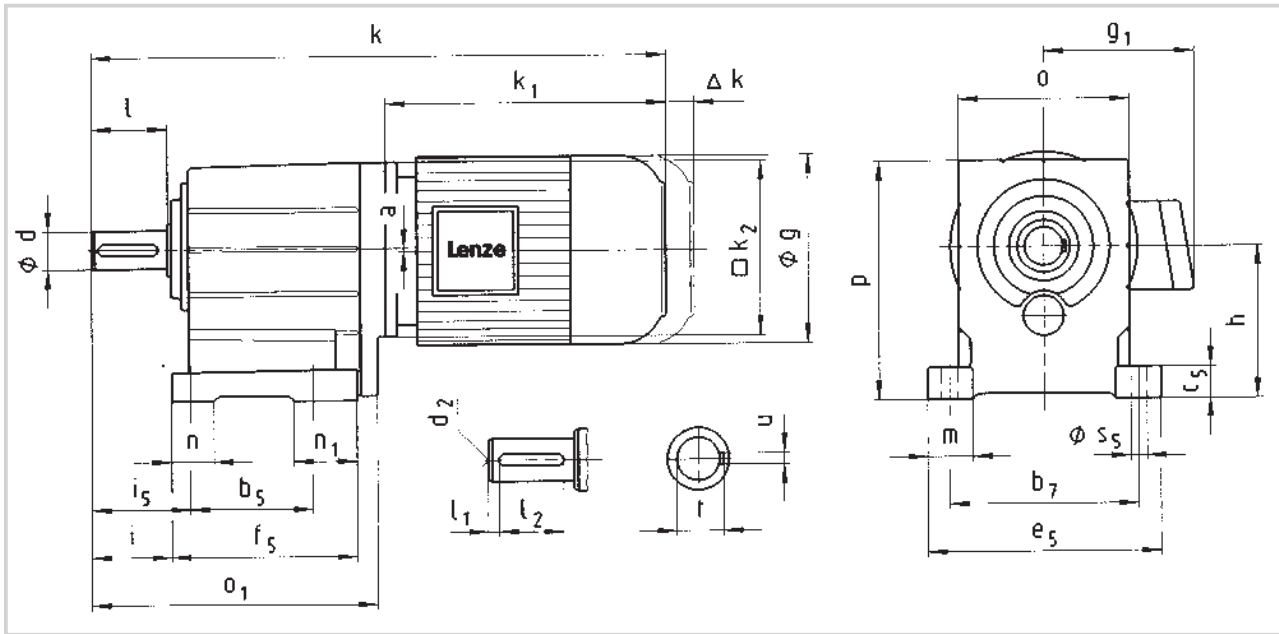
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For further attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



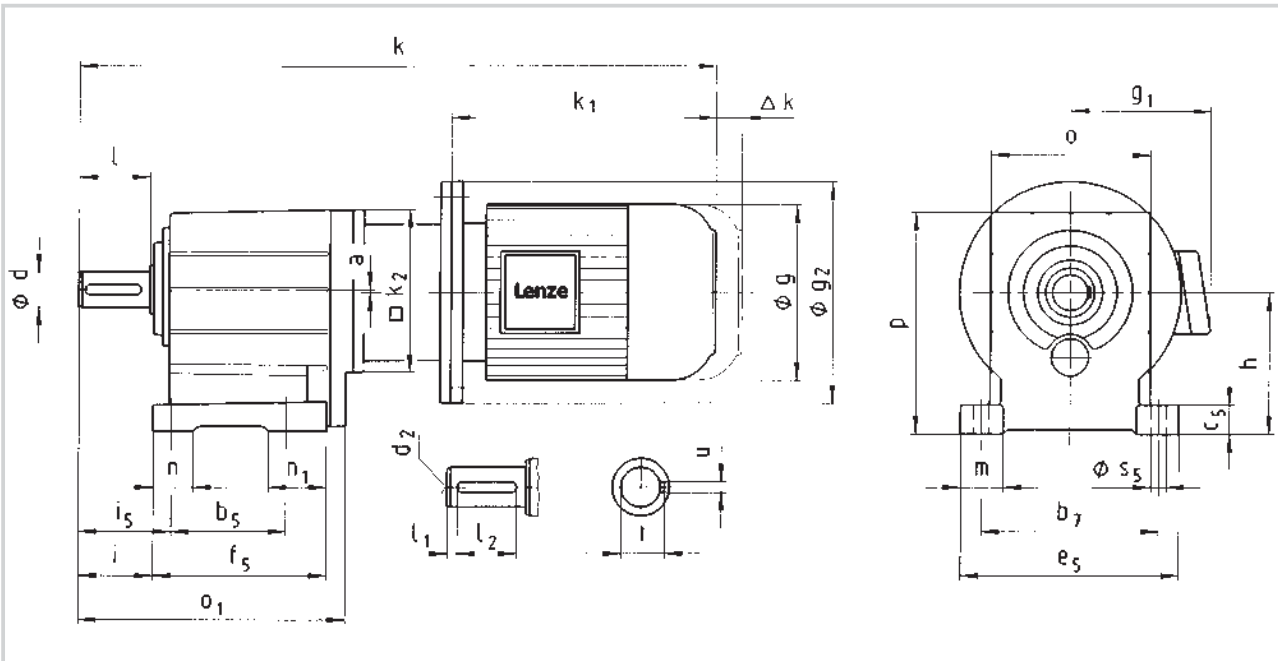
Geared motor		Motor frame size																
<b>GST □□ - 2 M VBR</b>		063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32	180-22 180-32					
Motor	g	123	138	156	176	196	220	261	310	355								
	g <sub>1</sub>	Without option	100	109	141	146	157	167	195	207	226							
		Brake motor	107	116	130	135	146	156	195	207	226							
	k <sub>1</sub>	156	188	207	225	276	309	319	363	404	475	519	592					
	k <sub>2</sub>	From gearbox size 04	100	120	120	145	180	180	222	265	300	300						
	Δk**	Brake	71	40	52	73	70	79	90	109	96	83						
Separate fan		-	130	128	128	127	109	102	115	96	83							
Separate fan + brake		-	170	165	184	180	170	183	201	208	198							
Gearbox size	Gearbox					Total length												
	o <sup>1)</sup>	o <sub>1</sub>	p <sup>1)</sup>	h <sup>1)</sup>	a	k												
03	90	127*	101	65	2	286*	317*	338*										
		139				298	329	350										
04	100	174	132	80	0		371	391	413	474								
05	115	214	159	100	1		401	421	443	504	538							
06	145	243	198	125	2		427	447	469	530	564	580	624					
07	180	302	251	160	3				525	586	620	636	680	728	805	849		
09	222	370	311	200	4					649	683	699	743	791	868	912	984	
11	270	433	385	250	4						740	756	800	848	925	969	1041	
14	328	533	479	315	6							849	890	938	1015	1059	1131	

Gearbox size	Solid shaft							Foot										
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
03	14	28	4	20	M5	5	16	60	91	11	105	84	34	40	20	-	-	6.6
	20	40	5	28	M6	6	22.5						46	52				
04	20	40	5	28	M6	6	22.5	76	105	18	129	112	43	53	24.5	20	36	9
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26

Dimensions in [mm] d ≤ 50 mm: k<sub>6</sub> \* With solid shaft d=14 <sup>1)</sup> Observe dimension k<sub>2</sub>. With gearbox size 03 and motor frame size 071, dimension g/2 > h-a  
d > 50 mm: m<sub>6</sub> \*\* For further attachments see section 8 With gearbox size 04 and motor frame size 090, dimension is k<sub>2</sub>/2 > h-a

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size					
<b>GST□□ - 2 M VBR</b>		<b>200N32</b>	<b>225N12 225N22</b>				
Motor	g	388	433				
	g <sub>1</sub>	Without option	291	319			
		Brake motor	309	327			
	g <sub>2</sub>	400	450				
	k <sub>1</sub>	661	693				
	k <sub>2</sub>	300	300				
	Δk	Brake	175	200			
Separate fan		387	388				
Separate fan + brake		507	518				
Gearbox size	Gearbox					Total length	
	o*	o <sub>1</sub>	p*	h	a	k	
09	222	370	311	200	4	1297	
11	270	433	385	250	4	1354	
14	328	533	479	315	6	1444	

Gearbox size	Solid shaft								Foot									
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26

Dimensions in [mm]

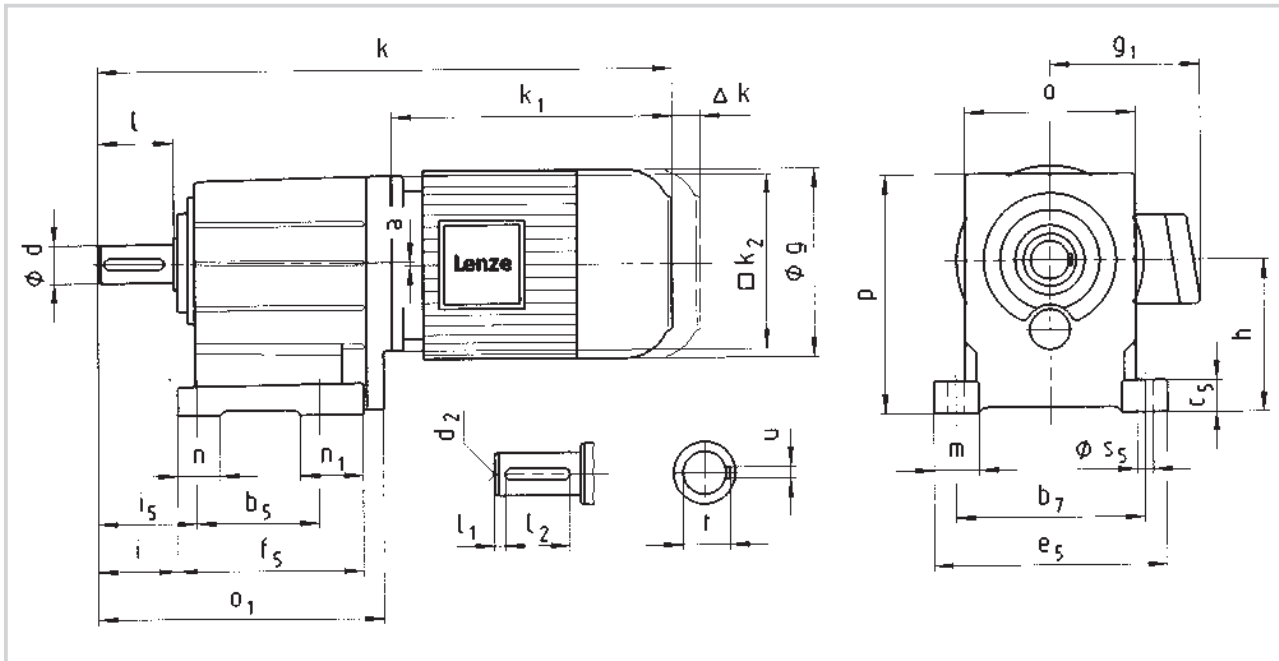
d ≤ 50 mm: k<sub>6</sub>

d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size																	
<b>GST □□ - 2 M VBR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21									
Motor	g		129	142	156	178		194	222	262									
	g <sub>1</sub>	Without option	105	131	131	141		158	165	197									
		Brake motor	105	131	131	140		159	165	197									
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409								
	k <sub>2</sub>			100	145	145	180		180	222	265								
	Δk**	Brake		56	66	68	74		94	101	127								
Separate fan			71	80	94	101		97	95	104									
Separate fan + brake			118	134	150	164		169	183	218									
Gearbox size	Gearbox					Total length													
	o*	o <sub>1</sub>	p*	h*	a	k													
04	100	174	132	80	0	351	362	364	413	441									
05	115	214	159	100	1			394	443	471	509	539							
06	145	243	198	125	2			420	469	497	535	565	583						
07	180	302	251	160	3				525	553	591	621	639	734					
09	222	370	311	200	4					616	654	684	702	797					
11	270	433	385	250	4						711	741	759	854					
14	328	533	479	315	6								849	944					

Gearbox size	Solid shaft									Foot									
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>	
04	20	40	5	28	M6	6	22.5	76	105	18	129	112	43	53	24.5	20	36	9	
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11	
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5	
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18	
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18	
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22	
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26	

Dimensions in [mm]

d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

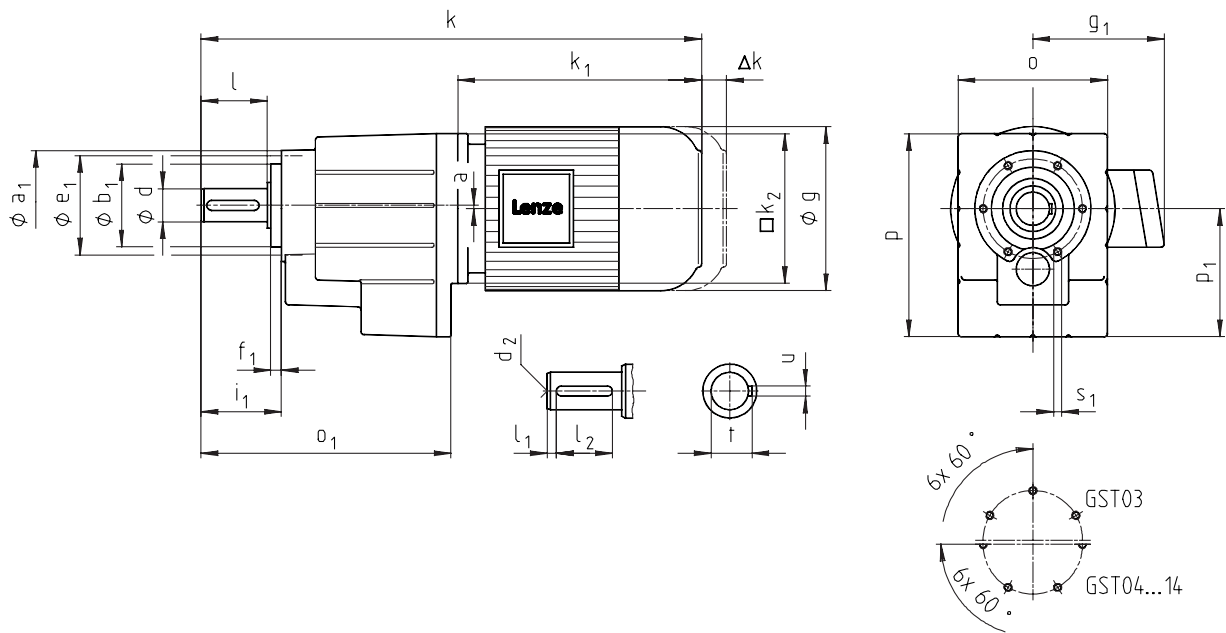
<sup>1)</sup> Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension is k<sub>2</sub>/2 > h-a

\*\* For further attachments see section 8

# Dimensions - Helical gearboxes

Geared motors (4-pole)

## GST □□ - 2 M VCR



# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor <b>GST □□ - 2 M VCR</b>		Motor frame size																			
		063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32	180-22 180-32								
Motor	<b>g</b>	123		138	156	176	196	220		261	310		355								
	<b>g<sub>1</sub></b>	Without option		100	109	141	146	157	167		195	207		226							
		Brake motor		107	116	130	135	146	156		195	207		226							
	<b>k<sub>1</sub></b>	156		188	207	225	276	309	319	363	404	475	519	592							
	<b>k<sub>2</sub></b>	From gearbox size 04		100	120	120	145	180	180		222	265		300	300						
	<b>Δk **</b>	Brake		71	40	52	73	70	79	90		109	96		83						
Separate fan		-	130	128	128	127	109	102		115	96		83								
Separate fan + brake		-	170	165	184	180	170	183		201	208		198								
Gearbox size	Gearbox					Total length															
	o <sup>1)</sup>	o <sub>1</sub>	p <sup>1)</sup>	p <sub>1</sub>	a	k															
03	90	127*	100	64	2	286*	317*	338*													
		139				298	329	350													
04	100	174	129	77	0		371	391	413	474											
05	115	214	156	98	1		401	421	443	504	538										
06	145	243	194	121	2		427	447	469	530	564	580	624								
07	180	302	245	155	3				525	586	620	636	680	728	805	849					
09	222	370	304	194	4					649	683	699	743	791	868	912	984				
11	270	433	378	243	4						740	756	800	848	925	969	1041				
14	328	533	470	306	6							849	890	938	1015	1059	1131				

Gearbox size	Solid shaft							Pitch circle						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
03	14	28	4	20	M5	5	16	71	48	61	8	51	39	
	20	40	5	28	M6	6	22.5						51	
04	20	40	5	28	M6	6	22.5	72	48	61	8	51	M5x10	
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12	
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14	
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18	
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20	
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26	
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34	

Dimensions in [mm]

d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

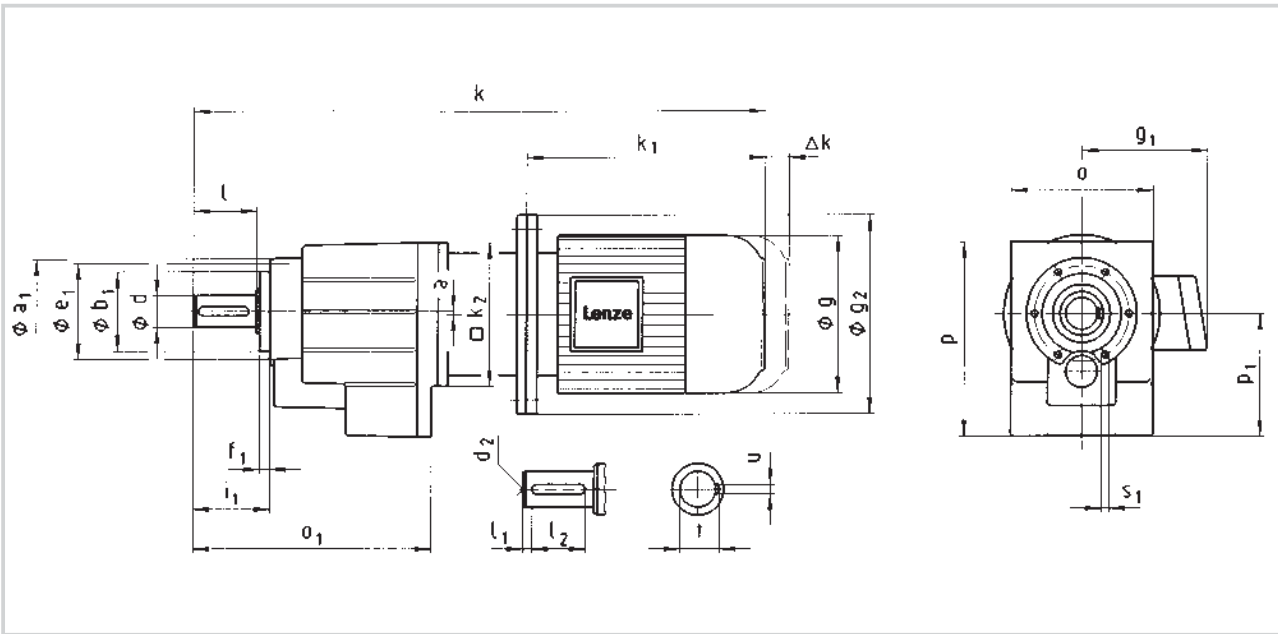
\* With solid shaft d=14

\*\* For additional attachments see section 8

<sup>1)</sup> Observe dimension k<sub>2</sub>.

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size					
<b>GST□□ - 2 M VCR</b>		<b>200N32</b>	<b>225N12 225N22</b>				
Motor	<b>g</b>	388	433				
	<b>g<sub>1</sub></b>	Without option	291	319			
		Brake motor	309	327			
	<b>g<sub>2</sub></b>	400	450				
	<b>k<sub>1</sub></b>	661	693				
	<b>k<sub>2</sub></b>	300	300				
	<b>Δk</b>	Brake	175	200			
		Separate fan	387	388			
Separate fan + brake		507	518				
Gearbox size	Gearbox					Total length	
	<b>o*</b>	<b>o<sub>1</sub></b>	<b>p*</b>	<b>p<sub>1</sub></b>	<b>a</b>	<b>k</b>	
<b>09</b>	222	370	304	194	4	1297	
<b>11</b>	270	433	378	243	4	1354	
<b>14</b>	328	533	470	306	6	1444	

Gearbox size	Solid shaft							Pitch circle					
	<b>d</b>	<b>l</b>	<b>l<sub>1</sub></b>	<b>l<sub>2</sub></b>	<b>d<sub>2</sub></b>	<b>u</b>	<b>t</b>	<b>a<sub>1</sub></b>	<b>b<sub>1</sub></b> h7	<b>e<sub>1</sub></b>	<b>f<sub>1</sub></b>	<b>i<sub>1</sub></b>	<b>s<sub>1</sub></b> 6x60°
<b>09</b>	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20
<b>11</b>	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26
<b>14</b>	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34

Dimensions in [mm]

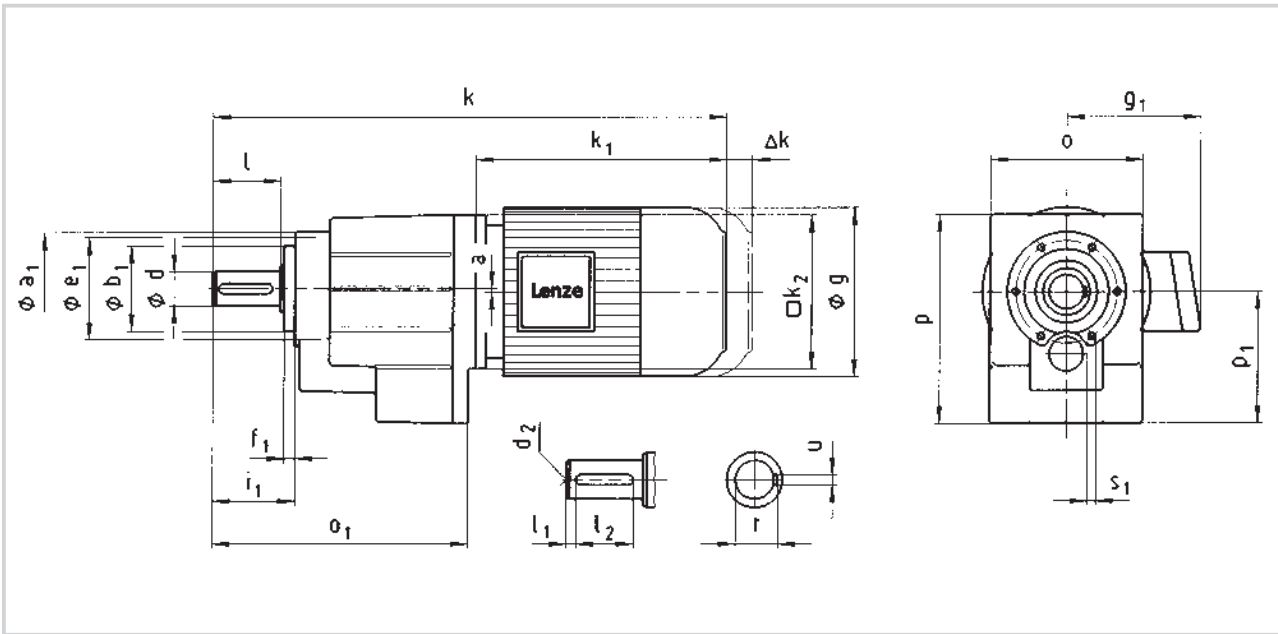
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>



# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size												
<b>GST □□ - 2 M VCR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21				
Motor	g	129	142	156	178	194	222	262						
	g <sub>1</sub>	Without option	105	131	131	141	158	165	197					
		Brake motor	105	131	131	140	159	165	197					
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409				
	k <sub>2</sub>	100	145	145	180	180	180	222	265					
	Δk**	Brake	56	66	68	74	94	101	127					
Separate fan		71	80	94	101	97	95	104						
Separate fan + brake		118	134	150	164	169	183	218						
Gearbox size	Gearbox					Total length								
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k								
04	100	174	129	77	0	351	362	364	413	441				
05	115	214	156	98	1			394	443	471	509	539		
06	145	243	194	121	2			420	469	497	535	565	583	
07	180	302	245	155	3				525	553	591	621	639	734
09	222	370	304	194	4					616	654	684	702	797
11	270	433	378	243	4						711	741	759	854
14	328	533	470	306	6								849	944

Gearbox size	Solid shaft							Pitch circle						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
04	20	40	5	28	M6	6	22.5	72	48	61	8	51	M5x10	
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12	
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14	
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18	
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20	
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26	
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34	

Dimensions in [mm]

d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

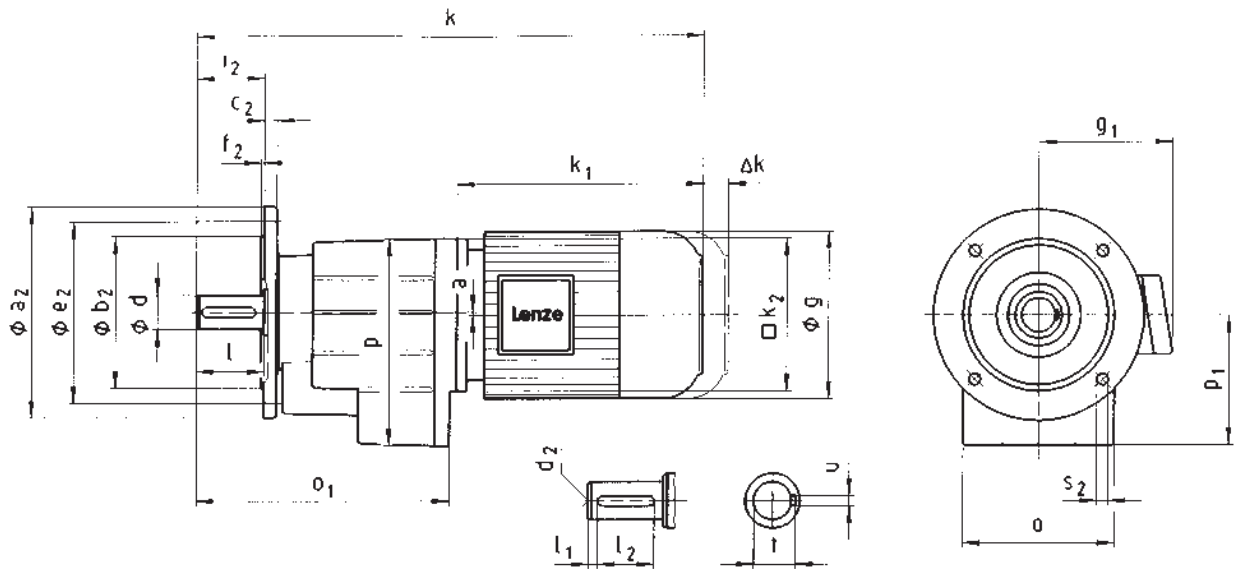
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

Geared motors (4-pole)

## GST □□ - 2 M VCK



# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																
<b>GST □□ - 2 M VCK</b>		063C02	063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22					
		063C22	063C32	071C42	080C42		100C32			132C32			180-32					
Motor	<b>g</b>	123		138	156	176	196	220		261	310		355					
	<b>g<sub>1</sub></b>	Without option		100	109	141	146	157	167		195	207		226				
		Brake motor		107	116	130	135	146	156		195	207		226				
	<b>k<sub>1</sub></b>	156	188	207	225	276	309	319	363	404	475	519	592					
	<b>k<sub>2</sub></b>	From gearbox size 04		100	120	120	145	180	180	222		265	300		300			
	<b>Δk **</b>	Brake		71	40	52	73	70	79	90		109	96		83			
		Separate fan		-	130	128	128	127	109	102		115	96		83			
Separate fan + brake		-	170	165	184	180	170	183		201	208		198					
Gearbox size	Gearbox					Total length												
	o <sup>1)</sup>	o <sub>1</sub>	p <sup>1)</sup>	p <sub>1</sub>	a	k												
03	90	127*	100	64	2	286*	317*	338*										
		139				298	329	350										
04	100	174	129	77	0		371	391	413	474								
05	115	214	156	98	1		401	421	443	504	538							
06	145	243	194	121	2		427	447	469	530	564	580	624					
07	180	302	245	155	3				525	586	620	636	680	728	805	849		
09	222	370	304	194	4					649	683	699	743	791	868	912	984	
11	270	433	378	243	4						740	756	800	848	925	969	1041	
14	328	533	470	306	6							846	890	938	1015	1059	1131	

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°	
03	14	28	4	20	M5	5	16	120	80	10	100	3	28	7	
								140	95		115	3	9		
	20	40	5	28	M6	6	22.5	160	110		130	3.5	40	9	
04	20	40	5	28	M6	6	22.5	120	80	10	100	3	7		
								140	95		115	3	9		
								160	110		130	3.5	40	9	
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7	
								140	95		115	3		9	
								160	110		130	3.5		9	
								200	130		165	3.5		11	
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9	
								200	130		165			11	
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11	
								250	180		215			4	14
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14	
								300	230		265			18	14
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14	
								350	250		300			5	18
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18	
								400	300		350			24	18

Dimensions in [mm]

d ≤ 50 mm: k<sub>G</sub>  
d > 50 mm: m<sub>G</sub>

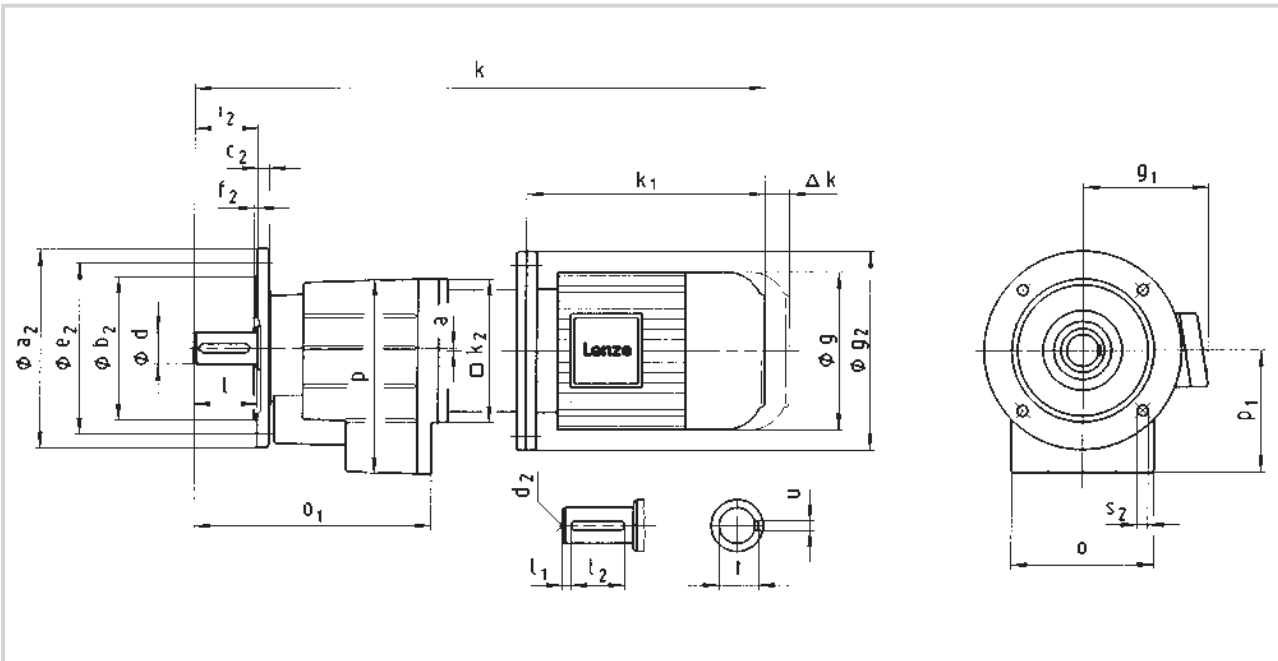
\* With solid shaft d=14

\*\* For additional attachments see section 8

<sup>1)</sup> Observe dimension k<sub>2</sub>

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size					
<b>GST□□ - 2 M VCK</b>		<b>200N32</b>	<b>225N12 225N22</b>				
Motor	g	388	433				
	g <sub>1</sub>	Without option	291	319			
		Brake motor	309	327			
	g <sub>2</sub>	400	450				
	k <sub>1</sub>	661	693				
	k <sub>2</sub>	300	300				
	Δk	Brake	175	200			
Separate fan		387	388				
Separate fan + brake		507	518				
Gearbox size	Gearbox					Total length	
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k	
09	222	370	304	194	4	1297	
11	270	433	378	243	4	1354	
14	328	533	470	306	6	1444	

Gearbox size	Solid shaft							Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
09	50	100	8	80	M16	14	53.5	250 300	180 230	16 18	215 265	4	100	14
11	60	120	8	100	M20	18	64	300 350	230 250	18 20	265 300	4 5	120	14 18
14	80	160	15	125	M20	22	85	350 400	250 300	22 24	300 350	5	160	18

Dimensions in [mm]

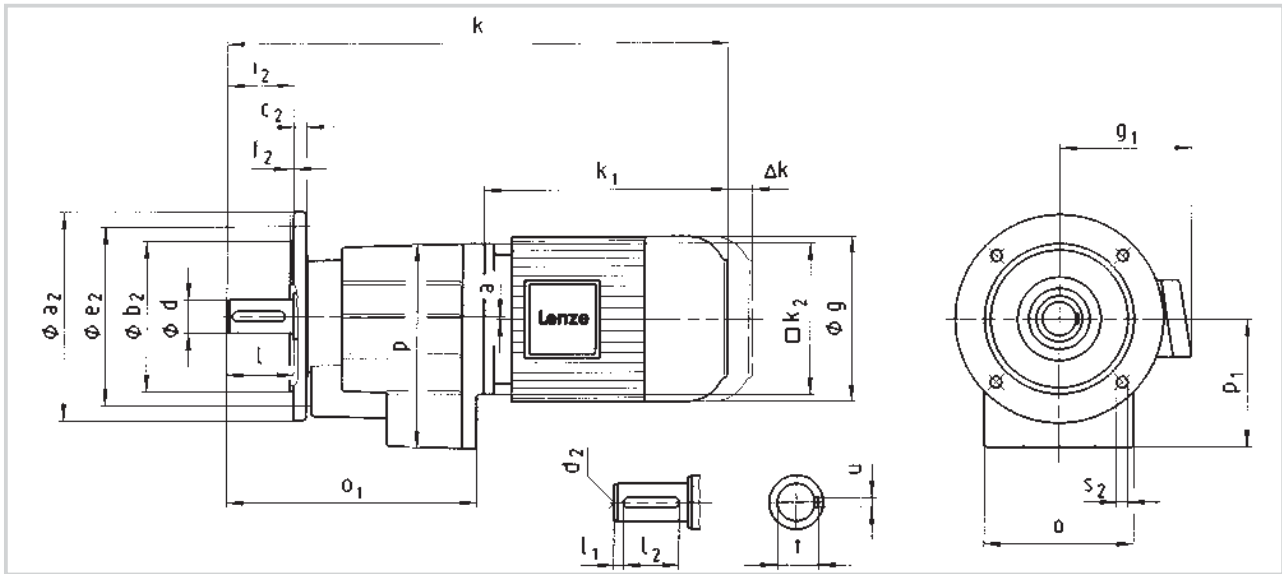
d ≤ 50 mm: k<sub>6</sub>

d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GST □□ - 2 M VCK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21						
Motor	g	129		142	156	178	194		222	262						
	g <sub>1</sub>	Without option		105	131	131	141		158	165	197					
		Brake motor		105	131	131	140		159	165	197					
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409						
	k <sub>2</sub>	100		145	145	180	180		222	265						
	Δk**	Brake		56	66	68	74	94		101	127					
Separate fan		71	80	94	101	97		95	104							
Separate fan + brake		118	134	150	164	169		183	218							
Gearbox size	Gearbox					Total length										
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k										
04	100	174	129	77	0	351	362	364	413	441						
05	115	214	156	98	1			394	443	471	509	539				
06	145	243	194	121	2			420	469	497	535	565	583			
07	180	302	245	155	3				525	553	591	621	639	734		
09	222	370	304	194	4					616	654	684	702	797		
11	270	433	378	243	4						711	741	759	854		
14	328	533	470	306	6								849	944		

Gearbox size	Solid shaft							Output flange							
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°	
04	20	40	5	28	M6	6	22.5	120	80	10	100	3	40	7	
								140	95		115	3		9	
								160	110		130	3.5		9	
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7	
								140	95		115	3		9	
								160	110		130	3.5		9	
								200	130		12	165		3.5	11
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9	
								200	130		12	165		3.5	11
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11	
								250	180		15	215		4	14
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14	
								300	230		18	265		4	14
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14	
								350	250		20	300		5	18
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18	
								400	300		24	350		5	18

Dimensions in [mm]

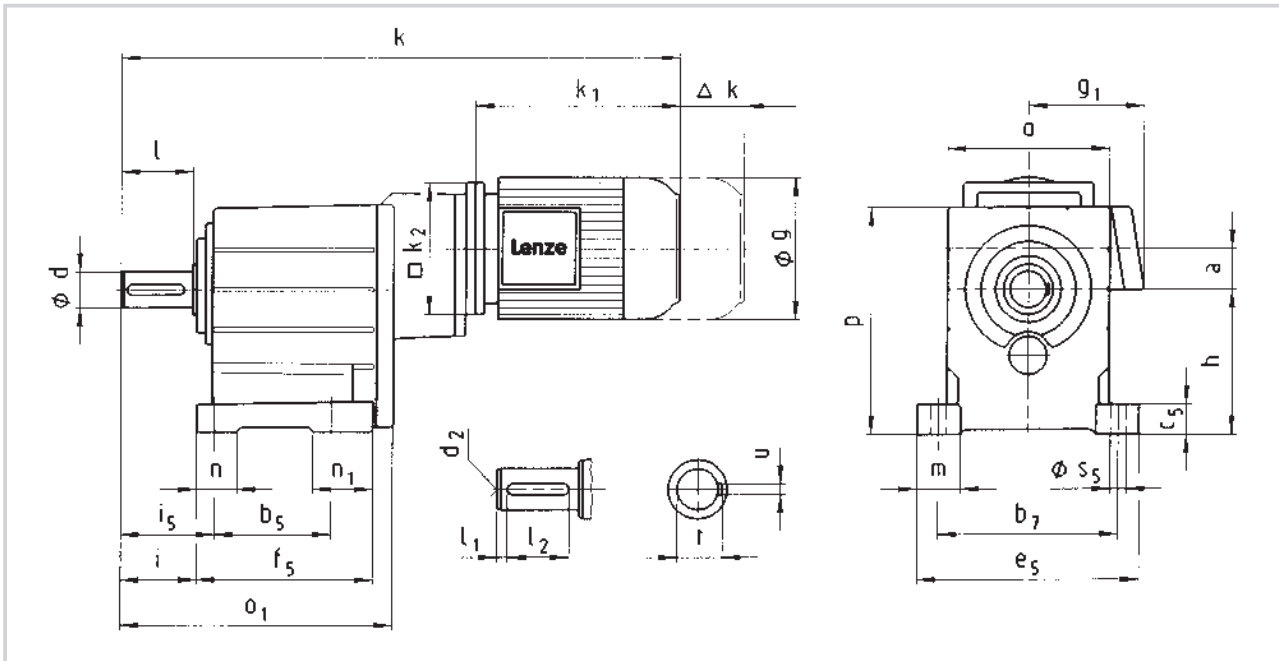
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																
<b>GST □□ - 3 M VBR</b>		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22						
		063C32	071C42	080C42		100C32			132C32			180-32						
		063C42																
Motor	g	123	138	156	176	196	220		261	310		355						
	g <sub>1</sub>	Without option	100	109	141	146	157	167		195	207		226					
		Brake motor	107	116	130	135	146	156		195	207		226					
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592						
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300						
	Δk**	Brake	40	52	73	70	79	90		109	96		83					
Separate fan		130	128	128	127	109	102		115	96		83						
Separate fan + brake		170	165	184	180	170	183		201	208		198						
Gearbox size	Gearbox					Total length k												
	o*	o <sub>1</sub>	p*	h	a													
05	115	208	159	100	35	478	497	520	581									
06	145	240	198	125	34	521	540	563	624									
07	180	302	251	160	42	588	607	630	691	724								
09	222	370	311	200	52	669	688	711	772	805	821	865						
11	270	433	385	250	66			787	848	881	897	941	990	1066	1110			
14	328	533	479	315	83				972	1005	1021	1065	1114	1190	1234	1307		

Gearbox size	Solid shaft								Foot										
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>	
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11	
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5	
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18	
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18	
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22	
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26	

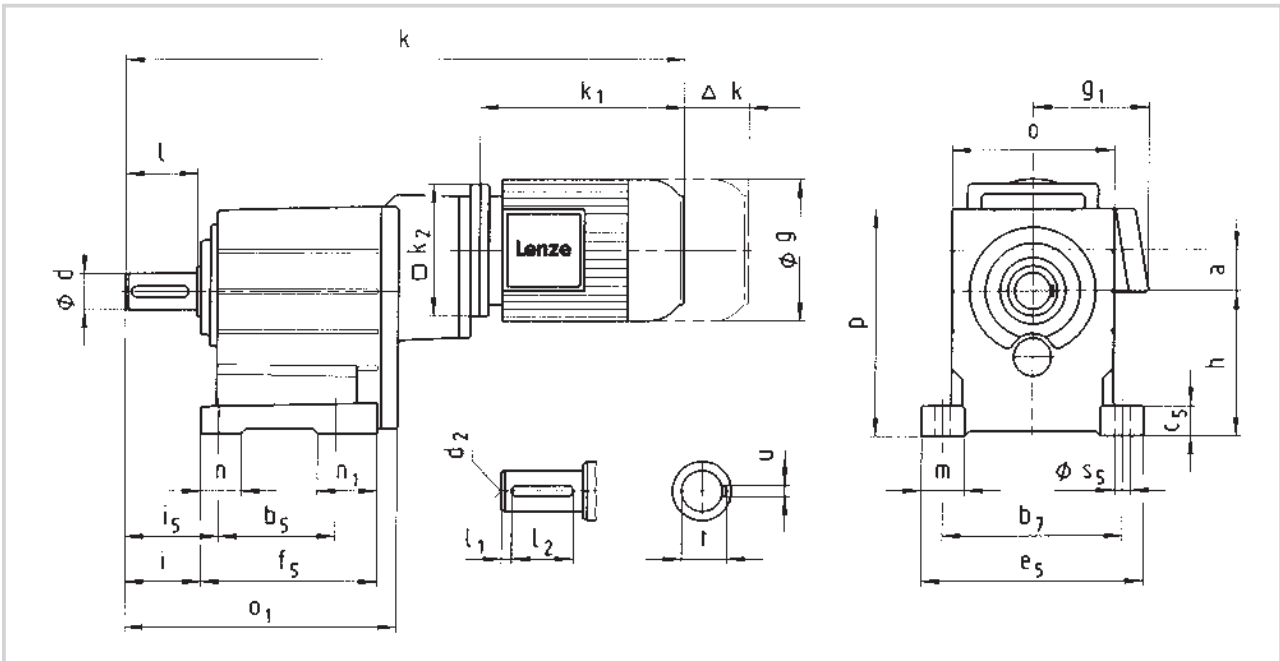
Dimensions in [mm]

d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>  
\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size																	
<b>GST □□ - 3 M VBR</b>		063-11	063-31	071-□□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21									
Motor	g		129	142	156	178		194	222	262									
	g <sub>1</sub>	Without option	105	131	131	141		158	165	197									
		Brake motor	105	131	131	140		159	165	197									
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409								
	k <sub>2</sub>			100	145	145	180		180	222	265								
	Δk**	Brake		56	66	68	74		94	101	127								
Separate fan			71	80	94	101		97	95	104									
Separate fan + brake			118	134	150	164		169	183	218									
Gearbox size	Gearbox					Total length													
	o*	o <sub>1</sub>	p*	h	a	k													
05	115	208	159	100	35	458	469	471	520	547									
06	145	240	198	125	34	501	512	514	563	590									
07	180	302	251	160	42			581	630	657	695	725							
09	222	370	311	200	52			662	711	738	776	806	825						
11	270	433	385	250	66				787	814	852	882	901	995					
14	328	533	479	315	83					938	976	1006	1025	1119					

Gearbox size	Solid shaft								Foot									
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26

Dimensions in [mm]

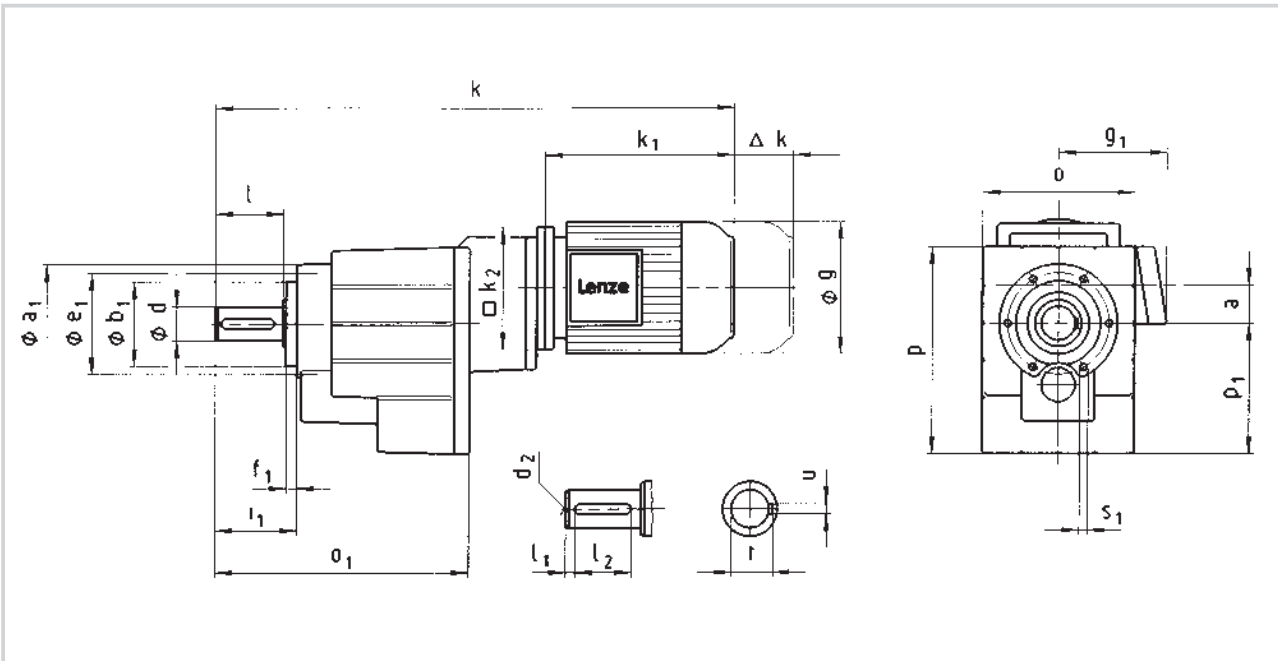
d ≤ 50 mm: k<sub>G</sub>  
d > 50 mm: m<sub>G</sub>

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size														
<b>GST □□ - 3 M VCR</b>		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22				
		063C32	071C42	080C42		100C32			132C32			180-32				
		063C42														
Motor	g	123	138	156	176	196	220		261	310		355				
	g <sub>1</sub>	Without option	100	109	141	146	157	167		195	207		226			
		Brake motor	107	116	130	135	146	156		195	207		226			
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592				
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300				
	Δk**	Brake	40	52	73	70	79	90		109	96		83			
Separate fan		130	128	128	127	109	102		115	96		83				
Separate fan + brake		170	165	184	180	170	183		201	208		198				
Gearbox size	Gearbox					Total length										
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k										
05	115	208	156	98	35	478	497	520	581							
06	145	240	194	121	34	521	540	563	624							
07	180	302	245	155	42	588	607	630	691	724						
09	222	370	304	194	52	669	688	711	772	805	821	865				
11	270	433	378	243	66			787	848	881	897	941	990	1066	1110	
14	328	533	470	306	83				972	1005	1021	1065	1114	1190	1234	1307

Gearbox size	Solid shaft								Pitch circle					
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12	
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14	
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18	
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20	
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26	
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34	

Dimensions in [mm]

d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

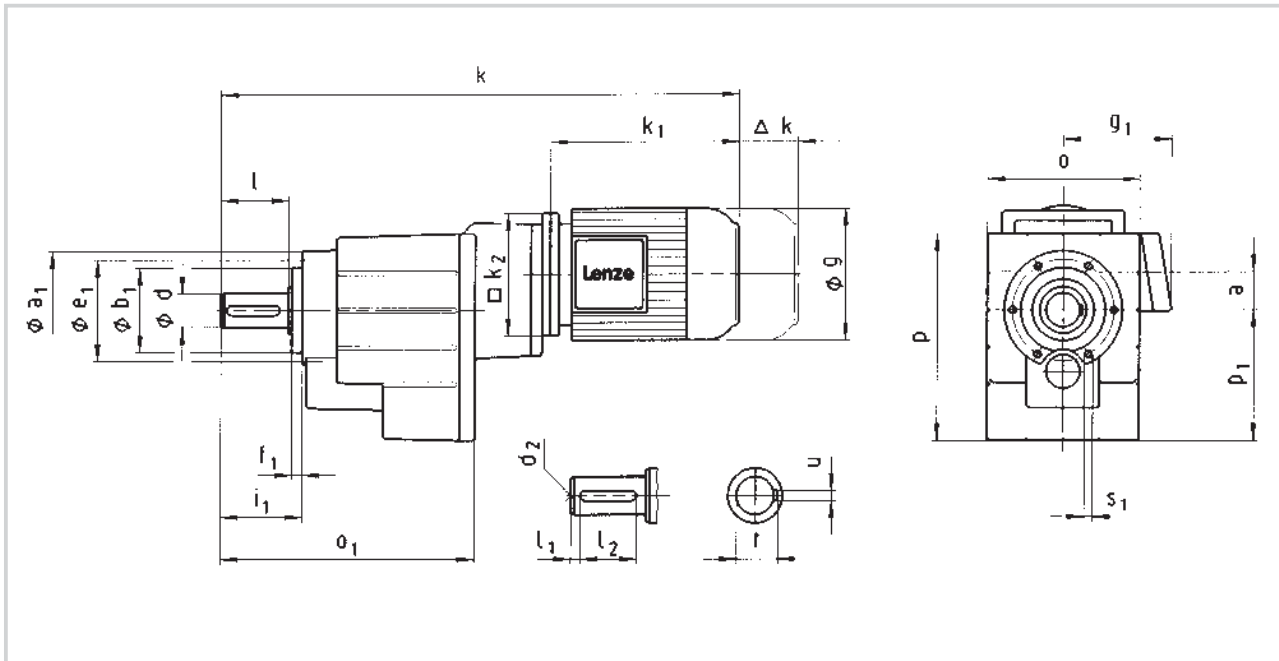
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8



# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size													
<b>GST □□ - 3 M VCR</b>		063-11	063-31	071-□□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21					
Motor	g		129	142	156	178		194	222	262					
	g <sub>1</sub>	Without option	105	131	131	141		158	165	197					
		Brake motor	105	131	131	140		159	165	197					
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409				
	k <sub>2</sub>			100	145	145	180		180	222	265				
	Δk**	Brake		56	66	68	74		94	101	127				
Separate fan			71	80	94	101		97	95	104					
Separate fan + brake			118	134	150	164		169	183	218					
Gearbox size	Gearbox					Total length									
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k									
05	115	208	156	98	35	458	469	471	520	547					
06	145	240	194	121	34	501	512	514	563	590					
07	180	302	245	155	42			581	630	657	695	725			
09	222	370	304	194	52			662	711	738	776	806	825		
11	270	433	378	243	66				787	814	852	882	901	995	
14	328	533	470	306	83					938	976	1006	1025	1119	

Gearbox size	Solid shaft							Pitch circle						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12	
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14	
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18	
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20	
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26	
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34	

Dimensions in [mm]

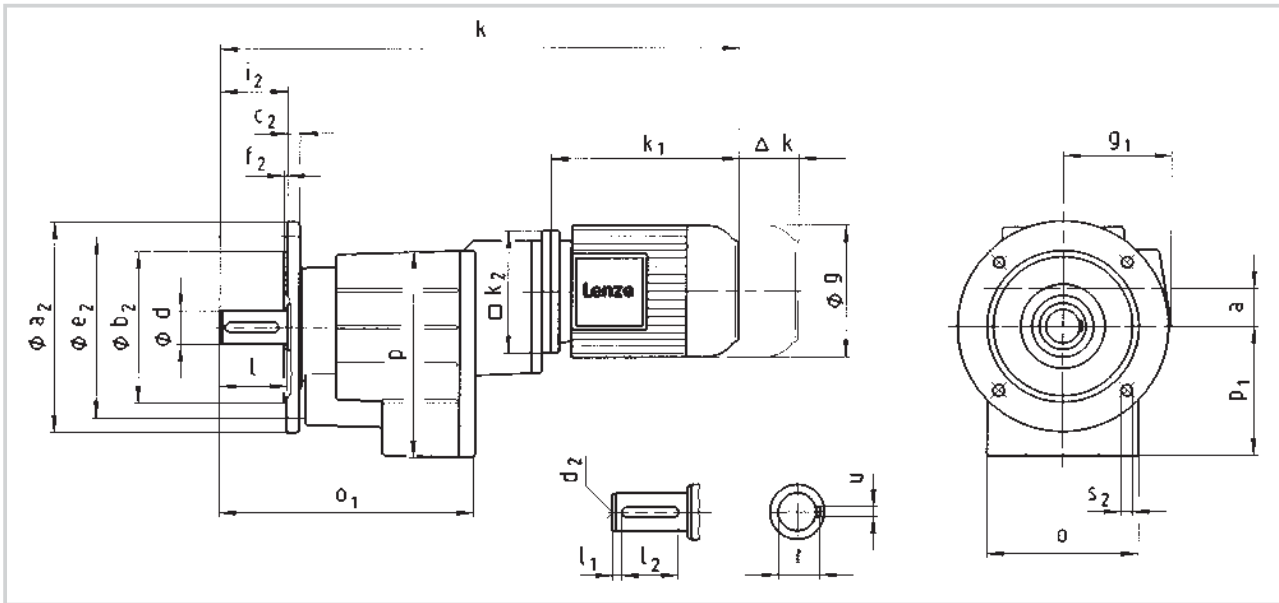
d ≤ 50 mm: k<sub>G</sub>  
d > 50 mm: m<sub>G</sub>

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size														
<b>GST □□ - 3 M VCK</b>		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22	180-32			
		063C32	071C42	080C42		100C32			132C32							
Motor	g	123	138	156	176	196	220		261	310		355				
	g <sub>1</sub>	Without option	100	109	141	146	157	167		195	207		226			
		Brake motor	107	116	130	135	146	156		195	207		226			
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592				
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300				
Δk**	Brake	40	52	73	70	79	90		109	96		83				
	Separate fan	130	128	128	127	109	102		115	96		83				
	Separate fan + brake	170	165	184	180	170	183		201	208		198				
Gearbox size	Gearbox					Total length										
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k										
05	115	208	156	98	35	478	497	520	581							
06	145	240	194	121	34	521	540	563	624							
07	180	302	245	155	42	588	607	630	691	724						
09	222	370	304	194	52	669	688	711	772	805	821	865				
11	270	433	378	243	66			787	848	881	897	941	990	1066	1110	
14	328	533	470	306	83				972	1005	1021	1065	1114	1190	1234	1307

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°	
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7	
								140	95	10	115	3		9	
								160	110	10	130	3.5		9	
								200	130	12	165	3.5		11	
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9	
								200	130		165			11	
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11	
								250	180	15	215	4		14	
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14	
								300	230	18	265			14	
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14	
								350	250	20	300	5		18	
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18	
								400	300	24	350			18	

Dimensions in [mm]

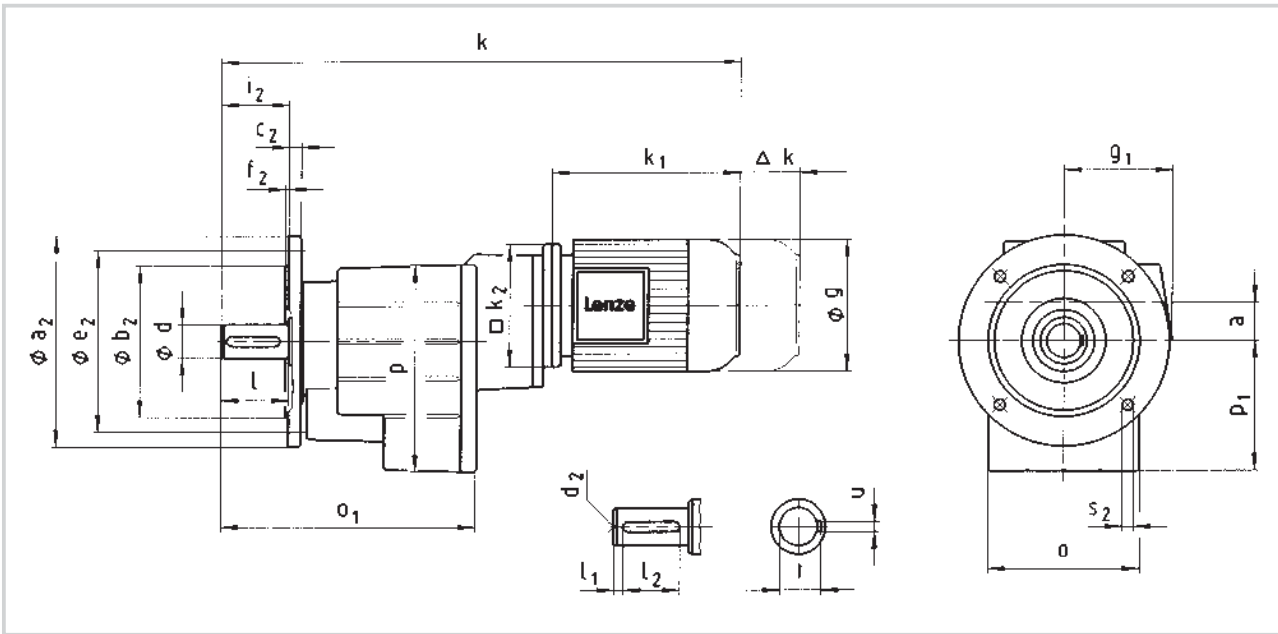
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size												
<b>GST □□ - 3 M VCK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21				
Motor	g	129		142	156	178	194		222	262				
	g <sub>1</sub>	Without option		105	131	131	141	158		165	197			
		Brake motor		105	131	131	140	159		165	197			
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409				
	k <sub>2</sub>	100		145	145	180	180		222	265				
	Δk**	Brake		56	66	68	74	94		101	127			
Separate fan		71	80	94	101	97		95	104					
Separate fan + brake		118	134	150	164	169		183	218					
Gearbox size	Gearbox					Total length								
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k								
05	115	208	156	98	35	458	469	471	520	547				
06	145	240	194	121	34	501	512	514	563	590				
07	180	302	245	155	42			581	630	657	695	725		
09	222	370	304	194	52			662	711	738	776	806	825	
11	270	433	378	243	66				787	814	852	882	901	995
14	328	533	470	306	83					938	976	1006	1025	1119

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°	
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7	
								140	95	10	115	3		9	
								160	110	10	130	3.5		9	
								200	130	12	165	3.5		11	
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9	
								200	130		165			11	
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11	
								250	180	15	215	4		14	
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14	
								300	230	18	265			18	
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14	
								350	250	20	300	5		18	
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18	
								400	300	24	350			18	

Dimensions in [mm]

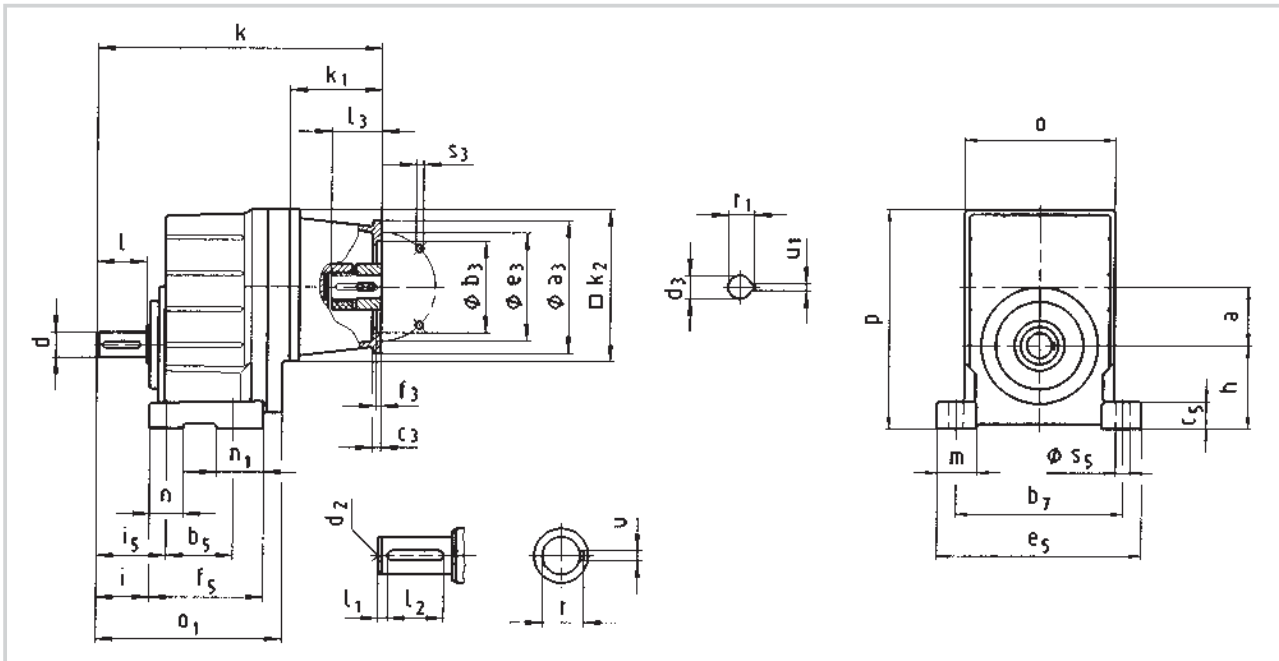
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical gearboxes

Gearbox with mounting flange for IEC standard motors



Gearbox		Drive size																				
<b>GST □□ - 1 N VBR</b> corresponds to IEC motor		1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	1K
		63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	200

Housing	$k_1$	75	77	75	91			115		110		139	180	160	180	218	218	188	243			
	$k_2$	120	145	120	145			180		180		180	265		300		300					
Flange	$a_3$	90	105	90	160	160	105	120	160	160		160	300	250	250	350	350	300	400			
	$b_3$ H8	60	70	60	110	110	70	80	110	110		110	230	180	180	250	250	230	300			
	$c_3$	7	8	7	10	10	8	8	10	10		10	18	18	35	20	20	18	20			
	$e_3$	75	85	75	130	130	85	100	130	130		130	265	215	215	300	300	265	350			
	$f_3$	3	3	4	4	3	3.5	4	4	4		4	4.5		6	6	4.5	6				
	$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9	9		9	13.5		17.5	17.5	13.5	17.5				
Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55
	$l_3$	min	23	30	23	25			50	40	30		30	80	80	80	110	110	80	110		
		max	23	30	23	40			50	50	60		60	80	60	80	110	110	80	110		
	$u_1$	4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	

Gearbox size	Gearbox					Total length																		
	$o^*$	$o_1$	$p^*$	$h^*$	$a$	$k$																		
04	100	134	138	50	36	219	226	219	240			274												
05	115	165	168	63	45	247		261			295	290												
06	145	191	211	80	56	270		284			318	313		342										
07	180	223	264	100	70				313			347	342		371			426	406	426	469	439		
09	222	271	329	125	89							390	385		414			469	449	469	512	512	482	537

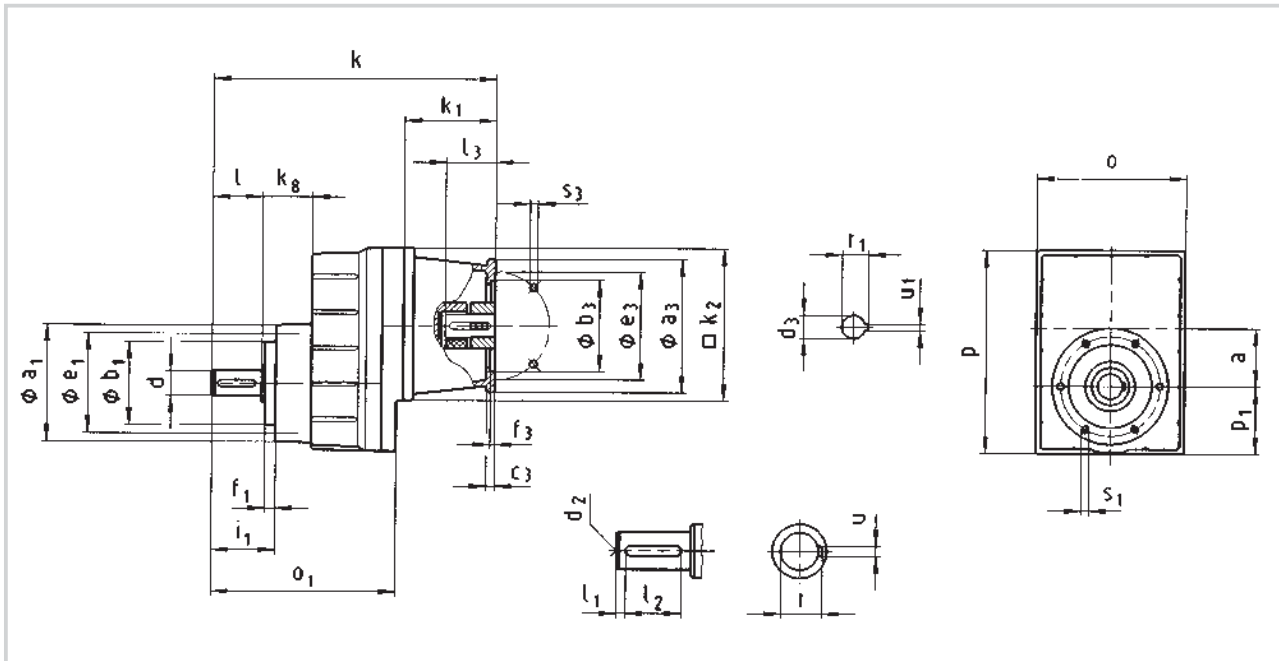
Gearbox size	Solid shaft								Foot										
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$b_5$	$b_7$	$c_5$	$e_5$	$f_5$	$i$	$i_5$	$m$	$n$	$n_1$	$s_5$	
04	16	32	6	20	M5	5	18	55	105	17	128	80	35	45	24	20	25	9	
05	20	40	6	28	M6	6	22.5	70	125	22	154	99	43	56	32	26	29	11	
06	25	50	4	40	M10	8	28	72	160	27	194	115	53	68	37	30	43	13.5	
07	30	60	7.5	45	M10	8	33	80	200	35	245	137	64	84	48	40	57	18	
09	40	80	8.5	63	M16	12	43	105	245	43	296	161	84	107	51	45	56	18	

Dimensions in [mm]

\* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h+a$

# Dimensions - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox		Drive size																										
<b>GST □□ - 1 N VCR</b> corresponds to IEC motor		1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	1K						
		63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	200						
													112			112												
Housing	$k_1$	75	77	75	91				115		110		139		180	160	180	218	218	188	243							
	$k_2$	120	145	120	145				180		180		180		265		300		300		300							
Flange	$a_3$	90	105	90	160	160	105	120	160		160		160		300	250	250	350	350	300	400							
	$b_3$ H8	60	70	60	110	110	70	80	110		110		110		230	180	180	250	250	230	300							
	$c_3$	7	8	7	10	10	8	8	10		10		10		18	18	35	20	20	18	20							
	$e_3$	75	85	75	130	130	85	100	130		130		130		265	215	215	300	300	265	350							
	$f_3$	3	3	4	4	3	3.5	4	4		4		4		4.5		6		6	4.5	6							
	$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9		9		13.5		17.5		17.5	13.5	17.5							
Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55						
	$l_3$	min	23	30	23	25		50	40	30		30		30		80	60	80	110	110	80	110						
		max	23	30	23	40		50	50	60		60		60		80	80	80	110	110	80	110						
	$u_1$	4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16						
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59							
Gearbox size	Gearbox						Total length																					
	$o^*$	$o_1$	$p^*$	$p_1$	$a$	$k_8$	$k$																					
04	100	134	129	41	36	35	219	226	219	240		274																
05	115	165	156	51	45	43	247		261		295		290															
06	145	191	194	63	56	48	270		284		318		313		342													
07	180	223	245	82	70	60			313		347		342		371		426	406	426	469	439							
09	222	271	304	101	89	74					390		385		414		469	449	469	512	512	482	537					

Gearbox size	Solid shaft							Pitch circle						
	$d_{k_6}$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$ h7	$e_1$	$f_1$	$i_1$	$s_1$ 6x60°	
04	16	32	6	20	M5	5	18	72	48	61	8	43	M5x10	
05	20	40	6	28	M6	6	22.5	88	58	74	9	52	M6x12	
06	25	50	4	40	M10	8	28	109	70	90	11	64	M8x14	
07	30	60	7.5	45	M10	8	33	140	100	120	13	77	M10x18	
09	40	80	8.5	63	M16	12	43	174	120	145	15	100	M12x20	

Dimensions in [mm]

\* Observe dimension  $k_2$



# Dimensions - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GST □□ - 1 N VCK</b> corresponds to IEC motor			Drive size																					
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132	1K 200	
Housing	$k_1$		75	77	75	91			115		110		139		180	160	180	218	218	188	243			
		$k_2$	120	145	120	145			180		180		180		265		300		300					
	Flange	$a_3$	90	105	90	160	160	105	120	160		160		160		300	250	250	350	350	300	400		
		$b_3$ H8	60	70	60	110	110	70	80	110		110		110		230	180	180	250	250	230	300		
		$c_3$	7	8	7	10	10	8	8	10		10		10		18	18	35	20	20	18	20		
		$e_3$	75	85	75	130	130	85	100	130		130		130		265	215	215	300	300	265	350		
		$f_3$	3	3	3	4	4	3	3.5	4		4		4		4.5		6		6	4.5	6		
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9		9		13.5		17.5		17.5	13.5	17.5		
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	
		$l_3$	min	23	30	23	25			50	40	30		30		80	60	80	110	110	80	110		
max			23	30	23	40			50	50	60		60		80	60	80	110	110	80	110			
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16		
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59			
Gearbox size	Gearbox						Total length																	
	$o^*$	$o_1$	$p_1$	$p_3^*$	$a$	$k_8$	$k$																	
04	100	134	41	88	36	35	219	226	219	240			274											
05	115	165	51	105	45	43	247		261			295		290										
06	145	191	63	131	56	48	270		284			318		313		342								
07	180	223	82	164	70	60			313			347		342		371		426	406	426	469	439		
09	222	271	101	204	89	74						390		385		414		469	449	469	512	512	482	537

Gearbox size	Solid shaft							Output flange						
	$d$ $k_6$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ $j_7$	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$ 4x90°
04	16	32	6	20	M5	5	18	120	80	10	100	3	32	7
								140	95		115	3		9
								160	110		130	3.5		9
05	20	40	6	28	M6	6	22.5	120	80	10	100	3	40	7
								140	95		115	3		9
								160	110		130	3.5		9
								200	130		165	3.5		11
06	25	50	4	40	M10	8	28	160	110	12	130	3.5	50	9
								200	130		165	3.5		11
07	30	60	7.5	45	M10	8	33	200	130	14	165	3.5	60	11
								250	180		215	4		13.5
09	40	80	8.5	63	M16	12	43	250	180	16	215	4	80	13.5
								300	230		265	4		13.5

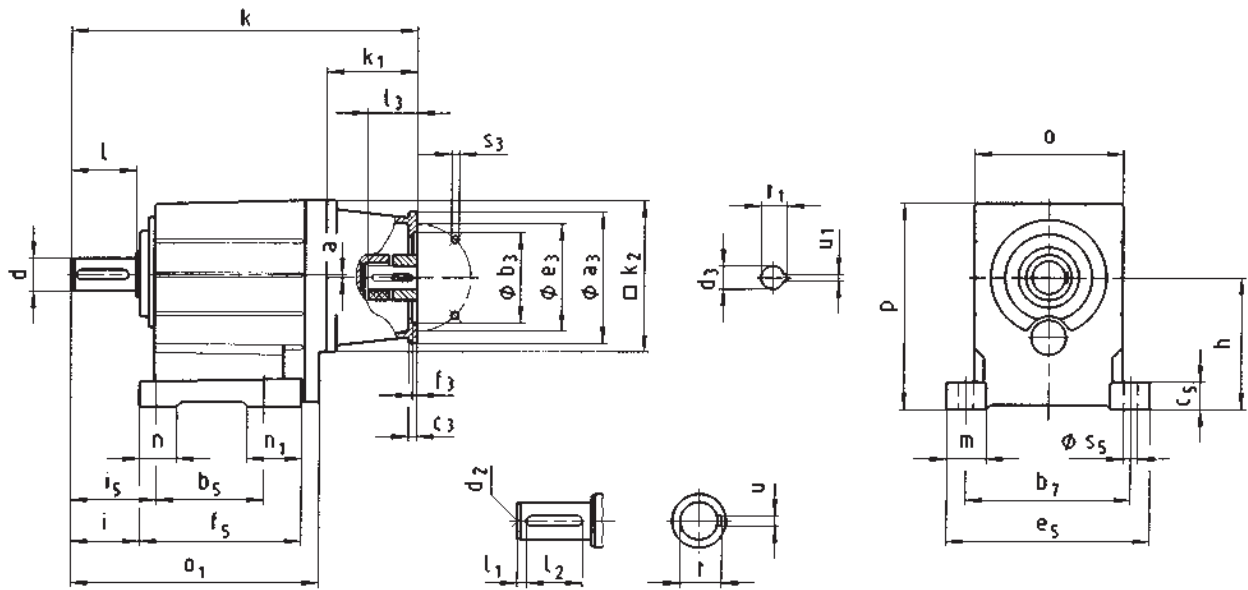
Dimensions in [mm]

\* Observe dimension  $k_2$

## Dimensions - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

### GST □□ - 2 N VBR





# Dimensions - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GST □□ - 2 N VBR</b> corresponds to IEC motor			Drive size																																	
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	1K	2K												
			63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	200	225												
Housing	$k_1$		58**	75	77	75	91			115			110			139			180	160	180	218	218	188	243	273										
		$k_2$	100**	120	145	120	145			180			180			180			265			300			300											
	Flange	$a_3$		90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450									
		$b_3$ H8		60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350									
		$c_3$		7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20										
		$e_3$		75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400									
		$f_3$		3	3	3	4	4	3	3.5	4			4			4			4.5			6	6	4.5	6										
		$s_3$ 4 x 8 x		5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5									
	Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60											
		$l_3$ min max		23	30	23	25			50			40			30			60			80	60	80	110	110	80	110	140							
				23	30	23	40			50			50			60			60			80	80	110	110	80	110	140								
		$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18											
	$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64												
	Gearbox size	Gearbox					Total length																													
$o_1$		$o_1$	$p_1$	$h_1$	$a$	$k$																														
03	90	127*	101	65	2	209*																														
		139				221																														
04	100	174	132	80	0		259	266	259	280			314																							
05	115	214	159	100	1		296			310			344			339																				
06	145	243	198	125	2		322			336			370			365			394																	
07	180	302	251	160	3					392			426			421			450			505	485	505	548	518										
09	222	370	311	200	4								489			484			513			568	548	568	611	611	581	636								
11	270	433	385	250	4											541			570			625	605	625	668	668	638	693	723							
14	328	533	479	315	6																	715	695	715	758	758	728	783	813							

Gearbox size	Solid shaft								Foot									
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$b_5$	$b_7$	$c_5$	$e_5$	$f_5$	$i$	$i_5$	$m$	$n$	$n_1$	$s_5$
03	14	28	4	20	M5	5	16	60	91	11	105	84	34	40	20	-	-	6.6
	20	40	5	28	M6	6	22.5						46	52				
04	20	40	5	28	M6	6	22.5	76	105	18	129	112	43	53	25	20	36	9
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	33	26	49	11
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	49	45	66	18
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26

Dimensions in [mm]

$d \leq 50$  mm:  $k_6$   
 $d > 50$  mm:  $m_6$

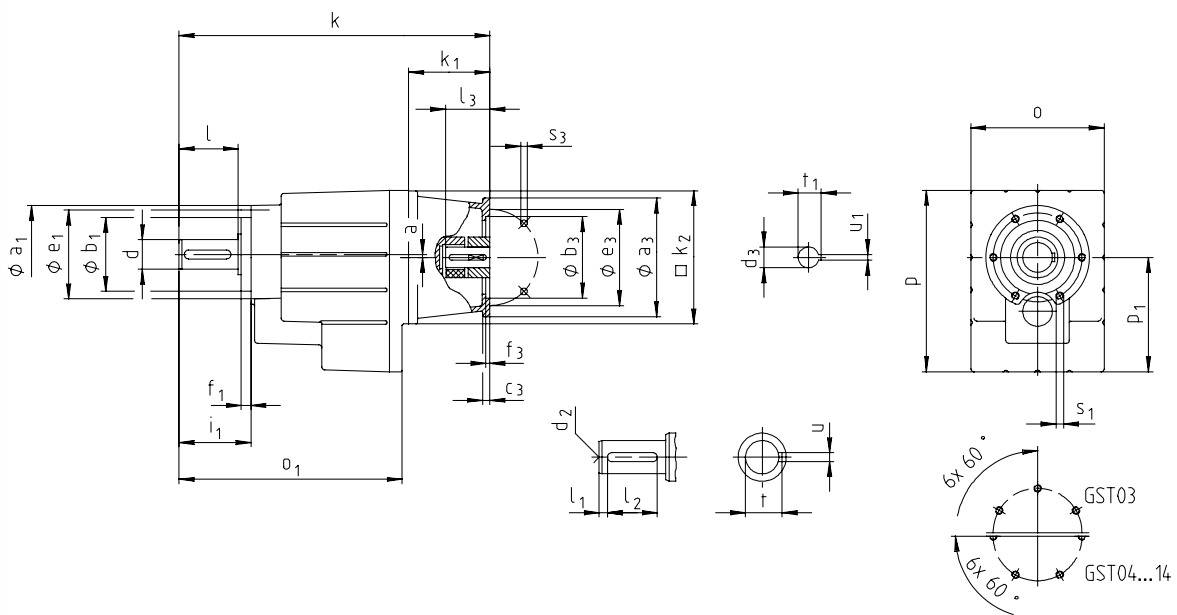
\* With solid shaft  $d=14$   
 \*\* With gearbox size 03

1) Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

## GST □□ - 2 N VCR



# Dimensions - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GST □□ - 2 N VCR</b> corresponds to IEC motor			Drive size																															
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	1K	2K										
			63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	200	225										
											112			112				112																
Housing	$k_1$		58**	75	77	75	91			115			110			139			180	160	180	218	218	188	243	273								
		$k_2$	100**	120	145	120	145			180			180			180			265			300			300									
	Flange	$a_3$		90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450							
		$b_3$ H8		60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350							
		$c_3$		7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20								
		$e_3$		75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400							
		$f_3$		3		3	4	4	3	3.5	4			4			4			4.5			6	6	4.5	6								
		$s_3$ 4 x 8 x		5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5								
	Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60									
		$l_3$ min max		23 23	30 30	23 23	25 40			50 50			30 60			30 60			80	60	80	110	110	80	110	140	140							
		$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18									
		$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64									
	Gearbox size	Gearbox					Total length																											
		$o_1$	$o_1$	$p_1$	$p_1$	$a$	$k$																											
03	90	127*	100	64	2	209*																												
		139				221																												
04	100	174	129	77	0	259	266	259	280			314																						
05	115	214	156	98	1	296		310			344			339																				
06	145	243	194	121	2	322		336			370			365			394																	
07	180	302	245	155	3				392			426			421			450			505	485	505	548	518									
09	222	370	304	194	4							489			484			513			568	548	568	611	611	581	636							
11	270	433	378	243	4										541			570			625	605	625	668	668	638	693	723						
14	328	533	470	306	6																715	695	715	758	758	728	783	813						

Gearbox size	Solid shaft							Pitch circle					
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$ h7	$e_1$	$f_1$	$i_1$	$s_1$ 6x60°
03	14	28	4	20	M5	5	16	71	48	61	8	39	M5x10
	20	40	5	28	M6	6	22.5					51	
04	20	40	5	28	M6	6	22.5	72	48	61	8	51	M5x10
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34

Dimensions in [mm]

$d \leq 50$  mm:  $k_6$   
 $d > 50$  mm:  $m_6$

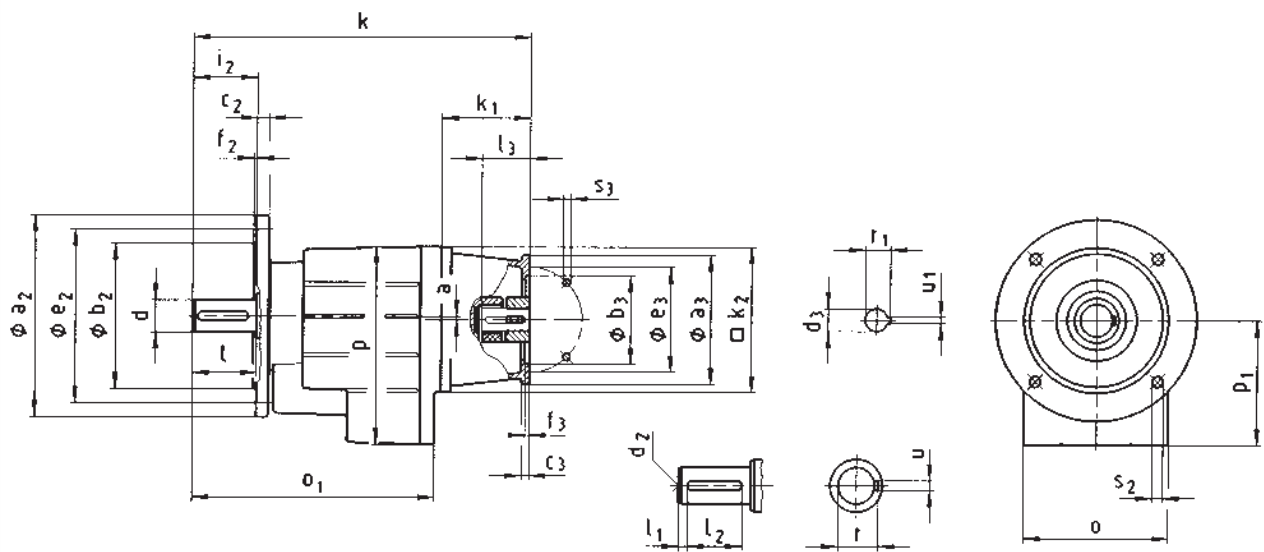
\* With solid shaft  $d=14$   
 \*\* With gearbox size 03

1) Observe dimension  $k_2$

## Dimensions - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

### GST □□ - 2 N VCK



# Dimensions - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GST □□ - 2 N VCK</b> corresponds to IEC motor			Drive size																													
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	1K	2K								
			63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	200	225								
											112			112				112														
Housing	k <sub>1</sub>		58**	75	77	75	91			115			110			139			180	160	180	218	218	188	243	273						
		k <sub>2</sub>	100**	120	145	120	145			180			180			180			265			300			300							
	Flange	a <sub>3</sub>		90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450					
		b <sub>3</sub> H8		60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350					
		c <sub>3</sub>		7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20						
		e <sub>3</sub>		75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400					
		f <sub>3</sub>		3	3	3	4	4	3	3.5	4			4			4			4.5			6	6	4.5	6						
		s <sub>3</sub> 4 x 8 x		5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5					
	Required motor shafts	d <sub>3</sub>		11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60							
		l <sub>3</sub> min max		23	30	23	25			50			40			30			60			80			110			110			140	
			23	30	23	40			50			50			60			80			80			110			110			140		
u <sub>1</sub>			4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18								
t <sub>1</sub>		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64									
Gearbox size	Gearbox					Total length																										
	o <sup>1)</sup>	o <sub>1</sub>	p <sup>1)</sup>	p <sub>1</sub>	a	k																										
03	90	127*	100	64	2	209*																										
		139				221																										
04	100	174	129	77	0	259	266	259	280			314																				
05	115	214	156	98	1	296		310			344			339																		
06	145	243	194	121	2	322		336			370			365			394															
07	180	302	245	155	3	392			426			421			450			505	485	505	548	518										
09	222	370	304	194	4				489			484			513			568	548	568	611	611	581	636								
11	270	433	378	243	4							541			570			625	605	625	668	668	638	693	723							
14	328	533	470	306	6													715	695	715	758	758	728	783	813							

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°	
03	14	28	4	20	M5	5	16	120	80	10	100	3	28	7	
								140	95		115	3		9	
	20	40	5	28	M6	6	22.5	160	110		130	3.5		40	9
04	20	40	5	28	M6	6	22.5	120	80	10	100	3	40	7	
								140	95		115	3		9	
								160	110		130	3.5		9	
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7	
								140	95		115	3		9	
								160	110		130	3.5		9	
								200	130		165	3.5		11	
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9	
								200	130		165			11	
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11	
								250	180		215			4	14
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14	
								300	230		265			5	14
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14	
								350	250		300			5	18
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18	
								400	300		350			18	

Dimensions in [mm]

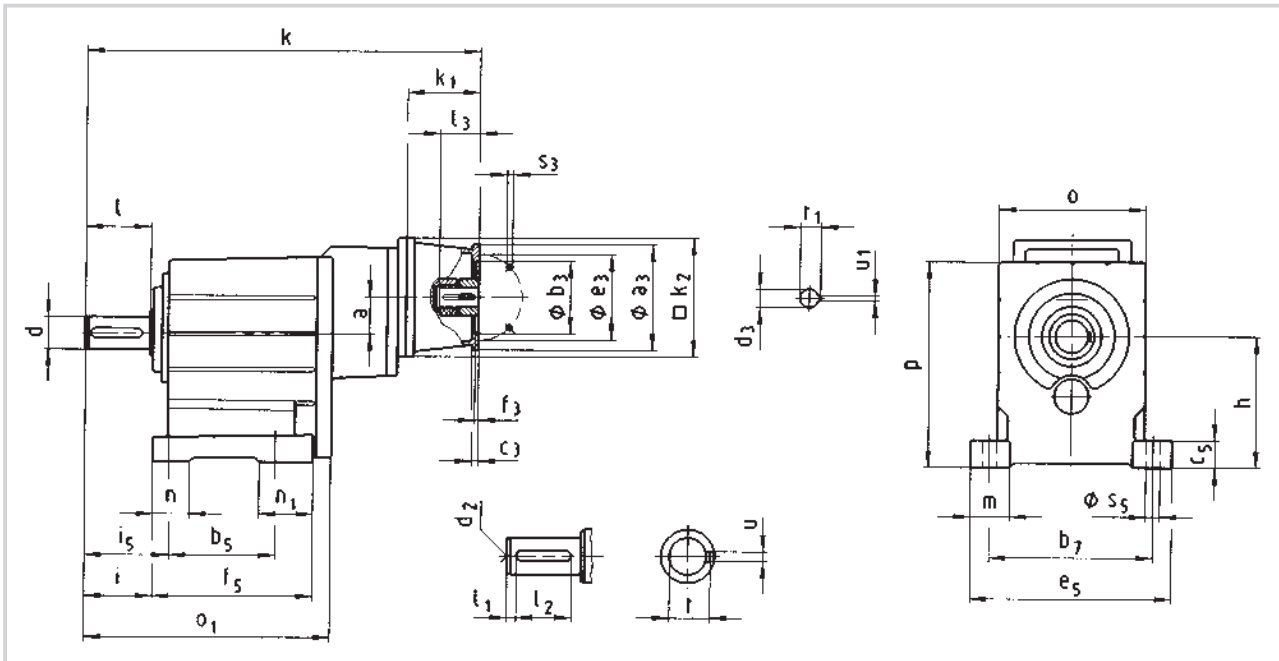
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* With solid shaft d=14  
\*\* With gearbox size 03

1) Observe dimension k<sub>2</sub>

# Dimensions - Helical gearboxes

Gearbox with mounting flange for IEC standard motors



3

Gearbox		Drive size																				
<b>GST □□ - 3 N VBR</b> corresponds to IEC motor		1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	
		63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	
											112			112			112					
Housing	$k_1$	75	77	75	91				115		110		139		180	160	180	218	218	188		
	$k_2$	120	145	120	145				180		180		180		265		300		300			
Flange	$a_3$	90	105	90	160	160	105	120	160	160	160	160	160	160	300	250	250	350	350	300		
	$b_3$ H8	60	70	60	110	110	70	80	110	110	110	110	110	110	230	180	180	250	250	230		
	$c_3$	7	8	7	10	10	8	8	10	10	10	10	10	10	18	18	35	20	20	18		
	$e_3$	75	85	75	130	130	85	100	130	130	130	130	130	130	265	215	215	300	300	265		
	$f_3$	3	3	4	4	3	3.5	4	4	4	4	4	4	4	4.5	4.5	6	6	4.5			
	$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9	9	9	9	9	9	13.5	13.5	17.5	17.5	13.5			
Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	
	$l_3$	min	23	30	23	25			50	40	30	30	30	30	80	60	80	110	110	80		
		max	23	30	23	40			50	50	60	60	60	60	80	80	80	110	110	80		
	$u_1$	4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41		
Gearbox size	Gearbox					Total length																
	$o^*$	$o_1$	$p^*$	$h$	$a$	$k$																
05	115	208	159	100	35	365	372	365	386		420											
06	145	240	198	125	34	408	415	408	429		463											
07	180	302	251	160	42	482		496		530		525										
09	222	370	311	200	52	563		577		611		606		635								
11	270	433	385	250	66			653		687		682		711		766	746	766				
14	328	533	479	315	83					811		806		835		890	870	890	933	933	903	

Gearbox size	Solid shaft								Foot										
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$b_5$	$b_7$	$c_5$	$e_5$	$f_5$	$i$	$i_5$	$m$	$n$	$n_1$	$s_5$	
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11	
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5	
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18	
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18	
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22	
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26	

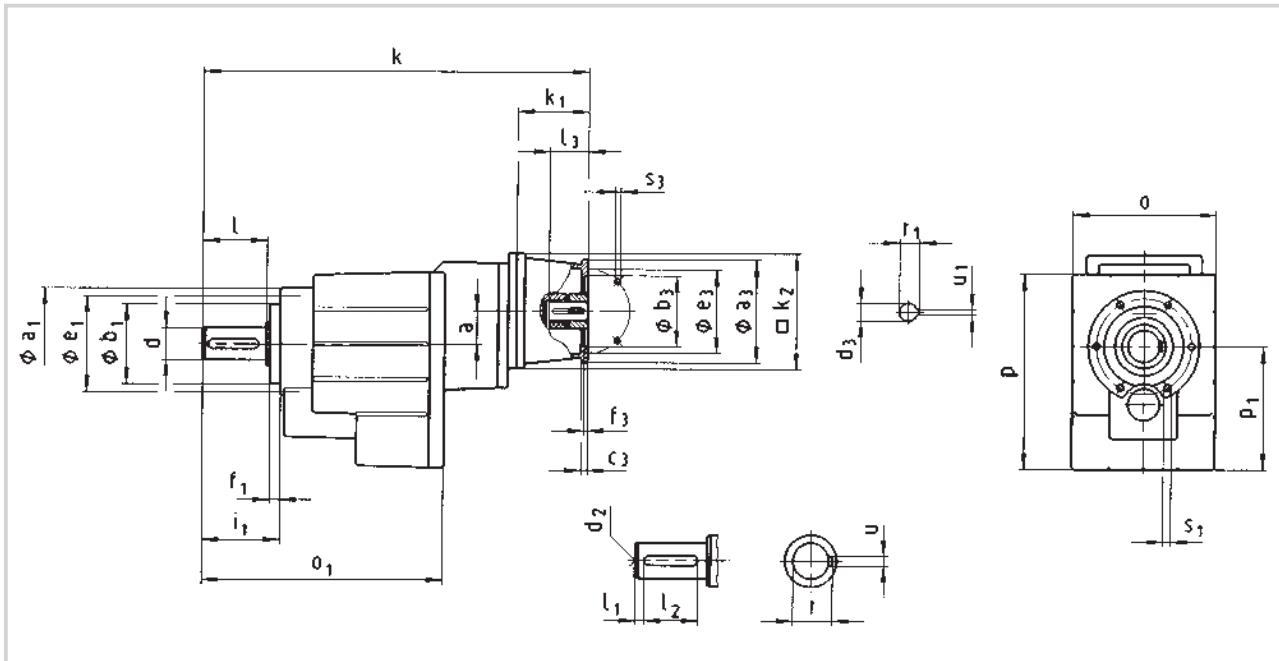
Dimensions in [mm]

$d \leq 50$  mm:  $k_6$   
 $d > 50$  mm:  $m_6$

\* Observe dimension  $k_2$

# Dimensions - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox		GST □□ - 3 N VCR corresponds to IEC motor		Drive size																												
				1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H									
				63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132									
Housing	k <sub>1</sub>	75	77	75	91				115		110		139		180	160	180	218	218	188												
	k <sub>2</sub>	120	145	120	145				180		180		180		265		300															
Flange	a <sub>3</sub>	90	105	90	160	160	105	120	160		160		160		300	250	250	350	350	300												
	b <sub>3</sub> H8	60	70	60	110	110	70	80	110		110		110		230	180	180	250	250	230												
	c <sub>3</sub>	7	8	7	10	10	8	8	10		10		10		18	18	35	20	20	18												
	e <sub>3</sub>	75	85	75	130	130	85	100	130		130		130		265	215	215	300	300	265												
	f <sub>3</sub>	3	3	4	4	3	3.5	4	4		4		4		4.5	6	6	4.5														
	s <sub>3</sub> 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9		9		13.5	17.5	17.5	13.5														
Required motor shafts	d <sub>3</sub>	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38											
	l <sub>3</sub> min	23	30	23	25			50	40	30		30		80	60	80	80	110	110	80												
	l <sub>3</sub> max	23	30	23	40			50	50	60		60		80	80	80	110	110	80													
	u <sub>1</sub>	4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10											
	t <sub>1</sub>	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41											
Gearbox size	Gearbox					Total length																										
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k																										
05	115	208	156	98	35	365	372	365	386				420																			
06	145	240	194	121	34	408	415	408	429				463																			
07	180	302	245	155	42	482		496				530		525																		
09	222	370	304	194	52	563		577				611		606		635																
11	270	433	378	243	66	653				687		682		711		766	746	766														
14	328	533	470	306	83					811		806		835		890	870	890	933	933	903											

Gearbox size	Solid shaft								Pitch circle					
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12	
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14	
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18	
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20	
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26	
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34	

Dimensions in [mm]

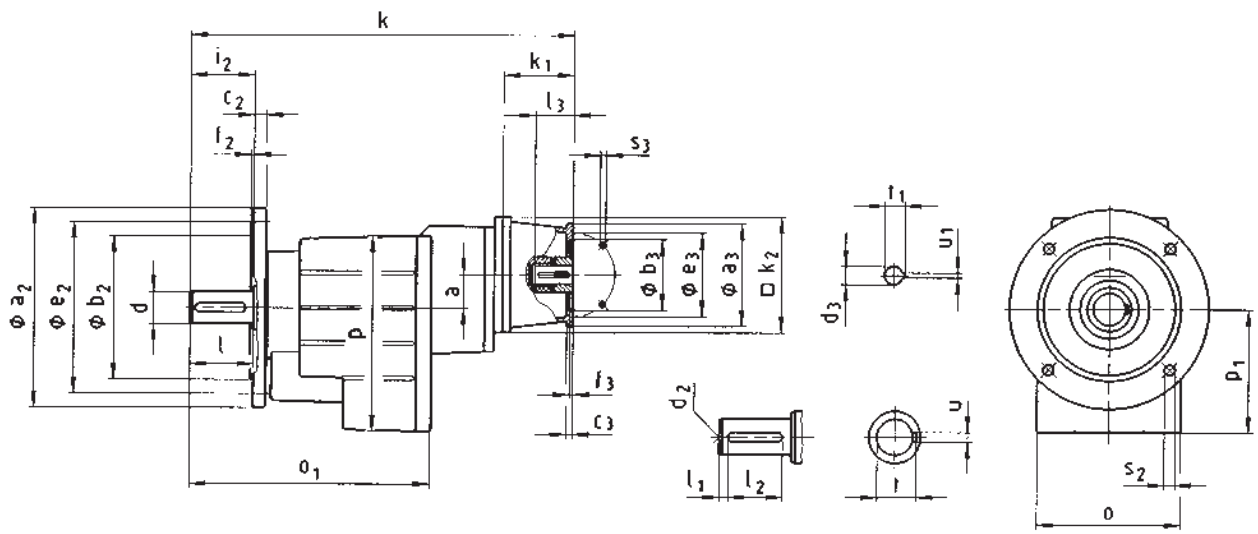
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>

## Dimensions - Helical gearboxes

Gearbox with mounting flange for IEC standard motors

### GST □□ - 3 N VCK





# Dimensions - Helical gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GST □□ - 3 N VCK</b> corresponds to IEC motor					Drive size																						
					1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H			
					63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132			
Housing	$k_1$				75	77	75	91				115		110		139		180	160	180	218	218	188				
		$k_2$				120	145	120	145				180		180		180		265			300					
	Flange	$a_3$				90	105	90	160	160	105	120	160		160		160		300	250	250	350	350	300			
		$b_3$ H8				60	70	60	110	110	70	80	110		110		110		230	180	180	250	250	230			
		$c_3$				7	8	7	10	10	8	8	10		10		10		18	18	35	20	20	18			
		$e_3$				75	85	75	130	130	85	100	130		130		130		265	215	215	300	300	265			
		$f_3$				3		3	4	4	3	3.5	4		4		4		4.5			6	6	4.5			
		$s_3$ 4 x				5.5	6.6	5.5	9	9	6.6	6.6	9		9		9		13.5			17.5	17.5	13.5			
	Required motor shafts	$d_3$				11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38		
		$l_3$	min				23	30	23	25			50	40	30		30	80	60	80	110	110	80				
			max				23	30	23	40			50	50	60		60	80	60	80	110	110	80				
		$u_1$				4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10		
$t_1$				12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41				
Gearbox size	Gearbox					Total length																					
	$o^*$	$o_1$	$p^*$	$p_1$	a	k																					
05	115	208	156	98	35	365	372	365	386				420														
06	145	240	194	121	34	408	415	408	429				463														
07	180	302	245	155	42		482		496				530		525												
09	222	370	304	194	52		563		577				611		606		635										
11	270	433	378	243	66				653				687		682		711		766	746	766						
14	328	533	470	306	83								811		806		835		890	870	890	933	933	903			

Gearbox size	Solid shaft							Output flange						
	d	l	$l_1$	$l_2$	$d_2$	u	t	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$ 4x90°
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7
								140	95	10	115	3		9
								160	110	10	130	3.5		9
								200	130	12	165	3.5		11
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9
								200	130		165			11
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11
								250	180	15	215	4		14
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14
								300	230	18	265			14
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14
								350	250	20	300	5		18
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18
								400	300	24	350			18

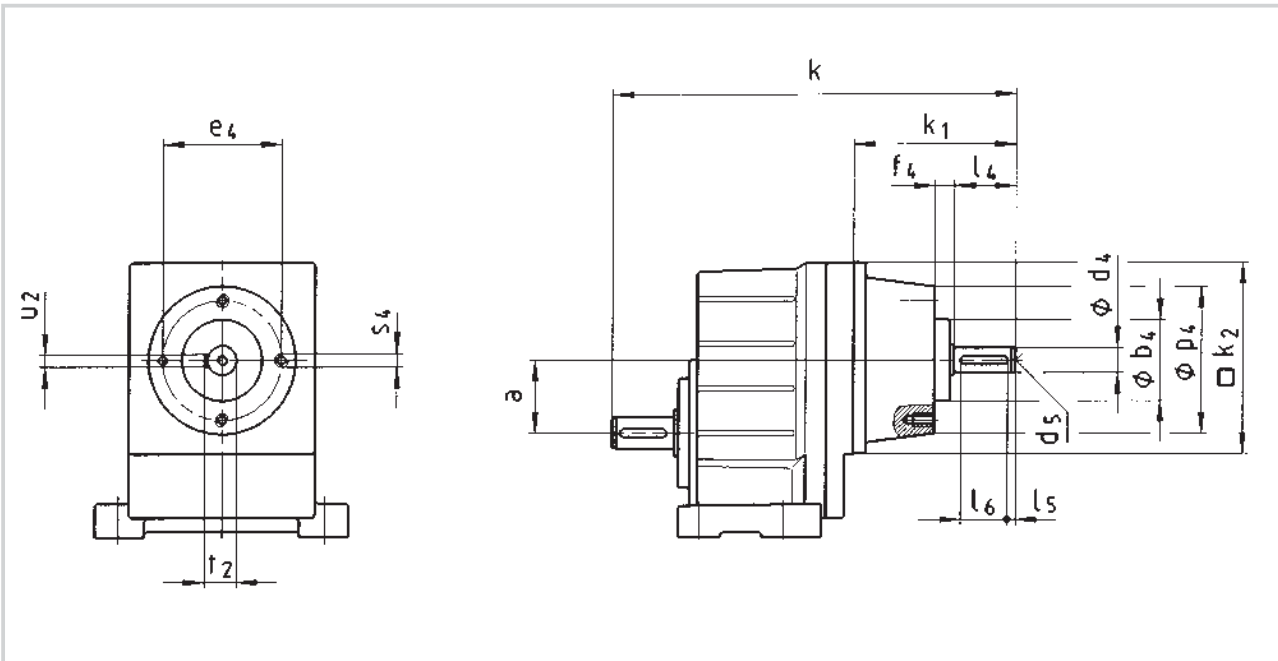
Dimensions in [mm]

$d \leq 50$  mm:  $k_6$   
 $d > 50$  mm:  $m_6$

\* Observe dimension  $k_2$

# Dimensions - Helical gearboxes

## Gearbox with free input shaft



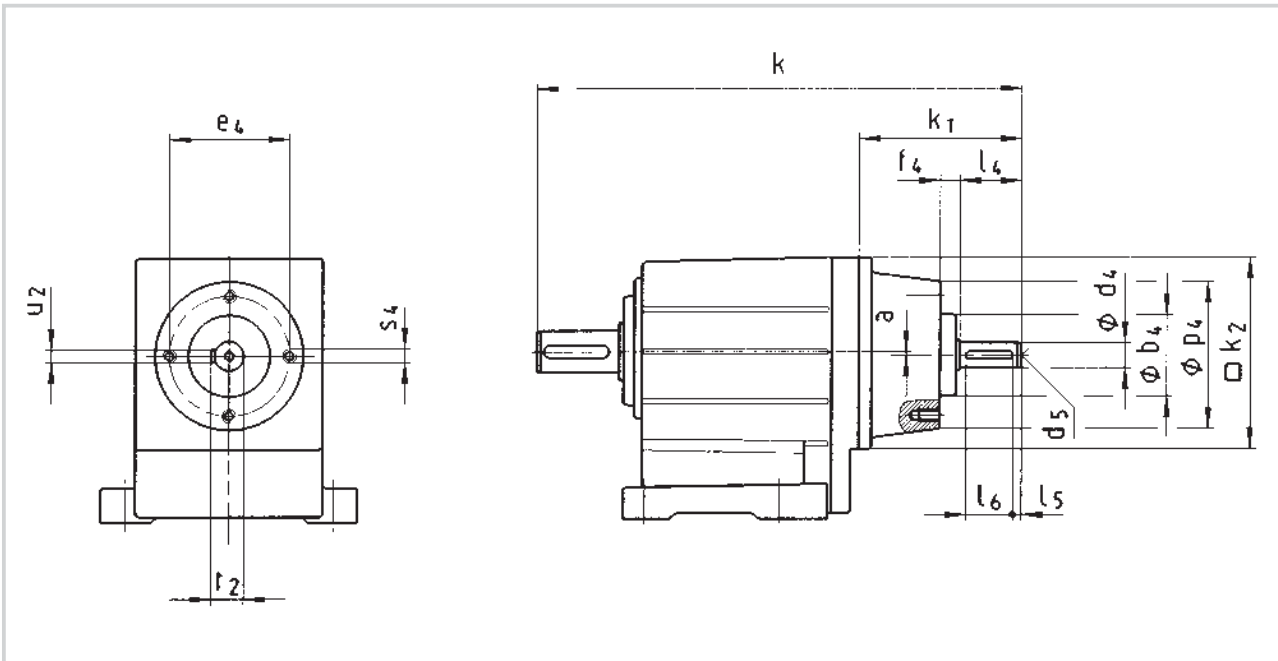
Gearbox		Drive size							
<b>GST □□ - 1 W □□□</b>		<b>1A</b>	<b>1B</b>	<b>1C</b>	<b>1D</b>	<b>1E</b>	<b>1F</b>	<b>1G</b>	<b>1H</b>
Housing	$k_1$	100	100	102	130	160	175	175	182
	$k_2$	115	115	145	145	180	222	222	300
	Pitch circle with centring								
	$p_4$	80	86	90	120	142	178	216	262
	$b_4$ js8	52	52	52	65	78	98	125	155
	$e_4$	67	67	67	90	115	145	175	210
Input shaft	$f_4$	12	12	12	12	22	23	23	23
	$s_4$ 4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	M20x36
	$d_4$ k6	14	14	14	19	24	28	38	42
	$l_4$	35	35	40	50	60	80	100	110
	$l_5$	4.5	4.5	4	4	6	7	8	8
	$l_6$	25	25	32	40	45	63	80	90
Gearbox size	$d_5$	M6	M6	M6	M6	M8	M10	M12	M16
	$u_2$	5	5	5	6	8	8	10	12
	$t_2$	16	16	16	21.5	27	31	41	45
	Gearbox size	Gearbox a	Total length k						
04	36	219	219	251					
05	45		247	272	300				
06	56			295	323	363	384		
07	70				352	392	413	413	
09	89					435	456	456	476

Dimensions in [mm]

Fur further dimensions see Dimensions - Helical geared motors

# Dimensions - Helical gearboxes

## Gearbox with free input shaft



3

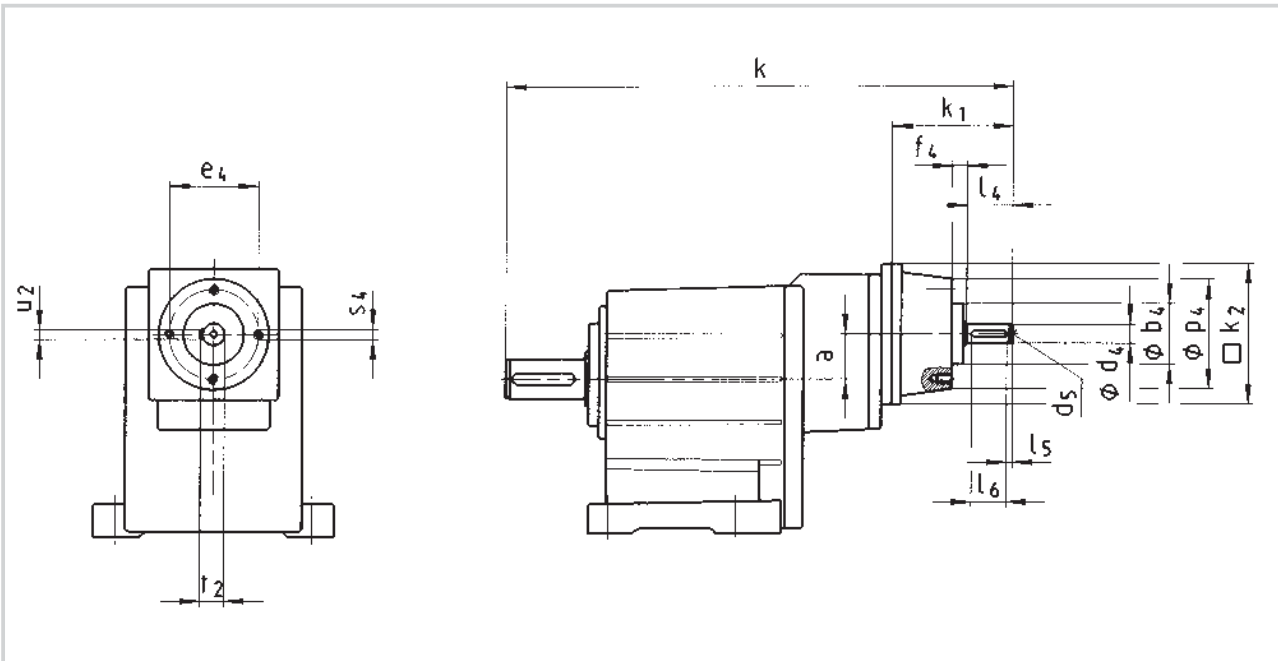
Gearbox		Drive size									
<b>GST □□ - 2 W □□□</b>		1A	1B	1C	1D	1E	1F	1G	1H	1K	
Housing	$k_1$	100	100	102	130	160	175	175	182	220	
	$k_2$	115	115	145	145	180	222	222	300	300	
	Pitch circle with centring	$p_4$	80	86	90	120	142	178	216	262	262
	$b_4$ js8	52	52	52	65	78	98	125	155	155	
	$e_4$	67	67	67	90	115	145	175	210	210	
	$f_4$	12	12	12	12	22	23	23	23	32	
Input shaft	$s_4$ 4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	M20x36	M20x36	
	$d_4$ k6	14	14	14	19	24	28	38	42	48	
	$l_4$	35	35	40	50	60	80	100	110	110	
	$l_5$	4.5	4.5	4	4	6	7	8	8	8	
	$l_6$	25	25	32	40	45	63	80	90	90	
	$d_5$	M6	M6	M6	M6	M8	M10	M12	M16	M16	
	$u_2$	5	5	5	6	8	8	10	12	14	
	$t_2$	16	16	16	21.5	27	31	41	45	51.5	
	<b>Gearbox size</b>	<b>Gearbox a</b>	<b>Total length k</b>								
	04	0	259	259	291						
05	1		296	321	349						
06	2			347	375	415	436				
07	3				431	471	492	492			
09	4					534	555	555	575		
11	4						612	612	632	670	
14	6							702	722	760	

Dimensions in [mm]

For further dimensions see Dimensions - Helical geared motors

# Dimensions - Helical gearboxes

## Gearbox with free input shaft

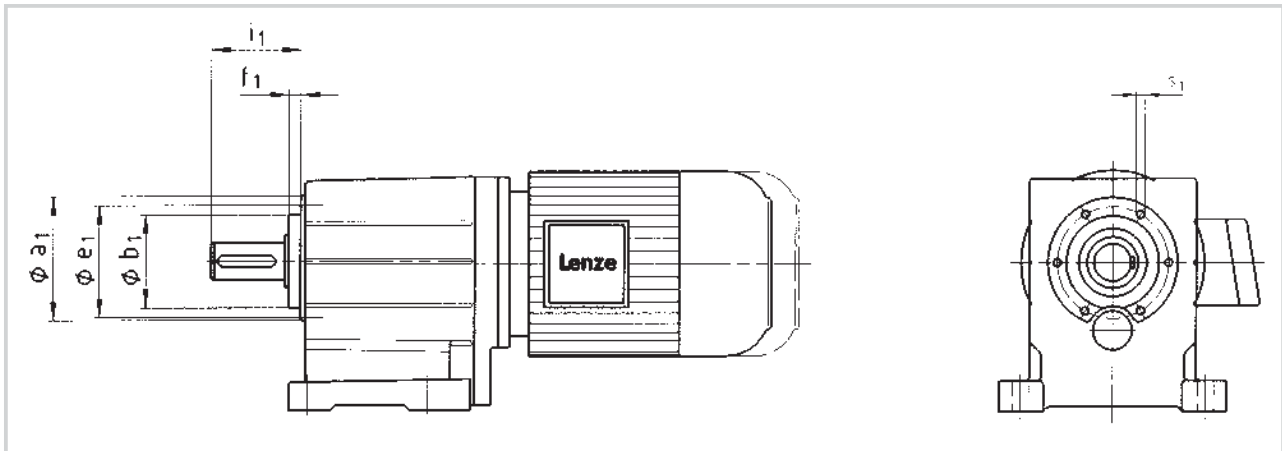


Gearbox		Drive size							
GST □□ - 3 W □□□		1A	1B	1C	1D	1E	1F	1G	1H
Housing	$k_1$	100	100	102	130	160	175	175	182
	$k_2$	115	115	145	145	180	222	222	300
Pitch circle with centring	$p_4$	80	86	90	120	142	178	216	262
	$b_4$ js8	52	52	52	65	78	98	125	155
	$e_4$	67	67	67	90	115	145	175	210
	$f_4$	12	12	12	12	22	23	23	23
Input shaft	$s_4$ 4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	M20x36
	$d_4$ k6	14	14	14	19	24	28	38	42
	$l_4$	35	35	40	50	60	80	100	110
	$l_5$	4.5	4.5	4	4	6	7	8	8
	$l_6$	25	25	32	40	45	63	80	90
	$d_5$	M6	M6	M6	M6	M8	M10	M12	M16
	$u_2$	5	5	5	6	8	8	10	12
	$t_2$	16	16	16	21.5	27	31	41	45
<b>Gearbox size</b>	<b>Gearbox a</b>	<b>Total length k</b>							
05	35	365	365	397					
06	34	408	408	440					
07	42		482	507	535				
09	52			588	616	656	677		
11	66				692	732	753	753	
14	83					856	877	877	897

Dimensions in [mm]

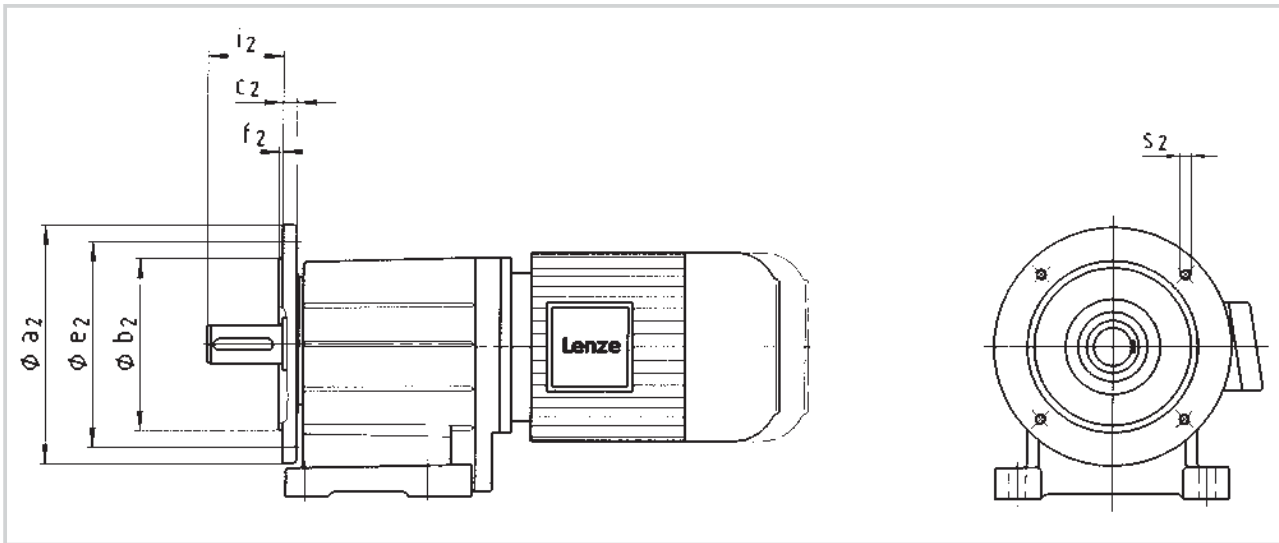
Fur further dimensions see Dimensions - Helical geared motors

## Output design VAR



Gearbox size	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6 x 60°
04	72	48	61	8	51	M5x10
05	88	58	74	9	62	M6x12
06	109	70	90	10	74	M8x14
07	140	100	120	13	97	M10x8
09	174	120	145	15	120	M12x20
11	215	150	185	18	143	M16x26
14	265	195	230	22	187	M20x34

### Output design VAL



3

Gearbox size	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4 x 90°
04	120	80	10	100	3	40	M6
	140	95		115			M8
05	120	80	10	100	3	50	M6
	140	95		115	3		M8
	160	110		130	3.5		M8
06	160	110	12	130	3.5	60	M8
	200	130		165			M10
07	200	130	14	165	3.5	80	M10
	250	180	15	215	4		M12
09	250	180	16	215	4	100	M12
	300	230	18	265			
11	300	230	18	265	4	120	M12
	350	250	20	300	5		M16
14	350	250	22	300	5	160	M16
	400	300	24	350			

Dimensions in [mm]

For further dimensions see Dimensions - Helical geared motors

# Shaft-mounted helical gearboxes

(low-profile gearboxes)

G-motion const

## Technical data

Permissible radial and axial forces	4-2
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## Dimensions

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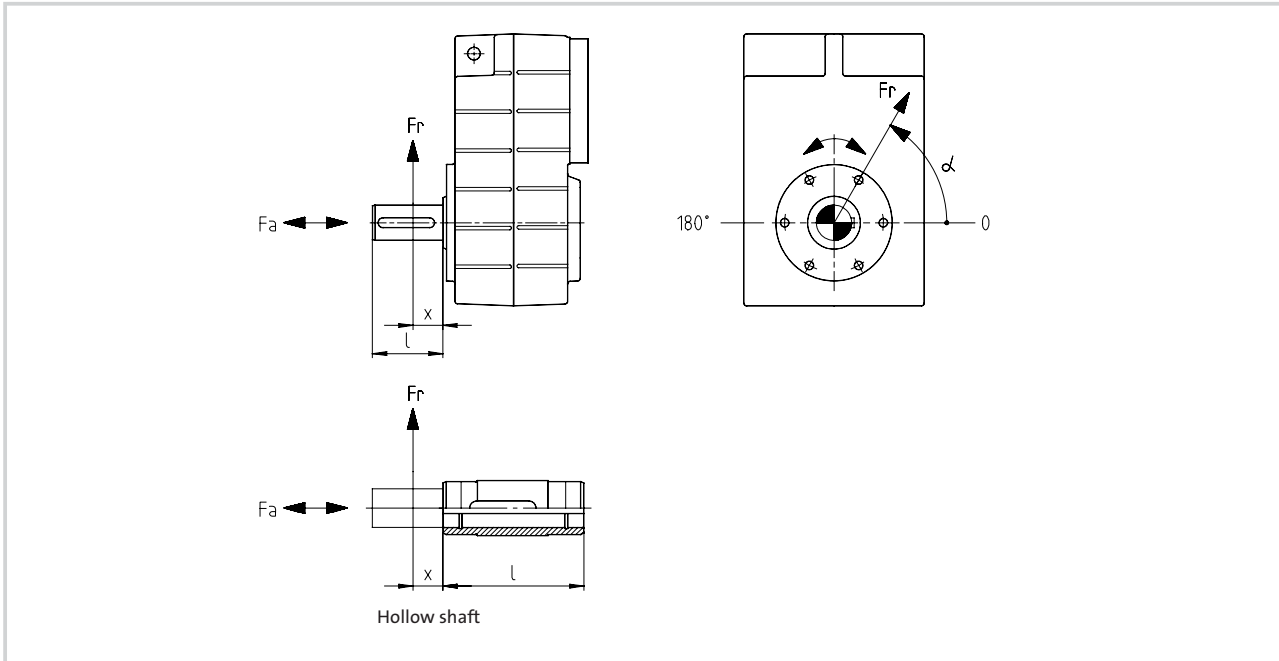
**Permissible radial force**

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

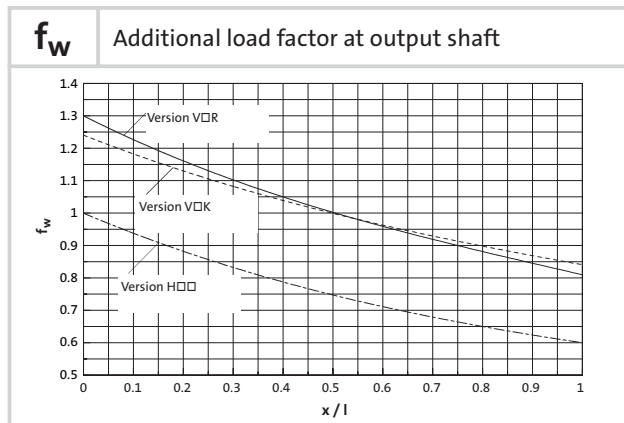
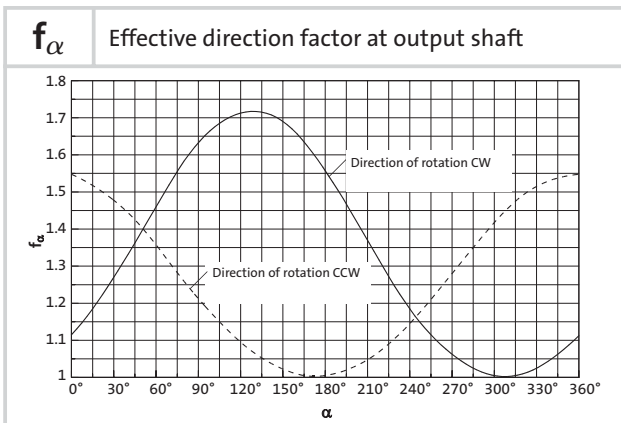
**Permissible axial force**

$$F_{Aperm} = F_{ATab} \quad \text{at } F_R = 0$$

Contact Lenze if  $F_R$  and  $F_A \neq 0$



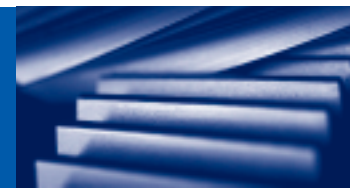
4





# Technical data - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Permissible radial and axial forces - output



VCK	Solid shaft with flange													
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ )													
	$F_{aTab}$ only valid for $F_r = 0$													
$n_2$ [min <sup>-1</sup> ]	GFL 04		GFL 05		GFL 06		GFL 07		GFL 09		GFL 11		GFL 14	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3200	2200	4300	3100	6100	4300	6400	6100	7800	6100	12500	6800	18000	6000
250	3700	2600	5100	3900	7000	5500	7400	6500	9000	6500	14500	8500	20000	8000
160	4400	3200	5900	4800	7800	6500	8900	7000	10500	7000	17000	10500	23000	10000
100	4600	4200	6800	6400	9600	8500	10500	9500	14000	9500	21500	17000	27500	13000
63	4600	4400	7000	6600	10000	10000	12000	11500	15000	11500	26000	22000	32000	19000
40	4600	4400	7000	6600	10000	10000	13000	11500	15000	11500	30000	27000	38000	26000
25	4600	4400	7000	6600	10000	10000	14000	11500	15000	11500	30000	27000	43000	35000
≤ 16	4600	4400	7000	6600	10000	10000	14000	11500	15000	11500	30000	27000	43000	35000
$F_{rmax}$	4600	–	7400	–	11000	–	16000	–	16000	–	32000	–	46000	–

VOR	Solid shaft without flange													
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ )													
	$F_{aTab}$ only valid for $F_r = 0$													
$n_2$ [min <sup>-1</sup> ]	GFL 04		GFL 05		GFL 06		GFL 07		GFL 09*		GFL 11*		GFL 14	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	2300	2200	2400	2800	3200	4000	3200	3400	3800	3100	5500	4700	47000	25000
250	2700	2600	2700	3600	3600	5200	3600	4700	4400	4200	6300	6000	54000	27000
160	3200	3200	3200	4200	3900	6000	3900	6000	5500	5800	7300	7500	62000	29000
100	3600	4200	4000	5900	5100	8500	5100	8500	8000	10000	11200	14000	65000	32000
63	3600	5300	4800	6600	6500	10000	6500	12000	10000	13500	14500	19000	65000	35000
40	3600	5500	5800	6600	8400	10000	8400	14000	12000	17000	17400	25000	65000	35000
25	3600	5500	6200	6600	9000	10000	9000	14000	18000	21000	20500	27000	65000	35000
≤ 16	3600	5500	6200	6600	9000	10000	9000	14000	18000	21000	23000	27000	65000	35000
$F_{rmax}$	3600	–	7000	–	11000	–	11000	–	22000	–	28000	–	65000	–

H00	Hollow shaft													
	Application of force $F_r$ : At hollow shaft end face ( $x = 0$ )													
	$F_{aTab}$ only valid for $F_r = 0$													
$n_2$ [min <sup>-1</sup> ]	GFL 04		GFL 05		GFL 06		GFL 07		GFL 09		GFL 11		GFL 14	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	2800	2200	3000	2800	4300	4000	4500	3400	5000	3100	7300	4700	8000	4000
250	3200	2600	3400	3600	4700	5200	5100	4700	6000	4200	8700	6000	9000	5000
160	3800	3200	4100	4200	5000	6000	6400	6000	7200	5800	10000	7500	9500	6200
100	4600	4200	5000	5900	6600	8500	7900	8500	10500	10000	14200	14000	11500	7500
63	5500	5300	6000	6600	8500	10000	9300	12000	13000	13500	19000	19000	14000	11000
40	6300	5500	7100	6600	10800	10000	11500	14000	15000	17000	23000	25000	18000	17500
25	7000	5500	8000	6600	12000	10000	15000	14000	22000	21000	27000	27000	30000	31000
≤ 16	7000	5500	8000	6600	12000	10000	16000	14000	24000	21000	30000	27000	45000	35000
$F_{rmax}$	7000	–	10000	–	15000	–	20000	–	30000	–	38000	–	56000	–

\* A reinforced output shaft bearing is available on request for VOR versions.

Neither radial nor axial forces are permitted on hollow shafts with shrink disc (S□□).

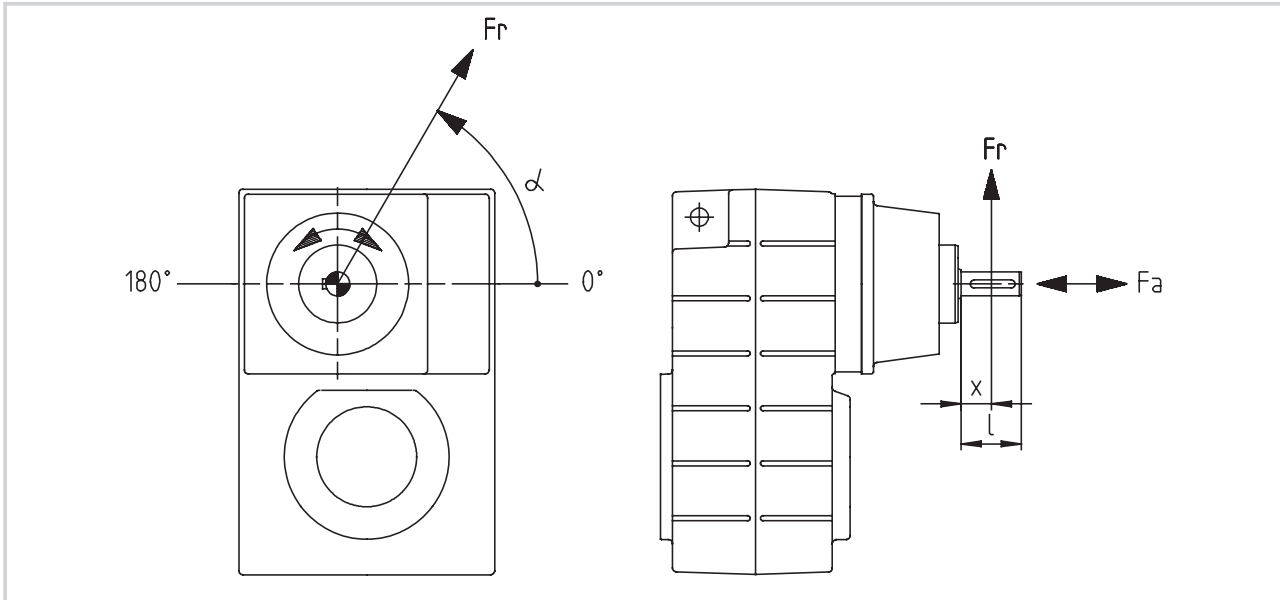
**Permissible radial force**

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

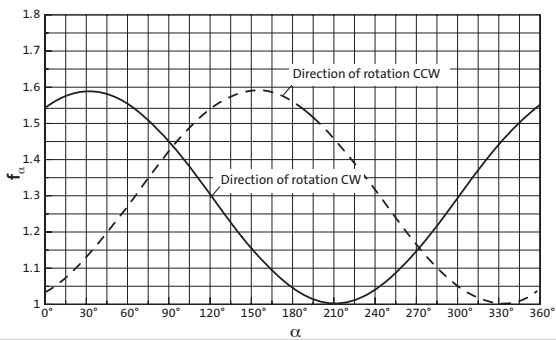
**Permissible axial force**

$$F_{Aperm} = F_{ATab} \quad \text{at } F_R = 0$$

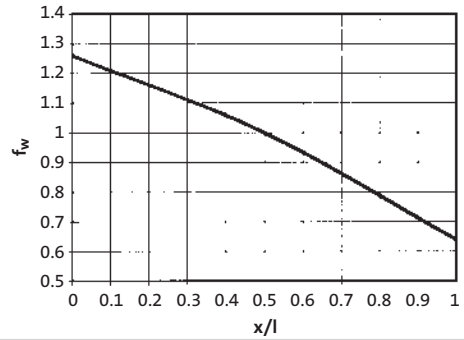
Contact Lenze if  $F_R$  and  $F_A \neq 0$



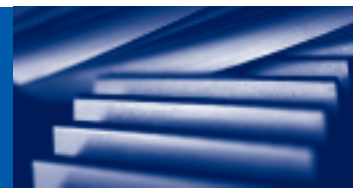
**$f_\alpha$**  Effective direction factor at input shaft



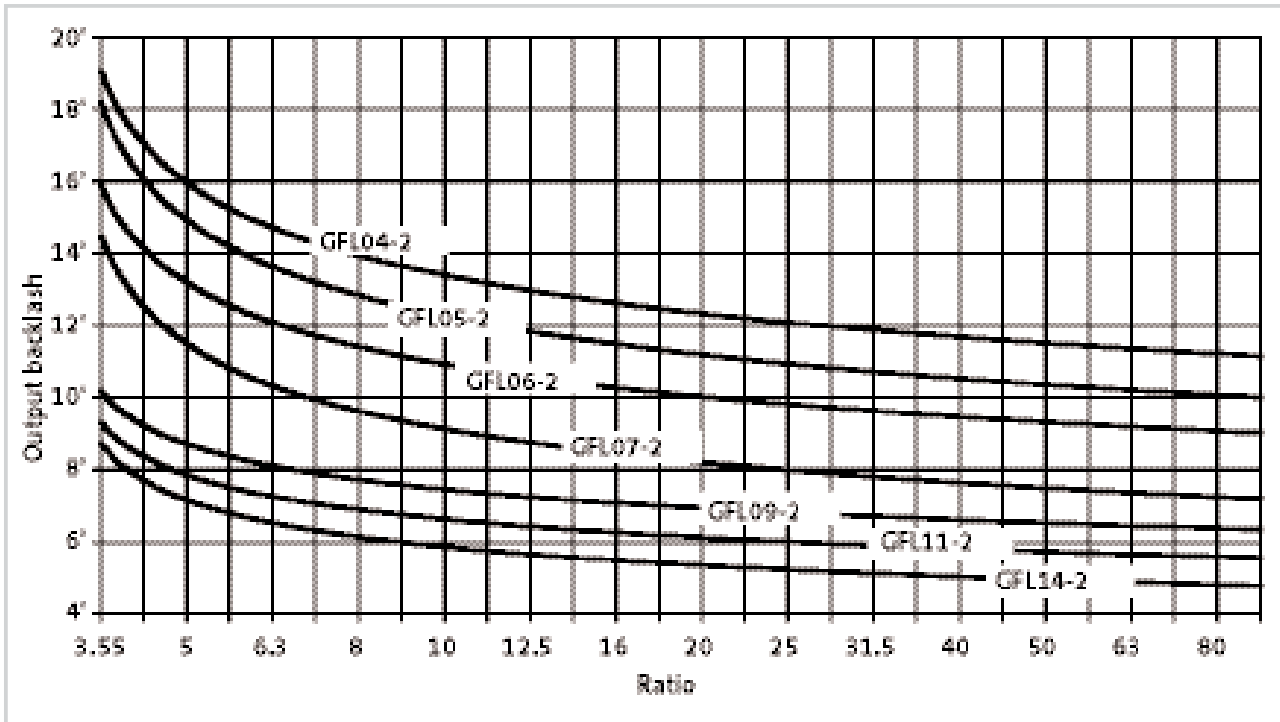
**$f_w$**  Additional load factor at input shaft



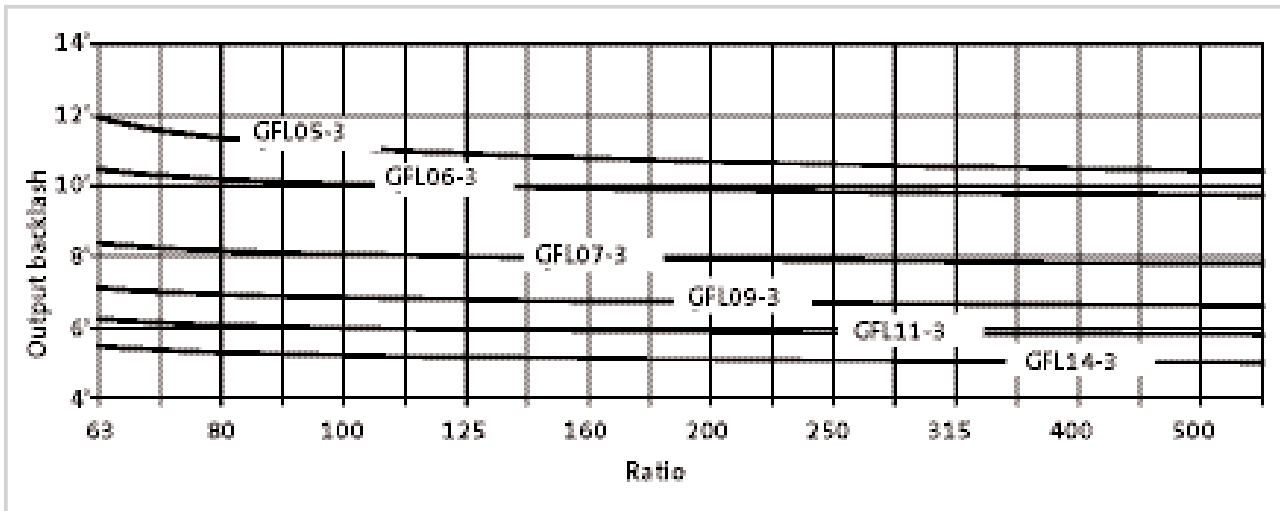
W	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$															
	Drive size															
	$n_1$ [min <sup>-1</sup> ]	1A 1B		1C		1D		1E		1F		1G		1H		1K
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
700	830	1200	1150	1400	1470	1500	2140	1600	3200	2800	4000	4500	5000	6000	8500	10000
1400	570	770	780	900	1000	740	1400	800	2200	1700	3200	2000	4000	2500	7000	5300
2800	440	530	590	620	770	470	940	460	1700	1100	2300	1600	3000	2000	5000	3500
$F_{Rmax}$	1850	-	1650	-	3000	-	4900	-	5600	-	8000	-	10000	-	12000	-



GFL □□-2

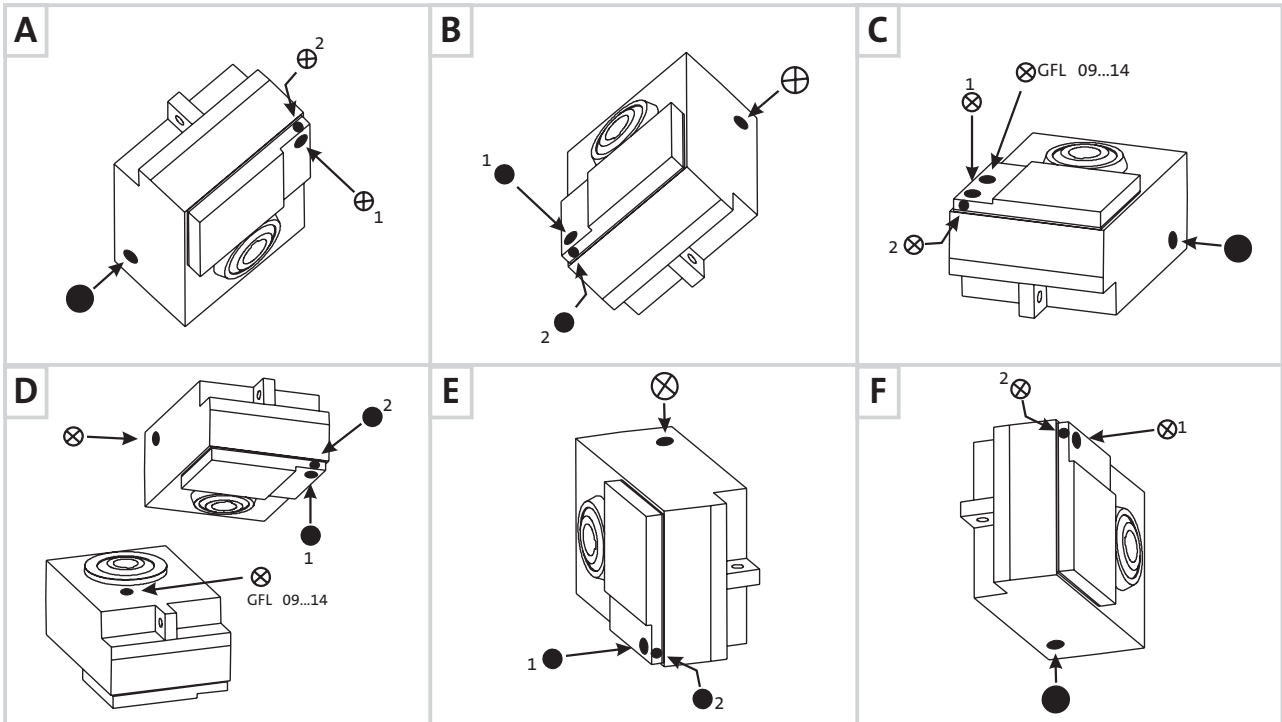


GFL □□-3

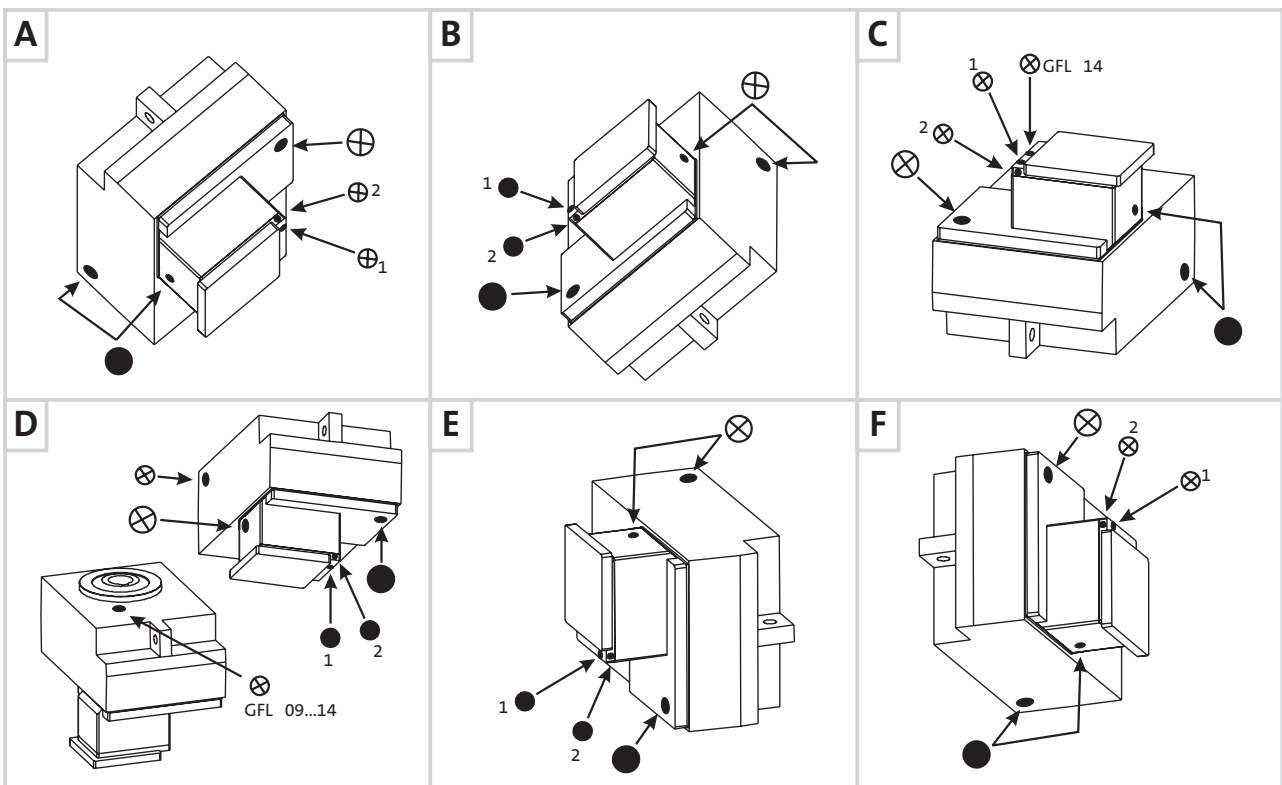


Position of ventilation, oil filler plug and oil drain plug

Shaft-mounted helical gearbox (low-profile gearbox) GFL 05 ... 14-2



Shaft-mounted helical gearbox (low-profile gearbox) GFL 05 ... 14-3



(A ... F) Mounting position

⊗ Ventilation/oil filler plug  
● Oil drain plug

Pos. 1 or 2 depending on version  
(see table on page 4-7)



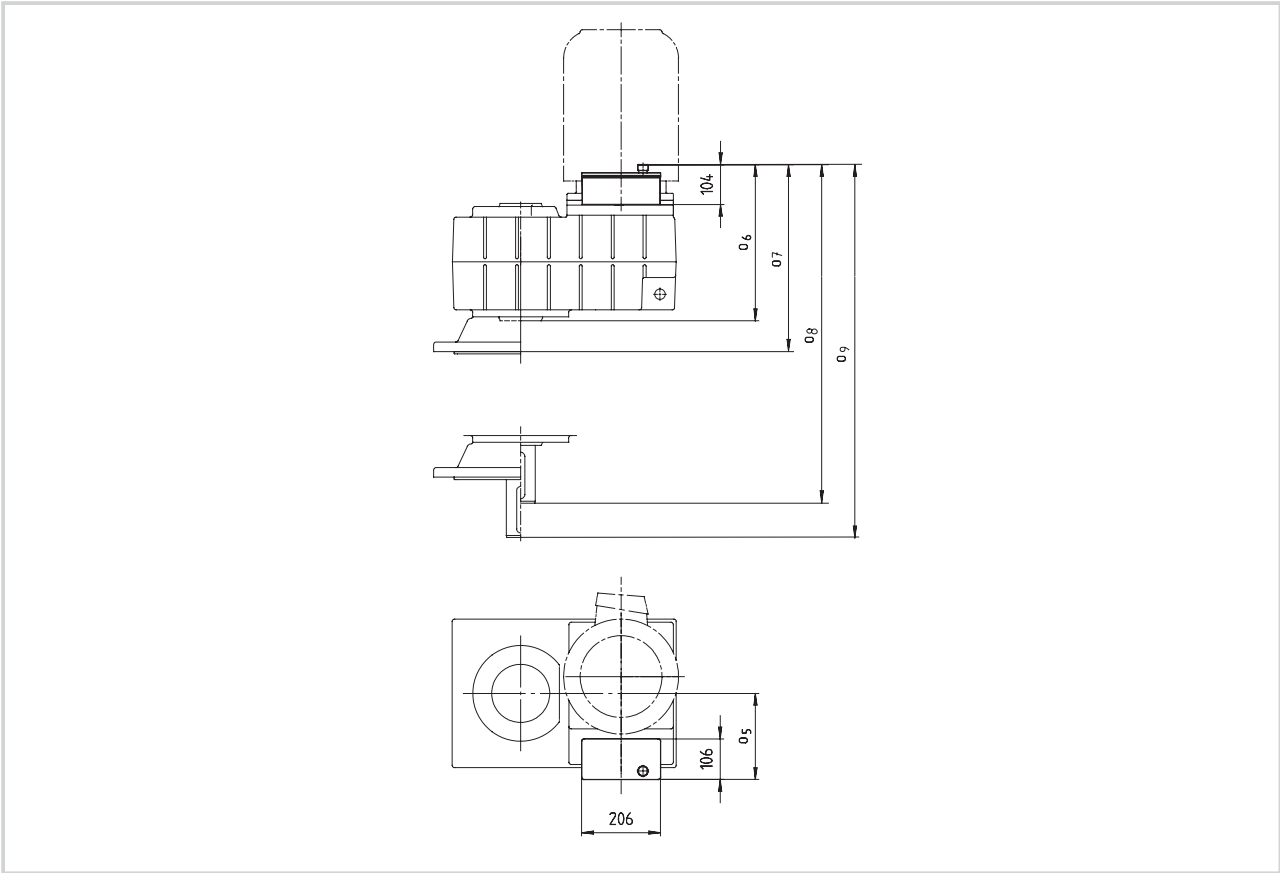
On the **versions listed** in the table, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.  
On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

### Shaft-mounted helical gearboxes (low-profile gearboxes)

GFL	05	-2	M	□□□	090 100
			N	□□□	1D/2D 1E/2E/3E
	06	-2	M	□□□	112
			W	□□□	1F
	07	-2	M	□□□	160
			N	□□□	1H/3H
		-3	M	□□□	090 100
			N	□□□	1D/2D 1E/2E/3E
	09	-3	M	□□□	112
			W	□□□	1F

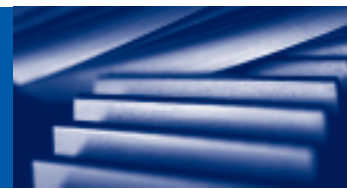
**Gearbox with ventilation and reservoir for mounting position C**

**Shaft-mounted helical gearbox (low-profile gearbox) GFL**



Shaft-mounted helical gearbox (low-profile gearbox) GFL□□ - 2 M	Motor frame size / Drive size				
	090 / 100	112	132 / 180	160 / 200 / 225	
GFL□□ - 2 N	□D / □E / □F		□G / □H	□K	
GFL□□ - 2 W	1E	1F / 1G		1H / 1K	
09	O5	166	188	209	224
	O6	340	340	340	340
	O7	400	400	400	400
	O8	456	456	456	456
	O9	516	516	516	516
11	O5	156	178	202	216
	O6	382	386	386	386
	O7	442	446	446	446
	O8	537	541	541	541
	O9	597	601	601	601
14	O5		183	213	213
	O6		440	440	440
	O7		500	500	500
	O8		595	595	595
	O9		655	655	655

Terminal box position 3 not permitted.



### Shaft-mounted helical gearbox (low-profile gearbox) GFL □□-2

Gearbox size	Geared motors														
	GFL□□-2M HCR/HDR with motor frame size														
	063	071	080	090	100	112		132	160		180		200	225	
						C22/-31	C32/-41		-22	-32	-22	-32	N32	N12	N22
04	11	13	18	25											
05	24	26	31	38	45										
06	38	40	45	52	59	71	77								
07			71	78	85	97	103	130	174	194					
09				124	131	143	149	177	221	241	320	330	416		
11					216	228	234	260	304	324	403	413	500	552	622
14						370	376	401	445	465	544	554	638	690	760

Gearbox size	Gearbox with mounting flange for IEC motors												Gearbox with free input shaft										
	GFL□□-2N HCR/HDR with drive size												GFL□□-2W HCR/HDR with drive size										
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	2H	3H	1K	2K	1A	1B	1C	1D	1E	1F	1G	1H	1K	
04	9	10	13	16										8	9	10							
05		23	26	29	31										22	23	25						
06		37	40	43	45	47										37	40	43	51				
07			66	69	71	73	96	93	104		100						65	68	77	82			
09				115	118	119	143	140	151	155	147	171						114	123	129	144		
11					203	204	226	223	234	238	230	255	262						208	212	227	243	
14							367	364	375	379	371	393	400							353	368	381	

Weights in [kg] with oil capacity for mounting position A. All data is approximate  
Observe extra weights on page 4-10!

Shaft-mounted helical gearbox (low-profile gearbox) GFL □□-3

Gearbox size	Geared motors GFL□□-3M HCR/HDR with motor frame size											
	063	071	080	090	100	112		132	160		180	
						C22/-31	C32/-41		-22	-32	-22	-32
05	25	27	32	39								
06	42	44	49	55								
07	72	74	79	86	93							
09	123	125	130	137	144	157	163					
11			223	230	237	250	256	283	327	347		
14				387	394	406	412	439	483	503	538	548

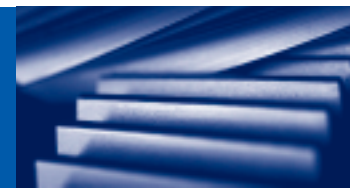
Gearbox size	Gearbox with mounting flange for IEC motors GFL□□-3N HCR/HDR with drive size										Gearbox with free input shaft GFL□□-3W HCR/HDR with drive size								
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	2H	3H	1A	1B	1C	1D	1E	1F	1G	1H
	05	23	25	27	30								22	23	24				
06	40	41	44	47								39	40	41					
07		71	74	77	79								70	71	73				
09		122	125	128	131	132								122	125	128	137		
11			218	221	224	226	249	246	257	261	253				218	221	230	235	
14				378	380	381	405	402	413	417	409					377	385	391	406

Extra weights

Gearbox size	Solid shaft V□□	Hollow shaft with shrink disc S□□	Flange □□K	Foot □A□/□B□
04	0.6	0.6	2.5	1.0
05	1	0.8	4	1.5
06	2.5	1	7	2.5
07	5	1.5	11	4
09	8	3	16	7
11	16	5	24	14
14	33	11	33	23

Weights in [kg] with oil capacity for mounting position A. All data is approximate





P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.12 kW</b> n <sub>1</sub> =1425					<b>GFL □□ - 2M</b>	4-84
	203	6	5.4	7.025	GFL04 - 2M□□□ 063C12	
	89	13	5.4	16.087	GFL04 - 2M□□□ 063C12	
	80	14	5.4	17.920	GFL04 - 2M□□□ 063C12	
	69	16	5.0	20.519	GFL04 - 2M□□□ 063C12	
	62	18	5.0	22.857	GFL04 - 2M□□□ 063C12	
	45	25	5.5	31.600	GFL04 - 2M□□□ 063C12	
	41	28	5.5	35.200	GFL04 - 2M□□□ 063C12	
	35	32	4.6	40.697	GFL04 - 2M□□□ 063C12	
	31	35	4.6	45.333	GFL04 - 2M□□□ 063C12	
	28	40	4.0	51.579	GFL04 - 2M□□□ 063C12	
	25	45	3.9	57.455	GFL04 - 2M□□□ 063C12	
	22	50	3.2	64.636	GFL04 - 2M□□□ 063C12	
	20	56	3.2	72.000	GFL04 - 2M□□□ 063C12	
	17	66	1.6	85.156	GFL04 - 2M□□□ 063C12	
	15	74	1.6	94.857	GFL04 - 2M□□□ 063C12	
					<b>GFL □□ - 3M</b>	
	14	78	4.2	101.547	GFL05 - 3M□□□ 063C12	
	12	88	3.7	114.952	GFL05 - 3M□□□ 063C12	
	11	100	3.3	129.524	GFL05 - 3M□□□ 063C12	
	9.9	111	5.0	144.320	GFL06 - 3M□□□ 063C12	
	8.8	125	4.9	162.583	GFL06 - 3M□□□ 063C12	
	8.1	136	2.5	177.027	GFL05 - 3M□□□ 063C12	
	7.1	153	2.1	199.467	GFL05 - 3M□□□ 063C12	
	6.3	175	2.0	227.989	GFL05 - 3M□□□ 063C12	
	5.6	197	1.7	256.889	GFL05 - 3M□□□ 063C12	
	5.5	200	3.1	260.457	GFL06 - 3M□□□ 063C12	
	4.9	222	1.6	288.948	GFL05 - 3M□□□ 063C12	
	4.9	225	2.9	293.018	GFL06 - 3M□□□ 063C12	
	4.4	250	1.3	325.576	GFL05 - 3M□□□ 063C12	
	4.8	230	2.7	299.200	GFL06 - 3M□□□ 063C12	
	3.9	278	1.2	362.100	GFL05 - 3M□□□ 063C12	
	3.9	282	2.3	367.200	GFL06 - 3M□□□ 063C12	
	3.5	314	1.0	408.000	GFL05 - 3M□□□ 063C12	
	3.4	318	1.9	413.667	GFL06 - 3M□□□ 063C12	
3.0	365	1.8	475.200	GFL06 - 3M□□□ 063C12		
3.0	367	0.9	477.052	GFL05 - 3M□□□ 063C12		
2.7	411	1.5	535.333	GFL06 - 3M□□□ 063C12		
2.5	443	1.4	576.720	GFL06 - 3M□□□ 063C12		
2.2	499	1.2	649.700	GFL06 - 3M□□□ 063C12		
1.9	584	0.9	759.806	GFL06 - 3M□□□ 063C12		
1.7	658	0.9	855.954	GFL06 - 3M□□□ 063C12		

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.18 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2760	393	4	5.7	7.025	GFL04 - 2M□□□ 063-11	
	172	10	5.7	16.087	GFL04 - 2M□□□ 063-11	
	154	11	5.7	17.920	GFL04 - 2M□□□ 063-11	
	135	12	5.3	20.519	GFL04 - 2M□□□ 063-11	
	121	14	5.3	22.857	GFL04 - 2M□□□ 063-11	
	68	25	5.5	40.697	GFL04 - 2M□□□ 063-11	
	61	27	5.5	45.333	GFL04 - 2M□□□ 063-11	
	54	31	4.8	51.579	GFL04 - 2M□□□ 063-11	
	48	35	4.6	57.455	GFL04 - 2M□□□ 063-11	
	43	39	3.9	64.636	GFL04 - 2M□□□ 063-11	
	38	44	4.1	72.000	GFL04 - 2M□□□ 063-11	
	32	52	2.0	85.156	GFL04 - 2M□□□ 063-11	
	29	57	2.0	94.857	GFL04 - 2M□□□ 063-11	
	n1=1365	194	9	3.4	7.025	GFL04 - 2M□□□ 063C32
85		20	3.4	16.087	GFL04 - 2M□□□ 063C32	
76		22	3.4	17.920	GFL04 - 2M□□□ 063C32	
67		25	3.2	20.519	GFL04 - 2M□□□ 063C32	
60		28	3.2	22.857	GFL04 - 2M□□□ 063C32	
43		39	3.5	31.600	GFL04 - 2M□□□ 063C32	
39		43	3.5	35.200	GFL04 - 2M□□□ 063C32	
34		50	2.9	40.697	GFL04 - 2M□□□ 063C32	
30		55	2.9	45.333	GFL04 - 2M□□□ 063C32	
27		63	2.6	51.579	GFL04 - 2M□□□ 063C32	
24		70	2.5	57.455	GFL04 - 2M□□□ 063C32	
21		79	2.1	64.636	GFL04 - 2M□□□ 063C32	
19		88	2.0	72.000	GFL04 - 2M□□□ 063C32	
16		104	1.0	85.156	GFL04 - 2M□□□ 063C32	
14		116	1.0	94.857	GFL04 - 2M□□□ 063C32	
n1=870		14	124	1.3	64.636	GFL04 - 2M□□□ 071-13
	14	121	2.3	63.190	GFL05 - 2M□□□ 071-13	
	12	138	1.3	72.000	GFL04 - 2M□□□ 071-13	
	12	137	2.2	71.200	GFL05 - 2M□□□ 071-13	
	11	155	1.4	80.763	GFL05 - 2M□□□ 071-13	
	11	155	2.8	81.000	GFL06 - 2M□□□ 071-13	
	9.6	174	1.4	91.000	GFL05 - 2M□□□ 071-13	
	9.5	175	2.7	91.250	GFL06 - 2M□□□ 071-13	

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.18 kW</b>					<b>GFL □□ - 3M</b>	<b>4-100</b>
n1=1365	13	122	2.7	101.547	GFL05 - 3M□□□ 063C32	
	12	138	2.4	114.952	GFL05 - 3M□□□ 063C32	
	12	140	2.9	116.571	GFL06 - 3M□□□ 063C32	
	11	156	2.1	129.524	GFL05 - 3M□□□ 063C32	
	10	158	3.2	131.323	GFL06 - 3M□□□ 063C32	
	9.5	174	3.2	144.320	GFL06 - 3M□□□ 063C32	
	8.4	196	3.1	162.583	GFL06 - 3M□□□ 063C32	
	7.7	213	1.6	177.027	GFL05 - 3M□□□ 063C32	
	7.6	216	2.8	179.520	GFL06 - 3M□□□ 063C32	
	6.8	240	1.4	199.467	GFL05 - 3M□□□ 063C32	
	6.8	243	2.5	202.237	GFL06 - 3M□□□ 063C32	
	6.0	274	1.3	227.989	GFL05 - 3M□□□ 063C32	
	5.9	278	2.3	231.200	GFL06 - 3M□□□ 063C32	
	5.3	309	1.1	256.889	GFL05 - 3M□□□ 063C32	
	5.2	313	2.0	260.457	GFL06 - 3M□□□ 063C32	
	4.7	348	1.0	288.948	GFL05 - 3M□□□ 063C32	
	4.7	353	1.9	293.018	GFL06 - 3M□□□ 063C32	
	4.2	392	0.8	325.576	GFL05 - 3M□□□ 063C32	
	4.6	360	1.7	299.200	GFL06 - 3M□□□ 063C32	
	3.7	442	1.5	367.200	GFL06 - 3M□□□ 063C32	
3.3	498	1.2	413.667	GFL06 - 3M□□□ 063C32		
2.9	572	1.1	475.200	GFL06 - 3M□□□ 063C32		
2.6	644	1.0	535.333	GFL06 - 3M□□□ 063C32		
2.4	694	0.9	576.720	GFL06 - 3M□□□ 063C32		
n1=870	2.4	693	0.9	367.200	GFL06 - 3M□□□ 071-13	
	2.2	751	1.7	397.533	GFL07 - 3M□□□ 071-13	
	2.0	812	1.6	430.222	GFL07 - 3M□□□ 071-13	
	1.7	986	1.3	522.133	GFL07 - 3M□□□ 071-13	
	1.7	972	2.8	514.881	GFL09 - 3M□□□ 071-13	
	1.6	1062	1.1	562.391	GFL07 - 3M□□□ 071-13	
	1.6	1047	2.0	554.470	GFL09 - 3M□□□ 071-13	
	1.4	1197	1.0	633.680	GFL07 - 3M□□□ 071-13	
	1.4	1180	1.9	624.879	GFL09 - 3M□□□ 071-13	
	1.2	1357	0.8	718.786	GFL07 - 3M□□□ 071-13	
1.2	1323	1.6	700.875	GFL09 - 3M□□□ 071-13		
1.1	1491	1.5	789.875	GFL09 - 3M□□□ 071-13		
<b>0.25 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2760	393	6	4.1	7.025	GFL04 - 2M□□□ 063-31	
	172	14	4.1	16.087	GFL04 - 2M□□□ 063-31	
	154	15	4.1	17.920	GFL04 - 2M□□□ 063-31	
	135	17	3.8	20.519	GFL04 - 2M□□□ 063-31	
	121	19	3.8	22.857	GFL04 - 2M□□□ 063-31	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.25 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2760	87	27	4.7	31.600	GFL04 - 2M□□□ 063-31	
	78	30	4.7	35.200	GFL04 - 2M□□□ 063-31	
	68	34	4.0	40.697	GFL04 - 2M□□□ 063-31	
	61	38	4.0	45.333	GFL04 - 2M□□□ 063-31	
	54	43	3.5	51.579	GFL04 - 2M□□□ 063-31	
	48	48	3.3	57.455	GFL04 - 2M□□□ 063-31	
	43	54	2.8	64.636	GFL04 - 2M□□□ 063-31	
	38	60	2.9	72.000	GFL04 - 2M□□□ 063-31	
	32	72	1.4	85.156	GFL04 - 2M□□□ 063-31	
	29	80	1.5	94.857	GFL04 - 2M□□□ 063-31	
n1=1370	374	6	4.5	3.659	GFL04 - 2M□□□ 063C42	
	273	9	4.5	5.018	GFL04 - 2M□□□ 063C42	
	235	10	4.5	5.833	GFL04 - 2M□□□ 063C42	
	214	11	4.5	6.400	GFL05 - 2M□□□ 063C42	
	195	12	5.2	7.025	GFL04 - 2M□□□ 063C42	
	164	14	4.5	8.379	GFL04 - 2M□□□ 063C42	
	147	16	4.5	9.333	GFL04 - 2M□□□ 063C42	
	134	17	5.2	10.238	GFL04 - 2M□□□ 063C42	
	119	19	4.5	11.491	GFL04 - 2M□□□ 063C42	
	107	22	4.5	12.800	GFL04 - 2M□□□ 063C42	
	93	25	5.2	14.706	GFL04 - 2M□□□ 063C42	
	86	27	4.5	15.904	GFL05 - 2M□□□ 063C42	
	77	30	4.5	17.920	GFL05 - 2M□□□ 063C42	
	67	35	4.8	20.519	GFL04 - 2M□□□ 063C42	
	60	39	4.3	22.857	GFL04 - 2M□□□ 063C42	
	55	43	4.3	25.136	GFL04 - 2M□□□ 063C42	
	49	47	3.5	28.000	GFL04 - 2M□□□ 063C42	
	43	53	3.5	31.600	GFL04 - 2M□□□ 063C42	
	39	60	2.9	35.200	GFL04 - 2M□□□ 063C42	
	34	69	2.7	40.697	GFL04 - 2M□□□ 063C42	
	30	77	2.2	45.333	GFL04 - 2M□□□ 063C42	
	27	87	2.2	51.579	GFL04 - 2M□□□ 063C42	
	24	97	1.8	57.455	GFL04 - 2M□□□ 063C42	
23	99	3.2	58.667	GFL05 - 2M□□□ 063C42		
21	109	1.2	64.636	GFL04 - 2M□□□ 063C42		
22	107	2.6	63.190	GFL05 - 2M□□□ 063C42		
21	108	3.2	64.080	GFL06 - 2M□□□ 063C42		
19	122	1.2	72.000	GFL04 - 2M□□□ 063C42		
19	120	2.5	71.200	GFL05 - 2M□□□ 063C42		
19	122	3.2	72.189	GFL06 - 2M□□□ 063C42		

Thermal power limit not considered (see page 2-4)



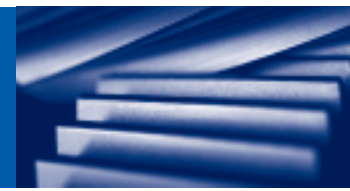
P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>0.25 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>		
n1=1370	17	137	1.4	80.763	GFL05 - 2M□□□ 063C42			
	17	137	2.6	81.000	GFL06 - 2M□□□ 063C42			
	15	154	1.4	91.000	GFL05 - 2M□□□ 063C42			
	15	154	2.6	91.250	GFL06 - 2M□□□ 063C42			
n1=920	14	163	1.0	64.636	GFL04 - 2M□□□ 071-33			
	15	159	1.8	63.190	GFL05 - 2M□□□ 071-33			
	14	161	2.7	64.080	GFL06 - 2M□□□ 071-33			
	13	181	1.0	72.000	GFL04 - 2M□□□ 071-33			
	13	179	1.7	71.200	GFL05 - 2M□□□ 071-33			
	13	182	2.7	72.189	GFL06 - 2M□□□ 071-33			
	11	203	1.1	80.763	GFL05 - 2M□□□ 071-33			
	11	204	2.1	81.000	GFL06 - 2M□□□ 071-33			
	10	229	1.0	91.000	GFL05 - 2M□□□ 071-33			
	10	230	2.1	91.250	GFL06 - 2M□□□ 071-33			
	n1=1370	15	154	5.2	92.413		GFL07 - 3M□□□ 063C42	<b>4-100</b>
		14	169	1.9	101.547		GFL05 - 3M□□□ 063C42	
12		191	1.7	114.952	GFL05 - 3M□□□ 063C42			
12		194	2.7	116.571	GFL06 - 3M□□□ 063C42			
11		216	1.5	129.524	GFL05 - 3M□□□ 063C42			
10		219	2.7	131.323	GFL06 - 3M□□□ 063C42			
9.7		235	1.5	140.817	GFL05 - 3M□□□ 063C42			
9.5		240	2.3	144.320	GFL06 - 3M□□□ 063C42			
8.6		264	1.2	158.667	GFL05 - 3M□□□ 063C42			
8.4		271	2.3	162.583	GFL06 - 3M□□□ 063C42			
7.7		295	1.2	177.027	GFL05 - 3M□□□ 063C42			
7.6		299	2.0	179.520	GFL06 - 3M□□□ 063C42			
6.9		332	1.0	199.467	GFL05 - 3M□□□ 063C42			
6.8		337	1.8	202.237	GFL06 - 3M□□□ 063C42			
6.0		380	0.9	227.989	GFL05 - 3M□□□ 063C42			
5.9		385	1.6	231.200	GFL06 - 3M□□□ 063C42			
5.3		434	1.4	260.457	GFL06 - 3M□□□ 063C42			
5.4		422	3.0	253.111	GFL07 - 3M□□□ 063C42			
4.7		488	1.3	293.018	GFL06 - 3M□□□ 063C42			
4.7		484	2.8	290.706	GFL07 - 3M□□□ 063C42			
4.6		498	1.2	299.200	GFL06 - 3M□□□ 063C42			
4.2		546	2.3	327.556	GFL07 - 3M□□□ 063C42			
3.7		612	1.1	367.200	GFL06 - 3M□□□ 063C42			
3.9		588	2.3	352.811	GFL07 - 3M□□□ 063C42			
3.9		588	3.2	353.033	GFL09 - 3M□□□ 063C42			
3.3		689	0.9	413.667	GFL06 - 3M□□□ 063C42			
3.5		662	1.9	397.533	GFL07 - 3M□□□ 063C42			
3.4		663	3.2	397.863	GFL09 - 3M□□□ 063C42			
2.9	791	0.8	475.200	GFL06 - 3M□□□ 063C42				
3.2	717	1.8	430.222	GFL07 - 3M□□□ 063C42				
2.6	870	1.5	522.133	GFL07 - 3M□□□ 063C42				
2.7	857	3.2	514.881	GFL09 - 3M□□□ 063C42				

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.25 kW</b>					<b>GFL □□ - 3M</b>	<b>4-100</b>	
n1=1370	2.4	937	1.2	562.391	GFL07 - 3M□□□ 063C42		
	2.5	923	2.3	554.470	GFL09 - 3M□□□ 063C42		
	2.2	1055	1.2	633.680	GFL07 - 3M□□□ 063C42		
	2.2	1041	2.2	624.879	GFL09 - 3M□□□ 063C42		
	1.9	1197	0.9	718.786	GFL07 - 3M□□□ 063C42		
	2.0	1167	1.8	700.875	GFL09 - 3M□□□ 063C42		
	1.7	1349	0.9	809.900	GFL07 - 3M□□□ 063C42		
	1.7	1315	1.7	789.875	GFL09 - 3M□□□ 063C42		
	n1=920	1.6	1395	0.8	562.391		GFL07 - 3M□□□ 071-33
		1.7	1375	1.5	554.470		GFL09 - 3M□□□ 071-33
		1.5	1550	1.5	624.879		GFL09 - 3M□□□ 071-33
		1.3	1738	1.2	700.875		GFL09 - 3M□□□ 071-33
		1.2	1959	1.2	789.875		GFL09 - 3M□□□ 071-33
	<b>0.37 kW</b>						<b>GFL □□ - 2M</b>
n1=2840	138	25	6.0	20.519	GFL04 - 2M□□□ 071-11		
	124	28	4.9	22.857	GFL04 - 2M□□□ 071-11		
	113	30	5.5	25.136	GFL04 - 2M□□□ 071-11		
	101	34	4.6	28.000	GFL04 - 2M□□□ 071-11		
	90	38	4.5	31.600	GFL04 - 2M□□□ 071-11		
	81	43	3.7	35.200	GFL04 - 2M□□□ 071-11		
	70	49	3.5	40.697	GFL04 - 2M□□□ 071-11		
	63	55	2.9	45.333	GFL04 - 2M□□□ 071-11		
	55	62	2.8	51.579	GFL04 - 2M□□□ 071-11		
	49	69	2.3	57.455	GFL04 - 2M□□□ 071-11		
	44	78	1.9	64.636	GFL04 - 2M□□□ 071-11		
	39	87	2.0	72.000	GFL04 - 2M□□□ 071-11		
	35	98	2.2	80.763	GFL05 - 2M□□□ 071-11		
	31	110	2.2	91.000	GFL05 - 2M□□□ 071-11		
	n1=1410	385	9	4.0	3.659		GFL04 - 2M□□□ 071C32
		281	12	4.0	5.018		GFL04 - 2M□□□ 071C32
		242	14	4.0	5.833		GFL04 - 2M□□□ 071C32
		220	16	4.0	6.400		GFL05 - 2M□□□ 071C32
201		17	4.5	7.025	GFL04 - 2M□□□ 071C32		
168		20	4.0	8.379	GFL04 - 2M□□□ 071C32		
151		23	4.0	9.333	GFL04 - 2M□□□ 071C32		
138		25	4.5	10.238	GFL04 - 2M□□□ 071C32		
123		28	4.0	11.491	GFL04 - 2M□□□ 071C32		
110		31	4.0	12.800	GFL04 - 2M□□□ 071C32		
96		36	4.5	14.706	GFL04 - 2M□□□ 071C32		

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.37 kW</b> n <sub>1</sub> =1410					<b>GFL □□ - 2M</b>	4-84	
	89	39	4.0	15.904	GFL05 - 2M□□□ 071C32		
	79	44	3.8	17.920	GFL04 - 2M□□□ 071C32		
	69	50	3.7	20.519	GFL04 - 2M□□□ 071C32		
	62	56	3.0	22.857	GFL04 - 2M□□□ 071C32		
	56	61	3.0	25.136	GFL04 - 2M□□□ 071C32		
	50	68	2.5	28.000	GFL04 - 2M□□□ 071C32		
	45	77	2.4	31.600	GFL04 - 2M□□□ 071C32		
	40	86	2.0	35.200	GFL04 - 2M□□□ 071C32		
	35	99	1.9	40.697	GFL04 - 2M□□□ 071C32		
	35	98	3.2	40.233	GFL05 - 2M□□□ 071C32		
	31	110	1.6	45.333	GFL04 - 2M□□□ 071C32		
	31	110	2.9	45.333	GFL05 - 2M□□□ 071C32		
	27	125	1.5	51.579	GFL04 - 2M□□□ 071C32		
	27	127	2.4	52.067	GFL05 - 2M□□□ 071C32		
	27	128	3.2	52.800	GFL06 - 2M□□□ 071C32		
	25	140	1.2	57.455	GFL04 - 2M□□□ 071C32		
	24	143	2.3	58.667	GFL05 - 2M□□□ 071C32		
	24	145	3.2	59.481	GFL06 - 2M□□□ 071C32		
	22	157	1.0	64.636	GFL04 - 2M□□□ 071C32		
	22	154	1.8	63.190	GFL05 - 2M□□□ 071C32		
	22	156	2.8	64.080	GFL06 - 2M□□□ 071C32		
	20	175	1.0	72.000	GFL04 - 2M□□□ 071C32		
	20	173	1.8	71.200	GFL05 - 2M□□□ 071C32		
	20	176	2.8	72.189	GFL06 - 2M□□□ 071C32		
	18	196	1.1	80.763	GFL05 - 2M□□□ 071C32		
	17	197	2.2	81.000	GFL06 - 2M□□□ 071C32		
	16	221	1.1	91.000	GFL05 - 2M□□□ 071C32		
	16	222	2.1	91.250	GFL06 - 2M□□□ 071C32		
	n <sub>1</sub> =900	15	224	1.4	58.667		GFL05 - 2M□□□ 080-13
		15	227	2.7	59.481		GFL06 - 2M□□□ 080-13
		14	241	1.2	63.190		GFL05 - 2M□□□ 080-13
14		244	2.4	64.080	GFL06 - 2M□□□ 080-13		
13		271	1.1	71.200	GFL05 - 2M□□□ 080-13		
13		275	2.2	72.189	GFL06 - 2M□□□ 080-13		
11		309	1.4	81.000	GFL06 - 2M□□□ 080-13		
11		304	2.6	79.875	GFL07 - 2M□□□ 080-13		
9.9		348	1.4	91.250	GFL06 - 2M□□□ 080-13		
10.0		343	2.6	90.000	GFL07 - 2M□□□ 080-13		
n <sub>1</sub> =1410						<b>GFL □□ - 3M</b>	4-100
		15	221	4.3	92.413	GFL07 - 3M□□□ 071C32	
	14	243	1.3	101.547	GFL05 - 3M□□□ 071C32		
	14	238	2.3	99.361	GFL06 - 3M□□□ 071C32		
	12	275	1.2	114.952	GFL05 - 3M□□□ 071C32		
	12	279	1.9	116.571	GFL06 - 3M□□□ 071C32		
	11	310	1.1	129.524	GFL05 - 3M□□□ 071C32		
	11	315	1.9	131.323	GFL06 - 3M□□□ 071C32		

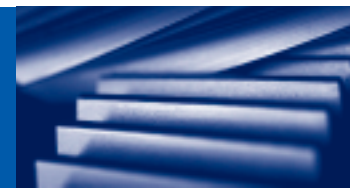
Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b>					<b>GFL □□ - 3M</b>	<b>4-100</b>
n1=1410	10	337	1.0	140.817	GFL05 - 3M□□□ 071C32	
	9.8	346	1.6	144.320	GFL06 - 3M□□□ 071C32	
	9.6	353	3.2	147.347	GFL07 - 3M□□□ 071C32	
	8.9	380	0.9	158.667	GFL05 - 3M□□□ 071C32	
	8.7	389	1.6	162.583	GFL06 - 3M□□□ 071C32	
	8.5	398	3.1	166.025	GFL07 - 3M□□□ 071C32	
	8.0	424	0.8	177.027	GFL05 - 3M□□□ 071C32	
	7.9	430	1.4	179.520	GFL06 - 3M□□□ 071C32	
	7.7	439	2.8	183.285	GFL07 - 3M□□□ 071C32	
	7.0	484	1.3	202.237	GFL06 - 3M□□□ 071C32	
	6.8	495	2.5	206.519	GFL07 - 3M□□□ 071C32	
	6.1	554	1.1	231.200	GFL06 - 3M□□□ 071C32	
	6.3	538	2.5	224.636	GFL07 - 3M□□□ 071C32	
	5.4	624	1.0	260.457	GFL06 - 3M□□□ 071C32	
	5.6	606	2.1	253.111	GFL07 - 3M□□□ 071C32	
	4.8	702	0.9	293.018	GFL06 - 3M□□□ 071C32	
	4.9	696	2.0	290.706	GFL07 - 3M□□□ 071C32	
	4.9	697	3.2	290.889	GFL09 - 3M□□□ 071C32	
	4.7	717	0.9	299.200	GFL06 - 3M□□□ 071C32	
	4.3	784	1.6	327.556	GFL07 - 3M□□□ 071C32	
	4.3	785	3.2	327.827	GFL09 - 3M□□□ 071C32	
	4.0	845	1.6	352.811	GFL07 - 3M□□□ 071C32	
	4.0	845	2.8	353.033	GFL09 - 3M□□□ 071C32	
	3.6	952	1.3	397.533	GFL07 - 3M□□□ 071C32	
	3.5	953	2.8	397.863	GFL09 - 3M□□□ 071C32	
	3.3	1030	1.2	430.222	GFL07 - 3M□□□ 071C32	
	3.3	1016	2.7	424.247	GFL09 - 3M□□□ 071C32	
	2.7	1250	1.0	522.133	GFL07 - 3M□□□ 071C32	
	2.7	1233	2.2	514.881	GFL09 - 3M□□□ 071C32	
	2.5	1347	0.8	562.391	GFL07 - 3M□□□ 071C32	
2.5	1328	1.6	554.470	GFL09 - 3M□□□ 071C32		
2.2	1518	0.8	633.680	GFL07 - 3M□□□ 071C32		
2.3	1496	1.5	624.879	GFL09 - 3M□□□ 071C32		
2.0	1678	1.3	700.875	GFL09 - 3M□□□ 071C32		
1.8	1892	1.2	789.875	GFL09 - 3M□□□ 071C32		
n1=900	1.8	1932	1.4	514.881	GFL09 - 3M□□□ 080-13	
	1.7	1959	3.0	522.133	GFL11 - 3M□□□ 080-13	
	1.6	2080	1.0	554.470	GFL09 - 3M□□□ 080-13	
	1.6	2110	2.5	562.391	GFL11 - 3M□□□ 080-13	
	1.4	2344	1.0	624.879	GFL09 - 3M□□□ 080-13	
	1.4	2377	2.5	633.680	GFL11 - 3M□□□ 080-13	
	1.3	2630	0.8	700.875	GFL09 - 3M□□□ 080-13	
	1.3	2667	2.0	710.888	GFL11 - 3M□□□ 080-13	
	1.1	3005	1.9	801.000	GFL11 - 3M□□□ 080-13	
	<b>0.55 kW</b>				<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2840	776	7	4.3	3.659	GFL04 - 2M□□□ 071-31	
	566	9	4.3	5.018	GFL04 - 2M□□□ 071-31	

Thermal power limit not considered (see page 2-4)





P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b> n <sub>1</sub> =2840					<b>GFL □□ - 2M</b>	4-84
	487	11	4.3	5.833	GFL04 - 2M□□□ 071-31	
	444	12	4.3	6.400	GFL05 - 2M□□□ 071-31	
	404	13	5.0	7.025	GFL04 - 2M□□□ 071-31	
	339	15	4.3	8.379	GFL04 - 2M□□□ 071-31	
	304	17	4.3	9.333	GFL04 - 2M□□□ 071-31	
	277	18	5.0	10.238	GFL04 - 2M□□□ 071-31	
	247	21	4.3	11.491	GFL04 - 2M□□□ 071-31	
	222	23	4.3	12.800	GFL04 - 2M□□□ 071-31	
	193	26	5.0	14.706	GFL04 - 2M□□□ 071-31	
	179	29	4.3	15.904	GFL05 - 2M□□□ 071-31	
	159	32	4.2	17.920	GFL04 - 2M□□□ 071-31	
	138	37	4.0	20.519	GFL04 - 2M□□□ 071-31	
	124	41	3.3	22.857	GFL04 - 2M□□□ 071-31	
	113	45	3.7	25.136	GFL04 - 2M□□□ 071-31	
	101	50	3.1	28.000	GFL04 - 2M□□□ 071-31	
	90	57	3.0	31.600	GFL04 - 2M□□□ 071-31	
	81	63	2.5	35.200	GFL04 - 2M□□□ 071-31	
	70	73	2.4	40.697	GFL04 - 2M□□□ 071-31	
	63	81	1.9	45.333	GFL04 - 2M□□□ 071-31	
	55	93	1.9	51.579	GFL04 - 2M□□□ 071-31	
	55	93	3.0	52.067	GFL05 - 2M□□□ 071-31	
	49	103	1.6	57.455	GFL04 - 2M□□□ 071-31	
	48	105	2.8	58.667	GFL05 - 2M□□□ 071-31	
	44	116	1.3	64.636	GFL04 - 2M□□□ 071-31	
	45	113	2.3	63.190	GFL05 - 2M□□□ 071-31	
	39	129	1.4	72.000	GFL04 - 2M□□□ 071-31	
	40	128	2.4	71.200	GFL05 - 2M□□□ 071-31	
	35	145	1.5	80.763	GFL05 - 2M□□□ 071-31	
	35	145	3.0	81.000	GFL06 - 2M□□□ 071-31	
	31	163	1.4	91.000	GFL05 - 2M□□□ 071-31	
	31	164	2.9	91.250	GFL06 - 2M□□□ 071-31	
n <sub>1</sub> =1405	384	13	4.5	3.659	GFL04 - 2M□□□ 071C42	
	280	18	4.5	5.018	GFL04 - 2M□□□ 071C42	
	241	21	4.5	5.833	GFL04 - 2M□□□ 071C42	
	219	23	4.2	6.422	GFL04 - 2M□□□ 071C42	
	200	26	4.2	7.025	GFL04 - 2M□□□ 071C42	
	168	30	4.5	8.379	GFL04 - 2M□□□ 071C42	
	156	33	4.5	9.010	GFL05 - 2M□□□ 071C42	
	137	37	4.2	10.238	GFL04 - 2M□□□ 071C42	
	122	42	4.3	11.491	GFL04 - 2M□□□ 071C42	
	110	46	3.6	12.800	GFL04 - 2M□□□ 071C42	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

### Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=1405	96	53	3.4	14.706	GFL04 - 2M□□□ 071C42	
	87	58	3.1	16.087	GFL04 - 2M□□□ 071C42	
	78	65	2.6	17.920	GFL04 - 2M□□□ 071C42	
	69	74	2.5	20.519	GFL04 - 2M□□□ 071C42	
	62	83	2.0	22.857	GFL04 - 2M□□□ 071C42	
	56	91	2.0	25.136	GFL04 - 2M□□□ 071C42	
	50	102	1.7	28.000	GFL04 - 2M□□□ 071C42	
	50	102	3.1	28.000	GFL05 - 2M□□□ 071C42	
	45	115	1.6	31.600	GFL04 - 2M□□□ 071C42	
	43	117	2.9	32.344	GFL05 - 2M□□□ 071C42	
	40	128	1.3	35.200	GFL04 - 2M□□□ 071C42	
	39	132	2.4	36.444	GFL05 - 2M□□□ 071C42	
	35	148	1.3	40.697	GFL04 - 2M□□□ 071C42	
	35	146	2.4	40.233	GFL05 - 2M□□□ 071C42	
	34	148	3.2	40.800	GFL06 - 2M□□□ 071C42	
	31	164	1.0	45.333	GFL04 - 2M□□□ 071C42	
	31	164	1.9	45.333	GFL05 - 2M□□□ 071C42	
	31	167	3.2	45.963	GFL06 - 2M□□□ 071C42	
	27	189	1.6	52.067	GFL05 - 2M□□□ 071C42	
	27	192	2.9	52.800	GFL06 - 2M□□□ 071C42	
	24	213	1.5	58.667	GFL05 - 2M□□□ 071C42	
	24	216	2.9	59.481	GFL06 - 2M□□□ 071C42	
	22	229	1.2	63.190	GFL05 - 2M□□□ 071C42	
	22	232	2.4	64.080	GFL06 - 2M□□□ 071C42	
	20	258	1.2	71.200	GFL05 - 2M□□□ 071C42	
	20	262	2.4	72.189	GFL06 - 2M□□□ 071C42	
	17	294	1.4	81.000	GFL06 - 2M□□□ 071C42	
	15	331	1.4	91.250	GFL06 - 2M□□□ 071C42	
n1=900	15	332	1.0	58.667	GFL05 - 2M□□□ 080-33	
	15	337	1.8	59.481	GFL06 - 2M□□□ 080-33	
	15	332	2.5	58.667	GFL07 - 2M□□□ 080-33	
	14	363	1.6	64.080	GFL06 - 2M□□□ 080-33	
	14	358	2.2	63.190	GFL07 - 2M□□□ 080-33	
	13	409	1.5	72.189	GFL06 - 2M□□□ 080-33	
	13	403	2.2	71.200	GFL07 - 2M□□□ 080-33	
	11	459	0.9	81.000	GFL06 - 2M□□□ 080-33	
	11	452	1.8	79.875	GFL07 - 2M□□□ 080-33	
	9.9	517	0.9	91.250	GFL06 - 2M□□□ 080-33	
	10.0	510	1.8	90.000	GFL07 - 2M□□□ 080-33	
					<b>GFL □□ - 3M</b>	<b>4-100</b>
n1=1405	15	330	2.9	92.413	GFL07 - 3M□□□ 071C42	
	14	363	0.9	101.547	GFL05 - 3M□□□ 071C42	
	14	355	1.5	99.361	GFL06 - 3M□□□ 071C42	
	14	372	2.9	104.127	GFL07 - 3M□□□ 071C42	
	12	411	0.8	114.952	GFL05 - 3M□□□ 071C42	
	12	416	1.3	116.571	GFL06 - 3M□□□ 071C42	
	12	404	2.6	113.206	GFL07 - 3M□□□ 071C42	

Thermal power limit not considered (see page 2-4)



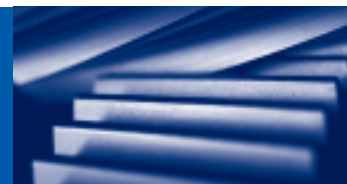
P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b>					<b>GFL □□ - 3M</b>	<b>4-100</b>
n1=1405	11	469	1.3	131.323	GFL06 - 3M□□□ 071C42	
	11	456	2.6	127.556	GFL07 - 3M□□□ 071C42	
	9.7	516	1.1	144.320	GFL06 - 3M□□□ 071C42	
	9.5	526	2.2	147.347	GFL07 - 3M□□□ 071C42	
	8.6	581	1.1	162.583	GFL06 - 3M□□□ 071C42	
	8.5	593	2.1	166.025	GFL07 - 3M□□□ 071C42	
	7.8	641	0.9	179.520	GFL06 - 3M□□□ 071C42	
	7.7	655	1.9	183.285	GFL07 - 3M□□□ 071C42	
	7.6	661	3.2	185.111	GFL09 - 3M□□□ 071C42	
	7.0	723	0.8	202.237	GFL06 - 3M□□□ 071C42	
	6.8	738	1.7	206.519	GFL07 - 3M□□□ 071C42	
	6.7	745	3.2	208.617	GFL09 - 3M□□□ 071C42	
	6.3	803	1.7	224.636	GFL07 - 3M□□□ 071C42	
	6.3	803	3.0	224.778	GFL09 - 3M□□□ 071C42	
	5.6	904	1.4	253.111	GFL07 - 3M□□□ 071C42	
	5.6	905	3.0	253.321	GFL09 - 3M□□□ 071C42	
	4.8	1039	1.3	290.706	GFL07 - 3M□□□ 071C42	
	4.8	1039	2.5	290.889	GFL09 - 3M□□□ 071C42	
	4.3	1170	1.1	327.556	GFL07 - 3M□□□ 071C42	
	4.3	1171	2.5	327.827	GFL09 - 3M□□□ 071C42	
	4.0	1260	1.1	352.811	GFL07 - 3M□□□ 071C42	
	4.0	1261	2.2	353.033	GFL09 - 3M□□□ 071C42	
	3.5	1420	0.9	397.533	GFL07 - 3M□□□ 071C42	
	3.5	1421	2.2	397.863	GFL09 - 3M□□□ 071C42	
	3.3	1537	0.8	430.222	GFL07 - 3M□□□ 071C42	
	3.3	1516	1.8	424.247	GFL09 - 3M□□□ 071C42	
	2.7	1839	1.5	514.881	GFL09 - 3M□□□ 071C42	
	2.5	1981	1.1	554.470	GFL09 - 3M□□□ 071C42	
2.3	2232	1.0	624.879	GFL09 - 3M□□□ 071C42		
2.0	2504	0.8	700.875	GFL09 - 3M□□□ 071C42		
1.8	2822	0.8	789.875	GFL09 - 3M□□□ 071C42		
n1=900	1.8	2872	0.9	514.881	GFL09 - 3M□□□ 080-33	
	1.7	2912	2.0	522.133	GFL11 - 3M□□□ 080-33	
	1.6	3137	1.7	562.391	GFL11 - 3M□□□ 080-33	
	1.4	3534	1.7	633.680	GFL11 - 3M□□□ 080-33	
	1.3	3965	1.3	710.888	GFL11 - 3M□□□ 080-33	
	1.1	4467	1.3	801.000	GFL11 - 3M□□□ 080-33	
<b>0.75 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2850	444	16	5.8	6.422	GFL04 - 2M□□□ 080-11	
	406	17	5.3	7.025	GFL04 - 2M□□□ 080-11	
	305	23	5.9	9.333	GFL04 - 2M□□□ 080-11	
	278	25	5.2	10.238	GFL04 - 2M□□□ 080-11	
	248	28	5.2	11.491	GFL04 - 2M□□□ 080-11	
	223	31	4.3	12.800	GFL04 - 2M□□□ 080-11	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2850	194	36	4.1	14.706	GFL04 - 2M□□□ 080-11	
	177	39	3.7	16.087	GFL04 - 2M□□□ 080-11	
	159	44	3.1	17.920	GFL04 - 2M□□□ 080-11	
	139	50	3.0	20.519	GFL04 - 2M□□□ 080-11	
	125	56	2.4	22.857	GFL04 - 2M□□□ 080-11	
	113	61	2.7	25.136	GFL04 - 2M□□□ 080-11	
	102	68	2.3	28.000	GFL04 - 2M□□□ 080-11	
	90	77	2.2	31.600	GFL04 - 2M□□□ 080-11	
	81	86	1.8	35.200	GFL04 - 2M□□□ 080-11	
	70	99	1.7	40.697	GFL04 - 2M□□□ 080-11	
	71	98	3.2	40.233	GFL05 - 2M□□□ 080-11	
	63	111	1.4	45.333	GFL04 - 2M□□□ 080-11	
	63	111	2.6	45.333	GFL05 - 2M□□□ 080-11	
	55	127	2.2	52.067	GFL05 - 2M□□□ 080-11	
	49	143	2.1	58.667	GFL05 - 2M□□□ 080-11	
	45	154	1.7	63.190	GFL05 - 2M□□□ 080-11	
	40	174	1.8	71.200	GFL05 - 2M□□□ 080-11	
	35	198	2.2	81.000	GFL06 - 2M□□□ 080-11	
	31	223	2.1	91.250	GFL06 - 2M□□□ 080-11	
	n1=1410	385	18	4.2	3.659	GFL04 - 2M□□□ 080C32
281		25	4.2	5.018	GFL04 - 2M□□□ 080C32	
242		29	4.2	5.833	GFL04 - 2M□□□ 080C32	
220		32	3.6	6.422	GFL04 - 2M□□□ 080C32	
201		35	3.3	7.025	GFL04 - 2M□□□ 080C32	
168		41	4.2	8.379	GFL04 - 2M□□□ 080C32	
151		46	3.6	9.333	GFL04 - 2M□□□ 080C32	
138		51	3.2	10.238	GFL04 - 2M□□□ 080C32	
123		57	3.2	11.491	GFL04 - 2M□□□ 080C32	
110		63	2.6	12.800	GFL04 - 2M□□□ 080C32	
96		73	2.5	14.706	GFL04 - 2M□□□ 080C32	
88		79	2.3	16.087	GFL04 - 2M□□□ 080C32	
79		88	1.9	17.920	GFL04 - 2M□□□ 080C32	
69		101	1.8	20.519	GFL04 - 2M□□□ 080C32	
62		113	1.5	22.857	GFL04 - 2M□□□ 080C32	
62		113	2.8	22.857	GFL05 - 2M□□□ 080C32	
56		124	1.5	25.136	GFL04 - 2M□□□ 080C32	
57		123	2.8	24.850	GFL05 - 2M□□□ 080C32	
50		138	1.2	28.000	GFL04 - 2M□□□ 080C32	
50		138	2.3	28.000	GFL05 - 2M□□□ 080C32	

Thermal power limit not considered (see page 2-4)



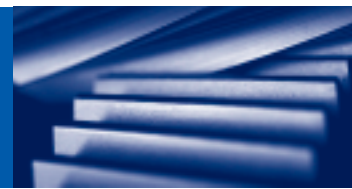
P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b> n <sub>1</sub> =1410	<b>GFL □□ - 2M</b>					4-84
	45	156	1.2	31.600	GFL04 - 2M□□□ 080C32	
	44	159	2.2	32.344	GFL05 - 2M□□□ 080C32	
	40	174	1.0	35.200	GFL04 - 2M□□□ 080C32	
	39	180	1.8	36.444	GFL05 - 2M□□□ 080C32	
	35	201	0.9	40.697	GFL04 - 2M□□□ 080C32	
	35	198	1.7	40.233	GFL05 - 2M□□□ 080C32	
	35	201	2.9	40.800	GFL06 - 2M□□□ 080C32	
	31	223	1.4	45.333	GFL05 - 2M□□□ 080C32	
	31	227	2.7	45.963	GFL06 - 2M□□□ 080C32	
	27	257	1.2	52.067	GFL05 - 2M□□□ 080C32	
	27	260	2.5	52.800	GFL06 - 2M□□□ 080C32	
	27	257	2.9	52.067	GFL07 - 2M□□□ 080C32	
	24	289	1.1	58.667	GFL05 - 2M□□□ 080C32	
	24	293	2.1	59.481	GFL06 - 2M□□□ 080C32	
	24	289	2.9	58.667	GFL07 - 2M□□□ 080C32	
	22	311	0.9	63.190	GFL05 - 2M□□□ 080C32	
	22	316	1.8	64.080	GFL06 - 2M□□□ 080C32	
	22	311	2.5	63.190	GFL07 - 2M□□□ 080C32	
	20	351	0.9	71.200	GFL05 - 2M□□□ 080C32	
	20	356	1.7	72.189	GFL06 - 2M□□□ 080C32	
	20	351	2.5	71.200	GFL07 - 2M□□□ 080C32	
	17	399	1.1	81.000	GFL06 - 2M□□□ 080C32	
	18	394	2.0	79.875	GFL07 - 2M□□□ 080C32	
	16	450	1.1	91.250	GFL06 - 2M□□□ 080C32	
	16	444	2.0	90.000	GFL07 - 2M□□□ 080C32	
	<b>GFL □□ - 3M</b>					4-100
	15	449	2.1	92.413	GFL07 - 3M□□□ 080C32	
	14	482	1.1	99.361	GFL06 - 3M□□□ 080C32	
	14	506	2.1	104.127	GFL07 - 3M□□□ 080C32	
	12	566	0.9	116.571	GFL06 - 3M□□□ 080C32	
	13	550	1.9	113.206	GFL07 - 3M□□□ 080C32	
	11	638	0.9	131.323	GFL06 - 3M□□□ 080C32	
	11	619	1.9	127.556	GFL07 - 3M□□□ 080C32	
	9.6	715	1.6	147.347	GFL07 - 3M□□□ 080C32	
	9.5	722	2.8	148.815	GFL09 - 3M□□□ 080C32	
	8.5	806	1.5	166.025	GFL07 - 3M□□□ 080C32	
	8.4	814	2.8	167.712	GFL09 - 3M□□□ 080C32	
	7.7	890	1.4	183.285	GFL07 - 3M□□□ 080C32	
	7.6	899	2.5	185.111	GFL09 - 3M□□□ 080C32	
6.8	1003	1.2	206.519	GFL07 - 3M□□□ 080C32		
6.8	1013	2.5	208.617	GFL09 - 3M□□□ 080C32		
6.3	1090	1.2	224.636	GFL07 - 3M□□□ 080C32		
6.3	1091	2.2	224.778	GFL09 - 3M□□□ 080C32		
5.6	1229	1.0	253.111	GFL07 - 3M□□□ 080C32		
5.6	1230	2.2	253.321	GFL09 - 3M□□□ 080C32		
4.9	1411	1.0	290.706	GFL07 - 3M□□□ 080C32		
4.9	1412	1.9	290.889	GFL09 - 3M□□□ 080C32		
4.3	1591	1.9	327.827	GFL09 - 3M□□□ 080C32		

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b>					<b>GFL □□ - 3M</b>	<b>4-100</b>
n1=1410	4.0	1713	0.8	352.811	GFL07 - 3M□□□ 080C32	
	4.0	1714	1.6	353.033	GFL09 - 3M□□□ 080C32	
	3.9	1738	2.5	358.077	GFL11 - 3M□□□ 080C32	
	3.5	1931	1.6	397.863	GFL09 - 3M□□□ 080C32	
	3.5	1959	2.5	403.467	GFL11 - 3M□□□ 080C32	
	3.3	2059	1.3	424.247	GFL09 - 3M□□□ 080C32	
	3.3	2088	2.8	430.222	GFL11 - 3M□□□ 080C32	
	2.7	2499	1.1	514.881	GFL09 - 3M□□□ 080C32	
	2.7	2535	2.3	522.133	GFL11 - 3M□□□ 080C32	
	2.5	2730	1.9	562.391	GFL11 - 3M□□□ 080C32	
	2.2	3076	1.9	633.680	GFL11 - 3M□□□ 080C32	
	2.0	3451	1.5	710.888	GFL11 - 3M□□□ 080C32	
	1.8	3888	1.5	801.000	GFL11 - 3M□□□ 080C32	
<b>1.1 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2810	768	13	4.6	3.659	GFL04 - 2M□□□ 080-31	
	560	18	4.6	5.018	GFL04 - 2M□□□ 080-31	
	482	21	4.6	5.833	GFL04 - 2M□□□ 080-31	
	438	23	3.9	6.422	GFL04 - 2M□□□ 080-31	
	400	26	3.6	7.025	GFL04 - 2M□□□ 080-31	
	335	30	4.6	8.379	GFL04 - 2M□□□ 080-31	
	301	34	4.0	9.333	GFL04 - 2M□□□ 080-31	
	275	37	3.5	10.238	GFL04 - 2M□□□ 080-31	
	245	42	3.5	11.491	GFL04 - 2M□□□ 080-31	
	220	46	2.9	12.800	GFL04 - 2M□□□ 080-31	
	191	53	2.8	14.706	GFL04 - 2M□□□ 080-31	
	175	58	2.5	16.087	GFL04 - 2M□□□ 080-31	
	157	65	2.1	17.920	GFL04 - 2M□□□ 080-31	
	137	74	2.0	20.519	GFL04 - 2M□□□ 080-31	
	123	83	1.6	22.857	GFL04 - 2M□□□ 080-31	
	123	83	3.1	22.857	GFL05 - 2M□□□ 080-31	
	112	91	1.9	25.136	GFL04 - 2M□□□ 080-31	
	100	102	1.5	28.000	GFL04 - 2M□□□ 080-31	
	100	102	2.9	28.000	GFL05 - 2M□□□ 080-31	
	89	115	1.5	31.600	GFL04 - 2M□□□ 080-31	
	87	117	2.7	32.344	GFL05 - 2M□□□ 080-31	
	80	128	1.2	35.200	GFL04 - 2M□□□ 080-31	
	77	132	2.2	36.444	GFL05 - 2M□□□ 080-31	
	69	148	1.2	40.697	GFL04 - 2M□□□ 080-31	
	70	146	2.2	40.233	GFL05 - 2M□□□ 080-31	
	62	164	1.0	45.333	GFL04 - 2M□□□ 080-31	
	62	164	1.8	45.333	GFL05 - 2M□□□ 080-31	
	54	189	1.5	52.067	GFL05 - 2M□□□ 080-31	
	53	192	3.2	52.800	GFL06 - 2M□□□ 080-31	

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>1.1 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>	
n1=2810	48	213	1.4	58.667	GFL05 - 2M□□□ 080-31		
	47	216	2.6	59.481	GFL06 - 2M□□□ 080-31		
	45	229	1.1	63.190	GFL05 - 2M□□□ 080-31		
	44	232	2.3	64.080	GFL06 - 2M□□□ 080-31		
	45	229	3.2	63.190	GFL07 - 2M□□□ 080-31		
	40	258	1.2	71.200	GFL05 - 2M□□□ 080-31		
	39	262	2.4	72.189	GFL06 - 2M□□□ 080-31		
	35	294	1.5	81.000	GFL06 - 2M□□□ 080-31		
	35	290	2.7	79.875	GFL07 - 2M□□□ 080-31		
	31	331	1.4	91.250	GFL06 - 2M□□□ 080-31		
	31	326	2.7	90.000	GFL07 - 2M□□□ 080-31		
	n1=1390	380	27	4.1	3.659	GFL04 - 2M□□□ 080C42	
		304	34	4.5	4.571	GFL05 - 2M□□□ 080C42	
		277	37	3.0	5.018	GFL04 - 2M□□□ 080C42	
238		43	3.6	5.833	GFL04 - 2M□□□ 080C42		
216		47	2.4	6.422	GFL04 - 2M□□□ 080C42		
198		52	2.2	7.025	GFL04 - 2M□□□ 080C42		
166		61	2.9	8.379	GFL04 - 2M□□□ 080C42		
149		68	2.4	9.333	GFL04 - 2M□□□ 080C42		
136		75	2.1	10.238	GFL04 - 2M□□□ 080C42		
121		84	2.1	11.491	GFL04 - 2M□□□ 080C42		
109		94	1.8	12.800	GFL04 - 2M□□□ 080C42		
109		94	3.0	12.800	GFL05 - 2M□□□ 080C42		
95		108	1.7	14.706	GFL04 - 2M□□□ 080C42		
96		107	2.8	14.538	GFL05 - 2M□□□ 080C42		
86		118	1.5	16.087	GFL04 - 2M□□□ 080C42		
87		117	2.7	15.904	GFL05 - 2M□□□ 080C42		
78		131	1.3	17.920	GFL04 - 2M□□□ 080C42		
78		131	2.4	17.920	GFL05 - 2M□□□ 080C42		
68		150	1.2	20.519	GFL04 - 2M□□□ 080C42		
69		149	2.2	20.286	GFL05 - 2M□□□ 080C42		
61		168	1.0	22.857	GFL04 - 2M□□□ 080C42		
61		168	1.9	22.857	GFL05 - 2M□□□ 080C42		
55		184	1.0	25.136	GFL04 - 2M□□□ 080C42		
56		182	1.9	24.850	GFL05 - 2M□□□ 080C42		
50		205	0.8	28.000	GFL04 - 2M□□□ 080C42		
50		205	1.5	28.000	GFL05 - 2M□□□ 080C42		
49		208	2.9	28.389	GFL06 - 2M□□□ 080C42		
43		237	1.5	32.344	GFL05 - 2M□□□ 080C42		
42		241	2.7	32.800	GFL06 - 2M□□□ 080C42		
38		267	1.2	36.444	GFL05 - 2M□□□ 080C42		
38	271	2.3	36.951	GFL06 - 2M□□□ 080C42			
35	295	1.2	40.233	GFL05 - 2M□□□ 080C42			
34	299	2.2	40.800	GFL06 - 2M□□□ 080C42			
35	291	3.1	39.642	GFL07 - 2M□□□ 080C42			

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>1.1 kW</b> n <sub>1</sub> =1390					<b>GFL □□ - 2M</b>	<b>4-84</b>		
	31	332	1.0	45.333	GFL05 - 2M□□□ 080C42			
	30	337	1.8	45.963	GFL06 - 2M□□□ 080C42			
	31	328	3.1	44.667	GFL07 - 2M□□□ 080C42			
	26	387	1.7	52.800	GFL06 - 2M□□□ 080C42			
	27	382	2.9	52.067	GFL07 - 2M□□□ 080C42			
	23	436	1.4	59.481	GFL06 - 2M□□□ 080C42			
	24	430	2.9	58.667	GFL07 - 2M□□□ 080C42			
	22	470	1.2	64.080	GFL06 - 2M□□□ 080C42			
	22	463	2.3	63.190	GFL07 - 2M□□□ 080C42			
	19	529	1.2	72.189	GFL06 - 2M□□□ 080C42			
	20	522	2.3	71.200	GFL07 - 2M□□□ 080C42			
	17	586	1.4	79.875	GFL07 - 2M□□□ 080C42			
	15	660	1.4	90.000	GFL07 - 2M□□□ 080C42			
					<b>GFL □□ - 3M</b>		<b>4-100</b>	
	15	667	1.4	92.413	GFL07 - 3M□□□ 080C42			
	15	674	2.5	93.333	GFL09 - 3M□□□ 080C42			
	13	752	1.4	104.127	GFL07 - 3M□□□ 080C42			
	13	760	2.5	105.185	GFL09 - 3M□□□ 080C42			
	12	818	1.3	113.206	GFL07 - 3M□□□ 080C42			
	12	826	2.2	114.333	GFL09 - 3M□□□ 080C42			
	11	921	1.3	127.556	GFL07 - 3M□□□ 080C42			
	11	931	2.2	128.852	GFL09 - 3M□□□ 080C42			
	9.4	1064	1.1	147.347	GFL07 - 3M□□□ 080C42			
	9.3	1075	1.9	148.815	GFL09 - 3M□□□ 080C42			
	8.4	1199	1.0	166.025	GFL07 - 3M□□□ 080C42			
	8.3	1211	1.9	167.712	GFL09 - 3M□□□ 080C42			
	7.6	1324	0.9	183.285	GFL07 - 3M□□□ 080C42			
	7.5	1337	1.7	185.111	GFL09 - 3M□□□ 080C42			
	7.6	1320	3.1	182.792	GFL11 - 3M□□□ 080C42			
	6.7	1492	0.8	206.519	GFL07 - 3M□□□ 080C42			
	6.7	1507	1.7	208.617	GFL09 - 3M□□□ 080C42			
	6.8	1488	3.1	205.963	GFL11 - 3M□□□ 080C42			
	6.2	1622	0.8	224.636	GFL07 - 3M□□□ 080C42			
	6.2	1623	1.5	224.778	GFL09 - 3M□□□ 080C42			
	6.2	1622	2.8	224.636	GFL11 - 3M□□□ 080C42			
	5.5	1830	1.5	253.321	GFL09 - 3M□□□ 080C42			
	5.5	1828	2.8	253.111	GFL11 - 3M□□□ 080C42			
	4.8	2101	1.3	290.889	GFL09 - 3M□□□ 080C42			
	5.2	1930	2.6	267.259	GFL11 - 3M□□□ 080C42			
	4.2	2368	1.3	327.827	GFL09 - 3M□□□ 080C42			
	4.2	2366	2.3	327.556	GFL11 - 3M□□□ 080C42			
3.9	2550	1.1	353.033	GFL09 - 3M□□□ 080C42				
3.9	2586	2.0	358.077	GFL11 - 3M□□□ 080C42				
3.5	2873	1.1	397.863	GFL09 - 3M□□□ 080C42				
3.5	2914	2.0	403.467	GFL11 - 3M□□□ 080C42				
3.3	3064	0.9	424.247	GFL09 - 3M□□□ 080C42				
3.2	3107	1.9	430.222	GFL11 - 3M□□□ 080C42				
2.7	3771	1.6	522.133	GFL11 - 3M□□□ 080C42				

Thermal power limit not considered (see page 2-4)





P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GFL □□ - 3M</b>	<b>4-100</b>
n <sub>1</sub> =1390	2.5	4062	1.3	562.391	GFL11 - 3M□□□ 080C42	
	2.2	4576	1.3	633.680	GFL11 - 3M□□□ 080C42	
	2.0	5134	1.0	710.888	GFL11 - 3M□□□ 080C42	
	1.7	5785	1.0	801.000	GFL11 - 3M□□□ 080C42	
<b>1.5 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =2840	776	18	4.9	3.659	* GFL04 - 2M□□□ 090-11	
	566	25	3.7	5.018	* GFL04 - 2M□□□ 090-11	
	487	29	4.3	5.833	* GFL04 - 2M□□□ 090-11	
	442	31	2.9	6.422	* GFL04 - 2M□□□ 090-11	
	404	34	2.7	7.025	* GFL04 - 2M□□□ 090-11	
	339	41	3.5	8.379	* GFL04 - 2M□□□ 090-11	
	304	46	2.9	9.333	* GFL04 - 2M□□□ 090-11	
	277	50	2.6	10.238	* GFL04 - 2M□□□ 090-11	
	247	56	2.6	11.491	* GFL04 - 2M□□□ 090-11	
	222	63	2.1	12.800	* GFL04 - 2M□□□ 090-11	
	193	72	2.0	14.706	* GFL04 - 2M□□□ 090-11	
	177	79	1.9	16.087	* GFL04 - 2M□□□ 090-11	
	179	78	3.2	15.904	GFL05 - 2M□□□ 090-11	
	159	88	1.5	17.920	* GFL04 - 2M□□□ 090-11	
	159	88	2.9	17.920	GFL05 - 2M□□□ 090-11	
	138	100	1.5	20.519	* GFL04 - 2M□□□ 090-11	
	140	99	2.7	20.286	GFL05 - 2M□□□ 090-11	
	124	112	1.2	22.857	* GFL04 - 2M□□□ 090-11	
	124	112	2.3	22.857	GFL05 - 2M□□□ 090-11	
	113	123	1.4	25.136	* GFL04 - 2M□□□ 090-11	
	114	122	2.6	24.850	GFL05 - 2M□□□ 090-11	
	101	137	1.1	28.000	* GFL04 - 2M□□□ 090-11	
	101	137	2.1	28.000	GFL05 - 2M□□□ 090-11	
	88	158	2.0	32.344	GFL05 - 2M□□□ 090-11	
	78	178	1.6	36.444	GFL05 - 2M□□□ 090-11	
	77	181	3.1	36.951	GFL06 - 2M□□□ 090-11	
	71	197	1.6	40.233	GFL05 - 2M□□□ 090-11	
	70	200	3.0	40.800	GFL06 - 2M□□□ 090-11	
	63	222	1.3	45.333	GFL05 - 2M□□□ 090-11	
	62	225	2.5	45.963	GFL06 - 2M□□□ 090-11	
	54	258	2.3	52.800	GFL06 - 2M□□□ 090-11	
	48	291	1.9	59.481	GFL06 - 2M□□□ 090-11	
	44	314	1.7	64.080	GFL06 - 2M□□□ 090-11	
	39	353	1.7	72.189	GFL06 - 2M□□□ 090-11	
	36	391	2.2	79.875	GFL07 - 2M□□□ 090-11	
	32	440	2.1	90.000	GFL07 - 2M□□□ 090-11	

Thermal power limit not considered (see page 2-4)

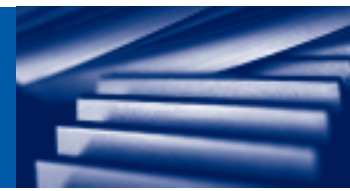
\* not possible with hollow shaft (H□□)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =1390	380	37	3.0	3.659	* GFL04 - 2M□□□ 090C32	
	304	46	3.7	4.571	GFL05 - 2M□□□ 090C32	
	277	50	2.2	5.018	* GFL04 - 2M□□□ 090C32	
	238	58	2.6	5.833	* GFL04 - 2M□□□ 090C32	
	216	64	1.8	6.422	* GFL04 - 2M□□□ 090C32	
	217	64	2.7	6.400	GFL05 - 2M□□□ 090C32	
	198	70	1.6	7.025	* GFL04 - 2M□□□ 090C32	
	166	84	2.1	8.379	* GFL04 - 2M□□□ 090C32	
	149	93	1.8	9.333	* GFL04 - 2M□□□ 090C32	
	154	90	2.9	9.010	GFL05 - 2M□□□ 090C32	
	136	102	1.6	10.238	* GFL04 - 2M□□□ 090C32	
	140	99	2.8	9.946	GFL05 - 2M□□□ 090C32	
	121	115	1.6	11.491	* GFL04 - 2M□□□ 090C32	
	122	114	2.5	11.360	GFL05 - 2M□□□ 090C32	
	109	128	1.3	12.800	* GFL04 - 2M□□□ 090C32	
	109	128	2.2	12.800	GFL05 - 2M□□□ 090C32	
	95	147	1.2	14.706	* GFL04 - 2M□□□ 090C32	
	96	145	2.1	14.538	GFL05 - 2M□□□ 090C32	
	86	161	1.1	16.087	* GFL04 - 2M□□□ 090C32	
	87	159	1.9	15.904	GFL05 - 2M□□□ 090C32	
	78	179	0.9	17.920	* GFL04 - 2M□□□ 090C32	
	78	179	1.7	17.920	GFL05 - 2M□□□ 090C32	
	68	205	0.9	20.519	* GFL04 - 2M□□□ 090C32	
	69	203	1.6	20.286	GFL05 - 2M□□□ 090C32	
	68	206	3.1	20.571	GFL06 - 2M□□□ 090C32	
	61	229	1.4	22.857	GFL05 - 2M□□□ 090C32	
	60	232	2.6	23.175	GFL06 - 2M□□□ 090C32	
	56	249	1.4	24.850	GFL05 - 2M□□□ 090C32	
	55	252	2.6	25.200	GFL06 - 2M□□□ 090C32	
	50	280	1.1	28.000	GFL05 - 2M□□□ 090C32	
	49	284	2.1	28.389	GFL06 - 2M□□□ 090C32	
	43	323	1.1	32.344	GFL05 - 2M□□□ 090C32	
	42	328	2.0	32.800	GFL06 - 2M□□□ 090C32	
	38	364	0.9	36.444	GFL05 - 2M□□□ 090C32	
	38	369	1.7	36.951	GFL06 - 2M□□□ 090C32	
	35	402	0.9	40.233	GFL05 - 2M□□□ 090C32	
	34	408	1.6	40.800	GFL06 - 2M□□□ 090C32	
	35	396	2.8	39.642	GFL07 - 2M□□□ 090C32	
	30	460	1.3	45.963	GFL06 - 2M□□□ 090C32	
	31	447	2.8	44.667	GFL07 - 2M□□□ 090C32	
	26	528	1.2	52.800	GFL06 - 2M□□□ 090C32	
	27	521	2.4	52.067	GFL07 - 2M□□□ 090C32	
	27	513	2.8	51.333	GFL09 - 2M□□□ 090C32	
	23	595	1.0	59.481	GFL06 - 2M□□□ 090C32	
	24	587	2.2	58.667	GFL07 - 2M□□□ 090C32	
	24	578	2.8	57.852	GFL09 - 2M□□□ 090C32	
	22	641	0.9	64.080	GFL06 - 2M□□□ 090C32	
	22	632	2.0	63.190	GFL07 - 2M□□□ 090C32	
	22	623	2.5	62.300	GFL09 - 2M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

\* not possible with hollow shaft (H□□)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>1.5 kW</b> n <sub>1</sub> =1390	<b>GFL □□ - 2M</b>					4-84	
	19	722	0.9	72.189	GFL06 - 2M□□□ 090C32		
	20	712	1.8	71.200	GFL07 - 2M□□□ 090C32		
	20	702	2.5	70.211	GFL09 - 2M□□□ 090C32		
	17	799	1.1	79.875	GFL07 - 2M□□□ 090C32		
	18	787	1.9	78.750	GFL09 - 2M□□□ 090C32		
	15	900	1.0	90.000	GFL07 - 2M□□□ 090C32		
	16	887	1.9	88.750	GFL09 - 2M□□□ 090C32		
	<b>GFL □□ - 3M</b>						4-100
	15	910	1.1	92.413	GFL07 - 3M□□□ 090C32		
	15	919	1.8	93.333	GFL09 - 3M□□□ 090C32		
	13	1026	1.1	104.127	GFL07 - 3M□□□ 090C32		
	13	1036	1.8	105.185	GFL09 - 3M□□□ 090C32		
	12	1115	0.9	113.206	GFL07 - 3M□□□ 090C32		
	12	1126	1.6	114.333	GFL09 - 3M□□□ 090C32		
	11	1256	0.9	127.556	GFL07 - 3M□□□ 090C32		
	11	1269	1.6	128.852	GFL09 - 3M□□□ 090C32		
	9.3	1466	1.4	148.815	GFL09 - 3M□□□ 090C32		
	9.3	1469	2.7	149.144	GFL11 - 3M□□□ 090C32		
	8.3	1652	1.4	167.712	GFL09 - 3M□□□ 090C32		
	8.3	1655	2.7	168.049	GFL11 - 3M□□□ 090C32		
	7.5	1823	1.2	185.111	GFL09 - 3M□□□ 090C32		
	7.6	1800	2.4	182.792	GFL11 - 3M□□□ 090C32		
	6.7	2055	1.2	208.617	GFL09 - 3M□□□ 090C32		
	6.8	2028	2.4	205.963	GFL11 - 3M□□□ 090C32		
	6.9	1990	2.8	202.074	GFL14 - 3M□□□ 090C32		
	6.2	2214	1.1	224.778	GFL09 - 3M□□□ 090C32		
	6.2	2212	2.0	224.636	GFL11 - 3M□□□ 090C32		
	5.5	2495	1.1	253.321	GFL09 - 3M□□□ 090C32		
	5.5	2493	2.0	253.111	GFL11 - 3M□□□ 090C32		
	4.8	2865	0.9	290.889	GFL09 - 3M□□□ 090C32		
	5.2	2632	1.9	267.259	GFL11 - 3M□□□ 090C32		
	4.2	3229	0.9	327.827	GFL09 - 3M□□□ 090C32		
	4.2	3226	1.7	327.556	GFL11 - 3M□□□ 090C32		
	3.9	3477	0.8	353.033	GFL09 - 3M□□□ 090C32		
	3.9	3526	1.5	358.077	GFL11 - 3M□□□ 090C32		
	3.9	3475	2.5	352.811	GFL14 - 3M□□□ 090C32		
	3.5	3918	0.8	397.863	GFL09 - 3M□□□ 090C32		
	3.5	3973	1.5	403.467	GFL11 - 3M□□□ 090C32		
	3.5	3915	2.5	397.533	GFL14 - 3M□□□ 090C32		
	3.2	4237	1.4	430.222	GFL11 - 3M□□□ 090C32		
	3.2	4237	2.5	430.222	GFL14 - 3M□□□ 090C32		
2.7	5142	1.2	522.133	GFL11 - 3M□□□ 090C32			
2.7	5142	2.1	522.133	GFL14 - 3M□□□ 090C32			
2.5	5539	1.0	562.391	GFL11 - 3M□□□ 090C32			
2.5	5539	1.6	562.391	GFL14 - 3M□□□ 090C32			
2.2	6241	0.9	633.680	GFL11 - 3M□□□ 090C32			
2.2	6241	1.6	633.680	GFL14 - 3M□□□ 090C32			
2.0	7001	1.3	710.888	GFL14 - 3M□□□ 090C32			
1.7	7888	1.2	801.000	GFL14 - 3M□□□ 090C32			

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =2840	776	26	3.4	3.659	* GFL04 - 2M□□□ 090-31	
	621	33	4.2	4.571	GFL05 - 2M□□□ 090-31	
	566	36	2.5	5.018	* GFL04 - 2M□□□ 090-31	
	487	42	3.0	5.833	* GFL04 - 2M□□□ 090-31	
	442	46	2.0	6.422	* GFL04 - 2M□□□ 090-31	
	444	46	3.0	6.400	GFL05 - 2M□□□ 090-31	
	404	50	1.8	7.025	* GFL04 - 2M□□□ 090-31	
	339	60	2.4	8.379	* GFL04 - 2M□□□ 090-31	
	304	67	2.0	9.333	* GFL04 - 2M□□□ 090-31	
	277	74	1.8	10.238	* GFL04 - 2M□□□ 090-31	
	286	71	3.1	9.946	GFL05 - 2M□□□ 090-31	
	247	83	1.8	11.491	* GFL04 - 2M□□□ 090-31	
	250	82	2.8	11.360	GFL05 - 2M□□□ 090-31	
	222	92	1.5	12.800	* GFL04 - 2M□□□ 090-31	
	222	92	2.5	12.800	GFL05 - 2M□□□ 090-31	
	193	106	1.4	14.706	* GFL04 - 2M□□□ 090-31	
	195	104	2.3	14.538	GFL05 - 2M□□□ 090-31	
	177	116	1.3	16.087	* GFL04 - 2M□□□ 090-31	
	179	114	2.2	15.904	GFL05 - 2M□□□ 090-31	
	159	129	1.1	17.920	* GFL04 - 2M□□□ 090-31	
	159	129	2.0	17.920	GFL05 - 2M□□□ 090-31	
	138	147	1.0	20.519	* GFL04 - 2M□□□ 090-31	
	140	146	1.8	20.286	GFL05 - 2M□□□ 090-31	
	124	164	0.8	22.857	* GFL04 - 2M□□□ 090-31	
	124	164	1.5	22.857	GFL05 - 2M□□□ 090-31	
	123	166	2.9	23.175	GFL06 - 2M□□□ 090-31	
	113	180	0.9	25.136	* GFL04 - 2M□□□ 090-31	
	114	178	1.8	24.850	GFL05 - 2M□□□ 090-31	
	101	201	1.4	28.000	GFL05 - 2M□□□ 090-31	
	100	204	2.7	28.389	GFL06 - 2M□□□ 090-31	
	88	232	1.4	32.344	GFL05 - 2M□□□ 090-31	
	87	235	2.5	32.800	GFL06 - 2M□□□ 090-31	
	78	262	1.1	36.444	GFL05 - 2M□□□ 090-31	
	77	265	2.1	36.951	GFL06 - 2M□□□ 090-31	
	71	289	1.1	40.233	GFL05 - 2M□□□ 090-31	
	70	293	2.1	40.800	GFL06 - 2M□□□ 090-31	
	63	325	0.9	45.333	GFL05 - 2M□□□ 090-31	
	62	330	1.7	45.963	GFL06 - 2M□□□ 090-31	
	54	379	1.6	52.800	GFL06 - 2M□□□ 090-31	
	55	374	3.0	52.067	GFL07 - 2M□□□ 090-31	
	48	427	1.3	59.481	GFL06 - 2M□□□ 090-31	
	48	421	2.8	58.667	GFL07 - 2M□□□ 090-31	
	44	460	1.2	64.080	GFL06 - 2M□□□ 090-31	
	45	454	2.5	63.190	GFL07 - 2M□□□ 090-31	
	46	447	3.2	62.300	GFL09 - 2M□□□ 090-31	
	39	518	1.2	72.189	GFL06 - 2M□□□ 090-31	
	40	511	2.5	71.200	GFL07 - 2M□□□ 090-31	

Thermal power limit not considered (see page 2-4)

\* not possible with hollow shaft (H□□)



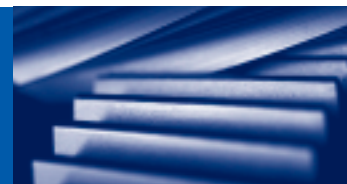
P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2840	36	573	1.5	79.875	GFL07 - 2M□□□ 090-31	
	36	565	2.7	78.750	GFL09 - 2M□□□ 090-31	
	32	646	1.4	90.000	GFL07 - 2M□□□ 090-31	
	32	637	2.7	88.750	GFL09 - 2M□□□ 090-31	
n1=1440	432	47	3.5	3.333	GFL05 - 2M□□□ 100C12	
	315	65	2.6	4.571	GFL05 - 2M□□□ 100C12	
	281	73	3.1	5.133	GFL05 - 2M□□□ 100C12	
	254	80	2.9	5.667	GFL05 - 2M□□□ 100C12	
	225	91	1.9	6.400	GFL05 - 2M□□□ 100C12	
	205	100	2.5	7.040	GFL05 - 2M□□□ 100C12	
	185	110	2.3	7.771	GFL05 - 2M□□□ 100C12	
	160	128	2.1	9.010	GFL05 - 2M□□□ 100C12	
	145	141	2.0	9.946	GFL05 - 2M□□□ 100C12	
	143	143	3.2	10.092	GFL06 - 2M□□□ 100C12	
	127	161	1.7	11.360	GFL05 - 2M□□□ 100C12	
	113	181	1.6	12.800	GFL05 - 2M□□□ 100C12	
	111	184	3.2	12.978	GFL06 - 2M□□□ 100C12	
	99	206	1.5	14.538	GFL05 - 2M□□□ 100C12	
	98	209	3.1	14.743	GFL06 - 2M□□□ 100C12	
	91	225	1.4	15.904	GFL05 - 2M□□□ 100C12	
	89	228	2.8	16.128	GFL06 - 2M□□□ 100C12	
	80	254	1.2	17.920	GFL05 - 2M□□□ 100C12	
	79	257	2.3	18.169	GFL06 - 2M□□□ 100C12	
	71	287	1.2	20.286	GFL05 - 2M□□□ 100C12	
	70	291	2.2	20.571	GFL06 - 2M□□□ 100C12	
	63	324	1.0	22.857	GFL05 - 2M□□□ 100C12	
	62	328	1.8	23.175	GFL06 - 2M□□□ 100C12	
	58	352	1.0	24.850	GFL05 - 2M□□□ 100C12	
	57	357	1.8	25.200	GFL06 - 2M□□□ 100C12	
	51	402	1.5	28.389	GFL06 - 2M□□□ 100C12	
	51	396	3.1	28.000	GFL07 - 2M□□□ 100C12	
	44	464	1.4	32.800	GFL06 - 2M□□□ 100C12	
	45	458	3.0	32.344	GFL07 - 2M□□□ 100C12	
	39	523	1.2	36.951	GFL06 - 2M□□□ 100C12	
	40	516	2.4	36.444	GFL07 - 2M□□□ 100C12	
	35	578	1.1	40.800	GFL06 - 2M□□□ 100C12	
36	561	2.5	39.642	GFL07 - 2M□□□ 100C12		
31	651	0.9	45.963	GFL06 - 2M□□□ 100C12		
32	632	2.0	44.667	GFL07 - 2M□□□ 100C12		
28	737	1.8	52.067	GFL07 - 2M□□□ 100C12		
28	727	2.8	51.333	GFL09 - 2M□□□ 100C12		
25	830	1.5	58.667	GFL07 - 2M□□□ 100C12		
25	819	2.8	57.852	GFL09 - 2M□□□ 100C12		
23	894	1.4	63.190	GFL07 - 2M□□□ 100C12		
23	882	2.3	62.300	GFL09 - 2M□□□ 100C12		
23	894	2.9	63.190	GFL11 - 2M□□□ 100C12		

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>2.2 kW</b> n <sub>1</sub> =1440	<b>GFL □□ - 2M</b>					<b>4-84</b>	
	20	1008	1.3	71.200	GFL07 - 2M□□□ 100C12		
	21	994	2.3	70.211	GFL09 - 2M□□□ 100C12		
	20	1008	2.9	71.200	GFL11 - 2M□□□ 100C12		
	18	1115	1.5	78.750	GFL09 - 2M□□□ 100C12		
	18	1131	2.3	79.875	GFL11 - 2M□□□ 100C12		
	16	1256	1.4	88.750	GFL09 - 2M□□□ 100C12		
	16	1274	2.3	90.000	GFL11 - 2M□□□ 100C12		
	<b>GFL □□ - 3M</b>						<b>4-100</b>
	15	1301	1.3	93.333	GFL09 - 3M□□□ 100C12		
	15	1304	2.5	93.540	GFL11 - 3M□□□ 100C12		
	14	1467	1.3	105.185	GFL09 - 3M□□□ 100C12		
	14	1470	2.5	105.397	GFL11 - 3M□□□ 100C12		
	13	1594	1.2	114.333	GFL09 - 3M□□□ 100C12		
	13	1598	2.2	114.586	GFL11 - 3M□□□ 100C12		
	11	1797	1.2	128.852	GFL09 - 3M□□□ 100C12		
	11	1800	2.2	129.111	GFL11 - 3M□□□ 100C12		
	9.7	2075	1.0	148.815	GFL09 - 3M□□□ 100C12		
	9.7	2079	1.9	149.144	GFL11 - 3M□□□ 100C12		
	8.6	2338	1.0	167.712	GFL09 - 3M□□□ 100C12		
	8.6	2343	1.9	168.049	GFL11 - 3M□□□ 100C12		
	7.8	2581	0.9	185.111	GFL09 - 3M□□□ 100C12		
	7.9	2549	1.7	182.792	GFL11 - 3M□□□ 100C12		
	6.9	2909	0.9	208.617	GFL09 - 3M□□□ 100C12		
	7.0	2872	1.7	205.963	GFL11 - 3M□□□ 100C12		
	7.1	2817	2.8	202.074	GFL14 - 3M□□□ 100C12		
	6.4	3132	1.4	224.636	GFL11 - 3M□□□ 100C12		
	6.4	3132	2.8	224.636	GFL14 - 3M□□□ 100C12		
	5.7	3529	1.4	253.111	GFL11 - 3M□□□ 100C12		
	5.7	3529	2.8	253.111	GFL14 - 3M□□□ 100C12		
	5.4	3726	1.4	267.259	GFL11 - 3M□□□ 100C12		
	5.3	3817	2.6	273.778	GFL14 - 3M□□□ 100C12		
	4.4	4567	1.2	327.556	GFL11 - 3M□□□ 100C12		
	4.3	4635	2.3	332.444	GFL14 - 3M□□□ 100C12		
	4.0	4993	1.1	358.077	GFL11 - 3M□□□ 100C12		
	4.1	4919	2.1	352.811	GFL14 - 3M□□□ 100C12		
	3.6	5625	1.1	403.467	GFL11 - 3M□□□ 100C12		
	3.6	5543	2.1	397.533	GFL14 - 3M□□□ 100C12		
	3.4	5998	1.0	430.222	GFL11 - 3M□□□ 100C12		
	3.4	5998	1.8	430.222	GFL14 - 3M□□□ 100C12		
2.8	7280	0.8	522.133	GFL11 - 3M□□□ 100C12			
2.8	7280	1.5	522.133	GFL14 - 3M□□□ 100C12			
2.6	7841	1.2	562.391	GFL14 - 3M□□□ 100C12			
2.3	8835	1.1	633.680	GFL14 - 3M□□□ 100C12			
2.0	9912	0.9	710.888	GFL14 - 3M□□□ 100C12			
1.8	11168	0.9	801.000	GFL14 - 3M□□□ 100C12			

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b> n <sub>1</sub> =2850					<b>GFL □□ - 2M</b>	4-84
	855	33	4.1	3.333	GFL05 - 2M□□□ 100-31	
	623	45	3.1	4.571	GFL05 - 2M□□□ 100-31	
	555	50	3.6	5.133	GFL05 - 2M□□□ 100-31	
	503	55	3.4	5.667	GFL05 - 2M□□□ 100-31	
	445	62	2.2	6.400	GFL05 - 2M□□□ 100-31	
	405	69	2.9	7.040	GFL05 - 2M□□□ 100-31	
	367	76	2.8	7.771	GFL05 - 2M□□□ 100-31	
	316	88	2.4	9.010	GFL05 - 2M□□□ 100-31	
	287	97	2.3	9.946	GFL05 - 2M□□□ 100-31	
	251	111	2.0	11.360	GFL05 - 2M□□□ 100-31	
	223	125	1.8	12.800	GFL05 - 2M□□□ 100-31	
	196	142	1.7	14.538	GFL05 - 2M□□□ 100-31	
	179	155	1.6	15.904	GFL05 - 2M□□□ 100-31	
	159	175	1.4	17.920	GFL05 - 2M□□□ 100-31	
	157	177	2.7	18.169	GFL06 - 2M□□□ 100-31	
	141	198	1.4	20.286	GFL05 - 2M□□□ 100-31	
	139	201	2.6	20.571	GFL06 - 2M□□□ 100-31	
	125	223	1.1	22.857	GFL05 - 2M□□□ 100-31	
	123	226	2.2	23.175	GFL06 - 2M□□□ 100-31	
	115	242	1.3	24.850	GFL05 - 2M□□□ 100-31	
	113	246	2.4	25.200	GFL06 - 2M□□□ 100-31	
	102	273	1.1	28.000	GFL05 - 2M□□□ 100-31	
	100	277	2.0	28.389	GFL06 - 2M□□□ 100-31	
	87	320	1.8	32.800	GFL06 - 2M□□□ 100-31	
	77	360	1.6	36.951	GFL06 - 2M□□□ 100-31	
	78	355	3.2	36.444	GFL07 - 2M□□□ 100-31	
	70	398	1.5	40.800	GFL06 - 2M□□□ 100-31	
	62	448	1.3	45.963	GFL06 - 2M□□□ 100-31	
	64	436	2.6	44.667	GFL07 - 2M□□□ 100-31	
	55	508	2.4	52.067	GFL07 - 2M□□□ 100-31	
	49	572	2.0	58.667	GFL07 - 2M□□□ 100-31	
45	616	1.8	63.190	GFL07 - 2M□□□ 100-31		
46	608	3.1	62.300	GFL09 - 2M□□□ 100-31		
40	694	1.8	71.200	GFL07 - 2M□□□ 100-31		
36	768	2.1	78.750	GFL09 - 2M□□□ 100-31		
32	866	2.1	88.750	GFL09 - 2M□□□ 100-31		
n <sub>1</sub> =1430	429	65	2.6	3.333	GFL05 - 2M□□□ 100C32	
	313	89	1.9	4.571	GFL05 - 2M□□□ 100C32	
	279	100	2.2	5.133	GFL05 - 2M□□□ 100C32	
	252	110	2.1	5.667	GFL05 - 2M□□□ 100C32	
	223	124	1.4	6.400	GFL05 - 2M□□□ 100C32	
	222	125	2.8	6.450	GFL06 - 2M□□□ 100C32	

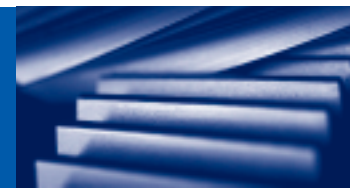
Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b> n1=1430					<b>GFL □□ - 2M</b>	<b>4-84</b>
	203	137	1.8	7.040	GFL05 - 2M□□□ 100C32	
	200	139	3.1	7.147	GFL06 - 2M□□□ 100C32	
	184	151	1.7	7.771	GFL05 - 2M□□□ 100C32	
	159	175	1.5	9.010	GFL05 - 2M□□□ 100C32	
	151	184	3.2	9.463	GFL06 - 2M□□□ 100C32	
	144	193	1.4	9.946	GFL05 - 2M□□□ 100C32	
	142	196	2.3	10.092	GFL06 - 2M□□□ 100C32	
	126	221	1.3	11.360	GFL05 - 2M□□□ 100C32	
	124	224	2.8	11.520	GFL06 - 2M□□□ 100C32	
	112	249	1.1	12.800	GFL05 - 2M□□□ 100C32	
	110	252	2.3	12.978	GFL06 - 2M□□□ 100C32	
	98	283	1.1	14.538	GFL05 - 2M□□□ 100C32	
	97	287	2.2	14.743	GFL06 - 2M□□□ 100C32	
	90	309	1.0	15.904	GFL05 - 2M□□□ 100C32	
	89	314	2.1	16.128	GFL06 - 2M□□□ 100C32	
	80	348	0.9	17.920	GFL05 - 2M□□□ 100C32	
	79	353	1.7	18.169	GFL06 - 2M□□□ 100C32	
	71	394	0.8	20.286	GFL05 - 2M□□□ 100C32	
	70	400	1.6	20.571	GFL06 - 2M□□□ 100C32	
	71	394	3.2	20.286	GFL07 - 2M□□□ 100C32	
	62	450	1.3	23.175	GFL06 - 2M□□□ 100C32	
	63	444	2.8	22.857	GFL07 - 2M□□□ 100C32	
	57	490	1.3	25.200	GFL06 - 2M□□□ 100C32	
	58	483	2.8	24.850	GFL07 - 2M□□□ 100C32	
	50	552	1.1	28.389	GFL06 - 2M□□□ 100C32	
	51	544	2.3	28.000	GFL07 - 2M□□□ 100C32	
	44	638	1.0	32.800	GFL06 - 2M□□□ 100C32	
	44	629	2.2	32.344	GFL07 - 2M□□□ 100C32	
	44	635	2.9	32.667	GFL09 - 2M□□□ 100C32	
	39	718	0.9	36.951	GFL06 - 2M□□□ 100C32	
	39	708	1.8	36.444	GFL07 - 2M□□□ 100C32	
	39	716	2.9	36.815	GFL09 - 2M□□□ 100C32	
	35	793	0.8	40.800	GFL06 - 2M□□□ 100C32	
	36	771	1.8	39.642	GFL07 - 2M□□□ 100C32	
	36	771	2.5	39.667	GFL09 - 2M□□□ 100C32	
32	868	1.4	44.667	GFL07 - 2M□□□ 100C32		
32	869	2.5	44.704	GFL09 - 2M□□□ 100C32		
28	1012	1.3	52.067	GFL07 - 2M□□□ 100C32		
28	998	2.0	51.333	GFL09 - 2M□□□ 100C32		
28	1012	2.5	52.067	GFL11 - 2M□□□ 100C32		
24	1140	1.1	58.667	GFL07 - 2M□□□ 100C32		
25	1125	2.0	57.852	GFL09 - 2M□□□ 100C32		
24	1140	2.5	58.667	GFL11 - 2M□□□ 100C32		
23	1228	1.0	63.190	GFL07 - 2M□□□ 100C32		
23	1211	1.7	62.300	GFL09 - 2M□□□ 100C32		
23	1228	2.1	63.190	GFL11 - 2M□□□ 100C32		
20	1384	0.9	71.200	GFL07 - 2M□□□ 100C32		
20	1365	1.7	70.211	GFL09 - 2M□□□ 100C32		
20	1384	2.1	71.200	GFL11 - 2M□□□ 100C32		
18	1531	1.1	78.750	GFL09 - 2M□□□ 100C32		
18	1553	1.7	79.875	GFL11 - 2M□□□ 100C32		

Thermal power limit not considered (see page 2-4)





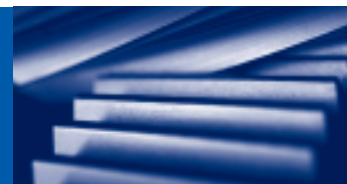
P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>3 kW</b> n <sub>1</sub> =1430					<b>GFL □□ - 2M</b>		4-84
	16	1725	1.0	88.750	GFL09 - 2M□□□ 100C32	4-100	
	16	1749	1.7	90.000	GFL11 - 2M□□□ 100C32		
					<b>GFL □□ - 3M</b>		
	15	1787	0.9	93.333	GFL09 - 3M□□□ 100C32		
	15	1791	1.8	93.540	GFL11 - 3M□□□ 100C32		
	14	2014	0.9	105.185	GFL09 - 3M□□□ 100C32		
	14	2018	1.8	105.397	GFL11 - 3M□□□ 100C32		
	14	2008	2.9	104.889	GFL14 - 3M□□□ 100C32		
	13	2189	0.8	114.333	GFL09 - 3M□□□ 100C32		
	13	2194	1.6	114.586	GFL11 - 3M□□□ 100C32		
	13	2185	2.9	114.126	GFL14 - 3M□□□ 100C32		
	11	2467	0.8	128.852	GFL09 - 3M□□□ 100C32		
	11	2472	1.6	129.111	GFL11 - 3M□□□ 100C32		
	11	2462	2.9	128.593	GFL14 - 3M□□□ 100C32		
	9.6	2855	1.4	149.144	GFL11 - 3M□□□ 100C32		
	8.5	3217	1.4	168.049	GFL11 - 3M□□□ 100C32		
	9.2	2990	2.5	156.148	GFL14 - 3M□□□ 100C32		
	7.8	3500	1.2	182.792	GFL11 - 3M□□□ 100C32		
	8.4	3256	2.6	170.074	GFL14 - 3M□□□ 100C32		
	6.9	3943	1.2	205.963	GFL11 - 3M□□□ 100C32		
	7.1	3869	2.0	202.074	GFL14 - 3M□□□ 100C32		
	6.4	4301	1.1	224.636	GFL11 - 3M□□□ 100C32		
	6.4	4301	2.0	224.636	GFL14 - 3M□□□ 100C32		
	5.7	4846	1.1	253.111	GFL11 - 3M□□□ 100C32		
	5.7	4846	2.0	253.111	GFL14 - 3M□□□ 100C32		
	5.4	5117	1.0	267.259	GFL11 - 3M□□□ 100C32		
	5.2	5242	1.9	273.778	GFL14 - 3M□□□ 100C32		
4.4	6271	0.9	327.556	GFL11 - 3M□□□ 100C32			
4.3	6365	1.7	332.444	GFL14 - 3M□□□ 100C32			
4.1	6755	1.5	352.811	GFL14 - 3M□□□ 100C32			
3.6	7611	1.5	397.533	GFL14 - 3M□□□ 100C32			
3.3	8237	1.3	430.222	GFL14 - 3M□□□ 100C32			
2.7	9997	1.1	522.133	GFL14 - 3M□□□ 100C32			
2.5	10767	0.8	562.391	GFL14 - 3M□□□ 100C32			
2.3	12132	0.8	633.680	GFL14 - 3M□□□ 100C32			
<b>4 kW</b> n <sub>1</sub> =2830					<b>GFL □□ - 2M</b>		4-84
	849	44	3.1	3.333	GFL05 - 2M□□□ 100-41		
	619	60	2.3	4.571	GFL05 - 2M□□□ 100-41		
	551	67	2.7	5.133	GFL05 - 2M□□□ 100-41		
	499	74	2.5	5.667	GFL05 - 2M□□□ 100-41		
	442	84	1.7	6.400	GFL05 - 2M□□□ 100-41		
	402	92	2.2	7.040	GFL05 - 2M□□□ 100-41		
	364	102	2.1	7.771	GFL05 - 2M□□□ 100-41		
	314	118	1.8	9.010	GFL05 - 2M□□□ 100-41		

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2830	285	130	1.7	9.946	GFL05 - 2M□□□ 100-41	
	280	132	2.8	10.092	GFL06 - 2M□□□ 100-41	
	249	149	1.5	11.360	GFL05 - 2M□□□ 100-41	
	221	168	1.4	12.800	GFL05 - 2M□□□ 100-41	
	218	170	2.8	12.978	GFL06 - 2M□□□ 100-41	
	195	190	1.3	14.538	GFL05 - 2M□□□ 100-41	
	192	193	2.7	14.743	GFL06 - 2M□□□ 100-41	
	178	208	1.2	15.904	GFL05 - 2M□□□ 100-41	
	176	211	2.5	16.128	GFL06 - 2M□□□ 100-41	
	158	235	1.1	17.920	GFL05 - 2M□□□ 100-41	
	156	238	2.0	18.169	GFL06 - 2M□□□ 100-41	
	140	266	1.0	20.286	GFL05 - 2M□□□ 100-41	
	138	269	1.9	20.571	GFL06 - 2M□□□ 100-41	
	124	299	0.8	22.857	GFL05 - 2M□□□ 100-41	
	122	304	1.6	23.175	GFL06 - 2M□□□ 100-41	
	114	325	1.0	24.850	GFL05 - 2M□□□ 100-41	
	112	330	1.8	25.200	GFL06 - 2M□□□ 100-41	
	100	372	1.5	28.389	GFL06 - 2M□□□ 100-41	
	101	367	3.1	28.000	GFL07 - 2M□□□ 100-41	
	86	430	1.4	32.800	GFL06 - 2M□□□ 100-41	
	88	424	3.0	32.344	GFL07 - 2M□□□ 100-41	
	77	484	1.2	36.951	GFL06 - 2M□□□ 100-41	
	78	477	2.4	36.444	GFL07 - 2M□□□ 100-41	
	69	534	1.1	40.800	GFL06 - 2M□□□ 100-41	
	71	519	2.4	39.642	GFL07 - 2M□□□ 100-41	
	62	602	0.9	45.963	GFL06 - 2M□□□ 100-41	
	63	585	2.0	44.667	GFL07 - 2M□□□ 100-41	
	54	682	1.8	52.067	GFL07 - 2M□□□ 100-41	
	55	672	2.7	51.333	GFL09 - 2M□□□ 100-41	
	48	768	1.5	58.667	GFL07 - 2M□□□ 100-41	
	49	758	2.7	57.852	GFL09 - 2M□□□ 100-41	
	45	828	1.4	63.190	GFL07 - 2M□□□ 100-41	
	45	816	2.3	62.300	GFL09 - 2M□□□ 100-41	
	45	828	2.9	63.190	GFL11 - 2M□□□ 100-41	
	40	932	1.4	71.200	GFL07 - 2M□□□ 100-41	
	40	919	2.5	70.211	GFL09 - 2M□□□ 100-41	
	40	932	3.1	71.200	GFL11 - 2M□□□ 100-41	
	36	1031	1.6	78.750	GFL09 - 2M□□□ 100-41	
	35	1046	2.5	79.875	GFL11 - 2M□□□ 100-41	
	32	1162	1.5	88.750	GFL09 - 2M□□□ 100-41	
31	1179	2.5	90.000	GFL11 - 2M□□□ 100-41		
n1=1450	395	94	3.4	3.675	GFL06 - 2M□□□ 112C22	
	312	119	4.2	4.643	GFL07 - 2M□□□ 112C22	
	278	133	3.2	5.211	GFL06 - 2M□□□ 112C22	
	252	147	3.0	5.750	GFL06 - 2M□□□ 112C22	
	225	165	2.1	6.450	GFL06 - 2M□□□ 112C22	

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =1450	203	183	2.4	7.147	GFL06 - 2M□□□ 112C22	
	173	215	2.8	8.400	GFL06 - 2M□□□ 112C22	
	153	242	2.4	9.463	GFL06 - 2M□□□ 112C22	
	144	258	1.8	10.092	GFL06 - 2M□□□ 112C22	
	126	294	2.1	11.520	GFL06 - 2M□□□ 112C22	
	112	332	1.8	12.978	GFL06 - 2M□□□ 112C22	
	98	377	1.7	14.743	GFL06 - 2M□□□ 112C22	
	102	363	3.2	14.200	GFL07 - 2M□□□ 112C22	
	90	412	1.6	16.128	GFL06 - 2M□□□ 112C22	
	91	407	2.9	15.904	GFL07 - 2M□□□ 112C22	
	80	464	1.3	18.169	GFL06 - 2M□□□ 112C22	
	81	458	2.6	17.920	GFL07 - 2M□□□ 112C22	
	71	526	1.2	20.571	GFL06 - 2M□□□ 112C22	
	72	519	2.4	20.286	GFL07 - 2M□□□ 112C22	
	63	592	1.0	23.175	GFL06 - 2M□□□ 112C22	
	63	584	2.1	22.857	GFL07 - 2M□□□ 112C22	
	58	644	1.0	25.200	GFL06 - 2M□□□ 112C22	
	58	635	2.1	24.850	GFL07 - 2M□□□ 112C22	
	51	726	0.8	28.389	GFL06 - 2M□□□ 112C22	
	52	716	1.7	28.000	GFL07 - 2M□□□ 112C22	
	45	827	1.7	32.344	GFL07 - 2M□□□ 112C22	
	44	835	2.6	32.667	GFL09 - 2M□□□ 112C22	
	44	837	3.2	32.739	GFL11 - 2M□□□ 112C22	
	40	932	1.3	36.444	GFL07 - 2M□□□ 112C22	
	39	941	2.6	36.815	GFL09 - 2M□□□ 112C22	
	39	943	3.2	36.889	GFL11 - 2M□□□ 112C22	
	37	1013	1.4	39.642	GFL07 - 2M□□□ 112C22	
	37	1014	2.2	39.667	GFL09 - 2M□□□ 112C22	
	36	1028	2.7	40.233	GFL11 - 2M□□□ 112C22	
	33	1142	1.1	44.667	GFL07 - 2M□□□ 112C22	
	32	1143	2.2	44.704	GFL09 - 2M□□□ 112C22	
	32	1159	2.7	45.333	GFL11 - 2M□□□ 112C22	
	28	1312	1.7	51.333	GFL09 - 2M□□□ 112C22	
	28	1331	2.2	52.067	GFL11 - 2M□□□ 112C22	
	28	1331	2.7	52.067	GFL14 - 2M□□□ 112C22	
	25	1479	1.7	57.852	GFL09 - 2M□□□ 112C22	
	25	1499	2.2	58.667	GFL11 - 2M□□□ 112C22	
	25	1499	2.7	58.667	GFL14 - 2M□□□ 112C22	
	23	1592	1.5	62.300	GFL09 - 2M□□□ 112C22	
	23	1615	1.8	63.190	GFL11 - 2M□□□ 112C22	
	23	1615	2.3	63.190	GFL14 - 2M□□□ 112C22	
	21	1795	1.4	70.211	GFL09 - 2M□□□ 112C22	
	20	1820	1.8	71.200	GFL11 - 2M□□□ 112C22	
	20	1820	2.3	71.200	GFL14 - 2M□□□ 112C22	
	18	2042	1.5	79.875	GFL11 - 2M□□□ 112C22	
	18	2042	1.8	79.875	GFL14 - 2M□□□ 112C22	
	16	2300	1.5	90.000	GFL11 - 2M□□□ 112C22	
	16	2300	1.8	90.000	GFL14 - 2M□□□ 112C22	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GFL □□ - 3M</b>	<b>4-100</b>
n <sub>1</sub> =1450	16	2355	1.4	93.540	GFL11 - 3M□□□ 112C22	
	14	2653	1.4	105.397	GFL11 - 3M□□□ 112C22	
	14	2641	2.6	104.889	GFL14 - 3M□□□ 112C22	
	13	2885	1.2	114.586	GFL11 - 3M□□□ 112C22	
	13	2873	2.3	114.126	GFL14 - 3M□□□ 112C22	
	11	3250	1.2	129.111	GFL11 - 3M□□□ 112C22	
	11	3237	2.3	128.593	GFL14 - 3M□□□ 112C22	
	9.7	3755	1.0	149.144	GFL11 - 3M□□□ 112C22	
	11	3446	2.1	136.889	GFL14 - 3M□□□ 112C22	
	8.6	4231	1.0	168.049	GFL11 - 3M□□□ 112C22	
	9.3	3931	2.1	156.148	GFL14 - 3M□□□ 112C22	
	7.9	4602	0.9	182.792	GFL11 - 3M□□□ 112C22	
	8.5	4282	2.0	170.074	GFL14 - 3M□□□ 112C22	
	7.0	5185	0.9	205.963	GFL11 - 3M□□□ 112C22	
	7.2	5087	1.7	202.074	GFL14 - 3M□□□ 112C22	
	6.5	5655	1.5	224.636	GFL14 - 3M□□□ 112C22	
	5.7	6372	1.5	253.111	GFL14 - 3M□□□ 112C22	
	5.3	6892	1.4	273.778	GFL14 - 3M□□□ 112C22	
	4.4	8369	1.3	332.444	GFL14 - 3M□□□ 112C22	
	4.1	8882	1.2	352.811	GFL14 - 3M□□□ 112C22	
	3.7	10008	1.2	397.533	GFL14 - 3M□□□ 112C22	
	3.4	10831	1.0	430.222	GFL14 - 3M□□□ 112C22	
	2.8	13145	0.8	522.133	GFL14 - 3M□□□ 112C22	
<b>5.5 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =2890	786	65	4.0	3.675	GFL06 - 2M□□□ 112-31	
	623	82	4.9	4.643	GFL07 - 2M□□□ 112-31	
	555	92	3.7	5.211	GFL06 - 2M□□□ 112-31	
	503	101	3.5	5.750	GFL06 - 2M□□□ 112-31	
	448	114	2.5	6.450	GFL06 - 2M□□□ 112-31	
	404	126	2.8	7.147	GFL06 - 2M□□□ 112-31	
	344	148	3.3	8.400	GFL06 - 2M□□□ 112-31	
	305	167	2.8	9.463	GFL06 - 2M□□□ 112-31	
	286	178	2.1	10.092	GFL06 - 2M□□□ 112-31	
	251	203	2.5	11.520	GFL06 - 2M□□□ 112-31	
	223	229	2.1	12.978	GFL06 - 2M□□□ 112-31	
	196	260	2.0	14.743	GFL06 - 2M□□□ 112-31	
	179	284	1.8	16.128	GFL06 - 2M□□□ 112-31	
	159	320	1.5	18.169	GFL06 - 2M□□□ 112-31	
	161	316	3.0	17.920	GFL07 - 2M□□□ 112-31	
	141	363	1.4	20.571	GFL06 - 2M□□□ 112-31	
	143	358	2.8	20.286	GFL07 - 2M□□□ 112-31	
	125	409	1.2	23.175	GFL06 - 2M□□□ 112-31	
	126	403	2.5	22.857	GFL07 - 2M□□□ 112-31	

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>5.5 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>	
n1=2890	115	444	1.3	25.200	GFL06 - 2M□□□ 112-31		
	116	438	2.8	24.850	GFL07 - 2M□□□ 112-31		
	102	501	1.1	28.389	GFL06 - 2M□□□ 112-31		
	103	494	2.3	28.000	GFL07 - 2M□□□ 112-31		
	89	570	2.2	32.344	GFL07 - 2M□□□ 112-31		
	79	643	1.8	36.444	GFL07 - 2M□□□ 112-31		
	73	699	1.8	39.642	GFL07 - 2M□□□ 112-31		
	73	699	2.9	39.667	GFL09 - 2M□□□ 112-31		
	65	788	1.5	44.667	GFL07 - 2M□□□ 112-31		
	65	788	2.9	44.704	GFL09 - 2M□□□ 112-31		
	56	905	2.3	51.333	GFL09 - 2M□□□ 112-31		
	56	918	2.9	52.067	GFL11 - 2M□□□ 112-31		
	50	1020	2.3	57.852	GFL09 - 2M□□□ 112-31		
	49	1034	2.9	58.667	GFL11 - 2M□□□ 112-31		
	46	1099	1.9	62.300	GFL09 - 2M□□□ 112-31		
	46	1114	2.4	63.190	GFL11 - 2M□□□ 112-31		
	46	1114	3.0	63.190	GFL14 - 2M□□□ 112-31		
	41	1238	2.0	70.211	GFL09 - 2M□□□ 112-31		
	41	1255	2.6	71.200	GFL11 - 2M□□□ 112-31		
	36	1408	2.1	79.875	GFL11 - 2M□□□ 112-31		
	36	1408	2.6	79.875	GFL14 - 2M□□□ 112-31		
	32	1587	2.1	90.000	GFL11 - 2M□□□ 112-31		
	32	1587	2.6	90.000	GFL14 - 2M□□□ 112-31		
	n1=1445	393	130	2.5	3.675	GFL06 - 2M□□□ 112C32	
		431	118	3.0	3.350	GFL07 - 2M□□□ 112C32	
		311	164	3.0	4.643	GFL07 - 2M□□□ 112C32	
		277	184	2.3	5.211	GFL06 - 2M□□□ 112C32	
		280	182	3.0	5.159	GFL07 - 2M□□□ 112C32	
251		203	2.2	5.750	GFL06 - 2M□□□ 112C32		
254		201	3.0	5.695	GFL07 - 2M□□□ 112C32		
224		228	1.5	6.450	GFL06 - 2M□□□ 112C32		
226		226	2.5	6.400	GFL07 - 2M□□□ 112C32		
202		252	1.7	7.147	GFL06 - 2M□□□ 112C32		
202		252	3.0	7.150	GFL07 - 2M□□□ 112C32		
172		296	2.0	8.400	GFL06 - 2M□□□ 112C32		
174		294	3.0	8.324	GFL07 - 2M□□□ 112C32		
153		334	1.7	9.463	GFL06 - 2M□□□ 112C32		
154		331	3.0	9.379	GFL07 - 2M□□□ 112C32		
143		356	1.3	10.092	GFL06 - 2M□□□ 112C32		
149		343	2.7	9.714	GFL07 - 2M□□□ 112C32		
125		406	1.6	11.520	GFL06 - 2M□□□ 112C32		
125		407	2.7	11.538	GFL07 - 2M□□□ 112C32		
129		394	3.1	11.167	GFL09 - 2M□□□ 112C32		
111		458	1.3	12.978	GFL06 - 2M□□□ 112C32		
111		458	2.4	13.000	GFL07 - 2M□□□ 112C32		
98		520	1.2	14.743	GFL06 - 2M□□□ 112C32		
102		501	2.3	14.200	GFL07 - 2M□□□ 112C32		

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n1=1445					<b>GFL □□ - 2M</b>	4-84
	90	569	1.1	16.128	GFL06 - 2M□□□ 112C32	
	91	561	2.1	15.904	GFL07 - 2M□□□ 112C32	
	89	576	3.1	16.333	GFL09 - 2M□□□ 112C32	
	80	641	0.9	18.169	GFL06 - 2M□□□ 112C32	
	81	632	1.9	17.920	GFL07 - 2M□□□ 112C32	
	79	649	3.1	18.407	GFL09 - 2M□□□ 112C32	
	70	725	0.9	20.571	GFL06 - 2M□□□ 112C32	
	71	715	1.8	20.286	GFL07 - 2M□□□ 112C32	
	74	694	2.8	19.667	GFL09 - 2M□□□ 112C32	
	63	806	1.5	22.857	GFL07 - 2M□□□ 112C32	
	65	782	2.8	22.164	GFL09 - 2M□□□ 112C32	
	58	876	1.5	24.850	GFL07 - 2M□□□ 112C32	
	60	850	2.4	24.111	GFL09 - 2M□□□ 112C32	
	52	987	1.3	28.000	GFL07 - 2M□□□ 112C32	
	53	958	2.4	27.173	GFL09 - 2M□□□ 112C32	
	45	1141	1.2	32.344	GFL07 - 2M□□□ 112C32	
	44	1152	1.9	32.667	GFL09 - 2M□□□ 112C32	
	44	1155	2.4	32.739	GFL11 - 2M□□□ 112C32	
	40	1285	1.0	36.444	GFL07 - 2M□□□ 112C32	
	39	1298	1.9	36.815	GFL09 - 2M□□□ 112C32	
	39	1301	2.4	36.889	GFL11 - 2M□□□ 112C32	
	37	1398	1.0	39.642	GFL07 - 2M□□□ 112C32	
	36	1399	1.6	39.667	GFL09 - 2M□□□ 112C32	
	36	1419	2.0	40.233	GFL11 - 2M□□□ 112C32	
	32	1577	1.6	44.704	GFL09 - 2M□□□ 112C32	
	32	1599	2.0	45.333	GFL11 - 2M□□□ 112C32	
	28	1810	1.3	51.333	GFL09 - 2M□□□ 112C32	
	28	1836	1.6	52.067	GFL11 - 2M□□□ 112C32	
	28	1836	2.0	52.067	GFL14 - 2M□□□ 112C32	
	25	2040	1.3	57.852	GFL09 - 2M□□□ 112C32	
	25	2069	1.6	58.667	GFL11 - 2M□□□ 112C32	
	25	2069	2.0	58.667	GFL14 - 2M□□□ 112C32	
	23	2197	1.1	62.300	GFL09 - 2M□□□ 112C32	
	23	2228	1.3	63.190	GFL11 - 2M□□□ 112C32	
	23	2228	1.6	63.190	GFL14 - 2M□□□ 112C32	
	21	2476	1.0	70.211	GFL09 - 2M□□□ 112C32	
	20	2511	1.3	71.200	GFL11 - 2M□□□ 112C32	
	20	2511	1.6	71.200	GFL14 - 2M□□□ 112C32	
	18	2817	1.1	79.875	GFL11 - 2M□□□ 112C32	
18	2817	1.3	79.875	GFL14 - 2M□□□ 112C32		
16	3174	1.1	90.000	GFL11 - 2M□□□ 112C32		
16	3174	1.3	90.000	GFL14 - 2M□□□ 112C32		
				<b>GFL □□ - 3M</b>	4-100	
15	3249	1.0	93.540	GFL11 - 3M□□□ 112C32		
14	3661	1.0	105.397	GFL11 - 3M□□□ 112C32		
14	3643	1.9	104.889	GFL14 - 3M□□□ 112C32		
13	3980	0.9	114.586	GFL11 - 3M□□□ 112C32		
13	3964	1.7	114.126	GFL14 - 3M□□□ 112C32		
11	4485	0.9	129.111	GFL11 - 3M□□□ 112C32		
11	4467	1.7	128.593	GFL14 - 3M□□□ 112C32		

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n <sub>1</sub> =1445					<b>GFL □□ - 3M</b>	4-100
	11	4755	1.5	136.889	GFL14 - 3M□□□ 112C32	
	9.3	5424	1.5	156.148	GFL14 - 3M□□□ 112C32	
	8.5	5908	1.4	170.074	GFL14 - 3M□□□ 112C32	
	7.2	7019	1.3	202.074	GFL14 - 3M□□□ 112C32	
	6.4	7803	1.1	224.636	GFL14 - 3M□□□ 112C32	
	5.7	8792	1.1	253.111	GFL14 - 3M□□□ 112C32	
	5.3	9510	1.0	273.778	GFL14 - 3M□□□ 112C32	
	4.4	11548	0.9	332.444	GFL14 - 3M□□□ 112C32	
	4.1	12255	0.8	352.811	GFL14 - 3M□□□ 112C32	
3.6	13809	0.8	397.533	GFL14 - 3M□□□ 112C32		
<b>7.5 kW</b> n <sub>1</sub> =2900					<b>GFL □□ - 2M</b>	4-84
	789	88	2.9	3.675	GFL06 - 2M□□□ 112-41	
	625	111	3.6	4.643	GFL07 - 2M□□□ 112-41	
	557	125	2.7	5.211	GFL06 - 2M□□□ 112-41	
	504	138	2.6	5.750	GFL06 - 2M□□□ 112-41	
	450	155	1.8	6.450	GFL06 - 2M□□□ 112-41	
	453	153	2.9	6.400	GFL07 - 2M□□□ 112-41	
	406	171	2.0	7.147	GFL06 - 2M□□□ 112-41	
	345	201	2.4	8.400	GFL06 - 2M□□□ 112-41	
	307	227	2.1	9.463	GFL06 - 2M□□□ 112-41	
	287	242	1.5	10.092	GFL06 - 2M□□□ 112-41	
	299	233	3.1	9.714	GFL07 - 2M□□□ 112-41	
	252	276	1.8	11.520	GFL06 - 2M□□□ 112-41	
	251	277	3.1	11.538	GFL07 - 2M□□□ 112-41	
	224	311	1.5	12.978	GFL06 - 2M□□□ 112-41	
	223	312	2.8	13.000	GFL07 - 2M□□□ 112-41	
	197	353	1.5	14.743	GFL06 - 2M□□□ 112-41	
	204	340	2.7	14.200	GFL07 - 2M□□□ 112-41	
	180	386	1.3	16.128	GFL06 - 2M□□□ 112-41	
	182	381	2.5	15.904	GFL07 - 2M□□□ 112-41	
	160	435	1.1	18.169	GFL06 - 2M□□□ 112-41	
	162	429	2.2	17.920	GFL07 - 2M□□□ 112-41	
	141	493	1.1	20.571	GFL06 - 2M□□□ 112-41	
	143	486	2.1	20.286	GFL07 - 2M□□□ 112-41	
	125	555	0.9	23.175	GFL06 - 2M□□□ 112-41	
	127	548	1.8	22.857	GFL07 - 2M□□□ 112-41	
	115	604	1.0	25.200	GFL06 - 2M□□□ 112-41	
	117	595	2.0	24.850	GFL07 - 2M□□□ 112-41	
	120	578	3.2	24.111	GFL09 - 2M□□□ 112-41	
	102	680	0.8	28.389	GFL06 - 2M□□□ 112-41	
	104	671	1.7	28.000	GFL07 - 2M□□□ 112-41	
	107	651	3.2	27.173	GFL09 - 2M□□□ 112-41	
	90	775	1.6	32.344	GFL07 - 2M□□□ 112-41	
89	783	2.5	32.667	GFL09 - 2M□□□ 112-41		
89	785	3.2	32.739	GFL11 - 2M□□□ 112-41		

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>7.5 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>	
n1=2900	80	873	1.3	36.444	GFL07 - 2M□□□ 112-41		
	79	882	2.5	36.815	GFL09 - 2M□□□ 112-41		
	79	884	3.2	36.889	GFL11 - 2M□□□ 112-41		
	73	950	1.3	39.642	GFL07 - 2M□□□ 112-41		
	73	951	2.1	39.667	GFL09 - 2M□□□ 112-41		
	72	964	2.6	40.233	GFL11 - 2M□□□ 112-41		
	65	1070	1.1	44.667	GFL07 - 2M□□□ 112-41		
	65	1071	2.1	44.704	GFL09 - 2M□□□ 112-41		
	64	1086	2.6	45.333	GFL11 - 2M□□□ 112-41		
	57	1230	1.7	51.333	GFL09 - 2M□□□ 112-41		
	56	1248	2.1	52.067	GFL11 - 2M□□□ 112-41		
	56	1248	2.6	52.067	GFL14 - 2M□□□ 112-41		
	50	1386	1.7	57.852	GFL09 - 2M□□□ 112-41		
	49	1406	2.1	58.667	GFL11 - 2M□□□ 112-41		
	49	1406	2.6	58.667	GFL14 - 2M□□□ 112-41		
	47	1493	1.4	62.300	GFL09 - 2M□□□ 112-41		
	46	1514	1.8	63.190	GFL11 - 2M□□□ 112-41		
	46	1514	2.2	63.190	GFL14 - 2M□□□ 112-41		
	41	1682	1.5	70.211	GFL09 - 2M□□□ 112-41		
	41	1706	1.9	71.200	GFL11 - 2M□□□ 112-41		
	41	1706	2.4	71.200	GFL14 - 2M□□□ 112-41		
	36	1914	1.6	79.875	GFL11 - 2M□□□ 112-41		
	36	1914	1.9	79.875	GFL14 - 2M□□□ 112-41		
	32	2157	1.6	90.000	GFL11 - 2M□□□ 112-41		
	32	2157	1.9	90.000	GFL14 - 2M□□□ 112-41		
	n1=1455	434	160	4.0	3.350		GFL07 - 2M□□□ 132C22
		313	222	2.9	4.643		GFL07 - 2M□□□ 132C22
		282	246	3.4	5.159		GFL07 - 2M□□□ 132C22
		256	272	3.4	5.695		GFL07 - 2M□□□ 132C22
		227	306	2.2	6.400		GFL07 - 2M□□□ 132C22
204		342	2.7	7.150	GFL07 - 2M□□□ 132C22		
175		398	2.5	8.324	GFL07 - 2M□□□ 132C22		
155		448	2.2	9.379	GFL07 - 2M□□□ 132C22		
150		464	2.1	9.714	GFL07 - 2M□□□ 132C22		
126		551	2.0	11.538	GFL07 - 2M□□□ 132C22		
112		621	1.8	13.000	GFL07 - 2M□□□ 132C22		
103		678	1.7	14.200	GFL07 - 2M□□□ 132C22		
92		760	1.6	15.904	GFL07 - 2M□□□ 132C22		
89		780	3.2	16.333	GFL09 - 2M□□□ 132C22		
81		856	1.4	17.920	GFL07 - 2M□□□ 132C22		
79		879	2.8	18.407	GFL09 - 2M□□□ 132C22		
72		969	1.3	20.286	GFL07 - 2M□□□ 132C22		
74		939	2.7	19.667	GFL09 - 2M□□□ 132C22		
64		1092	1.1	22.857	GFL07 - 2M□□□ 132C22		
66		1059	2.5	22.164	GFL09 - 2M□□□ 132C22		
59	1187	1.1	24.850	GFL07 - 2M□□□ 132C22			
60	1152	2.4	24.111	GFL09 - 2M□□□ 132C22			

Thermal power limit not considered (see page 2-4)





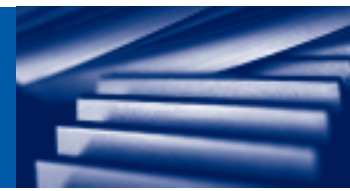
P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>7.5 kW</b> n <sub>1</sub> =1455					<b>GFL □□ - 2M</b>	4-84
	52	1337	0.9	28.000	GFL07 - 2M□□□ 132C22	
	54	1298	2.1	27.173	GFL09 - 2M□□□ 132C22	
	52	1337	3.2	28.000	GFL11 - 2M□□□ 132C22	
	45	1560	1.9	32.667	GFL09 - 2M□□□ 132C22	
	44	1564	2.9	32.739	GFL11 - 2M□□□ 132C22	
	40	1758	1.7	36.815	GFL09 - 2M□□□ 132C22	
	39	1762	2.6	36.889	GFL11 - 2M□□□ 132C22	
	37	1894	1.6	39.667	GFL09 - 2M□□□ 132C22	
	36	1921	2.5	40.233	GFL11 - 2M□□□ 132C22	
	33	2135	1.4	44.704	GFL09 - 2M□□□ 132C22	
	32	2165	2.3	45.333	GFL11 - 2M□□□ 132C22	
	28	2487	2.1	52.067	GFL11 - 2M□□□ 132C22	
	28	2487	3.1	52.067	GFL14 - 2M□□□ 132C22	
	25	2802	1.9	58.667	GFL11 - 2M□□□ 132C22	
	25	2802	3.1	58.667	GFL14 - 2M□□□ 132C22	
	23	3018	1.8	63.190	GFL11 - 2M□□□ 132C22	
	23	3018	2.6	63.190	GFL14 - 2M□□□ 132C22	
	20	3400	1.6	71.200	GFL11 - 2M□□□ 132C22	
	20	3400	2.6	71.200	GFL14 - 2M□□□ 132C22	
	18	3815	1.8	79.875	GFL14 - 2M□□□ 132C22	
	16	4298	1.8	90.000	GFL14 - 2M□□□ 132C22	
					<b>GFL □□ - 3M</b>	4-100
	14	4934	1.4	104.889	GFL14 - 3M□□□ 132C22	
	13	5369	1.3	114.126	GFL14 - 3M□□□ 132C22	
	11	6049	1.3	128.593	GFL14 - 3M□□□ 132C22	
11	6439	1.1	136.889	GFL14 - 3M□□□ 132C22		
9.3	7345	1.1	156.148	GFL14 - 3M□□□ 132C22		
8.6	8001	1.1	170.074	GFL14 - 3M□□□ 132C22		
6.5	10567	0.8	224.636	GFL14 - 3M□□□ 132C22		
5.8	11907	0.8	253.111	GFL14 - 3M□□□ 132C22		
<b>9.2 kW</b> n <sub>1</sub> =2925					<b>GFL □□ - 2M</b>	
	873	98	5.2	3.350	GFL07 - 2M□□□ 132-21	
	630	135	3.9	4.643	GFL07 - 2M□□□ 132-21	
	567	150	4.5	5.159	GFL07 - 2M□□□ 132-21	
	514	166	4.4	5.695	GFL07 - 2M□□□ 132-21	
	457	187	2.8	6.400	GFL07 - 2M□□□ 132-21	
	409	208	3.5	7.150	GFL07 - 2M□□□ 132-21	
	351	243	3.3	8.324	GFL07 - 2M□□□ 132-21	
	312	273	2.9	9.379	GFL07 - 2M□□□ 132-21	
	301	283	2.7	9.714	GFL07 - 2M□□□ 132-21	
	254	336	2.6	11.538	GFL07 - 2M□□□ 132-21	
	225	379	2.3	13.000	GFL07 - 2M□□□ 132-21	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>9.2 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=2925	206	414	2.2	14.200	GFL07 - 2M□□□ 132-21	
	184	464	2.0	15.904	GFL07 - 2M□□□ 132-21	
	163	522	1.8	17.920	GFL07 - 2M□□□ 132-21	
	144	591	1.7	20.286	GFL07 - 2M□□□ 132-21	
	128	666	1.5	22.857	GFL07 - 2M□□□ 132-21	
	132	646	3.2	22.164	GFL09 - 2M□□□ 132-21	
	118	724	1.7	24.850	GFL07 - 2M□□□ 132-21	
	105	816	1.4	28.000	GFL07 - 2M□□□ 132-21	
	108	792	3.2	27.173	GFL09 - 2M□□□ 132-21	
	90	952	2.9	32.667	GFL09 - 2M□□□ 132-21	
	80	1073	2.6	36.815	GFL09 - 2M□□□ 132-21	
	74	1156	2.4	39.667	GFL09 - 2M□□□ 132-21	
	65	1303	2.1	44.704	GFL09 - 2M□□□ 132-21	
	56	1517	3.1	52.067	GFL11 - 2M□□□ 132-21	
	50	1710	2.8	58.667	GFL11 - 2M□□□ 132-21	
	46	1841	2.7	63.190	GFL11 - 2M□□□ 132-21	
	41	2075	2.7	71.200	GFL11 - 2M□□□ 132-21	
	37	2328	3.0	79.875	GFL14 - 2M□□□ 132-21	
	33	2623	3.0	90.000	GFL14 - 2M□□□ 132-21	
n1=1450	433	197	3.2	3.350	GFL07 - 2M□□□ 132C32	
	312	273	2.4	4.643	GFL07 - 2M□□□ 132C32	
	281	303	2.8	5.159	GFL07 - 2M□□□ 132C32	
	255	335	2.7	5.695	GFL07 - 2M□□□ 132C32	
	227	376	1.8	6.400	GFL07 - 2M□□□ 132C32	
	203	420	2.2	7.150	GFL07 - 2M□□□ 132C32	
	174	489	2.0	8.324	GFL07 - 2M□□□ 132C32	
	155	551	1.8	9.379	GFL07 - 2M□□□ 132C32	
	149	571	1.7	9.714	GFL07 - 2M□□□ 132C32	
	126	678	1.6	11.538	GFL07 - 2M□□□ 132C32	
	112	764	1.4	13.000	GFL07 - 2M□□□ 132C32	
	118	723	3.1	12.307	GFL09 - 2M□□□ 132C32	
	102	835	1.4	14.200	GFL07 - 2M□□□ 132C32	
	101	843	2.8	14.333	GFL09 - 2M□□□ 132C32	
	91	935	1.3	15.904	GFL07 - 2M□□□ 132C32	
	89	960	2.6	16.333	GFL09 - 2M□□□ 132C32	
	81	1053	1.1	17.920	GFL07 - 2M□□□ 132C32	
	79	1082	2.3	18.407	GFL09 - 2M□□□ 132C32	
	72	1193	1.1	20.286	GFL07 - 2M□□□ 132C32	
	74	1156	2.2	19.667	GFL09 - 2M□□□ 132C32	
	63	1344	0.9	22.857	GFL07 - 2M□□□ 132C32	
	65	1303	2.0	22.164	GFL09 - 2M□□□ 132C32	
	63	1344	3.0	22.857	GFL11 - 2M□□□ 132C32	

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>9.2 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =1450	58	1461	0.9	24.850	GFL07 - 2M□□□ 132C32	
	60	1417	1.9	24.111	GFL09 - 2M□□□ 132C32	
	58	1461	2.9	24.850	GFL11 - 2M□□□ 132C32	
	53	1597	1.7	27.173	GFL09 - 2M□□□ 132C32	
	52	1646	2.6	28.000	GFL11 - 2M□□□ 132C32	
	44	1920	1.6	32.667	GFL09 - 2M□□□ 132C32	
	44	1925	2.4	32.739	GFL11 - 2M□□□ 132C32	
	39	2164	1.4	36.815	GFL09 - 2M□□□ 132C32	
	39	2169	2.1	36.889	GFL11 - 2M□□□ 132C32	
	37	2332	1.3	39.667	GFL09 - 2M□□□ 132C32	
	36	2365	2.1	40.233	GFL11 - 2M□□□ 132C32	
	37	2330	3.1	39.642	GFL14 - 2M□□□ 132C32	
	32	2628	1.2	44.704	GFL09 - 2M□□□ 132C32	
	32	2665	1.8	45.333	GFL11 - 2M□□□ 132C32	
	33	2626	3.1	44.667	GFL14 - 2M□□□ 132C32	
	28	3061	1.7	52.067	GFL11 - 2M□□□ 132C32	
	28	3061	2.5	52.067	GFL14 - 2M□□□ 132C32	
	25	3449	1.5	58.667	GFL11 - 2M□□□ 132C32	
	25	3449	2.5	58.667	GFL14 - 2M□□□ 132C32	
	23	3715	1.5	63.190	GFL11 - 2M□□□ 132C32	
	23	3715	2.1	63.190	GFL14 - 2M□□□ 132C32	
	20	4186	1.3	71.200	GFL11 - 2M□□□ 132C32	
	20	4186	2.1	71.200	GFL14 - 2M□□□ 132C32	
	18	4695	1.5	79.875	GFL14 - 2M□□□ 132C32	
	16	5291	1.5	90.000	GFL14 - 2M□□□ 132C32	
					<b>GFL □□ - 3M</b>	<b>4-100</b>
	14	6073	1.1	104.889	GFL14 - 3M□□□ 132C32	
	13	6608	1.0	114.126	GFL14 - 3M□□□ 132C32	
	11	7446	1.0	128.593	GFL14 - 3M□□□ 132C32	
	11	7926	0.9	136.889	GFL14 - 3M□□□ 132C32	
	9.3	9041	0.9	156.148	GFL14 - 3M□□□ 132C32	
	8.5	9848	0.9	170.074	GFL14 - 3M□□□ 132C32	
<b>11 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =1460	436	234	2.7	3.350	GFL07 - 2M□□□ 160-22	
	315	324	2.0	4.643	GFL07 - 2M□□□ 160-22	
	283	360	2.4	5.159	GFL07 - 2M□□□ 160-22	
	256	398	2.3	5.695	GFL07 - 2M□□□ 160-22	
	228	447	1.5	6.400	GFL07 - 2M□□□ 160-22	
	204	499	1.8	7.150	GFL07 - 2M□□□ 160-22	
	175	581	1.7	8.324	GFL07 - 2M□□□ 160-22	
	156	655	1.5	9.379	GFL07 - 2M□□□ 160-22	
	150	678	1.4	9.714	GFL07 - 2M□□□ 160-22	
	127	805	1.3	11.538	GFL07 - 2M□□□ 160-22	
	131	780	3.0	11.167	GFL09 - 2M□□□ 160-22	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>11 kW</b> n <sub>1</sub> =1460					<b>GFL □□ - 2M</b>	4-84		
	112	908	1.2	13.000	GFL07 - 2M□□□ 160-22			
	119	859	2.6	12.307	GFL09 - 2M□□□ 160-22			
	103	991	1.2	14.200	GFL07 - 2M□□□ 160-22			
	102	1001	2.4	14.333	GFL09 - 2M□□□ 160-22			
	92	1110	1.1	15.904	GFL07 - 2M□□□ 160-22			
	89	1140	2.2	16.333	GFL09 - 2M□□□ 160-22			
	82	1251	1.0	17.920	GFL07 - 2M□□□ 160-22			
	79	1285	1.9	18.407	GFL09 - 2M□□□ 160-22			
	82	1251	3.0	17.920	GFL11 - 2M□□□ 160-22			
	74	1373	1.9	19.667	GFL09 - 2M□□□ 160-22			
	72	1416	2.9	20.286	GFL11 - 2M□□□ 160-22			
	66	1547	1.7	22.164	GFL09 - 2M□□□ 160-22			
	64	1596	2.5	22.857	GFL11 - 2M□□□ 160-22			
	61	1683	1.6	24.111	GFL09 - 2M□□□ 160-22			
	59	1735	2.5	24.850	GFL11 - 2M□□□ 160-22			
	54	1897	1.5	27.173	GFL09 - 2M□□□ 160-22			
	52	1955	2.2	28.000	GFL11 - 2M□□□ 160-22			
	45	2285	2.0	32.739	GFL11 - 2M□□□ 160-22			
	40	2575	1.8	36.889	GFL11 - 2M□□□ 160-22			
	36	2809	1.7	40.233	GFL11 - 2M□□□ 160-22			
	32	3165	1.5	45.333	GFL11 - 2M□□□ 160-22			
	28	3635	2.8	52.067	GFL14 - 2M□□□ 160-22			
	25	4095	2.8	58.667	GFL14 - 2M□□□ 160-22			
	23	4411	2.3	63.190	GFL14 - 2M□□□ 160-22			
	21	4970	2.1	71.200	GFL14 - 2M□□□ 160-22			
							<b>GFL □□ - 3M</b>	4-100
	19	5323	1.1	77.418	GFL14 - 3M□□□ 160-22			
17	5847	1.1	85.037	GFL14 - 3M□□□ 160-22				
<b>15 kW</b> n <sub>1</sub> =1460					<b>GFL □□ - 2M</b>	4-84		
	436	319	2.0	3.350	GFL07 - 2M□□□ 160-32			
	315	442	1.5	4.643	GFL07 - 2M□□□ 160-32			
	283	491	1.7	5.159	GFL07 - 2M□□□ 160-32			
	256	542	1.7	5.695	GFL07 - 2M□□□ 160-32			
	228	609	1.1	6.400	GFL07 - 2M□□□ 160-32			
	204	681	1.3	7.150	GFL07 - 2M□□□ 160-32			
	213	653	3.2	6.864	GFL09 - 2M□□□ 160-32			
	175	792	1.3	8.324	GFL07 - 2M□□□ 160-32			
	196	711	3.0	7.466	GFL09 - 2M□□□ 160-32			
	156	893	1.1	9.379	GFL07 - 2M□□□ 160-32			
	162	858	2.6	9.010	GFL09 - 2M□□□ 160-32			
	150	925	1.0	9.714	GFL07 - 2M□□□ 160-32			
	149	933	2.5	9.799	GFL09 - 2M□□□ 160-32			
	127	1098	1.0	11.538	GFL07 - 2M□□□ 160-32			
	131	1063	2.2	11.167	GFL09 - 2M□□□ 160-32			
	112	1237	0.9	13.000	GFL07 - 2M□□□ 160-32			
	119	1171	1.9	12.307	GFL09 - 2M□□□ 160-32			
	117	1188	2.9	12.480	GFL11 - 2M□□□ 160-32			

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>15 kW</b> n <sub>1</sub> =1460					<b>GFL □□ - 2M</b>	4-84
	103	1352	0.8	14.200	GFL07 - 2M□□□ 160-32	
	102	1364	1.7	14.333	GFL09 - 2M□□□ 160-32	
	100	1384	2.7	14.538	GFL11 - 2M□□□ 160-32	
	89	1555	1.6	16.333	GFL09 - 2M□□□ 160-32	
	92	1514	2.5	15.904	GFL11 - 2M□□□ 160-32	
	79	1752	1.4	18.407	GFL09 - 2M□□□ 160-32	
	82	1706	2.2	17.920	GFL11 - 2M□□□ 160-32	
	74	1872	1.4	19.667	GFL09 - 2M□□□ 160-32	
	72	1931	2.1	20.286	GFL11 - 2M□□□ 160-32	
	66	2110	1.2	22.164	GFL09 - 2M□□□ 160-32	
	64	2176	1.9	22.857	GFL11 - 2M□□□ 160-32	
	61	2295	1.2	24.111	GFL09 - 2M□□□ 160-32	
	59	2365	1.8	24.850	GFL11 - 2M□□□ 160-32	
	54	2587	1.1	27.173	GFL09 - 2M□□□ 160-32	
	52	2665	1.6	28.000	GFL11 - 2M□□□ 160-32	
	45	3116	1.5	32.739	GFL11 - 2M□□□ 160-32	
	45	3079	3.0	32.344	GFL14 - 2M□□□ 160-32	
	40	3511	1.3	36.889	GFL11 - 2M□□□ 160-32	
	40	3469	3.0	36.444	GFL14 - 2M□□□ 160-32	
	36	3830	1.3	40.233	GFL11 - 2M□□□ 160-32	
	37	3773	2.6	39.642	GFL14 - 2M□□□ 160-32	
	32	4315	1.1	45.333	GFL11 - 2M□□□ 160-32	
	33	4252	2.6	44.667	GFL14 - 2M□□□ 160-32	
	28	4956	2.0	52.067	GFL14 - 2M□□□ 160-32	
	25	5584	2.0	58.667	GFL14 - 2M□□□ 160-32	
23	6015	1.7	63.190	GFL14 - 2M□□□ 160-32		
21	6777	1.6	71.200	GFL14 - 2M□□□ 160-32		
					<b>GFL □□ - 3M</b>	4-100
	19	7259	0.8	77.418	GFL14 - 3M□□□ 160-32	
<b>18.5 kW</b> n <sub>1</sub> =1470					<b>GFL □□ - 2M</b>	4-84
	214	800	2.6	6.864	GFL09 - 2M□□□ 180-22	
	197	871	2.5	7.466	GFL09 - 2M□□□ 180-22	
	163	1051	2.1	9.010	GFL09 - 2M□□□ 180-22	
	150	1143	2.0	9.799	GFL09 - 2M□□□ 180-22	
	132	1302	1.8	11.167	GFL09 - 2M□□□ 180-22	
	137	1250	3.1	10.720	GFL11 - 2M□□□ 180-22	
	119	1435	1.5	12.307	GFL09 - 2M□□□ 180-22	
	118	1455	2.4	12.480	GFL11 - 2M□□□ 180-22	
	103	1671	1.4	14.333	GFL09 - 2M□□□ 180-22	
	101	1695	2.2	14.538	GFL11 - 2M□□□ 180-22	
	90	1905	1.3	16.333	GFL09 - 2M□□□ 180-22	
	92	1854	2.0	15.904	GFL11 - 2M□□□ 180-22	
	80	2146	1.2	18.407	GFL09 - 2M□□□ 180-22	
	82	2090	1.8	17.920	GFL11 - 2M□□□ 180-22	
	75	2293	1.1	19.667	GFL09 - 2M□□□ 180-22	
	73	2365	1.7	20.286	GFL11 - 2M□□□ 180-22	
	66	2584	1.0	22.164	GFL09 - 2M□□□ 180-22	
	64	2665	1.5	22.857	GFL11 - 2M□□□ 180-22	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>18.5 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=1470	61	2811	1.0	24.111	GFL09 - 2M□□□ 180-22	
	59	2898	1.5	24.850	GFL11 - 2M□□□ 180-22	
	60	2852	3.1	24.456	GFL14 - 2M□□□ 180-22	
	54	3168	0.9	27.173	GFL09 - 2M□□□ 180-22	
	53	3265	1.3	28.000	GFL11 - 2M□□□ 180-22	
	53	3213	3.1	27.556	GFL14 - 2M□□□ 180-22	
	45	3817	1.2	32.739	GFL11 - 2M□□□ 180-22	
	45	3771	2.5	32.344	GFL14 - 2M□□□ 180-22	
	40	4301	1.1	36.889	GFL11 - 2M□□□ 180-22	
	40	4249	2.5	36.444	GFL14 - 2M□□□ 180-22	
	37	4691	1.0	40.233	GFL11 - 2M□□□ 180-22	
	37	4622	2.1	39.642	GFL14 - 2M□□□ 180-22	
	32	5286	0.9	45.333	GFL11 - 2M□□□ 180-22	
	33	5208	2.1	44.667	GFL14 - 2M□□□ 180-22	
	28	6071	1.7	52.067	GFL14 - 2M□□□ 180-22	
	25	6841	1.7	58.667	GFL14 - 2M□□□ 180-22	
	23	7368	1.3	63.190	GFL14 - 2M□□□ 180-22	
	21	8302	1.3	71.200	GFL14 - 2M□□□ 180-22	
<b>22 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n1=1465	213	955	2.2	6.864	GFL09 - 2M□□□ 180-32	
	213	955	3.1	6.864	GFL11 - 2M□□□ 180-32	
	196	1039	2.1	7.466	GFL09 - 2M□□□ 180-32	
	196	1039	3.1	7.466	GFL11 - 2M□□□ 180-32	
	163	1254	1.8	9.010	GFL09 - 2M□□□ 180-32	
	163	1254	2.9	9.010	GFL11 - 2M□□□ 180-32	
	167	1224	3.2	8.800	GFL14 - 2M□□□ 180-32	
	150	1363	1.7	9.799	GFL09 - 2M□□□ 180-32	
	150	1363	2.8	9.799	GFL11 - 2M□□□ 180-32	
	153	1332	3.2	9.571	GFL14 - 2M□□□ 180-32	
	131	1554	1.5	11.167	GFL09 - 2M□□□ 180-32	
	137	1492	2.6	10.720	GFL11 - 2M□□□ 180-32	
	119	1712	1.3	12.307	GFL09 - 2M□□□ 180-32	
	117	1736	2.0	12.480	GFL11 - 2M□□□ 180-32	
	102	1994	1.2	14.333	GFL09 - 2M□□□ 180-32	
	101	2023	1.8	14.538	GFL11 - 2M□□□ 180-32	
	103	1976	3.2	14.200	GFL14 - 2M□□□ 180-32	
	90	2273	1.1	16.333	GFL09 - 2M□□□ 180-32	
	92	2213	1.7	15.904	GFL11 - 2M□□□ 180-32	
	94	2173	3.1	15.620	GFL14 - 2M□□□ 180-32	
	80	2561	1.0	18.407	GFL09 - 2M□□□ 180-32	
	82	2493	1.5	17.920	GFL11 - 2M□□□ 180-32	
	83	2449	3.1	17.600	GFL14 - 2M□□□ 180-32	
	75	2736	0.9	19.667	GFL09 - 2M□□□ 180-32	
	72	2822	1.4	20.286	GFL11 - 2M□□□ 180-32	
	73	2775	2.9	19.948	GFL14 - 2M□□□ 180-32	
	66	3084	0.8	22.164	GFL09 - 2M□□□ 180-32	
	64	3180	1.3	22.857	GFL11 - 2M□□□ 180-32	
	65	3127	2.9	22.476	GFL14 - 2M□□□ 180-32	
	61	3355	0.8	24.111	GFL09 - 2M□□□ 180-32	
	59	3457	1.2	24.850	GFL11 - 2M□□□ 180-32	
	60	3403	2.6	24.456	GFL14 - 2M□□□ 180-32	
	52	3896	1.1	28.000	GFL11 - 2M□□□ 180-32	
	53	3834	2.6	27.556	GFL14 - 2M□□□ 180-32	

Thermal power limit not considered (see page 2-4)



P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>22 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =1465	45	4555	1.0	32.739	GFL11 - 2M□□□ 180-32	
	45	4500	2.1	32.344	GFL14 - 2M□□□ 180-32	
	40	5132	0.9	36.889	GFL11 - 2M□□□ 180-32	
	40	5071	2.1	36.444	GFL14 - 2M□□□ 180-32	
	36	5598	0.9	40.233	GFL11 - 2M□□□ 180-32	
	37	5515	1.8	39.642	GFL14 - 2M□□□ 180-32	
	33	6215	1.8	44.667	GFL14 - 2M□□□ 180-32	
	28	7244	1.4	52.067	GFL14 - 2M□□□ 180-32	
	25	8162	1.4	58.667	GFL14 - 2M□□□ 180-32	
	23	8792	1.1	63.190	GFL14 - 2M□□□ 180-32	
	21	9906	1.1	71.200	GFL14 - 2M□□□ 180-32	
<b>30 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =1465	213	1302	1.6	6.864	GFL09 - 2M□□□ 200N32	
	213	1302	2.0	6.864	GFL11 - 2M□□□ 200N32	
	205	1357	2.0	7.150	GFL14 - 2M□□□ 200N32	
	196	1416	1.5	7.466	GFL09 - 2M□□□ 200N32	
	196	1416	2.0	7.466	GFL11 - 2M□□□ 200N32	
	188	1476	2.0	7.777	GFL14 - 2M□□□ 200N32	
	163	1709	1.3	9.010	GFL09 - 2M□□□ 200N32	
	163	1709	2.0	9.010	GFL11 - 2M□□□ 200N32	
	167	1670	2.0	8.800	GFL14 - 2M□□□ 200N32	
	150	1859	1.2	9.799	GFL09 - 2M□□□ 200N32	
	150	1859	2.0	9.799	GFL11 - 2M□□□ 200N32	
	153	1816	2.0	9.571	GFL14 - 2M□□□ 200N32	
	137	2034	1.9	10.720	GFL11 - 2M□□□ 200N32	
	127	2189	2.0	11.538	GFL14 - 2M□□□ 200N32	
	119	2335	1.0	12.307	GFL09 - 2M□□□ 200N32	
	117	2368	1.5	12.480	GFL11 - 2M□□□ 200N32	
	113	2466	2.0	13.000	GFL14 - 2M□□□ 200N32	
	102	2719	0.9	14.333	GFL09 - 2M□□□ 200N32	
	101	2758	1.3	14.538	GFL11 - 2M□□□ 200N32	
	103	2694	2.0	14.200	GFL14 - 2M□□□ 200N32	
	92	3017	1.3	15.904	GFL11 - 2M□□□ 200N32	
	94	2964	2.0	15.620	GFL14 - 2M□□□ 200N32	
	82	3400	1.1	17.920	GFL11 - 2M□□□ 200N32	
	83	3339	2.0	17.600	GFL14 - 2M□□□ 200N32	
	72	3849	1.1	20.286	GFL11 - 2M□□□ 200N32	
	73	3785	2.0	19.948	GFL14 - 2M□□□ 200N32	
	64	4337	0.9	22.857	GFL11 - 2M□□□ 200N32	
	65	4264	2.0	22.476	GFL14 - 2M□□□ 200N32	
	59	4715	0.9	24.850	GFL11 - 2M□□□ 200N32	
	60	4640	2.0	24.456	GFL14 - 2M□□□ 200N32	
	52	5312	0.8	28.000	GFL11 - 2M□□□ 200N32	
	53	5228	2.0	27.556	GFL14 - 2M□□□ 200N32	
	45	6137	1.7	32.344	GFL14 - 2M□□□ 200N32	
	40	6915	1.6	36.444	GFL14 - 2M□□□ 200N32	
<b>37 kW</b>					<b>GFL □□ - 2M</b>	<b>4-84</b>
n <sub>1</sub> =1470	214	1601	1.6	6.864	GFL11 - 2M□□□ 225N12	
	206	1667	1.6	7.150	GFL14 - 2M□□□ 225N12	
	197	1741	1.6	7.466	GFL11 - 2M□□□ 225N12	
	189	1814	1.6	7.777	GFL14 - 2M□□□ 225N12	

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors

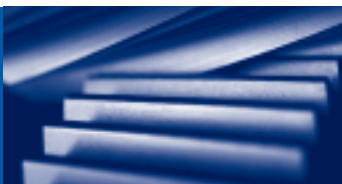
P <sub>1</sub>	50 Hz			i	Shaft-mounted helical geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>37 kW</b> n <sub>1</sub> =1470					<b>GFL □□ - 2M</b>	4-84
	163	2101	1.6	9.010	GFL11 - 2M□□□ 225N12	
	167	2052	1.6	8.800	GFL14 - 2M□□□ 225N12	
	150	2285	1.6	9.799	GFL11 - 2M□□□ 225N12	
	154	2232	1.6	9.571	GFL14 - 2M□□□ 225N12	
	137	2500	1.5	10.720	GFL11 - 2M□□□ 225N12	
	127	2691	1.6	11.538	GFL14 - 2M□□□ 225N12	
	118	2910	1.2	12.480	GFL11 - 2M□□□ 225N12	
	113	3032	1.6	13.000	GFL14 - 2M□□□ 225N12	
	101	3390	1.1	14.538	GFL11 - 2M□□□ 225N12	
	104	3311	1.6	14.200	GFL14 - 2M□□□ 225N12	
	92	3709	1.0	15.904	GFL11 - 2M□□□ 225N12	
	94	3643	1.6	15.620	GFL14 - 2M□□□ 225N12	
	82	4179	0.9	17.920	GFL11 - 2M□□□ 225N12	
	84	4104	1.6	17.600	GFL14 - 2M□□□ 225N12	
	73	4731	0.9	20.286	GFL11 - 2M□□□ 225N12	
	74	4652	1.6	19.948	GFL14 - 2M□□□ 225N12	
	65	5241	1.6	22.476	GFL14 - 2M□□□ 225N12	
	60	5703	1.6	24.456	GFL14 - 2M□□□ 225N12	
	53	6426	1.6	27.556	GFL14 - 2M□□□ 225N12	
45	7543	1.4	32.344	GFL14 - 2M□□□ 225N12		
40	8499	1.3	36.444	GFL14 - 2M□□□ 225N12		
<b>45 kW</b> n <sub>1</sub> =1470					<b>GFL □□ - 2M</b>	4-84
	214	1947	1.3	6.864	GFL11 - 2M□□□ 225N22	
	206	2028	1.3	7.150	GFL14 - 2M□□□ 225N22	
	197	2117	1.3	7.466	GFL11 - 2M□□□ 225N22	
	189	2206	1.3	7.777	GFL14 - 2M□□□ 225N22	
	163	2555	1.3	9.010	GFL11 - 2M□□□ 225N22	
	167	2496	1.3	8.800	GFL14 - 2M□□□ 225N22	
	150	2779	1.3	9.799	GFL11 - 2M□□□ 225N22	
	154	2715	1.3	9.571	GFL14 - 2M□□□ 225N22	
	137	3040	1.3	10.720	GFL11 - 2M□□□ 225N22	
	127	3272	1.3	11.538	GFL14 - 2M□□□ 225N22	
	118	3540	1.0	12.480	GFL11 - 2M□□□ 225N22	
	113	3687	1.3	13.000	GFL14 - 2M□□□ 225N22	
	101	4123	0.9	14.538	GFL11 - 2M□□□ 225N22	
	104	4027	1.3	14.200	GFL14 - 2M□□□ 225N22	
	92	4511	0.8	15.904	GFL11 - 2M□□□ 225N22	
	94	4430	1.3	15.620	GFL14 - 2M□□□ 225N22	
	84	4992	1.3	17.600	GFL14 - 2M□□□ 225N22	
	74	5658	1.3	19.948	GFL14 - 2M□□□ 225N22	
	65	6375	1.3	22.476	GFL14 - 2M□□□ 225N22	
60	6936	1.3	24.456	GFL14 - 2M□□□ 225N22		
53	7815	1.3	27.556	GFL14 - 2M□□□ 225N22		
45	9174	1.1	32.344	GFL14 - 2M□□□ 225N22		
40	10336	1.1	36.444	GFL14 - 2M□□□ 225N22		

Thermal power limit not considered (see page 2-4)



# Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 190 \text{ Nm}$

GFL 04 - 2 N													Dimensions page 4-116			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>						
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80			
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1A	□B	□C	□D*	1A	□B	□C	□D*	1A	□B	□C	□D*			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]															
3.659	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.25	1.54			
	$M_2$		27	37	45		33	45	56		35	60	75			
5.018	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.25	1.54			
	$M_2$		37	50	62		46	62	77		48	83	102			
5.833	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.25	1.54			
	$M_2$		43	59	72		53	72	89		56	96	119			
6.422	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.78	1.21	1.32			
	$M_2$		47	65	80		58	79	98		66	103	112			
7.025	$P_1$	1.03	2.23	3.04	3.75	0.64	1.37	1.87	2.31	0.32	0.74	1.15	1.21			
	$M_2$	24	52	71	87	30	64	87	107	30	69	107	113			
8.379	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.25	1.54			
	$M_2$		62	84	104		76	104	128		81	138	171			
9.333	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.25	1.34			
	$M_2$		69	94	116		85	115	143		90	154	165			
10.238	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.78	1.18	1.18			
	$M_2$		76	103	127		93	127	156		105	159	159			
11.491	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.19	1.19			
	$M_2$		85	115	143		105	142	176		110	181	181			
12.800	$P_1$		2.23	3.04	3.18		1.37	1.87	1.96		0.73	0.98	0.98			
	$M_2$		95	129	135		116	158	166		123	166	166			
14.706	$P_1$		2.23	3.04	3.04		1.37	1.87	1.87		0.78	0.94	0.94			
	$M_2$		109	148	148		134	182	182		151	182	182			
16.087	$P_1$	1.03	2.23	2.78	2.78	0.64	1.37	1.71	1.71	0.32	0.74	0.86	0.86			
	$M_2$	55	119	148	148	68	146	182	182	68	158	182	182			
17.920	$P_1$	1.03	2.23	2.29	2.29	0.64	1.37	1.41	1.41	0.32	0.70	0.70	0.70			
	$M_2$	61	132	136	136	75	163	167	167	75	167	167	167			
20.519	$P_1$	0.96	2.03	2.19	2.19	0.59	1.25	1.35	1.35	0.30	0.63	0.67	0.67			
	$M_2$	65	138	149	149	80	170	183	183	80	170	183	183			
22.857	$P_1$	0.96	1.79	1.79	1.79	0.59	1.10	1.10	1.10	0.30	0.55	0.55	0.55			
	$M_2$	72	136	136	136	89	167	167	167	89	167	167	167			
25.136	$P_1$		1.98	2.03	2.03		1.08	1.10	1.10		0.54	0.55	0.55			
	$M_2$		165	169	169		179	183	183		179	183	183			
28.000	$P_1$		1.67	1.67	1.67		0.91	0.91	0.91		0.45	0.45	0.45			
	$M_2$		155	155	155		168	168	168		168	168	168			
31.600	$P_1$	1.19	1.63	1.63		0.65	0.89	0.89		0.32	0.44	0.44				
	$M_2$	125	171	171		135	185	185		135	185	185				
35.200	$P_1$	1.19	1.35	1.35		0.65	0.73	0.73		0.32	0.37	0.37				
	$M_2$	139	157	157		151	170	170		151	170	170				
40.697	$P_1$	1.00	1.28	1.28		0.54	0.69	0.69		0.27	0.35	0.35				
	$M_2$	134	173	173		146	187	187		146	187	187				
45.333	$P_1$	1.00	1.06	1.06		0.54	0.57	0.57		0.27	0.29	0.29				
	$M_2$	150	159	159		162	172	172		162	172	172				
51.579	$P_1$	0.87	1.03			0.47	0.56			0.24	0.28					
	$M_2$	149	175			162	190			162	190					

Thermal power limit not considered (see page 2-4)

\* not possible with hollow shaft (H□□)

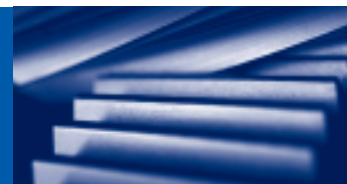
$M_2 \text{ perm} \leq 190 \text{ Nm}$

GFL 04 - 2 N												Dimensions page 4-116	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
57.455	P <sub>1</sub>	0.84	0.84			0.46	0.46			0.23	0.23		
	M <sub>2</sub>	161	161			174	174			174	174		
64.636	P <sub>1</sub>	0.71	0.71			0.38	0.38			0.19	0.19		
	M <sub>2</sub>	151	151			164	164			164	164		
72.000	P <sub>1</sub>	0.74	0.74			0.37	0.37			0.19	0.19		
	M <sub>2</sub>	177	177			177	177			177	177		
85.156	P <sub>1</sub>	0.37				0.18				0.09			
	M <sub>2</sub>	103				103				103			
94.857	P <sub>1</sub>	0.37				0.19				0.09			
	M <sub>2</sub>	116				116				116			
57.455	P <sub>1</sub>	0.84	0.84			0.46	0.46			0.23	0.23		
	M <sub>2</sub>	161	161			174	174			174	174		
64.636	P <sub>1</sub>	0.71	0.71			0.38	0.38			0.19	0.19		
	M <sub>2</sub>	151	151			164	164			164	164		
72.000	P <sub>1</sub>	0.74	0.74			0.37	0.37			0.19	0.19		
	M <sub>2</sub>	177	177			177	177			177	177		
85.156	P <sub>1</sub>	0.37				0.18				0.09			
	M <sub>2</sub>	103				103				103			
94.857	P <sub>1</sub>	0.37				0.19				0.09			
	M <sub>2</sub>	116				116				116			

Thermal power limit not considered (see page 2-4)

# Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 345 \text{ Nm}$

GFL 05 - 2 N													Dimensions page 4-116			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>						
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71 63	80 71	90 80	100/112 80/90			
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]															
3.333	$P_1$ $M_2$	3.75 41 9.22 102				2.31 5.68 51 125				1.54 2.84 68 125						
4.571	$P_1$ $M_2$	3.75 9.14 57 138				2.31 5.62 70 170				1.54 2.81 93 170						
5.133	$P_1$ $M_2$	3.75 9.22 64 157				2.31 5.68 78 193				1.54 2.84 105 193						
5.667	$P_1$ $M_2$	3.75 9.22 70 173				2.31 5.68 87 213				1.54 2.84 115 213						
6.400	$P_1$ $M_2$	2.23 47	3.04 64	3.75 79	6.64 141	1.37 58	1.87 79	2.31 98	4.09 173	0.73 62	1.25 106	1.54 130	2.04 173			
7.040	$P_1$ $M_2$	3.75 8.65 87 201				2.31 5.32 108 248				1.54 2.66 143 248						
7.771	$P_1$ $M_2$	3.75 8.16 96 210				2.31 5.02 119 258				1.54 2.51 158 258						
9.010	$P_1$ $M_2$	3.04 3.75 7.23 91 112 216				1.87 2.31 4.45 111 138 265				1.25 1.54 2.23 149 184 265						
9.946	$P_1$ $M_2$	3.04 3.75 6.78 100 123 223				1.87 2.31 4.17 123 152 275				1.25 1.54 2.09 164 203 275						
11.360	$P_1$ $M_2$	3.75 6.02 141 226				2.31 3.70 174 278				1.54 1.85 231 278						
12.800	$P_1$ $M_2$	3.75 5.46 159 231				2.31 3.36 196 285				1.54 1.68 261 285						
14.538	$P_1$ $M_2$	3.04 3.75 5.09 146 180 245				1.87 2.31 3.13 180 222 301				1.25 1.54 1.57 240 296 301						
15.904	$P_1$ $M_2$	2.23 117	3.04 160	3.75 197	4.78 252	1.37 145	1.87 197	2.31 243	2.94 310	0.73 153	1.25 262	1.47 310	1.47 310			
17.920	$P_1$ $M_2$	2.23 132	3.04 180	3.75 222	4.27 253	1.37 163	1.87 222	2.31 274	2.63 312	0.73 172	1.25 296	1.32 312	1.32 312			
20.286	$P_1$ $M_2$	2.23 150	3.04 204	3.75 252	4.03 270	1.37 185	1.87 251	2.31 310	2.48 333	0.77 207	1.20 323	1.24 333	1.24 333			
22.857	$P_1$ $M_2$	2.23 169	3.04 230	3.36 254	3.36 254	1.37 208	1.87 283	2.07 313	2.07 313	0.77 234	1.04 313	1.04 313	1.04 313			
24.850	$P_1$ $M_2$	3.45 3.86 3.86 284 317 317				1.87 2.09 2.09 307 344 344				1.03 1.05 1.05 340 344 344						
28.000	$P_1$ $M_2$	3.13 3.13 3.13 290 290 290				1.69 1.69 1.69 314 314 314				0.85 0.85 0.85 314 314 314						
32.344	$P_1$ $M_2$	1.97 211	2.97 318	2.97 318	1.07 1.61 1.61 228 345 345				0.53 0.81 0.81 228 345 345							
36.444	$P_1$ $M_2$	1.97 237	2.42 292	2.42 292	1.07 1.31 1.31 257 316 316				0.53 0.66 0.66 257 316 316							
40.233	$P_1$ $M_2$	1.65 219	2.39 318	2.39 318	0.89 1.30 1.30 238 345 345				0.45 0.65 0.65 238 345 345							
45.333	$P_1$ $M_2$	1.65 247	1.96 294	1.96 294	0.89 1.06 1.06 268 319 319				0.45 0.53 0.53 268 319 319							

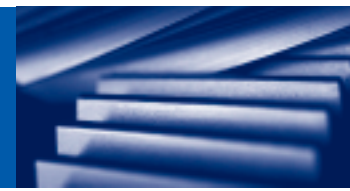
Thermal power limit not considered (see page 2-4)

$M_2 \text{ perm} \leq 345 \text{ Nm}$

GFL 05 - 2 N												Dimensions page 4-116	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71 63	80 71	90 80	100/112 80/90
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
52.067	$P_1$	1.32	1.66			0.72	0.90			0.36	0.45		
	$M_2$	228	286			247	309			247	309		
58.667	$P_1$	1.32	1.53			0.72	0.83			0.36	0.42		
	$M_2$	256	297			278	322			278	322		
63.190	$P_1$	1.10	1.25			0.60	0.68			0.30	0.34		
	$M_2$	231	260			250	282			250	282		
71.200	$P_1$	1.20	1.30			0.60	0.65			0.30	0.32		
	$M_2$	282	305			282	305			282	305		
80.763	$P_1$	0.81				0.41				0.20			
	$M_2$	217				217				217			
91.000	$P_1$	0.79				0.39				0.20			
	$M_2$	236				236				236			

Thermal power limit not considered (see page 2-4)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)  
Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 345 \text{ Nm}$

GFL 05 - 3 N											Dimensions page 4-124		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	63	71 63	80 71	63	71 63	80 71			
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1A	□B	□C	1A	□B	□C	1A	□B	□C			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
61.653	$P_1$	0.95	0.95	0.95	0.52	0.52	0.52	0.26	0.26	0.26			
	$M_2$	191	191	191	207	207	207	207	207	207			
78.639	$P_1$	0.88	0.88	0.88	0.44	0.44	0.44	0.22	0.22	0.22			
	$M_2$	225	225	225	225	225	225	225	225	225			
90.123	$P_1$	1.03	1.03	1.03	0.52	0.52	0.52	0.26	0.26	0.26			
	$M_2$	303	303	303	303	303	303	303	303	303			
101.547	$P_1$	0.99	0.99	0.99	0.50	0.50	0.50	0.25	0.25	0.25			
	$M_2$	328	328	328	328	328	328	328	328	328			
114.952	$P_1$	0.88	0.88	0.88	0.44	0.44	0.44	0.22	0.22	0.22			
	$M_2$	329	329	329	329	329	329	329	329	329			
129.524	$P_1$	0.78	0.78	0.78	0.39	0.39	0.39	0.19	0.19	0.19			
	$M_2$	328	328	328	328	328	328	328	328	328			
140.817	$P_1$		0.75	0.75		0.38	0.38		0.19	0.19			
	$M_2$		345	345		345	345		345	345			
158.667	$P_1$		0.63	0.63		0.32	0.32		0.16	0.16			
	$M_2$		328	328		328	328		328	328			
177.027	$P_1$	0.60	0.60	0.60	0.30	0.30	0.30	0.15	0.15	0.15			
	$M_2$	345	345	345	345	345	345	345	345	345			
199.467	$P_1$	0.50	0.50	0.50	0.25	0.25	0.25	0.13	0.13	0.13			
	$M_2$	328	328	328	328	328	328	328	328	328			
227.989	$P_1$	0.46	0.46	0.46	0.23	0.23	0.23	0.12	0.12	0.12			
	$M_2$	345	345	345	345	345	345	345	345	345			
256.889	$P_1$	0.39	0.39	0.39	0.20	0.20	0.20	0.10	0.10	0.10			
	$M_2$	328	328	328	328	328	328	328	328	328			
288.948	$P_1$	0.37	0.37		0.18	0.18		0.09	0.09				
	$M_2$	345	345		345	345		345	345				
325.576	$P_1$	0.31	0.31		0.16	0.16		0.08	0.08				
	$M_2$	328	328		328	328		328	328				
362.100	$P_1$	0.29	0.29		0.15	0.15		0.07	0.07				
	$M_2$	345	345		345	345		345	345				
408.000	$P_1$	0.25	0.25		0.12	0.12		0.06	0.06				
	$M_2$	328	328		328	328		328	328				
477.052	$P_1$	0.22			0.11			0.06					
	$M_2$	345			345			345					
537.524	$P_1$	0.19			0.09			0.05					
	$M_2$	328			328			328					

Thermal power limit not considered (see page 2-4)

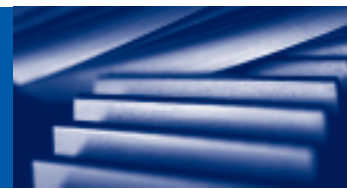
## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

### Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 657 \text{ Nm}$

GFL 06 - 2 N											Dimensions page 4-116					
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]															
3.675	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.40	4.40
	M <sub>2</sub>				130	130				160	160				214	214
5.211	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.40	4.40
	M <sub>2</sub>				185	185				228	228				303	303
5.750	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.40	4.40
	M <sub>2</sub>				204	204				251	251				335	335
6.450	P <sub>1</sub>			3.75	10.7	10.7			2.31	6.60	6.60			1.54	4.01	4.12
	M <sub>2</sub>			80	229	229			99	282	282			131	342	352
7.147	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.40	4.40
	M <sub>2</sub>				253	253				312	312				416	416
8.400	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.40	4.40
	M <sub>2</sub>				298	298				367	367				489	489
9.463	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.40	4.40
	M <sub>2</sub>				336	336				413	413				551	551
10.092	P <sub>1</sub>			3.75	10.7	10.7			2.31	6.60	6.60			1.54	3.44	3.44
	M <sub>2</sub>			125	358	358			154	441	441			206	459	459
11.520	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.14	4.14
	M <sub>2</sub>				408	408				503	503				632	632
12.978	P <sub>1</sub>				10.7	10.7				6.60	6.60				3.44	3.44
	M <sub>2</sub>				460	460				567	567				592	592
14.743	P <sub>1</sub>			3.75	10.7	10.7			2.31	6.57	6.57			1.54	3.28	3.28
	M <sub>2</sub>			183	520	520			225	641	641			300	641	641
16.128	P <sub>1</sub>			3.75	9.78	9.78			2.31	6.02	6.02			1.54	3.01	3.01
	M <sub>2</sub>			200	522	522			246	643	643			329	643	643
18.169	P <sub>1</sub>			3.75	8.10	8.10			2.31	4.99	4.99			1.54	2.49	2.49
	M <sub>2</sub>			225	487	487			278	600	600			370	600	600
20.571	P <sub>1</sub>		3.04	3.75	7.70	7.70		1.87	2.31	4.74	4.74		1.25	1.54	2.37	2.37
	M <sub>2</sub>		207	255	524	524		254	314	645	645		339	419	645	645
23.175	P <sub>1</sub>		3.04	3.75	6.40	6.40		1.87	2.31	3.94	3.94		1.25	1.54	1.97	1.97
	M <sub>2</sub>		233	288	490	490		287	354	604	604		382	472	604	604
25.200	P <sub>1</sub>			4.26	7.20	7.20			2.31	3.90	3.90			1.54	1.95	1.95
	M <sub>2</sub>			355	600	600			385	651	651			513	651	651
28.389	P <sub>1</sub>			4.26	5.96	5.96			2.31	3.23	3.23			1.54	1.62	1.62
	M <sub>2</sub>			400	560	560			434	607	607			578	607	607
32.800	P <sub>1</sub>		3.45	4.26	5.45			1.87	2.31	2.95			1.02	1.36	1.48	
	M <sub>2</sub>		374	463	591			406	501	641			444	591	641	
36.951	P <sub>1</sub>		3.45	4.26	4.61			1.87	2.31	2.50			1.02	1.25	1.25	
	M <sub>2</sub>		422	521	564			457	565	611			500	611	611	
40.800	P <sub>1</sub>		3.16	4.20	4.49			1.71	2.27	2.43			0.86	1.14	1.22	
	M <sub>2</sub>		426	567	606			462	614	657			462	614	657	
45.963	P <sub>1</sub>		3.16	3.72	3.72			1.71	2.01	2.01			0.86	1.01	1.01	
	M <sub>2</sub>		480	565	565			520	613	613			520	613	613	
52.800	P <sub>1</sub>	1.63	2.53	3.37			0.88	1.37	1.83			0.44	0.69	0.91		
	M <sub>2</sub>	284	443	589			308	480	638			308	480	638		

Thermal power limit not considered (see page 2-4)



$M_2 \text{ perm} \leq 657 \text{ Nm}$

GFL 06 - 2 N																Dimensions page 4-116				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>								
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90				
For the geometrical assignment of servo/DC motors see section 2																				
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F				
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																			
59.482	$P_1$	1.63	2.53	2.88						0.88	1.37	1.56	0.44	0.69	0.78					
	$M_2$	320	499	567						347	540	615	347	540	615					
64.080	$P_1$	1.36	2.11	2.51						0.74	1.15	1.36	0.37	0.57	0.68					
	$M_2$	288	448	531						312	486	576	312	486	576					
72.189	$P_1$	1.47	2.29	2.58						0.74	1.15	1.29	0.37	0.57	0.65					
	$M_2$	352	547	616						352	547	616	352	547	616					
81.000	$P_1$	1.18	1.62								0.59	0.81			0.30	0.41				
	$M_2$	316	435								316	435			316	435				
91.250	$P_1$	1.18	1.58								0.59	0.79			0.30	0.39				
	$M_2$	356	476								356	476			356	476				

Thermal power limit not considered (see page 2-4)

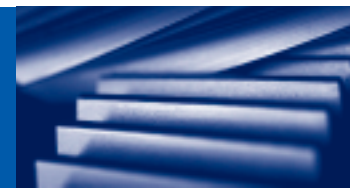
$M_2 \text{ perm} \leq 657 \text{ Nm}$

GFL 06 - 3 N													Dimensions page 4-124			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>						
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80			
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D			
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]															
66.213	P <sub>1</sub>	1.18	2.30	2.30	2.30	0.59	1.15	1.15	1.15	0.30	0.58	0.58	0.58			
	M <sub>2</sub>	255	496	496	496	255	496	496	496	255	496	496	496			
72.000	P <sub>1</sub>	1.18	2.12	2.12	2.12	0.59	1.06	1.06	1.06	0.30	0.53	0.53	0.53			
	M <sub>2</sub>	277	496	496	496	277	496	496	496	277	496	496	496			
81.111	P <sub>1</sub>	1.18	1.88	1.88	1.88	0.59	0.94	0.94	0.94	0.30	0.47	0.47	0.47			
	M <sub>2</sub>	312	496	496	496	312	496	496	496	312	496	496	496			
88.200	P <sub>1</sub>		1.70	1.70	1.70		0.85	0.85	0.85		0.42	0.42	0.42			
	M <sub>2</sub>		488	488	488		488	488	488		488	488	488			
99.361	P <sub>1</sub>		1.70	1.70	1.70		0.85	0.85	0.85		0.42	0.42	0.42			
	M <sub>2</sub>		550	550	550		550	550	550		550	550	550			
116.571	P <sub>1</sub>	1.08	1.39	1.39		0.54	0.70	0.70		0.27	0.35	0.35				
	M <sub>2</sub>	411	528	528		411	528	528		411	528	528				
131.323	P <sub>1</sub>	1.18	1.39	1.39	1.39	0.59	0.70	0.70	0.70	0.30	0.35	0.35	0.35			
	M <sub>2</sub>	505	595	595	595	505	595	595	595	505	595	595	595			
144.320	P <sub>1</sub>	1.19	1.19	1.19		0.60	0.60	0.60		0.30	0.30	0.30				
	M <sub>2</sub>	560	560	560		560	560	560		560	560	560				
162.583	P <sub>1</sub>	1.16	1.16	1.16		0.58	0.58	0.58		0.29	0.29	0.29				
	M <sub>2</sub>	613	613	613		613	613	613		613	613	613				
179.520	P <sub>1</sub>	1.03	1.03	1.03		0.52	0.52	0.52		0.26	0.26	0.26				
	M <sub>2</sub>	605	605	605		605	605	605		605	605	605				
202.237	P <sub>1</sub>	0.93	0.93	0.93		0.46	0.46	0.46		0.23	0.23	0.23				
	M <sub>2</sub>	611	611	611		611	611	611		611	611	611				
231.200	P <sub>1</sub>	0.84	0.84	0.84		0.42	0.42	0.42		0.21	0.21	0.21				
	M <sub>2</sub>	634	634	634		634	634	634		634	634	634				
260.457	P <sub>1</sub>	0.72	0.72	0.72		0.36	0.36	0.36		0.18	0.18	0.18				
	M <sub>2</sub>	613	613	613		613	613	613		613	613	613				
293.018	P <sub>1</sub>	0.69	0.69			0.34	0.34			0.17	0.17					
	M <sub>2</sub>	657	657			657	657			657	657					
299.200	P <sub>1</sub>	0.63	0.63	0.63		0.31	0.31	0.31		0.16	0.16	0.16				
	M <sub>2</sub>	613	613	613		613	613	613		613	613	613				
367.200	P <sub>1</sub>	0.55	0.55			0.27	0.27			0.14	0.14					
	M <sub>2</sub>	657	657			657	657			657	657					
413.667	P <sub>1</sub>	0.46	0.46			0.23	0.23			0.11	0.11					
	M <sub>2</sub>	614	614			614	614			614	614					
475.200	P <sub>1</sub>	0.42	0.42			0.21	0.21			0.11	0.11					
	M <sub>2</sub>	657	657			657	657			657	657					
535.333	P <sub>1</sub>	0.35	0.35			0.18	0.18			0.09	0.09					
	M <sub>2</sub>	613	613			613	613			613	613					
576.720	P <sub>1</sub>	0.33	0.33			0.16	0.16			0.08	0.08					
	M <sub>2</sub>	614	614			614	614			614	614					
649.700	P <sub>1</sub>	0.29	0.29			0.15	0.15			0.07	0.07					
	M <sub>2</sub>	615	615			615	615			615	615					
759.806	P <sub>1</sub>	0.21				0.11				0.05						
	M <sub>2</sub>	524				524				524						
855.954	P <sub>1</sub>	0.20				0.10				0.05						
	M <sub>2</sub>	563				563				563						

Thermal power limit not considered (see page 2-4)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)  
Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 1337 \text{ Nm}$

GFL 07 - 2 N													Dimensions page 4-116						
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>					
IEC connection		80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160
		71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
3.350	P <sub>1</sub>	10.7 28.6 46.9						6.60 17.6 28.8						4.40 11.2 14.4					
	M <sub>2</sub>	119 317 519						146 390 639						195 495 639					
4.643	P <sub>1</sub>	10.7 28.6 34.5						6.60 17.6 21.3						4.40 10.6 10.6					
	M <sub>2</sub>	165 439 530						203 541 653						270 653 653					
5.159	P <sub>1</sub>	10.7 28.6 40.4						6.60 17.6 24.9						4.40 11.2 12.4					
	M <sub>2</sub>	183 488 690						225 601 850						300 762 850					
5.695	P <sub>1</sub>	10.7 28.6 39.4						6.60 17.6 24.3						4.40 11.2 12.1					
	M <sub>2</sub>	202 538 742						249 663 914						332 841 914					
6.400	P <sub>1</sub>	10.7	10.7	25.4	25.4	6.60 6.60 15.6 15.6						4.40 4.40 7.82 7.82							
	M <sub>2</sub>	227	227	538	538	279 279 662 662						373 373 662 662							
7.150	P <sub>1</sub>	10.7 28.6 31.5						6.60 17.6 19.4						4.40 9.70 9.70					
	M <sub>2</sub>	254 676 746						312 832 918						416 918 918					
8.324	P <sub>1</sub>	10.7 28.6 29.3						6.60 17.6 18.0						4.40 9.01 9.01					
	M <sub>2</sub>	295 787 807						363 969 993						485 993 993					
9.379	P <sub>1</sub>	10.7 26.2 26.2						6.60 16.1 16.1						4.40 8.05 8.05					
	M <sub>2</sub>	333 812 812						410 999 999						546 999 999					
9.714	P <sub>1</sub>	10.7	10.7	24.5	24.5	6.60 6.60 15.1 15.1						4.40 4.40 7.53 7.53							
	M <sub>2</sub>	344	344	787	787	424 424 969 969						566 566 969 969							
11.538	P <sub>1</sub>	10.7 23.0 23.0						6.60 14.2 14.2						4.40 7.07 7.07					
	M <sub>2</sub>	409 877 877						504 1080 1080						672 1080 1080					
13.000	P <sub>1</sub>	10.7 20.6 20.6						6.60 12.7 12.7						4.40 6.33 6.33					
	M <sub>2</sub>	461 884 884						568 1089 1089						757 1089 1089					
14.200	P <sub>1</sub>	10.7	10.7	19.8	19.8	6.60 6.60 12.2 12.2						4.40 4.40 6.08 6.08							
	M <sub>2</sub>	504	504	929	929	620 620 1143 1143						827 827 1143 1143							
15.904	P <sub>1</sub>	10.7 10.7 18.2 18.2						6.60 6.60 11.2 11.2						4.40 4.40 5.60 5.60					
	M <sub>2</sub>	564 564 957 957						694 694 1179 1179						926 926 1179 1179					
17.920	P <sub>1</sub>	10.7 10.7 16.3 16.3						6.60 6.60 10.0 10.0						4.40 4.40 5.01 5.01					
	M <sub>2</sub>	635 635 966 966						782 782 1189 1189						1043 1043 1189 1189					
20.286	P <sub>1</sub>	3.75	10.7	10.7	15.3	2.31 6.60 6.60 9.40						1.54 3.97 4.15 4.70							
	M <sub>2</sub>	252	719	719	1025	310 886 886 1262						413 1065 1115 1262							
22.857	P <sub>1</sub>	3.75	10.7	10.7	13.3	2.31 6.60 6.60 8.20						1.54 3.97 4.10 4.10							
	M <sub>2</sub>	284	810	810	1007	349 998 998 1240						466 1200 1240 1240							
24.850	P <sub>1</sub>	12.2 12.2 15.0						6.60 6.60 8.13						3.41 3.58 4.06					
	M <sub>2</sub>	1001 1001 1234						1085 1085 1337						1123 1178 1337					
28.000	P <sub>1</sub>	12.2 12.2 12.4						6.60 6.60 6.70						3.35 3.35 3.35					
	M <sub>2</sub>	1128 1128 1146						1222 1222 1242						1242 1242 1242					
32.344	P <sub>1</sub>	4.26	10.1	10.6	2.31 5.49 5.75						1.54 2.75 2.88								
	M <sub>2</sub>	456	1084	1137	494 1175 1232						659 1175 1232								
36.444	P <sub>1</sub>	4.26	9.55	9.55	2.31 5.17 5.17						1.54 2.59 2.59								
	M <sub>2</sub>	514	1152	1152	557 1248 1248						743 1248 1248								
39.642	P <sub>1</sub>	4.26	8.68	9.09	2.31 4.70 4.92						1.43 2.35 2.46								
	M <sub>2</sub>	559	1139	1192	606 1234 1292						751 1234 1292								
44.667	P <sub>1</sub>	4.26	7.85	7.85	2.31 4.26 4.26						1.43 2.13 2.13								
	M <sub>2</sub>	630	1161	1161	683 1258 1258						846 1258 1258								

Thermal power limit not considered (see page 2-4)

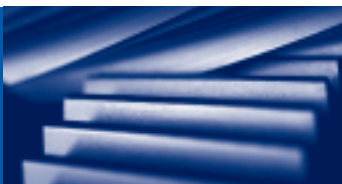
$M_2 \text{ perm} \leq 1337 \text{ Nm}$

GFL 07 - 2 N														Dimensions page 4-116									
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>									
IEC connection		80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160				
		71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132				
For the geometrical assignment of servo/DC motors see section 2																							
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H				
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																						
52.067	$P_1$	3.11	4.14	6.80							1.69	2.24	3.69							0.84	1.12	1.84	
	$M_2$	536	713	1172							580	773	1270							580	773	1270	
58.667	$P_1$	3.11	4.14	6.04							1.69	2.24	3.27							0.84	1.12	1.64	
	$M_2$	604	804	1172							654	871	1270							654	871	1270	
63.190	$P_1$	2.60	3.46	5.47							1.41	1.87	2.97							0.70	0.94	1.48	
	$M_2$	543	722	1145							588	783	1240							588	783	1240	
71.200	$P_1$	2.81	3.74	5.43							1.41	1.87	2.72							0.70	0.94	1.36	
	$M_2$	663	882	1280							663	882	1280							663	882	1280	
79.875	$P_1$	2.26	3.00							1.13	1.50							0.56	0.75				
	$M_2$	596	794							596	794							596	794				
90.000	$P_1$	2.26	3.00							1.13	1.50							0.56	0.75				
	$M_2$	672	894							672	894							672	894				

Thermal power limit not considered (see page 2-4)

# Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 1378 \text{ Nm}$

GFL 07 - 3 N													Dimensions page 4-124	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	
For the geometrical assignment of servo/DC motors see section 2														
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E	
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]													
65.306	P <sub>1</sub>	2.75	3.74	4.15	4.15	1.37	1.87	2.07	2.07	0.77	1.04	1.04	1.04	
	M <sub>2</sub>	585	796	883	883	585	796	883	883	658	883	883	883	
72.452	P <sub>1</sub>	2.75	3.68	3.68	3.68	1.37	1.84	1.84	1.84	0.73	0.92	0.92	0.92	
	M <sub>2</sub>	649	869	869	869	649	869	869	869	686	869	869	869	
81.636	P <sub>1</sub>	2.75	3.68	3.68	3.68	1.37	1.84	1.84	1.84	0.73	0.92	0.92	0.92	
	M <sub>2</sub>	731	979	979	979	731	979	979	979	773	979	979	979	
92.413	P <sub>1</sub>	2.75	3.19	3.19	3.19	1.37	1.60	1.60	1.60	0.77	0.80	0.80	0.80	
	M <sub>2</sub>	828	961	961	961	828	961	961	961	931	961	961	961	
104.127	P <sub>1</sub>	2.75	3.19	3.19	3.19	1.37	1.60	1.60	1.60	0.77	0.80	0.80	0.80	
	M <sub>2</sub>	933	1082	1082	1082	933	1082	1082	1082	1049	1082	1082	1082	
113.206	P <sub>1</sub>		2.82	2.82	2.82		1.41	1.41	1.41		0.70	0.70	0.70	
	M <sub>2</sub>		1040	1040	1040		1040	1040	1040		1040	1040	1040	
127.556	P <sub>1</sub>		2.82	2.82	2.82		1.41	1.41	1.41		0.70	0.70	0.70	
	M <sub>2</sub>		1171	1171	1171		1171	1171	1171		1171	1171	1171	
147.347	P <sub>1</sub>	2.13	2.37	2.37		1.07	1.19	1.19		0.53	0.59	0.59		
	M <sub>2</sub>	1025	1140	1140		1025	1140	1140		1025	1140	1140		
166.025	P <sub>1</sub>	2.13	2.31	2.31		1.07	1.15	1.15		0.53	0.58	0.58		
	M <sub>2</sub>	1155	1248	1248		1155	1248	1248		1155	1248	1248		
183.285	P <sub>1</sub>	1.78	2.07	2.07		0.89	1.03	1.03		0.45	0.52	0.52		
	M <sub>2</sub>	1066	1236	1236		1066	1236	1236		1066	1236	1236		
206.519	P <sub>1</sub>	1.78	1.85	1.85		0.89	0.93	0.93		0.45	0.46	0.46		
	M <sub>2</sub>	1201	1248	1248		1201	1248	1248		1201	1248	1248		
224.636	P <sub>1</sub>	1.78	1.83	1.83		0.89	0.92	0.92		0.45	0.46	0.46		
	M <sub>2</sub>	1306	1343	1343		1306	1343	1343		1306	1343	1343		
253.111	P <sub>1</sub>	1.53	1.53	1.53		0.76	0.76	0.76		0.38	0.38	0.38		
	M <sub>2</sub>	1258	1258	1258		1258	1258	1258		1258	1258	1258		
290.706	P <sub>1</sub>	1.43	1.45			0.72	0.73			0.36	0.36			
	M <sub>2</sub>	1357	1378			1357	1378			1357	1378			
327.556	P <sub>1</sub>	1.18	1.18			0.59	0.59			0.30	0.30			
	M <sub>2</sub>	1258	1258			1258	1258			1258	1258			
352.811	P <sub>1</sub>	1.20	1.20			0.60	0.60			0.30	0.30			
	M <sub>2</sub>	1374	1378			1374	1378			1374	1378			
397.533	P <sub>1</sub>	0.97	0.97			0.49	0.49			0.24	0.24			
	M <sub>2</sub>	1258	1258			1258	1258			1258	1258			
430.222	P <sub>1</sub>	0.91	0.91			0.45	0.45			0.23	0.23			
	M <sub>2</sub>	1270	1270			1270	1270			1270	1270			
522.133	P <sub>1</sub>	0.75	0.75			0.37	0.37			0.19	0.19			
	M <sub>2</sub>	1270	1270			1270	1270			1270	1270			
562.391	P <sub>1</sub>	0.62	0.62			0.31	0.31			0.15	0.15			
	M <sub>2</sub>	1128	1128			1128	1128			1128	1128			
633.680	P <sub>1</sub>	0.59	0.59			0.30	0.30			0.15	0.15			
	M <sub>2</sub>	1220	1220			1220	1220			1220	1220			
718.786	P <sub>1</sub>		0.48				0.24				0.12			
	M <sub>2</sub>		1128				1128				1128			
809.900	P <sub>1</sub>		0.46				0.23				0.12			
	M <sub>2</sub>		1220				1220				1220			

Thermal power limit not considered (see page 2-4)

# Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

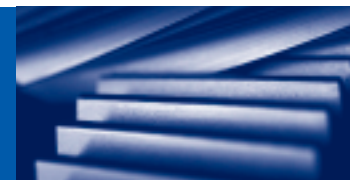
## Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 3107 \text{ Nm}$

GFL 09 - 2 N														Dimensions page 4-116					
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>					
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		0D	0E	0F	0G	0H	1K	0D	0E	0F	0G	0H	1K	0D	0E	0F	0G	0H	1K
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
6.864	$P_1$			28.6	74.7	74.7				17.6	46.0	46.0				11.7	23.0	23.0	
	$M_2$			649	1697	1697				799	2089	2089				1066	2089	2089	
7.466	$P_1$			28.6	70.9	70.9				17.6	43.6	43.6				11.7	21.8	21.8	
	$M_2$			706	1751	1751				869	2156	2156				1159	2156	2156	
9.010	$P_1$		10.7	28.6	60.8	60.8			6.60	17.6	37.4	37.4		4.40	11.7	18.7	18.7		
	$M_2$		319	852	1811	1811			393	1049	2230	2230		524	1399	2230	2230		
9.799	$P_1$		10.7	28.6	57.9	57.9			6.60	17.6	35.6	35.6		4.40	11.7	17.8	17.8		
	$M_2$		347	927	1876	1876			428	1141	2310	2310		570	1521	2310	2310		
11.167	$P_1$		10.7	28.6	50.6			6.60	17.6	31.2			4.40	11.7	15.6				
	$M_2$		396	1056	1870			488	1300	2303			650	1733	2303				
12.307	$P_1$			28.6	44.3	44.3				17.6	27.3	27.3				11.7	13.7	13.7	
	$M_2$			1164	1806	1806				1433	2223	2223				1910	2223	2223	
14.333	$P_1$		10.7	28.6	40.7	40.7			6.60	17.6	25.0	25.0		4.40	11.7	12.5	12.5		
	$M_2$		508	1355	1928	1928			626	1669	2374	2374		834	2225	2374	2374		
16.333	$P_1$		10.7	28.6	37.0			6.60	17.6	22.8			4.40	11.4	11.4				
	$M_2$		579	1544	1998			713	1902	2461			951	2461	2461				
18.407	$P_1$		10.7	28.6	33.1			6.60	17.6	20.4			4.40	10.2	10.2				
	$M_2$		653	1741	2014			804	2143	2479			1072	2479	2479				
19.667	$P_1$	10.7	10.7	28.6	32.0			6.60	6.60	17.6	19.7		4.40	4.40	9.85	9.85			
	$M_2$	697	697	1860	2082			859	859	2290	2563		1145	1145	2563	2563			
22.164	$P_1$	10.7	10.7	28.6	28.9			6.60	6.60	17.6	17.8		4.40	4.40	8.90	8.90			
	$M_2$	786	786	2096	2121			968	968	2580	2612		1290	1290	2612	2612			
24.111	$P_1$		12.2	31.5	31.5			6.60	17.1	17.1			4.40	8.53	8.53				
	$M_2$		971	2512	2512			1053	2722	2722			1404	2722	2722				
27.173	$P_1$		12.2	28.4	28.4			6.60	15.4	15.4			4.40	7.69	7.69				
	$M_2$		1095	2553	2553			1186	2767	2767			1582	2767	2767				
32.667	$P_1$	12.2	12.2	25.5			6.60	6.60	13.8			3.53	3.75	6.91					
	$M_2$	1316	1316	2759			1426	1426	2990			1526	1620	2990					
36.815	$P_1$	12.2	12.2	22.9			6.60	6.60	12.4			3.53	3.75	6.19					
	$M_2$	1483	1483	2784			1607	1607	3018			1720	1826	3018					
39.667	$P_1$	11.2	11.9	21.8			6.06	6.42	11.8			3.03	3.21	5.92					
	$M_2$	1467	1556	2867			1590	1686	3107			1590	1686	3107					
44.704	$P_1$	11.2	11.9	18.9			6.06	6.42	10.2			3.03	3.21	5.12					
	$M_2$	1654	1754	2793			1792	1901	3027			1792	1901	3027					
51.333	$P_1$	4.26	8.98	9.52			2.31	4.86	5.16			1.44	2.43	2.58					
	$M_2$	724	1525	1616			784	1653	1752			981	1653	1752					
57.852	$P_1$	4.26	8.98	9.52			2.31	4.86	5.16			1.44	2.43	2.58					
	$M_2$	816	1719	1822			884	1862	1974			1105	1862	1974					
62.300	$P_1$	4.26	7.50	7.94			2.31	4.06	4.30			1.21	2.03	2.15					
	$M_2$	878	1546	1637			952	1675	1774			994	1675	1774					
70.211	$P_1$	4.62	8.12	8.61			2.31	4.06	4.30			1.21	2.03	2.15					
	$M_2$	1073	1888	1999			1073	1888	1999			1121	1888	1999					
78.750	$P_1$	3.87	6.26				1.93	3.13			0.97	1.57							
	$M_2$	1008	1631				1008	1631			1008	1631							
88.750	$P_1$	3.87	6.07				1.93	3.03			0.97	1.52							
	$M_2$	1136	1781				1136	1781			1136	1781							

Thermal power limit not considered (see page 2-4)

**Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)**  
**Gearbox with mounting flange for IEC standard motors**



**M<sub>2</sub> perm ≤ 3170 Nm**

<b>GFL 09 - 3 N</b>											Dimensions page 4-124					
<b>n<sub>1</sub></b>		<b>2800 min<sup>-1</sup></b>					<b>1400 min<sup>-1</sup></b>					<b>700 min<sup>-1</sup></b>				
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]															
63.326	P <sub>1</sub>		3.45	4.26	6.75	6.75		1.87	2.31	3.66	3.66		1.25	1.54	1.83	1.83
	M <sub>2</sub>		712	880	1393	1393		772	953	1510	1510		1029	1271	1510	1510
73.173	P <sub>1</sub>			4.62	6.36	6.36			2.31	3.18	3.18			1.54	1.59	1.59
	M <sub>2</sub>			1101	1517	1517			1101	1517	1517			1469	1517	1517
82.465	P <sub>1</sub>			4.62	6.36	6.36			2.31	3.18	3.18			1.54	1.59	1.59
	M <sub>2</sub>			1241	1710	1710			1241	1710	1710			1655	1710	1710
93.333	P <sub>1</sub>		3.74	4.62	5.56	5.56		1.87	2.31	2.78	2.78		1.25	1.39	1.39	1.39
	M <sub>2</sub>		1137	1405	1692	1692		1137	1405	1692	1692		1516	1692	1692	1692
105.185	P <sub>1</sub>		3.74	4.62	5.56	5.56		1.87	2.31	2.78	2.78		1.25	1.39	1.39	1.39
	M <sub>2</sub>		1282	1583	1907	1907		1282	1583	1907	1907		1709	1907	1907	1907
114.333	P <sub>1</sub>			4.62	4.96	4.96			2.31	2.48	2.48			1.24	1.24	1.24
	M <sub>2</sub>			1721	1847	1847			1721	1847	1847			1847	1847	1847
128.852	P <sub>1</sub>			4.62	4.96	4.96			2.31	2.48	2.48			1.24	1.24	1.24
	M <sub>2</sub>			1939	2082	2082			1939	2082	2082			2082	2082	2082
148.815	P <sub>1</sub>		3.74	4.23	4.23			1.87	2.12	2.12			1.02	1.06	1.06	
	M <sub>2</sub>		1813	2053	2053			1813	2053	2053			1984	2053	2053	
167.712	P <sub>1</sub>		3.74	4.23	4.23			1.87	2.12	2.12			1.02	1.06	1.06	
	M <sub>2</sub>		2044	2314	2314			2044	2314	2314			2236	2314	2314	
185.111	P <sub>1</sub>		3.42	3.70	3.70			1.71	1.85	1.85			0.86	0.93	0.93	
	M <sub>2</sub>		2064	2231	2231			2064	2231	2231			2064	2231	2231	
208.617	P <sub>1</sub>		3.42	3.70	3.70			1.71	1.85	1.85			0.86	0.93	0.93	
	M <sub>2</sub>		2326	2515	2515			2326	2515	2515			2326	2515	2515	
224.778	P <sub>1</sub>		3.29	3.29	3.29			1.64	1.64	1.64			0.82	0.82	0.82	
	M <sub>2</sub>		2407	2407	2407			2407	2407	2407			2407	2407	2407	
253.321	P <sub>1</sub>		3.29	3.29	3.29			1.64	1.64	1.64			0.82	0.82	0.82	
	M <sub>2</sub>		2712	2712	2712			2712	2712	2712			2712	2712	2712	
290.889	P <sub>1</sub>	1.76	2.75	2.79			0.88	1.37	1.39			0.44	0.69	0.70		
	M <sub>2</sub>	1671	2603	2640			1671	2603	2640			1671	2603	2640		
327.827	P <sub>1</sub>	1.76	2.75	2.79			0.88	1.37	1.39			0.44	0.69	0.70		
	M <sub>2</sub>	1883	2934	2975			1883	2934	2975			1883	2934	2975		
353.033	P <sub>1</sub>	1.47	2.29	2.45			0.74	1.15	1.22			0.37	0.57	0.61		
	M <sub>2</sub>	1694	2636	2813			1694	2636	2813			1694	2636	2813		
397.863	P <sub>1</sub>	1.47	2.29	2.45			0.74	1.15	1.22			0.37	0.57	0.61		
	M <sub>2</sub>	1909	2971	3170			1909	2971	3170			1909	2971	3170		
424.247	P <sub>1</sub>	1.76	1.97	1.97			0.88	0.99	0.99			0.44	0.49	0.49		
	M <sub>2</sub>	2437	2724	2724			2437	2724	2724			2437	2724	2724		
514.881	P <sub>1</sub>	1.47	1.62	1.62			0.74	0.81	0.81			0.37	0.41	0.41		
	M <sub>2</sub>	2470	2724	2724			2470	2724	2724			2470	2724	2724		
554.470	P <sub>1</sub>	1.17	1.17	1.17			0.58	0.58	0.58			0.29	0.29	0.29		
	M <sub>2</sub>	2113	2113	2113			2113	2113	2113			2113	2113	2113		
624.879	P <sub>1</sub>	1.12	1.12	1.12			0.56	0.56	0.56			0.28	0.28	0.28		
	M <sub>2</sub>	2273	2273	2273			2273	2273	2273			2273	2273	2273		
700.875	P <sub>1</sub>	0.93	0.93				0.46	0.46				0.23	0.23			
	M <sub>2</sub>	2113	2113				2113	2113				2113	2113			
789.875	P <sub>1</sub>	0.88	0.88				0.44	0.44				0.22	0.22			
	M <sub>2</sub>	2273	2273				2273	2273				2273	2273			

Thermal power limit not considered (see page 2-4)

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## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

### Gearbox with mounting flange for IEC standard motors

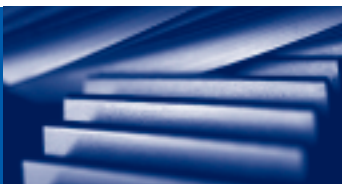
$M_2 \text{ perm} \leq 4882 \text{ Nm}$

<b>GFL 11 - 2 N</b>															Dimensions page 3-116				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□E	□F	□G	□H	□K	□E	□F	□G	□H	□K	□E	□F	□G	□H	□K			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
6.864	$P_1$ $M_2$				80.4 1825	93.8 2130				49.5 2248	57.7 2622				32.5 2951	37.0 3364			
7.466	$P_1$ $M_2$				80.4 1985	93.8 2316				49.5 2445	57.7 2852				32.5 3210	35.8 3533			
9.010	$P_1$ $M_2$				80.4 2396	93.8 2795				49.5 2950	57.7 3442				27.9 3323	31.3 3736			
9.799	$P_1$ $M_2$				80.4 2606	93.8 3040				49.5 3209	57.7 3744				27.9 3615	29.0 3767			
10.720	$P_1$ $M_2$		28.6 1014	80.4 2851	87.4 3101			17.6 1248	49.5 3510	53.8 3818			11.7 1664	26.4 3745	26.9 3818				
12.480	$P_1$ $M_2$			68.2 2815	68.2 2815				42.0 3466	42.0 3466				21.0 3466	21.0 3466				
14.538	$P_1$ $M_2$			62.8 3020	62.8 3020				38.6 3718	38.6 3718				19.3 3718	19.3 3718				
15.904	$P_1$ $M_2$		28.6 1504	58.6 3086	58.6 3086			17.6 1852	36.1 3800	36.1 3800			11.7 2469	18.1 3800	18.1 3800				
17.920	$P_1$ $M_2$		28.6 1694	51.9 3077	51.9 3077			17.6 2086	32.0 3789	32.0 3789			11.7 2782	16.0 3789	16.0 3789				
20.286	$P_1$ $M_2$	10.7 719	28.6 1918	48.9 3285	48.9 3285		6.60 886	17.6 2362	30.1 4045	30.1 4045		4.40 1181	11.7 3149	15.1 4045	15.1 4045				
22.857	$P_1$ $M_2$	10.7 810	28.6 2161	43.4 3279	43.4 3279		6.60 998	17.6 2661	26.7 4037	26.7 4037		4.40 1331	11.7 3548	13.3 4037	13.3 4037				
24.850	$P_1$ $M_2$		32.5 2670	47.9 3938	47.9 3938			17.6 2893	26.0 4268	26.0 4268			11.1 3655	13.0 4268	13.0 4268				
28.000	$P_1$ $M_2$		32.5 3008	42.5 3934	42.5 3934			17.6 3260	23.0 4263	23.0 4263			11.1 4118	11.5 4263	11.5 4263				
32.739	$P_1$ $M_2$	12.2 1319	32.5 3517	39.2 4247			6.60 1429	17.6 3812	21.2 4603			4.40 1906	8.94 3872	10.6 4603					
36.889	$P_1$ $M_2$	12.2 1486	32.5 3963	34.8 4245			6.60 1611	17.6 4295	18.8 4601			4.40 2147	8.94 4363	9.42 4601					
40.233	$P_1$ $M_2$	12.2 1621	27.6 3674	33.8 4505			6.60 1757	15.0 3982	18.3 4882			3.92 2087	7.48 3982	9.17 4882					
45.333	$P_1$ $M_2$	12.2 1826	27.6 4140	30.0 4504			6.60 1979	15.0 4486	16.3 4881			3.92 2352	7.48 4486	8.13 4881					
52.067	$P_1$ $M_2$	10.9 1878	11.6 2003	22.2 3817			5.91 2035	6.30 2170	12.0 4137			2.95 2035	3.15 2170	6.00 4137					
58.667	$P_1$ $M_2$	10.9 2116	11.6 2256	22.2 4301			5.91 2293	6.30 2445	12.0 4661			2.95 2293	3.15 2445	6.00 4661					
63.190	$P_1$ $M_2$	9.10 1904	9.71 2029	18.5 3868			4.93 2063	5.26 2199	10.0 4192			2.47 2063	2.63 2199	5.01 4192					
71.200	$P_1$ $M_2$	9.87 2325	10.5 2478	20.1 4723			4.93 2325	5.26 2478	10.0 4723			2.47 2325	2.63 2478	5.01 4723					
79.875	$P_1$ $M_2$	7.92 2092	8.43 2229				3.96 2092	4.22 2229				1.98 2092	2.11 2229						
90.000	$P_1$ $M_2$	7.92 2358	8.43 2511				3.96 2358	4.22 2511				1.98 2358	2.11 2511						

Thermal power limit not considered (see page 2-4)

# Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 5952 \text{ Nm}$

GFL 11 - 3 N														Dimensions page 4-124							
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>							
IEC connection		80 71	90 80	100/112 80/90	100/112 90	132 100/112	160/180 132	80 71	90 80	100/112 80/90	100/112 90	132 100/112	160/180 132	80 71	90 80	100/112 80/90	100/112 90	132 100/112	160/180 132		
For the geometrical assignment of servo/DC motors see section 2																					
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																				
65.306	P <sub>1</sub>	4.62	13.2	13.2	13.6							2.31	6.60	6.60	6.79	1.54	3.40	3.40	3.40		
	M <sub>2</sub>	983	2809	2809	2891							983	2809	2809	2891	1311	2891	2891	2891		
73.335	P <sub>1</sub>	12.0				12.0	12.0							6.01	6.01	6.01	6.01				
	M <sub>2</sub>	2875				2875	2875							2875	2875	2875	2875	2875	2875	2875	2875
82.631	P <sub>1</sub>	12.0				12.0	12.0							6.01	6.01	6.01	6.01				
	M <sub>2</sub>	3240				3240	3240	3240							3240	3240	3240	3240	3240	3240	3240
93.540	P <sub>1</sub>	4.62	10.5	10.5	10.5							2.31	5.26	5.26	5.26	1.54	2.63	2.63	2.63		
	M <sub>2</sub>	1408	3206	3206	3206							1408	3206	3206	3206	1877	3206	3206	3206		
105.397	P <sub>1</sub>	4.62	10.5	10.5	10.5							2.31	5.26	5.26	5.26	1.54	2.63	2.63	2.63		
	M <sub>2</sub>	1586	3613	3613	3613							1586	3613	3613	3613	2115	3613	3613	3613		
114.586	P <sub>1</sub>	9.37			9.37	9.37							4.69	4.69	4.69						
	M <sub>2</sub>	3501			3501	3501							3501	3501	3501	3501	3501	3501	3501		
129.111	P <sub>1</sub>	9.37			9.37	9.37							4.69	4.69	4.69						
	M <sub>2</sub>	3945			3945	3945							3945	3945	3945	3945	3945	3945	3945		
149.144	P <sub>1</sub>	4.62	8.01	8.01							2.31	4.01	4.01								
	M <sub>2</sub>	2245	3894	3894							2245	3894	3894	2993	3894	3894					
168.049	P <sub>1</sub>	4.62	8.01	8.01							2.31	4.01	4.01								
	M <sub>2</sub>	2529	4387	4387							2529	4387	4387	3373	4387	4387					
182.792	P <sub>1</sub>	4.62	7.10	7.10							2.31	3.55	3.55								
	M <sub>2</sub>	2751	4232	4232							2751	4232	4232	3410	4232	4232					
205.963	P <sub>1</sub>	4.62	7.10	7.10							2.31	3.55	3.55								
	M <sub>2</sub>	3100	4769	4769							3100	4769	4769	3842	4769	4769					
224.636	P <sub>1</sub>	4.62	6.18	6.18							2.31	3.09	3.09								
	M <sub>2</sub>	3381	4523	4523							3381	4523	4523	4191	4523	4523					
253.111	P <sub>1</sub>	4.62	6.18	6.18							2.31	3.09	3.09								
	M <sub>2</sub>	3810	5097	5097							3810	5097	5097	4722	5097	5097					
267.259	P <sub>1</sub>	4.62	5.86	5.86							2.31	2.93	2.93								
	M <sub>2</sub>	4023	5106	5106							4023	5106	5106	5106	5106	5106					
327.556	P <sub>1</sub>	4.62	5.17	5.17							2.31	2.59	2.59								
	M <sub>2</sub>	4930	5523	5523							4930	5523	5523	5523	5523	5523					
358.077	P <sub>1</sub>	2.81	3.74	4.53							1.41	1.87	2.26								
	M <sub>2</sub>	3283	4370	5283							3283	4370	5283	3283	4370	5283					
403.467	P <sub>1</sub>	2.81	3.74	4.53							1.41	1.87	2.26								
	M <sub>2</sub>	3699	4924	5952							3699	4924	5952	3699	4924	5952					
430.222	P <sub>1</sub>	3.37	4.24	4.24							1.69	2.12	2.12								
	M <sub>2</sub>	4725	5942	5942							4725	5942	5942	4725	5942	5942					
522.133	P <sub>1</sub>	2.81	3.49	3.49							1.41	1.75	1.75								
	M <sub>2</sub>	4787	5942	5942							4787	5942	5942	4787	5942	5942					
562.391	P <sub>1</sub>	2.81	2.90	2.90							1.41	1.45	1.45								
	M <sub>2</sub>	5156	5319	5319							5156	5319	5319	5156	5319	5319					
633.680	P <sub>1</sub>	2.81	2.83	2.83							1.41	1.42	1.42								
	M <sub>2</sub>	5810	5844	5844							5810	5844	5844	5810	5844	5844					
710.888	P <sub>1</sub>	2.26	2.30							1.13	1.15										
	M <sub>2</sub>	5227	5319							5227	5319										
801.000	P <sub>1</sub>	2.24	2.24							1.12	1.12										
	M <sub>2</sub>	5844	5844							5844	5844										

Thermal power limit not considered (see page 2-4)

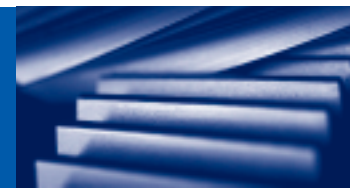
$M_2 \text{ perm} \leq 11344 \text{ Nm}$

GFL 14 - 2 N										Dimensions page 4-116		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		□G	□H	□K	□G	□H	□K	□G	□H	□K		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
7.150	P <sub>1</sub> M <sub>2</sub>	93.8 2218			57.7 2731			38.5 3642				
7.777	P <sub>1</sub> M <sub>2</sub>	93.8 2413			57.7 2971			38.5 3961				
8.800	P <sub>1</sub> M <sub>2</sub>	80.4 2340	93.8 2730	49.5 2882			57.7 3362	33.0 3842	38.5 4482			
9.571	P <sub>1</sub> M <sub>2</sub>	80.4 2545	93.8 2970	49.5 3134			57.7 3657	33.0 4179	38.5 4875			
11.538	P <sub>1</sub> M <sub>2</sub>	93.8 3580			57.7 4408			38.5 5877				
13.000	P <sub>1</sub> M <sub>2</sub>	93.8 4033			57.7 4966			38.5 6622				
14.200	P <sub>1</sub> M <sub>2</sub>	80.4 3776	93.8 4406	49.5 4650			57.7 5425	33.0 6200	38.5 7233			
15.620	P <sub>1</sub> M <sub>2</sub>	80.4 4154	93.8 4846	49.5 5115			57.7 5967	31.9 6588	38.5 7956			
17.600	P <sub>1</sub> M <sub>2</sub>	80.4 4681	93.8 5461	49.5 5763			57.7 6724	31.9 7423	38.5 8965			
19.948	P <sub>1</sub> M <sub>2</sub>	80.4 5305	93.8 6189	49.5 6532			57.7 7621	27.1 7143	34.7 9152			
22.476	P <sub>1</sub> M <sub>2</sub>	80.4 5977	93.8 6974	49.5 7360			57.7 8586	27.1 8049	33.3 9896			
24.456	P <sub>1</sub> M <sub>2</sub>	86.3 6982	106.5 8621	46.8 7567			57.7 9343	23.4 7567	29.9 9681			
27.556	P <sub>1</sub> M <sub>2</sub>	86.3 7867	106.1 9671	46.8 8526			57.5 10480	23.4 8526	28.7 10480			
32.344	P <sub>1</sub> M <sub>2</sub>	32.5 3475	69.3 7416	88.5 9475	17.6 3766	37.5 8037	48.0 10268	10.8 4616	18.8 8037	24.0 10268		
36.444	P <sub>1</sub> M <sub>2</sub>	32.5 3915	69.3 8356	86.8 10468	17.6 4243	37.5 9056	47.0 11344	10.8 5201	18.8 9056	23.5 11344		
39.642	P <sub>1</sub> M <sub>2</sub>	32.5 4259	59.2 7769	17.6 4615			32.1 8419	9.26 4858	16.1 8419			
44.667	P <sub>1</sub> M <sub>2</sub>	32.5 4799	59.2 8754	17.6 5200			32.1 9486	9.26 5473	16.1 9486			
52.067	P <sub>1</sub> M <sub>2</sub>	26.8 4618	46.8 8055	14.5 5005			25.3 8729	7.26 5005	12.7 8729			
58.667	P <sub>1</sub> M <sub>2</sub>	26.8 5203	46.8 9076	14.5 5639			25.3 9836	7.26 5639	12.7 9836			
63.190	P <sub>1</sub> M <sub>2</sub>	22.4 4683	39.3 8209	12.1 5075			21.3 8896	6.07 5075	10.6 8896			
71.200	P <sub>1</sub> M <sub>2</sub>	24.3 5718	42.5 10024	12.1 5718			21.3 10024	6.07 5718	10.6 10024			
79.875	P <sub>1</sub> M <sub>2</sub>	19.5 5148	9.74 5148			4.87 5148						
90.000	P <sub>1</sub> M <sub>2</sub>	19.5 5801	9.74 5801			4.87 5801						

Thermal power limit not considered (see page 2-4)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)  
Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 11150 \text{ Nm}$

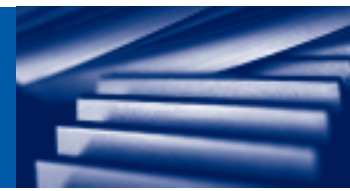
GFL 14 - 3 N															Dimensions page 3-124				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		OD	OE	OF	OG	OH	OD	OE	OF	OG	OH	OD	OE	OF	OG	OH			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
64.296	$P_1$			12.2	24.7	24.7			6.60	13.4	13.4			4.40	6.69	6.69			
	$M_2$			2551	5176	5176			2765	5609	5609			3687	5609	5609			
68.708	$P_1$		13.2	13.2	24.2	24.2		6.60	6.60	12.1	12.1		4.40	4.40	6.05	6.05			
	$M_2$		2955	2955	5416	5416		2955	2955	5416	5416		3940	3940	5416	5416			
77.418	$P_1$		13.2	13.2	24.2	24.2		6.60	6.60	12.1	12.1		4.40	4.40	6.05	6.05			
	$M_2$		3329	3329	6102	6102		3329	3329	6102	6102		4439	4439	6102	6102			
85.037	$P_1$			13.2	22.6	22.6			6.60	11.3	11.3			4.40	5.66	5.66			
	$M_2$			3657	6276	6276			3657	6276	6276			4876	6276	6276			
104.889	$P_1$		13.2	13.2	20.2			6.60	6.60	10.1			3.53	3.75	5.04				
	$M_2$		4511	4511	6888			4511	4511	6888			4827	5123	6888				
114.126	$P_1$		13.2	13.2	18.1			6.60	6.60	9.03			3.53	3.75	4.52				
	$M_2$		4908	4908	6719			4908	4908	6719			5252	5574	6719				
128.593	$P_1$		13.2	13.2	18.1			6.60	6.60	9.03			3.53	3.75	4.52				
	$M_2$		5530	5530	7571			5530	5530	7571			5917	6281	7571				
136.889	$P_1$			13.2	16.5	16.5			6.60	8.25	8.25			4.12	4.12	4.12			
	$M_2$			5887	7359	7359			5887	7359	7359			7359	7359	7359			
156.148	$P_1$		12.1	12.9	16.2			6.06	6.42	8.08			3.03	3.21	4.04				
	$M_2$		6166	6539	8227			6166	6539	8227			6166	6539	8227				
170.074	$P_1$		13.2	13.2	15.2			6.60	6.60	7.58			3.53	3.75	3.79				
	$M_2$		7314	7314	8408			7314	7314	8408			7826	8307	8408				
202.074	$P_1$	4.62	9.73	10.3			2.31	4.86	5.16			1.44	2.43	2.58					
	$M_2$	3042	6408	6792			3042	6408	6792			3802	6408	6792					
224.636	$P_1$		11.9	11.9	11.9			5.97	5.97	5.97			2.98	2.98	2.98				
	$M_2$		8739	8739	8739			8739	8739	8739			8739	8739	8739				
253.111	$P_1$		11.9	11.9	11.9			5.97	5.97	5.97			2.98	2.98	2.98				
	$M_2$		9846	9846	9846			9846	9846	9846			9846	9846	9846				
273.778	$P_1$		10.9	10.9	10.9			5.46	5.46	5.46			2.73	2.73	2.73				
	$M_2$		9753	9753	9753			9753	9753	9753			9753	9753	9753				
332.444	$P_1$		9.74	9.74	9.74			4.87	4.87	4.87			2.43	2.43	2.43				
	$M_2$		10550	10550	10550			10550	10550	10550			10550	10550	10550				
352.811	$P_1$	4.62	8.12	8.61			2.31	4.06	4.30			1.21	2.03	2.15					
	$M_2$	5310	9343	9896			5310	9343	9896			5546	9343	9896					
397.533	$P_1$	4.62	8.12	8.61			2.31	4.06	4.30			1.21	2.03	2.15					
	$M_2$	5984	10527	11150			5984	10527	11150			6250	10527	11150					
430.222	$P_1$	4.62	7.53	7.53			2.31	3.77	3.77			1.44	1.88	1.88					
	$M_2$	6476	10560	10560			6476	10560	10560			8096	10560	10560					
522.133	$P_1$	4.62	6.21	6.21			2.31	3.10	3.10			1.21	1.55	1.55					
	$M_2$	7859	10560	10560			7859	10560	10560			8208	10560	10560					
562.391	$P_1$	4.62	4.93	4.93			2.31	2.47	2.47			1.21	1.23	1.23					
	$M_2$	8465	9036	9036			8465	9036	9036			8841	9036	9036					
633.680	$P_1$	4.62	4.75	4.75			2.31	2.38	2.38			1.19	1.19	1.19					
	$M_2$	9538	9811	9811			9538	9811	9811			9811	9811	9811					
710.888	$P_1$	3.87	3.90				1.93	1.95				0.97	0.98						
	$M_2$	8961	9036				8961	9036				8961	9036						
801.000	$P_1$	3.76	3.76				1.88	1.88				0.94	0.94						
	$M_2$	9811	9811				9811	9811				9811	9811						

Thermal power limit not considered (see page 2-4)

$M_2 \leq 190 \text{ Nm}$

GFL 04 - 2 W										Dimensions page 4-132		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	$P_{1perm}$ [kW] $M_{2perm}$ [Nm]											
3.659	P <sub>1</sub>		2.36	3.88		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		29	47		35	58		35	58		
5.018	P <sub>1</sub>		2.36	3.88		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		39	64		48	79		48	79		
5.833	P <sub>1</sub>		2.36	3.88		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		46	75		56	92		56	92		
6.422	P <sub>1</sub>		2.71	3.27		1.67	2.01		0.83	1.01		
	M <sub>2</sub>		58	69		71	86		71	86		
7.026	P <sub>1</sub>		2.68	3.12		1.65	1.92		0.83	0.96		
	M <sub>2</sub>		62	73		77	89		77	89		
8.379	P <sub>1</sub>		2.36	3.88		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		65	108		81	133		81	133		
9.333	P <sub>1</sub>		2.36	3.88		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		73	120		90	148		90	148		
10.238	P <sub>1</sub>		2.71	3.27		1.67	2.01		0.83	1.01		
	M <sub>2</sub>		92	111		113	136		113	136		
11.491	P <sub>1</sub>		2.36	3.87		1.45	2.38		0.73	1.19		
	M <sub>2</sub>		90	147		110	181		110	181		
12.800	P <sub>1</sub>		2.36	3.18		1.45	1.96		0.73	0.98		
	M <sub>2</sub>		100	135		123	166		123	166		
14.706	P <sub>1</sub>		2.71	3.04		1.67	1.87		0.83	0.94		
	M <sub>2</sub>		132	148		162	182		162	182		
16.087	P <sub>1</sub>		2.68	2.78		1.65	1.71		0.83	0.86		
	M <sub>2</sub>		143	148		176	182		176	182		
17.920	P <sub>1</sub>		2.29	2.29		1.41	1.41		0.70	0.70		
	M <sub>2</sub>		136	136		167	167		167	167		
20.520	P <sub>1</sub>		2.19	2.19		1.35	1.35		0.67	0.67		
	M <sub>2</sub>		149	149		183	183		183	183		
22.857	P <sub>1</sub>		1.79	1.79		1.10	1.10		0.55	0.55		
	M <sub>2</sub>		136	136		167	167		167	167		
25.136	P <sub>1</sub>		1.79	1.79		1.10	1.10		0.55	0.55		
	M <sub>2</sub>		149	149		183	183		183	183		
28.000	P <sub>1</sub>		1.47	1.47		0.91	0.91		0.45	0.45		
	M <sub>2</sub>		136	136		168	168		168	168		
31.600	P <sub>1</sub>	1.05	1.44	1.44	0.65	0.89	0.89	0.32	0.44	0.44		
	M <sub>2</sub>	110	150	150	135	185	185	135	185	185		
35.200	P <sub>1</sub>	1.05	1.19	1.19	0.65	0.73	0.73	0.32	0.37	0.37		
	M <sub>2</sub>	122	138	138	151	170	170	151	170	170		
40.697	P <sub>1</sub>	0.88	1.13	1.13	0.54	0.69	0.69	0.27	0.35	0.35		
	M <sub>2</sub>	118	152	152	146	187	187	146	187	187		
45.333	P <sub>1</sub>	0.88	0.93	0.93	0.54	0.57	0.57	0.27	0.29	0.29		
	M <sub>2</sub>	132	140	140	162	172	172	162	172	172		
51.579	P <sub>1</sub>	0.77	0.90		0.47	0.56		0.24	0.28			
	M <sub>2</sub>	131	154		162	190		162	190			
57.455	P <sub>1</sub>	0.74	0.74		0.46	0.46		0.23	0.23			
	M <sub>2</sub>	141	141		174	174		174	174			
64.636	P <sub>1</sub>	0.62	0.62		0.38	0.38		0.19	0.19			
	M <sub>2</sub>	133	133		164	164		164	164			
72.000	P <sub>1</sub>	0.60	0.60		0.37	0.37		0.19	0.19			
	M <sub>2</sub>	144	144		177	177		177	177			
85.156	P <sub>1</sub>	0.30			0.18			0.09				
	M <sub>2</sub>	84			103			103				
94.857	P <sub>1</sub>	0.30			0.19			0.09				
	M <sub>2</sub>	95			116			116				

Thermal power limit not considered (see page 2-4)



$M_2 \leq 345 \text{ Nm}$

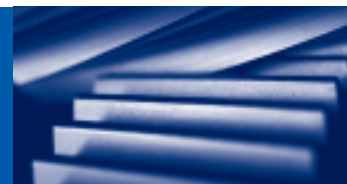
GFL 05 - 2 W										Dimensions page 4-132		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	$P_{1perm}$ [kW] $M_{2perm}$ [Nm]											
3.333	$P_1$ $M_2$			7.41 82			4.56 101			2.28 101		
4.571	$P_1$ $M_2$			7.41 112			4.56 138			2.28 138		
5.133	$P_1$ $M_2$			7.41 126			4.56 155			2.28 155		
5.667	$P_1$ $M_2$			7.41 139			4.56 171			2.28 171		
6.400	$P_1$ $M_2$	2.36 50	3.86 82	6.02 127	1.45 62	2.38 101	3.70 157	0.73 62	1.19 101	1.85 157		
7.040	$P_1$ $M_2$			7.41 173			4.56 213			2.28 213		
7.771	$P_1$ $M_2$			7.41 191			4.56 235			2.28 235		
9.010	$P_1$ $M_2$		4.04 120	6.28 187		2.49 148	3.87 231		1.24 148	1.93 231		
9.946	$P_1$ $M_2$		4.04 133	6.28 207		2.49 164	3.87 254		1.24 164	1.93 254		
11.360	$P_1$ $M_2$			6.02 226			3.70 278			1.85 278		
12.800	$P_1$ $M_2$			5.46 231			3.36 285			1.68 285		
14.538	$P_1$ $M_2$		4.04 194	5.09 245		2.49 239	3.13 301		1.24 239	1.57 301		
15.904	$P_1$ $M_2$	2.36 124	3.86 203	4.78 252	1.45 153	2.38 250	2.94 310	0.73 153	1.19 250	1.47 310		
17.920	$P_1$ $M_2$	2.36 140	3.86 229	4.27 253	1.45 172	2.38 282	2.63 312	0.73 172	1.19 282	1.32 312		
20.286	$P_1$ $M_2$	2.31 155	3.26 219	4.03 270	1.42 191	2.01 269	2.48 333	0.71 191	1.00 269	1.24 333		
22.857	$P_1$ $M_2$	2.31 175	3.26 246	3.36 254	1.42 215	2.01 303	2.07 313	0.71 215	1.00 303	1.04 313		
24.850	$P_1$ $M_2$		2.80 230	3.40 279		1.72 284	2.09 344		0.86 284	1.05 344		
28.000	$P_1$ $M_2$		2.75 255	2.75 255		1.69 314	1.69 314		0.85 314	0.85 314		
32.344	$P_1$ $M_2$	1.61 172	2.25 241	2.62 280	0.99 212	1.38 296	1.61 345	0.50 212	0.69 296	0.81 345		
36.444	$P_1$ $M_2$	1.61 194	2.13 257	2.13 257	0.99 239	1.31 316	1.31 316	0.50 239	0.66 316	0.66 316		
40.233	$P_1$ $M_2$	1.35 180	1.88 250	2.11 280	0.83 221	1.16 308	1.30 345	0.42 221	0.58 308	0.65 345		
45.333	$P_1$ $M_2$	1.35 203	1.73 259	1.73 259	0.83 249	1.06 319	1.06 319	0.42 249	0.53 319	0.53 319		
52.067	$P_1$ $M_2$	1.09 187	1.46 251		0.67 231	0.90 309		0.34 231	0.45 309			
58.667	$P_1$ $M_2$	1.09 211	1.35 262		0.67 260	0.83 322		0.34 260	0.42 322			

Thermal power limit not considered (see page 2-4)

$M_2 \leq 345 \text{ Nm}$

GFL 05 - 2 W							Dimensions page 4-132			
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D
i	$P_{1perm}$ [kW] $M_{2perm}$ [Nm]									
63.190	$P_1$	0.91	1.10		0.56	0.68		0.28	0.34	
	$M_2$	190	229		234	282		234	282	
71.200	$P_1$	0.91	1.05		0.56	0.65		0.28	0.32	
	$M_2$	214	248		264	305		264	305	
80.763	$P_1$	0.66			0.41			0.20		
	$M_2$	177			217			217		
91.000	$P_1$	0.64			0.39			0.20		
	$M_2$	192			236			236		

Thermal power limit not considered (see page 2-4)



$M_2 \leq 345 \text{ Nm}$

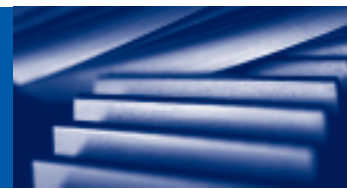
GFL 05 - 3 W											Dimensions page 4-133
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>			
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C	
i	$P_{1perm}$ [kW] $M_{2perm}$ [Nm]										
61.653	P <sub>1</sub>	0.84	0.84	0.84	0.52	0.52	0.52	0.26	0.26	0.26	
	M <sub>2</sub>	168	168	168	207	207	207	207	207	207	
78.639	P <sub>1</sub>	0.71	0.71	0.71	0.44	0.44	0.44	0.22	0.22	0.22	
	M <sub>2</sub>	183	183	183	225	225	225	225	225	225	
90.123	P <sub>1</sub>	0.84	0.84	0.84	0.52	0.52	0.52	0.26	0.26	0.26	
	M <sub>2</sub>	246	246	246	303	303	303	303	303	303	
101.547	P <sub>1</sub>	0.81	0.81	0.81	0.50	0.50	0.50	0.25	0.25	0.25	
	M <sub>2</sub>	266	266	266	328	328	328	328	328	328	
114.952	P <sub>1</sub>	0.71	0.71	0.71	0.44	0.44	0.44	0.22	0.22	0.22	
	M <sub>2</sub>	267	267	267	329	329	329	329	329	329	
129.524	P <sub>1</sub>	0.63	0.63	0.63	0.39	0.39	0.39	0.19	0.19	0.19	
	M <sub>2</sub>	266	266	266	328	328	328	328	328	328	
140.817	P <sub>1</sub>		0.61	0.61		0.38	0.38		0.19	0.19	
	M <sub>2</sub>		280	280		345	345		345	345	
158.667	P <sub>1</sub>		0.52	0.52		0.32	0.32		0.16	0.16	
	M <sub>2</sub>		266	266		328	328		328	328	
177.027	P <sub>1</sub>	0.49	0.49	0.49	0.30	0.30	0.30	0.15	0.15	0.15	
	M <sub>2</sub>	280	280	280	345	345	345	345	345	345	
199.467	P <sub>1</sub>	0.41	0.41	0.41	0.25	0.25	0.25	0.13	0.13	0.13	
	M <sub>2</sub>	266	266	266	328	328	328	328	328	328	
227.989	P <sub>1</sub>	0.38	0.38	0.38	0.23	0.23	0.23	0.12	0.12	0.12	
	M <sub>2</sub>	280	280	280	345	345	345	345	345	345	
256.889	P <sub>1</sub>	0.32	0.32	0.32	0.20	0.20	0.20	0.10	0.10	0.10	
	M <sub>2</sub>	266	266	266	328	328	328	328	328	328	
288.948	P <sub>1</sub>	0.30	0.30		0.18	0.18		0.09	0.09		
	M <sub>2</sub>	280	280		345	345		345	345		
325.576	P <sub>1</sub>	0.25	0.25		0.16	0.16		0.08	0.08		
	M <sub>2</sub>	266	266		328	328		328	328		
362.100	P <sub>1</sub>	0.24	0.24		0.15	0.15		0.07	0.07		
	M <sub>2</sub>	280	280		345	345		345	345		
408.000	P <sub>1</sub>	0.20	0.20		0.12	0.12		0.06	0.06		
	M <sub>2</sub>	266	266		328	328		328	328		
477.052	P <sub>1</sub>	0.18			0.11			0.06			
	M <sub>2</sub>	280			345			345			
537.524	P <sub>1</sub>	0.15			0.09			0.05			
	M <sub>2</sub>	266			328			328			

Thermal power limit not considered (see page 2-4)

$M_2 \leq 657 \text{ Nm}$

GFL 06 - 2 W												Dimensions page 4-132			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F		
i	$P_{1perm}$ [kW] $M_{2perm}$ [Nm]														
3.675	P <sub>1</sub>			14.3	21.7			8.82	13.3			4.41	6.67		
	M <sub>2</sub>			174	263			214	324			214	324		
5.211	P <sub>1</sub>			14.3	19.9			8.82	12.3			4.41	6.14		
	M <sub>2</sub>			247	344			304	423			304	423		
5.750	P <sub>1</sub>			14.3	18.9			8.82	11.6			4.41	5.80		
	M <sub>2</sub>			273	359			336	442			336	442		
6.450	P <sub>1</sub>		7.56	12.2	13.4		4.66	7.50	8.24		2.33	3.75	4.12		
	M <sub>2</sub>		161	260	286		199	320	352		199	320	352		
7.147	P <sub>1</sub>			14.3	14.9			8.82	9.16			4.41	4.58		
	M <sub>2</sub>			339	352			417	433			417	433		
8.400	P <sub>1</sub>			14.3	17.6			8.82	10.9			4.41	5.43		
	M <sub>2</sub>			398	490			490	604			490	604		
9.463	P <sub>1</sub>			14.3	15.1			8.82	9.28			4.41	4.64		
	M <sub>2</sub>			449	472			552	581			552	581		
10.092	P <sub>1</sub>		7.56	11.2	11.2		4.66	6.87	6.87		2.33	3.44	3.44		
	M <sub>2</sub>		253	373	373		311	459	459		311	459	459		
11.520	P <sub>1</sub>			13.5	13.5			8.29	8.29			4.14	4.14		
	M <sub>2</sub>			513	513			632	632			632	632		
12.978	P <sub>1</sub>			11.2	11.2			6.89	6.89			3.44	3.44		
	M <sub>2</sub>			480	480			592	592			592	592		
14.743	P <sub>1</sub>		7.56	10.7	10.7		4.66	6.57	6.57		2.33	3.28	3.28		
	M <sub>2</sub>		369	520	520		454	641	641		454	641	641		
16.128	P <sub>1</sub>		7.27	9.78	9.78		4.48	6.02	6.02		2.24	3.01	3.01		
	M <sub>2</sub>		388	522	522		478	643	643		478	643	643		
18.169	P <sub>1</sub>		7.27	8.10	8.10		4.48	4.99	4.99		2.24	2.49	2.49		
	M <sub>2</sub>		437	487	487		538	600	600		538	600	600		
20.571	P <sub>1</sub>	4.01	6.18	7.70	7.70	2.47	3.80	4.74	4.74	1.23	1.90	2.37	2.37		
	M <sub>2</sub>	273	421	524	524	336	518	645	645	336	518	645	645		
23.175	P <sub>1</sub>	4.01	6.18	6.40	6.40	2.47	3.80	3.94	3.94	1.23	1.90	1.97	1.97		
	M <sub>2</sub>	307	474	490	490	379	583	604	604	379	583	604	604		
25.200	P <sub>1</sub>		5.34	6.34	6.34		3.29	3.90	3.90		1.65	1.95	1.95		
	M <sub>2</sub>		446	528	528		549	651	651		549	651	651		
28.389	P <sub>1</sub>		5.25	5.25	5.25		3.23	3.23	3.23		1.62	1.62	1.62		
	M <sub>2</sub>		493	493	493		607	607	607		607	607	607		
32.800	P <sub>1</sub>	2.77	4.31	4.80		1.71	2.65	2.95		0.85	1.33	1.48			
	M <sub>2</sub>	301	468	520		370	576	641		370	576	641			
36.951	P <sub>1</sub>	2.77	4.06	4.06		1.71	2.50	2.50		0.85	1.25	1.25			
	M <sub>2</sub>	339	496	496		417	611	611		417	611	611			
40.800	P <sub>1</sub>	2.32	3.62	3.95		1.43	2.23	2.43		0.71	1.11	1.22			
	M <sub>2</sub>	313	488	533		385	601	657		385	601	657			
45.963	P <sub>1</sub>	2.32	3.27	3.27		1.43	2.01	2.01		0.71	1.01	1.01			
	M <sub>2</sub>	352	497	497		434	613	613		434	613	613			
52.800	P <sub>1</sub>	1.79	2.91			1.10	1.79			0.55	0.90				
	M <sub>2</sub>	312	509			385	627			385	627				
59.482	P <sub>1</sub>	1.79	2.54			1.10	1.56			0.55	0.78				
	M <sub>2</sub>	352	499			433	615			433	615				

Thermal power limit not considered (see page 2-4)



$M_2 \text{ perm} \leq 657 \text{ Nm}$

GFL 06 - 2 W												Dimensions page 4-132	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
64.080	$P_1$	1.55	2.21			0.96	1.36			0.48	0.68		
	$M_2$	329	468			405	576			405	576		
72.189	$P_1$	1.55	2.09			0.96	1.29			0.48	0.65		
	$M_2$	370	500			456	616			456	616		
81.000	$P_1$	1.24				0.77				0.38			
	$M_2$	333				410				410			
91.250	$P_1$	1.24				0.77				0.38			
	$M_2$	375				462				462			

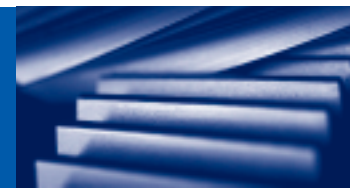
Thermal power limit not considered (see page 2-4)

$M_2 \leq 657 \text{ Nm}$

GFL 06 - 3 W										Dimensions page 4-133		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
66.213	P <sub>1</sub>	0.96	1.87	1.87	0.59	1.15	1.15	0.30	0.58	0.58		
	M <sub>2</sub>	207	403	403	255	496	496	255	496	496		
72.000	P <sub>1</sub>	0.96	1.72	1.72	0.59	1.06	1.06	0.30	0.53	0.53		
	M <sub>2</sub>	225	403	403	277	496	496	277	496	496		
81.111	P <sub>1</sub>	0.96	1.53	1.53	0.59	0.94	0.94	0.30	0.47	0.47		
	M <sub>2</sub>	253	403	403	312	496	496	312	496	496		
88.200	P <sub>1</sub>		1.38	1.38		0.85	0.85		0.42	0.42		
	M <sub>2</sub>		396	396		488	488		488	488		
99.361	P <sub>1</sub>		1.38	1.38		0.85	0.85		0.42	0.42		
	M <sub>2</sub>		446	446		550	550		550	550		
116.571	P <sub>1</sub>	0.88	1.13	1.13	0.54	0.70	0.70	0.27	0.35	0.35		
	M <sub>2</sub>	334	429	429	411	528	528	411	528	528		
131.323	P <sub>1</sub>	0.96	1.13	1.13	0.59	0.70	0.70	0.30	0.35	0.35		
	M <sub>2</sub>	410	483	483	505	595	595	505	595	595		
144.320	P <sub>1</sub>	0.97	0.97	0.97	0.60	0.60	0.60	0.30	0.30	0.30		
	M <sub>2</sub>	455	455	455	560	560	560	560	560	560		
162.583	P <sub>1</sub>	0.94	0.94	0.94	0.58	0.58	0.58	0.29	0.29	0.29		
	M <sub>2</sub>	497	497	497	613	613	613	613	613	613		
179.520	P <sub>1</sub>	0.84	0.84	0.84	0.52	0.52	0.52	0.26	0.26	0.26		
	M <sub>2</sub>	492	492	492	605	605	605	605	605	605		
202.237	P <sub>1</sub>	0.75	0.75	0.75	0.46	0.46	0.46	0.23	0.23	0.23		
	M <sub>2</sub>	496	496	496	611	611	611	611	611	611		
231.200	P <sub>1</sub>	0.68	0.68	0.68	0.42	0.42	0.42	0.21	0.21	0.21		
	M <sub>2</sub>	515	515	515	634	634	634	634	634	634		
260.457	P <sub>1</sub>	0.59	0.59	0.59	0.36	0.36	0.36	0.18	0.18	0.18		
	M <sub>2</sub>	497	497	497	613	613	613	613	613	613		
293.018	P <sub>1</sub>	0.56	0.56		0.34	0.34		0.17	0.17			
	M <sub>2</sub>	533	533		657	657		657	657			
299.200	P <sub>1</sub>	0.51	0.51	0.51	0.31	0.31	0.31	0.16	0.16	0.16		
	M <sub>2</sub>	497	497	497	613	613	613	613	613	613		
367.200	P <sub>1</sub>	0.45	0.45		0.27	0.27		0.14	0.14			
	M <sub>2</sub>	533	533		657	657		657	657			
413.667	P <sub>1</sub>	0.37	0.37		0.23	0.23		0.11	0.11			
	M <sub>2</sub>	498	498		614	614		614	614			
475.200	P <sub>1</sub>	0.34	0.34		0.21	0.21		0.11	0.11			
	M <sub>2</sub>	533	533		657	657		657	657			
535.333	P <sub>1</sub>	0.29	0.29		0.18	0.18		0.09	0.09			
	M <sub>2</sub>	497	497		613	613		613	613			
576.720	P <sub>1</sub>	0.27	0.27		0.16	0.16		0.08	0.08			
	M <sub>2</sub>	498	498		614	614		614	614			
649.700	P <sub>1</sub>	0.24	0.24		0.15	0.15		0.07	0.07			
	M <sub>2</sub>	499	499		615	615		615	615			
759.806	P <sub>1</sub>	0.17			0.11			0.05				
	M <sub>2</sub>	425			524			524				
855.954	P <sub>1</sub>	0.16			0.10			0.05				
	M <sub>2</sub>	457			563			563				

Thermal power limit not considered (see page 2-4)





$M_2 \leq 1378 \text{ Nm}$

GFL 07 - 2 W												Dimensions page 4-132			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$\frac{P_{1perm}}{M_{2perm}}$ [kW] [Nm]														
3.350	P <sub>1</sub>			26.2	43.4			16.1	26.7			8.07	13.4		
	M <sub>2</sub>			290	481			358	593			358	593		
4.643	P <sub>1</sub>			26.2	34.5			16.1	21.3			8.07	10.6		
	M <sub>2</sub>			403	530			496	653			496	653		
5.159	P <sub>1</sub>			26.2	40.4			16.1	24.9			8.07	12.4		
	M <sub>2</sub>			447	690			551	850			551	850		
5.695	P <sub>1</sub>			26.2	39.4			16.1	24.3			8.07	12.1		
	M <sub>2</sub>			494	742			608	914			608	914		
6.400	P <sub>1</sub>		14.2	21.4	25.4		8.73	13.2	15.6		4.37	6.60	7.82		
	M <sub>2</sub>		300	454	538		370	559	662		370	559	662		
7.150	P <sub>1</sub>			26.2	31.5			16.1	19.4			8.07	9.70		
	M <sub>2</sub>			620	746			763	918			763	918		
8.324	P <sub>1</sub>			26.2	29.3			16.1	18.0			8.07	9.01		
	M <sub>2</sub>			722	807			889	993			889	993		
9.379	P <sub>1</sub>			26.2	26.2			16.1	16.1			8.05	8.05		
	M <sub>2</sub>			812	812			999	999			999	999		
9.714	P <sub>1</sub>		15.3	23.0	24.5		9.39	14.2	15.1		4.69	7.09	7.53		
	M <sub>2</sub>		490	740	787		604	911	969		604	911	969		
11.538	P <sub>1</sub>			23.0	23.0			14.2	14.2			7.07	7.07		
	M <sub>2</sub>			877	877			1080	1080			1080	1080		
13.000	P <sub>1</sub>			20.6	20.6			12.7	12.7			6.33	6.33		
	M <sub>2</sub>			884	884			1089	1089			1089	1089		
14.200	P <sub>1</sub>		15.3	19.8	19.8		9.39	12.2	12.2		4.69	6.08	6.08		
	M <sub>2</sub>		717	929	929		882	1143	1143		882	1143	1143		
15.904	P <sub>1</sub>		14.2	18.2	18.2		8.73	11.2	11.2		4.37	5.60	5.60		
	M <sub>2</sub>		747	957	957		919	1179	1179		919	1179	1179		
17.920	P <sub>1</sub>		14.2	16.3	16.3		8.73	10.0	10.0		4.37	5.01	5.01		
	M <sub>2</sub>		841	966	966		1036	1189	1189		1036	1189	1189		
20.286	P <sub>1</sub>	7.37	12.0	15.3	15.3	4.54	7.38	9.40	9.40	2.27	3.69	4.70	4.70		
	M <sub>2</sub>	495	804	1025	1025	609	990	1262	1262	609	990	1262	1262		
22.857	P <sub>1</sub>	7.37	12.0	13.3	13.3	4.54	7.38	8.20	8.20	2.27	3.69	4.10	4.10		
	M <sub>2</sub>	558	906	1007	1007	687	1116	1240	1240	687	1116	1240	1240		
24.850	P <sub>1</sub>		10.3	13.2	13.2		6.35	8.13	8.13		3.18	4.06	4.06		
	M <sub>2</sub>		848	1086	1086		1044	1337	1337		1044	1337	1337		
28.000	P <sub>1</sub>		10.3	10.9	10.9		6.35	6.70	6.70		3.18	3.35	3.35		
	M <sub>2</sub>		956	1009	1009		1177	1242	1242		1177	1242	1242		
32.344	P <sub>1</sub>	5.17	8.35	10.4		3.18	5.14	6.40		1.59	2.57	3.20			
	M <sub>2</sub>	553	894	1113		681	1100	1370		681	1100	1370			
36.444	P <sub>1</sub>	5.17	8.35	8.40		3.18	5.14	5.17		1.59	2.57	2.59			
	M <sub>2</sub>	623	1007	1014		768	1240	1248		768	1240	1248			
39.642	P <sub>1</sub>	4.46	7.10	8.53		2.74	4.37	5.25		1.37	2.19	2.63			
	M <sub>2</sub>	584	932	1119		720	1147	1378		720	1147	1378			
44.667	P <sub>1</sub>	4.46	6.91	6.91		2.74	4.26	4.26		1.37	2.13	2.13			
	M <sub>2</sub>	659	1022	1022		811	1258	1258		811	1258	1258			
52.067	P <sub>1</sub>	3.51	5.60			2.16	3.45			1.08	1.72				
	M <sub>2</sub>	604	965			744	1188			744	1188				
58.667	P <sub>1</sub>	3.51	5.31			2.16	3.27			1.08	1.64				
	M <sub>2</sub>	681	1031			838	1270			838	1270				

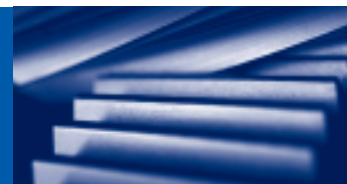
Thermal power limit not considered (see page 2-4)

$M_2 \text{ perm} \leq 1378 \text{ Nm}$

GFL 07 - 2 W												Dimensions page 4-132			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
63.190	$P_1$	2.94	4.71			1.81	2.90			0.90	1.45				
	$M_2$	614	984			756	1211			756	1211				
71.200	$P_1$	2.94	4.41			1.81	2.72			0.90	1.36				
	$M_2$	692	1040			852	1280			852	1280				
79.875	$P_1$	2.36				1.45				0.73					
	$M_2$	624				768				768					
90.000	$P_1$	2.36				1.45				0.73					
	$M_2$	703				865				865					

Thermal power limit not considered (see page 2-4)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)  
Gearbox with free input shaft



$M_2 \text{ perm} \leq 1378 \text{ Nm}$

GFL 07 - 3 W										Dimensions page 4-133
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D
i	$\frac{P_{1perm}}{M_{2perm}}$ [kW] [Nm]									
65.306	P <sub>1</sub>	2.31	3.26	3.37	1.42	2.01	2.07	0.71	1.00	1.04
	M <sub>2</sub>	492	693	717	605	854	883	605	854	883
72.452	P <sub>1</sub>	2.36	2.99	2.99	1.45	1.84	1.84	0.73	0.92	0.92
	M <sub>2</sub>	557	706	706	686	869	869	686	869	869
81.636	P <sub>1</sub>	2.36	2.99	2.99	1.45	1.84	1.84	0.73	0.92	0.92
	M <sub>2</sub>	628	795	795	773	979	979	773	979	979
92.413	P <sub>1</sub>	2.31	2.59	2.59	1.42	1.60	1.60	0.71	0.80	0.80
	M <sub>2</sub>	696	780	780	857	961	961	857	961	961
104.127	P <sub>1</sub>	2.31	2.59	2.59	1.42	1.60	1.60	0.71	0.80	0.80
	M <sub>2</sub>	784	879	879	965	1082	1082	965	1082	1082
113.206	P <sub>1</sub>		2.29	2.29		1.41	1.41		0.70	0.70
	M <sub>2</sub>		844	844		1040	1040		1040	1040
127.556	P <sub>1</sub>		2.29	2.29		1.41	1.41		0.70	0.70
	M <sub>2</sub>		951	951		1171	1171		1171	1171
147.347	P <sub>1</sub>	1.61	1.93	1.93	0.99	1.19	1.19	0.50	0.59	0.59
	M <sub>2</sub>	773	926	926	951	1140	1140	951	1140	1140
166.025	P <sub>1</sub>	1.61	1.87	1.87	0.99	1.15	1.15	0.50	0.58	0.58
	M <sub>2</sub>	871	1014	1014	1072	1248	1248	1072	1248	1248
183.285	P <sub>1</sub>	1.35	1.68	1.68	0.83	1.03	1.03	0.42	0.52	0.52
	M <sub>2</sub>	806	1003	1003	993	1236	1236	993	1236	1236
206.519	P <sub>1</sub>	1.35	1.51	1.51	0.83	0.93	0.93	0.42	0.46	0.46
	M <sub>2</sub>	909	1014	1014	1119	1248	1248	1119	1248	1248
224.636	P <sub>1</sub>	1.35	1.49	1.49	0.83	0.92	0.92	0.42	0.46	0.46
	M <sub>2</sub>	988	1091	1091	1217	1343	1343	1217	1343	1343
253.111	P <sub>1</sub>	1.24	1.24	1.24	0.76	0.76	0.76	0.38	0.38	0.38
	M <sub>2</sub>	1022	1022	1022	1258	1258	1258	1258	1258	1258
290.706	P <sub>1</sub>	1.09	1.18		0.67	0.73		0.34	0.36	
	M <sub>2</sub>	1030	1119		1268	1378		1268	1378	
327.556	P <sub>1</sub>	0.96	0.96		0.59	0.59		0.30	0.30	
	M <sub>2</sub>	1022	1022		1258	1258		1258	1258	
352.811	P <sub>1</sub>	0.91	0.97		0.56	0.60		0.28	0.30	
	M <sub>2</sub>	1045	1119		1287	1378		1287	1378	
397.533	P <sub>1</sub>	0.79	0.79		0.49	0.49		0.24	0.24	
	M <sub>2</sub>	1022	1022		1258	1258		1258	1258	
430.222	P <sub>1</sub>	0.74	0.74		0.45	0.45		0.23	0.23	
	M <sub>2</sub>	1031	1031		1270	1270		1270	1270	
522.133	P <sub>1</sub>	0.61	0.61		0.37	0.37		0.19	0.19	
	M <sub>2</sub>	1031	1031		1270	1270		1270	1270	
562.391	P <sub>1</sub>	0.50	0.50		0.31	0.31		0.15	0.15	
	M <sub>2</sub>	916	916		1128	1128		1128	1128	
633.680	P <sub>1</sub>	0.48	0.48		0.30	0.30		0.15	0.15	
	M <sub>2</sub>	991	991		1220	1220		1220	1220	
718.786	P <sub>1</sub>	0.39			0.24			0.12		
	M <sub>2</sub>	916			1128			1128		
809.900	P <sub>1</sub>	0.38			0.23			0.12		
	M <sub>2</sub>	991			1220			1220		

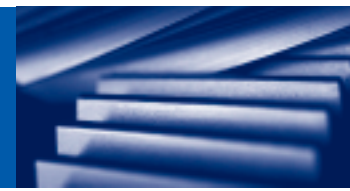
Thermal power limit not considered (see page 2-4)

$M_2 \text{ perm} \leq 3107 \text{ Nm}$

GFL 09 - 2 W												Dimensions page 4-132			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
6.864	P <sub>1</sub>			54.6	74.7			33.6	46.0			16.8	23.0		
	M <sub>2</sub>			1241	1697			1528	2089			1528	2089		
7.466	P <sub>1</sub>			54.6	70.9			33.6	43.6			16.8	21.8		
	M <sub>2</sub>			1350	1751			1662	2156			1662	2156		
9.010	P <sub>1</sub>		28.4	46.3	60.8		17.5	28.5	37.4		8.73	14.2	18.7		
	M <sub>2</sub>		846	1379	1811		1041	1698	2230		1041	1698	2230		
9.799	P <sub>1</sub>		28.4	46.3	57.9		17.5	28.5	35.6		8.73	14.2	17.8		
	M <sub>2</sub>		920	1500	1876		1133	1847	2310		1133	1847	2310		
11.167	P <sub>1</sub>		25.6	42.5	50.6		15.8	26.1	31.2		7.88	13.1	15.6		
	M <sub>2</sub>		946	1569	1870		1165	1932	2303		1165	1932	2303		
12.307	P <sub>1</sub>			44.3	44.3			27.3	27.3			13.7	13.7		
	M <sub>2</sub>			1806	1806			2223	2223			2223	2223		
14.333	P <sub>1</sub>		28.4	40.7	40.7		17.5	25.0	25.0		8.73	12.5	12.5		
	M <sub>2</sub>		1345	1928	1928		1657	2374	2374		1657	2374	2374		
16.333	P <sub>1</sub>		25.6	37.0	37.0		15.8	22.8	22.8		7.88	11.4	11.4		
	M <sub>2</sub>		1384	1998	1998		1704	2461	2461		1704	2461	2461		
18.407	P <sub>1</sub>		25.6	33.1	33.1		15.8	20.4	20.4		7.88	10.2	10.2		
	M <sub>2</sub>		1559	2014	2014		1920	2479	2479		1920	2479	2479		
19.667	P <sub>1</sub>	14.9	22.5	32.0	32.0	9.16	13.9	19.7	19.7	4.58	6.93	9.85	9.85		
	M <sub>2</sub>	969	1464	2082	2082	1193	1803	2563	2563	1193	1803	2563	2563		
22.164	P <sub>1</sub>	14.9	22.5	28.9	28.9	9.16	13.9	17.8	17.8	4.58	6.93	8.90	8.90		
	M <sub>2</sub>	1092	1650	2121	2121	1344	2031	2612	2612	1344	2031	2612	2612		
24.111	P <sub>1</sub>		19.4	27.7	27.7		11.9	17.1	17.1		5.96	8.53	8.53		
	M <sub>2</sub>		1545	2211	2211		1902	2722	2722		1902	2722	2722		
27.173	P <sub>1</sub>		19.4	25.0	25.0		11.9	15.4	15.4		5.96	7.69	7.69		
	M <sub>2</sub>		1741	2247	2247		2143	2767	2767		2143	2767	2767		
32.667	P <sub>1</sub>	10.1	15.2	22.5		6.22	9.34	13.8		3.11	4.67	6.91			
	M <sub>2</sub>	1092	1640	2428		1344	2020	2990		1344	2020	2990			
36.815	P <sub>1</sub>	10.1	15.2	20.1		6.22	9.34	12.4		3.11	4.67	6.19			
	M <sub>2</sub>	1230	1848	2451		1515	2276	3018		1515	2276	3018			
39.667	P <sub>1</sub>	8.64	13.0	19.2		5.32	8.01	11.8		2.66	4.01	5.92			
	M <sub>2</sub>	1134	1708	2523		1396	2103	3107		1396	2103	3107			
44.704	P <sub>1</sub>	8.64	13.0	16.6		5.32	8.01	10.2		2.66	4.01	5.12			
	M <sub>2</sub>	1278	1925	2458		1573	2370	3027		1573	2370	3027			
51.333	P <sub>1</sub>	6.94	10.4			4.27	6.43			2.14	3.21				
	M <sub>2</sub>	1178	1774			1451	2184			1451	2184				
57.852	P <sub>1</sub>	6.94	10.4			4.27	6.43			2.14	3.21				
	M <sub>2</sub>	1328	1999			1635	2461			1635	2461				
62.300	P <sub>1</sub>	5.83	8.72			3.59	5.37			1.79	2.68				
	M <sub>2</sub>	1201	1797			1479	2213			1479	2213				
70.211	P <sub>1</sub>	5.83	8.72			3.59	5.37			1.79	2.68				
	M <sub>2</sub>	1354	2025			1667	2494			1667	2494				
78.750	P <sub>1</sub>	4.70				2.89				1.45					
	M <sub>2</sub>	1225				1508				1508					
88.750	P <sub>1</sub>	4.70				2.89				1.45					
	M <sub>2</sub>	1380				1700				1700					

Thermal power limit not considered (see page 2-4)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)  
Gearbox with free input shaft



$M_2 \text{ perm} \leq 3170 \text{ Nm}$

GFL 09 - 3 W												Dimensions page 4-133	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
63.326	P <sub>1</sub>	4.01	5.94	5.94	5.94	2.47	3.66	3.66	3.66	1.23	1.83	1.83	1.83
	M <sub>2</sub>	827	1226	1226	1226	1019	1510	1510	1510	1019	1510	1510	1510
73.173	P <sub>1</sub>		5.17	5.17	5.17		3.18	3.18	3.18		1.59	1.59	1.59
	M <sub>2</sub>		1232	1232	1232		1517	1517	1517		1517	1517	1517
82.465	P <sub>1</sub>		5.17	5.17	5.17		3.18	3.18	3.18		1.59	1.59	1.59
	M <sub>2</sub>		1389	1389	1389		1710	1710	1710		1710	1710	1710
93.333	P <sub>1</sub>	4.01	4.52	4.52	4.52	2.47	2.78	2.78	2.78	1.23	1.39	1.39	1.39
	M <sub>2</sub>	1219	1374	1374	1374	1502	1692	1692	1692	1502	1692	1692	1692
105.185	P <sub>1</sub>	4.01	4.52	4.52	4.52	2.47	2.78	2.78	2.78	1.23	1.39	1.39	1.39
	M <sub>2</sub>	1374	1549	1549	1549	1692	1907	1907	1907	1692	1907	1907	1907
114.333	P <sub>1</sub>		4.03	4.03	4.03		2.48	2.48	2.48		1.24	1.24	1.24
	M <sub>2</sub>		1500	1500	1500		1847	1847	1847		1847	1847	1847
128.852	P <sub>1</sub>		4.03	4.03	4.03		2.48	2.48	2.48		1.24	1.24	1.24
	M <sub>2</sub>		1691	1691	1691		2082	2082	2082		2082	2082	2082
148.815	P <sub>1</sub>	2.77	3.44	3.44		1.71	2.12	2.12		0.85	1.06	1.06	
	M <sub>2</sub>	1343	1667	1667		1654	2053	2053		1654	2053	2053	
167.712	P <sub>1</sub>	2.77	3.44	3.44		1.71	2.12	2.12		0.85	1.06	1.06	
	M <sub>2</sub>	1514	1879	1879		1864	2314	2314		1864	2314	2314	
185.111	P <sub>1</sub>	2.32	3.00	3.00		1.43	1.85	1.85		0.71	0.93	0.93	
	M <sub>2</sub>	1397	1812	1812		1720	2231	2231		1720	2231	2231	
208.617	P <sub>1</sub>	2.32	3.00	3.00		1.43	1.85	1.85		0.71	0.93	0.93	
	M <sub>2</sub>	1575	2042	2042		1939	2515	2515		1939	2515	2515	
224.778	P <sub>1</sub>	2.32	2.67	2.67		1.43	1.64	1.64		0.71	0.82	0.82	
	M <sub>2</sub>	1696	1955	1955		2089	2407	2407		2089	2407	2407	
253.321	P <sub>1</sub>	2.32	2.67	2.67		1.43	1.64	1.64		0.71	0.82	0.82	
	M <sub>2</sub>	1912	2203	2203		2354	2712	2712		2354	2712	2712	
290.889	P <sub>1</sub>	1.79	2.26			1.10	1.39			0.55	0.70		
	M <sub>2</sub>	1695	2144			2087	2640			2087	2640		
327.827	P <sub>1</sub>	1.79	2.26			1.10	1.39			0.55	0.70		
	M <sub>2</sub>	1910	2417			2352	2975			2352	2975		
353.033	P <sub>1</sub>	1.55	1.99			0.96	1.22			0.48	0.61		
	M <sub>2</sub>	1785	2285			2197	2813			2197	2813		
397.863	P <sub>1</sub>	1.55	1.99			0.96	1.22			0.48	0.61		
	M <sub>2</sub>	2011	2575			2476	3170			2476	3170		
424.247	P <sub>1</sub>	1.60	1.60			0.99	0.99			0.49	0.49		
	M <sub>2</sub>	2212	2212			2724	2724			2724	2724		
514.881	P <sub>1</sub>	1.32	1.32			0.81	0.81			0.41	0.41		
	M <sub>2</sub>	2212	2212			2724	2724			2724	2724		
554.470	P <sub>1</sub>	0.95	0.95			0.58	0.58			0.29	0.29		
	M <sub>2</sub>	1716	1716			2113	2113			2113	2113		
624.879	P <sub>1</sub>	0.91	0.91			0.56	0.56			0.28	0.28		
	M <sub>2</sub>	1846	1846			2273	2273			2273	2273		
700.875	P <sub>1</sub>	0.75				0.46				0.23			
	M <sub>2</sub>	1716				2113				2113			
789.875	P <sub>1</sub>	0.72				0.44				0.22			
	M <sub>2</sub>	1846				2273				2273			

Thermal power limit not considered (see page 2-4)

## Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

### Gearbox with free input shaft

$M_2 \text{ perm} \leq 5159 \text{ Nm}$

<b>GFL 11 - 2 W</b>												Dimensions page 4-132			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1F	1G	1H	1K	1F	1G	1H	1K	1F	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
6.864	$P_1$			105.5	120.3			65.0	74.1			32.5	37.0		
	$M_2$			2397	2732			2951	3364			2951	3364		
7.466	$P_1$			105.5	116.1			65.0	71.5			32.5	35.8		
	$M_2$			2607	2869			3210	3533			3210	3533		
9.010	$P_1$			93.5	101.8			57.6	62.7			28.8	31.3		
	$M_2$			2787	3034			3432	3736			3432	3736		
9.799	$P_1$			93.5	94.4			57.6	58.1			28.8	29.0		
	$M_2$			3032	3060			3733	3767			3733	3767		
10.720	$P_1$		53.6	87.4	87.4		33.0	53.8	53.8		16.5	26.9	26.9		
	$M_2$		1900	3101	3101		2339	3818	3818		2339	3818	3818		
12.480	$P_1$			68.2	68.2			42.0	42.0			21.0	21.0		
	$M_2$			2815	2815			3466	3466			3466	3466		
14.538	$P_1$			62.8	62.8			38.6	38.6			19.3	19.3		
	$M_2$			3020	3020			3718	3718			3718	3718		
15.904	$P_1$		53.6	58.6	58.6		33.0	36.1	36.1		16.5	18.1	18.1		
	$M_2$		2818	3086	3086		3470	3800	3800		3470	3800	3800		
17.920	$P_1$		51.9	51.9	51.9		32.0	32.0	32.0		16.0	16.0	16.0		
	$M_2$		3077	3077	3077		3789	3789	3789		3789	3789	3789		
20.286	$P_1$	27.3	45.3	48.9	48.9	16.8	27.9	30.1	30.1	8.40	14.0	15.1	15.1		
	$M_2$	1832	3044	3285	3285	2255	3747	4045	4045	2255	3747	4045	4045		
22.857	$P_1$	27.3	43.4	43.4	43.4	16.8	26.7	26.7	26.7	8.40	13.3	13.3	13.3		
	$M_2$	2064	3279	3279	3279	2541	4037	4037	4037	2541	4037	4037	4037		
24.850	$P_1$		39.1	42.2	42.2		24.1	26.0	26.0		12.0	13.0	13.0		
	$M_2$		3213	3466	3466		3956	4268	4268		3956	4268	4268		
28.000	$P_1$		37.4	37.4	37.4		23.0	23.0	23.0		11.5	11.5	11.5		
	$M_2$		3462	3462	3462		4263	4263	4263		4263	4263	4263		
32.739	$P_1$	19.0	31.5	34.5		11.7	19.4	21.2		5.85	9.70	10.6			
	$M_2$	2057	3413	3738		2533	4202	4603		2533	4202	4603			
36.889	$P_1$	19.0	30.6	30.6		11.7	18.8	18.8		5.85	9.42	9.42			
	$M_2$	2318	3737	3737		2854	4601	4601		2854	4601	4601			
40.233	$P_1$	15.9	26.4	29.8		9.77	16.3	18.3		4.89	8.13	9.17			
	$M_2$	2113	3517	3965		2602	4330	4882		2602	4330	4882			
45.333	$P_1$	15.9	26.4	26.4		9.77	16.3	16.3		4.89	8.13	8.13			
	$M_2$	2381	3963	3964		2932	4879	4881		2932	4879	4881			
52.067	$P_1$	12.8	21.2			7.85	13.1			3.93	6.54				
	$M_2$	2197	3658			2705	4504			2705	4504				
58.667	$P_1$	12.8	21.2			7.85	13.1			3.93	6.54				
	$M_2$	2476	4121			3048	5074			3048	5074				
63.190	$P_1$	10.7	17.8			6.55	11.0			3.28	5.47				
	$M_2$	2226	3719			2741	4579			2741	4579				
71.200	$P_1$	10.7	17.8			6.55	11.0			3.28	5.47				
	$M_2$	2508	4190			3089	5159			3089	5159				
79.875	$P_1$	8.54				5.26				2.63					
	$M_2$	2257				2779				2779					
90.000	$P_1$	8.54				5.26				2.63					
	$M_2$	2543				3131				3131					

Thermal power limit not considered (see page 2-4)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)  
Gearbox with free input shaft



$M_2 \text{ perm} \leq 5952 \text{ Nm}$

GFL 11 - 3 W												Dimensions page 4-133	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
65.306	P <sub>1</sub>	7.37	11.0	11.0	11.0	4.54	6.79	6.79	6.79	2.27	3.40	3.40	3.40
	M <sub>2</sub>	1569	2348	2348	2348	1932	2891	2891	2891	1932	2891	2891	2891
73.335	P <sub>1</sub>		9.77	9.77	9.77		6.01	6.01	6.01		3.01	3.01	3.01
	M <sub>2</sub>		2335	2335	2335		2875	2875	2875		2875	2875	2875
82.631	P <sub>1</sub>		9.77	9.77	9.77		6.01	6.01	6.01		3.01	3.01	3.01
	M <sub>2</sub>		2631	2631	2631		3240	3240	3240		3240	3240	3240
93.540	P <sub>1</sub>	7.37	8.54	8.54	8.54	4.54	5.26	5.26	5.26	2.27	2.63	2.63	2.63
	M <sub>2</sub>	2248	2604	2604	2604	2768	3206	3206	3206	2768	3206	3206	3206
105.397	P <sub>1</sub>	7.37	8.54	8.54	8.54	4.54	5.26	5.26	5.26	2.27	2.63	2.63	2.63
	M <sub>2</sub>	2533	2934	2934	2934	3118	3613	3613	3613	3118	3613	3613	3613
114.586	P <sub>1</sub>		7.61	7.61	7.61		4.69	4.69	4.69		2.34	2.34	2.34
	M <sub>2</sub>		2843	2843	2843		3501	3501	3501		3501	3501	3501
129.111	P <sub>1</sub>		7.61	7.61	7.61		4.69	4.69	4.69		2.34	2.34	2.34
	M <sub>2</sub>		3204	3204	3204		3945	3945	3945		3945	3945	3945
149.144	P <sub>1</sub>	5.17	6.51	6.51		3.18	4.01	4.01		1.59	2.00	2.00	
	M <sub>2</sub>	2513	3162	3162		3094	3894	3894		3094	3894	3894	
168.049	P <sub>1</sub>	5.17	6.51	6.51		3.18	4.01	4.01		1.59	2.00	2.00	
	M <sub>2</sub>	2832	3563	3563		3487	4387	4387		3487	4387	4387	
182.792	P <sub>1</sub>	4.46	5.77	5.77		2.74	3.55	3.55		1.37	1.78	1.78	
	M <sub>2</sub>	2655	3437	3437		3268	4232	4232		3268	4232	4232	
205.963	P <sub>1</sub>	4.46	5.77	5.77		2.74	3.55	3.55		1.37	1.78	1.78	
	M <sub>2</sub>	2991	3873	3873		3683	4769	4769		3683	4769	4769	
224.636	P <sub>1</sub>	4.46	5.02	5.02		2.74	3.09	3.09		1.37	1.54	1.54	
	M <sub>2</sub>	3262	3674	3674		4017	4523	4523		4017	4523	4523	
253.111	P <sub>1</sub>	4.46	5.02	5.02		2.74	3.09	3.09		1.37	1.54	1.54	
	M <sub>2</sub>	3676	4139	4139		4526	5097	5097		4526	5097	5097	
267.259	P <sub>1</sub>	4.76	4.76	4.76		2.93	2.93	2.93		1.47	1.47	1.47	
	M <sub>2</sub>	4147	4147	4147		5106	5106	5106		5106	5106	5106	
327.556	P <sub>1</sub>	4.20	4.20	4.20		2.59	2.59	2.59		1.29	1.29	1.29	
	M <sub>2</sub>	4485	4485	4485		5523	5523	5523		5523	5523	5523	
358.077	P <sub>1</sub>	2.94	3.68			1.81	2.26			0.90	1.13		
	M <sub>2</sub>	3426	4290			4219	5283			4219	5283		
403.467	P <sub>1</sub>	2.94	3.68			1.81	2.26			0.90	1.13		
	M <sub>2</sub>	3861	4834			4753	5952			4753	5952		
430.222	P <sub>1</sub>	3.44	3.44			2.12	2.12			1.06	1.06		
	M <sub>2</sub>	4826	4826			5942	5942			5942	5942		
522.133	P <sub>1</sub>	2.84	2.84			1.75	1.75			0.87	0.87		
	M <sub>2</sub>	4826	4826			5942	5942			5942	5942		
562.391	P <sub>1</sub>	2.36	2.36			1.45	1.45			0.73	0.73		
	M <sub>2</sub>	4320	4320			5319	5319			5319	5319		
633.680	P <sub>1</sub>	2.30	2.30			1.42	1.42			0.71	0.71		
	M <sub>2</sub>	4746	4746			5844	5844			5844	5844		
710.888	P <sub>1</sub>	1.86				1.15				0.57			
	M <sub>2</sub>	4320				5319				5319			
801.000	P <sub>1</sub>	1.82				1.12				0.56			
	M <sub>2</sub>	4746				5844				5844			

Thermal power limit not considered (see page 2-4)

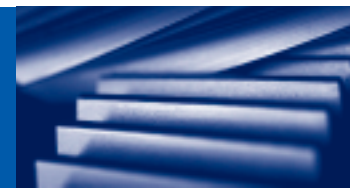
$M_2 \text{ perm} \leq 11344 \text{ Nm}$

GFL 14 - 2 W										Dimensions page 4-132		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1G	1H	1K	1G	1H	1K	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
7.150	$P_1$			187.3			115.3			57.7		
	$M_2$			4432			5458			5458		
7.777	$P_1$			187.3			115.3			57.7		
	$M_2$			4821			5936			5936		
8.800	$P_1$		107.8	179.3		66.4	110.4		33.2	55.2		
	$M_2$		3139	5222		3865	6430		3865	6430		
9.571	$P_1$		107.8	179.3		66.4	110.4		33.2	55.2		
	$M_2$		3414	5680		4204	6993		4204	6993		
11.538	$P_1$			176.0			108.3			54.2		
	$M_2$			6718			8272			8272		
13.000	$P_1$			159.6			98.3			49.1		
	$M_2$			6868			8456			8456		
14.200	$P_1$		107.8	152.7		66.4	94.0		33.2	47.0		
	$M_2$		5065	7173		6236	8832		6236	8832		
15.620	$P_1$		105.5	142.9		65.0	88.0		32.5	44.0		
	$M_2$		5454	7387		6715	9095		6715	9095		
17.600	$P_1$		105.5	129.0		65.0	79.4		32.5	39.7		
	$M_2$		6145	7511		7566	9248		7566	9248		
19.948	$P_1$		91.0	120.7		56.0	74.3		28.0	37.2		
	$M_2$		6009	7969		7399	9812		7399	9812		
22.476	$P_1$		91.0	108.1		56.0	66.5		28.0	33.3		
	$M_2$		6771	8037		8337	9896		8337	9896		
24.456	$P_1$		78.6	104.2		48.4	64.2		24.2	32.1		
	$M_2$		6359	8436		7830	10387		7830	10387		
27.556	$P_1$		78.6	93.3		48.4	57.5		24.2	28.7		
	$M_2$		7165	8511		8823	10480		8823	10480		
32.344	$P_1$	38.1	63.0	84.7	23.4	38.8	52.1	11.7	19.4	26.1		
	$M_2$	4073	6739	9063	5015	8297	11159	5015	8297	11159		
36.444	$P_1$	38.1	63.0	76.4	23.4	38.8	47.0	11.7	19.4	23.5		
	$M_2$	4589	7593	9213	5650	9349	11344	5650	9349	11344		
39.642	$P_1$	32.6	53.8		20.0	33.2		10.0	16.6			
	$M_2$	4270	7063		5258	8696		5258	8696			
44.667	$P_1$	32.6	53.8		20.0	33.2		10.0	16.6			
	$M_2$	4811	7958		5924	9798		5924	9798			
52.067	$P_1$	25.7	42.4		15.8	26.1		7.90	13.1			
	$M_2$	4420	7303		5443	8992		5443	8992			
58.667	$P_1$	25.7	42.4		15.8	26.1		7.90	13.1			
	$M_2$	4981	8229		6133	10132		6133	10132			
63.190	$P_1$	21.5	35.6		13.2	21.9		6.62	10.9			
	$M_2$	4497	7434		5537	9153		5537	9153			
71.200	$P_1$	21.5	35.6		13.2	21.9		6.62	10.9			
	$M_2$	5067	8376		6239	10314		6239	10314			
79.875	$P_1$	17.3			10.7			5.33				
	$M_2$	4577			5636			5636				
90.000	$P_1$	17.3			10.7			5.33				
	$M_2$	5157			6350			6350				

Thermal power limit not considered (see page 2-4)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)  
Gearbox with free input shaft

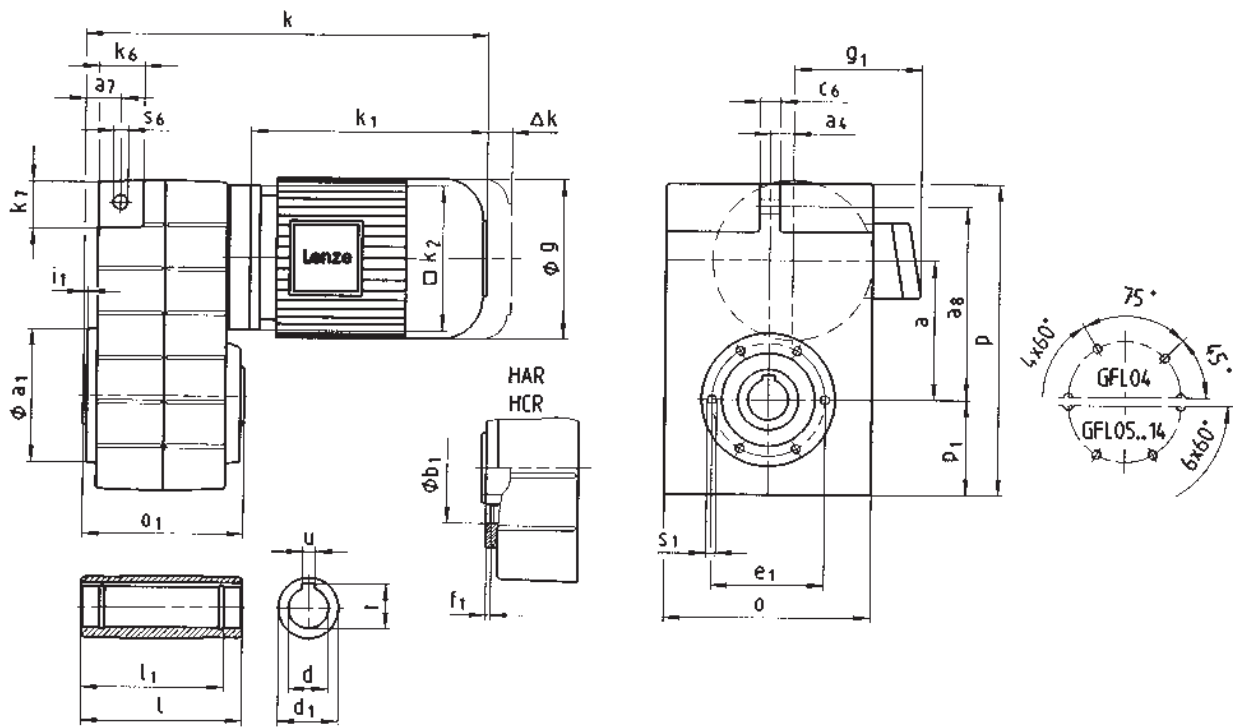


$M_2 \text{ perm} \leq 11615 \text{ Nm}$

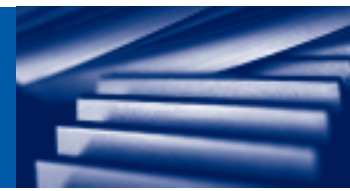
GFL 14 - 3 W												Dimensions page 4-133	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H
i	$\frac{P_{1perm}}{M_{2perm}}$ [kW] [Nm]												
64.296	P <sub>1</sub>		21.7	21.7	21.7		13.4	13.4	13.4		6.69	6.69	6.69
	M <sub>2</sub>		4556	4556	4556		5609	5609	5609		5609	5609	5609
68.708	P <sub>1</sub>	14.9	19.6	19.6	19.6	9.16	12.1	12.1	12.1	4.58	6.05	6.05	6.05
	M <sub>2</sub>	3333	4399	4399	4399	4104	5416	5416	5416	4104	5416	5416	5416
77.418	P <sub>1</sub>	14.9	19.6	19.6	19.6	9.16	12.1	12.1	12.1	4.58	6.05	6.05	6.05
	M <sub>2</sub>	3756	4956	4956	4956	4624	6102	6102	6102	4624	6102	6102	6102
85.037	P <sub>1</sub>		18.4	18.4	18.4		11.3	11.3	11.3		5.66	5.66	5.66
	M <sub>2</sub>		5097	5097	5097		6276	6276	6276		6276	6276	6276
104.889	P <sub>1</sub>	10.1	15.2	16.4		6.22	9.34	10.1		3.11	4.67	5.04	
	M <sub>2</sub>	3453	5188	5594		4251	6387	6888		4251	6387	6888	
114.126	P <sub>1</sub>	10.1	14.7	14.7		6.22	9.03	9.03		3.11	4.52	4.52	
	M <sub>2</sub>	3757	5457	5457		4626	6719	6719		4626	6719	6719	
128.593	P <sub>1</sub>	10.1	14.7	14.7		6.22	9.03	9.03		3.11	4.52	4.52	
	M <sub>2</sub>	4233	6149	6149		5212	7571	7571		5212	7571	7571	
136.889	P <sub>1</sub>		13.4	13.4	13.4		8.25	8.25	8.25		4.12	4.12	4.12
	M <sub>2</sub>		5976	5976	5976		7359	7359	7359		7359	7359	7359
156.148	P <sub>1</sub>	8.64	13.0	13.1		5.32	8.01	8.08		2.66	4.01	4.04	
	M <sub>2</sub>	4396	6623	6682		5412	8155	8227		5412	8155	8227	
170.074	P <sub>1</sub>	10.1	12.3	12.3		6.22	7.58	7.58		3.11	3.79	3.79	
	M <sub>2</sub>	5598	6828	6828		6893	8408	8408		6893	8408	8408	
202.074	P <sub>1</sub>	6.94	10.4			4.27	6.43			2.14	3.21		
	M <sub>2</sub>	4569	6878			5625	8468			5625	8468		
224.636	P <sub>1</sub>	8.64	9.69	9.69		5.32	5.97	5.97		2.66	2.98	2.98	
	M <sub>2</sub>	6324	7097	7097		7786	8739	8739		7786	8739	8739	
253.111	P <sub>1</sub>	8.64	9.69	9.69		5.32	5.97	5.97		2.66	2.98	2.98	
	M <sub>2</sub>	7125	7997	7997		8773	9846	9846		8773	9846	9846	
273.778	P <sub>1</sub>	8.88	8.88	8.88		5.46	5.46	5.46		2.73	2.73	2.73	
	M <sub>2</sub>	7921	7921	7921		9753	9753	9753		9753	9753	9753	
332.444	P <sub>1</sub>	7.91	7.91	7.91		4.87	4.87	4.87		2.43	2.43	2.43	
	M <sub>2</sub>	8568	8568	8568		10550	10550	10550		10550	10550	10550	
352.811	P <sub>1</sub>	5.83	7.34			3.59	4.52			1.79	2.26		
	M <sub>2</sub>	6701	8437			8251	10389			8251	10389		
397.533	P <sub>1</sub>	5.83	7.28			3.59	4.48			1.79	2.24		
	M <sub>2</sub>	7550	9433			9296	11615			9296	11615		
430.222	P <sub>1</sub>	6.12	6.12			3.77	3.77			1.88	1.88		
	M <sub>2</sub>	8576	8576			10560	10560			10560	10560		
522.133	P <sub>1</sub>	5.04	5.04			3.10	3.10			1.55	1.55		
	M <sub>2</sub>	8576	8576			10560	10560			10560	10560		
562.391	P <sub>1</sub>	4.00	4.00			2.47	2.47			1.23	1.23		
	M <sub>2</sub>	7339	7339			9036	9036			9036	9036		
633.680	P <sub>1</sub>	3.86	3.86			2.38	2.38			1.19	1.19		
	M <sub>2</sub>	7968	7968			9811	9811			9811	9811		
710.888	P <sub>1</sub>	3.17				1.95				0.98			
	M <sub>2</sub>	7339				9036				9036			
801.000	P <sub>1</sub>	3.05				1.88				0.94			
	M <sub>2</sub>	7968				9811				9811			

Thermal power limit not considered (see page 2-4)

GFL □□ - 2 M HCR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor		Motor frame size																			
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22									
GFL □□ - 2 M HOR		063C32	071C42	080C42		100C32			132C32			180-32									
		063C42																			
Motor	g	123	138	156	176	196	220		261	310		355									
	g <sub>1</sub>	Without option		100	109	141	146	167		195	207		226								
		Brake motor		107	116	130	135	146		156	195		207								
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592									
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300									
	Δk **	Brake		40	52	73	70	79		90	109		83								
Separate fan		130	128	128	127	109		102	115		83										
Separate fan + brake		170	165	184	180	170		183	201		198										
Gearbox size	Gearbox						Total length														
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k														
04	148	115	214	69	90.5	12.5	312	332	354												
05	165	140	252	78	112.5	18.5	334	353	376	437	470										
06	206	160	315	98	140	22	347	366	389	450	483	499	543								
07	256	200	386	118	173	29			422	483	516	532	576	625	701	745					
09	318	240	486	149	220	37.5				517	550	566	610	659	735	779	852				
11	395	290	600	181	276.5	50					591	607	651	700	776	820	893				
14	490	350	740	228	339	65						652	696	745	821	865	938				

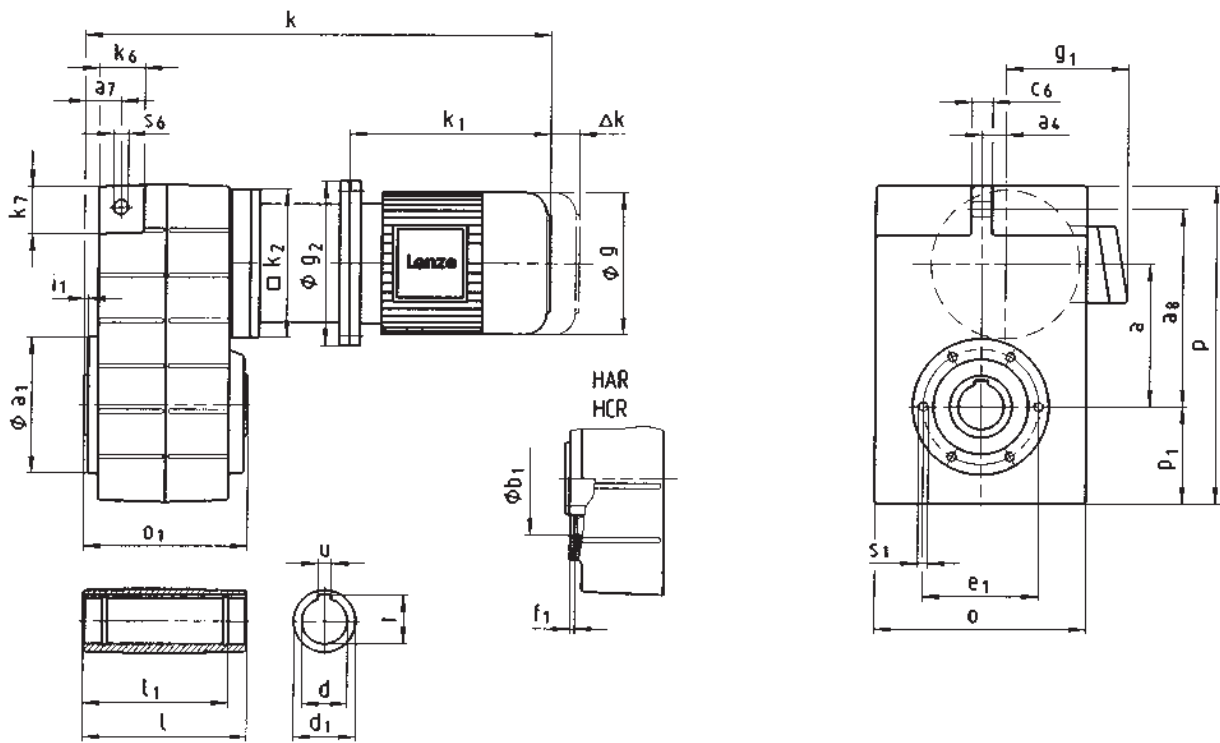
Gearbox size	Hollow shaft						Pitch circle						Torque plate					
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	l <sub>1</sub>	s <sub>1</sub>	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
04	25 30	115	45	100	8 8	28.3 33.3	110	75	90	3	2.5	M6x12	22.5	128	14	12.5	32	35
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114

Dimensions in [mm]

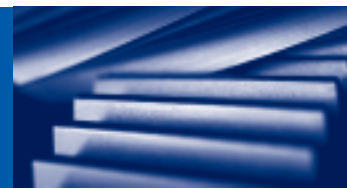
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

GFL □□ - 2 M HCR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



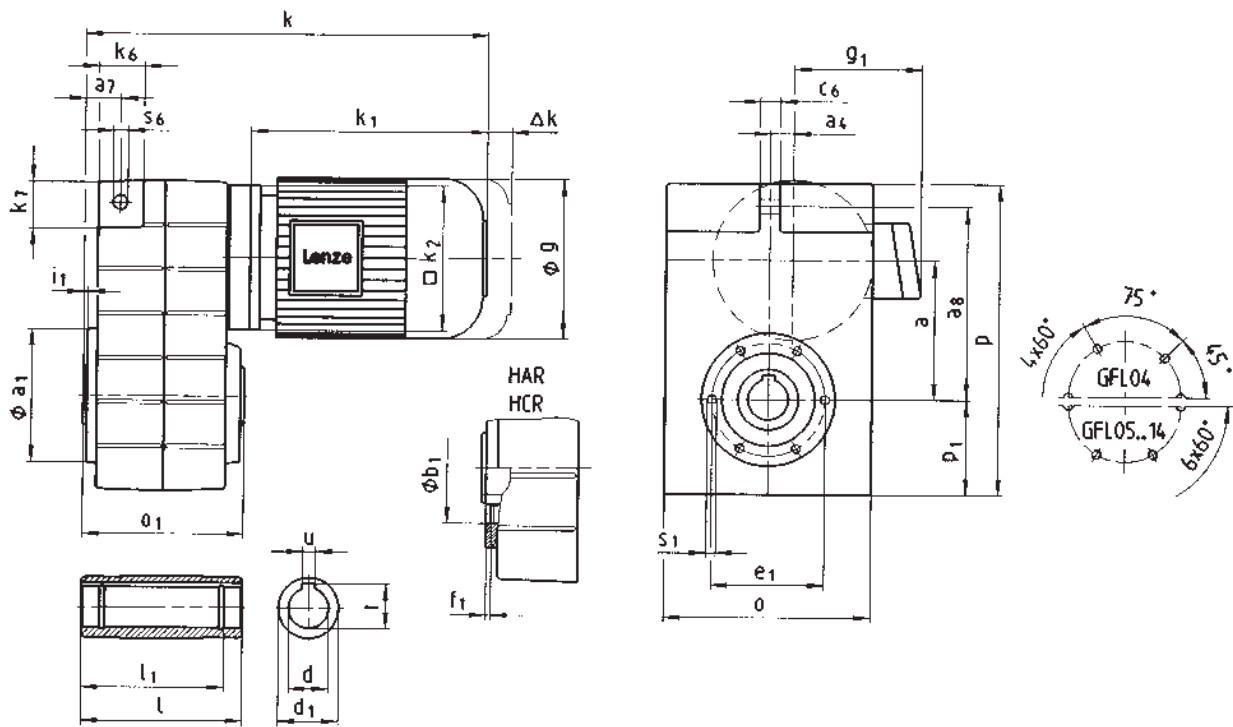
Geared motor <b>GFL □□ - 2 M HOR</b>		Motor frame size						
		200N32			225N12 225N22			
Motor	<b>g</b>	388					433	
	<b>g<sub>1</sub></b>	Without option					319	
		Brake motor					327	
	<b>g<sub>2</sub></b>	400					450	
	<b>k<sub>1</sub></b>	661					693	
	<b>k<sub>2</sub></b>	300					300	
	<b>Δk</b>	Brake					200	
		Separate fan					388	
Separate fan + brake					518			
Gearbox size	Gearbox						Total length	
	<b>o*</b>	<b>o<sub>1</sub></b>	<b>p*</b>	<b>p<sub>1</sub></b>	<b>a</b>	<b>a<sub>4</sub></b>	<b>k</b>	
<b>09</b>	318	240	486	149	220	37.5	1164	
<b>11</b>	395	290	600	181	276.5	50	1205	
<b>14</b>	490	350	740	228	339	65	1250	
							1267	
							1312	

Gearbox size	Hollow shaft						Pitch circle						Torque plate					
	<b>d</b> H7	<b>l</b>	<b>d<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>u</b> JS9	<b>t</b> +0.2	<b>a<sub>1</sub></b>	<b>b<sub>1</sub></b> H7	<b>e<sub>1</sub></b>	<b>f<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>s<sub>1</sub></b>	<b>a<sub>7</sub></b>	<b>a<sub>8</sub></b>	<b>c<sub>6</sub></b>	<b>s<sub>6</sub></b>	<b>k<sub>6</sub></b>	<b>k<sub>7</sub></b>
<b>09</b>	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70
<b>11</b>	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90
<b>14</b>	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114

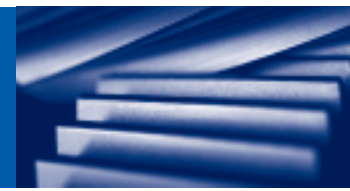
Dimensions in [mm]

\* Observe dimension  $k_2$

GFL □□ - 2 M HCR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



Geared motor		Motor frame size																		
<b>GFL □□ - 2 M HOR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21										
Motor	g	129		142	156	178	194		222	262										
	g <sub>1</sub>	Without option		105	131	141	158		165	197										
		Brake motor		105	131	140	159		165	197										
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409										
	k <sub>2</sub>	100		145	145	180	180		222	265										
	Δk **	Brake		56	66	68	74	94		101	127									
Separate fan		71	80	94	101	97		95	104											
Separate fan + brake		118	134	150	164	169		183	218											
Gearbox size	Gearbox						Total length													
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k													
04	148	115	214	69	90.5	12.5	292	303	305	354										
05	165	140	252	78	112.5	18.5			327	376	403	441	471							
06	206	160	315	98	140	22			340	389	416	454	484	503						
07	256	200	386	118	173	29			422		449	487	517	536	630					
09	318	240	486	149	220	37.5					483	521	551	570	664					
11	395	290	600	181	276.5	50					562		592	611	705					
14	490	350	740	228	339	65							656	750						

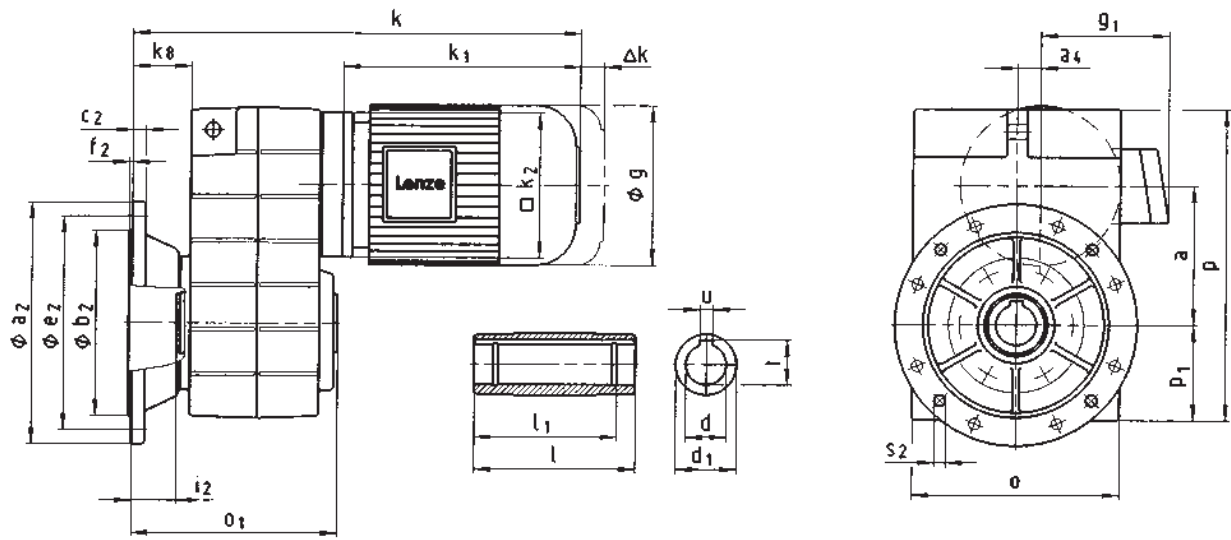
Gearbox size	Hollow shaft						Pitch circle						Torque plate					
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
04	25 30	115	45	100	8 8	28.3 33.3	110	75	90	3	2.5	M6x12	22.5	128	14	12.5	32	35
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

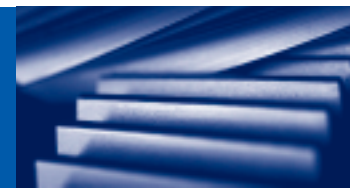
\*\* For additional attachments see section 8

GFL □□ - 2 M HCK





# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor		Motor frame size																						
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22												
<b>GFL □□ - 2 M HCK</b>		063C32	071C42	080C42		100C32			132C32			180-32												
Motor	g	123	138	156	176	196	220		261	310		355												
	g <sub>1</sub>	Without option		100	109	141	146	167		195	207		226											
		Brake motor		107	116	130	135	146		156	195		207	226										
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592												
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300												
	Δk **	Brake		40	52	73	70	79		90	109		83											
		Separate fan		130	128	128	127	109		102	115		83											
Separate fan + brake		170	165	184	180	170		183	201		198													
Gearbox size	Gearbox							Total length																
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>g</sub>	k																
04	148	148	214	69	90.5	12.5	41	345	365	387														
05	165	173	252	78	112.5	18.5	46	367	386	409	470	503												
06	206	201	315	98	140	22	55	388	407	430	491	524	540	584										
07	256	255	386	118	173	29	72			477	538	571	587	631	680	756	800							
09	318	300	486	149	220	37.5	77				577	610	626	670	719	795	839	912						
11	395	350	600	181	276.5	50	85					651	667	711	760	836	880	953						
14	490	410	740	228	339	65	89							712	756	805	881	925	998					

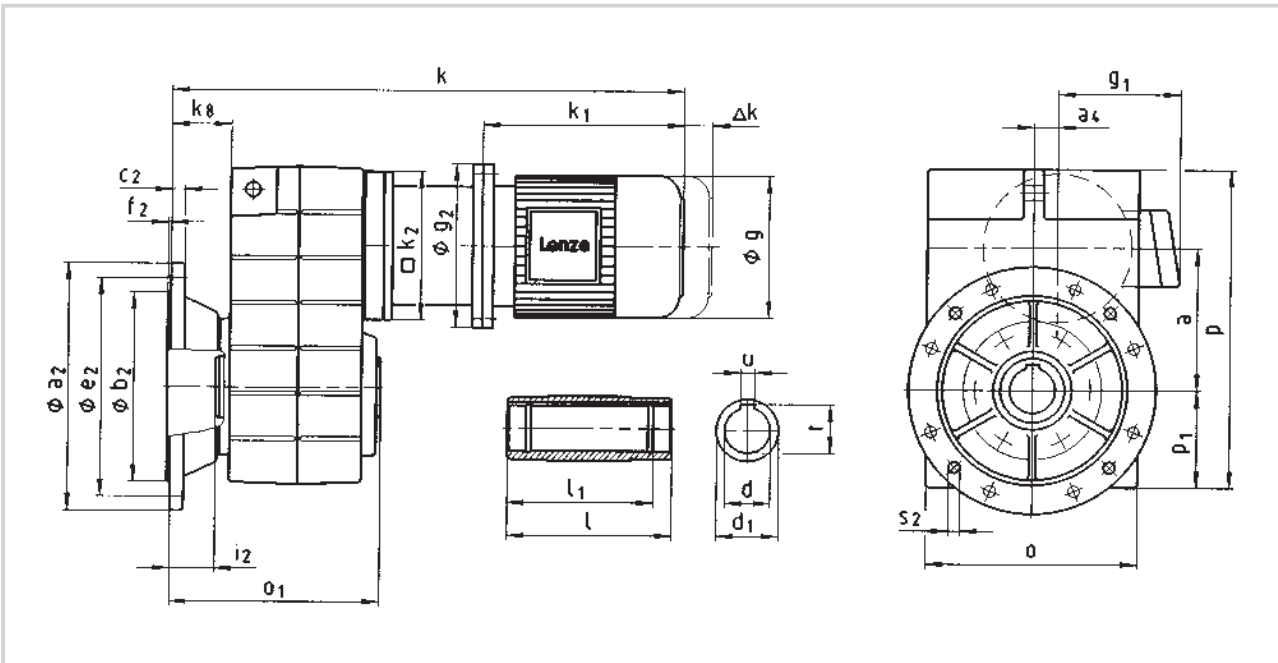
Gearbox size	Hollow shaft						Output flange							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9	
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14	
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14	
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5	
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5	
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



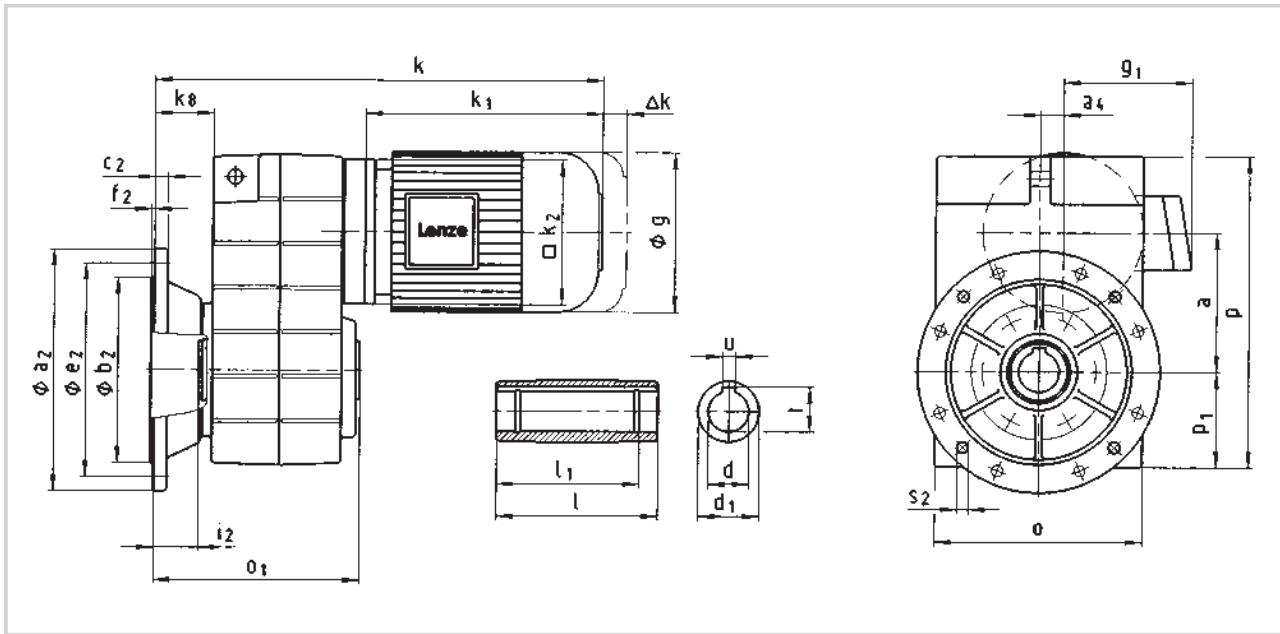
Geared motor		Motor frame size							
<b>GFLO□ - 2 M HCK</b>		<b>200N32</b>	<b>225N12 225N22</b>						
Motor	g	388	433						
	g <sub>1</sub>	Without option	291	319					
		Brake motor	309	327					
	g <sub>2</sub>	400	450						
	k <sub>1</sub>	661	693						
	k <sub>2</sub>	300	300						
	Δk	Brake	175	200					
		Separate fan	387	388					
Separate fan + brake		507	518						
Gearbox size	Gearbox							Total length	
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>g</sub>	k	
09	318	300	486	149	220	37.5	77	1224	
11	395	350	600	181	276.5	50	85	1265	
14	490	410	740	228	339	65	89	1310	

Gearbox size	Hollow shaft						Output flange							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
09	60	240	95	210	18	64.4	350	250	18	300	4	60	4 x 17.5	
	70													
11	70	290	105	250	20	74.9	400	300	20	350	5	60	4 x 17.5	
	80													
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GFL □□ - 2 M HCK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21						
Motor	g	129		142	156	178	194		222	262						
	g <sub>1</sub>	Without option		105	131	131	141	158		165	197					
		Brake motor		105	131	131	140	159		165	197					
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409						
	k <sub>2</sub>	100		145	145	180	180		222	265						
	Δk**	Brake		56	66	68	74	94		101	127					
Separate fan		71	80	94	101	97		95	104							
Separate fan + brake		118	134	150	164	169		183	218							
Gearbox size	Gearbox							Total length								
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>g</sub>	k								
04	148	148	214	69	90.5	12.5	41	325	336	338	387					
05	165	173	252	78	112.5	18.5	46			360	409	436	474	504		
06	206	201	315	98	140	22	55			381	430	457	495	525	544	
07	256	255	386	118	173	29	72				477	504	542	572	591	685
09	318	300	486	149	220	37.5	77					543	581	611	630	724
11	395	350	600	181	276.5	50	85						622	652	671	765
14	490	410	740	228	339	65	89								716	810

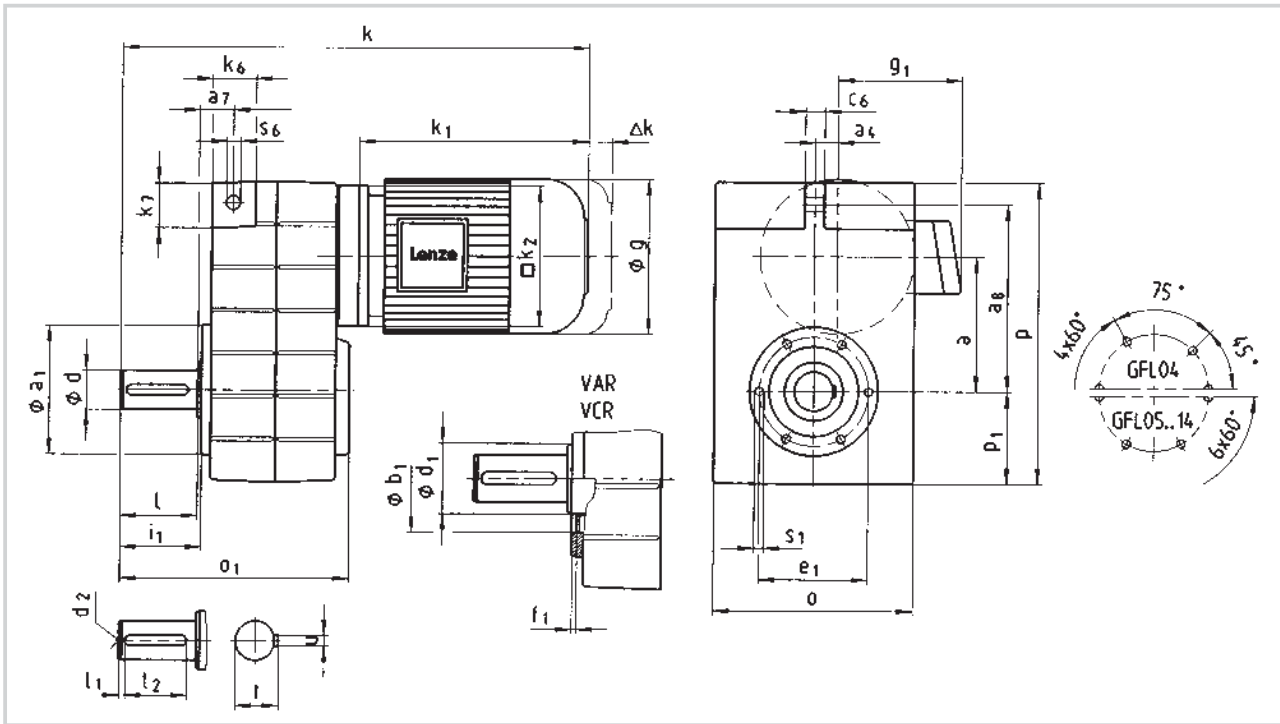
Gearbox size	Hollow shaft						Output flange							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	115	45	100	8	28.3	160	110	10	130	3.5	33	4 x 9	
	30				8	33.3								
05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11	
	35				10	38.3								
06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11	
	45				14	48.8								250
07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14	
	55				16	59.3								300
09	60	240	95	210	18	64.4	350	250	18	300	4	60	4 x 17.5	
	70				20	74.9								
11	70	290	105	250	20	74.9	400	300	20	350	5	60	4 x 17.5	
	80				22	85.4								450
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

## Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



4

Geared motor		Motor frame size																			
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22									
<b>GFL □□ - 2 M VDR</b>		063C32	071C42	080C42		100C32			132C32			180-32									
Motor	g	123	138	156	176	196		220	261		310	355									
	g <sub>1</sub>	Without option		100	109	141	146	157		167	195	207	226								
		Brake motor		107	116	130	135	146		156	195	207	226								
	k <sub>1</sub>		188	207	225	276	309	319	363	404	475	519	592								
	k <sub>2</sub>		120	120	145	180	180		222	265	300	300									
Δk**	Brake		40	52	73	70	79		90	109	96	83									
	Separate fan		130	128	128	127	109		102	115	96	83									
	Separate fan + brake		170	165	184	180	170		183	201	208	198									
Gearbox size	Gearbox						Total length														
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k														
04	148	163	214	69	90.5	12.5	362	382	404	465											
05	165	197	252	78	112.5	18.5	394	413	436	497	530										
06	206	236	315	98	140	22	427	446	469	530	563	579	623								
07	256	296	386	118	173	29			522	583	616	632	676	725	801	845					
09	318	356	486	149	220	37.5				637	670	686	730	779	855	899	972				
11	395	445	600	181	276.5	50					751	767	811	860	936	980	1053				
14	490	544	740	228	339	65						852	896	945	1021	1065	1138				

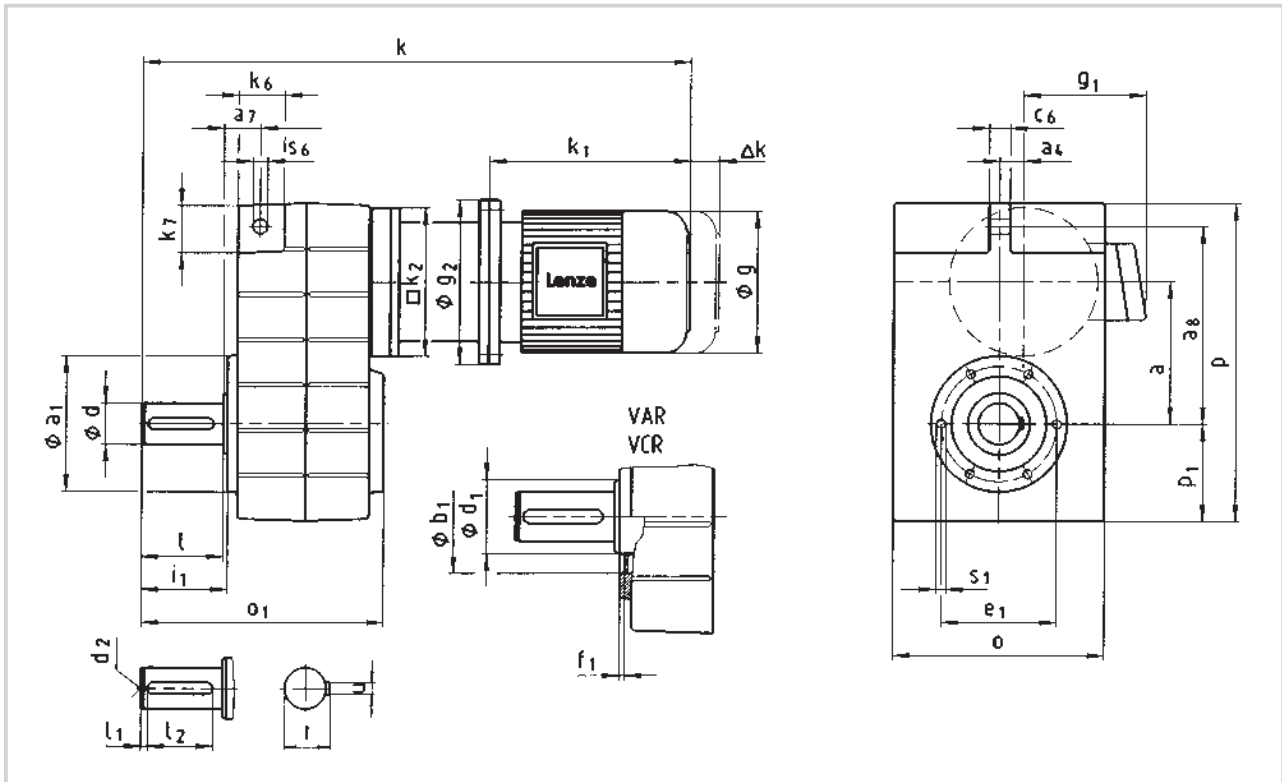
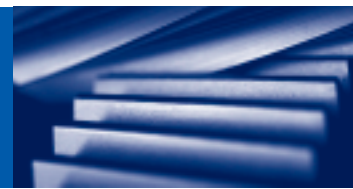
Gearbox size	Solid shaft									Pitch circle					Torque plate					
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
04	25	50	45	4	40	M10	8	28	110	75	90	3	52.5	M6x12	22.5	128	14	12.5	32	35
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114

Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8



Geared motor		Motor frame size								
<b>GFL □□ - 2 M VDR</b>		<b>200N32</b>	<b>225N12 225N22</b>							
Motor	g	388	433							
	g <sub>1</sub>	Without option	291	319						
		Brake motor	309	327						
	g <sub>2</sub>	400	450							
	k <sub>1</sub>	661	693							
	k <sub>2</sub>	300	300							
	Δk	Brake	175	200						
Separate fan		387	388							
Separate fan + brake		507	518							
Gearbox size	Gearbox						Total length			
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k			
09	318	356	486	149	220	37.5	1284			
11	395	445	600	181	276.5	50	1365			
14	490	544	740	228	339	65	1450			

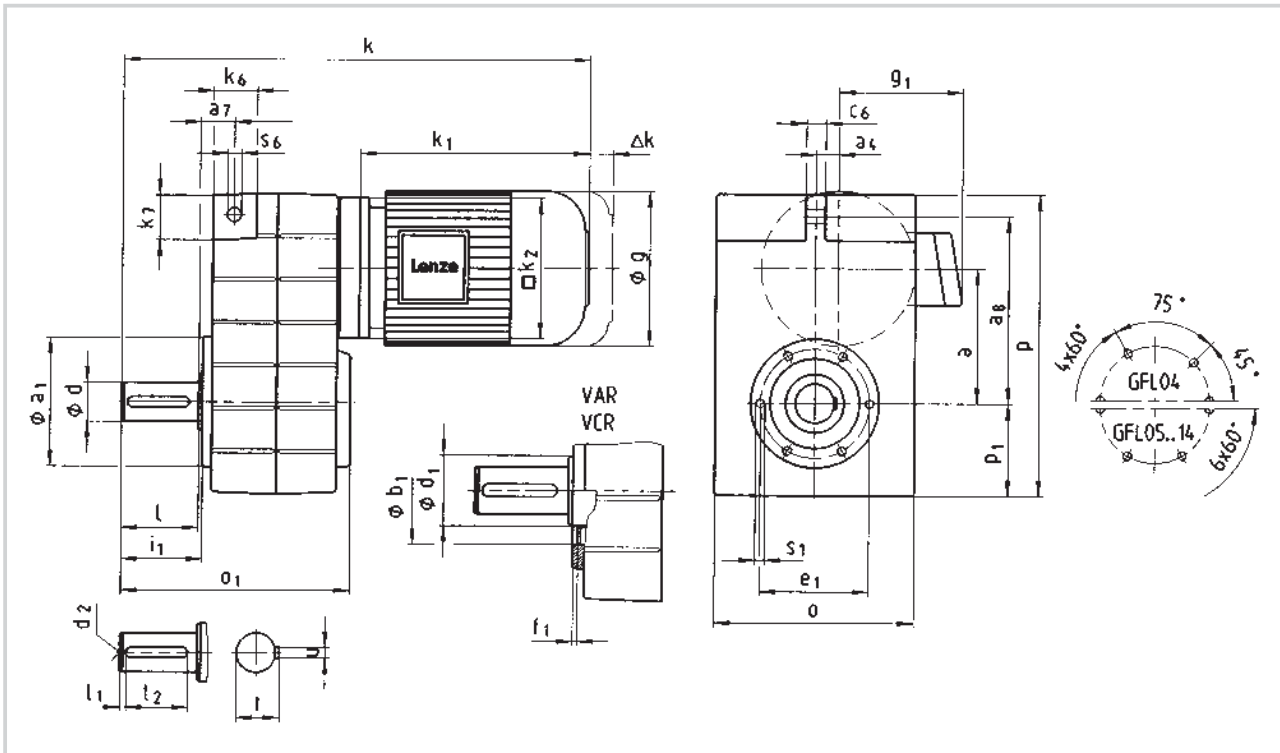
Gearbox size	Solid shaft									Pitch circle					Torque plate					
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114

Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



4

Geared motor		Motor frame size																		
<b>GFL □□ - 2 M VDR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21										
Motor	$g$	129	142	156	178	194	222	262												
	$g_1$	Without option	105	131	131	141	158	165	197											
		Brake motor	105	131	131	140	159	165	197											
	$k_1$	193	204	176	225	242	280	310	323	409										
	$k_2$	100	145	145	180	180	180	222	265											
	$\Delta k^{**}$	Brake	56	66	68	74	94	101	127											
Separate fan		71	80	94	101	97	95	104												
Separate fan + brake		118	134	150	164	169	183	218												
Gearbox size	Gearbox						Total length													
	$o^*$	$o_1$	$p^*$	$p_1$	$a$	$a_4$	$k$													
04	148	163	214	69	90.5	12.5	342	353	355	404	432									
05	165	197	252	78	112.5	18.5			387	436	463	501	531							
06	206	236	315	98	140	22			420	469	496	534	564	583						
07	256	296	386	118	173	29				522	549	587	617	636	730					
09	318	356	486	149	220	37.5					603	641	671	690	784					
11	395	445	600	181	276.5	50						722	752	771	865					
14	490	544	740	228	339	65								856	950					

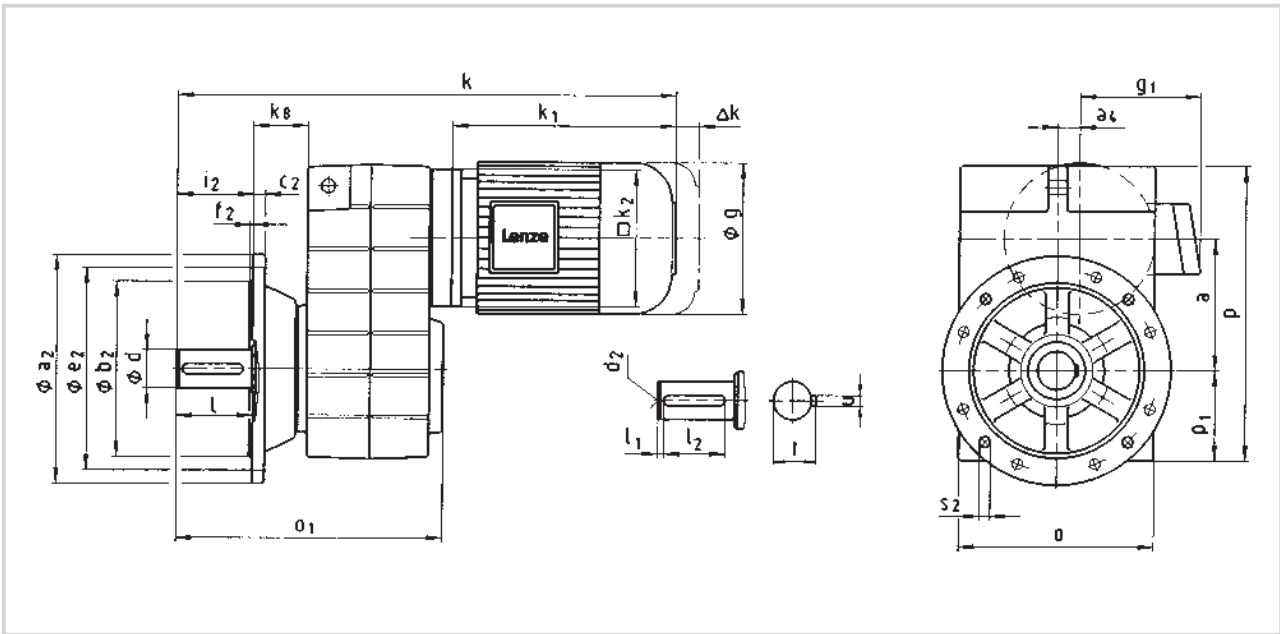
Gearbox size	Solid shaft									Pitch circle					Torque plate					
	$d$	$l$	$d_1$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$ $j_7$	$e_1$	$f_1$	$l_1$	$s_1$	$a_7$	$a_8$	$c_6$	$s_6$	$k_6$	$k_7$
04	25	50	45	4	40	M10	8	28	110	75	90	3	52.5	M6x12	22.5	128	14	12.5	32	35
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114

Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$   
\*\* For additional attachments see section 8

# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor		Motor frame size																
<b>GFL □□ - 2 M VCK</b>		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22						
		063C32	071C42	080C42		100C32			132C32			180-32						
		063C42																
Motor	g	123	138	156	176	196		220	261	310		355						
	g <sub>1</sub>	Without option	100	109	141	146	157		167	195	207		226					
		Brake motor	107	116	130	135	146		156	195	207		226					
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519		592					
	k <sub>2</sub>	120	120	145	180	180		222	265	300			300					
	Δk**	Brake	40	52	73	70	79		90	109	96		83					
Separate fan		130	128	128	127	109		102	115	96		83						
Separate fan + brake		170	165	184	180	170		183	201	208		198						
Gearbox size	Gearbox							Total length										
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k										
04	148	196	214	69	90.5	12.5	41	395	415	437	498							
05	165	230	252	78	112.5	18.5	46	427	446	469	530	563						
06	206	277	315	98	140	22	55	468	487	510	571	604	620	664				
07	256	351	386	118	173	29	72			577	638	671	687	731	780	856	900	
09	318	416	486	149	220	37.5	77				697	730	746	790	839	915	959	1032
11	395	505	600	181	276.5	50	85					811	827	871	920	996	1040	1113
14	490	604	740	228	339	65	89						912	956	1005	1081	1125	1198

Gearbox size	Solid shaft							Output flange							
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

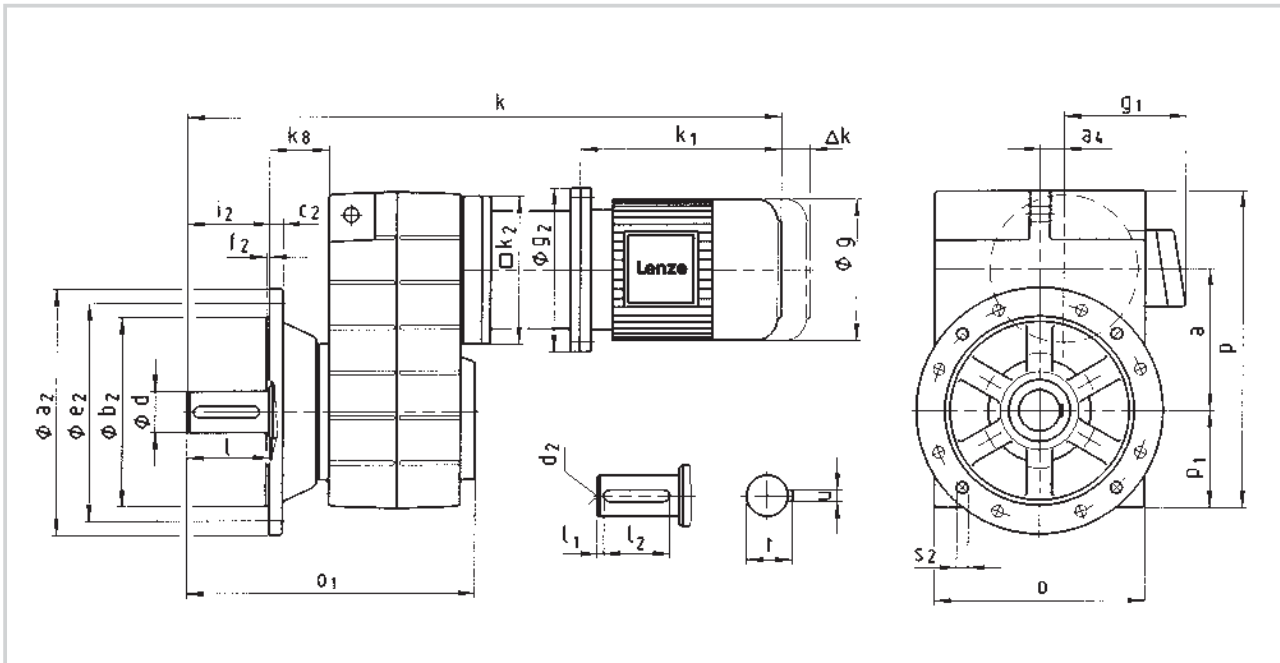
Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

## Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor <b>GFL □□ - 2 M VCK</b>		Motor frame size							
		200N32	225N12 225N22						
Motor	g	388	433						
	g <sub>1</sub>	Without option	291	319					
		Brake motor	309	327					
	g <sub>2</sub>	400	450						
	k <sub>1</sub>	661	693						
	k <sub>2</sub>	300	300						
	Δk	Brake	175	200					
		Separate fan	387	388					
Separate fan + brake		507	518						
Gearbox size	Gearbox							Total length	
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>g</sub>	k	
09	318	416	486	149	220	37.5	77	1344	
11	395	505	600	181	276.5	50	85	1425	
14	490	604	740	228	339	65	89	1510	

Gearbox size	Solid shaft								Output flange					
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5
11	80	160	15	125	M20	22	85	400	300	20	350	5	160	4 x 17.5
								450	350	22	400			
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5

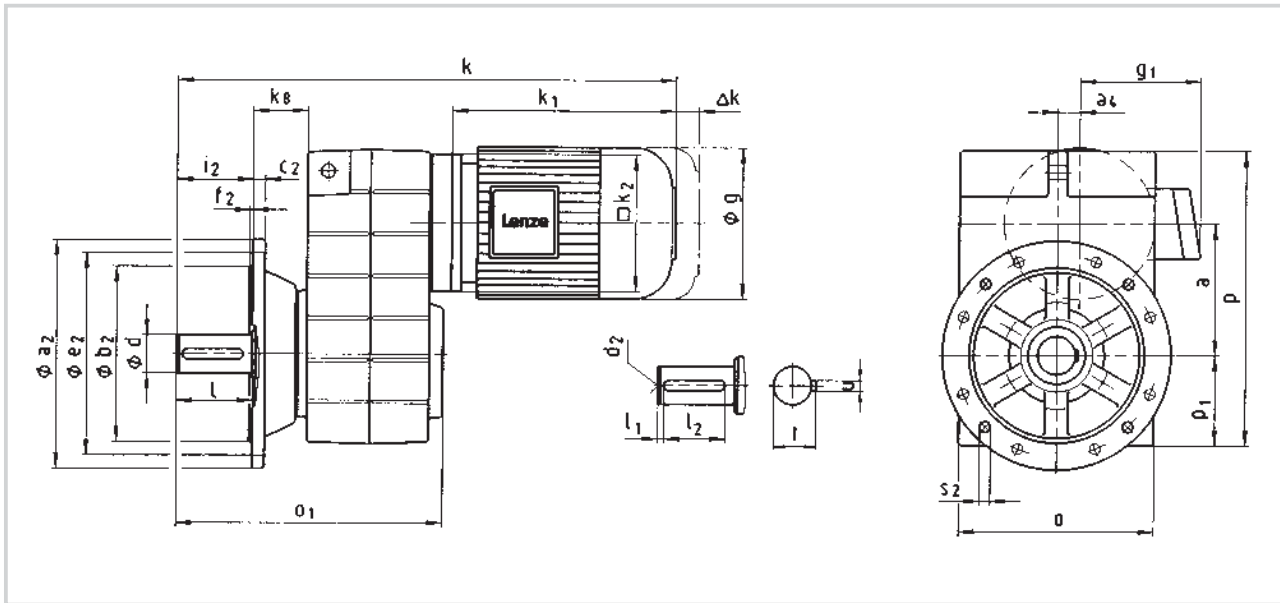
Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GFL □□ - 2 M VCK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21						
Motor	g	129		142	156	178	194		222	262						
	g <sub>1</sub>	Without option		105	131	131	141	158		165	197					
		Brake motor		105	131	131	140	159		165	197					
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409						
	k <sub>2</sub>	100		145	145	180	180		222	265						
	Δk**	Brake		56	66	68	74	94		101	127					
Separate fan		71	80	94	101	97		95	104							
Separate fan + brake		118	134	150	164	169		183	218							
Gearbox size	Gearbox							Total length								
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k								
04	148	196	214	69	90.5	12.5	41	375	386	388	437	465				
05	165	230	252	78	112.5	18.5	46			420	469	496	534	564		
06	206	277	315	98	140	22	55			461	510	537	575	605	624	
07	256	351	386	118	173	29	72				577	604	642	672	691	785
09	318	416	486	149	220	37.5	77					663	701	731	750	844
11	395	505	600	181	276.5	50	85						782	812	831	925
14	490	604	740	228	339	65	89								916	1010

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

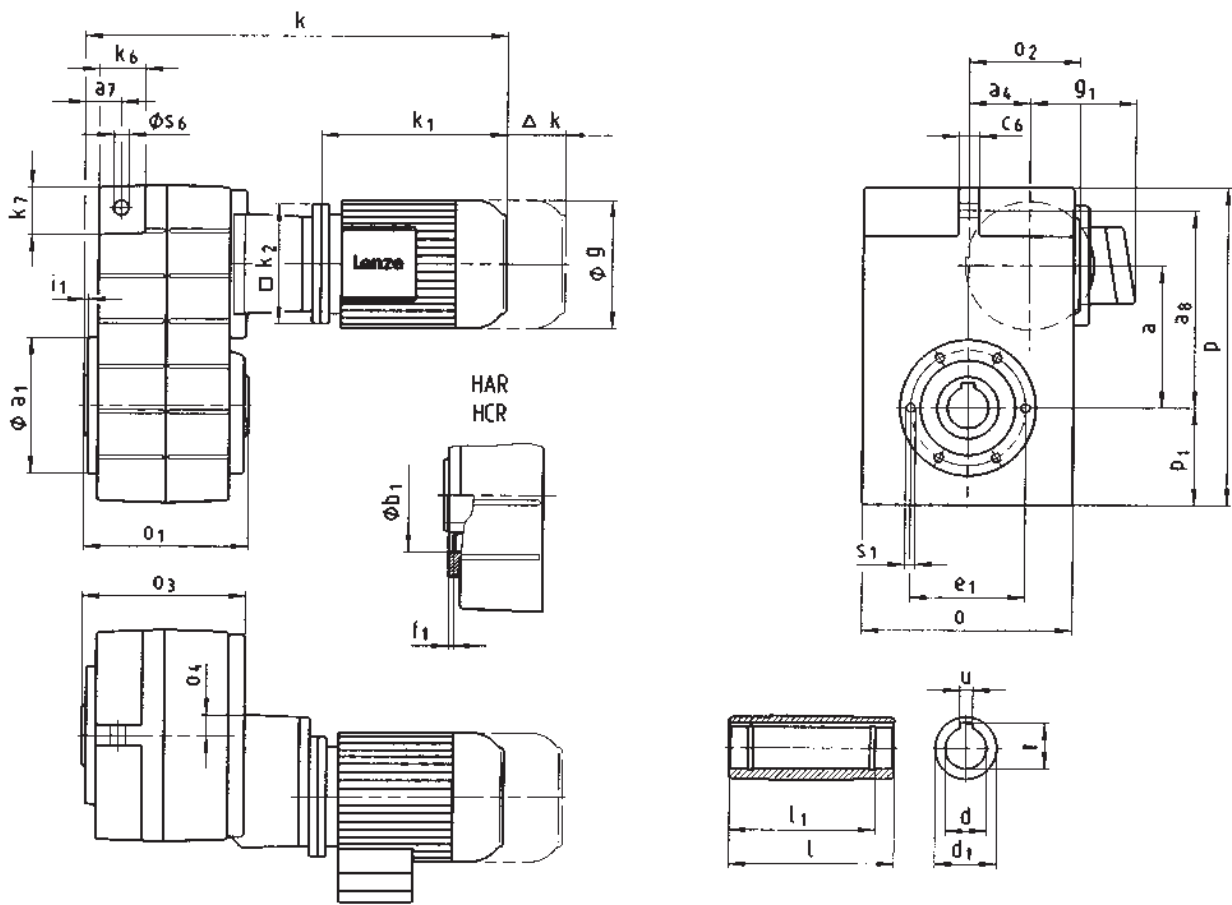
Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

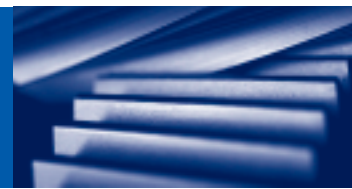
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

GFL □□ - 3 M HCR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor		Motor frame size																							
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22													
GFL □□ - 3 M HOR		063C32	071C42	080C42		100C32		132C32				180-32													
Motor	g	123	138	156	176	196	220		261	310		355													
	g <sub>1</sub>	Without option		100	109	141	146	157	167		195	207	226												
		Brake motor		107	116	130	135	146	156		195	207		226											
	k <sub>1</sub>			188	207	225	276	309	319	363	404	475	519	592											
	k <sub>2</sub>			120	120	145	180	180	222		265	300		300											
	Δk **	Brake		40	52	73	70	79	90		109	96		83											
Separate fan		130	128	128	127	109	102		115	96		83													
Separate fan + brake		170	165	184	180	170	183		201	208		198													
Gearbox size	Gearbox										Total length														
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k															
05	165	140	107	141	23	252	78	112.5	54.5	410	430	452	513												
06	206	160	111	160	20	315	98	140	58	440	460	482	543												
07	256	200	135	199	24	386	118	173	74	484	504	526	587	621											
09	318	240	170	238	27	486	149	220	93.5	536	556	578	639	673	689	733									
11	395	290	216	285	34	600	181	276.5	120			638	699	733	749	793	841	918	962						
14	490	350	271	340	38	740	228	339	154				778	812	828	872	920	997	1041	1113					

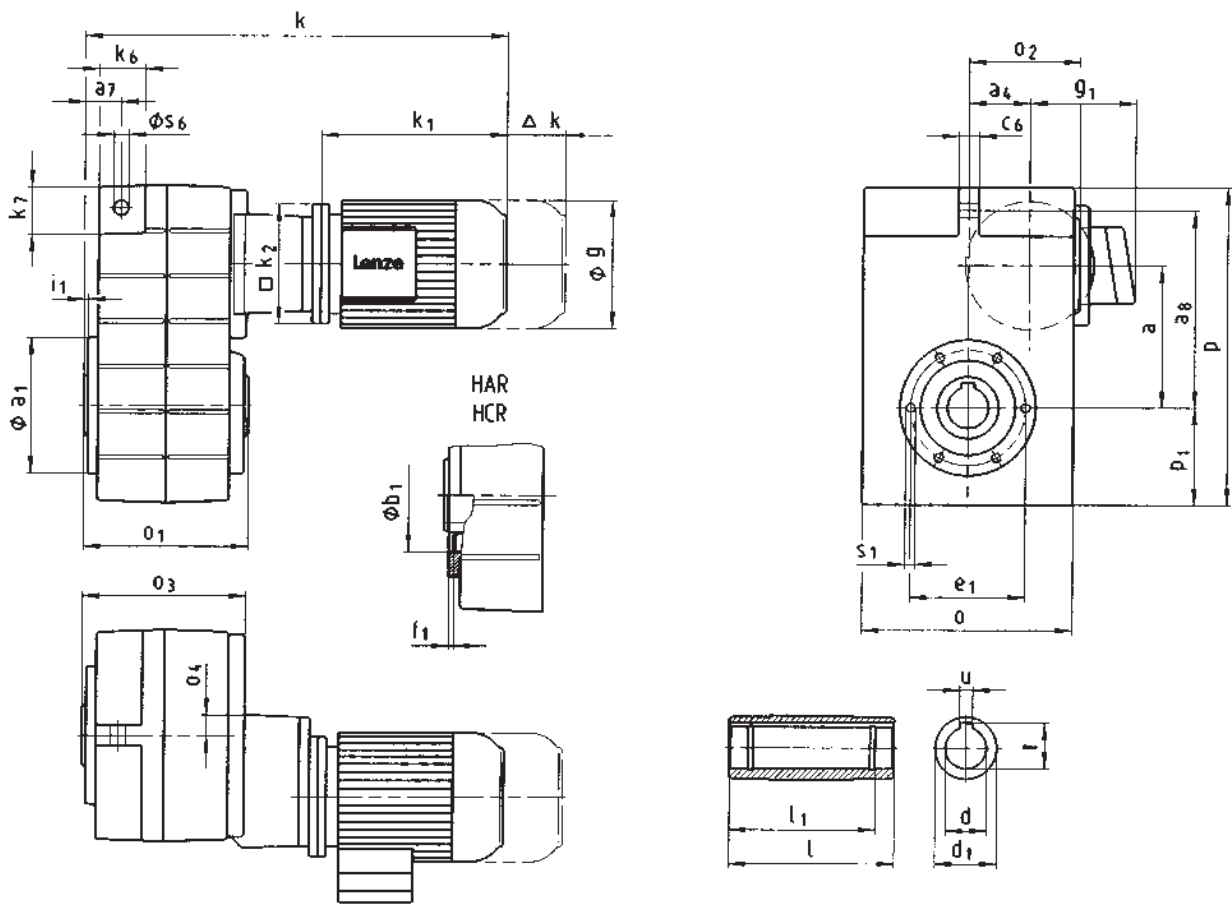
Gearbox size	Hollow shaft						Pitch circle					Torque plate							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>	
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38	
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46	
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56	
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70	
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90	
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114	

Dimensions in [mm]

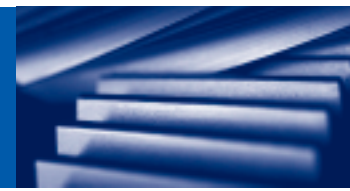
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

GFL □□ - 3 M HCR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



Geared motor		Motor frame size																		
<b>GFL □□ - 3 M HOR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21										
Motor	g	129		142	156	178	194		222	262										
	g <sub>1</sub>	Without option		105	131	131	141	158		165	197									
		Brake motor		105	131	131	140	159		165	197									
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409										
	k <sub>2</sub>	100		145	145	180	180		222	265										
	Δk **	Brake		56	66	68	74	94		101	127									
Separate fan		71	80	94	101	97		95	104											
Separate fan + brake		118	134	150	164	169		183	218											
Gearbox size	Gearbox										Total length									
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k										
05	165	140	107	141	23	252	78	112.5	54.5	390	401	403	452	480						
06	206	160	111	160	20	315	98	140	58	420	431	433	482	510						
07	256	200	135	199	24	386	118	173	74			477	526	554	592	622				
09	318	240	170	238	27	486	149	220	93.5			529	578	606	644	674	692			
11	395	290	216	285	34	600	181	276.5	120			638	666	704	734	752	847			
14	490	350	271	340	38	740	228	339	154				745	783	813	831	926			

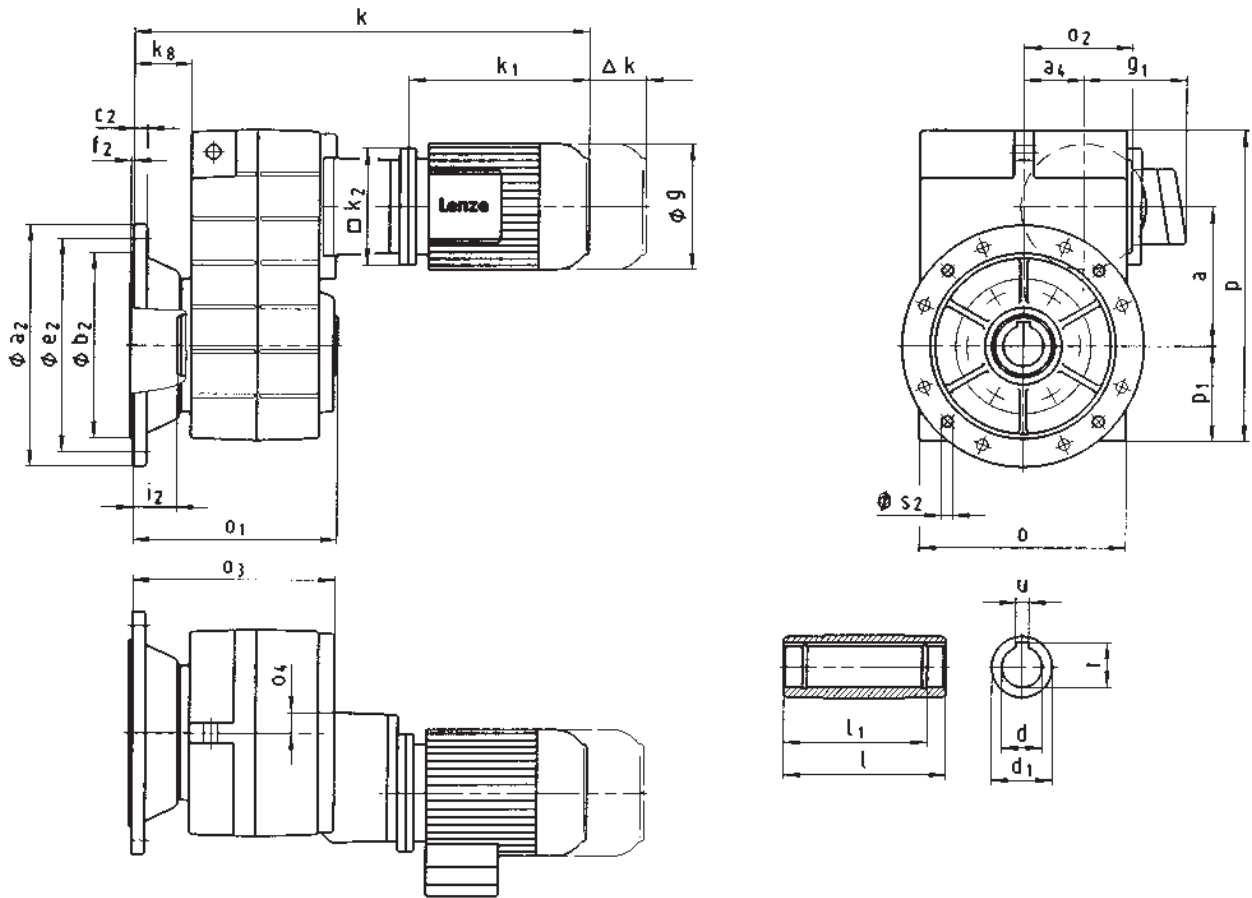
Gearbox size	Hollow shaft							Pitch circle					Torque plate						
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>	
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38	
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46	
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56	
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70	
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90	
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114	

Dimensions in [mm]

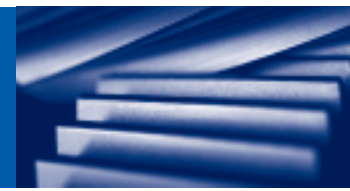
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

GFL □□ - 3 M HCK



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor		Motor frame size																						
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22												
<b>GFL □□ - 3 M HCK</b>		063C32	071C42	080C42		100C32			132C32			180-32												
Motor	g	123	138	156	176	196	220		261	310		355												
	g <sub>1</sub>	Without option		100	109	141	146	157	167		195	207	226											
		Brake motor		107	116	130	135	146	156		195	207		226										
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592												
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300												
	Δk **	Brake		40	52	73	70	79	90		109	96	83											
Separate fan		130	128	128	127	109	102		115	96	83													
Separate fan + brake		170	165	184	180	170	183		201	208		198												
Gearbox size	Gearbox										Total length													
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k													
05	165	173	107	174	23	252	78	113	54.5	46	443	463	485	546										
06	206	201	111	201	20	315	98	140	58	55	481	501	523	584										
07	256	255	135	254	24	386	118	173	74	72	539	559	581	642	676									
09	318	300	170	298	27	486	149	220	93.5	77	596	616	638	699	733	749	793							
11	395	350	216	345	34	600	181	277	120	85			698	759	793	809	853	901	978	1022				
14	490	410	271	400	38	740	228	339	154	89				838	872	888	932	980	1057	1101	1173			

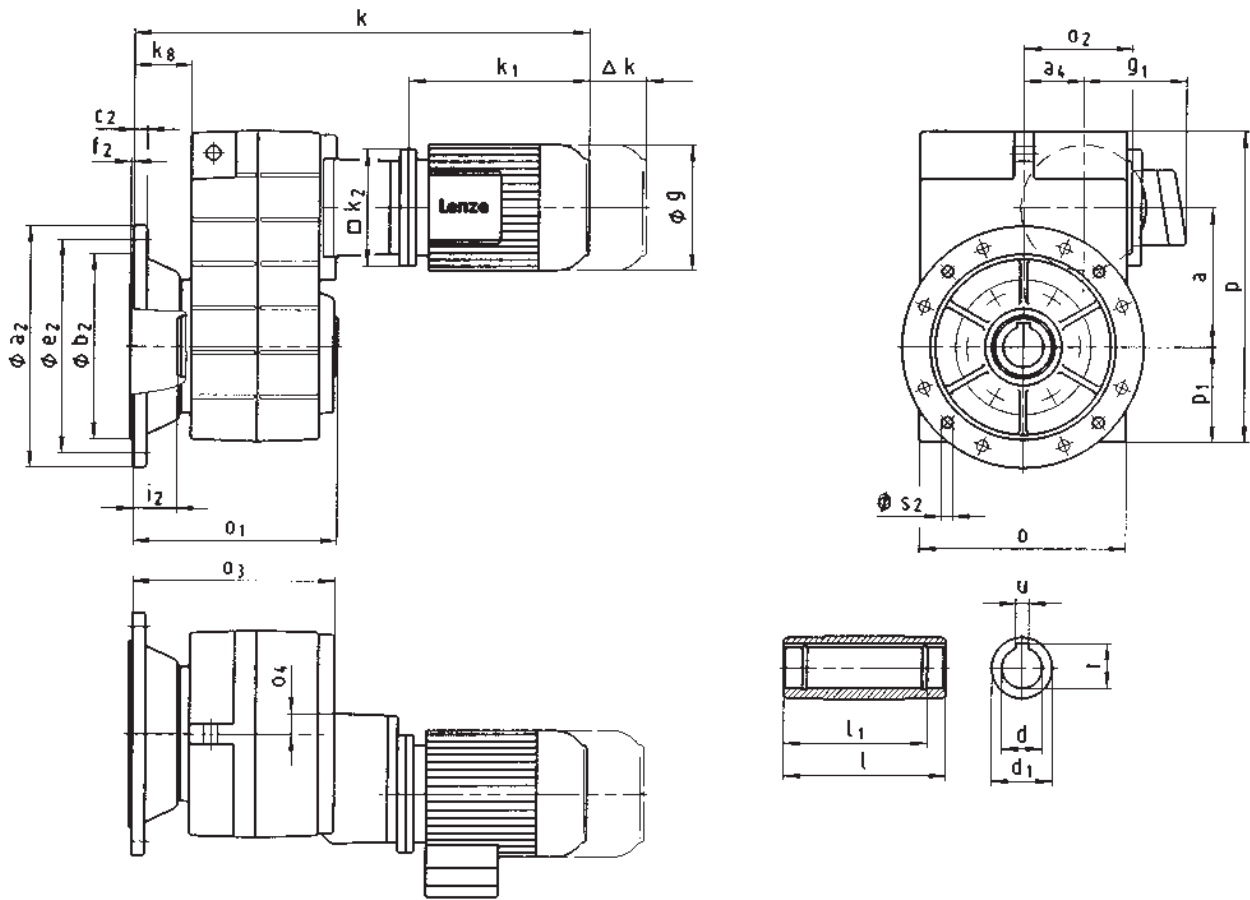
Gearbox size	d		l	Hollow shaft		u	t	a <sub>2</sub>	b <sub>2</sub>	c <sub>2</sub>	e <sub>2</sub>	Output flange		
	H7			d <sub>1</sub>	l <sub>1</sub>							J59	+0.2	j7
05	30		140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11
	35													
06	40		160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11
	45													
07	50		200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14
	55													
09	60		240	95	210	18	64.4	350	250	18	300	4	60	4 x 17.5
	70													
11	70		290	105	250	20	74.9	400	300	20	350	5	60	4 x 17.5
	80													
14	100		350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

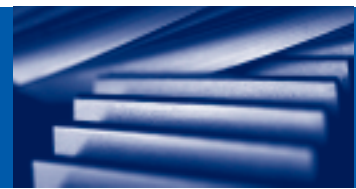
\*\* For additional attachments see section 8

GFL □□ - 3 M HCK





# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



Geared motor		Motor frame size																		
<b>GFL □□ - 3 M HCK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21										
Motor	g	129		142	156	178	194		222	262										
	g <sub>1</sub>	Without option			105	131	141	158		165	197									
		Brake motor			105	131	140	159		165	197									
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409										
	k <sub>2</sub>	100			145	145	180		222	265										
	Δk **	Brake			56	66	68	94		101	127									
Separate fan			71	80	94	97		95	104											
Separate fan + brake			118	134	150	169		183	218											
Gearbox size	Gearbox										Total length									
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k									
05	165	173	107	174	23	252	78	113	54.5	46	423	434	436	485	513					
06	206	201	111	201	20	315	98	140	58	55	461	472	474	523	551					
07	256	255	135	254	24	386	118	173	74	72			532	581	609	647	677			
09	318	300	170	298	27	486	149	220	93.5	77			589	638	666	704	734	752		
11	395	350	216	345	34	600	181	277	120	85				698	726	764	794	812	907	
14	490	410	271	400	38	740	228	339	154	89					805	843	873	891	986	

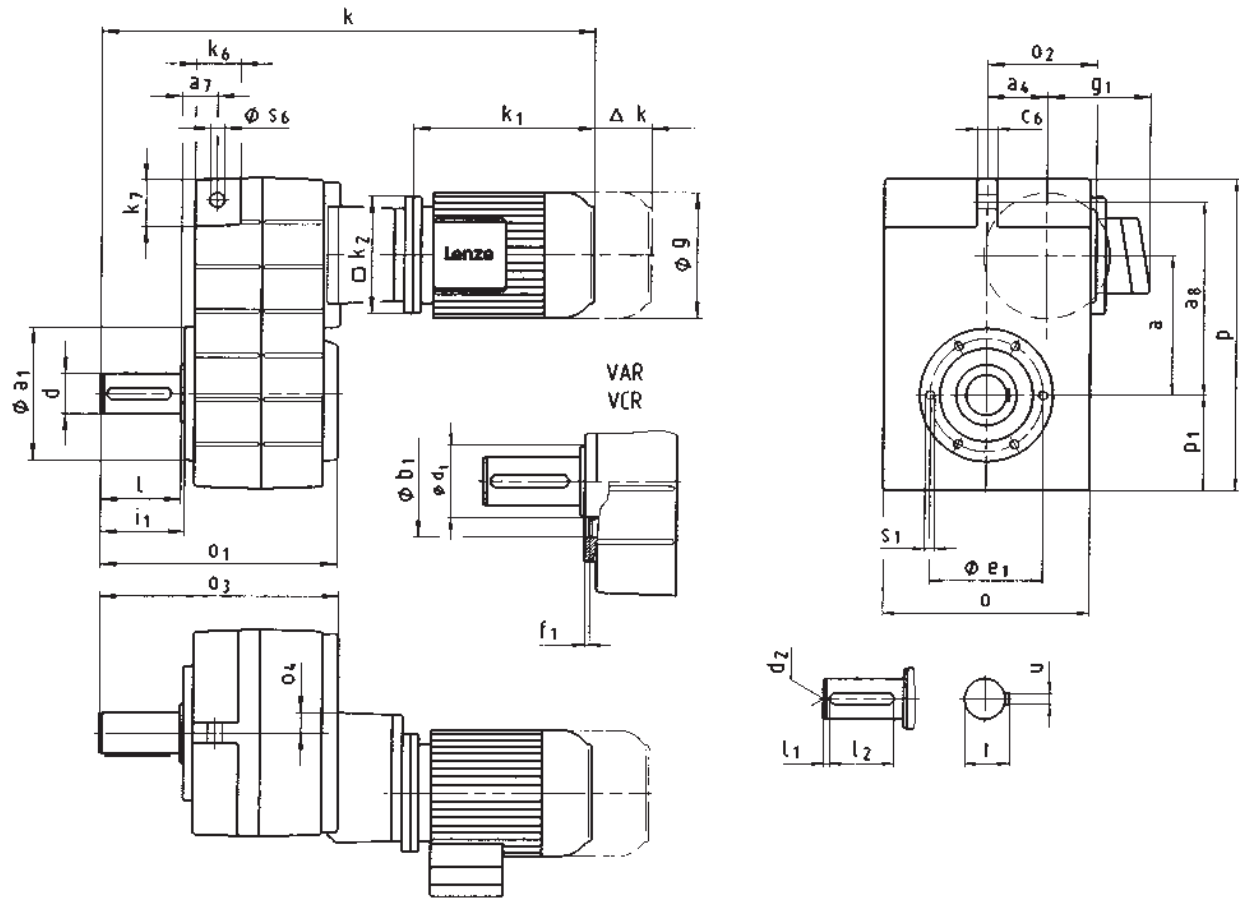
Gearbox size	Hollow shaft							Output flange						
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14	
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14	
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5	
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5	
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

Dimensions in [mm]

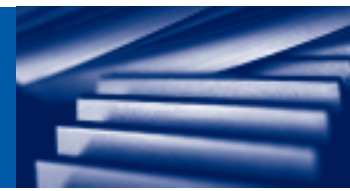
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

GFL □□ - 3 M VOR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor		Motor frame size																						
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22												
<b>GFL □□ - 3 M VDR</b>		063C32	071C42	080C42		100C32			132C32			180-32												
Motor	g	123	138	156	176	196	220		261	310		355												
	g <sub>1</sub>	Without option		100	109	141	146	157	167		195	207	226											
		Brake motor		107	116	130	135	146	156		195	207		226										
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592												
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300												
	Δk **	Brake		40	52	73	70	79	90		109	96	83											
Separate fan		130	128	128	127	109	102		115	96	83													
Separate fan + brake		170	165	184	180	170	183		201	208	198													
Gearbox size	Gearbox									Total length														
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k														
05	165	197	107	201	23	252	78	112.5	54.5	470	490	512	573											
06	206	236	111	240	20	315	98	140	58	520	540	562	623											
07	256	296	135	299	24	386	118	173	74	584	604	626	687	721										
09	318	356	170	358	27	486	149	220	93.5	656	676	698	759	793	809	853								
11	395	445	216	445	34	600	181	276.5	120			798	859	893	909	953	1001	1078	1122					
14	490	544	271	540	38	740	228	339	154				978	1012	1028	1072	1120	1197	1241	1313				

Gearbox size	Solid shaft									Pitch circle					Torque plate					
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114

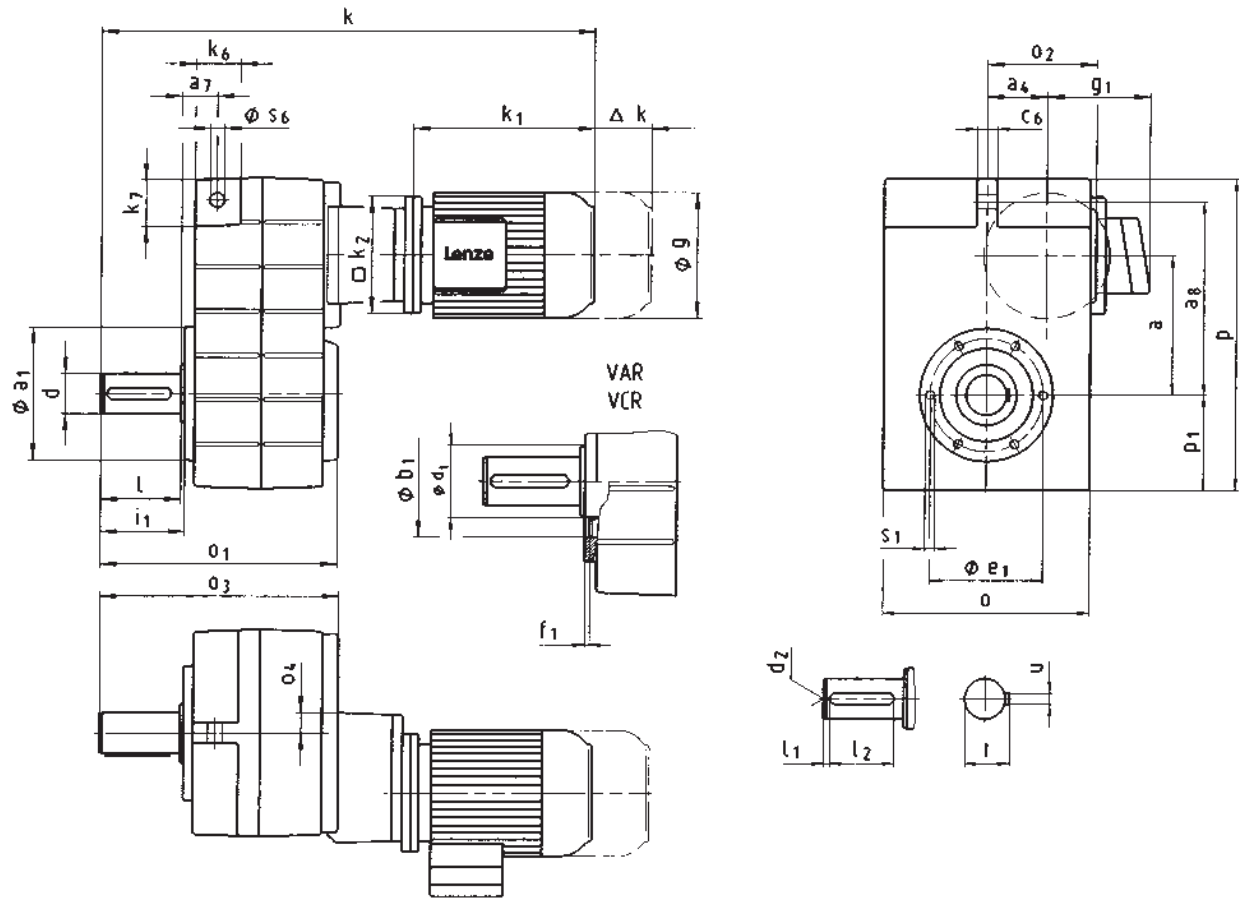
Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

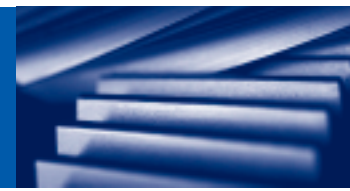
\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

GFL □□ - 3 M VOR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



Geared motor		Motor frame size																		
<b>GFL □□ - 3 M VDR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21										
Motor	g	129		142	156	178	194		222	262										
	g <sub>1</sub>	Without option			105	131	141	158		165	197									
		Brake motor			105	131	140	159		165	197									
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409										
	k <sub>2</sub>	100			145	145	180		222	265										
	Δk **	Brake			56	66	68	94		101	127									
Separate fan			71	80	94	97		95	104											
Separate fan + brake			118	134	150	169		183	218											
Gearbox size	Gearbox									Total length										
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k										
05	165	197	107	201	23	252	78	112.5	54.5	450	461	463	512	540						
06	206	236	111	240	20	315	98	140	58	500	511	513	562	590						
07	256	296	135	299	24	386	118	173	74			577	626	654	692	722				
09	318	356	170	358	27	486	149	220	93.5			649	698	726	764	794	812			
11	395	445	216	445	34	600	181	276.5	120				798	826	864	894	912	1007		
14	490	544	271	540	38	740	228	339	154					945	983	1013	1031	1126		

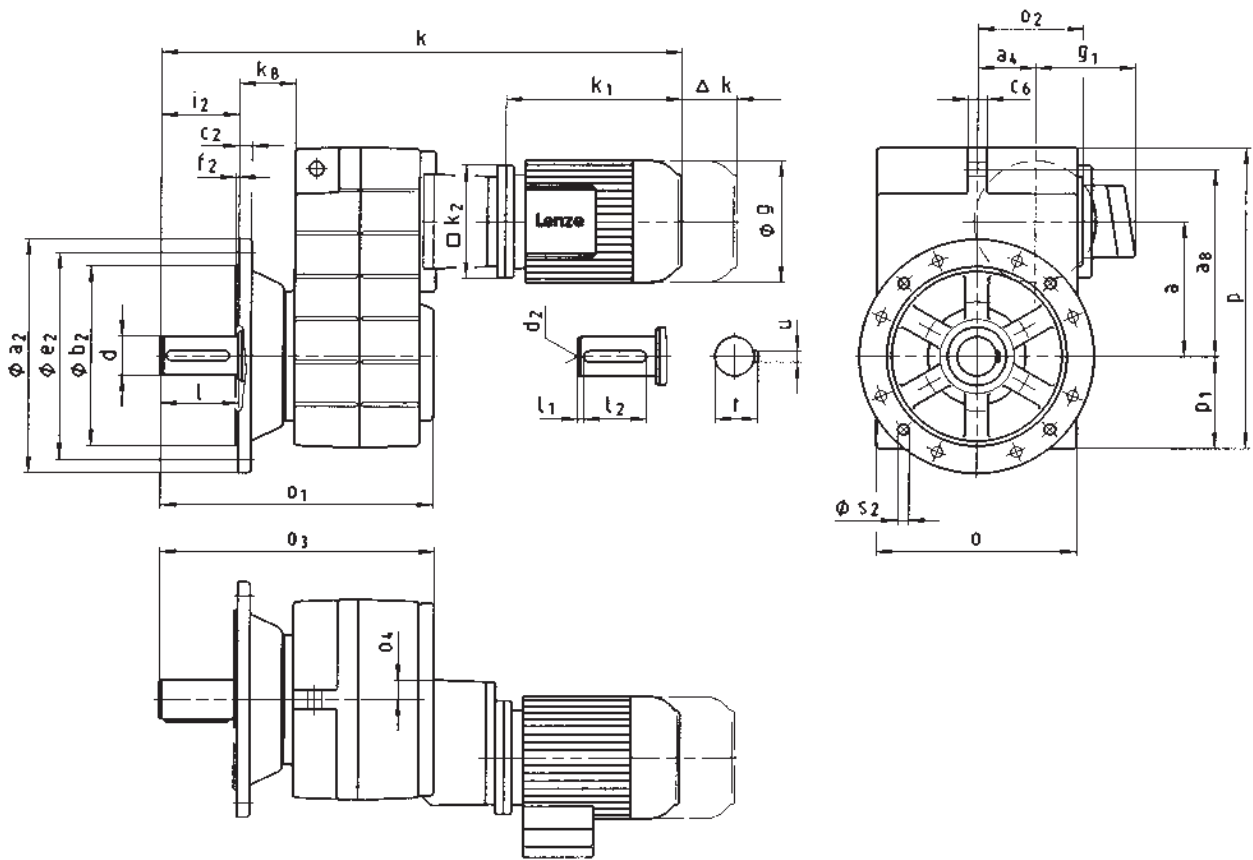
Gearbox size	Solid shaft									Pitch circle					Torque plate					
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114

Dimensions in [mm]

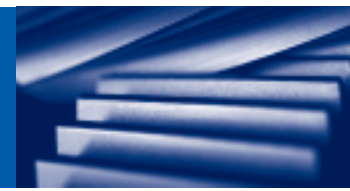
d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>  
\*\* For additional attachments see section 8

GFL □□ - 3 M VCK



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (4-pole)



Geared motor		Motor frame size																						
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22												
GFL □□ - 3 M VCK		063C32	071C42	080C42		100C32			132C32			180-32												
		063C42																						
Motor	g	123	138	156	176	196	220		261	310		355												
	g <sub>1</sub>	Without option		100	109	141	146	157	167		195	207	226											
		Brake motor		107	116	130	135	146	156		195	207	226											
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592												
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300												
	Δk **	Brake		40	52	73	70	79	90		109	96	83											
Separate fan		130	128	128	127	109	102		115	96	83													
Separate fan + brake		170	165	184	180	170	183		201	208	198													
Gearbox size	Gearbox										Total length													
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k													
05	165	230	107	234	23	252	78	112.5	54.5	46	503	523	545	606										
06	206	277	111	281	20	315	98	140	58	55	561	581	603	664										
07	256	351	135	354	24	386	118	173	74	72	639	659	681	742	776									
09	318	416	170	418	27	486	149	220	93.5	77	716	736	758	819	853	869	913							
11	395	505	216	505	34	600	181	276.5	120	85			858	919	953	969	1013	1061	1138	1182				
14	490	604	271	600	38	740	228	339	154	89				1038	1072	1088	1132	1180	1257	1301	1373			

Gearbox size	Solid shaft								Output flange							
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>		
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11		
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14		
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14		
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5		
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5		
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5		

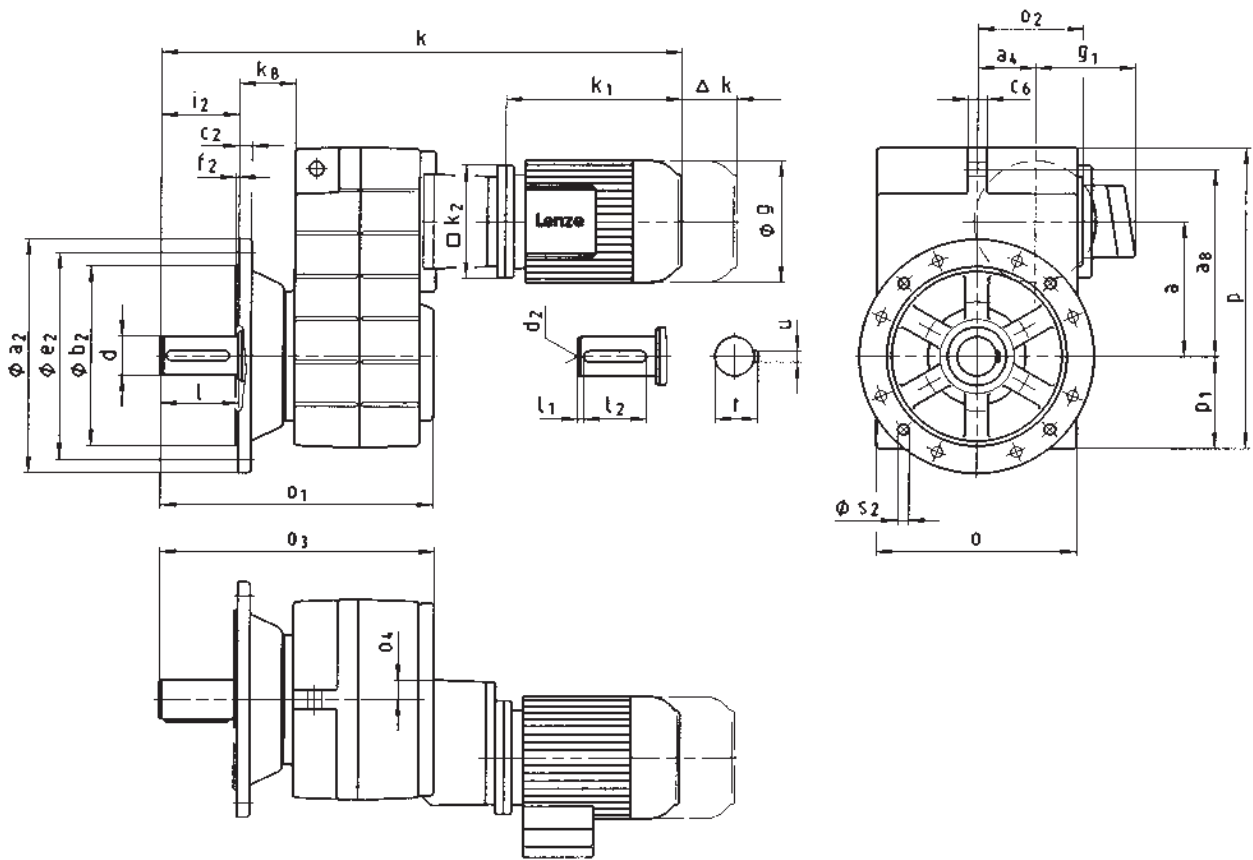
Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

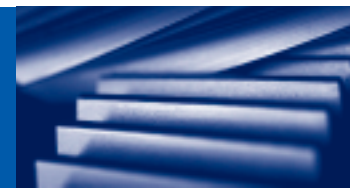
\*\* For additional attachments see section 8

GFL □□ - 3 M VCK





# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors (2- and 6-pole)



Geared motor		Motor frame size																		
<b>GFL □□ - 3 M VCK</b>		063-11	63-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21										
Motor	g	129		142	156	178	194		222	262										
	g <sub>1</sub>	Without option		105	131	131	141	158		165	197									
		Brake motor		105	131	131	140	159		165	197									
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409										
	k <sub>2</sub>	100		145	145	180	180		222	265										
	Δk **	Brake		56	66	68	74	94		101	127									
Separate fan		71	80	94	101	97		95	104											
Separate fan + brake		118	134	150	164	169		183	218											
Gearbox size	Gearbox										Total length									
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k									
05	165	230	107	234	23	252	78	112.5	54.5	46	483	494	496	545	573					
06	206	277	111	281	20	315	98	140	58	55	541	552	554	603	631					
07	256	351	135	354	24	386	118	173	74	72			632	681	709	747	777			
09	318	416	170	418	27	486	149	220	93.5	77			709	758	786	824	854	872		
11	395	505	216	505	34	600	181	276.5	120	85				858	886	924	954	972	1067	
14	490	604	271	600	38	740	228	339	154	89					1005	1043	1073	1091	1186	

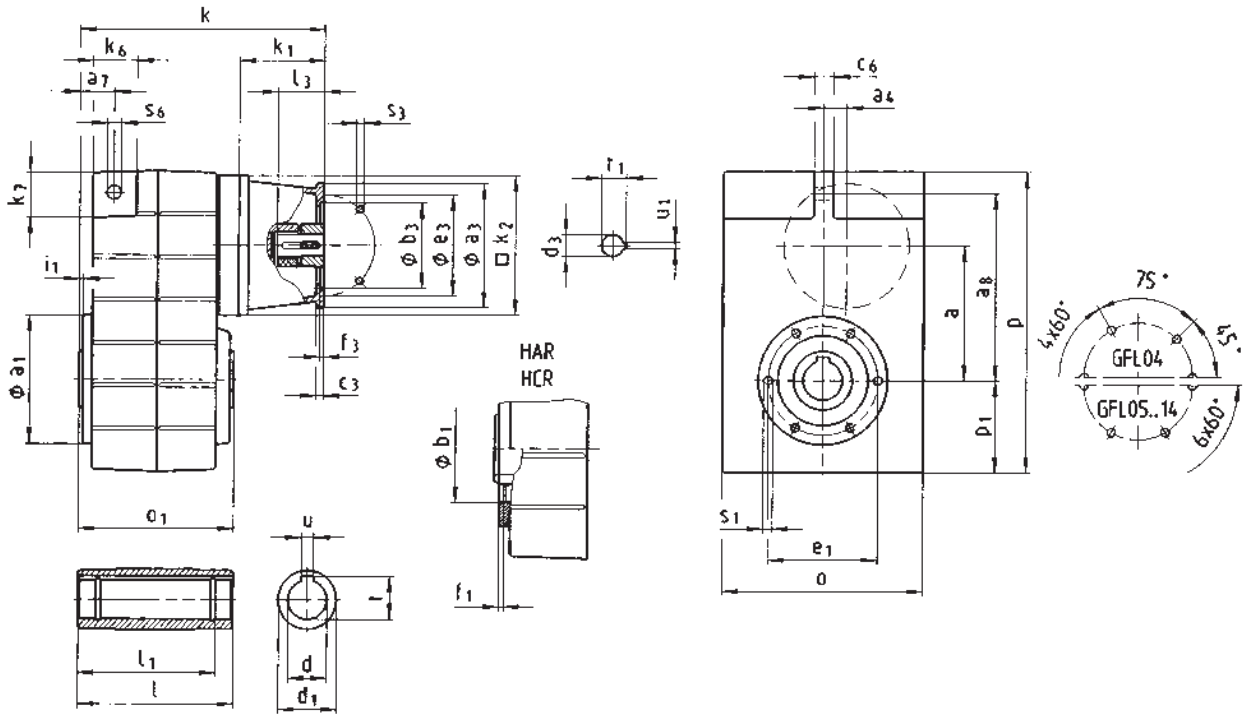
Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: k6

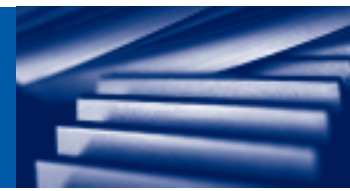
\* Observe dimension k<sub>2</sub>  
\*\* For additional attachments see section 8

GFL □□ - 2 N HCR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



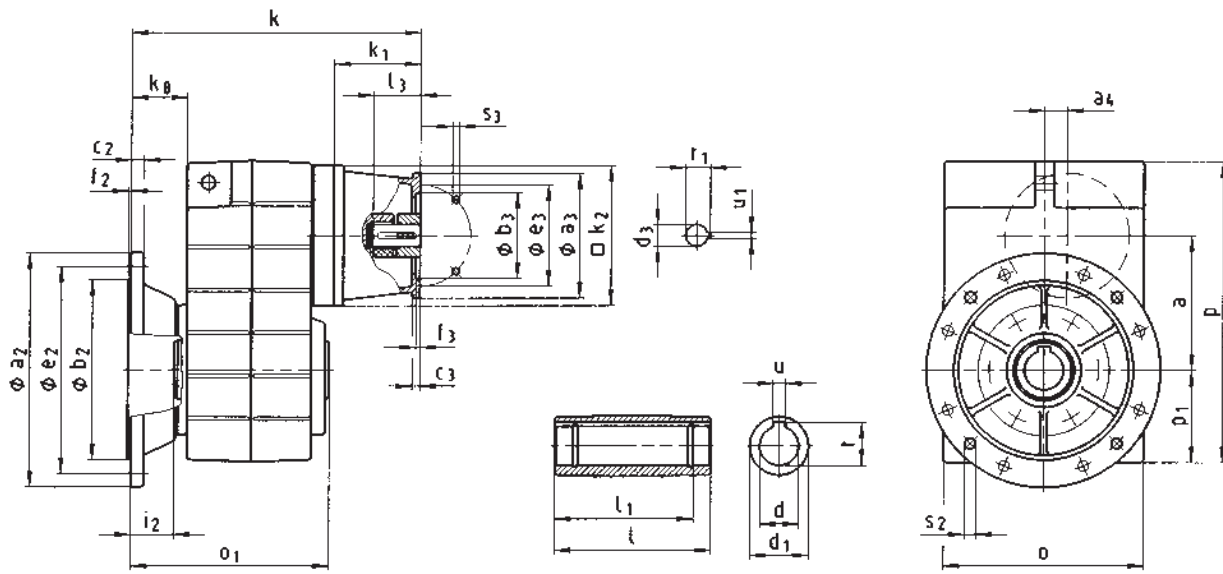
Gearbox <b>GFL □□ - 2 N HQR</b> corresponds to IEC motor			Drive size																											
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132	1K 200	2K 225						
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188	243	273					
		$k_2$	120	145	120	145			180			180			180			265			300			300						
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450				
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350				
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20					
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400				
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5	6					
		$s_3$ 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5					
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60						
		$l_3$	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80	110	140					
max			23	30	23	40			50	50	60			60			80	80	80	110	110	80	110	140						
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18							
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64								
Gearbox size	Gearbox						Total length																							
	$o^*$	$o_1$	$p^*$	$p_1$	$a$	$a_4$	$k$																							
04	148	115	214	69	90.5	12.5	200	207	200	221																				
05	165	140	252	78	112.5	18.5	228		242			276			271															
06	206	160	315	98	140	22	241		255			289			284			313												
07	256	200	386	118	173	29			288			322			317			346			401	381	401	444	414					
09	318	240	486	149	220	37.5						356			351			380			435	415	435	478	478	448	503			
11	395	290	600	181	276.5	50									392			421			476	456	476	519	519	489	544	574		
14	490	350	740	228	339	65															521	501	521	564	564	534	589	619		

Gearbox size	Hollow shaft						Pitch circle						Torque plate					
	$d$ H7	$l$	$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_1$	$b_1$ H7	$e_1$	$f_1$	$i_1$	$s_1$	$a_7$	$a_8$	$c_6$	$s_6$	$k_6$	$k_7$
04	25 30	115	45	100	8 8	28.3 33.3	110	75	90	3	2.5	M6x12	22.5	128	14	12.5	32	35
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114

Dimensions in [mm]

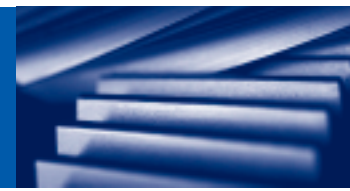
\* Observe dimension  $k_2$

GFL □□ - 2 N HCK



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



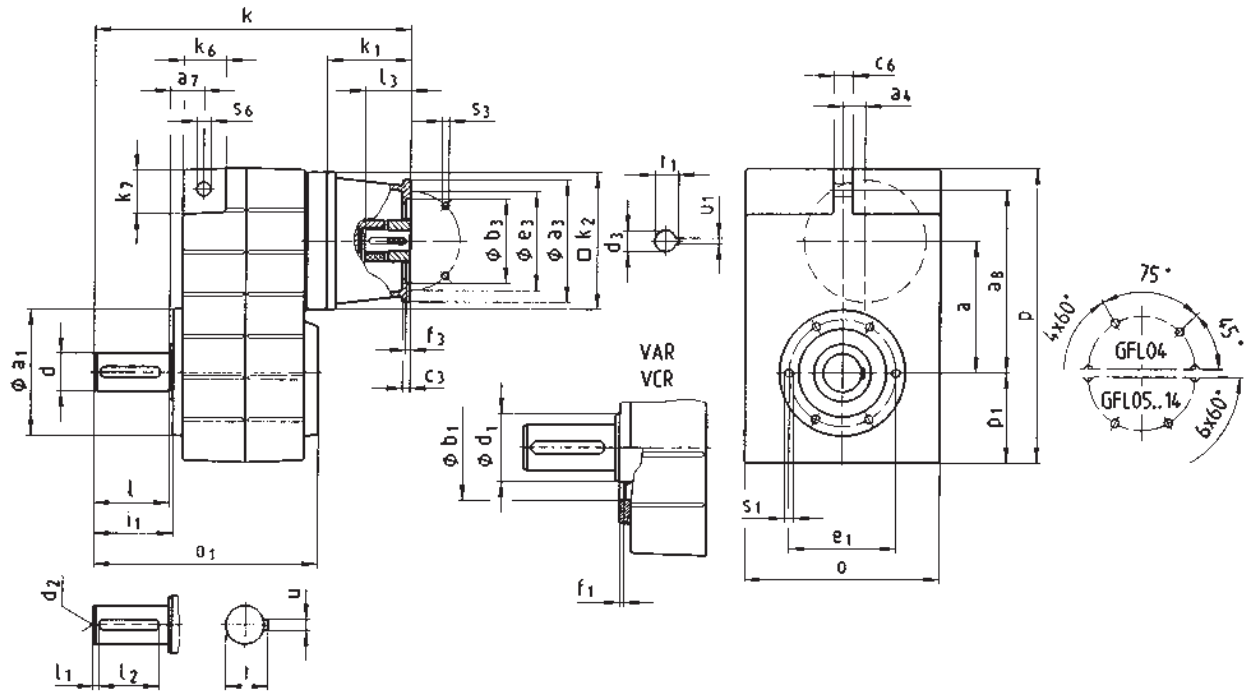
Gearbox		GFL □□ - 2 N HCK corresponds to IEC motor	Drive size																											
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132	1K 200	2K 225						
Housing	k <sub>1</sub>		75	77	75	91			115			110			139			180	160	180	218	218	188	243	273					
		k <sub>2</sub>	120	145	120	145			180			180			180			265			300			300						
	Flange	a <sub>3</sub>	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450				
		b <sub>3</sub> H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350				
		c <sub>3</sub>	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20					
		e <sub>3</sub>	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400				
		f <sub>3</sub>	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5	6					
		s <sub>3</sub> 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5				
	Required motor shafts	d <sub>3</sub>	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60						
		l <sub>3</sub>	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80	110	140					
max			23	30	23	40			50	50	60			60			80	80	80	110	110	80	110	140						
u <sub>1</sub>		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18							
t <sub>1</sub>	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64								
Gearbox size	Gearbox							Total length																						
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>g</sub>	k																						
04	148	148	214	69	90.5	12.5	41	233	240	233	254																			
05	165	173	252	78	112.5	18.5	46	261		275			309			304														
06	206	201	315	98	140	22	55	282			296			330			325			354										
07	256	255	386	118	173	29	72				343			377			372			401			456	436	456	499	469			
09	318	300	486	149	220	37.5	77							416			411			440			495	475	495	538	538	508	563	
11	395	350	600	181	276.5	50	85										452			481			536	516	536	579	579	549	604	634
14	490	410	740	228	339	65	89																581	561	581	624	624	594	649	679

Gearbox size	Hollow shaft						Output flange						
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

Dimensions in [mm]

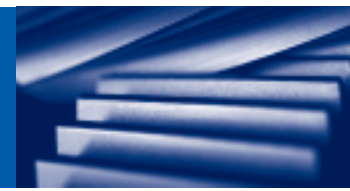
\* Observe dimension k<sub>2</sub>

GFL □□ - 2 N VDR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GFL □□ - 2 N V□R</b> corresponds to IEC motor			Drive size																												
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132	1K 200	2K 225							
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188	243	273						
		$k_2$	120	145	120	145			180			180			180			265			300			300							
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450					
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350					
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20						
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400					
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5	6						
		$s_3$ 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5					
																										17.5					
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60							
$l_3$		min	23	30	23	25			50	40	30			30			80	60	80	110	110	80	110	140							
		max	23	30	23	40			50	50	60			60			80	80	80	110	110	80	110	140							
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18								
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64									
Gearbox size	Gearbox						Total length																								
	$o^*$	$o_1$	$p^*$	$p_1$	$a$	$a_4$	$k$																								
04	148	163	214	69	90.5	12.5	250	257	250	271			305																		
05	165	197	252	78	112.5	18.5	288		302			336			331																
06	206	236	315	98	140	22	321		335			369			364			393													
07	256	296	386	118	173	29			388			422			417			446			501	481	501	544	514						
09	318	356	486	149	220	37.5						476			471			500			555	535	555	598	598	568	623				
11	395	445	600	181	276.5	50									552			581			636	616	636	679	679	649	704	734			
14	490	544	740	228	339	65															721	701	721	764	764	734	789	819			

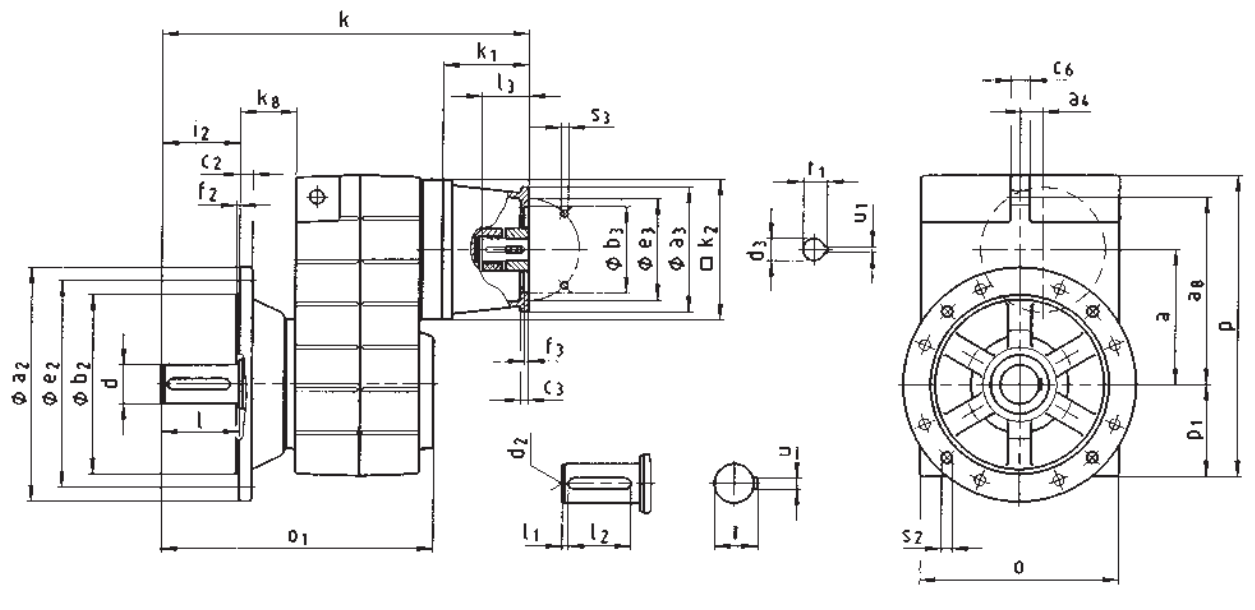
Gearbox size	Solid shaft									Pitch circle						Torque plate					
	$d$	$l$	$d_1$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$ H7	$e_1$	$f_1$	$i_1$	$s_1$	$a_7$	$a_8$	$c_6$	$s_6$	$k_6$	$k_7$	
04	25	50	45	4	40	M10	8	28	110	75	90	3	52.5	M6x12	22.5	128	14	12.5	32	35	
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38	
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46	
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56	
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70	
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90	
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114	

Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$

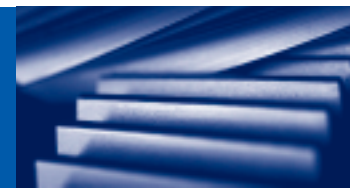
GFL □□ - 2 N VCK





# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



Gearbox		GFL □□ - 2 N VCK corresponds to IEC motor	Drive size																										
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132	1K 200	2K 225					
Housing	k <sub>1</sub>		75	77	75	91				115		110		139		180	160	180	218	218	188	243	273						
		k <sub>2</sub>	120	145	120	145				180		180		180		265		300		300		300							
	Flange	a <sub>3</sub>	90	105	90	160	160	105	120	160		160		160		300	250	250	350	350	300	400	450						
		b <sub>3</sub> H8	60	70	60	110	110	70	80	110		110		110		230	180	180	250	250	230	300	350						
		c <sub>3</sub>	7	8	7	10	10	8	8	10		10		10		18	18	35	20	20	18	20							
		e <sub>3</sub>	75	85	75	130	130	85	100	130		130		130		265	215	215	300	300	265	350	400						
		f <sub>3</sub>	3	3		4	4	3	3.5	4		4		4		4.5		6	6	4.5	6								
		s <sub>3</sub> 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9		9		13.5		17.5	17.5	13.5	17.5		17.5						
	Required motor shafts	d <sub>3</sub>	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60					
		l <sub>3</sub>	min	23	30	23	25			50	40	30		30		80	60	80	110	110	80	110	140						
max			23	30	23	40			50	50	60		60		80	60	80	110	110	80	110	140							
u <sub>1</sub>		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18						
t <sub>1</sub>	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64							
Gearbox size	Gearbox							Total length																					
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>g</sub>	k																					
04	148	196	214	69	90.5	12.5	41	283	290	283	304			338															
05	165	230	252	78	112.5	18.5	46	321		335			369		364														
06	206	277	315	98	140	22	55	362			376			410		405		434											
07	256	351	386	118	173	29	72				443			477		472		501		556	536	556	599	569					
09	318	416	486	149	220	37.5	77							536		531		560		615	595	615	658	658	628	683			
11	395	505	600	181	276.5	50	85									612		641		696	676	696	739	739	709	764	794		
14	490	604	740	228	339	65	89													781	761	781	824	824	794	849	879		

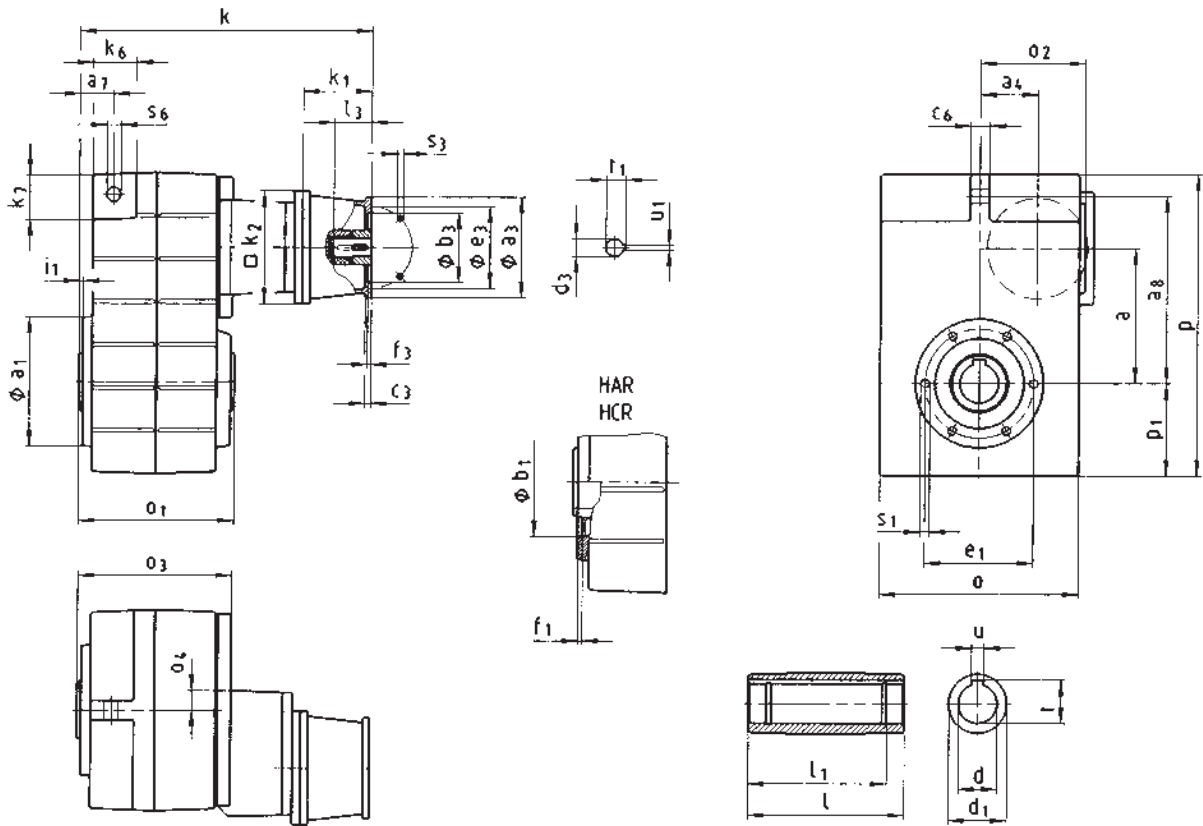
Gearbox size	Solid shaft							Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 450	5	160	4 x 17.5 8 x 17.5
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5

Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

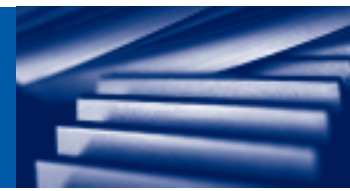
\* Observe dimension k<sub>2</sub>

GFL □□ - 3 N HCR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



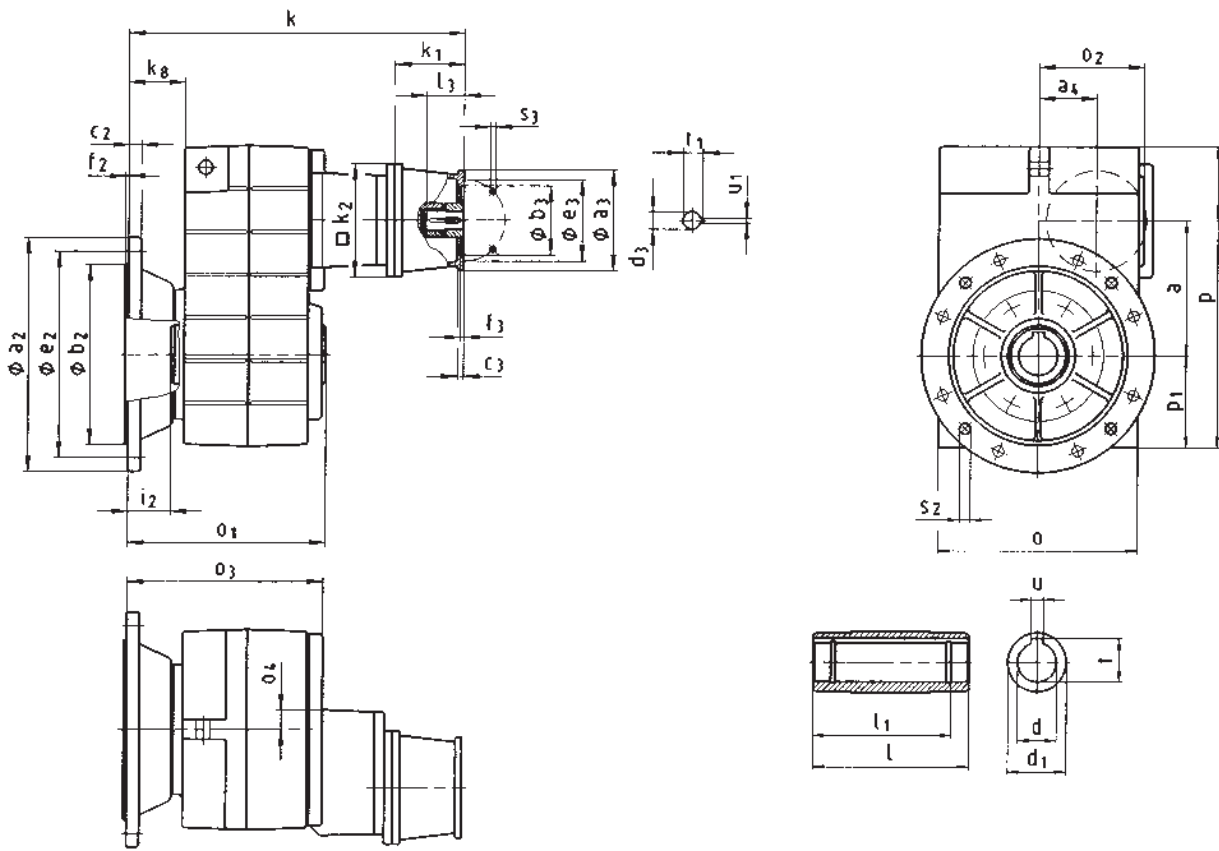
Gearbox <b>GFL □□ - 3 N HQ</b> corresponds to IEC motor			Drive size																														
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100	2E 90	3E 80	1F 100	2F 90	1G 132	2G 100	3G	1H 160	2H 180	3H 132											
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188										
		$k_2$	120	145	120	145			180			180			180			265			300												
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300									
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230									
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18									
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265									
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5									
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5									
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38											
		$l_3$	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80										
max			23	30	23	40			50	50	60			60			80	60	80	110	110	80											
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10												
$t_1$	12.5	16	12.5	21.5	16	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41												
Gearbox size	Gearbox										Total length																						
	$o^*$	$o_1$	$o_2$	$o_3$	$o_4$	$p^*$	$p_1$	$a$	$a_4$	$k$																							
05	165	140	107	141	23	252	78	112.5	54.5	298	305	298	319			353																	
06	206	160	111	160	20	315	98	140	58	328	335	328	349			383																	
07	256	200	135	199	24	386	118	173	74				379			393			427			422											
09	318	240	170	238	27	486	149	220	93.5				431			445			479			474			503								
11	395	290	216	285	34	600	181	276.5	120							505			539			534			563			618	598	618	661	661	631
14	490	350	271	340	38	740	228	339	154										618			613			642			697	677	697	740	740	710

Gearbox size	Hollow shaft						Pitch circle						Torque plate					
	$d$ H7	$l$	$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_1$	$b_1$ H7	$e_1$	$f_1$	$i_1$	$s_1$ 6x60	$a_7$	$a_8$	$c_6$	$s_6$	$k_6$	$k_7$
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114

Dimensions in [mm]

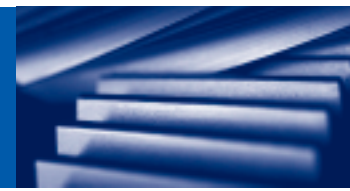
\* Observe dimension  $k_2$

GFL □□ - 3 N HCK



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



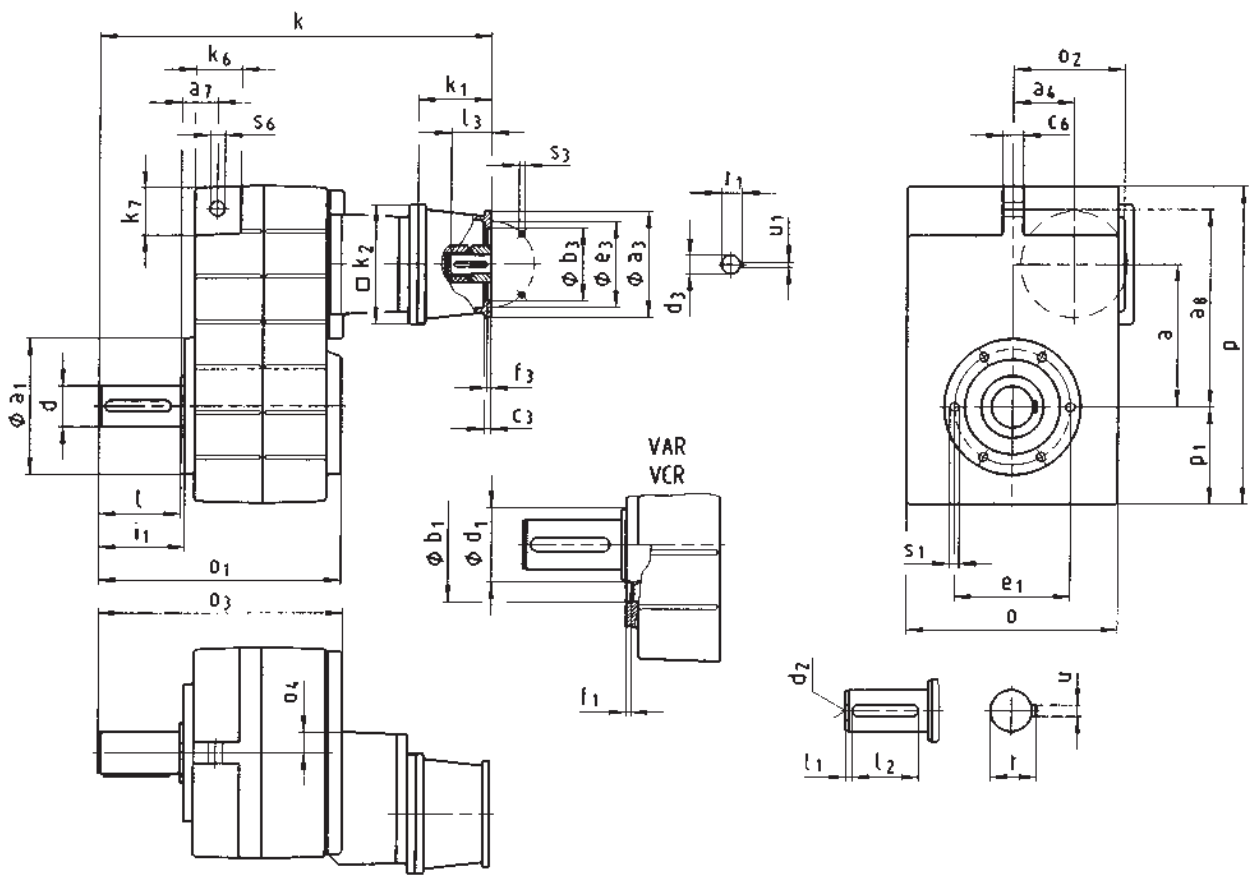
Gearbox <b>GFL □□ - 3 N HCK</b> corresponds to IEC motor			Drive size																												
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132									
Housing	$k_1$		75	77	75	91			115	110			139		180	160	180	218	218	188											
		$k_2$	120	145	120	145			180	180			180		265			300													
	Flange	$a_3$		90	105	90	160	160	105	120	160	160			160	300	250	250	350	350	300										
			$b_3$ H8	60	70	60	110	110	70	80	110	110			110	230	180	180	250	250	230										
		$c_3$	7	8	7	10	10	8	8	10	10			10	18	18	35	20	20	18											
		$e_3$	75	85	75	130	130	85	100	130	130			130	265	215	215	300	300	265											
		$f_3$	3	3		4	4	3	3.5	4	4			4	4.5			6	6	4.5											
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9	9			9	13.5			17.5	17.5	13.5											
		Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38							
	$l_3$ min max			23	30	23	25			50	40	30		30	80	60	80	110	110	80											
	23		30	23	40			50	50	60		60	80	60	80	110	110	80													
$u_1$	4		5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10										
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41											
Gearbox size	Gearbox										Total length																				
	$o^*$	$o_1$	$o_2$	$o_3$	$o_4$	$p^*$	$p_1$	$a$	$a_4$	$k_8$	$k$																				
05	165	173	107	173.5	23	252	78	112.5	54.5	46	331	338	331	352			386														
06	206	201	111	200.5	20	315	98	140	58	55	369	376	369	390			424														
07	256	255	135	254	24	386	118	173	74	72		434		448			482			477											
09	318	300	170	297.5	27	486	149	220	93.5	77		491		505			539			534			563								
11	395	350	216	344.5	34	600	181	276.5	120	85				565			599			594			623			678	658	678	721	721	691
14	490	410	271	399.5	38	740	228	339	154	89							678			673			702			757	737	757	800	800	770

Gearbox size	$d$ H7	$l$	Hollow shaft				Output flange							
			$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11	
	35				10	38.3								
06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11	
	45				14	48.8								250
07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14	
	55				16	59.3								300
09	60	240	95	210	18	64.4	350	250	18	300	4	60	4 x 17.5	
	70				20	74.9								
11	70	290	105	250	20	74.9	400	300	20	350	5	60	4 x 17.5	
	80				22	85.4								450
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

Dimensions in [mm]

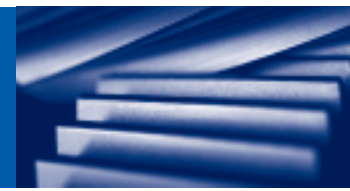
\* Observe dimension  $k_2$

GFL □□ - 3 N VDR



# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GFL □□ - 3 N V□R</b> corresponds to IEC motor			Drive size																											
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132								
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188							
		$k_2$	120	145	120	145			180			180			180			265			300									
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300						
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230						
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18						
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265						
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5						
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5						
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38								
		$l_3$	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80							
max			23	30	23	40			50	50	60			60			80	60	80	110	110	80								
$u_1$		4	5	4	6	5	5	5	8	6	8	6	8	8	8	10	8	10	12	14	10									
$t_1$	12.5	16	12.5	21.5	16	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41									
Gearbox size	Gearbox									Total length																				
	$o^*$	$o_1$	$o_2$	$o_3$	$o_4$	$p^*$	$p_1$	$a$	$a_4$	$k$																				
05	165	197	107	201	23	252	78	112.5	54.5	358	365	358	379			413														
06	206	236	111	240	20	315	98	140	58	408	415	408	429			463														
07	256	296	135	299	24	386	118	173	74		479		493			527			522											
09	318	356	170	358	27	486	149	220	93.5		551		565			599			594			623								
11	395	445	216	445	34	600	181	276.5	120				665			699			694			723			778	758	778	821	821	791
14	490	544	271	540	38	740	228	339	154							818			813			842			897	877	897	940	940	910

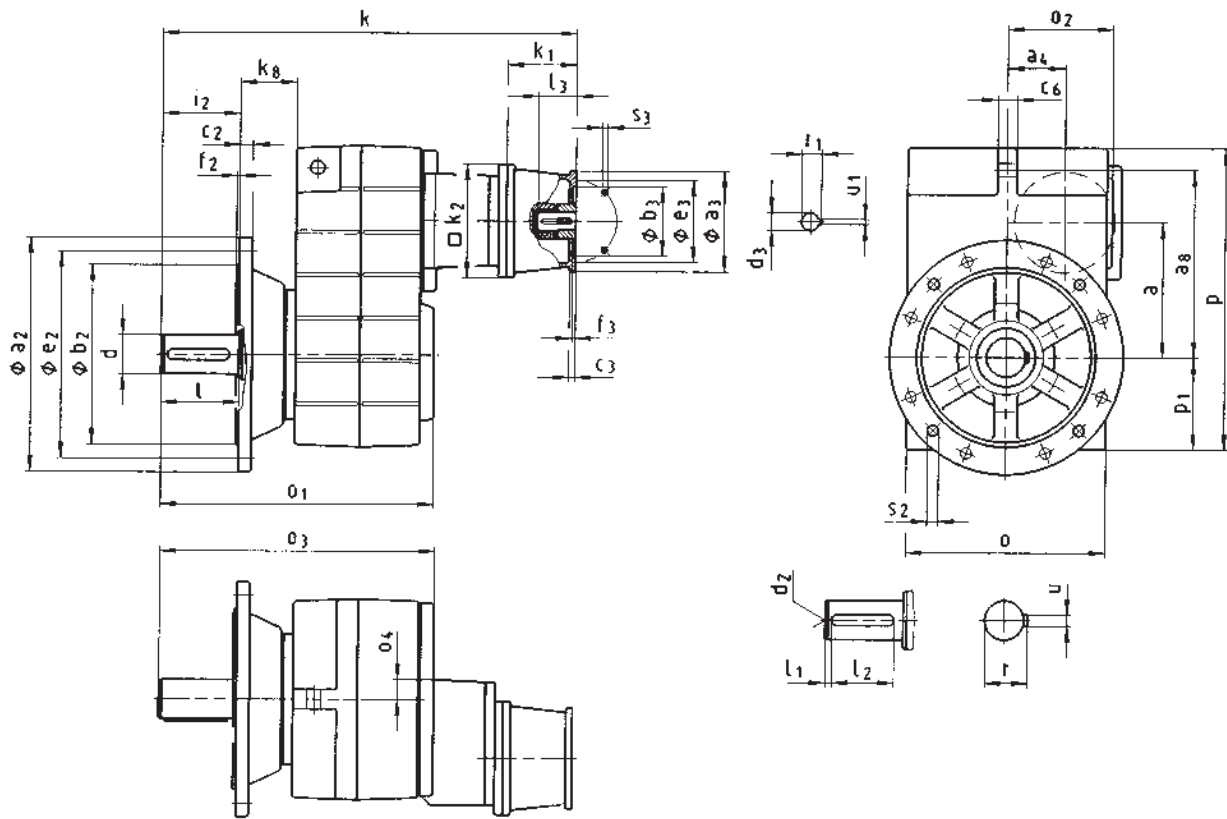
Gearbox size	Solid shaft									Pitch circle					Torque plate						
	$d$	$l$	$d_1$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$ H7	$e_1$	$f_1$	$i_1$	$s_1$ 6x60°	$a_7$	$a_8$	$c_6$	$s_6$	$k_6$	$k_7$	
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38	
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46	
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56	
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70	
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90	
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114	

Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$

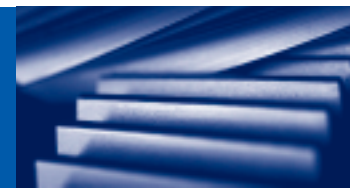
GFL □□ - 3 N VCK





# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GFL □□ - 3 N VCK</b> corresponds to IEC motor			Drive size																																												
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132																									
Housing	$k_1$		75	77	75	91			115			110			139			180			160			180			218			218			188														
		$k_2$	120	145	120	145			180			180			180			265			300			300			300			300																	
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300			250			250			350			350			300													
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230			180			180			250			250			230													
		$c_3$	7	8	7	10	10	8	8	10			10			10			18			18			35			20			20			18													
		$e_3$	75	85	75	130	130	85	100	130			130			130			265			215			215			300			300			265													
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6			6			6			4.5																
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5			17.5			13.5																			
		Required motor shafts	$d_3$	11	14	11	19	14	14	14	24			19			28			24			38			28			38			42			48			38									
	$l_3$		min	23	30	23	25			50			40			30			30			80			60			80			110			110			80										
max			23	30	23	40			50			50			60			60			80			60			80			110			110			80											
$u_1$	4		5	4	6	5	5	5	8			6			8			6			8			8			10			8			10			12			14			10					
$t_1$	12.5	16	12.5	21.5	16	16	16	16	27			21.5			31			27			21.5			31			27			41			31			41			45			51.5			41		
Gearbox size	Gearbox										Total length																																				
	$o^*$	$o_1$	$o_2$	$o_3$	$o_4$	$p^*$	$p_1$	$a$	$a_4$	$k_8$	$k$																																				
05	165	230	107	234	23	252	78	112.5	54.5	46	391	398	391	412			446																														
06	206	277	111	281	20	315	98	140	58	55	449	456	449	470			504																														
07	256	351	135	354	24	386	118	173	74	72	534			548			582			577																											
09	318	416	170	418	27	486	149	220	93.5	77	611			625			659			654			683																								
11	395	505	216	505	34	600	181	276.5	120	85				725			759			754			783			838			818			838			881			881			851						
14	490	604	271	600	38	740	228	339	154	89							878			873			902			957			937			957			1000			1000			970						

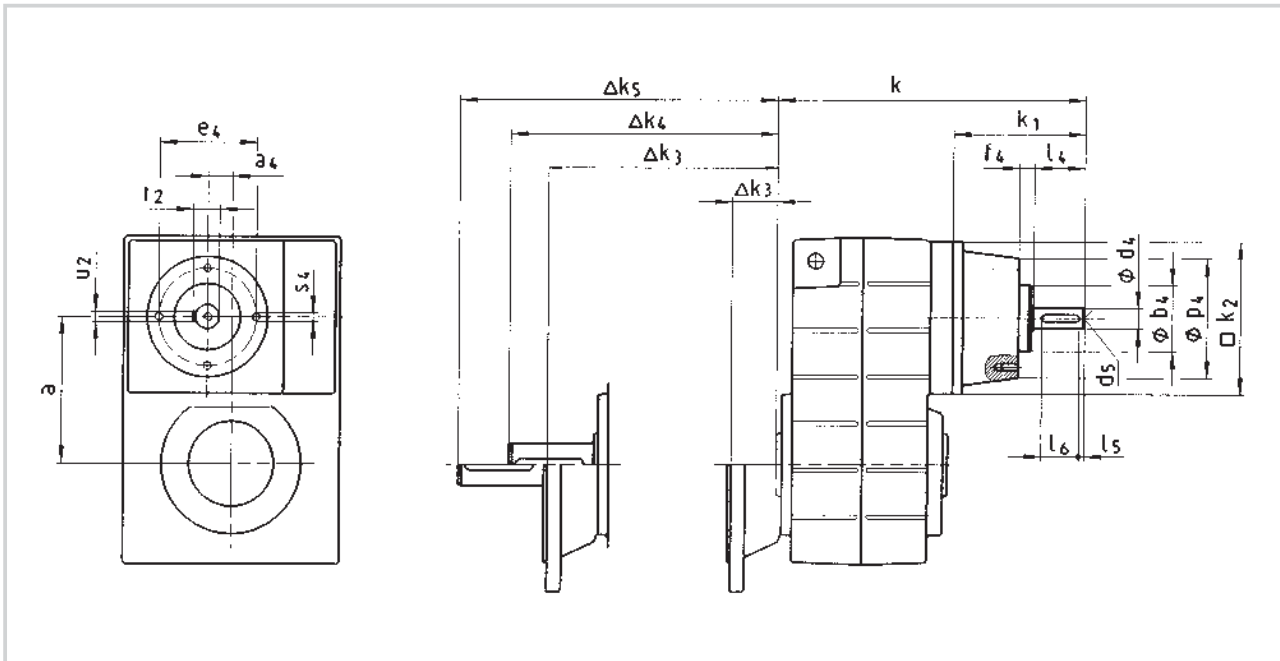
Gearbox size	Solid shaft										Output flange					
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$		
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11		
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14		
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14		
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5		
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 450	5	160	4 x 17.5 8 x 17.5		
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5		

Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$

## Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Gearbox with free input shaft



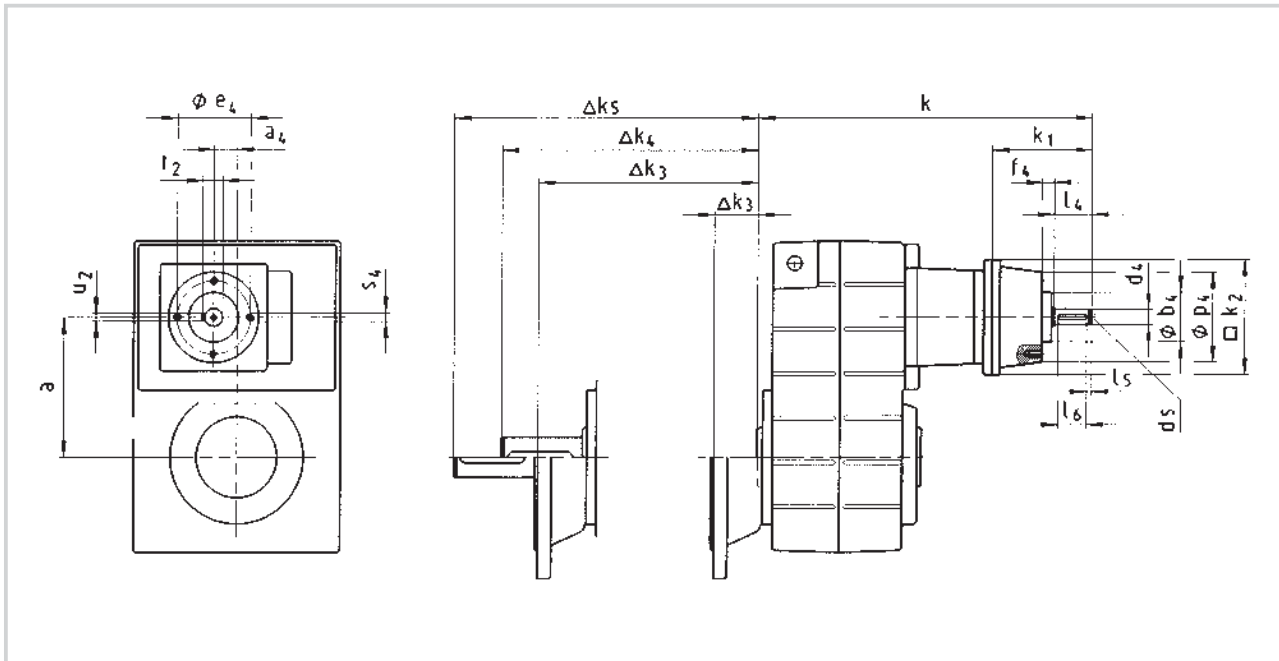
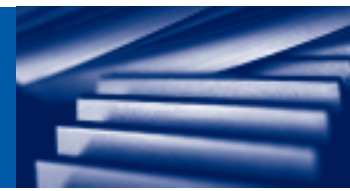
4

Gearbox		Drive size												
<b>GFL □□ - 2 W □□□</b>		1A	1B	1C	1D	1E	1F	1G	1H	1K				
Housing	$k_1$	100	100	102	130	160	175	175	182	220				
	$k_2$	115	115	145	145	180	222	222	300	300				
Pitch circle with centring	$p_4$	80	86	90	120	142	178	216	262	262				
	$b_4$ js8	52	52	52	65	78	98	125	155	155				
	$e_4$	67	67	67	90	115	145	175	210	210				
	$f_4$	12	12	12	12	22	23	23	23	32				
	$s_4$ 4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	M20x36	M20x36				
Input shaft	$d_4$ k6	14	14	14	19	24	28	38	42	48				
	$l_4$	35	35	40	50	60	80	100	110	110				
	$l_5$	4.5	4.5	4	4	6	7	8	8	8				
	$l_6$	25	25	32	40	45	63	80	90	90				
	$d_5$	M6	M6	M6	M6	M8	M10	M12	M16	M16				
	$u_2$	5	5	5	6	8	8	10	12	14				
	$t_2$	16	16	16	21.5	27	31	41	45	51.5				
Gearbox size	Gearbox *					Total length								
	a	$a_4$	HCK $\Delta k_3$	VDR $\Delta k_4$	VCK $\Delta k_5$	Output design HDR k								
04	90.5	12.5	33	50	83	200	200	232						
05	112.5	18.5	33	60	93		228	253	281					
06	140	22	41	80	121			266	294	334	355			
07	173	29	55	100	155				327	367	388	388		
09	220	37.5	60	120	180					401	422	422	442	
11	276.5	50	60	160	220						463	463	483	521
14	339	65	60	200	260							508	528	566

Dimensions in [mm]

\* For further dimensions see Dimensions - Shaft-mounted helical geared motors (low-profile geared motors)

# Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes) Gearbox with free input shaft

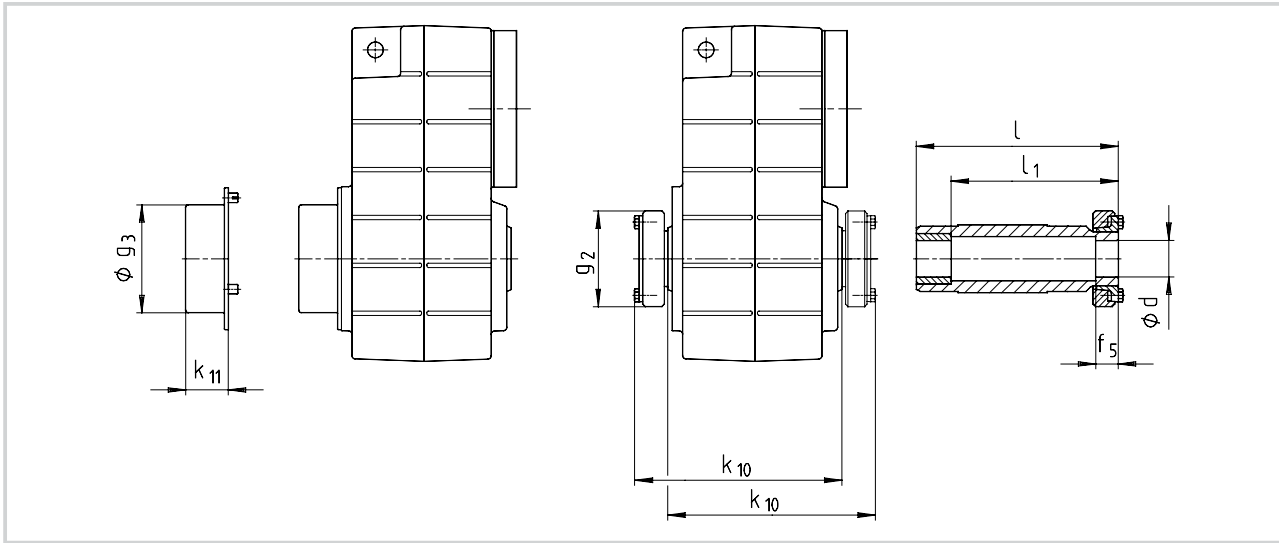


Gearbox		Drive size											
<b>GFL □□ - 3 W □□□</b>		1A	1B	1C	1D	1E	1F	1G	1H				
Housing	$k_1$	100	100	102	130	160	175	175	182				
	$k_2$	115	115	145	145	180	222	222	300				
	Pitch circle with centring												
	$p_4$	80	86	90	120	142	178	216	262				
	$b_4$ js8	52	52	52	65	78	98	125	155				
	$e_4$	67	67	67	90	115	145	175	210				
Input shaft	$f_4$	12	12	12	12	22	23	23	23				
	$s_4$ 4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	M20x36				
	$d_4$ k6	14	14	14	19	24	28	38	42				
	$l_4$	35	35	40	50	60	80	100	110				
	$l_5$	4.5	4.5	4	4	6	7	8	8				
	$l_6$	25	25	32	40	45	63	80	90				
Gearbox size	$d_5$	M6	M6	M6	M6	M8	M10	M12	M16				
	$u_2$	5	5	5	6	8	8	10	12				
	$t_2$	16	16	16	21.5	27	31	41	45				
Gearbox size	Gearbox *					Total length							
	a	$a_4$	HCK $\Delta k_3$	VDR $\Delta k_4$	VCK $\Delta k_5$	Output design HDR k							
05	112.5	54.5	33	60	93	298	298	330					
06	140	58	41	80	121	328	328	360					
07	173	74	55	100	155		379	404	432				
09	220	93.5	60	120	180			456	484	524	545		
11	276.5	120	60	160	220				544	584	605	605	
14	339	154	60	200	260					663	684	684	704

Dimensions in [mm]

\* For further dimensions see Dimensions - Shaft-mounted helical geared motors (low-profile geared motors)

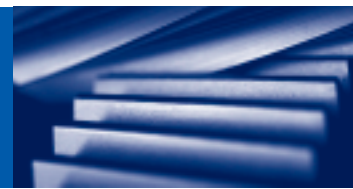
Hollow shaft with shrink disc



Gearbox size	Machine shaft *		Hollow shaft			Gearbox		Protective cover	
	d	Fit	l	l <sub>1</sub>	f <sub>5</sub>	g <sub>2</sub>	k <sub>10</sub>	g <sub>3</sub>	k <sub>11</sub>
04	25 30	h6	142	122	26	72	146	79	41
05	35	h6	168	148	28	80	171	90	43
06	40	h6	194	164	30	90	197	100	49
07	50	h6	232	192	26	110	234	124	49
09	65	h6	278	228	30	141	281	159	52
11	80	h6	338	238	42	170	344	191	65
14	100	h6	407	307	55	215	415	253	78

Dimensions in [mm]

\* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4) the torque values given in the selection tables can be transmitted without restriction. If less rigid materials are being used, please contact us. The average surface roughness R<sub>z</sub> should not exceed 15 μm (turning is sufficient).



Possible combinations of shrinks discs on the drive side (position 1)

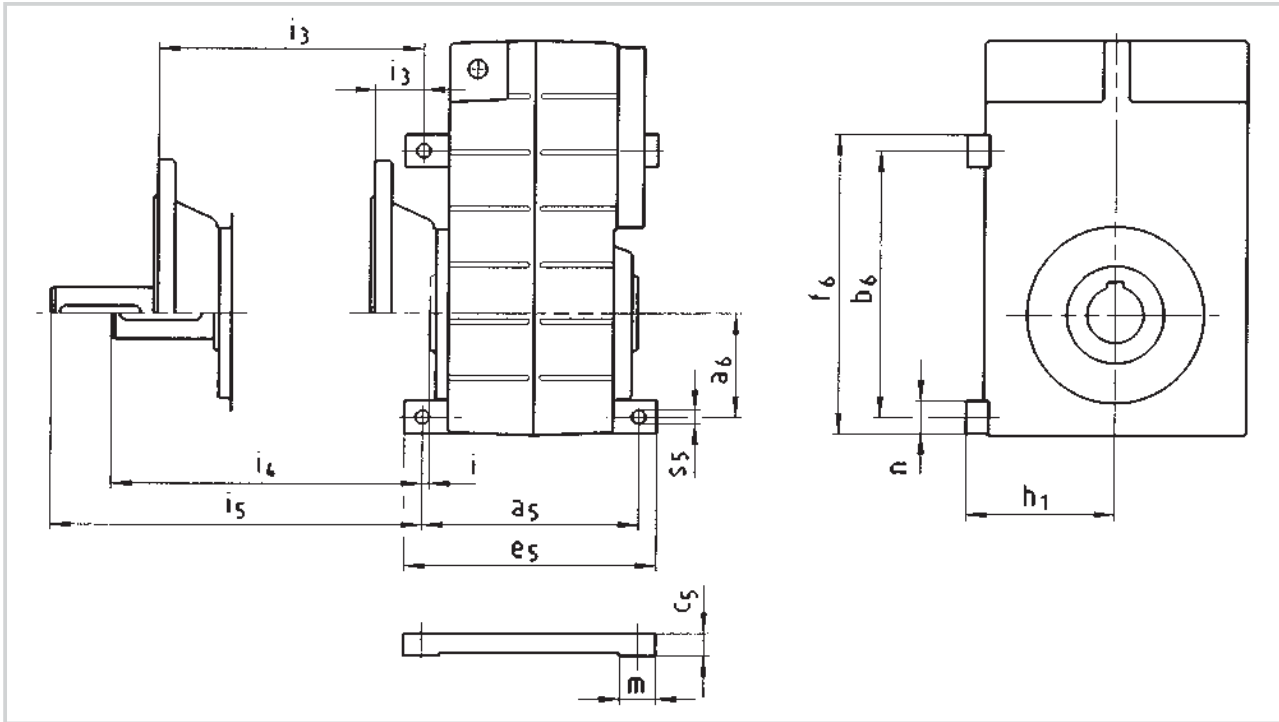
Gearbox size	Geared motors GFL□□-2M with motor frame size												
	063C	063	071C	071	080	090	100	112	132	160	180	200	225
04													
05	▲ 1)		▲ 1)										
06	▲		▲	▲	▲	▲ 1)	▲ 1)						
07					▲	▲	▲	▲ 1)					
09						▲	▲	▲	▲			▲ 1)	
11							▲	▲	▲	▲	▲	▲	▲
14								▲	▲	▲	▲	▲	▲
Gearbox size	Gearbox with mounting flange for IEC standard motors GFL□□-2N with drive size												
	1A	1B	2B	□C	□D	□E	□F	□G	□H	□K			
04													
05													
06		▲		▲	▲ 1)	▲ 1)	▲ 1)						
07				▲	▲	▲	▲						
09					▲	▲	▲	▲	▲ 1)		▲ 1)		
11						▲	▲	▲	▲	▲	▲	▲	
14								▲	▲	▲	▲	▲	
Gearbox size	Gearbox with free input shaft GFL□□-2W with drive size												
	1A	1B	1C	1D	1E	1F	1G	1H	1K				
04													
05		▲ 1)											
06		▲	▲	▲	▲ 1)								
07				▲	▲	▲ 1)	▲ 1)						
09					▲	▲	▲	▲ 1)					
11						▲	▲	▲	▲	▲			
14							▲	▲	▲	▲			

Dimensions in [mm]

1) Without cover

Terminal box position 4 is not possible with geared motors GFL□□-2M with shrink disc in position 1.  
All designs are possible with geared motors GFL□□-3□.

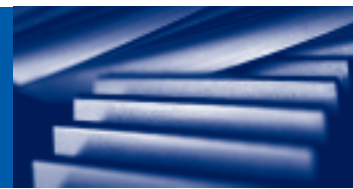
Foot mounting in position 3



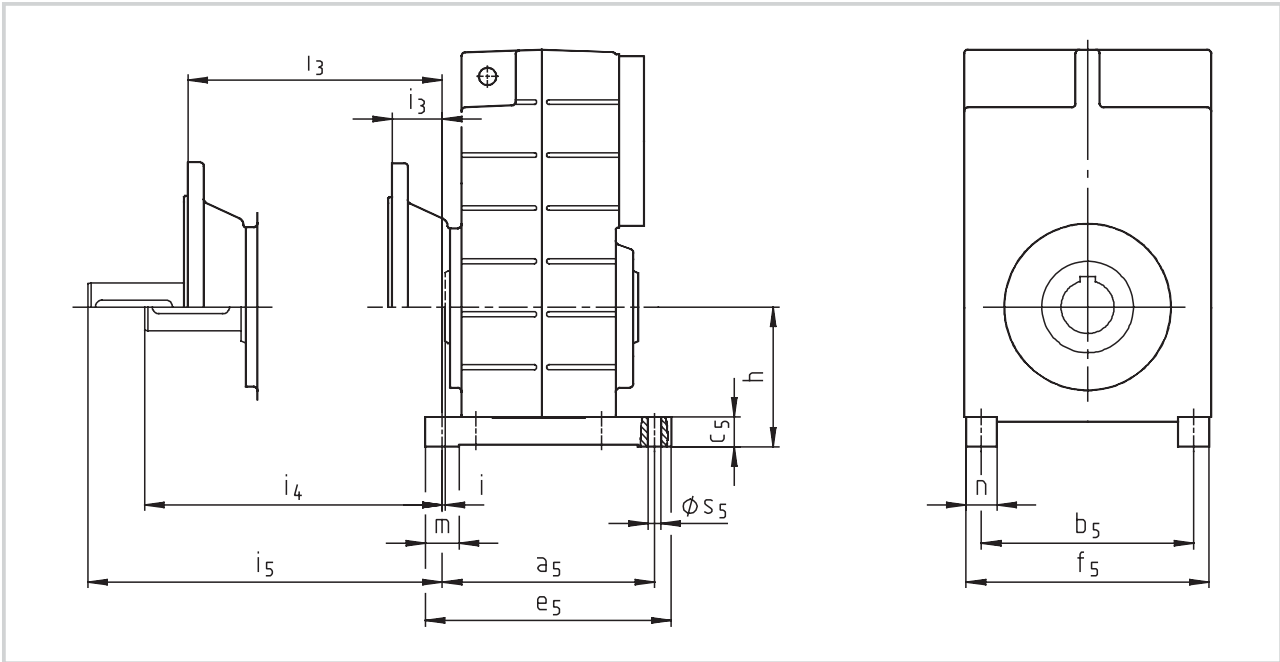
4

Gearbox size	Gearbox						Foot (in position 3)									Foot not possible with input side design		
	a <sub>6</sub>	h <sub>1</sub>	HQR i	HOK i <sub>3</sub>	VQR i <sub>4</sub>	VOK i <sub>5</sub>	a <sub>5</sub>	b <sub>6</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>	M	N	W	
04	47	90	4.5	28.5	45.5	78.5	130	115	18	152	140	25	22	6.6	> 080	> 1C		
05	65	100	2	31	58	91	160	167	21	185	192	25	25	9	> 080	> 1C		
06	80	125	2	39	78	119	175	205	27	205	233	28	30	11	> 100		> 1E	
07	100	155	3	52	97	152	220	260	31	255	292	32	35	13.5	> 132	> 1G		
09	125	190	3	57	117	177	260	335	36	300	375	40	40	17.5				
11	155	240	3	57	157	217	315	435	48	365	485	50	50	22				
14	200	295	3	57	197	257	375	540	57	430	600	60	55	26				

Dimensions in [mm]



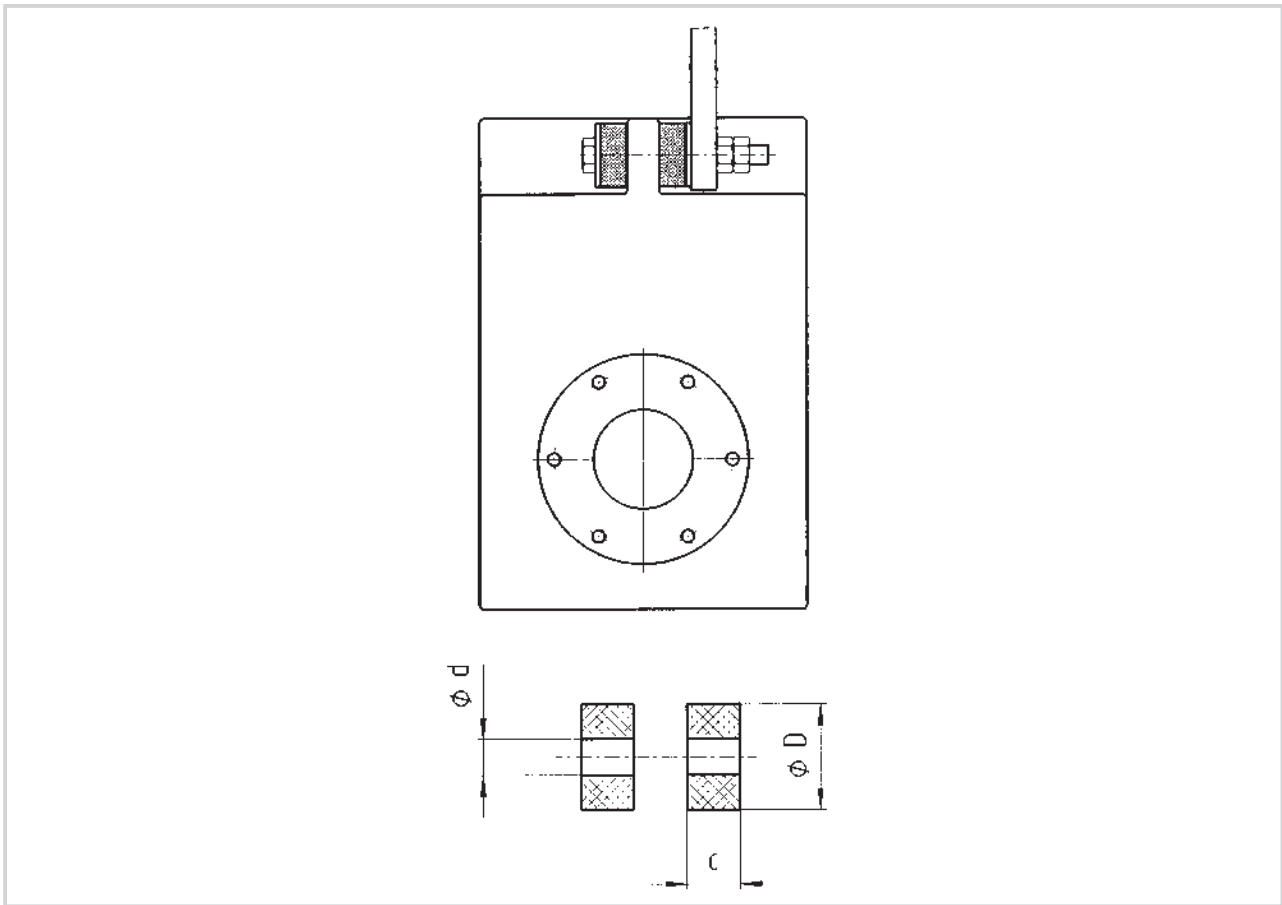
Foot mounting in position 4



Gearbox size	Gearbox					Foot (in position 4)							
	h	HQR i	HOK i <sub>3</sub>	VQR i <sub>4</sub>	VOK i <sub>5</sub>	a <sub>5</sub>	b <sub>5</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>
04	85	4.5	28.5	45.5	78.5	130	108	18	152	133	25	22	6.6
05	95	2	31	58	91	160	140	21	185	165	25	25	9
06	120	2	39	78	119	175	175	27	205	203	28	30	11
07	145	3	52	97	152	220	220	31	255	252	32	35	13.5
09	180	3	57	117	177	260	275	36	300	315	40	40	17.5
11	224	3	57	157	217	315	340	48	365	390	50	50	22
14	278	3	57	197	257	375	425	57	430	485	60	60	26

Dimensions in [mm]

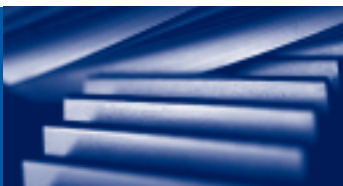
Rubber buffer set



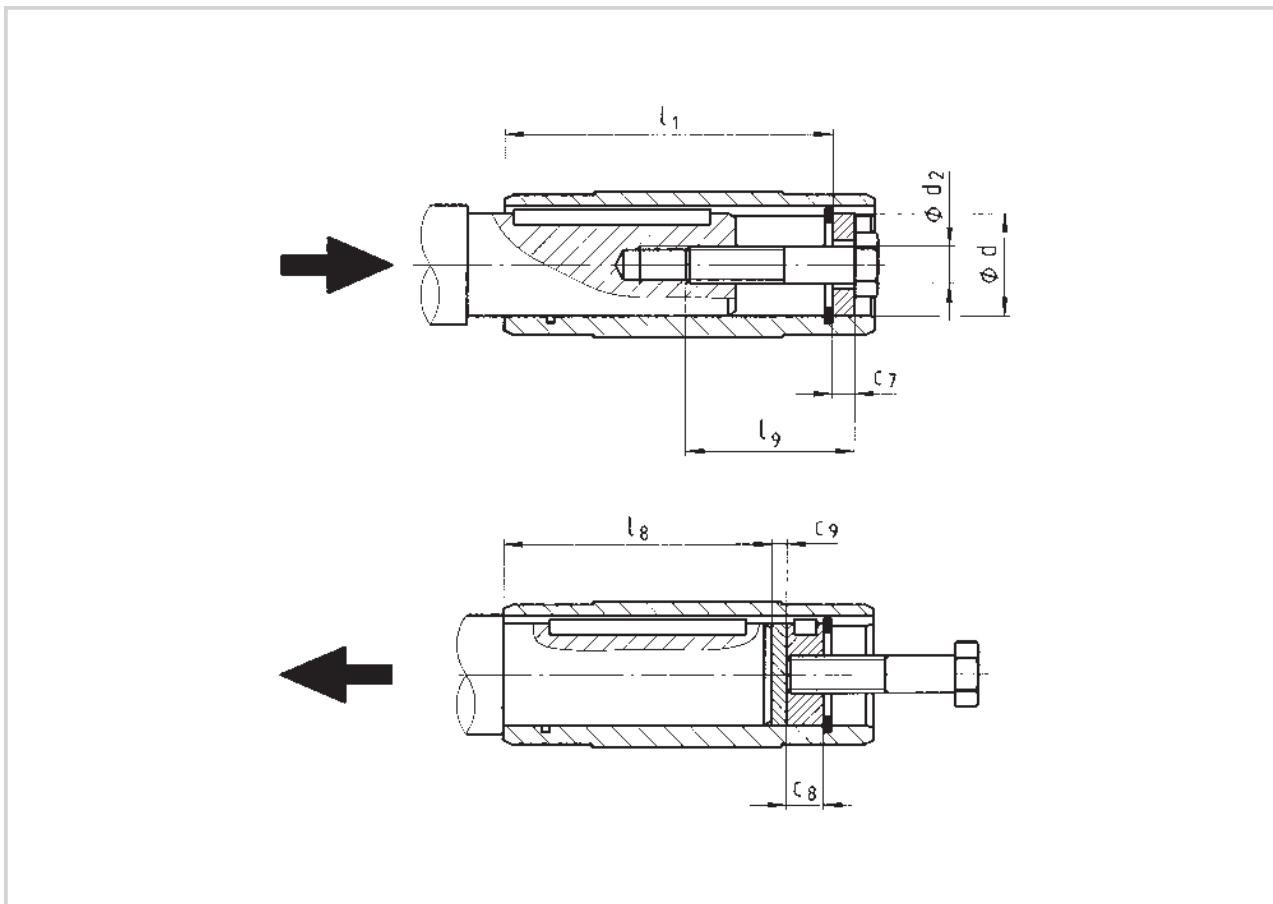
Gearbox size	d	D	c
04	11	30	14.5
05	11	30	14.5
06	13	40	15
07	17	50	27
09	21	60	28
11	26	72	29
14	33	92	30

Dimensions in [mm]





Assembly kit for hollow shaft retention / Proposal for auxiliary tool



Gearbox size	Hollow shaft (design H)			Assembly kit for hollow shaft circlip (auxiliary tool assembly)			Auxiliary tool disassembly		Machine shaft max $l_8$
	$l$	$l_1$	$d$ H7	$d_2$	$l_9$	$c_7$	$c_8$	$c_9$	
04	115	100	25 30	M10 M10	40	5 6	10	3	85
05	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
06	160	140	40 45	M16	60	8 9	16	4	118
07	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148
09	240	210	60 70	M20	80	13 14	20	5	182
11	290	250	70 80	M20	80	14 16	20	6	221
14	350	305	100	M24	100	20	24	8	270

Dimensions in [mm]

## Technical data

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## Selection tables

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## Dimensions

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Proposed design for auxiliary tools	5-53

## Bevel gearbox GKR□□

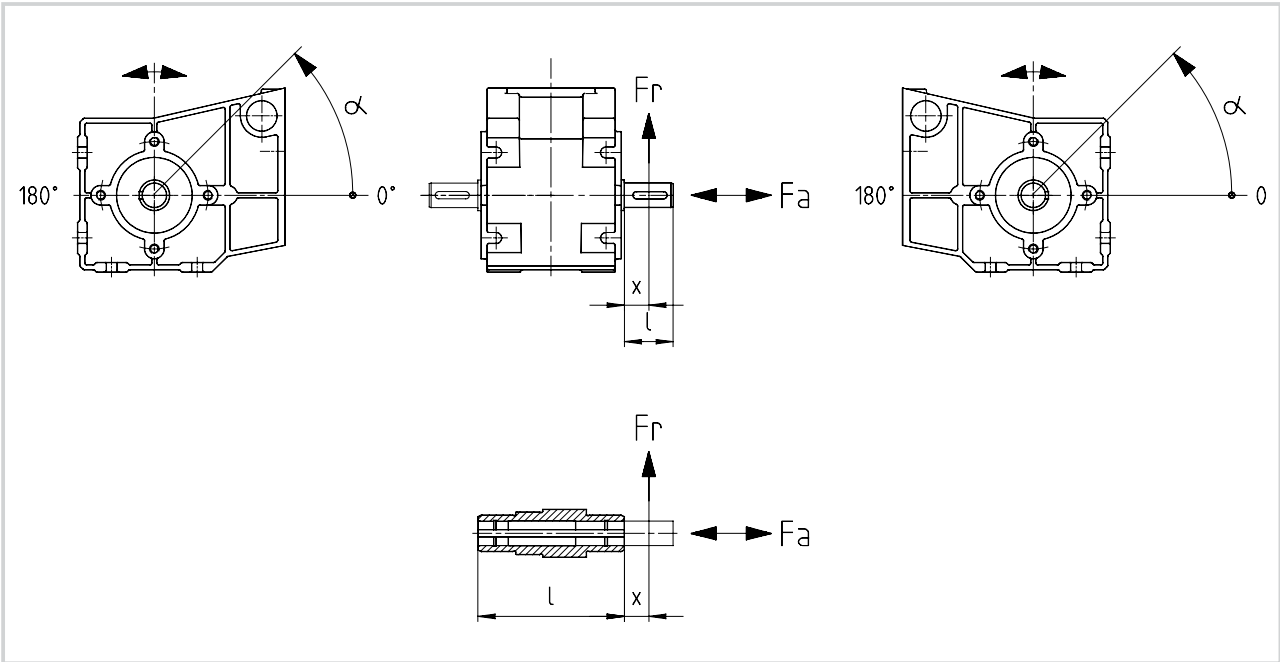
### Permissible radial force

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

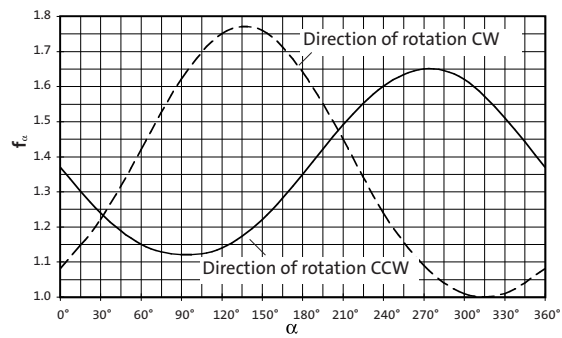
### Permissible axial force

$$F_{Aperm} = F_{ATab} \quad \text{at } F_r = 0$$

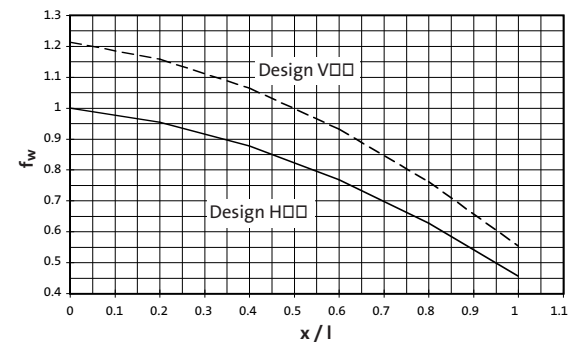
Contact Lenze      if  $F_r$  and  $F_a \neq 0$



$f_\alpha$  Effective direction factor at output shaft



$f_w$  Additional load factor at output shaft



# Technical data - Bevel gearboxes

## Permissible radial and axial forces - output



H00	Hollow shaft							
	Application of force $F_r$ : At hollow shaft end face ( $x = 0$ ) $F_{aTab}$ only valid for $F_r = 0$							
$n_2$ [min <sup>-1</sup> ]	GKR03		GKR04		GKR05		GKR06	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	2200	1000	2550	1275	3800	1900	5000	2500
250	2500	1100	3000	1500	4500	2200	5200	2600
160	2800	1250	3300	1650	5100	2500	5500	2750
100	3000	1400	3600	1800	6200	3100	7000	3500
63	3000	1400	3600	1800	7400	3700	9000	4500
40	3000	1400	3600	1800	7800	3900	10000	5000
25	3000	1400	3600	1800	7800	3900	10000	5000
≤16	3000	1400	3600	1800	7800	3900	10000	5000
$F_{r max}$	3000	–	3600	–	7800	–	10000	–

VOR	Solid shaft							
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$							
$n_2$ [min <sup>-1</sup> ]	GKR03		GKR04		GKR05		GKR06	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	1800	1000	2100	1275	3000	1900	4000	2500
250	2100	1100	2500	1500	3600	2200	4200	2600
160	2400	1250	2700	1650	4500	2500	4500	2750
100	2800	1400	3000	1800	5000	3100	5600	3500
63	3000	1400	3000	1800	6000	3700	7300	4500
40	3000	1400	3000	1800	6500	3900	8600	5000
25	3000	1400	3000	1800	6500	3900	9000	5000
≤16	3000	1400	3000	1800	6500	3900	9000	5000
$F_{r max}$	3000	–	3000	–	6500	–	9000	–

VAK	Solid shaft							
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$							
$n_2$ [min <sup>-1</sup> ]	GKR03		GKR04		GKR05		GKR06	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	1800	1000	2100	1275	5200	1900	5500	2500
250	2100	1100	2500	1500	6000	2200	6200	2600
160	2400	1250	2700	1650	6500	2500	7000	2750
100	2800	1400	3000	1800	6500	3100	9000	3500
63	3000	1400	3000	1800	6500	3700	9000	4500
40	3000	1400	3000	1800	6500	3900	9000	5000
25	3000	1400	3000	1800	6500	3900	9000	5000
≤16	3000	1400	3000	1800	6500	3900	9000	5000
$F_{r max}$	3000	–	3000	–	6500	–	9000	–

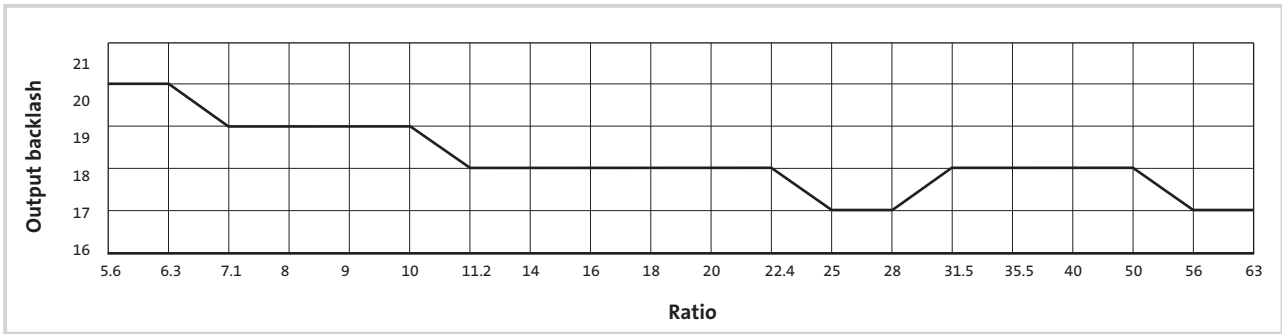
Neither radial nor axial forces are permitted on hollow shafts with shrink discs (S□□).



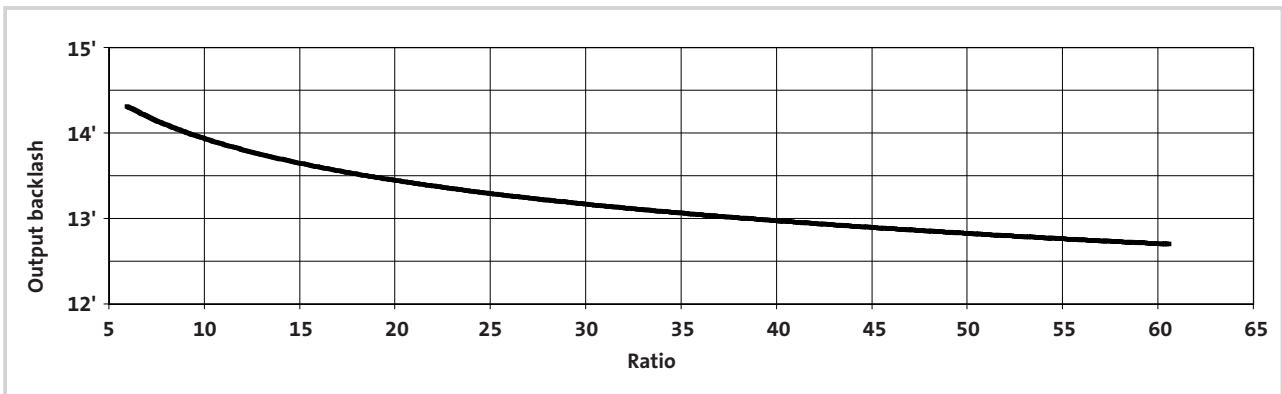
## Technical data - Bevel gearboxes

Output backlash in angular minutes

### GKR 03-2



### GKR 04-2

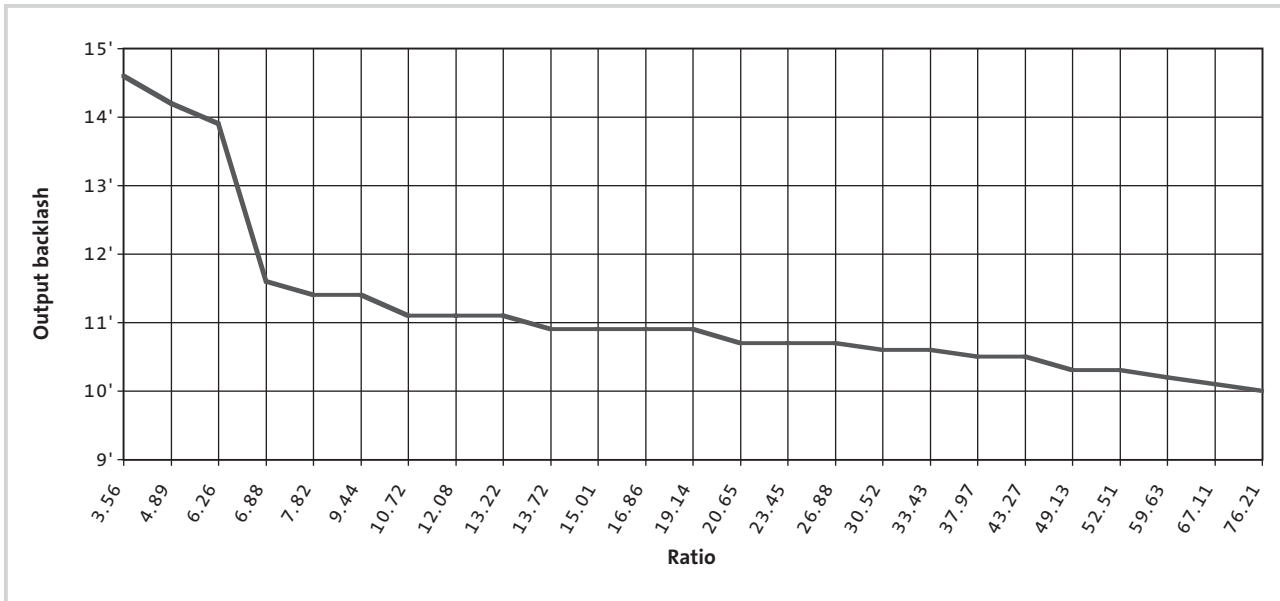


# Technical data - Bevel gearboxes

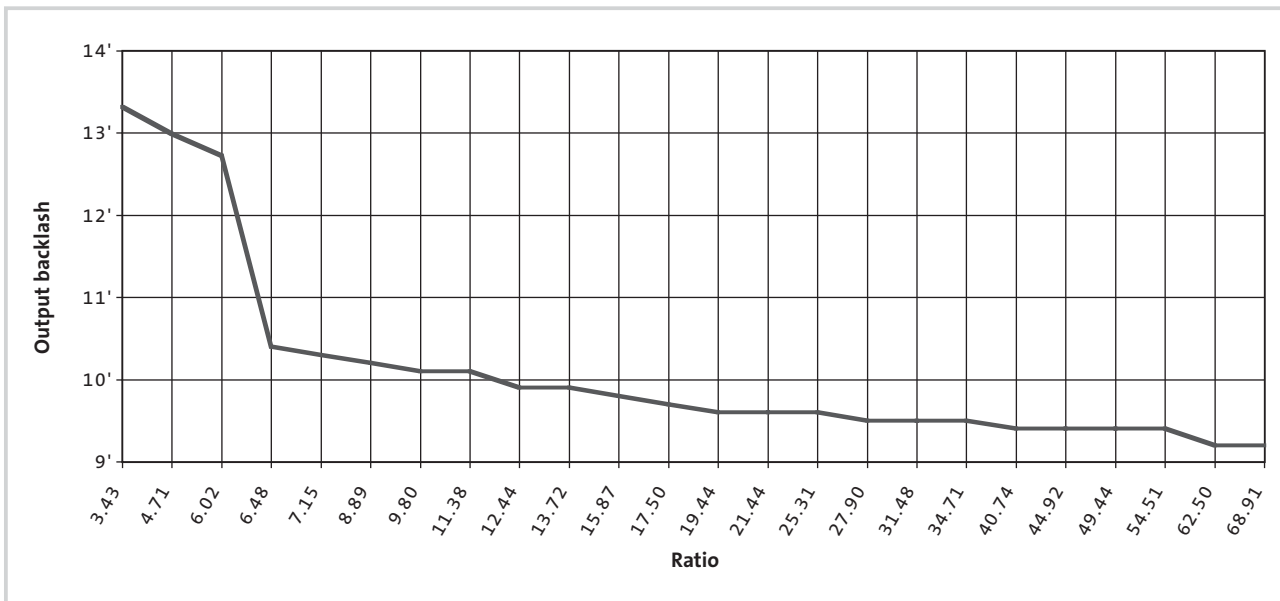
## Output backlash in angular minutes



GKR 05-2



GKR 06-2



### Bevel gearbox GKR □□-2

Gearbox size	Geared motors GKR□□-2M H□R with motor frame size						
	063	071	080	090	100	112 C22/-31 C32/41	
03	7.0	9.1					
04	9.2	11	16	23			
05	14	16	20	27	34		
06	22	24	28	36	43	55	61

Gearbox size	Gearbox with mounting flange for IEC standard motors GKR□□-2N H□R with drive size					
	1A	□B	□C	□D	□E	□F
03	5.6					
04	7.8	8.4	12			
05		13	16	19	21	
06		21	24	27	29	31

### Extra weights GKR □□

Gearbox size	Solid shaft	2nd output shaft end	Hollow shaft with shrink disc	Flange	Torque plate Pitch circle	Torque plate Housing foot
	V□□	V□□	S□□	□AK		
03	0.2	0.1	0.3	0.4	0.3	
04	0.3	0.1	0.3	0.5	0.4	
05	1.0	0.3	0.8	1.0	1.3	2.0
06	1.7	0.5	1.0	1.0	2.1	3.7

Weights in [kg] with oil capacity for mounting position A. All data is approximate

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.06 kW</b> n <sub>1</sub> =1425					<b>GKR □□ - 2M</b>	5-30
	64	9	5.3	22.270	GKR03 - 2M□□□ 063C02	
	57	10	4.7	25.051	GKR03 - 2M□□□ 063C02	
	50	11	4.1	28.808	GKR03 - 2M□□□ 063C02	
	44	12	3.6	32.593	GKR03 - 2M□□□ 063C02	
	38	14	3.1	37.481	GKR03 - 2M□□□ 063C02	
	34	16	2.8	42.222	GKR03 - 2M□□□ 063C02	
	29	19	2.4	48.556	GKR03 - 2M□□□ 063C02	
	26	21	2.2	53.889	GKR03 - 2M□□□ 063C02	
23	24	1.9	61.972	GKR03 - 2M□□□ 063C02		
<b>0.09 kW</b> n <sub>1</sub> =1375					<b>GKR □□ - 2M</b>	5-30
	103	8	5.7	13.386	GKR03 - 2M□□□ 063C22	
	91	9	5.0	15.111	GKR03 - 2M□□□ 063C22	
	79	10	4.4	17.378	GKR03 - 2M□□□ 063C22	
	71	12	3.9	19.365	GKR03 - 2M□□□ 063C22	
	62	13	3.4	22.270	GKR03 - 2M□□□ 063C22	
	55	15	3.0	25.051	GKR03 - 2M□□□ 063C22	
	48	17	2.6	28.808	GKR03 - 2M□□□ 063C22	
	42	19	2.3	32.593	GKR03 - 2M□□□ 063C22	
	37	22	2.0	37.481	GKR03 - 2M□□□ 063C22	
	33	25	1.8	42.222	GKR03 - 2M□□□ 063C22	
	28	29	1.6	48.556	GKR03 - 2M□□□ 063C22	
	26	32	1.4	53.889	GKR03 - 2M□□□ 063C22	
22	37	1.2	61.972	GKR03 - 2M□□□ 063C22		
<b>0.12 kW</b> n <sub>1</sub> =1425					<b>GKR □□ - 2M</b>	5-30
	136	8	5.6	10.466	GKR03 - 2M□□□ 063C12	
	122	9	5.1	11.640	GKR03 - 2M□□□ 063C12	
	112	10	5.0	12.698	GKR04 - 2M□□□ 063C12	
	107	10	4.4	13.386	GKR03 - 2M□□□ 063C12	
	94	12	3.9	15.111	GKR03 - 2M□□□ 063C12	
	82	13	3.4	17.378	GKR03 - 2M□□□ 063C12	
	74	15	3.0	19.365	GKR03 - 2M□□□ 063C12	
	64	17	2.6	22.270	GKR03 - 2M□□□ 063C12	
	57	19	2.4	25.051	GKR03 - 2M□□□ 063C12	
	50	22	2.0	28.808	GKR03 - 2M□□□ 063C12	
	44	25	1.8	32.593	GKR03 - 2M□□□ 063C12	
	38	29	1.6	37.481	GKR03 - 2M□□□ 063C12	
	34	32	1.4	42.222	GKR03 - 2M□□□ 063C12	
	36	31	2.9	40.000	GKR04 - 2M□□□ 063C12	
31	35	2.6	46.000	GKR04 - 2M□□□ 063C12		

Thermal power limit not considered (see page 2-4)



# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page			
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c						
<b>0.12 kW</b> n1=1425	29	37	1.2	48.556	<b>GKR □□ - 2M</b> GKR03 - 2M□□□ 063C12 GKR04 - 2M□□□ 063C12 GKR03 - 2M□□□ 063C12 GKR04 - 2M□□□ 063C12 GKR03 - 2M□□□ 063C12	5-30			
	27	40	1.7	52.698					
	26	41	1.1	53.889					
	24	46	1.7	60.603					
	23	47	1.0	61.972					
<b>0.18 kW</b> n1=2760	241	7	5.7	11.449	<b>GKR □□ - 2M</b> GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11 GKR04 - 2M□□□ 063-11	5-30			
	217	8	5.3	12.698					
	189	9	5.3	14.603					
	141	12	5.8	19.556					
	123	13	5.5	22.489					
	110	15	5.5	25.185					
	95	17	4.9	28.963					
	87	19	4.4	31.919					
	75	22	3.8	36.707					
	69	24	3.5	40.000					
	60	27	3.3	46.000					
	52	31	2.2	52.698					
	46	36	2.2	60.603					
	n1=1365	219	7	5.4			6.222	GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR04 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR04 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR04 - 2M□□□ 063C32 GKR03 - 2M□□□ 063C32 GKR04 - 2M□□□ 063C32	
		192	9	5.1			7.111		
		167	10	4.5			8.178		
		150	11	4.1			9.101		
		130	13	3.6			10.466		
		117	14	3.2			11.640		
108		15	3.2	12.698					
102		16	2.8	13.386					
94		18	3.2	14.603					
90		18	2.5	15.111					
79		21	2.2	17.378					
71		23	1.9	19.365					
61		27	1.7	22.270					
55		30	1.5	25.051					
54		30	2.9	25.185					
47		35	1.3	28.808					
47		35	2.6	28.963					
42		39	1.2	32.593					
43		38	2.4	31.919					
36	45	1.0	37.481						
37	44	2.0	36.707						

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.18 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=1365	32	51	0.9	42.222	GKR03 - 2M□□□ 063C32	
	34	48	1.9	40.000	GKR04 - 2M□□□ 063C32	
	30	55	1.6	46.000	GKR04 - 2M□□□ 063C32	
	26	63	1.1	52.698	GKR04 - 2M□□□ 063C32	
	23	73	1.1	60.603	GKR04 - 2M□□□ 063C32	
n1=870	22	75	1.2	40.000	GKR04 - 2M□□□ 071-13	
	19	86	1.0	46.000	GKR04 - 2M□□□ 071-13	
	20	81	3.0	43.267	GKR05 - 2M□□□ 071-13	
	18	92	2.6	49.133	GKR05 - 2M□□□ 071-13	
	17	99	2.4	52.510	GKR05 - 2M□□□ 071-13	
	16	102	3.5	54.513	GKR06 - 2M□□□ 071-13	
	15	112	2.1	59.630	GKR05 - 2M□□□ 071-13	
	14	117	2.8	62.500	GKR06 - 2M□□□ 071-13	
	13	126	1.4	67.113	GKR05 - 2M□□□ 071-13	
	13	129	2.8	68.906	GKR06 - 2M□□□ 071-13	
11	143	1.4	76.213	GKR05 - 2M□□□ 071-13		
<b>0.25 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2760	241	9	4.1	11.449	GKR04 - 2M□□□ 063-31	
	217	10	3.8	12.698	GKR04 - 2M□□□ 063-31	
	189	12	3.8	14.603	GKR04 - 2M□□□ 063-31	
	141	16	4.2	19.556	GKR04 - 2M□□□ 063-31	
	123	19	4.0	22.489	GKR04 - 2M□□□ 063-31	
	110	21	4.0	25.185	GKR04 - 2M□□□ 063-31	
	95	24	3.5	28.963	GKR04 - 2M□□□ 063-31	
	87	26	3.2	31.919	GKR04 - 2M□□□ 063-31	
	75	30	2.8	36.707	GKR04 - 2M□□□ 063-31	
	69	33	2.5	40.000	GKR04 - 2M□□□ 063-31	
	60	38	2.4	46.000	GKR04 - 2M□□□ 063-31	
	52	43	1.6	52.698	GKR04 - 2M□□□ 063-31	
	46	50	1.6	60.603	GKR04 - 2M□□□ 063-31	
	n1=1370	264	9	4.5	5.185	GKR04 - 2M□□□ 063C42
253		9	4.4	5.411	GKR03 - 2M□□□ 063C42	
220		10	3.9	6.222	GKR03 - 2M□□□ 063C42	
193		12	3.7	7.111	GKR03 - 2M□□□ 063C42	
168		14	3.3	8.178	GKR03 - 2M□□□ 063C42	
151		15	3.0	9.101	GKR03 - 2M□□□ 063C42	
131		17	2.6	10.466	GKR03 - 2M□□□ 063C42	
118		19	2.3	11.640	GKR03 - 2M□□□ 063C42	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.25 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=1370	108	21	4.3	12.698	GKR04 - 2M□□□ 063C42	
	104	22	4.5	13.216	GKR05 - 2M□□□ 063C42	
	102	22	2.0	13.386	GKR03 - 2M□□□ 063C42	
	91	25	4.5	15.008	GKR05 - 2M□□□ 063C42	
	91	25	1.8	15.111	GKR03 - 2M□□□ 063C42	
	79	29	1.6	17.378	GKR03 - 2M□□□ 063C42	
	77	30	3.0	17.889	GKR04 - 2M□□□ 063C42	
	71	32	1.4	19.365	GKR03 - 2M□□□ 063C42	
	70	32	2.8	19.556	GKR04 - 2M□□□ 063C42	
	62	37	1.2	22.270	GKR03 - 2M□□□ 063C42	
	61	37	2.4	22.489	GKR04 - 2M□□□ 063C42	
	55	42	1.1	25.051	GKR03 - 2M□□□ 063C42	
	54	42	2.2	25.185	GKR04 - 2M□□□ 063C42	
	48	48	0.9	28.808	GKR03 - 2M□□□ 063C42	
	47	48	1.9	28.963	GKR04 - 2M□□□ 063C42	
	45	51	4.3	30.522	GKR05 - 2M□□□ 063C42	
	42	54	0.8	32.593	GKR03 - 2M□□□ 063C42	
	43	53	1.7	31.919	GKR04 - 2M□□□ 063C42	
	37	61	1.5	36.707	GKR04 - 2M□□□ 063C42	
	34	66	1.2	40.000	GKR04 - 2M□□□ 063C42	
	30	76	1.2	46.000	GKR04 - 2M□□□ 063C42	
	28	81	3.0	49.133	GKR05 - 2M□□□ 063C42	
	28	82	3.2	49.444	GKR06 - 2M□□□ 063C42	
	26	87	2.8	52.510	GKR05 - 2M□□□ 063C42	
	25	90	3.2	54.513	GKR06 - 2M□□□ 063C42	
	23	99	2.4	59.630	GKR05 - 2M□□□ 063C42	
	22	104	2.6	62.500	GKR06 - 2M□□□ 063C42	
	20	111	1.4	67.113	GKR05 - 2M□□□ 063C42	
	20	114	2.6	68.906	GKR06 - 2M□□□ 063C42	
	18	126	1.4	76.213	GKR05 - 2M□□□ 063C42	
n1=920	18	130	1.9	52.510	GKR05 - 2M□□□ 071-33	
	17	134	2.7	54.513	GKR06 - 2M□□□ 071-33	
	15	147	1.6	59.630	GKR05 - 2M□□□ 071-33	
	15	154	2.2	62.500	GKR06 - 2M□□□ 071-33	
	14	166	1.1	67.113	GKR05 - 2M□□□ 071-33	
	13	170	2.2	68.906	GKR06 - 2M□□□ 071-33	
	12	188	1.1	76.213	GKR05 - 2M□□□ 071-33	
<b>0.37 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2840	271	12	5.8	10.466	GKR04 - 2M□□□ 071-11	
	248	14	5.4	11.449	GKR04 - 2M□□□ 071-11	
	224	15	4.8	12.698	GKR04 - 2M□□□ 071-11	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b> n1=2840					<b>GKR □□ - 2M</b>	5-30
	195	17	4.2	14.603	GKR04 - 2M□□□ 071-11	
	183	18	4.0	15.556	GKR04 - 2M□□□ 071-11	
	159	21	3.4	17.889	GKR04 - 2M□□□ 071-11	
	145	23	3.1	19.556	GKR04 - 2M□□□ 071-11	
	126	27	2.7	22.489	GKR04 - 2M□□□ 071-11	
	113	30	2.8	25.185	GKR04 - 2M□□□ 071-11	
	98	34	2.4	28.963	GKR04 - 2M□□□ 071-11	
	89	38	2.2	31.919	GKR04 - 2M□□□ 071-11	
	77	43	1.9	36.707	GKR04 - 2M□□□ 071-11	
	71	47	1.7	40.000	GKR04 - 2M□□□ 071-11	
	62	54	1.7	46.000	GKR04 - 2M□□□ 071-11	
	58	58	4.1	49.133	GKR05 - 2M□□□ 071-11	
	54	62	3.9	52.510	GKR05 - 2M□□□ 071-11	
	52	64	5.6	54.513	GKR06 - 2M□□□ 071-11	
	48	71	3.4	59.630	GKR05 - 2M□□□ 071-11	
	45	74	4.5	62.500	GKR06 - 2M□□□ 071-11	
	42	79	2.2	67.113	GKR05 - 2M□□□ 071-11	
	41	81	4.5	68.906	GKR06 - 2M□□□ 071-11	
	37	90	2.2	76.213	GKR05 - 2M□□□ 071-11	
n1=1410	272	12	4.0	5.185	GKR04 - 2M□□□ 071C32	
	261	13	3.1	5.411	GKR03 - 2M□□□ 071C32	
	227	15	2.7	6.222	GKR03 - 2M□□□ 071C32	
	198	17	2.5	7.111	GKR03 - 2M□□□ 071C32	
	172	20	2.3	8.178	GKR03 - 2M□□□ 071C32	
	155	22	2.1	9.101	GKR03 - 2M□□□ 071C32	
	135	25	1.8	10.466	GKR03 - 2M□□□ 071C32	
	121	28	1.6	11.640	GKR03 - 2M□□□ 071C32	
	111	30	3.0	12.698	GKR04 - 2M□□□ 071C32	
	107	32	4.0	13.216	GKR05 - 2M□□□ 071C32	
	105	32	1.4	13.386	GKR03 - 2M□□□ 071C32	
	97	35	2.6	14.603	GKR04 - 2M□□□ 071C32	
	94	36	4.0	15.008	GKR05 - 2M□□□ 071C32	
	93	36	1.3	15.111	GKR03 - 2M□□□ 071C32	
	91	37	2.4	15.556	GKR04 - 2M□□□ 071C32	
	81	41	1.1	17.378	GKR03 - 2M□□□ 071C32	
	79	43	2.1	17.889	GKR04 - 2M□□□ 071C32	
	73	46	1.0	19.365	GKR03 - 2M□□□ 071C32	
	72	47	1.9	19.556	GKR04 - 2M□□□ 071C32	
	63	53	0.8	22.270	GKR03 - 2M□□□ 071C32	
63	54	1.7	22.489	GKR04 - 2M□□□ 071C32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b> n <sub>1</sub> =1410					<b>GKR □□ - 2M</b>	5-30
	56	60	1.5	25.185	GKR04 - 2M□□□ 071C32	
	49	69	1.3	28.963	GKR04 - 2M□□□ 071C32	
	46	73	3.3	30.522	GKR05 - 2M□□□ 071C32	
	44	76	1.2	31.919	GKR04 - 2M□□□ 071C32	
	38	87	1.0	36.707	GKR04 - 2M□□□ 071C32	
	42	80	3.0	33.433	GKR05 - 2M□□□ 071C32	
	35	95	0.9	40.000	GKR04 - 2M□□□ 071C32	
	37	90	2.7	37.967	GKR05 - 2M□□□ 071C32	
	35	97	3.2	40.741	GKR06 - 2M□□□ 071C32	
	31	110	0.8	46.000	GKR04 - 2M□□□ 071C32	
	33	103	2.3	43.267	GKR05 - 2M□□□ 071C32	
	31	107	3.2	44.917	GKR06 - 2M□□□ 071C32	
	29	117	2.1	49.133	GKR05 - 2M□□□ 071C32	
	29	118	2.8	49.444	GKR06 - 2M□□□ 071C32	
	27	125	1.9	52.510	GKR05 - 2M□□□ 071C32	
	26	130	2.8	54.513	GKR06 - 2M□□□ 071C32	
	24	142	1.7	59.630	GKR05 - 2M□□□ 071C32	
	23	149	2.2	62.500	GKR06 - 2M□□□ 071C32	
	21	160	1.1	67.113	GKR05 - 2M□□□ 071C32	
21	164	2.2	68.906	GKR06 - 2M□□□ 071C32		
19	181	1.1	76.213	GKR05 - 2M□□□ 071C32		
n <sub>1</sub> =900	18	183	1.3	49.133	GKR05 - 2M□□□ 080-13	
	18	184	2.4	49.444	GKR06 - 2M□□□ 080-13	
	17	196	1.2	52.510	GKR05 - 2M□□□ 080-13	
	17	203	2.2	54.513	GKR06 - 2M□□□ 080-13	
	15	222	1.1	59.630	GKR05 - 2M□□□ 080-13	
	14	233	1.6	62.500	GKR06 - 2M□□□ 080-13	
	13	257	1.6	68.906	GKR06 - 2M□□□ 080-13	
<b>0.55 kW</b> n <sub>1</sub> =2840					<b>GKR □□ - 2M</b>	5-30
	548	9	4.3	5.185	GKR04 - 2M□□□ 071-31	
	476	11	4.3	5.963	GKR04 - 2M□□□ 071-31	
	399	13	4.3	7.111	GKR04 - 2M□□□ 071-31	
	347	14	4.3	8.178	GKR04 - 2M□□□ 071-31	
	312	16	4.3	9.101	GKR04 - 2M□□□ 071-31	
	271	18	3.9	10.466	GKR04 - 2M□□□ 071-31	
	248	20	3.6	11.449	GKR04 - 2M□□□ 071-31	
	224	22	3.3	12.698	GKR04 - 2M□□□ 071-31	
	215	23	4.3	13.216	GKR05 - 2M□□□ 071-31	
	195	26	2.8	14.603	GKR04 - 2M□□□ 071-31	
	189	26	4.3	15.008	GKR05 - 2M□□□ 071-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b> n1=2840					<b>GKR □□ - 2M</b>	5-30
	183	27	2.7	15.556	GKR04 - 2M□□□ 071-31	
	159	31	2.3	17.889	GKR04 - 2M□□□ 071-31	
	145	34	2.1	19.556	GKR04 - 2M□□□ 071-31	
	126	40	1.8	22.489	GKR04 - 2M□□□ 071-31	
	113	44	1.9	25.185	GKR04 - 2M□□□ 071-31	
	98	51	1.6	28.963	GKR04 - 2M□□□ 071-31	
	93	54	4.1	30.522	GKR05 - 2M□□□ 071-31	
	89	56	1.5	31.919	GKR04 - 2M□□□ 071-31	
	77	65	1.3	36.707	GKR04 - 2M□□□ 071-31	
	71	70	1.2	40.000	GKR04 - 2M□□□ 071-31	
	62	81	1.1	46.000	GKR04 - 2M□□□ 071-31	
	66	76	3.2	43.267	GKR05 - 2M□□□ 071-31	
	58	86	2.8	49.133	GKR05 - 2M□□□ 071-31	
	54	92	2.6	52.510	GKR05 - 2M□□□ 071-31	
	52	96	3.8	54.513	GKR06 - 2M□□□ 071-31	
	48	105	2.3	59.630	GKR05 - 2M□□□ 071-31	
	45	110	3.0	62.500	GKR06 - 2M□□□ 071-31	
	42	118	1.5	67.113	GKR05 - 2M□□□ 071-31	
	41	121	3.0	68.906	GKR06 - 2M□□□ 071-31	
37	134	1.5	76.213	GKR05 - 2M□□□ 071-31		
n1=1405	271	18	3.7	5.185	GKR04 - 2M□□□ 071C42	
	260	19	2.0	5.411	GKR03 - 2M□□□ 071C42	
	226	22	1.8	6.222	GKR03 - 2M□□□ 071C42	
	198	25	1.7	7.111	GKR03 - 2M□□□ 071C42	
	198	25	3.1	7.111	GKR04 - 2M□□□ 071C42	
	172	29	1.5	8.178	GKR03 - 2M□□□ 071C42	
	172	29	2.8	8.178	GKR04 - 2M□□□ 071C42	
	154	32	1.4	9.101	GKR03 - 2M□□□ 071C42	
	154	32	2.6	9.101	GKR04 - 2M□□□ 071C42	
	134	37	1.2	10.466	GKR03 - 2M□□□ 071C42	
	134	37	2.4	10.466	GKR04 - 2M□□□ 071C42	
	121	41	1.1	11.640	GKR03 - 2M□□□ 071C42	
	123	41	2.2	11.449	GKR04 - 2M□□□ 071C42	
	111	45	2.0	12.698	GKR04 - 2M□□□ 071C42	
	106	47	4.5	13.216	GKR05 - 2M□□□ 071C42	
	105	48	0.9	13.386	GKR03 - 2M□□□ 071C42	
	96	52	1.7	14.603	GKR04 - 2M□□□ 071C42	
	94	53	4.2	15.008	GKR05 - 2M□□□ 071C42	
	93	54	0.8	15.111	GKR03 - 2M□□□ 071C42	
	90	55	1.6	15.556	GKR04 - 2M□□□ 071C42	
79	64	1.4	17.889	GKR04 - 2M□□□ 071C42		

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=1405	72	69	1.3	19.556	GKR04 - 2M□□□ 071C42	
	63	80	1.1	22.489	GKR04 - 2M□□□ 071C42	
	60	83	2.9	23.450	GKR05 - 2M□□□ 071C42	
	56	89	1.0	25.185	GKR04 - 2M□□□ 071C42	
	52	96	2.5	26.878	GKR05 - 2M□□□ 071C42	
	49	103	0.9	28.963	GKR04 - 2M□□□ 071C42	
	46	108	2.2	30.522	GKR05 - 2M□□□ 071C42	
	45	112	3.2	31.481	GKR06 - 2M□□□ 071C42	
	42	119	2.0	33.433	GKR05 - 2M□□□ 071C42	
	41	123	3.2	34.708	GKR06 - 2M□□□ 071C42	
	37	135	1.8	37.967	GKR05 - 2M□□□ 071C42	
	35	145	2.9	40.741	GKR06 - 2M□□□ 071C42	
	33	154	1.6	43.267	GKR05 - 2M□□□ 071C42	
	31	160	2.8	44.917	GKR06 - 2M□□□ 071C42	
	29	175	1.4	49.133	GKR05 - 2M□□□ 071C42	
	28	176	2.4	49.444	GKR06 - 2M□□□ 071C42	
	27	187	1.3	52.510	GKR05 - 2M□□□ 071C42	
	26	194	2.3	54.513	GKR06 - 2M□□□ 071C42	
	24	212	1.1	59.630	GKR05 - 2M□□□ 071C42	
	23	222	1.4	62.500	GKR06 - 2M□□□ 071C42	
20	245	1.4	68.906	GKR06 - 2M□□□ 071C42		
n1=900	20	249	1.8	44.917	GKR06 - 2M□□□ 080-33	
	18	272	0.9	49.133	GKR05 - 2M□□□ 080-33	
	18	274	1.6	49.444	GKR06 - 2M□□□ 080-33	
	17	291	0.8	52.510	GKR05 - 2M□□□ 080-33	
	17	302	1.5	54.513	GKR06 - 2M□□□ 080-33	
	14	347	1.1	62.500	GKR06 - 2M□□□ 080-33	
	13	382	1.1	68.906	GKR06 - 2M□□□ 080-33	
<b>0.75 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2850	550	12	4.5	5.185	GKR04 - 2M□□□ 080-11	
	478	14	4.1	5.963	GKR04 - 2M□□□ 080-11	
	401	17	3.7	7.111	GKR04 - 2M□□□ 080-11	
	349	20	3.4	8.178	GKR04 - 2M□□□ 080-11	
	313	22	3.1	9.101	GKR04 - 2M□□□ 080-11	
	272	25	2.9	10.466	GKR04 - 2M□□□ 080-11	
	249	27	2.7	11.449	GKR04 - 2M□□□ 080-11	
	224	30	2.4	12.698	GKR04 - 2M□□□ 080-11	
	216	32	5.5	13.216	GKR05 - 2M□□□ 080-11	
	195	35	2.1	14.603	GKR04 - 2M□□□ 080-11	
	190	36	5.0	15.008	GKR05 - 2M□□□ 080-11	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.75 kW</b> n1=2850					<b>GKR □□ - 2M</b>	5-30	
	183	37	2.0	15.556	GKR04 - 2M□□□ 080-11		
	159	43	1.7	17.889	GKR04 - 2M□□□ 080-11		
	146	47	1.6	19.556	GKR04 - 2M□□□ 080-11		
	127	54	1.4	22.489	GKR04 - 2M□□□ 080-11		
	113	60	1.4	25.185	GKR04 - 2M□□□ 080-11		
	98	69	1.2	28.963	GKR04 - 2M□□□ 080-11		
	93	73	3.0	30.522	GKR05 - 2M□□□ 080-11		
	91	75	5.4	31.481	GKR06 - 2M□□□ 080-11		
	85	80	2.8	33.433	GKR05 - 2M□□□ 080-11		
	75	91	2.4	37.967	GKR05 - 2M□□□ 080-11		
	66	103	2.3	43.267	GKR05 - 2M□□□ 080-11		
	58	117	2.0	49.133	GKR05 - 2M□□□ 080-11		
	54	125	1.9	52.510	GKR05 - 2M□□□ 080-11		
	52	130	3.5	54.513	GKR06 - 2M□□□ 080-11		
	48	142	1.7	59.630	GKR05 - 2M□□□ 080-11		
	46	149	2.5	62.500	GKR06 - 2M□□□ 080-11		
	41	165	2.5	68.906	GKR06 - 2M□□□ 080-11		
	n1=1410	272	25	2.8	5.185		GKR04 - 2M□□□ 080C32
		237	29	2.5	5.963		GKR04 - 2M□□□ 080C32
225		30	4.1	6.257	GKR05 - 2M□□□ 080C32		
198		34	2.3	7.111	GKR04 - 2M□□□ 080C32		
172		40	2.1	8.178	GKR04 - 2M□□□ 080C32		
155		44	1.9	9.101	GKR04 - 2M□□□ 080C32		
135		51	1.8	10.466	GKR04 - 2M□□□ 080C32		
123		55	1.6	11.449	GKR04 - 2M□□□ 080C32		
111		61	1.5	12.698	GKR04 - 2M□□□ 080C32		
107		64	3.4	13.216	GKR05 - 2M□□□ 080C32		
97		71	1.3	14.603	GKR04 - 2M□□□ 080C32		
94		72	3.1	15.008	GKR05 - 2M□□□ 080C32		
91		75	1.2	15.556	GKR04 - 2M□□□ 080C32		
84		81	3.0	16.857	GKR05 - 2M□□□ 080C32		
79		86	1.0	17.889	GKR04 - 2M□□□ 080C32		
74		92	2.6	19.143	GKR05 - 2M□□□ 080C32		
72		94	1.0	19.556	GKR04 - 2M□□□ 080C32		
68		100	2.4	20.650	GKR05 - 2M□□□ 080C32		
63		109	0.8	22.489	GKR04 - 2M□□□ 080C32		
60		113	2.1	23.450	GKR05 - 2M□□□ 080C32		
53	130	1.9	26.878	GKR05 - 2M□□□ 080C32			
51	135	3.3	27.903	GKR06 - 2M□□□ 080C32			
46	147	1.6	30.522	GKR05 - 2M□□□ 080C32			

Thermal power limit not considered (see page 2-4)



# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b> n <sub>1</sub> =1410					<b>GKR □□ - 2M</b>	5-30
	45	152	2.9	31.481	GKR06 - 2M□□□ 080C32	
	42	161	1.5	33.433	GKR05 - 2M□□□ 080C32	
	41	168	2.7	34.708	GKR06 - 2M□□□ 080C32	
	37	183	1.3	37.967	GKR05 - 2M□□□ 080C32	
	35	197	2.3	40.741	GKR06 - 2M□□□ 080C32	
	33	209	1.1	43.267	GKR05 - 2M□□□ 080C32	
	31	217	2.1	44.917	GKR06 - 2M□□□ 080C32	
	29	237	1.0	49.133	GKR05 - 2M□□□ 080C32	
	29	239	1.9	49.444	GKR06 - 2M□□□ 080C32	
	27	253	0.9	52.510	GKR05 - 2M□□□ 080C32	
	26	263	1.7	54.513	GKR06 - 2M□□□ 080C32	
	24	288	0.8	59.630	GKR05 - 2M□□□ 080C32	
23	302	1.3	62.500	GKR06 - 2M□□□ 080C32		
21	333	1.3	68.906	GKR06 - 2M□□□ 080C32		
<b>1.1 kW</b> n <sub>1</sub> =2810					<b>GKR □□ - 2M</b>	5-30
	542	18	3.0	5.185	GKR04 - 2M□□□ 080-31	
	471	21	2.8	5.963	GKR04 - 2M□□□ 080-31	
	449	22	4.6	6.257	GKR05 - 2M□□□ 080-31	
	395	25	2.5	7.111	GKR04 - 2M□□□ 080-31	
	344	29	2.3	8.178	GKR04 - 2M□□□ 080-31	
	309	32	2.1	9.101	GKR04 - 2M□□□ 080-31	
	269	37	1.9	10.466	GKR04 - 2M□□□ 080-31	
	245	41	1.8	11.449	GKR04 - 2M□□□ 080-31	
	221	45	1.6	12.698	GKR04 - 2M□□□ 080-31	
	213	47	3.7	13.216	GKR05 - 2M□□□ 080-31	
	192	52	1.4	14.603	GKR04 - 2M□□□ 080-31	
	187	53	3.4	15.008	GKR05 - 2M□□□ 080-31	
	181	55	1.3	15.556	GKR04 - 2M□□□ 080-31	
	157	64	1.1	17.889	GKR04 - 2M□□□ 080-31	
	147	68	2.9	19.143	GKR05 - 2M□□□ 080-31	
	144	69	1.1	19.556	GKR04 - 2M□□□ 080-31	
	136	73	2.7	20.650	GKR05 - 2M□□□ 080-31	
	125	80	0.9	22.489	GKR04 - 2M□□□ 080-31	
	120	83	2.3	23.450	GKR05 - 2M□□□ 080-31	
	112	89	0.9	25.185	GKR04 - 2M□□□ 080-31	
	105	96	2.3	26.878	GKR05 - 2M□□□ 080-31	
	97	103	0.8	28.963	GKR04 - 2M□□□ 080-31	
	92	108	2.0	30.522	GKR05 - 2M□□□ 080-31	
	89	112	3.6	31.481	GKR06 - 2M□□□ 080-31	
	84	119	1.9	33.433	GKR05 - 2M□□□ 080-31	
	74	135	1.6	37.967	GKR05 - 2M□□□ 080-31	
	69	145	3.1	40.741	GKR06 - 2M□□□ 080-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2810	65	154	1.6	43.267	GKR05 - 2M□□□ 080-31	
	63	160	2.8	44.917	GKR06 - 2M□□□ 080-31	
	57	175	1.4	49.133	GKR05 - 2M□□□ 080-31	
	57	176	2.6	49.444	GKR06 - 2M□□□ 080-31	
	54	187	1.3	52.510	GKR05 - 2M□□□ 080-31	
	52	194	2.3	54.513	GKR06 - 2M□□□ 080-31	
	47	212	1.1	59.630	GKR05 - 2M□□□ 080-31	
	45	222	1.7	62.500	GKR06 - 2M□□□ 080-31	
	41	245	1.7	68.906	GKR06 - 2M□□□ 080-31	
n1=1390	390	26	4.5	3.565	GKR05 - 2M□□□ 080C42	
	268	37	1.8	5.185	GKR04 - 2M□□□ 080C42	
	233	43	1.7	5.963	GKR04 - 2M□□□ 080C42	
	222	45	3.5	6.257	GKR05 - 2M□□□ 080C42	
	196	51	1.5	7.111	GKR04 - 2M□□□ 080C42	
	170	59	1.4	8.178	GKR04 - 2M□□□ 080C42	
	153	65	1.3	9.101	GKR04 - 2M□□□ 080C42	
	147	68	2.8	9.440	GKR05 - 2M□□□ 080C42	
	133	75	1.2	10.466	GKR04 - 2M□□□ 080C42	
	130	77	2.6	10.720	GKR05 - 2M□□□ 080C42	
	121	82	1.1	11.449	GKR04 - 2M□□□ 080C42	
	110	91	1.0	12.698	GKR04 - 2M□□□ 080C42	
	115	87	2.4	12.081	GKR05 - 2M□□□ 080C42	
	105	95	2.3	13.216	GKR05 - 2M□□□ 080C42	
	95	105	0.9	14.603	GKR04 - 2M□□□ 080C42	
	101	99	2.2	13.719	GKR05 - 2M□□□ 080C42	
	93	108	2.1	15.008	GKR05 - 2M□□□ 080C42	
	89	112	0.8	15.556	GKR04 - 2M□□□ 080C42	
	83	121	2.0	16.857	GKR05 - 2M□□□ 080C42	
	73	137	1.7	19.143	GKR05 - 2M□□□ 080C42	
	67	148	1.6	20.650	GKR05 - 2M□□□ 080C42	
	72	140	3.2	19.444	GKR06 - 2M□□□ 080C42	
	59	168	1.4	23.450	GKR05 - 2M□□□ 080C42	
	65	154	2.9	21.438	GKR06 - 2M□□□ 080C42	
	52	193	1.2	26.878	GKR05 - 2M□□□ 080C42	
	55	182	2.5	25.309	GKR06 - 2M□□□ 080C42	
	50	200	2.2	27.903	GKR06 - 2M□□□ 080C42	
	46	219	1.1	30.522	GKR05 - 2M□□□ 080C42	
	44	226	2.0	31.481	GKR06 - 2M□□□ 080C42	
	42	240	1.0	33.433	GKR05 - 2M□□□ 080C42	
40	249	1.8	34.708	GKR06 - 2M□□□ 080C42		
37	273	0.9	37.967	GKR05 - 2M□□□ 080C42		
34	293	1.5	40.741	GKR06 - 2M□□□ 080C42		
31	323	1.4	44.917	GKR06 - 2M□□□ 080C42		

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GKR □□ - 2M</b>	5-30
n1=1390	28	355	1.3	49.444	GKR06 - 2M□□□ 080C42	
	26	391	1.2	54.513	GKR06 - 2M□□□ 080C42	
<b>1.5 kW</b>					<b>GKR □□ - 2M</b>	5-30
n1=2840	548	25	2.2	5.185	GKR04 - 2M□□□ 090-11	
	476	29	2.0	5.963	GKR04 - 2M□□□ 090-11	
	454	30	4.2	6.257	GKR05 - 2M□□□ 090-11	
	399	34	1.8	7.111	GKR04 - 2M□□□ 090-11	
	347	39	1.7	8.178	GKR04 - 2M□□□ 090-11	
	312	44	1.6	9.101	GKR04 - 2M□□□ 090-11	
	271	50	1.4	10.466	GKR04 - 2M□□□ 090-11	
	265	51	3.2	10.720	GKR05 - 2M□□□ 090-11	
	248	55	1.3	11.449	GKR04 - 2M□□□ 090-11	
	224	61	1.2	12.698	GKR04 - 2M□□□ 090-11	
	235	58	2.9	12.081	GKR05 - 2M□□□ 090-11	
	215	63	2.7	13.216	GKR05 - 2M□□□ 090-11	
	195	70	1.0	14.603	GKR04 - 2M□□□ 090-11	
	207	66	2.7	13.719	GKR05 - 2M□□□ 090-11	
	189	72	2.5	15.008	GKR05 - 2M□□□ 090-11	
	183	75	1.0	15.556	GKR04 - 2M□□□ 090-11	
	169	81	2.4	16.857	GKR05 - 2M□□□ 090-11	
	159	86	0.8	17.889	GKR04 - 2M□□□ 090-11	
	148	92	2.1	19.143	GKR05 - 2M□□□ 090-11	
	138	99	2.0	20.650	GKR05 - 2M□□□ 090-11	
	121	112	1.7	23.450	GKR05 - 2M□□□ 090-11	
	106	129	1.7	26.878	GKR05 - 2M□□□ 090-11	
	102	134	3.1	27.903	GKR06 - 2M□□□ 090-11	
	93	146	1.5	30.522	GKR05 - 2M□□□ 090-11	
	90	151	2.7	31.481	GKR06 - 2M□□□ 090-11	
	85	160	1.4	33.433	GKR05 - 2M□□□ 090-11	
	82	166	2.5	34.708	GKR06 - 2M□□□ 090-11	
	75	182	1.2	37.967	GKR05 - 2M□□□ 090-11	
	70	195	2.3	40.741	GKR06 - 2M□□□ 090-11	
	63	215	2.1	44.917	GKR06 - 2M□□□ 090-11	
	57	237	1.9	49.444	GKR06 - 2M□□□ 090-11	
	52	261	1.7	54.513	GKR06 - 2M□□□ 090-11	
n1=1390	390	35	3.9	3.565	GKR05 - 2M□□□ 090C32	
	268	51	1.4	5.185	GKR04 - 2M□□□ 090C32	
	284	48	3.1	4.889	GKR05 - 2M□□□ 090C32	
	233	58	1.2	5.963	GKR04 - 2M□□□ 090C32	
	222	61	2.5	6.257	GKR05 - 2M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b> n <sub>1</sub> =1390					<b>GKR □□ - 2M</b>	5-30
	196	70	1.1	7.111	GKR04 - 2M□□□ 090C32	
	202	67	2.7	6.883	GKR05 - 2M□□□ 090C32	
	170	80	1.0	8.178	GKR04 - 2M□□□ 090C32	
	178	77	2.4	7.817	GKR05 - 2M□□□ 090C32	
	153	89	0.9	9.101	GKR04 - 2M□□□ 090C32	
	147	92	2.1	9.440	GKR05 - 2M□□□ 090C32	
	133	103	0.9	10.466	GKR04 - 2M□□□ 090C32	
	130	105	1.9	10.720	GKR05 - 2M□□□ 090C32	
	121	112	0.8	11.449	GKR04 - 2M□□□ 090C32	
	115	118	1.8	12.081	GKR05 - 2M□□□ 090C32	
	105	129	1.7	13.216	GKR05 - 2M□□□ 090C32	
	101	134	1.6	13.719	GKR05 - 2M□□□ 090C32	
	101	134	3.2	13.720	GKR06 - 2M□□□ 090C32	
	93	147	1.5	15.008	GKR05 - 2M□□□ 090C32	
	83	165	1.5	16.857	GKR05 - 2M□□□ 090C32	
	88	155	2.9	15.873	GKR06 - 2M□□□ 090C32	
	73	187	1.3	19.143	GKR05 - 2M□□□ 090C32	
	79	171	2.6	17.500	GKR06 - 2M□□□ 090C32	
	67	202	1.2	20.650	GKR05 - 2M□□□ 090C32	
	72	190	2.4	19.444	GKR06 - 2M□□□ 090C32	
	59	230	1.0	23.450	GKR05 - 2M□□□ 090C32	
	65	210	2.1	21.438	GKR06 - 2M□□□ 090C32	
	52	263	0.9	26.878	GKR05 - 2M□□□ 090C32	
	55	248	1.8	25.309	GKR06 - 2M□□□ 090C32	
	50	273	1.6	27.903	GKR06 - 2M□□□ 090C32	
	46	299	0.8	30.522	GKR05 - 2M□□□ 090C32	
	44	308	1.5	31.481	GKR06 - 2M□□□ 090C32	
40	340	1.3	34.708	GKR06 - 2M□□□ 090C32		
34	399	1.1	40.741	GKR06 - 2M□□□ 090C32		
31	440	1.0	44.917	GKR06 - 2M□□□ 090C32		
28	484	0.9	49.444	GKR06 - 2M□□□ 090C32		
26	534	0.8	54.513	GKR06 - 2M□□□ 090C32		
<b>2.2 kW</b> n <sub>1</sub> =2840					<b>GKR □□ - 2M</b>	5-30
	797	25	4.4	3.565	GKR05 - 2M□□□ 090-31	
	548	36	1.5	5.185	GKR04 - 2M□□□ 090-31	
	476	42	1.4	5.963	GKR04 - 2M□□□ 090-31	
	454	44	2.9	6.257	GKR05 - 2M□□□ 090-31	
	399	50	1.3	7.111	GKR04 - 2M□□□ 090-31	
	413	48	3.0	6.883	GKR05 - 2M□□□ 090-31	
	347	58	1.1	8.178	GKR04 - 2M□□□ 090-31	
	363	55	2.8	7.817	GKR05 - 2M□□□ 090-31	
	312	64	1.1	9.101	GKR04 - 2M□□□ 090-31	
	301	66	2.3	9.440	GKR05 - 2M□□□ 090-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2840	271	74	1.0	10.466	GKR04 - 2M□□□ 090-31	
	265	75	2.2	10.720	GKR05 - 2M□□□ 090-31	
	248	81	0.9	11.449	GKR04 - 2M□□□ 090-31	
	224	89	0.8	12.698	GKR04 - 2M□□□ 090-31	
	235	85	2.0	12.081	GKR05 - 2M□□□ 090-31	
	215	93	1.9	13.216	GKR05 - 2M□□□ 090-31	
	207	96	1.8	13.719	GKR05 - 2M□□□ 090-31	
	189	106	1.7	15.008	GKR05 - 2M□□□ 090-31	
	169	119	1.6	16.857	GKR05 - 2M□□□ 090-31	
	148	135	1.4	19.143	GKR05 - 2M□□□ 090-31	
	162	123	3.0	17.500	GKR06 - 2M□□□ 090-31	
	138	145	1.3	20.650	GKR05 - 2M□□□ 090-31	
	146	137	2.7	19.444	GKR06 - 2M□□□ 090-31	
	121	165	1.2	23.450	GKR05 - 2M□□□ 090-31	
	133	151	2.4	21.438	GKR06 - 2M□□□ 090-31	
	106	189	1.2	26.878	GKR05 - 2M□□□ 090-31	
	112	178	2.3	25.309	GKR06 - 2M□□□ 090-31	
	102	196	2.1	27.903	GKR06 - 2M□□□ 090-31	
	93	215	1.0	30.522	GKR05 - 2M□□□ 090-31	
	90	221	1.9	31.481	GKR06 - 2M□□□ 090-31	
	85	235	0.9	33.433	GKR05 - 2M□□□ 090-31	
	82	244	1.7	34.708	GKR06 - 2M□□□ 090-31	
	75	267	0.8	37.967	GKR05 - 2M□□□ 090-31	
	70	286	1.6	40.741	GKR06 - 2M□□□ 090-31	
	63	316	1.4	44.917	GKR06 - 2M□□□ 090-31	
	57	348	1.3	49.444	GKR06 - 2M□□□ 090-31	
52	383	1.2	54.513	GKR06 - 2M□□□ 090-31		
n1=1440	404	49	2.8	3.565	GKR05 - 2M□□□ 100C12	
	295	68	2.2	4.889	GKR05 - 2M□□□ 100C12	
	230	87	1.8	6.257	GKR05 - 2M□□□ 100C12	
	209	95	1.9	6.883	GKR05 - 2M□□□ 100C12	
	184	108	1.7	7.817	GKR05 - 2M□□□ 100C12	
	153	131	1.5	9.440	GKR05 - 2M□□□ 100C12	
	134	149	1.4	10.720	GKR05 - 2M□□□ 100C12	
	147	136	2.8	9.800	GKR06 - 2M□□□ 100C12	
	127	158	2.8	11.376	GKR06 - 2M□□□ 100C12	
	119	167	1.2	12.081	GKR05 - 2M□□□ 100C12	
	116	173	2.6	12.444	GKR06 - 2M□□□ 100C12	
	109	183	1.2	13.216	GKR05 - 2M□□□ 100C12	
	105	190	1.1	13.719	GKR05 - 2M□□□ 100C12	
	105	190	2.2	13.720	GKR06 - 2M□□□ 100C12	
	96	208	1.1	15.008	GKR05 - 2M□□□ 100C12	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=1440	85	234	1.0	16.857	GKR05 - 2M□□□ 100C12	
	91	220	2.0	15.873	GKR06 - 2M□□□ 100C12	
	75	265	0.9	19.143	GKR05 - 2M□□□ 100C12	
	82	243	1.9	17.500	GKR06 - 2M□□□ 100C12	
	70	286	0.8	20.650	GKR05 - 2M□□□ 100C12	
	74	270	1.7	19.444	GKR06 - 2M□□□ 100C12	
	67	297	1.5	21.438	GKR06 - 2M□□□ 100C12	
	57	351	1.3	25.309	GKR06 - 2M□□□ 100C12	
	52	387	1.2	27.903	GKR06 - 2M□□□ 100C12	
	46	436	1.0	31.481	GKR06 - 2M□□□ 100C12	
	42	481	0.9	34.708	GKR06 - 2M□□□ 100C12	
<b>3 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2850	800	34	3.3	3.565	GKR05 - 2M□□□ 100-31	
	583	47	2.5	4.889	GKR05 - 2M□□□ 100-31	
	456	60	2.1	6.257	GKR05 - 2M□□□ 100-31	
	414	66	2.2	6.883	GKR05 - 2M□□□ 100-31	
	365	75	2.0	7.817	GKR05 - 2M□□□ 100-31	
	302	90	1.7	9.440	GKR05 - 2M□□□ 100-31	
	266	102	1.6	10.720	GKR05 - 2M□□□ 100-31	
	251	109	3.2	11.376	GKR06 - 2M□□□ 100-31	
	236	115	1.5	12.081	GKR05 - 2M□□□ 100-31	
	229	119	3.1	12.444	GKR06 - 2M□□□ 100-31	
	216	126	1.4	13.216	GKR05 - 2M□□□ 100-31	
	208	131	1.3	13.719	GKR05 - 2M□□□ 100-31	
	208	131	2.6	13.720	GKR06 - 2M□□□ 100-31	
	190	143	1.3	15.008	GKR05 - 2M□□□ 100-31	
	169	161	1.2	16.857	GKR05 - 2M□□□ 100-31	
	180	152	2.4	15.873	GKR06 - 2M□□□ 100-31	
	149	183	1.1	19.143	GKR05 - 2M□□□ 100-31	
	163	167	2.2	17.500	GKR06 - 2M□□□ 100-31	
	138	197	1.0	20.650	GKR05 - 2M□□□ 100-31	
	147	186	2.0	19.444	GKR06 - 2M□□□ 100-31	
	122	224	0.9	23.450	GKR05 - 2M□□□ 100-31	
	133	205	1.8	21.438	GKR06 - 2M□□□ 100-31	
	113	242	1.7	25.309	GKR06 - 2M□□□ 100-31	
	102	267	1.5	27.903	GKR06 - 2M□□□ 100-31	
	91	301	1.4	31.481	GKR06 - 2M□□□ 100-31	
	82	332	1.2	34.708	GKR06 - 2M□□□ 100-31	
n1=1430	401	68	2.0	3.565	GKR05 - 2M□□□ 100C32	
	417	65	3.1	3.431	GKR06 - 2M□□□ 100C32	
	293	93	1.6	4.889	GKR05 - 2M□□□ 100C32	
	304	90	2.8	4.706	GKR06 - 2M□□□ 100C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b> n <sub>1</sub> =1430					<b>GKR □□ - 2M</b>	5-30
	229	119	1.3	6.257	GKR05 - 2M□□□ 100C32	
	237	115	2.4	6.022	GKR06 - 2M□□□ 100C32	
	221	123	2.8	6.481	GKR06 - 2M□□□ 100C32	
	208	131	1.4	6.883	GKR05 - 2M□□□ 100C32	
	200	136	2.6	7.146	GKR06 - 2M□□□ 100C32	
	183	149	1.3	7.817	GKR05 - 2M□□□ 100C32	
	152	180	1.1	9.440	GKR05 - 2M□□□ 100C32	
	161	169	2.4	8.889	GKR06 - 2M□□□ 100C32	
	133	204	1.0	10.720	GKR05 - 2M□□□ 100C32	
	146	187	2.1	9.800	GKR06 - 2M□□□ 100C32	
	126	217	2.0	11.376	GKR06 - 2M□□□ 100C32	
	118	230	0.9	12.081	GKR05 - 2M□□□ 100C32	
	115	237	1.9	12.444	GKR06 - 2M□□□ 100C32	
	108	252	0.9	13.216	GKR05 - 2M□□□ 100C32	
	104	261	0.8	13.719	GKR05 - 2M□□□ 100C32	
	104	261	1.6	13.720	GKR06 - 2M□□□ 100C32	
	90	302	1.5	15.873	GKR06 - 2M□□□ 100C32	
	82	333	1.4	17.500	GKR06 - 2M□□□ 100C32	
	74	370	1.2	19.444	GKR06 - 2M□□□ 100C32	
67	408	1.1	21.438	GKR06 - 2M□□□ 100C32		
57	482	0.9	25.309	GKR06 - 2M□□□ 100C32		
51	531	0.8	27.903	GKR06 - 2M□□□ 100C32		
<b>4 kW</b> n <sub>1</sub> =2830					<b>GKR □□ - 2M</b>	5-30
	794	46	2.4	3.565	GKR05 - 2M□□□ 100-41	
	579	63	1.9	4.889	GKR05 - 2M□□□ 100-41	
	452	80	1.6	6.257	GKR05 - 2M□□□ 100-41	
	470	77	2.9	6.022	GKR06 - 2M□□□ 100-41	
	411	88	1.6	6.883	GKR05 - 2M□□□ 100-41	
	396	92	3.1	7.146	GKR06 - 2M□□□ 100-41	
	362	100	1.5	7.817	GKR05 - 2M□□□ 100-41	
	300	121	1.3	9.440	GKR05 - 2M□□□ 100-41	
	318	114	2.9	8.889	GKR06 - 2M□□□ 100-41	
	264	138	1.2	10.720	GKR05 - 2M□□□ 100-41	
	289	126	2.5	9.800	GKR06 - 2M□□□ 100-41	
	249	146	2.4	11.376	GKR06 - 2M□□□ 100-41	
	234	155	1.1	12.081	GKR05 - 2M□□□ 100-41	
	227	160	2.3	12.444	GKR06 - 2M□□□ 100-41	
	214	170	1.0	13.216	GKR05 - 2M□□□ 100-41	
	206	176	1.0	13.719	GKR05 - 2M□□□ 100-41	
	206	176	2.0	13.720	GKR06 - 2M□□□ 100-41	
	189	192	0.9	15.008	GKR05 - 2M□□□ 100-41	
	168	216	0.9	16.857	GKR05 - 2M□□□ 100-41	
178	204	1.8	15.873	GKR06 - 2M□□□ 100-41		
162	224	1.6	17.500	GKR06 - 2M□□□ 100-41		

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2830	146	249	1.5	19.444	GKR06 - 2M□□□ 100-41	
	132	275	1.3	21.438	GKR06 - 2M□□□ 100-41	
	112	325	1.3	25.309	GKR06 - 2M□□□ 100-41	
	101	358	1.2	27.903	GKR06 - 2M□□□ 100-41	
	90	404	1.0	31.481	GKR06 - 2M□□□ 100-41	
	82	445	0.9	34.708	GKR06 - 2M□□□ 100-41	
n1=1450	423	86	2.3	3.431	GKR06 - 2M□□□ 112C22	
	308	118	2.1	4.706	GKR06 - 2M□□□ 112C22	
	241	151	1.9	6.022	GKR06 - 2M□□□ 112C22	
	224	162	2.2	6.481	GKR06 - 2M□□□ 112C22	
	203	179	1.9	7.146	GKR06 - 2M□□□ 112C22	
	163	223	1.8	8.889	GKR06 - 2M□□□ 112C22	
	148	245	1.6	9.800	GKR06 - 2M□□□ 112C22	
	128	285	1.5	11.376	GKR06 - 2M□□□ 112C22	
	117	311	1.4	12.444	GKR06 - 2M□□□ 112C22	
	106	343	1.2	13.720	GKR06 - 2M□□□ 112C22	
	91	397	1.1	15.873	GKR06 - 2M□□□ 112C22	
	83	438	1.0	17.500	GKR06 - 2M□□□ 112C22	
	75	487	0.9	19.444	GKR06 - 2M□□□ 112C22	
	68	537	0.8	21.438	GKR06 - 2M□□□ 112C22	
<b>5.5 kW</b>					<b>GKR □□ - 2M</b>	<b>5-30</b>
n1=2890	842	59	2.7	3.431	GKR06 - 2M□□□ 112-31	
	614	81	2.5	4.706	GKR06 - 2M□□□ 112-31	
	480	104	2.2	6.022	GKR06 - 2M□□□ 112-31	
	446	112	2.5	6.481	GKR06 - 2M□□□ 112-31	
	404	123	2.3	7.146	GKR06 - 2M□□□ 112-31	
	325	154	2.1	8.889	GKR06 - 2M□□□ 112-31	
	295	169	1.8	9.800	GKR06 - 2M□□□ 112-31	
	254	196	1.8	11.376	GKR06 - 2M□□□ 112-31	
	232	215	1.7	12.444	GKR06 - 2M□□□ 112-31	
	211	237	1.4	13.720	GKR06 - 2M□□□ 112-31	
	182	274	1.3	15.873	GKR06 - 2M□□□ 112-31	
	165	302	1.2	17.500	GKR06 - 2M□□□ 112-31	
	149	336	1.1	19.444	GKR06 - 2M□□□ 112-31	
	135	370	1.0	21.438	GKR06 - 2M□□□ 112-31	
n1=1445	421	119	1.7	3.431	GKR06 - 2M□□□ 112C32	
	307	163	1.5	4.706	GKR06 - 2M□□□ 112C32	

Thermal power limit not considered (see page 2-4)



# Selection tables - Bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n <sub>1</sub> =1445					<b>GKR □□ - 2M</b>	5-30
	240	208	1.3	6.022	GKR06 - 2M□□□ 112C32	
	223	224	1.6	6.481	GKR06 - 2M□□□ 112C32	
	202	247	1.4	7.146	GKR06 - 2M□□□ 112C32	
	163	307	1.3	8.889	GKR06 - 2M□□□ 112C32	
	147	338	1.1	9.800	GKR06 - 2M□□□ 112C32	
	127	393	1.1	11.376	GKR06 - 2M□□□ 112C32	
	116	430	1.0	12.444	GKR06 - 2M□□□ 112C32	
	105	474	0.9	13.720	GKR06 - 2M□□□ 112C32	
91	548	0.8	15.873	GKR06 - 2M□□□ 112C32		
<b>7.5 kW</b> n <sub>1</sub> =2900					<b>GKR □□ - 2M</b>	5-30
	845	81	2.0	3.431	GKR06 - 2M□□□ 112-41	
	616	110	1.8	4.706	GKR06 - 2M□□□ 112-41	
	482	141	1.6	6.022	GKR06 - 2M□□□ 112-41	
	447	152	1.8	6.481	GKR06 - 2M□□□ 112-41	
	406	168	1.7	7.146	GKR06 - 2M□□□ 112-41	
	326	209	1.6	8.889	GKR06 - 2M□□□ 112-41	
	296	230	1.3	9.800	GKR06 - 2M□□□ 112-41	
	255	267	1.3	11.376	GKR06 - 2M□□□ 112-41	
	233	292	1.2	12.444	GKR06 - 2M□□□ 112-41	
	211	322	1.1	13.720	GKR06 - 2M□□□ 112-41	
	183	372	1.0	15.873	GKR06 - 2M□□□ 112-41	
	166	411	0.9	17.500	GKR06 - 2M□□□ 112-41	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 45 \text{ Nm}$

GKR 03 - 2 N				Dimensions page 5-42	
$n_1$	2800 min <sup>-1</sup>		1400 min <sup>-1</sup>		700 min <sup>-1</sup>
IEC connection	63		63		63
For the geometrical assignment of servo/DC motors see section 2					
Drive size		1A		1A	
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]				
5.411	P <sub>1</sub>	1.82	1.12	0.56	
	M <sub>2</sub>	32	39	39	
6.222	P <sub>1</sub>	1.63	1.00	0.50	
	M <sub>2</sub>	33	40	40	
7.111	P <sub>1</sub>	1.52	0.93	0.47	
	M <sub>2</sub>	35	43	43	
8.178	P <sub>1</sub>	1.36	0.84	0.42	
	M <sub>2</sub>	36	44	44	
9.101	P <sub>1</sub>	1.24	0.76	0.38	
	M <sub>2</sub>	37	45	45	
10.466	P <sub>1</sub>	1.08	0.66	0.33	
	M <sub>2</sub>	37	45	45	
11.640	P <sub>1</sub>	0.97	0.60	0.30	
	M <sub>2</sub>	37	45	45	
13.386	P <sub>1</sub>	0.84	0.52	0.26	
	M <sub>2</sub>	37	45	45	
15.111	P <sub>1</sub>	0.75	0.46	0.23	
	M <sub>2</sub>	37	45	45	
17.378	P <sub>1</sub>	0.65	0.40	0.20	
	M <sub>2</sub>	37	45	45	
19.365	P <sub>1</sub>	0.58	0.36	0.18	
	M <sub>2</sub>	37	45	45	
22.270	P <sub>1</sub>	0.51	0.31	0.16	
	M <sub>2</sub>	37	45	45	
25.051	P <sub>1</sub>	0.51	0.28	0.14	
	M <sub>2</sub>	42	45	45	
28.808	P <sub>1</sub>	0.45	0.24	0.12	
	M <sub>2</sub>	42	45	45	
32.593	P <sub>1</sub>	0.39	0.21	0.11	
	M <sub>2</sub>	42	45	45	
37.481	P <sub>1</sub>	0.34	0.19	0.09	
	M <sub>2</sub>	42	45	45	
42.222	P <sub>1</sub>	0.33	0.16	0.08	
	M <sub>2</sub>	45	45	45	
48.556	P <sub>1</sub>	0.29	0.14	0.07	
	M <sub>2</sub>	45	45	45	
53.889	P <sub>1</sub>	0.26	0.13	0.06	
	M <sub>2</sub>	45	45	45	
61.972	P <sub>1</sub>	0.22	0.11	0.06	
	M <sub>2</sub>	45	45	45	

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 90 \text{ Nm}$

GKR 04 - 2 N										Dimensions page 5-42		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		63	71 63	80 71	63	71 63	80 71	63	71 63	80 71		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		1A	□B	□C	1A	□B	□C	1A	□B	□C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
5.185	$P_1$		2.23	3.04		1.37	1.87		0.73	1.02		
	$M_2$		38	51		46	63		49	69		
5.963	$P_1$		2.23	3.03		1.37	1.87		0.73	0.93		
	$M_2$		43	59		53	72		56	72		
7.111	$P_1$		2.23	2.73		1.37	1.68		0.73	0.84		
	$M_2$		51	63		63	77		67	77		
8.178	$P_1$		2.23	2.49		1.37	1.53		0.73	0.77		
	$M_2$		59	66		73	81		77	81		
9.101	$P_1$		2.23	2.33		1.37	1.43		0.72	0.72		
	$M_2$		66	69		81	84		84	84		
10.466	$P_1$		2.12	2.12		1.31	1.31		0.65	0.65		
	$M_2$		72	72		89	89		89	89		
11.449	$P_1$	1.03	1.97	1.97	0.64	1.21	1.21	0.32	0.61	0.61		
	$M_2$	38	73	73	47	90	90	47	90	90		
12.698	$P_1$	0.96	1.78	1.78	0.59	1.09	1.09	0.30	0.55	0.55		
	$M_2$	39	73	73	49	90	90	49	90	90		
14.603	$P_1$	0.96	1.55	1.55	0.59	0.95	0.95	0.30	0.48	0.48		
	$M_2$	45	73	73	56	90	90	56	90	90		
15.556	$P_1$		1.45	1.45		0.89	0.89		0.45	0.45		
	$M_2$		73	73		90	90		90	90		
17.889	$P_1$		1.26	1.26		0.78	0.78		0.39	0.39		
	$M_2$		73	73		90	90		90	90		
19.556	$P_1$	1.05	1.15	1.15	0.65	0.71	0.71	0.32	0.36	0.36		
	$M_2$	67	73	73	82	90	90	82	90	90		
22.489	$P_1$	1.00	1.00	1.00	0.62	0.62	0.62	0.31	0.31	0.31		
	$M_2$	73	73	73	90	90	90	90	90	90		
25.185	$P_1$	1.00	1.02	1.02	0.54	0.55	0.55	0.27	0.28	0.28		
	$M_2$	81	83	83	88	90	90	88	90	90		
28.963	$P_1$	0.89	0.89	0.89	0.48	0.48	0.48	0.24	0.24	0.24		
	$M_2$	83	83	83	90	90	90	90	90	90		
31.919	$P_1$	0.80	0.80		0.44	0.44		0.22	0.22			
	$M_2$	83	83		90	90		90	90			
36.707	$P_1$	0.70	0.70		0.38	0.38		0.19	0.19			
	$M_2$	83	83		90	90		90	90			
40.000	$P_1$	0.64	0.64		0.35	0.35		0.17	0.17			
	$M_2$	83	83		90	90		90	90			
46.000	$P_1$	0.60	0.60		0.30	0.30		0.15	0.15			
	$M_2$	90	90		90	90		90	90			
52.698	$P_1$	0.40			0.20			0.10				
	$M_2$	69			69			69				
60.603	$P_1$	0.40			0.20			0.10				
	$M_2$	79			79			79				

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 240 Nm**

<b>GKR 05 - 2 N</b>													Dimensions page 5-42	
n <sub>1</sub>		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	
For the geometrical assignment of servo/DC motors see section 2														
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E	
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]													
3.565	P <sub>1</sub> M <sub>2</sub>			3.75 43	9.22 107			2.31 53	5.68 131			1.54 71	2.84 131	
4.889	P <sub>1</sub> M <sub>2</sub>			3.75 59	7.52 119			2.31 73	4.63 147			1.54 98	2.32 147	
6.257	P <sub>1</sub> M <sub>2</sub>		3.04 62	3.75 76	6.24 126		1.87 76	2.31 94	3.84 156		1.25 101	1.54 125	1.92 156	
6.883	P <sub>1</sub> M <sub>2</sub>			3.75 84	6.53 146			2.31 103	4.02 179			1.54 137	2.01 179	
7.817	P <sub>1</sub> M <sub>2</sub>			3.75 95	6.00 152			2.31 117	3.69 187			1.54 156	1.85 187	
9.440	P <sub>1</sub> M <sub>2</sub>			3.75 115	5.07 155			2.31 141	3.12 191			1.54 188	1.56 191	
10.720	P <sub>1</sub> M <sub>2</sub>			3.75 130	4.76 165			2.31 160	2.93 204			1.47 204	1.47 204	
12.081	P <sub>1</sub> M <sub>2</sub>		3.04 119	3.75 147	4.32 169		1.87 146	2.31 181	2.66 208		1.25 195	1.33 208	1.33 208	
13.216	P <sub>1</sub> M <sub>2</sub>	2.23 96	3.04 130	3.75 161	4.06 174	1.37 118	1.87 160	2.31 198	2.50 214	0.73 124	1.25 213	1.25 214	1.25 214	
13.719	P <sub>1</sub> M <sub>2</sub>		3.04 135	3.75 167	3.96 176		1.87 166	2.31 205	2.44 217		1.22 217	1.22 217	1.22 217	
15.008	P <sub>1</sub> M <sub>2</sub>	2.23 109	3.04 148	3.73 181	3.73 181	1.37 134	1.87 182	2.30 223	2.30 223	0.73 141	1.15 223	1.15 223	1.15 223	
16.857	P <sub>1</sub> M <sub>2</sub>	2.23 122	3.04 166	3.57 195	3.57 195	1.37 150	1.87 204	2.20 240	2.20 240	0.77 169	1.10 240	1.10 240	1.10 240	
19.143	P <sub>1</sub> M <sub>2</sub>	2.23 138	3.04 188	3.14 195	3.14 195	1.37 170	1.87 232	1.94 240	1.94 240	0.77 192	0.97 240	0.97 240	0.97 240	
20.650	P <sub>1</sub> M <sub>2</sub>		2.91 195	2.91 195	2.91 195		1.79 240	1.79 240	1.79 240		0.90 240	0.90 240	0.90 240	
23.450	P <sub>1</sub> M <sub>2</sub>		2.57 195	2.57 195	2.57 195		1.58 240	1.58 240	1.58 240		0.79 240	0.79 240	0.79 240	
26.878	P <sub>1</sub> M <sub>2</sub>	1.97 171	2.54 221	2.54 221		1.07 186	1.38 240	1.38 240		0.53 186	0.69 240	0.69 240		
30.522	P <sub>1</sub> M <sub>2</sub>	1.97 195	2.24 221	2.24 221		1.07 211	1.21 240	1.21 240		0.53 211	0.61 240	0.61 240		
33.433	P <sub>1</sub> M <sub>2</sub>	1.65 178	2.04 221	2.04 221		0.89 193	1.11 240	1.11 240		0.45 193	0.55 240	0.55 240		
37.967	P <sub>1</sub> M <sub>2</sub>	1.65 203	1.80 221	1.80 221		0.89 219	0.98 240	0.98 240		0.45 219	0.49 240	0.49 240		
43.267	P <sub>1</sub> M <sub>2</sub>	1.43 201	1.71 240			0.72 201	0.86 240			0.36 201	0.43 240			

Thermal power limit not considered (see page 2-4)

## Selection tables - Bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 240 \text{ Nm}$

GKR 05 - 2 N												Dimensions page 5-42	
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]												
49.133	P <sub>1</sub>	1.43	1.51			0.72	0.75			0.36	0.38		
	M <sub>2</sub>	228	240			228	240			228	240		
52.510	P <sub>1</sub>	1.20	1.41			0.60	0.71			0.30	0.35		
	M <sub>2</sub>	203	240			203	240			203	240		
59.630	P <sub>1</sub>	1.20	1.24			0.60	0.62			0.30	0.31		
	M <sub>2</sub>	231	240			231	240			231	240		
67.113	P <sub>1</sub>	0.82				0.41				0.21			
	M <sub>2</sub>	178				178				178			
76.213	P <sub>1</sub>	0.82				0.41				0.21			
	M <sub>2</sub>	202				202				202			

Thermal power limit not considered (see page 2-4)

# Selection tables - Bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 450 \text{ Nm}$

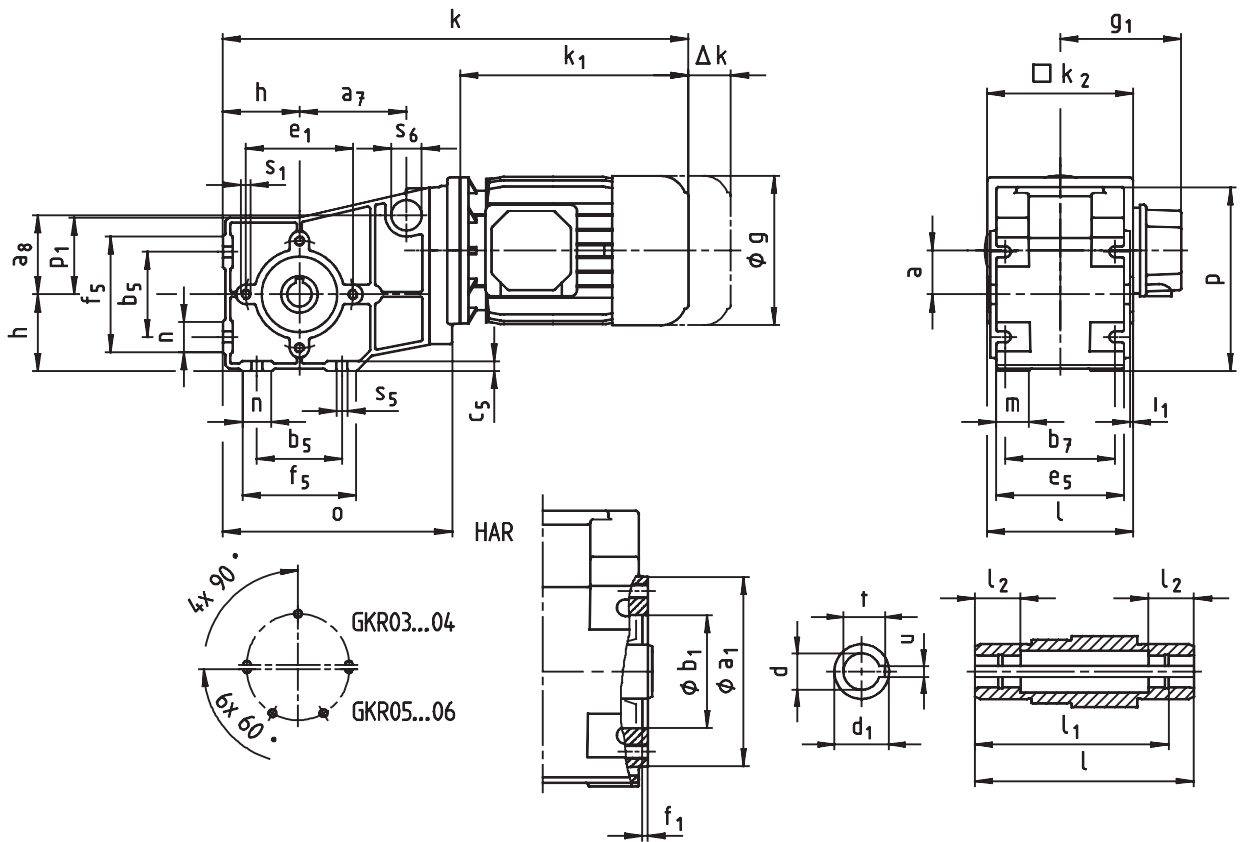
GKR 06 - 2 N											Dimensions page 5-42					
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]															
3.431	$P_1$ $M_2$				10.7 119	10.7 119				6.60 147	6.60 147				4.40 196	4.40 196
4.706	$P_1$ $M_2$				10.7 163	10.7 163				6.60 201	6.60 201				4.10 250	4.10 250
6.022	$P_1$ $M_2$			3.75 73	10.7 209	10.7 209			2.31 90	6.60 257	6.60 257		1.54 120	3.59 280	3.59 280	
6.481	$P_1$ $M_2$				10.7 225	10.7 225				6.60 277	6.60 277				4.17 350	4.17 350
7.146	$P_1$ $M_2$				10.7 248	10.7 248				6.60 305	6.60 305				3.76 348	3.76 348
8.889	$P_1$ $M_2$				10.7 309	10.7 309				6.60 380	6.60 380				3.54 408	3.54 408
9.800	$P_1$ $M_2$				9.83 312	9.83 312				6.05 384	6.05 384				3.02 384	3.02 384
11.376	$P_1$ $M_2$			3.75 138	9.60 354	9.60 354			2.31 170	5.91 436	5.91 436		1.54 227	2.95 436	2.95 436	
12.444	$P_1$ $M_2$			3.75 151	9.06 365	9.06 365			2.31 186	5.58 450	5.58 450		1.54 248	2.79 450	2.79 450	
13.720	$P_1$ $M_2$			3.75 167	7.79 346	7.79 346			2.31 205	4.79 426	4.79 426		1.54 274	2.40 426	2.40 426	
15.873	$P_1$ $M_2$		3.04 156	3.75 193	7.11 365	7.11 365		1.87 192	2.31 238	4.38 450	4.38 450		1.25 256	1.54 317	2.19 450	2.19 450
17.500	$P_1$ $M_2$		3.04 172	3.75 213	6.45 365	6.45 365		1.87 212	2.31 262	3.97 450	3.97 450		1.25 283	1.54 349	1.98 450	1.98 450
19.444	$P_1$ $M_2$			3.75 236	5.80 365	5.80 365			2.31 291	3.57 450	3.57 450		1.54 388	1.79 450	1.79 450	
21.438	$P_1$ $M_2$			3.75 261	5.26 365	5.26 365			2.31 321	3.24 450	3.24 450		1.54 428	1.62 450	1.62 450	
25.309	$P_1$ $M_2$		3.45 283	4.26 349	5.06 415			1.87 307	2.31 379	2.74 450		1.02 335	1.36 447	1.37 450		
27.903	$P_1$ $M_2$		3.45 312	4.26 385	4.59 415			1.87 338	2.31 418	2.49 450		1.02 370	1.24 450	1.24 450		
31.481	$P_1$ $M_2$		3.16 322	4.07 415	4.07 415			1.71 349	2.21 450	2.21 450		0.86 349	1.10 450	1.10 450		
34.708	$P_1$ $M_2$		3.16 355	3.69 415	3.69 415			1.71 385	2.00 450	2.00 450		0.86 385	1.00 450	1.00 450		
40.741	$P_1$ $M_2$	1.76 233	2.75 362	3.41 450			0.88 233	1.37 362	1.70 450		0.44 233	0.69 362	0.85 450			
44.917	$P_1$ $M_2$	1.76 257	2.75 400	3.09 450			0.88 257	1.37 400	1.55 450		0.44 257	0.69 400	0.77 450			
49.444	$P_1$ $M_2$	1.47 236	2.29 367	2.81 450			0.74 236	1.15 367	1.40 450		0.37 236	0.57 367	0.70 450			
54.513	$P_1$ $M_2$	1.47 260	2.29 405	2.55 450			0.74 260	1.15 405	1.27 450		0.37 260	0.57 405	0.64 450			
62.500	$P_1$ $M_2$	1.18 239	1.84 372				0.59 239	0.92 372				0.30 239	0.46 372			
68.906	$P_1$ $M_2$	1.18 263	1.84 410				0.59 263	0.92 410				0.30 263	0.46 410			

Thermal power limit not considered (see page 2-4)

# Dimensions - Bevel gearboxes

Geared motors (4-pole)

## GKR □□ - 2 M HOR



# Dimensions - Bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size														
		063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32							
<b>GKR □□ - 2 M H□R</b>																
Motor	g	123		138	156	176	196	220								
	g <sub>1</sub>	Without option		100	109	141	146	157	167							
		Brake motor		107	116	130	135	146	156							
	k <sub>1</sub>	156	188	207	225	276	309	319	363							
	k <sub>2</sub>	From gearbox size 04		100	120	120	145	180	222							
	Δk **	Brake		71	40	52	73	70	79	90						
		Separate fan		–	130	128	128	127	109	102						
Separate fan + brake		–	170	165	184	180	170	183								
Gearbox size	Gearbox						Total length									
	l*	p*	p <sub>1</sub>	a	h	o	k									
03	100	117	48	29	50	142	301	332	353							
04	120	151	63	36	63	189		383	403	425	486					
05	143	181	82	40	80	251		437	456	479	540	573				
06	170	226	100	51	100	307		488	508	530	591	625	641	685		

Gearbox size	Hollow shaft							Pitch circle						
	d <sup>2)</sup> H7	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	u JS9	t <sup>1)</sup> +0.1	a <sub>1</sub>	b <sub>1</sub> J7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	
03	18 20	100	30	86	22	6	20.8 22.8	85	55	70	2.5	2.5	M6x12	
04	20 25	120	30 35	106	25	6 8	22.8 27.0	104	62	88	3	2.5	M8x16	
05	30 35	143	50	128.5	25	8 10	33.3 38.3	116	80	100	4	4	M8x15	
06	40 45	170	65	152	30	12 14	43.3 48.8	140	100	120	4	5	M10x22	

Gearbox size	Foot									Torque plate		
	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>	a <sub>7</sub>	a <sub>8</sub>	s <sub>6</sub>	
03	60	75	7	90	80	20	22	6.6	66	39	25x12	
04	70	90	8	105	95	25	28	9	88	65	25x17	
05	100	100	11	115	138	48	27	9		–		
06	120	125	12	145	164	53	32	11		–		

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For further dimensions see section 8

<sup>1)</sup> If the hollow shaft diameter d=25mm, use a featherkey to DIN 6885/3

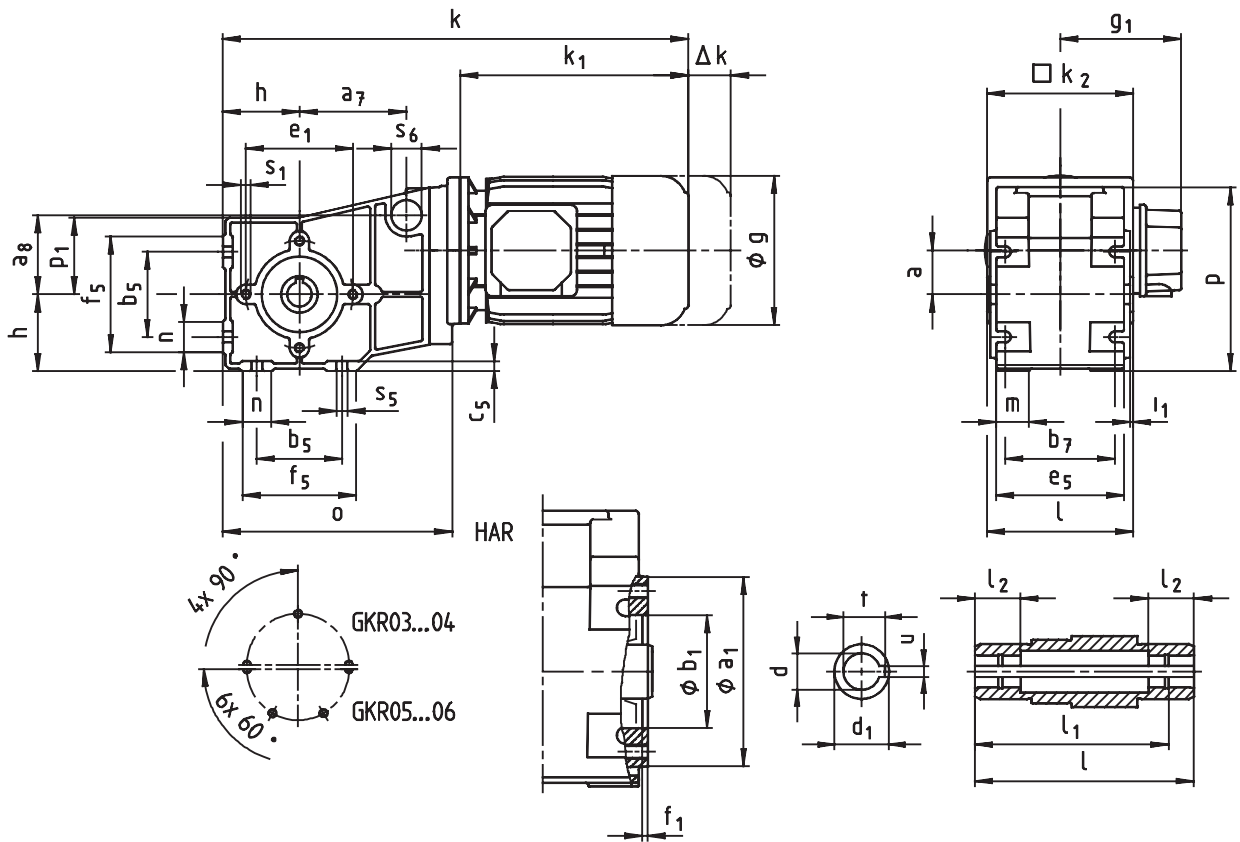
<sup>2)</sup> Only for the range l<sub>2</sub>



# Dimensions - Bevel gearboxes

Geared motors (2- and 6-pole)

## GKR □□ - 2 M HOR



# Dimensions - Bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size												
		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41					
<b>GKR □□ - 2 M H□R</b>														
Motor	g		129		142		156		178		194		222	
	g <sub>1</sub>	Without option		105		131		131		141		158		165
		Brake motor		105		131		131		140		159		165
	k <sub>1</sub>		193	204		176		225		242	280	310		323
	k <sub>2</sub>			100		145		145		180		180		222
	Δk **	Brake		56		66		68		74		94		101
		Separate fan		71		80		94		101		97		95
Separate fan + brake			118		134		150		164		169		183	
Gearbox size	Gearbox						Total length							
	l*	p*	p <sub>1</sub>	a	h	o	k							
04	120	151	63	36	63	189	363	374	376	425	453			
05	143	181	82	40	80	251			430	479	506	544	574	
06	170	226	100	51	100	307			481	530	558	596	626	644

Gearbox size	Hollow shaft							Pitch circle					
	d 2) H7	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	u JS9	t 1) +0.1	a <sub>1</sub>	b <sub>1</sub> J7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>
04	20 25	120	30 35	106	25	6 8	22.8 27.0	104	62	88	3	2.5	M8x16
05	30 35	143	50	128.5	25	8 10	33.3 38.3	116	80	100	4	4	M8x15
06	40 45	170	65	152	30	12 14	43.3 48.8	140	100	120	4	5	M10x22

Gearbox size	Foot								Torque plate		
	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>	a <sub>7</sub>	a <sub>8</sub>	s <sub>6</sub>
04	70	90	8	105	95	25	28	9	88	65	25x17
05	100	100	11	115	138	48	27	9		–	
06	120	125	12	145	164	53	32	11		–	

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

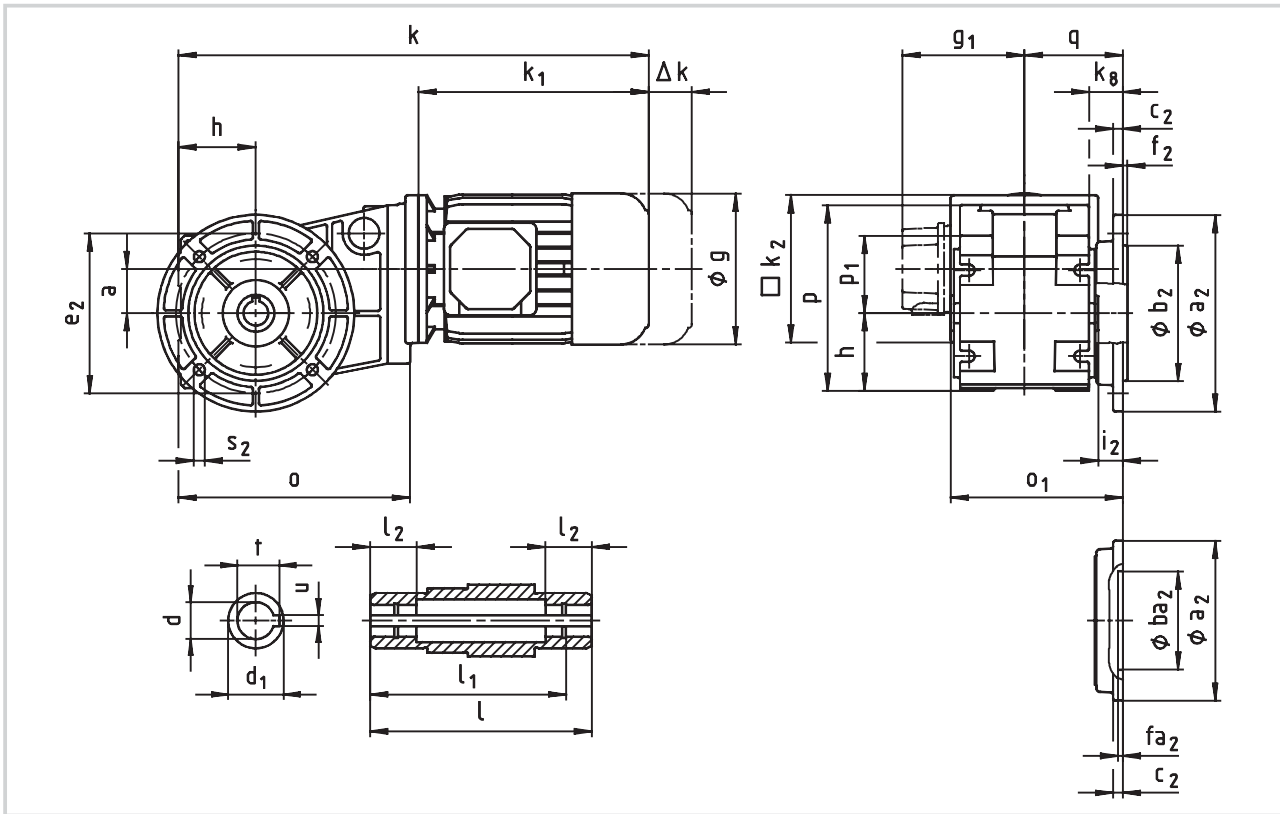
\*\* For further dimensions see section 8

1) If the hollow shaft diameter d=25mm, use a featherkey to DIN 6885/3

2) Only for the range l<sub>2</sub>

# Dimensions - Bevel gearboxes

## Geared motors (4-pole)



Geared motor

**GKR □□ - 2 M HAK**

Motor frame size

063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32
------------------	----------------------------	------------------	------------------	--------	------------------	--------	--------

Motor	g	Motor frame size															
		063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32								
Motor	g	123	138	156	176	196	220										
	g <sub>1</sub>	Without option	100	109	141	146	157	167									
		Brake motor	107	116	130	135	146	156									
	k <sub>1</sub>	156	188	207	225	276	309	319	363								
	k <sub>2</sub>	From gearbox size 04	100	120	120	145	180	180	222								
	Δk**	Brake	71	40	52	73	70	79	90								
Separate fan		–	130	128	128	127	109	102									
Separate fan + brake		–	170	165	184	180	170	183									
Gearbox size	Gearbox								Total length								
	o <sub>1</sub> *	p*	p <sub>1</sub>	a	h	k <sub>8</sub>	o	q	k								
03	130	117	48	29	50	35	142	80	301	332	353						
04	140	151	63	36	63	28	189	80		383	403	425	486				
05	177	181	82	40	80	47	251	105		437	456	479	540	573			
06	212	226	100	51	100	54	307	126.5		488	508	530	591	625	641	685	

Gearbox size	Hollow shaft								Output flange							
	d <sup>2)</sup> H7	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	u JS9	t <sup>1)</sup> +0.1	a <sub>2</sub>	b <sub>2</sub> j7	ba <sub>2</sub> H7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	fa <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
03	18	100	30	86	22	6	20.8	110	–	60	8	87	–	4	30	9
	120							80	–	100		3	–	7		
04	20	120	30	106	25	6	22.8	120	80	–	8	100	3	–	20	7
	25							160	110	–		130	3.5	–		9
05	30	143	50	128.5	25	8	33.3	160	110	–	12	130	3.5	–	33.5	9
	35							200	130	–		165	–	11		
06	40	170	65	152	30	12	43.3	200	130	–	12	165	3.5	–	41.5	11
	45							250	180	–		215	4	–		14

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

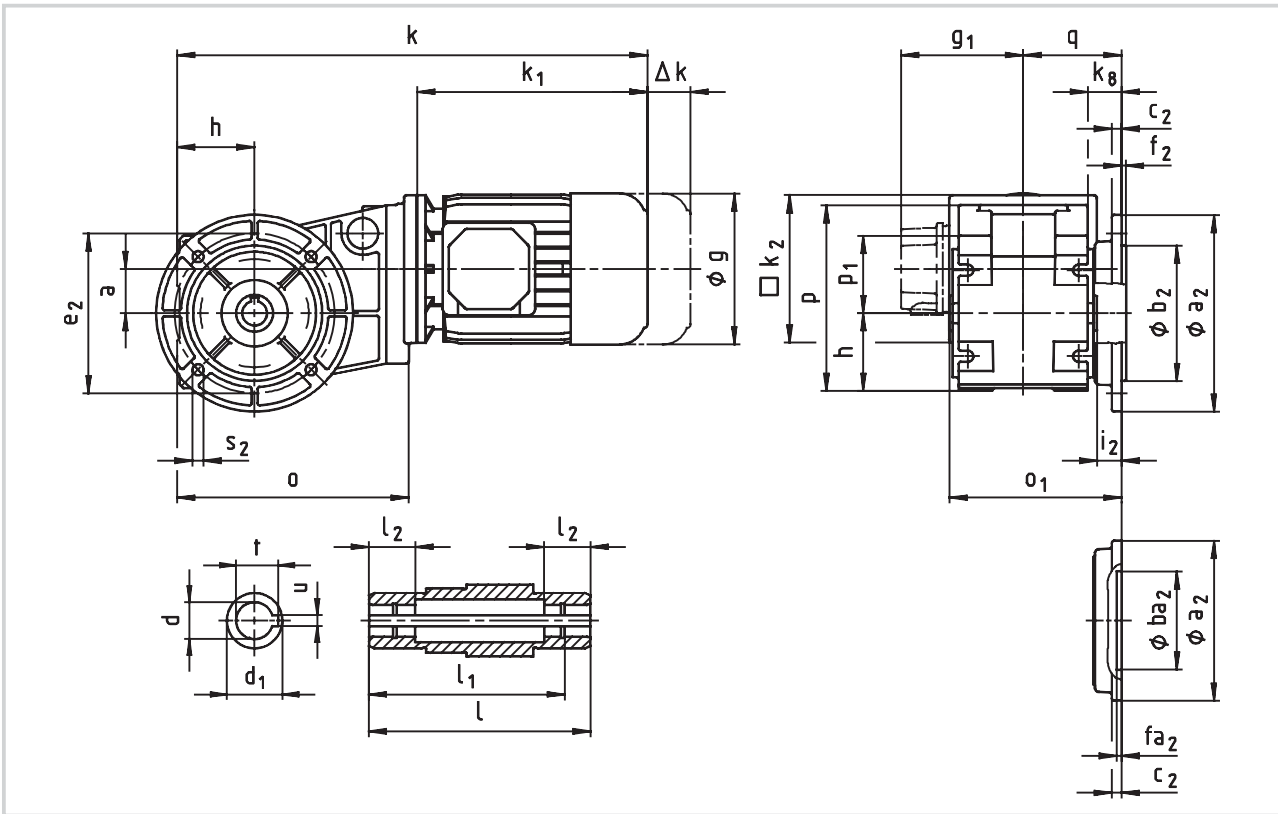
\*\* For further dimensions see section 8

<sup>1)</sup> If the hollow shaft diameter d=25mm, use a featherkey to DIN 6885/3

<sup>2)</sup> Only for the range l<sub>2</sub>

# Dimensions - Bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size																
GKR □□ - 2 M HAK		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41									
Motor	$g$		129	142	156	178	194		222									
	$g_1$	Without option	105	131	131	141	158		165									
		Brake motor	105	131	131	140	159		165									
	$k_1$		193	204	176	225	242	280	310	323								
	$k_2$			100	145	145	180		180	222								
	$\Delta k^{**}$	Brake		56	66	68	74		94	101								
Separate fan			71	80	94	101		97	95									
Separate fan + brake			118	134	150	164		169	183									
Gearbox size	Gearbox								Total length									
	$o_1^*$	$p^*$	$p_1$	$a$	$h$	$k_8$	$o$	$q$	$k$									
04	140	151	63	36	63	28	189	80	363	374	376	425	453					
05	177	181	82	40	80	47	251	105			430	479	506	544	574			
06	212	226	100	51	100	54	307	126.5			481	530	558	596	626	644		

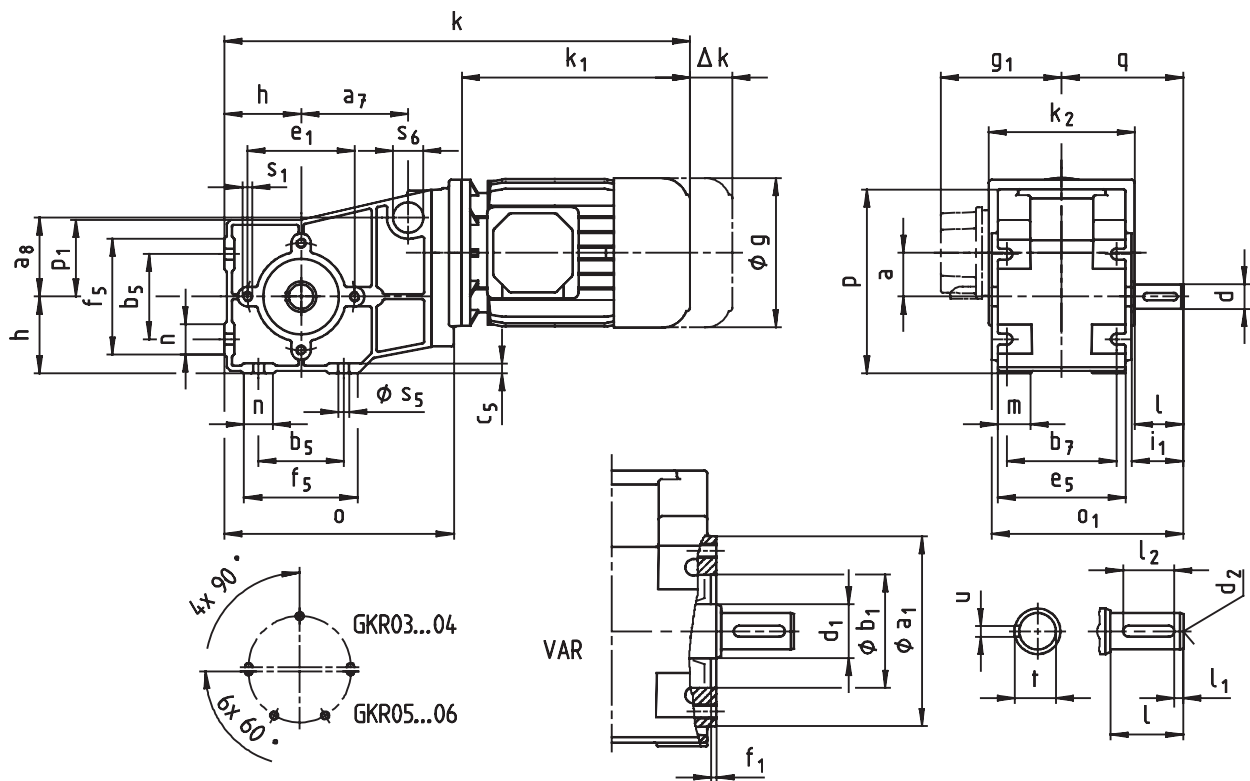
Gearbox size	Hollow shaft								Output flange						
	$d^2)$ H7	$l$	$d_1$	$l_1$	$l_2$	$u$ JS9	$t^1)$ +0.1	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$ 4x90°	
04	20	120	30	106	25	6	22.8	120	80	8	100	3	20	7	
	25		35			8	27.0	160	110		3.5	9			
05	30	143	50	128.5	25	8	33.3	160	110	12	130	3.5	33.5	9	
	35		10			38.3	200	130	4		11				
06	40	170	65	152	30	12	43.3	200	130	12	165	3.5	41.5	11	
	45		14			48.8	250	180	4		14				

Dimensions in [mm] \* Observe dimension  $k_2$  \*\* For further dimensions see section 8  
<sup>1)</sup> If the hollow shaft diameter  $d=25$ mm, use a featherkey to DIN 6885/3  
<sup>2)</sup> Only for the range  $l_2$

# Dimensions - Bevel gearboxes

Geared motors (4-pole)

## GKR □□ - 2 M V□R



# Dimensions - Bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size															
		063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32								
<b>GKR □□ - 2 M V□R</b>																	
Motor	g	123		138	156	176	196	220									
	g <sub>1</sub>	Without option		100	109	141	146	157	167								
		Brake motor		107		116	130	135	146	156							
	k <sub>1</sub>	156	188	207	225	276	309	319	363								
	k <sub>2</sub>	From gearbox size 04		100	120	120	145	180	180	222							
	Δk **	Brake		71	40	52	73	70	79	90							
		Separate fan		–	130	128	128	127	109	102							
Separate fan + brake		–	170	165	184	180	170	183									
Gearbox size	Gearbox							Total length									
	o <sub>1</sub> *	p*	p <sub>1</sub>	a	h	o	q	k									
03	138	117	48	29	50	142	90	301	332	353							
04	158	151	63	36	63	189	100		383	403	425	486					
05	199	181	82	40	80	251	131.5		437	456	479	540	573				
06	235	226	100	51	100	307	155		488	508	530	591	625	641	685		

Gearbox size	Solid shaft									Pitch circle					
	d k6	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> J7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	
03	20	40	30	5	28	M6	6	22.5	85	55	70	2.5	42.5	M6x12	
04	20	40	30	5	28	M6	6	22.5	104	62	88	3	42.5	M8x16	
05	30	60	50	6	45	M10	8	33	116	80	100	4	64	M8x15	
06	35	70	65	7	56	M12	10	38	140	100	120	4	75	M10x22	

Gearbox size	Foot									Torque plate		
	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>	a <sub>7</sub>	a <sub>8</sub>	s <sub>6</sub>	
03	60	75	7	90	80	20	22	6.6	66	39	25x12	
04	70	90	8	105	95	25	28	9	88	65	25x17	
05	100	100	11	115	138	48	27	9	–			
06	120	125	12	145	164	53	32	11	–			

Dimensions in [mm]

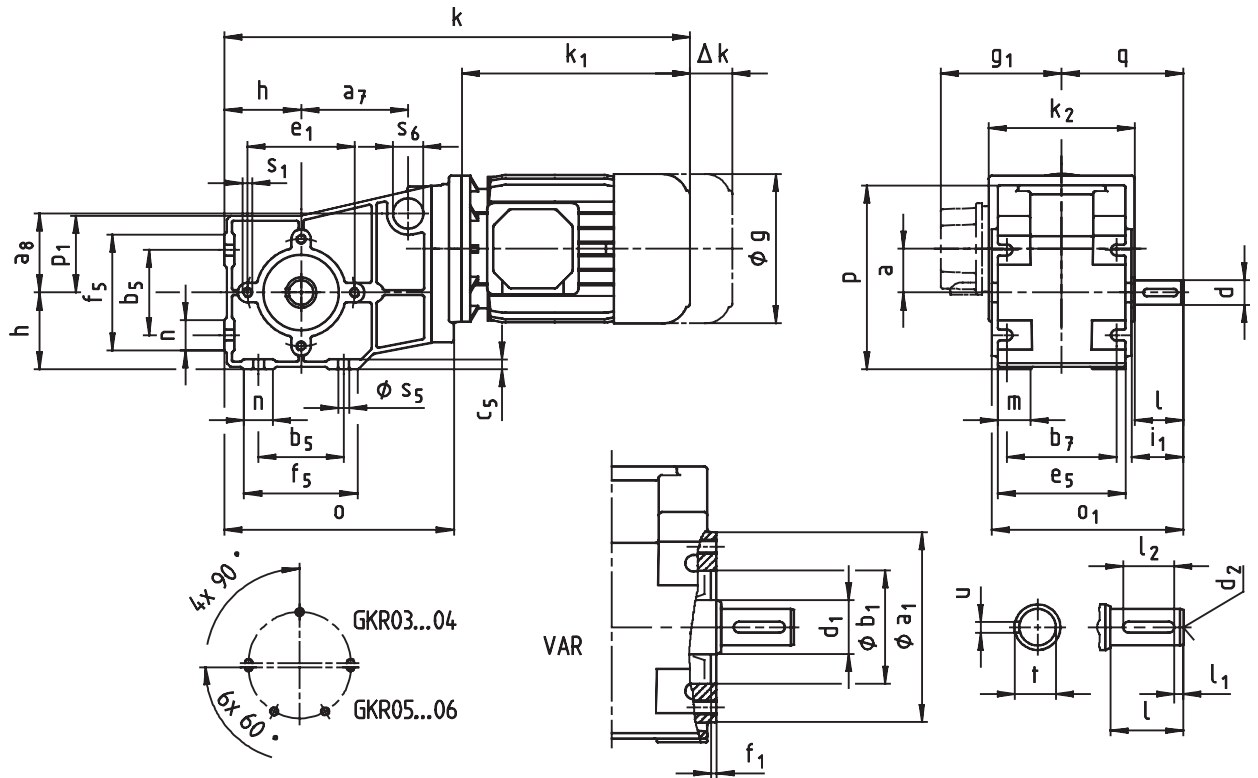
\* Observe dimension k<sub>2</sub>

\*\* For further dimensions see section 8

# Dimensions - Bevel gearboxes

Geared motors (2- and 6-pole)

## GKR □□ - 2 M VAR



# Dimensions - Bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size													
		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41						
<b>GKR □□ - 2 M V□R</b>															
Motor	g	129		142	156	178	194		222						
	g <sub>1</sub>	Without option			105	131	131	141	158		165				
		Brake motor			105	131	131	140	159		165				
	k <sub>1</sub>	193	204	176	225	242	280	310	323						
	k <sub>2</sub>	100		145	145	180	180		222						
	Δk **	Brake			56	66	68	74	94		101				
		Separate fan			71	80	94	101	97		95				
Separate fan + brake			118	134	150	164	169		183						
Gearbox size	Gearbox							Total length							
	o <sub>1</sub> *	p*	p <sub>1</sub>	a	h	o	q	k							
04	158	151	63	36	63	189	100	363	374	376	425	453			
05	199	181	82	40	80	251	131.5			430	479	506	544	574	
06	235	226	100	51	100	307	155			481	530	558	596	626	644

Gearbox size	Solid shaft									Pitch circle					
	d k6	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> J7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	
04	20	40	30	5	28	M6	6	22.5	104	62	88	3	42.5	M8x16	
05	30	60	50	6	45	M10	8	33	116	80	100	4	64	M8x15	
06	35	70	65	7	56	M12	10	38	140	100	120	4	75	M10x22	

Gearbox size	Foot									Torque plate		
	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>	a <sub>7</sub>	a <sub>8</sub>	s <sub>6</sub>	
04	70	90	8	105	95	25	28	9	88	65	25x17	
05	100	100	11	115	138	48	27	9		–		
06	120	125	12	145	164	53	32	11		–		

Dimensions in [mm]

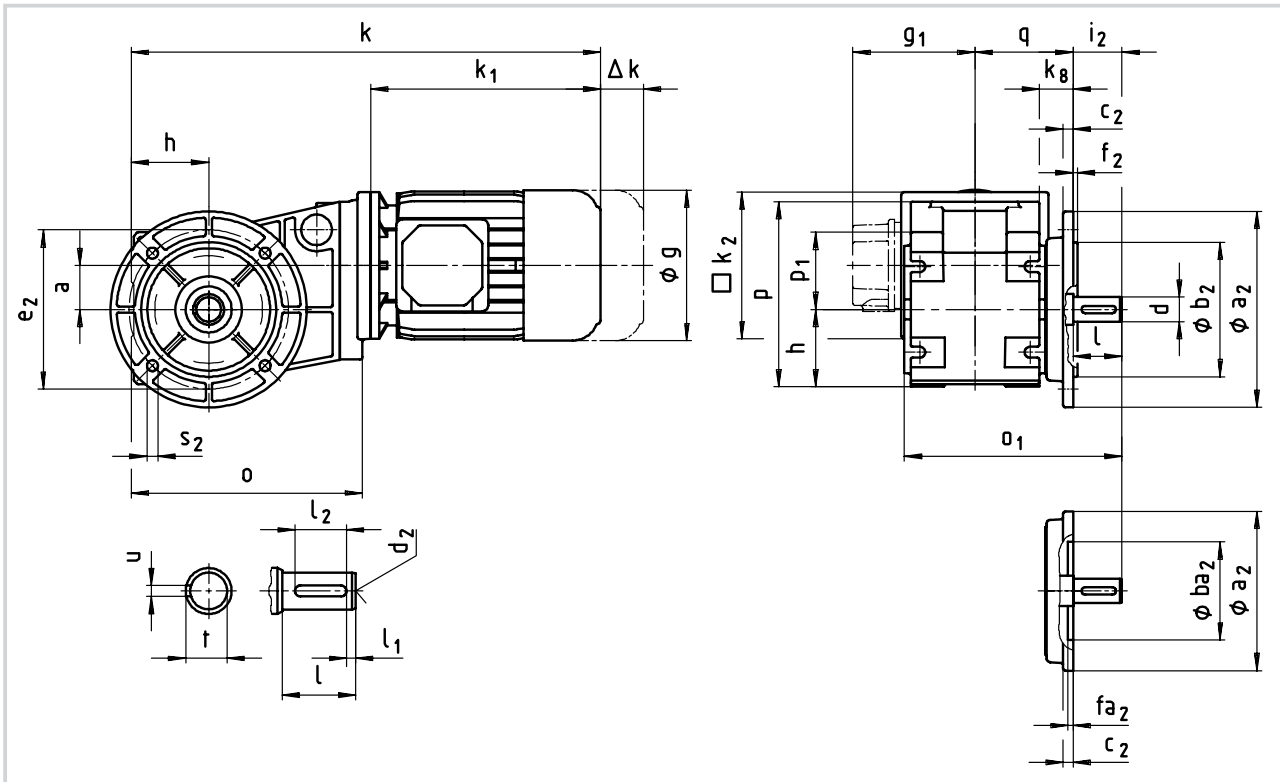
\* Observe dimension k<sub>2</sub>

\*\* For further dimensions see section 8



# Dimensions - Bevel gearboxes

Geared motors (4-pole)



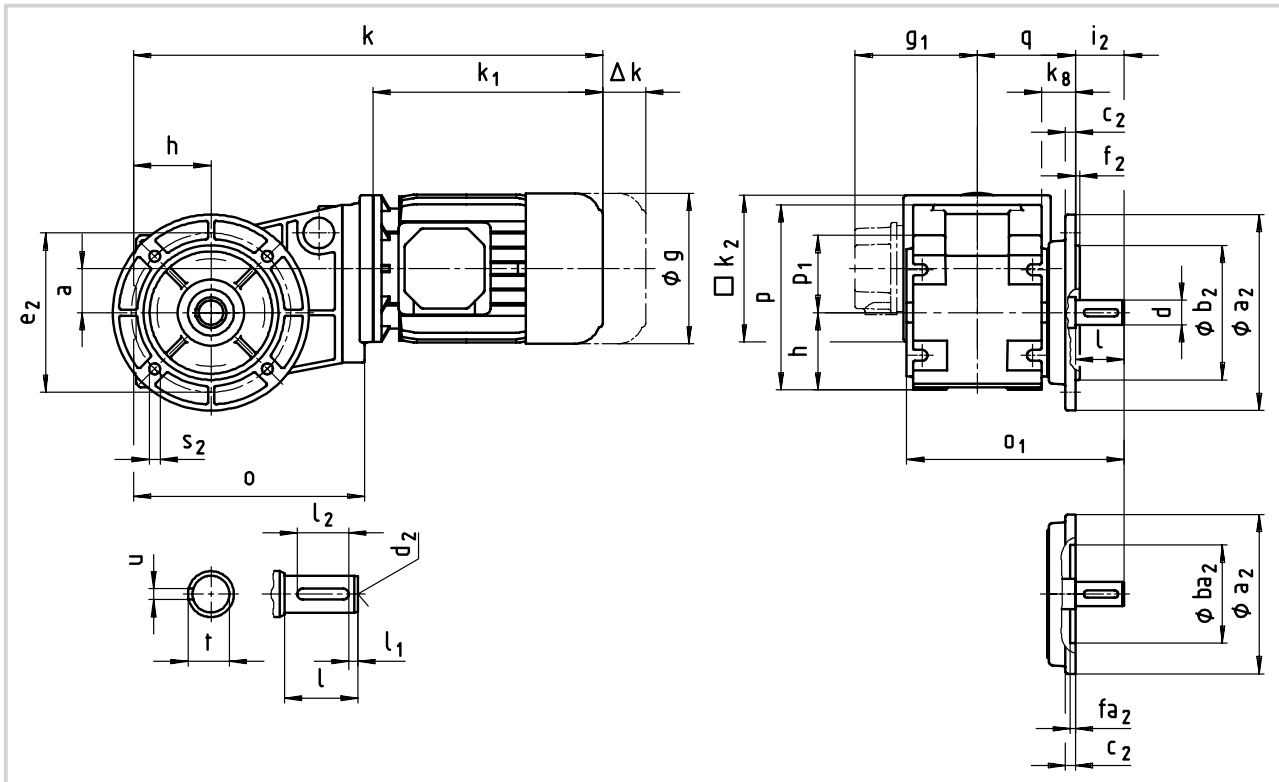
Geared motor		Motor frame size															
GKR □□ - 2 M VAK		063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32								
Motor	g	123		138	156	176	196	220									
	g <sub>1</sub>	Without option		100	109	141	146	157	167								
		Brake motor		107		116	130	135	146	156							
	k <sub>1</sub>	156	188	207	225	276	309	319	363								
	k <sub>2</sub>	From gearbox size 04		100	120	145	180	180	222								
	Δk**	Brake		71	40	52	73	70	79	90							
		Separate fan		-	130	128	128	127	109	102							
Separate fan + brake		-	170	165	184	180	170	183									
Gearbox size	Gearbox								Total length								
	o <sub>1</sub> *	p*	p <sub>1</sub>	a	h	o	q	k <sub>8</sub>	k								
	03	168	117	48	29	50	142	80	35	301	332	353					
	04	178	151	63	36	63	189	80.5	28		383	403	425	486			
	05	233	181	82	40	80	251	105	47		437	456	479	540	573		
06	277	226	100	51	100	307	126.5	54		488	508	530	591	625	641	685	

Gearbox size	Solid shaft								Output flange							
	d k6	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	ba <sub>2</sub> H7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	fa <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
03	20	40	5	28	M6	6	22.5	110 120	- 80	60 -	8	87 100	- 3	4 -	40	9 7
04	20	40	5	28	M6	6	22.5	120 160	80 110	-	8	100 130	3 3.5	-	40	7 9
05	30	60	6	45	M10	8	33	160 200	110 130	-	12	130 165	3.5	-	60	9 11
06	35	70	7	56	M12	10	38	200 250	130 180	-	12	165 215	3.5 4	-	70	11 14

Dimensions in [mm] \* Observe dimension k<sub>2</sub> \*\* For further dimensions see section 8

# Dimensions - Bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GKR □□ - 2 M VAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41							
Motor	$g$			129	142	156	178	194	222							
	$g_1$	Without option		105	131	131	141	158	165							
		Brake motor		105	131	131	140	159	165							
	$k_1$	193	204	176	225	242	280	310	323							
	$k_2$			100	145	145	180	180	222							
	$\Delta k^{**}$	Brake		56	66	68	74	94	101							
	Separate fan		71	80	94	101	97	95								
	Separate fan + brake		118	134	150	164	169	183								
Gearbox size	Gearbox								Total length							
	$o_1^*$	$p^*$	$p_1$	$a$	$h$	$o$	$q$	$k_8$	$k$							
	04	178	151	63	36	63	189	80.5	28	363	374	376	425	453		
	05	233	181	82	40	80	251	105	47			430	479	506	544	574
06	277	226	100	51	100	307	126.5	54			481	530	558	596	626	644

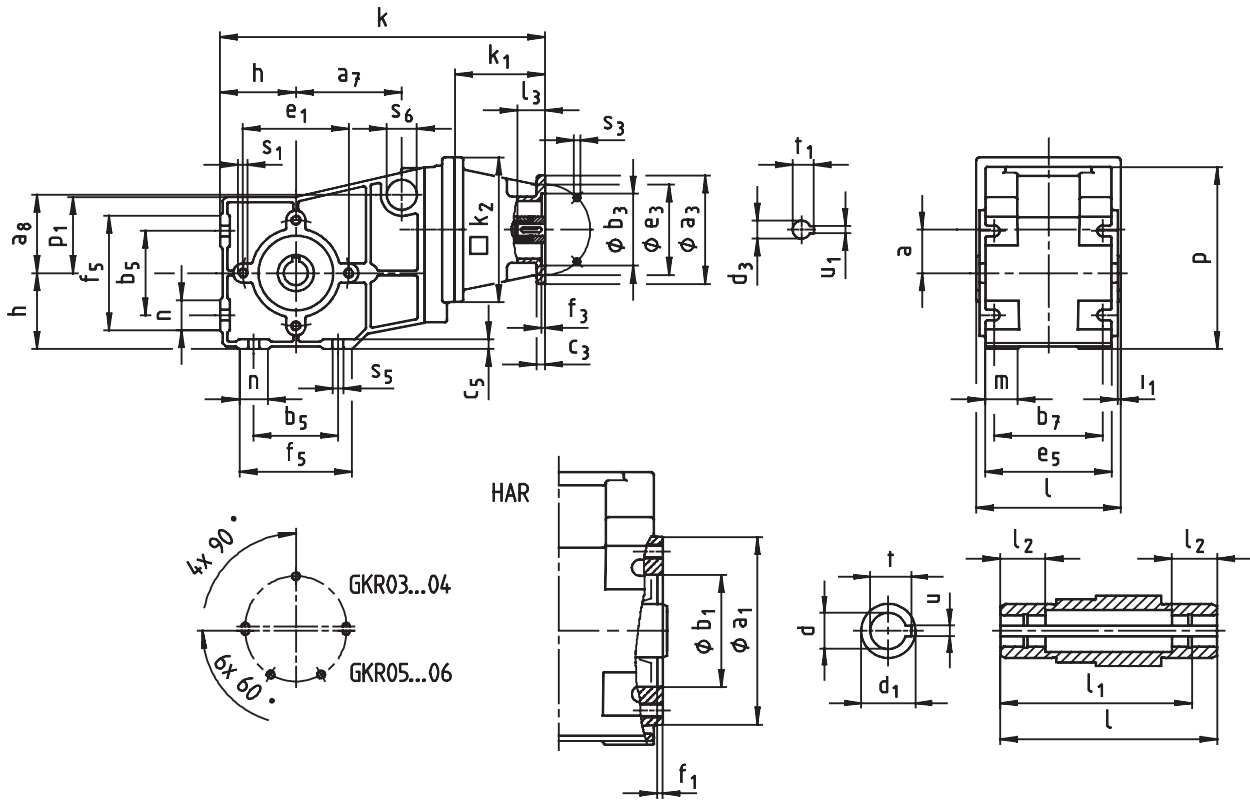
Gearbox size	Solid shaft							Output flange						
	$d$ k6	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$ 4x90°
04	20	40	5	28	M6	6	22.5	120 160	80 110	8	100 130	3 3.5	40	7 9
05	30	60	6	45	M10	8	33	160 200	110 130	12	130 165	3.5	60	9 11
06	35	70	7	56	M12	10	38	200 250	130 180	12	165 215	3.5 4	70	11 14

Dimensions in [mm] \* Observe dimension  $k_2$  \*\* For further dimensions see section 8

# Dimensions - Bevel gearboxes

Gearbox with mounting flange for IEC standard motors

## GKR □□ - 2 N H□R



# Dimensions - Bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GKR □□ - 2 N □□</b>		Drive size															
		1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90		
corresponds to IEC motor																	
Housing	$k_1$	58			75	77				75	91	115	110	139			
	$k_2$	100			120	145				120	145	180	180	180			
	Flange	$a_3$	90	105	90	160	160	105	120	160		160			160		
		$b_3$	H8	60	70	60	110	110	70	80	110		110			110	
		$c_3$		7	8	7	10	10	8	8	10		10			10	
		$e_3$		75	85	75	130	130	85	100	130		130			130	
		$f_3$		3	3	3	4	4	3	3.5	4		4			4	
		$s_3$	4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9			9	
	Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	28	24
		$l_3$	min	23	30	23	25				50	40	30			30	
max			23	30	23	40				50	50	60			60		
$u_1$			4	5	4	6	5	5	5	8	6	8	8	6	8	8	
$t_1$		12.5	16	12.5	21.5	16	16	16	16	27	21.5	31	27	21.5	31	27	
Gearbox size	Gearbox						Total length										
	$l^*$	$p^*$	$p_1$	$a$	$h$	$o$	$k$										
03	100	117	48	29	50	142	224										
04	120	151	63	36	63	189		271	278	271	292						
05	143	181	82	40	80	251			331		345		379	374			
06	170	226	100	51	100	307			383		397		431	426		455	

Gearbox size	Hollow shaft							Pitch circle					
	$d_2$ H7	$l$	$d_1$	$l_1$	$l_2$	$u$ J59	$t_1$ +0.1	$a_1$	$b_1$ J7	$e_1$	$f_1$	$i_1$	$s_1$
03	18 20	100	30	86	22	6	20.8 22.8	85	55	70	2.5	2.5	M6x12
04	20 25	120	30 35	106	25	6 8	22.8 27.0	104	62	88	3	2.5	M8x16
05	30 35	143	50	128.5	25	8 10	33.3 38.3	116	80	100	4	4	M8x15
06	40 45	170	65	152	30	12 14	43.3 48.8	140	100	120	4	5	M10x22

Gearbox size	Foot								Torque plate		
	$b_5$	$b_7$	$c_5$	$e_5$	$f_5$	$n$	$m$	$s_5$	$a_7$	$a_8$	$s_6$
03	60	75	7	90	80	20	22	6.6	66	39	25x12
04	70	90	8	105	95	25	28	9	88	65	25x17
05	100	100	11	115	138	48	27	9		–	
06	120	125	12	145	164	53	32	11		–	

Dimensions in [mm]

\* Observe dimension  $k_2$

\*\* With gearbox size 03

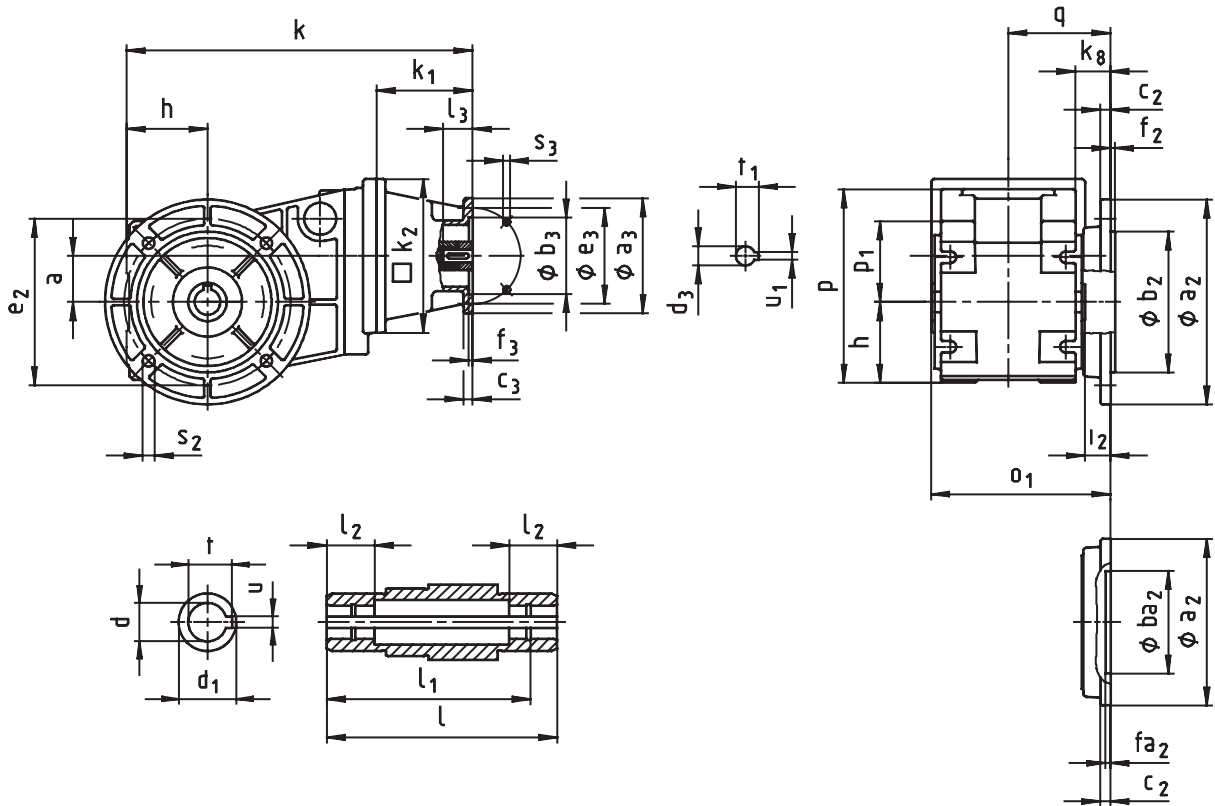
1) If the hollow shaft diameter  $d=25$ mm, use a featherkey to DIN 6885/3

2) Only for the range  $l_2$

# Dimensions - Bevel gearboxes

Gearbox with mounting flange for IEC standard motors

## GKR □□ - 2 N HAK



# Dimensions - Bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox		GKR □□ - 2 N HAK		Drive size														
				1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	
		corresponds to IEC motor		63	71	63	80		71	71	90	80	100	90	80	100	90	
Housing	k <sub>1</sub>			58			75	77				75	91	115	110	139		
		k <sub>2</sub>			100			120	145				120	145	180	180	180	
	Flange	a <sub>3</sub>			90	105	90	160	160	105	120	160		160		160		
		b <sub>3</sub>	H8			60	70	60	110	110	70	80	110		110		110	
		c <sub>3</sub>			7	8	7	10	10	8	8	10		10		10		
		e <sub>3</sub>			75	85	75	130	130	85	100	130		130		130		
		f <sub>3</sub>			3	3	3	4	4	3	3.5	4		4		4		
		s <sub>3</sub>	4 x			5.5	6.6	5.5	9	9	6.6	6.6	9		9		9	
	Required motor shafts	d <sub>3</sub>			11	14	11	19	14	14	14	24	19	28	24	19	28	24
		l <sub>3</sub>	min			23	30	23	25				50	40	30		30	
max					23	30	23	40				50	50	60		60		
u <sub>1</sub>				4	5	4	6	5	5	5	8	6	8	8	6	8	8	
t <sub>1</sub>			12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27		
Gearbox size	Gearbox								Total length									
	o <sub>1</sub> *	p*	p <sub>1</sub>	a	h	k <sub>g</sub>	o	q	k									
03	130	117	48	29	50	35	142	80	224									
04	140	151	63	36	63	28	189	80		271	278	271	292					
05	177	181	82	40	80	47	251	105			331		345		379	374		
06	212	226	100	51	100	54	307	126.5			383		397		431	426		455

Gearbox size	Hollow shaft							Output flange								
	d <sup>2)</sup> H7	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	u JS9	t <sup>1)</sup> +0.1	a <sub>2</sub>	b <sub>2</sub> j7	ba <sub>2</sub> H7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	fa <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
03	18 20	100	30	86	22	6	20.8 22.8	110 120	– 80	60 –	8.0	87 100	– 3	4 –	30	9 7
04	20 25	120	30 35	106	25	6 8	22.8 27	120 160	80 110	–	8.0	100 130	3 3.5	–	20	7 9
05	30 35	143	50	128.5	25	8 10	33.3 38.3	160 200	110 130	–	12	130 165	3.5	–	33.5	9 11
06	40 45	170	65	152	30	12 14	43.3 48.8	200 250	130 180	–	12	165 215	3.5 4	–	41.5	11 14

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* With gearbox size 03

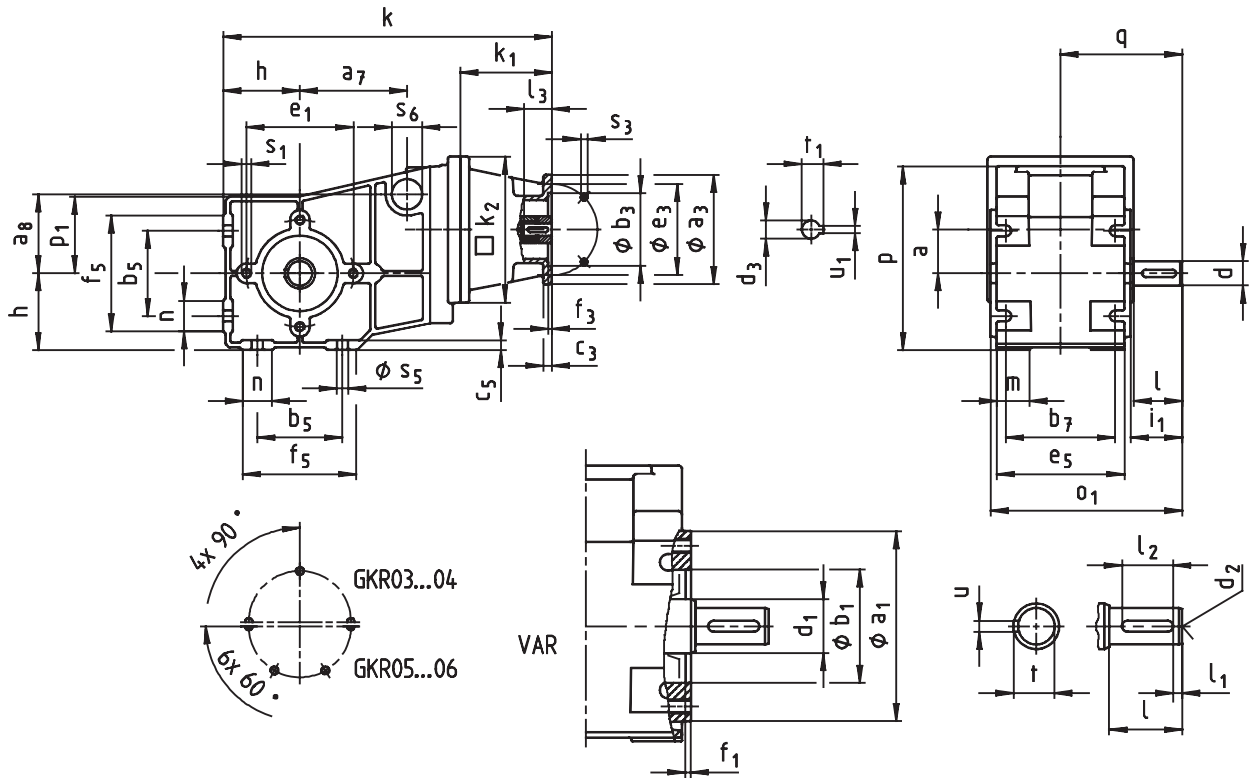
<sup>1)</sup> If the hollow shaft diameter d=25mm, use a featherkey to DIN 6885/3

<sup>2)</sup> Only for the range l<sub>2</sub>

# Dimensions - Bevel gearboxes

Gearbox with mounting flange for IEC standard motors

## GKR □□ - 2 N VOR



# Dimensions - Bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox		GKR □□ - 2 N V0R		Drive size														
				1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	
		corresponds to IEC motor		63	71	63	80		71	71	90	80	100	90	80	100	90	
Housing	k <sub>1</sub>			58			75	77				75	91	115	110	139		
		k <sub>2</sub>			100			120	145				120	145	180	180	180	
	Flange	a <sub>3</sub>			90	105	90	160	160	105	120	160		160			160	
		b <sub>3</sub>	H8		60	70	60	110	110	70	80	110		110			110	
		c <sub>3</sub>			7	8	7	10	10	8	8	10		10			10	
		e <sub>3</sub>			75	85	75	130	130	85	100	130		130			130	
		f <sub>3</sub>			3	3	3	4	4	3	3.5	4		4			4	
		s <sub>3</sub>	4 x		5.5	6.6	5.5	9	9	6.6	6.6	9		9			9	
	Required motor shafts	d <sub>3</sub>			11	14	11	19	14	14	14	24	19	28	24	19	28	24
		l <sub>3</sub>	min		23	30	23	25				50	40	30			30	
max				23	30	23	40				50	50	60			60		
u <sub>1</sub>				4	5	4	6	5	5	5	8	6	8	8	6	8	8	
t <sub>1</sub>			12.5	16	12.5	21.5	16	16	16	16	27	21.5	31	27	21.5	31	27	
Gearbox size	Gearbox							Total length										
	o <sub>1</sub> *	p*	p <sub>1</sub>	a	h	o	q	k										
03	138	117	48	29	50	142	90	224										
04	158	151	63	36	63	189	100		271	278	271	292						
05	199	181	82	40	80	251	131.5			331		345		379	374			
06	235	226	100	51	100	307	155			383		397		431	426		455	

Gearbox size	Solid shaft								Pitch circle					
	d k6	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> J7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>
03	20	40	30	5	28	M6	6	22.5	85	55	70	2.5	42.5	M6x12
04	20	40	30	5	28	M6	6	22.5	104	62	88	3	42.5	M8x16
05	30	60	50	6	45	M10	8	33	116	80	100	4	64	M8x15
06	35	70	65	7	56	M12	10	38	140	100	120	4	75	M10x22

Gearbox size	Foot								Torque plate		
	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>	a <sub>7</sub>	a <sub>8</sub>	s <sub>6</sub>
03	60	75	7	90	80	20	22	6.6	66	39	25x12
04	70	90	8	105	95	25	28	9	88	65	25x17
05	100	100	11	115	138	48	27	9		–	
06	120	125	12	145	164	53	32	11		–	

Dimensions in [mm]

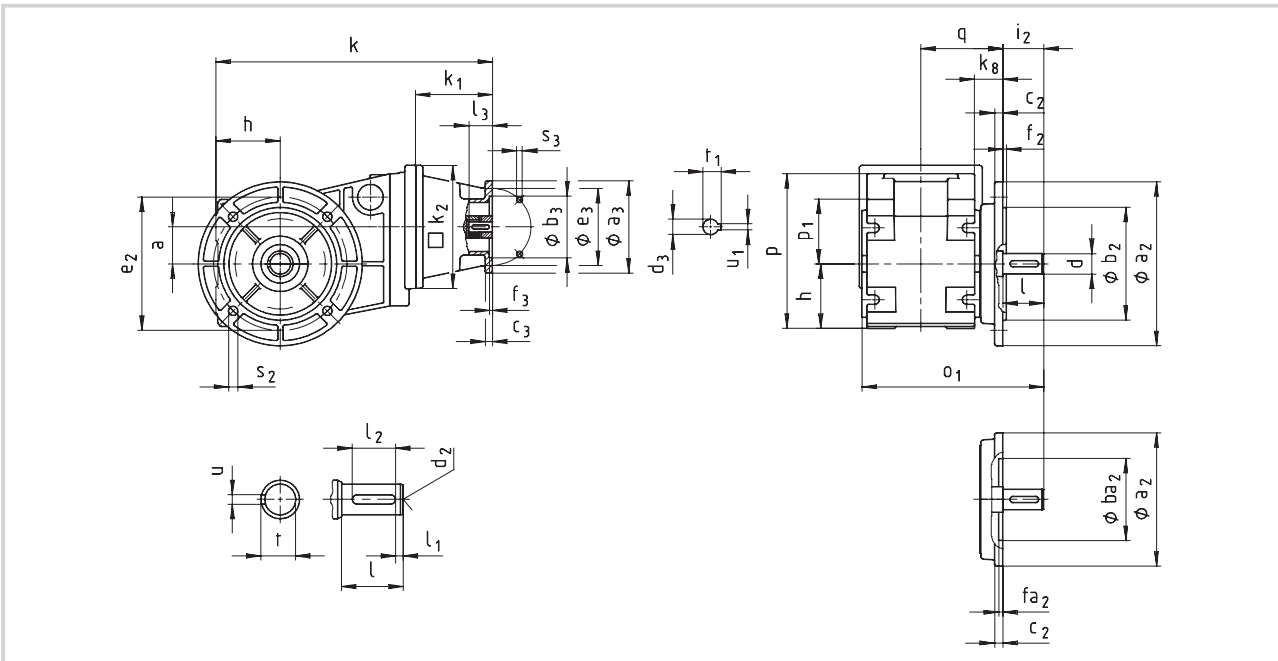
\* Observe dimension k<sub>2</sub>

\*\* With gearbox size 03



# Dimensions - Bevel gearboxes

Gearbox with mounting flange for IEC standard motors



Gearbox			Drive size													
<b>GKR □□ - 2 N VAK</b>			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F
corresponds to IEC motor			63	71	63	80		71	71	90	80	100	90	80	100	90
Housing	$k_1$		58		75	77			75	91	115	110	139			
	$k_2$		100		120	145			120	145	180	180	180			
Flange	$a_3$		90	105	90	160	160	105	120	160		160		160		
	$b_3$	H8	60	70	60	110	110	70	80	110		110		110		
	$c_3$		7	8	7	10	10	8	8	10		10		10		
	$e_3$		75	85	75	130	130	85	100	130		130		130		
	$f_3$		3	3	3	4	4	3	3.5	4		4		4		
	$s_3$	4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9		9		
Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	28	24
	$l_3$	min	23	30	23	25			25	50	40	30		30		
		max	23	30	23	40			40	50	50	60		60		
	$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8
$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	
Gearbox size	Gearbox								Total length							
	$o_1^*$	$p^*$	$p_1$	$a$	$h$	$o$	$q$	$k_8$	$k$							
03	168	117	48	29	50	142	80	35	224							
04	178	151	63	36	63	189	80.5	28		271	278	271		292		
05	233	181	82	40	80	251	105	47			331		345	379	374	
06	277	226	100	51	100	307	126.5	54			383		397	431	426	455

Gearbox size	Solid shaft							Output flange								
	$d$ k6	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$ba_2$ H7	$c_2$	$e_2$	$f_2$	$fa_2$	$i_2$	$s_2$ 4x90°
03	20	40	5	28	M6	6	22.5	110 120	- 80	60 -	8	87 100	- 3	4 -	40	9 7
04	20	40	5	28	M6	6	22.5	120 160	80 110	-	8	100 130	3 3.5	-	40	7 9
05	30	60	6	45	M10	8	33	160 200	110 130	-	12	130 165	3.5	-	60	9 11
06	35	70	7	56	M12	10	38	200 250	130 180	-	12	165 215	3.5 4	-	70	11 14

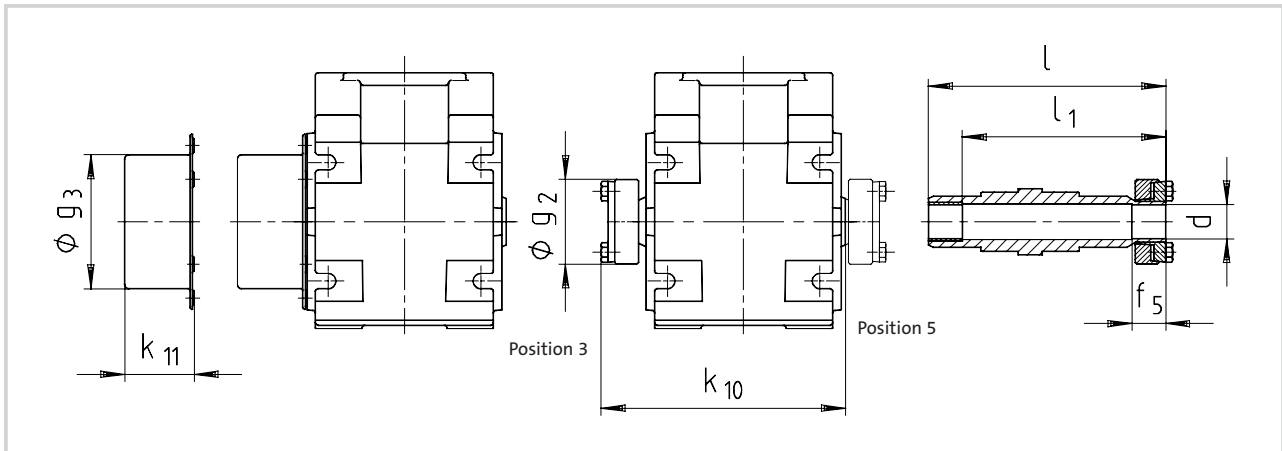
Dimensions in [mm]

\* Observe dimension  $k_2$

\*\* For gearbox size 03



## Hollow shaft with shrink disc



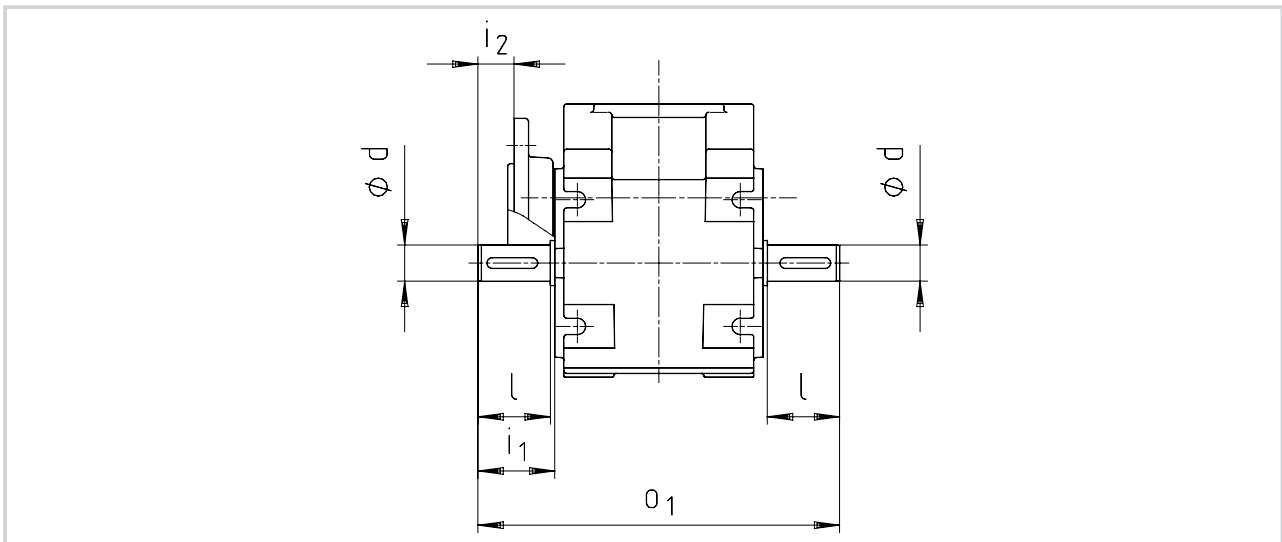
Gearbox size	Machine shaft *		Hollow shaft			Gearbox		Protective cover	
	d	fit	l	$l_1$	$f_5$	$g_2$	$k_{10}$	$g_3$	$k_{11}$
03	20	h6	120	100	20	50	124	65	41
04	20	h6	140	120	20	50	144	79	41
05	30/35	h6	171	151	28	80	177	90	43
06	40	h6	204	174	30	90	210	100	49

Dimensions in [mm]

\* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4) the torque values given in the selection tables can be transmitted without restrictions. If less rigid materials are being used, please contact us.

The average surface roughness  $R_z$  should not exceed 15  $\mu\text{m}$  (turning is sufficient).

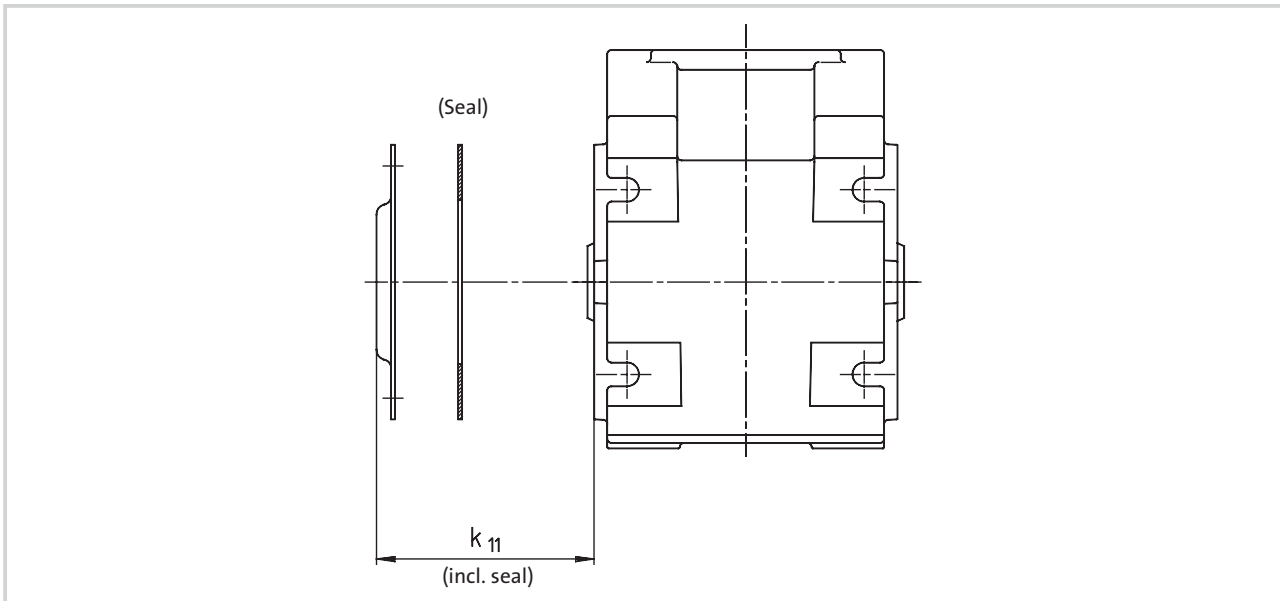
## Gearbox with 2nd output shaft



Gearbox size	d	l	$i_1$	$i_2$	$O_1$
03	k6	40	42.5	9.5	180
04	20	40	42.5	19.5	200
05	30	60	64	27	263
06	35	70	75	28.5	310

Dimensions in [mm]

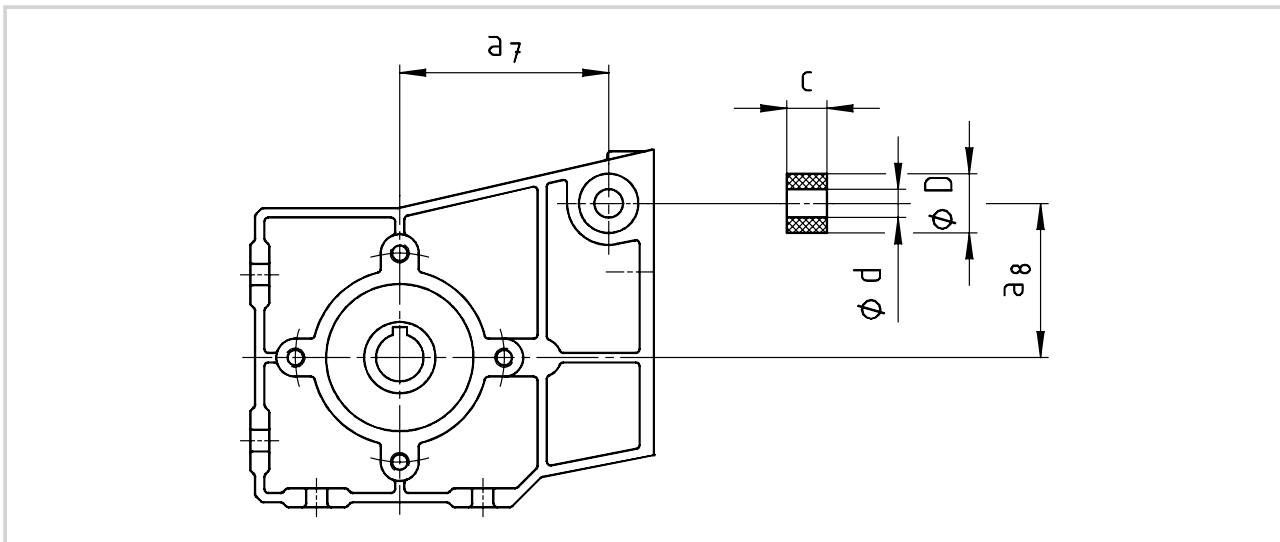
## Jet-proof hollow shaft cover



Gearbox size	Protective cover	
	$k_{11}$	
03	9	
04	9	
05	10	
06	11	

5

## Rubber buffer set for torque plate

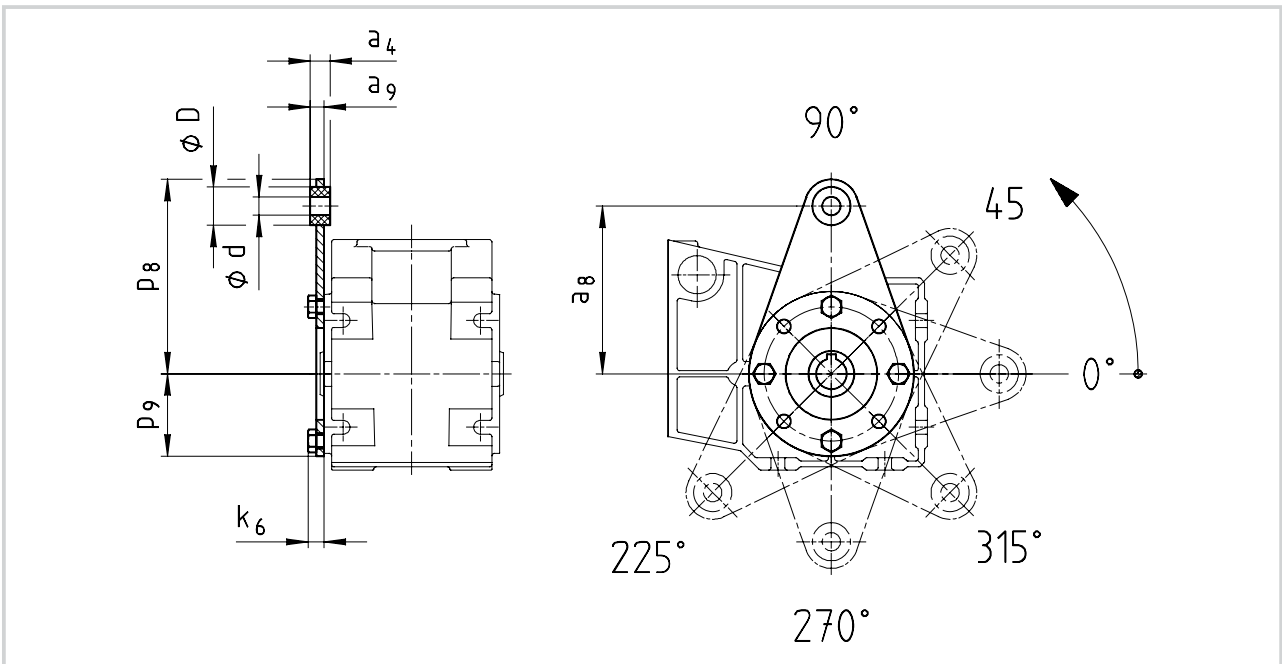


Gearbox size	d	D	c	$a_7$	$a_8$
03	10	25	13	66	39
04	10	25	13	88	65

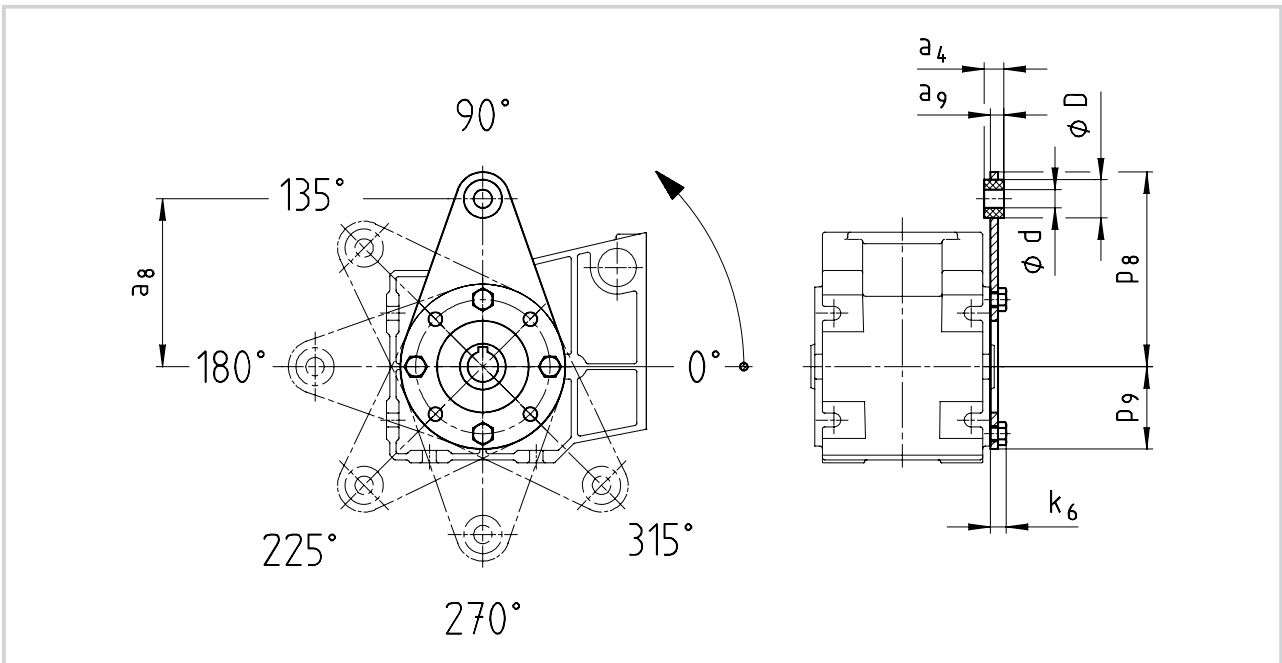
Dimensions in [mm]



## GKR 03/04 Torque plate at pitch circle, position 3



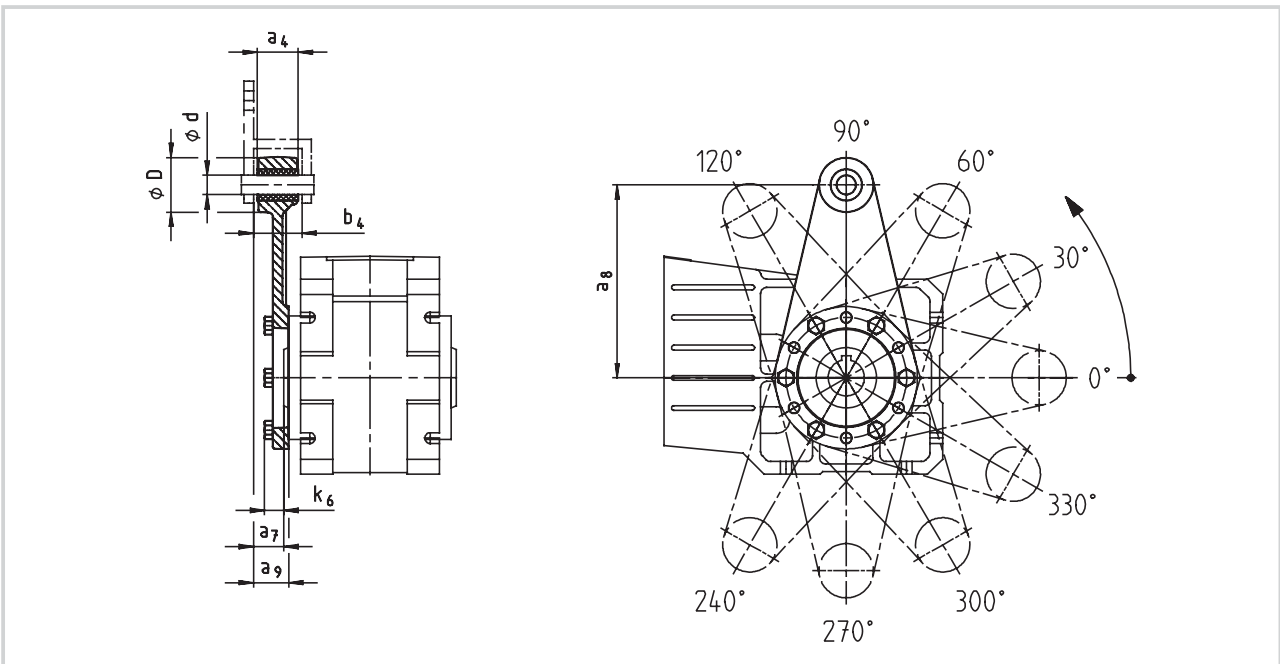
## GKR 03/04 Torque plate at pitch circle, position 5



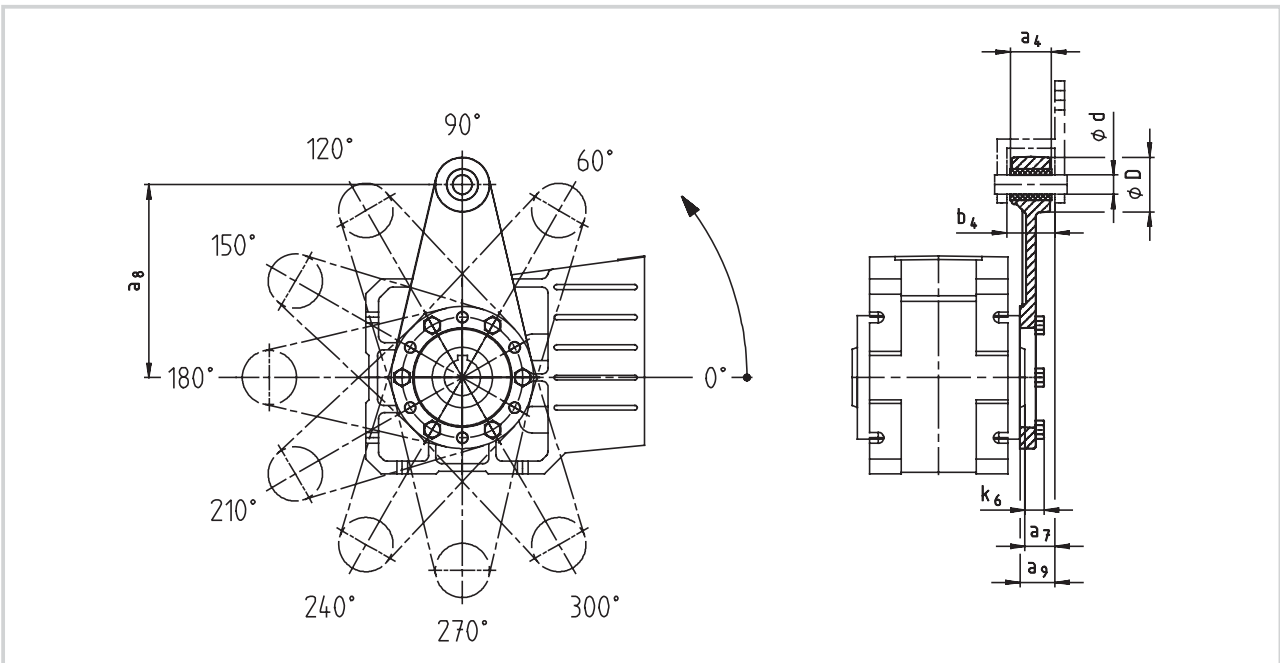
Gearbox size	Torque plate							
	$a_4$	$a_8$	$a_9$	$d$	$D$	$k_6$	$p_8$	$p_9$
03	12	100	8	8	20	9	115	42
04	13	110	9	10	25	11	128	52

Dimensions in [mm]

## GKR 05/06 Torque plate at pitch circle, position 3



## GKR 05/06 Torque plate at pitch circle, position 5

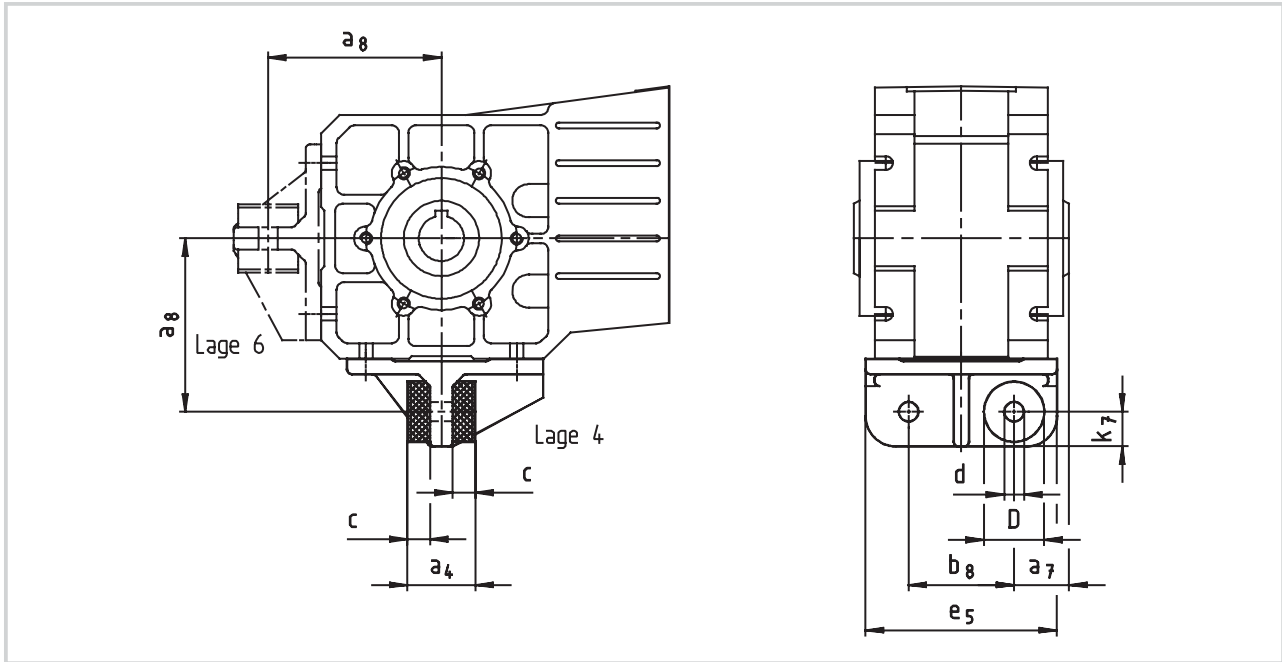


Gearbox size	Assembly space		Torque plate						
	a <sub>7</sub>	b <sub>4</sub>	a <sub>4</sub>	a <sub>8</sub>	a <sub>9</sub>	d	D	k <sub>6</sub>	
05	23.5	38.5	34	160	27.5	16	45	16	
06	28	44.5	40	200	33	20	50	18	

Dimensions in [mm]



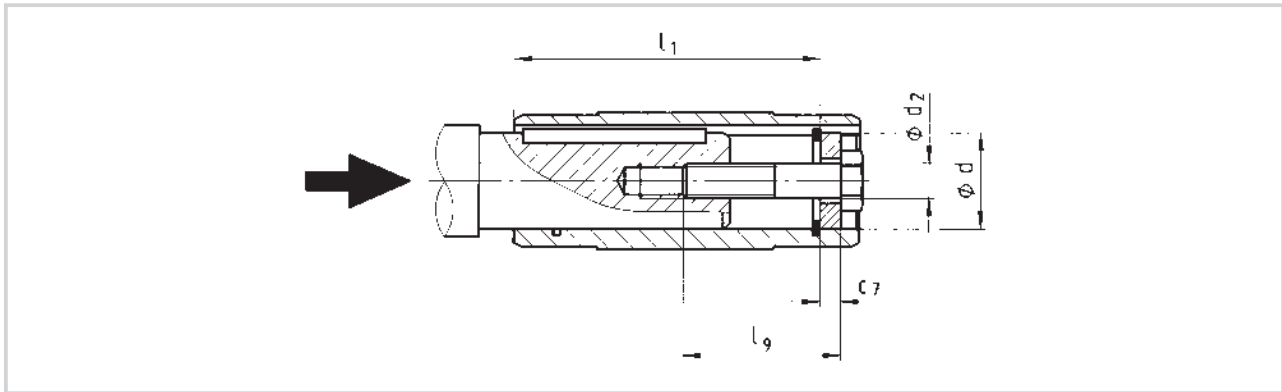
## Torque plate at housing foot



Gearbox size	a <sub>4</sub>	a <sub>7</sub>	a <sub>8</sub>	b <sub>8</sub>	c	d	D	e <sub>5</sub>	k <sub>7</sub>
05	45	36.5	115	70	15	13	40	127	23
06	72	45	145	80	27	17	50	145	28

Dimensions in [mm]

## Assembly kit for hollow shaft retention / Proposal for auxiliary tool



Gearbox size	Hollow shaft (Design H)			Assembly kit for hollow shaft circlip (auxiliary tool assembly)		
	l	l <sub>1</sub>	d H7	d <sub>2</sub>	l <sub>9</sub>	c <sub>7</sub>
03	100	86	18 20	M6	40	4
04	120	106	20 25	M6 M10	40	4 5
05	143	128	30 35	M10 M12	40 50	6 7
06	170	152	40 45	M16	60	8 9

Dimensions in [mm]

## Technical data

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Proposed design for auxiliary tools	6-141

## Helical-bevel gearboxes GKS□□

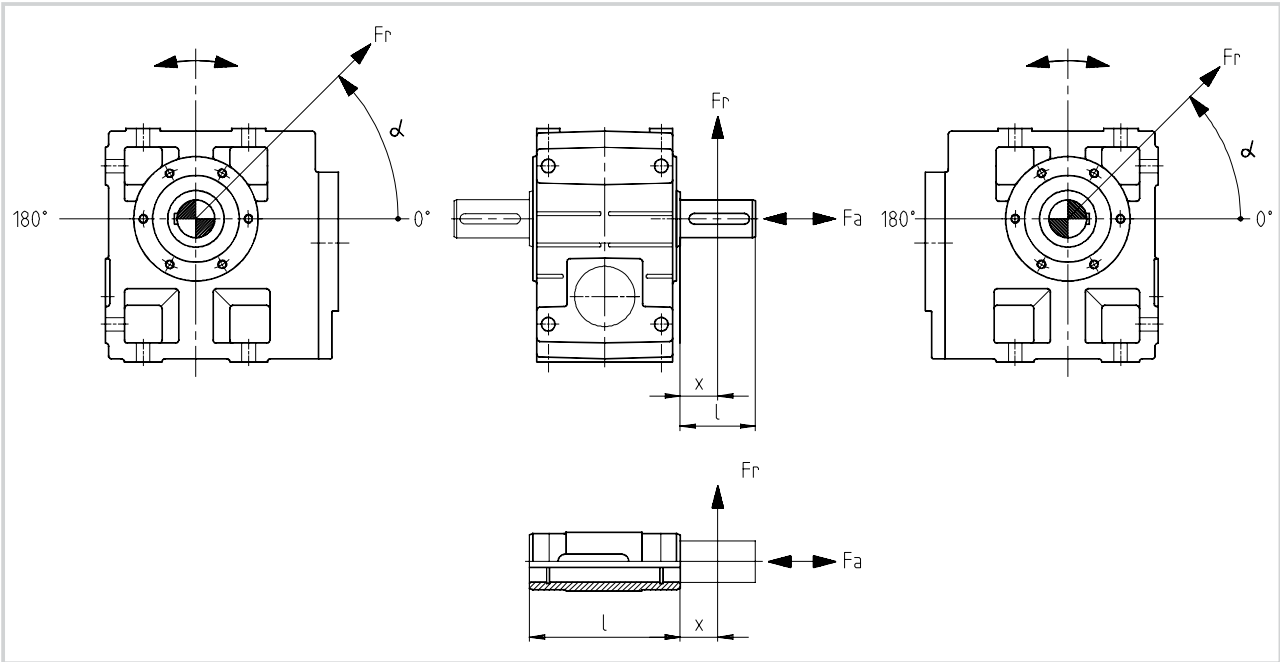
### Permissible radial force

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

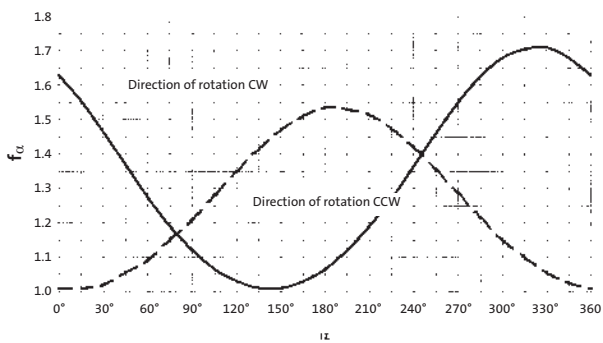
### Permissible axial force

$$F_{Aperm} = F_{ATab} \quad \text{if } F_R = 0$$

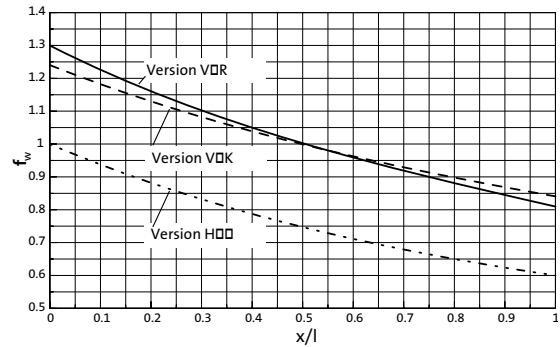
Contact Lenze      if  $F_R$  and  $F_A \neq 0$



$f_\alpha$  Effective direction factor at output shaft



$f_w$  Additional load factor at output shaft





# Technical data - Helical-bevel gearboxes

## Permissible radial and axial forces - output



### Helical-bevel gearboxes GKS□□

VAK	Solid shaft with flange													
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$													
$n_2$ [min <sup>-1</sup> ]	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3800	4200	4640	3630	6400	4660	7000	5700	9900	6000	14500	7000	20500	8400
250	4300	4400	5420	4440	7500	5880	8250	7000	10500	6600	16000	7500	23700	10000
160	4600	4400	6280	5420	8800	7320	9630	8500	12000	7600	17600	8500	27200	11500
100	4600	4400	7000	6600	9800	9230	11000	10400	14000	10000	21000	10500	31300	13000
63	4600	4400	7000	6600	10000	10000	13000	11500	15000	12000	24500	13000	35000	15000
40	4600	4400	7000	6600	10000	10000	14000	11500	15000	15000	28000	17500	41000	19000
25	4600	4400	7000	6600	10000	10000	14000	11500	15000	17000	30000	27000	43000	28000
≤ 16	4600	4400	7000	6600	10000	10000	14000	11500	15000	17000	30000	27000	43000	35000
$F_{rmax}$	4600	–	7000	–	10000	–	14000	–	15000	–	30000	–	43000	–

VOR	Solid shaft without flange													
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$													
$n_2$ [min <sup>-1</sup> ]	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09*		GKS 11*		GKS 14	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3000	4200	2800	3500	3700	4440	4000	4900	6200	6500	7100	7000	57900	35000
250	3400	5000	3200	4240	4300	5580	4900	6230	6400	7400	7500	8000	61000	35000
160	3600	5500	3600	5090	4900	6930	5800	7820	7100	8000	8200	9200	64100	35000
100	3600	5500	4100	6160	5300	8710	6600	9940	8400	10500	10000	12000	65000	35000
63	3600	5500	4900	6600	6200	10000	8000	12600	9500	13000	11200	14500	65000	35000
40	3600	5500	5800	6600	7900	10000	9600	14000	11800	17000	13000	18500	65000	35000
25	3600	5500	5800	6600	9000	10000	12000	14000	16000	21000	19000	27000	65000	35000
≤ 16	3600	5500	5800	6600	10000	9000	14000	12000	18000	21000	23000	27000	65000	35000
$F_{rmax}$	3600	–	5800	–	9000	–	12000	–	18000	–	23000	–	65000	–

HOO	Hollow shaft													
	Application of force $F_r$ : At hollow shaft end face ( $x = 0$ ) $F_{aTab}$ only valid for $F_r = 0$													
$n_2$ [min <sup>-1</sup> ]	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3900	4200	3500	3500	4600	4440	5400	4900	7500	6500	9000	7000	15000	6000
250	4500	5000	4200	4240	5600	5580	6300	6230	8200	7400	10000	8000	15500	8000
160	5100	5500	4630	5090	6400	6930	7400	7820	9400	8000	11000	9200	16500	10000
100	5900	5500	5000	6160	7000	8710	8700	9940	10600	10500	14000	12000	17500	13000
63	6800	5500	6200	6600	8200	10000	10500	12600	12200	13000	16000	14500	18500	16000
40	7000	5500	7300	6600	10400	10000	12500	14000	15500	17000	18500	18500	21000	20000
25	7000	5500	7300	6600	12000	10000	15100	14000	21000	21000	25000	27000	28000	28000
≤ 16	7000	5500	7300	6600	10000	12000	14000	16000	24000	21000	30000	27000	40000	35000
$F_{rmax}$	7000	–	7300	–	12000	–	16000	–	24000	–	30000	–	45000	–

\* A reinforced output shaft bearing is available on request for VOR versions.

Neither radial nor axial forces are permitted on hollow shafts with shrink disc (S□□).

## Helical-bevel gearboxes GKS□□

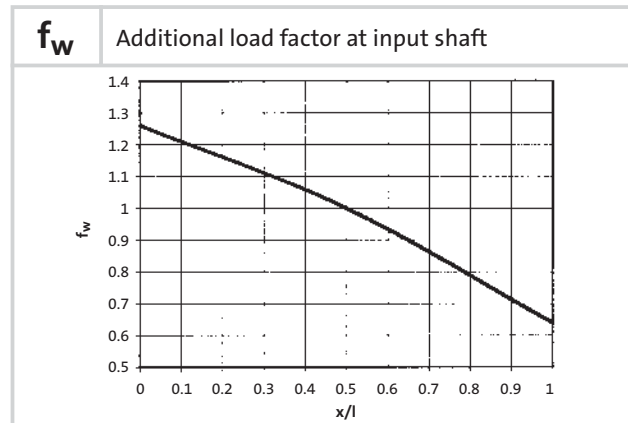
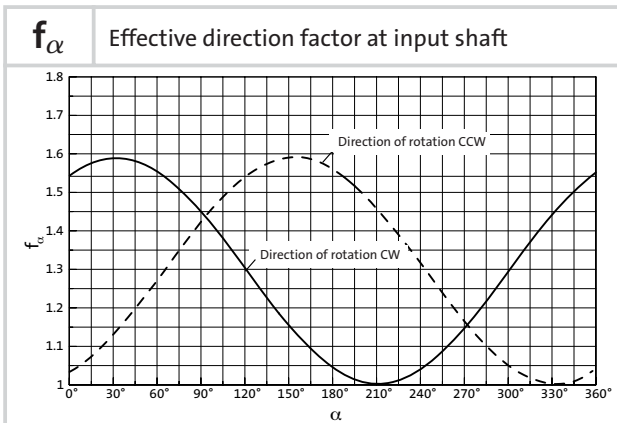
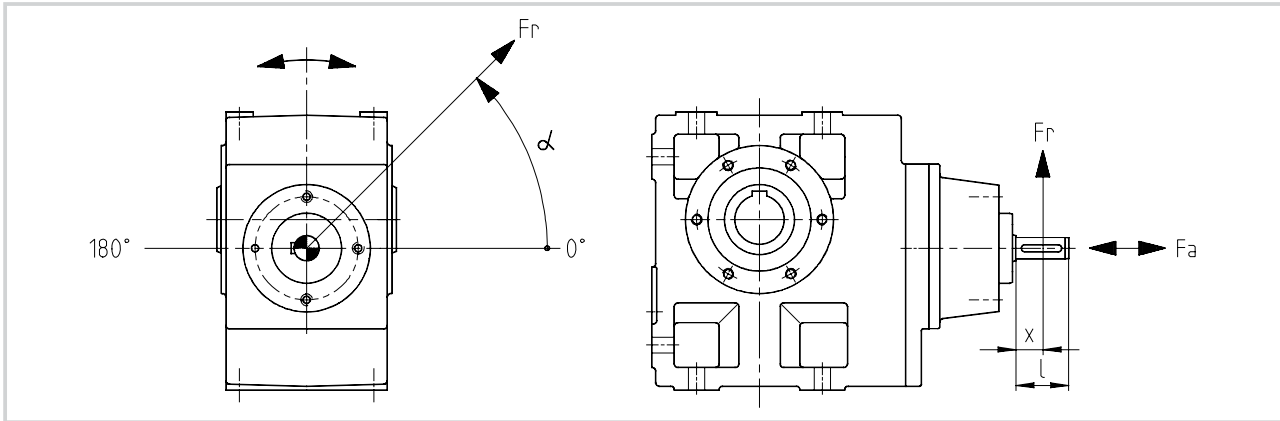
### Permissible radial force

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

### Permissible axial force

$$F_{Aperm} = F_{ATab} \quad \text{if } F_R = 0$$

Contact Lenze      if  $F_R$  and  $F_A \neq 0$

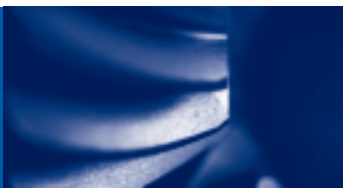


**W** Application of force  $F_{RTab}$ : Centre of shaft journal ( $x = l/2$ )  
 $F_{ATab}$  only valid for  $F_R = 0$

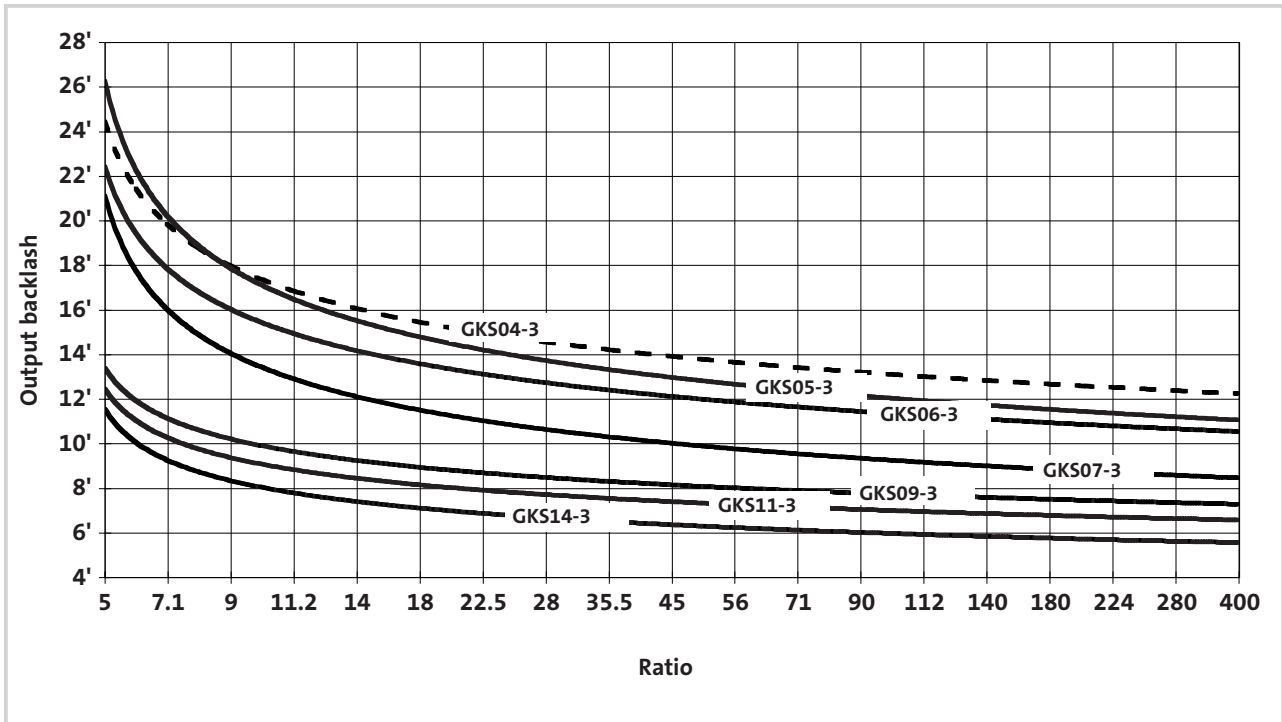
$n_1$ [min <sup>-1</sup> ]	Drive size															
	1A		1C		1D		1E		1F		1G		1H		1K	
	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]
700	830	1200	1150	1400	1470	1500	2140	1600	3200	2800	4000	4500	5000	6000	8500	10000
1400	570	770	780	900	1000	740	1400	800	2200	1700	3200	2000	4000	2500	7000	5300
2800	440	530	590	620	770	470	940	460	1700	1100	2300	1600	3000	2000	5000	3500
$F_{Rmax}$	1850	—	1650	—	3000	—	4900	—	5600	—	8000	—	10000	—	12000	—

# Technical data - Helical-bevel gearboxes

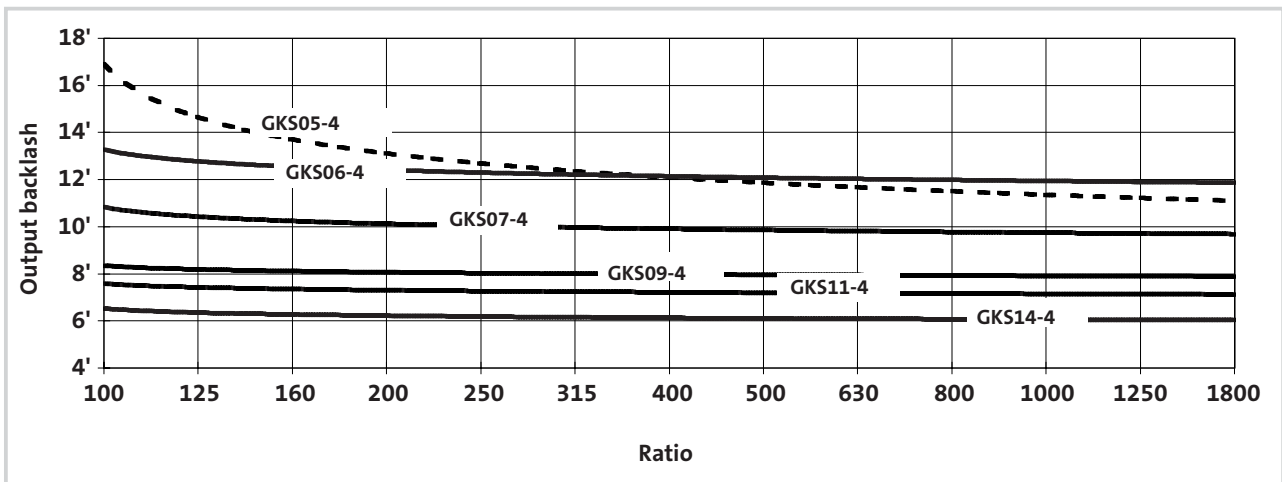
## Output backlash in angular minutes



Helical-bevel gearboxes GKS□□-3

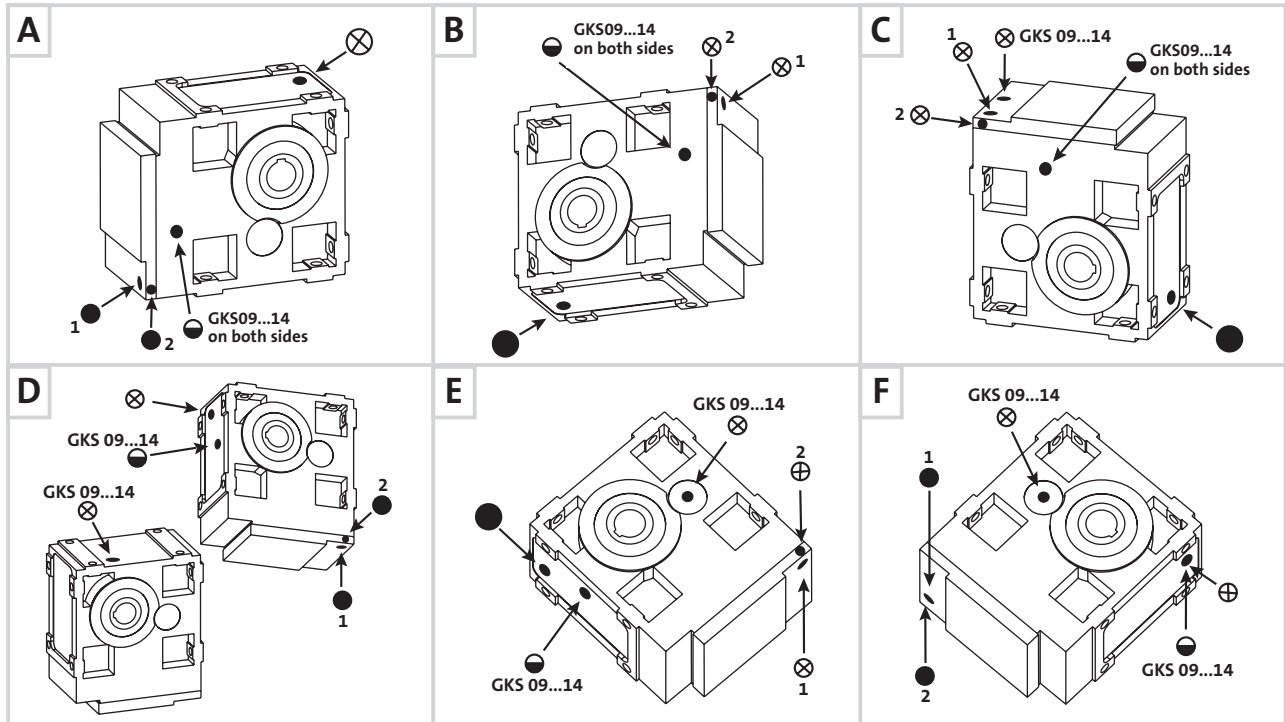


Helical-bevel gearboxes GKS□□-4

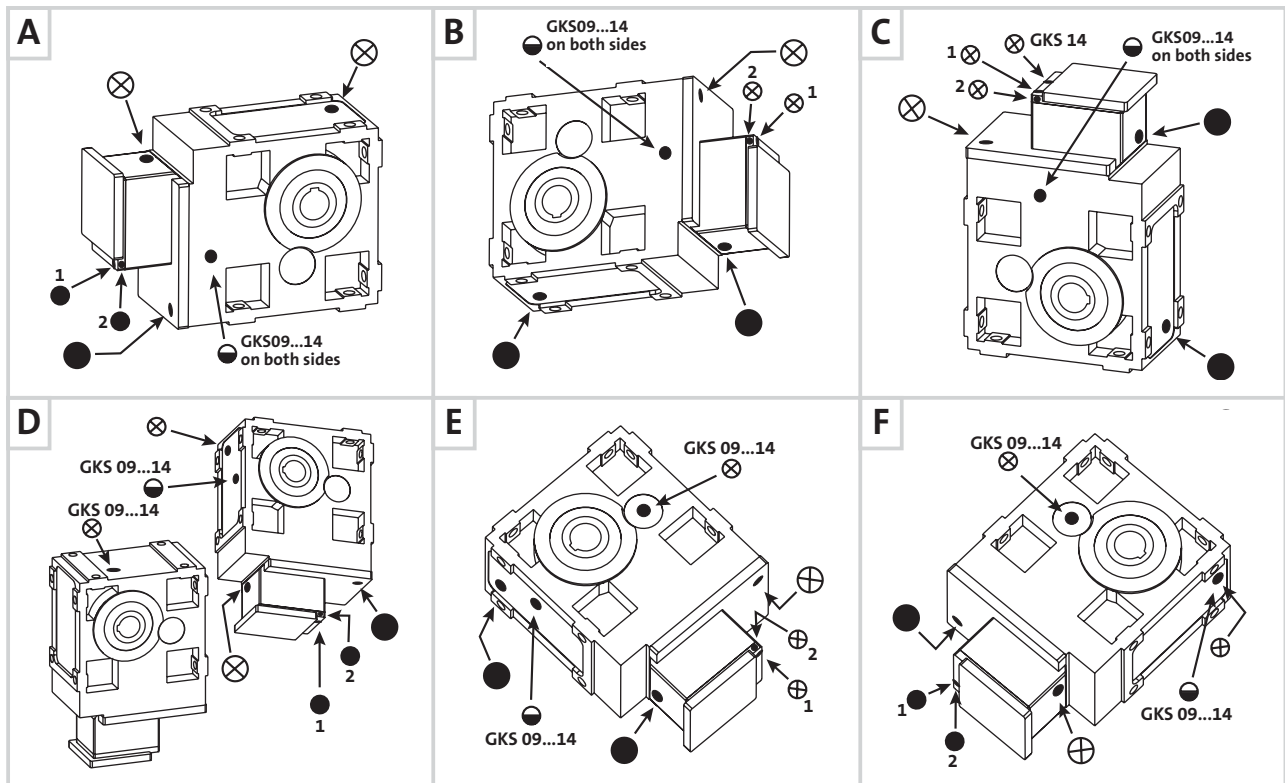


### Position of ventilation, oil filler plug and oil drain plug

Helical-bevel gearbox GKS 05 ... 14-3



Helical-bevel gearbox GKS 05 ... 14-4



(A ... F) Mounting position

⊗ Ventilation/oil filler plug

● Oil drain plug

◌ Oil control plug

Pos. 1 or 2 depending on version (see table on page 6-7)



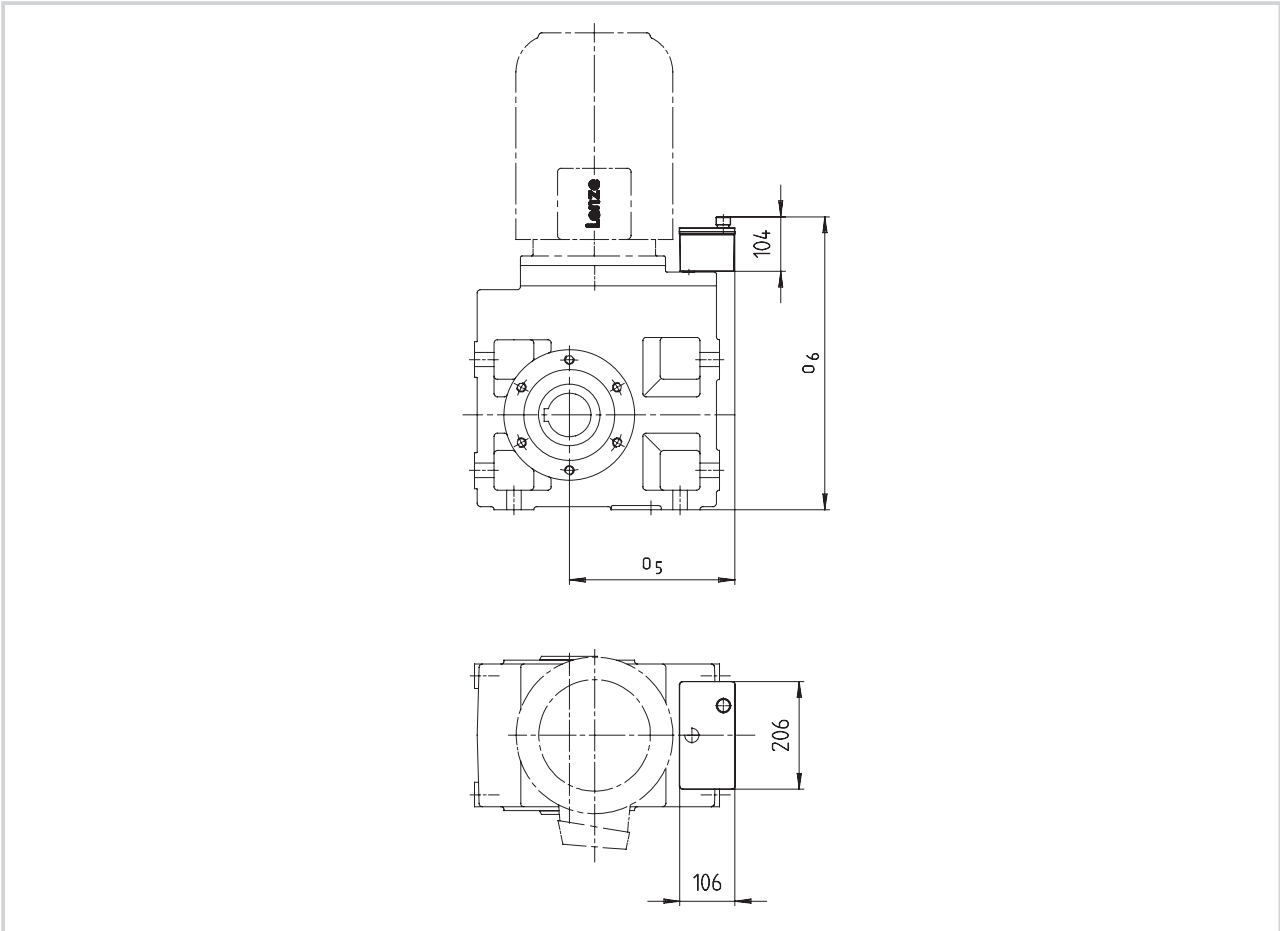
On the **versions listed** in the table, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.  
 On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

### Helical-bevel gearboxes

GKS	05	-3	M	□□□	090 100
			N	□□□	1D / 2D 1E / 2E / 3E
	06	-3	M	□□□	112
			W	□□□	1F
	07	-3	M	□□□	160
			N	□□□	1H/3H
		-4	M	□□□	090 100
			N	□□□	1D / 2D 1E / 2E / 3E
	09	-4	M	□□□	112
			W	□□□	1F

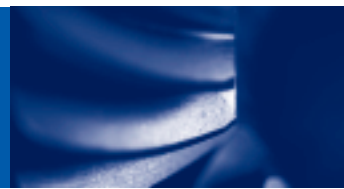
## Reservoir for mounting position C

### Helical-bevel gearboxes GKS



Helical-bevel gearbox		Motor frame size/ Drive size			
		090 / 100	112	132 / 180	160 / 200 / 225
GKS□□ - 3 M					
GKS□□ - 3 N		□□ / □□E / □□F		□□G / □□H	□□K
GKS□□ - 3 W		1E	1F / 1G		1H / 1K
09	o <sub>5</sub>	245	267	288	303
	o <sub>6</sub>	529	529	529	529
11	o <sub>5</sub>	260	282	306	320
	o <sub>6</sub>	622	626	626	626
14	o <sub>5</sub>		315	345	345
	o <sub>6</sub>		735	735	735

Terminal box position 4 not permitted.



### Helical-bevel gearboxes GKS □□-3

Gearbox size	Geared motors														
	GKS□□-3M HQR with motor frame size														
	063	071	080	090	100	112		132	160		180		200	225	
						C22/-31	C32/-41		-22	-32	-22	-32	N32	N12	N22
04	16	18	23	30											
05	26	28	33	40	47										
06	40	42	47	54	61	74	80								
07			73	80	87	99	105	132	176	196					
09				128	135	147	153	181	225	245	324	334	420		
11					235	246	252	279	323	343	422	432	518	570	640
14						417	423	447	491	511	590	600	685	737	807

Gearbox size	Gearbox with mounting flange for IEC motors												Gearbox with free input shaft										
	GKS□□-3N HQR with drive size												GKS□□-3W HQR with drive size										
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	2H	3H	1K	2K	1A	1B	1C	1D	1E	1F	1G	1H	1K	
04	15	15	18	21										13	14	16							
05		25	28	31	33										24	25	27						
06		39	42	45	48	49										39	42	45	53				
07			68	71	73	75	98	95	106		102						67	71	79	84			
09				119	122	123	147	144	155	159	151	175						118	127	133	148		
11					221	222	245	242	253	257	249	273	280						226	231	246	261	
14							413	410	421	425	417	440	447							399	414	428	

Weights in [kg] with oil capacity for mounting position A. All data is approximate

Observe extra weights on page 6-10!

### Helical-bevel gearboxes GKS □□-4

Gearbox size	Geared motors											
	GKS□□-4M HQR with motor frame size											
	063	071	080	090	100	112		132	160		180	
						C22/-31	C32/-41		-22	-32	-22	-32
05	27	29	34	40								
06	44	46	51	57								
07	74	76	81	88	95							
09	127	129	134	141	148	161	167					
11			242	249	256	268	274	301	345	365		
14				434	441	453	459	487	531	551	586	596

Gearbox size	Gearbox with mounting flange for IEC motors											Gearbox with free input shaft							
	GKS□□-4N HQR with drive size											GKS□□-4W HQR with drive size							
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	2H	3H	1A	1B	1C	1D	1E	1F	1G	1H
05	25	26	29									24	24	26					
06	42	43	46	49								41	41	43					
07		73	76	79	81								72	73	75				
09		126	129	132	135	136								126	129	132	141		
11			237	240	242	244	267	264							236	240	248	253	
14				425	428	429	453	450	461	465	457					424	433	439	454

### Extra weights

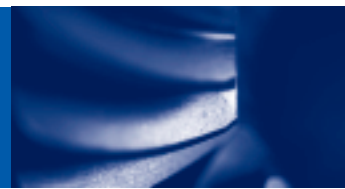
Gearbox size	Solid shaft V□□	2nd output shaft end V□□	Hollow shaft with shrink disk S□□	Flange □□K	Torque plate Housing foot	Torque plate Pitch circle
04	0.6	0.2	0.6	2.5	1.3	0.9
05	1	0.3	0.8	4	2.2	1.3
06	2.5	0.8	1	7	3.7	2.1
07	5	1.5	1.5	11	6.6	3.7
09	8	2.7	3	16	13	
11	16	6.3	5	24	23	
14	33	12	11	33	44	

Weights in [kg] with oil capacity for mounting position A. All data is approximate



# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.12 kW</b> n <sub>1</sub> =1425					<b>GKS □□ - 3M</b>	6-94
	145	8	5.4	9.836	GKS04 - 3M□□□ 063C12	
	63	17	5.4	22.522	GKS04 - 3M□□□ 063C12	
	57	19	5.4	25.088	GKS04 - 3M□□□ 063C12	
	50	22	5.0	28.727	GKS04 - 3M□□□ 063C12	
	45	24	5.0	32.000	GKS04 - 3M□□□ 063C12	
	32	34	5.5	44.240	GKS04 - 3M□□□ 063C12	
	28	39	4.7	50.943	GKS04 - 3M□□□ 063C12	
	25	44	4.3	56.976	GKS04 - 3M□□□ 063C12	
	22	50	3.7	64.978	GKS04 - 3M□□□ 063C12	
	20	55	3.4	72.210	GKS04 - 3M□□□ 063C12	
	16	69	2.7	90.491	GKS04 - 3M□□□ 063C12	
	14	76	2.4	100.067	GKS04 - 3M□□□ 063C12	
	13	85	2.0	111.467	GKS04 - 3M□□□ 063C12	
	11	98	1.9	128.874	GKS04 - 3M□□□ 063C12	
	9.9	110	1.6	143.556	GKS04 - 3M□□□ 063C12	
	8.7	125	1.5	163.332	GKS04 - 3M□□□ 063C12	
	7.8	139	1.3	181.939	GKS04 - 3M□□□ 063C12	
	7.0	156	1.2	204.682	GKS04 - 3M□□□ 063C12	
	6.3	174	1.0	228.000	GKS04 - 3M□□□ 063C12	
	5.3	206	0.9	269.660	GKS04 - 3M□□□ 063C12	
					<b>GKS □□ - 4M</b>	6-110
	5.1	210	2.6	279.286	GKS06 - 4M□□□ 063C12	
	4.5	238	3.0	316.800	GKS06 - 4M□□□ 063C12	
	3.9	274	1.2	364.467	GKS05 - 4M□□□ 063C12	
	3.9	271	2.0	361.429	GKS06 - 4M□□□ 063C12	
	3.5	308	1.0	410.667	GKS05 - 4M□□□ 063C12	
	3.5	306	2.3	408.000	GKS06 - 4M□□□ 063C12	
3.0	352	0.9	469.389	GKS05 - 4M□□□ 063C12		
3.1	344	1.6	458.067	GKS06 - 4M□□□ 063C12		
2.8	388	1.8	517.091	GKS06 - 4M□□□ 063C12		
2.6	417	1.3	555.927	GKS06 - 4M□□□ 063C12		
2.2	481	1.5	640.800	GKS06 - 4M□□□ 063C12		
2.1	523	1.0	696.668	GKS06 - 4M□□□ 063C12		
1.8	610	1.2	812.137	GKS06 - 4M□□□ 063C12		
1.6	687	0.9	914.907	GKS06 - 4M□□□ 063C12		
1.4	764	0.9	1017.741	GKS06 - 4M□□□ 063C12		
<b>0.18 kW</b> n <sub>1</sub> =2760					<b>GKS □□ - 3M</b>	6-94
	281	6	5.7	9.836	GKS04 - 3M□□□ 063-11	
	123	13	5.7	22.522	GKS04 - 3M□□□ 063-11	
	110	15	5.7	25.088	GKS04 - 3M□□□ 063-11	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

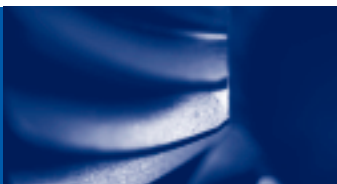
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.18 kW</b> n1=2760	96	17	5.3	28.727	GKS04 - 3M□□□ 063-11	6-94	
	86	19	5.3	32.000	GKS04 - 3M□□□ 063-11		
	54	30	5.6	50.943	GKS04 - 3M□□□ 063-11		
	48	34	5.1	56.976	GKS04 - 3M□□□ 063-11		
	43	38	4.4	64.978	GKS04 - 3M□□□ 063-11		
	38	43	4.1	72.210	GKS04 - 3M□□□ 063-11		
	31	54	3.3	90.491	GKS04 - 3M□□□ 063-11		
	28	59	2.9	100.067	GKS04 - 3M□□□ 063-11		
	25	66	2.6	111.467	GKS04 - 3M□□□ 063-11		
	21	76	2.5	128.874	GKS04 - 3M□□□ 063-11		
	19	85	2.0	143.556	GKS04 - 3M□□□ 063-11		
	17	97	2.0	163.332	GKS04 - 3M□□□ 063-11		
	15	108	1.6	181.939	GKS04 - 3M□□□ 063-11		
	14	121	1.6	204.682	GKS04 - 3M□□□ 063-11		
	12	135	1.3	228.000	GKS04 - 3M□□□ 063-11		
	10	160	1.2	269.660	GKS04 - 3M□□□ 063-11		
	9.2	178	1.0	300.381	GKS04 - 3M□□□ 063-11		
	n1=1365	139	12	3.4	9.836		GKS04 - 3M□□□ 063C32
		61	27	3.4	22.522		GKS04 - 3M□□□ 063C32
		54	30	3.4	25.088		GKS04 - 3M□□□ 063C32
		48	34	3.2	28.727		GKS04 - 3M□□□ 063C32
		43	38	3.2	32.000		GKS04 - 3M□□□ 063C32
		31	53	3.5	44.240		GKS04 - 3M□□□ 063C32
		27	61	3.0	50.943		GKS04 - 3M□□□ 063C32
		24	68	2.7	56.976		GKS04 - 3M□□□ 063C32
		21	78	2.4	64.978		GKS04 - 3M□□□ 063C32
19		86	2.2	72.210	GKS04 - 3M□□□ 063C32		
15		108	1.8	90.491	GKS04 - 3M□□□ 063C32		
14		120	1.5	100.067	GKS04 - 3M□□□ 063C32		
12		133	1.3	111.467	GKS04 - 3M□□□ 063C32		
11		154	1.2	128.874	GKS04 - 3M□□□ 063C32		
9.5		172	1.0	143.556	GKS04 - 3M□□□ 063C32		
8.4		195	1.0	163.332	GKS04 - 3M□□□ 063C32		
n1=870	8.1	201	1.6	107.196	GKS05 - 3M□□□ 071-13		
	8.3	197	3.2	104.967	GKS06 - 3M□□□ 071-13		
	7.8	209	0.8	111.467	GKS04 - 3M□□□ 071-13		
	7.2	227	1.4	120.784	GKS05 - 3M□□□ 071-13		
	6.7	244	1.4	130.097	GKS05 - 3M□□□ 071-13		
	6.8	239	2.7	127.392	GKS06 - 3M□□□ 071-13		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.18 kW</b> n1=870	5.9	275	1.1	146.588	<b>GKS □□ - 3M</b> GKS05 - 3M□□□ 071-13 GKS06 - 3M□□□ 071-13 GKS05 - 3M□□□ 071-13 GKS06 - 3M□□□ 071-13 GKS05 - 3M□□□ 071-13 GKS06 - 3M□□□ 071-13 GKS06 - 3M□□□ 071-13 GKS06 - 3M□□□ 071-13 GKS06 - 3M□□□ 071-13 GKS06 - 3M□□□ 071-13	6-94
	6.1	268	2.6	142.941		
	5.2	312	1.1	166.276		
	5.4	302	2.1	161.029		
	4.6	352	0.9	187.353		
	4.6	357	2.0	190.080		
	4.1	402	1.6	214.133		
	3.8	433	1.6	230.688		
	3.4	488	1.3	259.880		
	3.0	547	1.3	291.600		
2.7	617	1.0	328.500			
n1=1365	7.4	218	1.5	185.547	<b>GKS □□ - 4M</b> GKS05 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS05 - 4M□□□ 063C32 GKS05 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS05 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32 GKS06 - 4M□□□ 063C32	6-110
	7.8	205	2.6	174.336		
	6.5	246	1.3	209.067		
	6.0	266	0.9	225.867		
	6.1	264	2.0	224.524		
	5.8	278	1.2	236.667		
	4.9	328	1.6	279.286		
	4.3	373	1.9	316.800		
	3.8	425	1.3	361.429		
	3.4	480	1.5	408.000		
	3.0	539	1.0	458.067		
	2.6	608	1.2	517.091		
	2.5	654	0.8	555.927		
	2.1	753	0.9	640.800		
n1=870	2.1	753	0.9	408.000	GKS06 - 4M□□□ 071-13 GKS07 - 4M□□□ 071-13 GKS07 - 4M□□□ 071-13 GKS07 - 4M□□□ 071-13 GKS07 - 4M□□□ 071-13 GKS07 - 4M□□□ 071-13 GKS07 - 4M□□□ 071-13 GKS07 - 4M□□□ 071-13 GKS09 - 4M□□□ 071-13 GKS09 - 4M□□□ 071-13 GKS09 - 4M□□□ 071-13 GKS09 - 4M□□□ 071-13	
	1.9	857	1.2	464.367		
	1.7	953	1.4	516.810		
	1.5	1040	1.0	563.572		
	1.4	1174	1.1	636.581		
	1.3	1262	0.8	683.972		
	1.1	1520	0.9	823.810		
	1.1	1508	2.0	817.551		
	0.9	1700	1.8	921.367		
	0.9	1830	1.7	992.209		
	0.8	2063	1.5	1118.204		
	0.7	2314	1.3	1254.197		
0.6	2608	1.2	1413.461			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

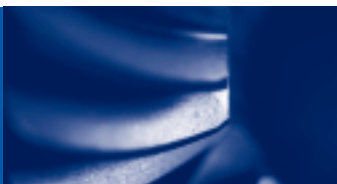
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.25 kW</b> n <sub>1</sub> =2760					<b>GKS □□ - 3M</b>	6-94
	281	8	4.1	9.836	GKS04 - 3M□□□ 063-31	
	123	19	4.1	22.522	GKS04 - 3M□□□ 063-31	
	110	21	4.1	25.088	GKS04 - 3M□□□ 063-31	
	96	24	3.8	28.727	GKS04 - 3M□□□ 063-31	
	86	26	3.8	32.000	GKS04 - 3M□□□ 063-31	
	62	36	4.7	44.240	GKS04 - 3M□□□ 063-31	
	54	42	4.0	50.943	GKS04 - 3M□□□ 063-31	
	48	47	3.7	56.976	GKS04 - 3M□□□ 063-31	
	43	53	3.2	64.978	GKS04 - 3M□□□ 063-31	
	38	59	3.0	72.210	GKS04 - 3M□□□ 063-31	
	31	74	2.4	90.491	GKS04 - 3M□□□ 063-31	
	28	82	2.1	100.067	GKS04 - 3M□□□ 063-31	
	25	92	1.9	111.467	GKS04 - 3M□□□ 063-31	
	21	106	1.8	128.874	GKS04 - 3M□□□ 063-31	
	19	118	1.5	143.556	GKS04 - 3M□□□ 063-31	
	17	134	1.4	163.332	GKS04 - 3M□□□ 063-31	
	15	150	1.2	181.939	GKS04 - 3M□□□ 063-31	
	14	168	1.1	204.682	GKS04 - 3M□□□ 063-31	
	12	187	0.9	228.000	GKS04 - 3M□□□ 063-31	
10	222	0.9	269.660	GKS04 - 3M□□□ 063-31		
n <sub>1</sub> =1370	267	9	4.5	5.123	GKS04 - 3M□□□ 063C42	
	195	12	4.5	7.025	GKS04 - 3M□□□ 063C42	
	168	14	4.5	8.167	GKS04 - 3M□□□ 063C42	
	152	15	5.2	8.991	GKS04 - 3M□□□ 063C42	
	139	16	5.2	9.836	GKS04 - 3M□□□ 063C42	
	117	19	4.5	11.730	GKS04 - 3M□□□ 063C42	
	105	22	4.5	13.067	GKS04 - 3M□□□ 063C42	
	96	24	5.2	14.333	GKS04 - 3M□□□ 063C42	
	85	27	4.5	16.087	GKS04 - 3M□□□ 063C42	
	77	30	4.5	17.920	GKS04 - 3M□□□ 063C42	
	67	34	5.2	20.588	GKS04 - 3M□□□ 063C42	
	61	37	4.9	22.522	GKS04 - 3M□□□ 063C42	
	55	42	4.0	25.088	GKS04 - 3M□□□ 063C42	
	48	48	3.8	28.727	GKS04 - 3M□□□ 063C42	
	43	53	3.2	32.000	GKS04 - 3M□□□ 063C42	
	39	58	3.1	35.191	GKS04 - 3M□□□ 063C42	
	35	65	2.6	39.200	GKS04 - 3M□□□ 063C42	
31	73	2.5	44.240	GKS04 - 3M□□□ 063C42		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.25 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=1370	27	84	2.2	50.943	GKS04 - 3M□□□ 063C42	
	24	94	2.0	56.976	GKS04 - 3M□□□ 063C42	
	21	108	1.7	64.978	GKS04 - 3M□□□ 063C42	
	21	110	3.0	66.592	GKS05 - 3M□□□ 063C42	
	19	120	1.6	72.210	GKS04 - 3M□□□ 063C42	
	18	124	2.5	75.033	GKS05 - 3M□□□ 063C42	
	17	132	1.4	79.598	GKS04 - 3M□□□ 063C42	
	17	137	2.4	82.833	GKS05 - 3M□□□ 063C42	
	15	150	1.2	90.491	GKS04 - 3M□□□ 063C42	
	15	155	2.0	93.333	GKS05 - 3M□□□ 063C42	
	14	166	1.1	100.067	GKS04 - 3M□□□ 063C42	
	13	177	1.9	107.196	GKS05 - 3M□□□ 063C42	
	12	185	0.9	111.467	GKS04 - 3M□□□ 063C42	
	11	200	1.6	120.784	GKS05 - 3M□□□ 063C42	
	12	187	3.2	113.082	GKS06 - 3M□□□ 063C42	
	11	213	0.9	128.874	GKS04 - 3M□□□ 063C42	
	11	215	1.5	130.097	GKS05 - 3M□□□ 063C42	
	11	211	3.0	127.392	GKS06 - 3M□□□ 063C42	
	9.4	243	1.3	146.588	GKS05 - 3M□□□ 063C42	
	9.6	237	2.6	142.941	GKS06 - 3M□□□ 063C42	
	8.2	275	1.2	166.276	GKS05 - 3M□□□ 063C42	
	8.5	267	2.4	161.029	GKS06 - 3M□□□ 063C42	
	7.3	310	1.0	187.353	GKS05 - 3M□□□ 063C42	
	7.2	315	2.2	190.080	GKS06 - 3M□□□ 063C42	
	6.5	350	0.9	211.200	GKS05 - 3M□□□ 063C42	
	6.4	354	1.8	214.133	GKS06 - 3M□□□ 063C42	
	5.9	382	1.8	230.688	GKS06 - 3M□□□ 063C42	
	5.3	430	1.5	259.880	GKS06 - 3M□□□ 063C42	
	4.7	483	1.5	291.600	GKS06 - 3M□□□ 063C42	
	4.2	544	1.2	328.500	GKS06 - 3M□□□ 063C42	
n1=920	4.0	569	1.2	230.688	GKS06 - 3M□□□ 071-33	
	3.5	641	1.0	259.880	GKS06 - 3M□□□ 071-33	
	3.2	719	1.0	291.600	GKS06 - 3M□□□ 071-33	
					<b>GKS □□ - 4M</b>	<b>6-110</b>
n1=1370	3.8	588	0.9	361.429	GKS06 - 4M□□□ 063C42	
	3.8	584	1.8	358.829	GKS07 - 4M□□□ 063C42	
	3.4	664	1.1	408.000	GKS06 - 4M□□□ 063C42	
	3.4	650	2.0	399.353	GKS07 - 4M□□□ 063C42	
	3.0	756	1.4	464.367	GKS07 - 4M□□□ 063C42	
	2.7	841	0.8	517.091	GKS06 - 4M□□□ 063C42	
	2.7	841	1.6	516.810	GKS07 - 4M□□□ 063C42	
	2.4	917	1.1	563.572	GKS07 - 4M□□□ 063C42	
	2.2	1036	1.3	636.581	GKS07 - 4M□□□ 063C42	
	2.0	1113	0.9	683.972	GKS07 - 4M□□□ 063C42	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.25 kW</b>					<b>GKS □□ - 4M</b>	<b>6-110</b>
n1=1370	1.7	1340	1.0	823.810	GKS07 - 4M□□□ 063C42	
	1.7	1330	2.3	817.551	GKS09 - 4M□□□ 063C42	
	1.5	1510	0.8	928.237	GKS07 - 4M□□□ 063C42	
	1.5	1499	2.1	921.367	GKS09 - 4M□□□ 063C42	
	1.4	1627	0.8	999.806	GKS07 - 4M□□□ 063C42	
	1.4	1614	1.9	992.209	GKS09 - 4M□□□ 063C42	
	1.2	1819	1.7	1118.204	GKS09 - 4M□□□ 063C42	
	1.1	2041	1.5	1254.197	GKS09 - 4M□□□ 063C42	
n1=920	1.0	2300	1.3	1413.461	GKS09 - 4M□□□ 063C42	
	0.9	2404	1.3	992.209	GKS09 - 4M□□□ 071-33	
	0.8	2709	1.1	1118.204	GKS09 - 4M□□□ 071-33	
	0.7	3039	1.0	1254.197	GKS09 - 4M□□□ 071-33	
<b>0.37 kW</b>	n1=2840				<b>GKS □□ - 3M</b>	<b>6-94</b>
		126	27	5.5	22.522	GKS04 - 3M□□□ 071-11
		113	30	4.6	25.088	GKS04 - 3M□□□ 071-11
		99	34	4.4	28.727	GKS04 - 3M□□□ 071-11
		89	38	3.6	32.000	GKS04 - 3M□□□ 071-11
		81	42	3.6	35.191	GKS04 - 3M□□□ 071-11
		72	46	2.9	39.200	GKS04 - 3M□□□ 071-11
		64	52	3.3	44.240	GKS04 - 3M□□□ 071-11
		56	60	2.8	50.943	GKS04 - 3M□□□ 071-11
		50	67	2.6	56.976	GKS04 - 3M□□□ 071-11
		44	77	2.2	64.978	GKS04 - 3M□□□ 071-11
		39	85	2.0	72.210	GKS04 - 3M□□□ 071-11
		38	89	3.2	75.033	GKS05 - 3M□□□ 071-11
		36	94	1.8	79.598	GKS04 - 3M□□□ 071-11
		34	98	3.1	82.833	GKS05 - 3M□□□ 071-11
		31	107	1.6	90.491	GKS04 - 3M□□□ 071-11
		30	110	2.6	93.333	GKS05 - 3M□□□ 071-11
		28	118	1.4	100.067	GKS04 - 3M□□□ 071-11
		27	127	2.4	107.196	GKS05 - 3M□□□ 071-11
		26	132	1.3	111.467	GKS04 - 3M□□□ 071-11
24	143	2.2	120.784	GKS05 - 3M□□□ 071-11		
22	152	1.2	128.874	GKS04 - 3M□□□ 071-11		
22	154	2.2	130.097	GKS05 - 3M□□□ 071-11		
20	170	1.0	143.556	GKS04 - 3M□□□ 071-11		
19	173	1.8	146.588	GKS05 - 3M□□□ 071-11		
17	193	1.0	163.332	GKS04 - 3M□□□ 071-11		
17	197	1.7	166.276	GKS05 - 3M□□□ 071-11		
16	215	0.8	181.939	GKS04 - 3M□□□ 071-11		
15	221	1.4	187.353	GKS05 - 3M□□□ 071-11		
15	225	3.1	190.080	GKS06 - 3M□□□ 071-11		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.37 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>	
n1=2840	13	250	1.3	211.200	GKS05 - 3M□□□ 071-11		
	13	253	2.5	214.133	GKS06 - 3M□□□ 071-11		
	13	269	1.0	227.484	GKS05 - 3M□□□ 071-11		
	12	273	2.6	230.688	GKS06 - 3M□□□ 071-11		
	11	303	1.0	256.320	GKS05 - 3M□□□ 071-11		
	11	307	2.1	259.880	GKS06 - 3M□□□ 071-11		
	9.8	344	0.8	290.745	GKS05 - 3M□□□ 071-11		
	9.7	345	2.0	291.600	GKS06 - 3M□□□ 071-11		
	8.7	387	0.8	327.600	GKS05 - 3M□□□ 071-11		
	8.7	388	1.6	328.500	GKS06 - 3M□□□ 071-11		
	n1=1410	275	12	4.0	5.123		GKS04 - 3M□□□ 071C32
		201	17	4.0	7.025		GKS04 - 3M□□□ 071C32
		173	19	4.0	8.167		GKS04 - 3M□□□ 071C32
		157	21	4.5	8.991		GKS04 - 3M□□□ 071C32
143		23	4.5	9.836	GKS04 - 3M□□□ 071C32		
120		28	4.0	11.730	GKS04 - 3M□□□ 071C32		
108		31	4.0	13.067	GKS04 - 3M□□□ 071C32		
98		34	4.5	14.333	GKS04 - 3M□□□ 071C32		
88		38	4.0	16.087	GKS04 - 3M□□□ 071C32		
79		43	3.9	17.920	GKS04 - 3M□□□ 071C32		
69		49	3.7	20.588	GKS04 - 3M□□□ 071C32		
63		54	3.4	22.522	GKS04 - 3M□□□ 071C32		
56		60	2.8	25.088	GKS04 - 3M□□□ 071C32		
49		68	2.7	28.727	GKS04 - 3M□□□ 071C32		
44		76	2.2	32.000	GKS04 - 3M□□□ 071C32		
40		84	2.2	35.191	GKS04 - 3M□□□ 071C32		
36		93	1.8	39.200	GKS04 - 3M□□□ 071C32		
32		105	1.8	44.240	GKS04 - 3M□□□ 071C32		
30		112	2.7	47.059	GKS05 - 3M□□□ 071C32		
28		121	1.5	50.943	GKS04 - 3M□□□ 071C32		
25		136	1.4	56.976	GKS04 - 3M□□□ 071C32		
22		155	1.2	64.978	GKS04 - 3M□□□ 071C32		
21		159	2.1	66.592	GKS05 - 3M□□□ 071C32		
20		172	1.1	72.210	GKS04 - 3M□□□ 071C32		
19		179	1.7	75.033	GKS05 - 3M□□□ 071C32		
18		190	1.0	79.598	GKS04 - 3M□□□ 071C32		
17		197	1.7	82.833	GKS05 - 3M□□□ 071C32		
16		215	0.9	90.491	GKS04 - 3M□□□ 071C32		
15	222	1.4	93.333	GKS05 - 3M□□□ 071C32			
15	222	3.2	93.176	GKS06 - 3M□□□ 071C32			
13	255	1.3	107.196	GKS05 - 3M□□□ 071C32			
13	250	2.5	104.967	GKS06 - 3M□□□ 071C32			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=1410	12	288	1.1	120.784	GKS05 - 3M□□□ 071C32	
	13	269	2.6	113.082	GKS06 - 3M□□□ 071C32	
	11	310	1.1	130.097	GKS05 - 3M□□□ 071C32	
	11	303	2.1	127.392	GKS06 - 3M□□□ 071C32	
	9.6	349	0.9	146.588	GKS05 - 3M□□□ 071C32	
	9.9	340	2.1	142.941	GKS06 - 3M□□□ 071C32	
	8.5	396	0.8	166.276	GKS05 - 3M□□□ 071C32	
	8.8	383	1.7	161.029	GKS06 - 3M□□□ 071C32	
	7.4	452	1.6	190.080	GKS06 - 3M□□□ 071C32	
	6.6	510	1.2	214.133	GKS06 - 3M□□□ 071C32	
	6.1	549	1.3	230.688	GKS06 - 3M□□□ 071C32	
	5.4	619	1.0	259.880	GKS06 - 3M□□□ 071C32	
	4.8	694	1.0	291.600	GKS06 - 3M□□□ 071C32	
4.3	782	0.8	328.500	GKS06 - 3M□□□ 071C32		
n1=900	3.9	860	0.8	230.688	GKS06 - 3M□□□ 080-13	
	4.0	835	1.6	224.037	GKS07 - 3M□□□ 080-13	
	3.6	941	1.3	252.436	GKS07 - 3M□□□ 080-13	
	3.2	1056	1.3	283.193	GKS07 - 3M□□□ 080-13	
	2.8	1190	1.0	319.091	GKS07 - 3M□□□ 080-13	
n1=1410					<b>GKS □□ - 4M</b>	<b>6-110</b>
	3.9	840	1.3	358.829	GKS07 - 4M□□□ 071C32	
	3.5	934	1.4	399.353	GKS07 - 4M□□□ 071C32	
	3.0	1087	1.0	464.367	GKS07 - 4M□□□ 071C32	
	2.7	1209	1.1	516.810	GKS07 - 4M□□□ 071C32	
	2.2	1489	0.9	636.581	GKS07 - 4M□□□ 071C32	
	1.7	1913	1.6	817.551	GKS09 - 4M□□□ 071C32	
	1.5	2156	1.4	921.367	GKS09 - 4M□□□ 071C32	
	1.4	2322	1.3	992.209	GKS09 - 4M□□□ 071C32	
	1.3	2616	1.2	1118.204	GKS09 - 4M□□□ 071C32	
	1.1	2935	1.0	1254.197	GKS09 - 4M□□□ 071C32	
	1.0	3307	0.9	1413.461	GKS09 - 4M□□□ 071C32	
n1=900	1.0	3377	0.9	921.367	GKS09 - 4M□□□ 080-13	
	1.0	3372	1.8	919.949	GKS11 - 4M□□□ 080-13	
	0.9	3637	0.8	992.209	GKS09 - 4M□□□ 080-13	
	0.9	3632	1.6	990.879	GKS11 - 4M□□□ 080-13	
	0.8	4093	1.5	1116.484	GKS11 - 4M□□□ 080-13	
	0.7	4591	1.3	1252.516	GKS11 - 4M□□□ 080-13	
	0.6	5173	1.2	1411.286	GKS11 - 4M□□□ 080-13	

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =2840	554	9	4.3	5.123	GKS04 - 3M□□□ 071-31	
	404	12	4.3	7.025	GKS04 - 3M□□□ 071-31	
	348	14	4.3	8.167	GKS04 - 3M□□□ 071-31	
	316	16	5.0	8.991	GKS04 - 3M□□□ 071-31	
	289	17	5.0	9.836	GKS04 - 3M□□□ 071-31	
	242	21	4.3	11.730	GKS04 - 3M□□□ 071-31	
	217	23	4.3	13.067	GKS04 - 3M□□□ 071-31	
	198	25	5.0	14.333	GKS04 - 3M□□□ 071-31	
	177	28	4.3	16.087	GKS04 - 3M□□□ 071-31	
	159	32	4.3	17.920	GKS04 - 3M□□□ 071-31	
	138	36	4.1	20.588	GKS04 - 3M□□□ 071-31	
	126	40	3.7	22.522	GKS04 - 3M□□□ 071-31	
	113	44	3.1	25.088	GKS04 - 3M□□□ 071-31	
	99	51	2.9	28.727	GKS04 - 3M□□□ 071-31	
	89	56	2.4	32.000	GKS04 - 3M□□□ 071-31	
	81	62	2.4	35.191	GKS04 - 3M□□□ 071-31	
	72	69	2.0	39.200	GKS04 - 3M□□□ 071-31	
	64	78	2.2	44.240	GKS04 - 3M□□□ 071-31	
	56	90	1.9	50.943	GKS04 - 3M□□□ 071-31	
	50	100	1.7	56.976	GKS04 - 3M□□□ 071-31	
	44	114	1.5	64.978	GKS04 - 3M□□□ 071-31	
	43	117	2.6	66.592	GKS05 - 3M□□□ 071-31	
	39	127	1.4	72.210	GKS04 - 3M□□□ 071-31	
	38	132	2.2	75.033	GKS05 - 3M□□□ 071-31	
	36	140	1.2	79.598	GKS04 - 3M□□□ 071-31	
	34	146	2.1	82.833	GKS05 - 3M□□□ 071-31	
	31	159	1.1	90.491	GKS04 - 3M□□□ 071-31	
	30	164	1.8	93.333	GKS05 - 3M□□□ 071-31	
	28	176	1.0	100.067	GKS04 - 3M□□□ 071-31	
	27	188	1.6	107.196	GKS05 - 3M□□□ 071-31	
	27	184	3.2	104.967	GKS06 - 3M□□□ 071-31	
	26	196	0.9	111.467	GKS04 - 3M□□□ 071-31	
	24	212	1.5	120.784	GKS05 - 3M□□□ 071-31	
	22	226	0.8	128.874	GKS04 - 3M□□□ 071-31	
	22	229	1.4	130.097	GKS05 - 3M□□□ 071-31	
	22	224	2.8	127.392	GKS06 - 3M□□□ 071-31	
	19	258	1.2	146.588	GKS05 - 3M□□□ 071-31	
	20	251	2.8	142.941	GKS06 - 3M□□□ 071-31	
	17	292	1.1	166.276	GKS05 - 3M□□□ 071-31	
	18	283	2.2	161.029	GKS06 - 3M□□□ 071-31	
	15	329	1.0	187.353	GKS05 - 3M□□□ 071-31	
	15	334	2.1	190.080	GKS06 - 3M□□□ 071-31	
	13	371	0.8	211.200	GKS05 - 3M□□□ 071-31	
	13	376	1.7	214.133	GKS06 - 3M□□□ 071-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

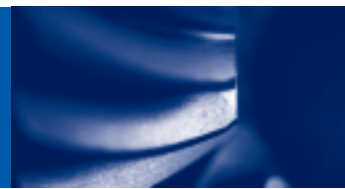
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=2840	12	405	1.7	230.688	GKS06 - 3M□□□ 071-31	
	11	457	1.4	259.880	GKS06 - 3M□□□ 071-31	
	9.7	512	1.4	291.600	GKS06 - 3M□□□ 071-31	
	8.7	577	1.1	328.500	GKS06 - 3M□□□ 071-31	
n1=1405	274	18	4.4	5.123	GKS04 - 3M□□□ 071C42	
	200	25	3.7	7.025	GKS04 - 3M□□□ 071C42	
	172	29	4.4	8.167	GKS04 - 3M□□□ 071C42	
	156	32	3.2	8.991	GKS04 - 3M□□□ 071C42	
	143	35	3.0	9.836	GKS04 - 3M□□□ 071C42	
	120	42	4.3	11.730	GKS04 - 3M□□□ 071C42	
	107	47	3.5	13.176	GKS05 - 3M□□□ 071C42	
	98	51	3.2	14.333	GKS04 - 3M□□□ 071C42	
	87	57	3.2	16.087	GKS04 - 3M□□□ 071C42	
	78	64	2.6	17.920	GKS04 - 3M□□□ 071C42	
	68	73	2.5	20.588	GKS04 - 3M□□□ 071C42	
	62	80	2.3	22.522	GKS04 - 3M□□□ 071C42	
	56	89	1.9	25.088	GKS04 - 3M□□□ 071C42	
	49	102	1.8	28.727	GKS04 - 3M□□□ 071C42	
	47	106	3.1	29.931	GKS05 - 3M□□□ 071C42	
	44	114	1.5	32.000	GKS04 - 3M□□□ 071C42	
	43	116	2.8	32.744	GKS05 - 3M□□□ 071C42	
	40	125	1.5	35.191	GKS04 - 3M□□□ 071C42	
	38	131	2.3	36.894	GKS05 - 3M□□□ 071C42	
	36	139	1.2	39.200	GKS04 - 3M□□□ 071C42	
	34	148	2.2	41.765	GKS05 - 3M□□□ 071C42	
	32	157	1.2	44.240	GKS04 - 3M□□□ 071C42	
	30	167	1.8	47.059	GKS05 - 3M□□□ 071C42	
	28	181	1.0	50.943	GKS04 - 3M□□□ 071C42	
	28	182	1.8	51.162	GKS05 - 3M□□□ 071C42	
	25	202	0.9	56.976	GKS04 - 3M□□□ 071C42	
	24	205	1.5	57.647	GKS05 - 3M□□□ 071C42	
	21	236	1.4	66.592	GKS05 - 3M□□□ 071C42	
22	232	2.7	65.207	GKS06 - 3M□□□ 071C42		
19	266	1.2	75.033	GKS05 - 3M□□□ 071C42		
20	256	2.7	72.000	GKS06 - 3M□□□ 071C42		
17	294	1.1	82.833	GKS05 - 3M□□□ 071C42		
17	288	2.2	81.111	GKS06 - 3M□□□ 071C42		
15	331	1.0	93.333	GKS05 - 3M□□□ 071C42		
15	331	2.1	93.176	GKS06 - 3M□□□ 071C42		
13	381	0.9	107.196	GKS05 - 3M□□□ 071C42		
13	373	1.7	104.967	GKS06 - 3M□□□ 071C42		
12	402	1.7	113.082	GKS06 - 3M□□□ 071C42		
11	452	1.4	127.392	GKS06 - 3M□□□ 071C42		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.55 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>	
n1=1405	9.8	508	1.4	142.941	GKS06 - 3M□□□ 071C42		
	8.7	572	1.1	161.029	GKS06 - 3M□□□ 071C42		
	7.4	675	1.0	190.080	GKS06 - 3M□□□ 071C42		
	6.6	760	0.8	214.133	GKS06 - 3M□□□ 071C42		
	6.1	819	0.9	230.688	GKS06 - 3M□□□ 071C42		
n1=900	4.9	1023	1.3	184.600	GKS07 - 3M□□□ 080-33		
	4.3	1153	1.1	208.000	GKS07 - 3M□□□ 080-33		
	4.0	1242	1.1	224.037	GKS07 - 3M□□□ 080-33		
	3.6	1399	0.9	252.436	GKS07 - 3M□□□ 080-33		
	3.2	1570	0.8	283.193	GKS07 - 3M□□□ 080-33		
					<b>GKS □□ - 4M</b>		<b>6-110</b>
n1=1405	5.7	861	1.5	246.659	GKS07 - 4M□□□ 071C42		
	5.1	954	1.1	273.199	GKS07 - 4M□□□ 071C42		
	4.4	1121	1.2	321.049	GKS07 - 4M□□□ 071C42		
	4.3	1129	2.7	323.365	GKS09 - 4M□□□ 071C42		
	3.9	1252	0.8	358.829	GKS07 - 4M□□□ 071C42		
	3.9	1272	2.4	364.427	GKS09 - 4M□□□ 071C42		
	3.5	1394	0.9	399.353	GKS07 - 4M□□□ 071C42		
	3.5	1404	2.2	402.234	GKS09 - 4M□□□ 071C42		
	3.1	1582	1.9	453.311	GKS09 - 4M□□□ 071C42		
	2.7	1817	1.7	520.538	GKS09 - 4M□□□ 071C42		
	2.4	2048	1.5	586.638	GKS09 - 4M□□□ 071C42		
	2.2	2205	1.4	631.744	GKS09 - 4M□□□ 071C42		
	2.0	2485	1.2	711.965	GKS09 - 4M□□□ 071C42		
	1.7	2854	1.1	817.551	GKS09 - 4M□□□ 071C42		
	1.5	3216	1.0	921.367	GKS09 - 4M□□□ 071C42		
1.4	3463	0.9	992.209	GKS09 - 4M□□□ 071C42			
n1=900	1.4	3442	0.9	631.744	GKS09 - 4M□□□ 080-33		
	1.1	4449	1.3	816.455	GKS11 - 4M□□□ 080-33		
	1.0	5013	1.2	919.949	GKS11 - 4M□□□ 080-33		
	0.9	5399	1.1	990.879	GKS11 - 4M□□□ 080-33		
	0.8	6084	1.0	1116.484	GKS11 - 4M□□□ 080-33		
	0.7	6825	0.9	1252.516	GKS11 - 4M□□□ 080-33		
<b>0.75 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>	
n1=2850	556	12	5.3	5.123	GKS04 - 3M□□□ 080-11		
	406	17	4.5	7.025	GKS04 - 3M□□□ 080-11		
	349	20	5.3	8.167	GKS04 - 3M□□□ 080-11		
	317	22	3.9	8.991	GKS04 - 3M□□□ 080-11		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

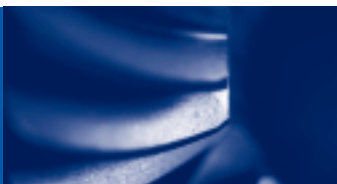
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b> n <sub>1</sub> =2850					<b>GKS □□ - 3M</b>	6-94
	290	24	3.7	9.836	GKS04 - 3M□□□ 080-11	
	243	28	5.2	11.730	GKS04 - 3M□□□ 080-11	
	216	32	4.2	13.176	GKS05 - 3M□□□ 080-11	
	199	34	3.9	14.333	GKS04 - 3M□□□ 080-11	
	177	38	3.8	16.087	GKS04 - 3M□□□ 080-11	
	159	43	3.1	17.920	GKS04 - 3M□□□ 080-11	
	138	49	3.0	20.588	GKS04 - 3M□□□ 080-11	
	127	54	2.7	22.522	GKS04 - 3M□□□ 080-11	
	114	60	2.3	25.088	GKS04 - 3M□□□ 080-11	
	99	69	2.2	28.727	GKS04 - 3M□□□ 080-11	
	89	76	1.8	32.000	GKS04 - 3M□□□ 080-11	
	81	84	1.8	35.191	GKS04 - 3M□□□ 080-11	
	77	88	2.8	36.894	GKS05 - 3M□□□ 080-11	
	73	94	1.5	39.200	GKS04 - 3M□□□ 080-11	
	68	100	2.7	41.765	GKS05 - 3M□□□ 080-11	
	64	106	1.6	44.240	GKS04 - 3M□□□ 080-11	
	61	112	2.5	47.059	GKS05 - 3M□□□ 080-11	
	56	122	1.4	50.943	GKS04 - 3M□□□ 080-11	
	56	122	2.5	51.162	GKS05 - 3M□□□ 080-11	
	50	136	1.3	56.976	GKS04 - 3M□□□ 080-11	
	49	138	2.0	57.647	GKS05 - 3M□□□ 080-11	
	44	155	1.1	64.978	GKS04 - 3M□□□ 080-11	
	43	159	1.9	66.592	GKS05 - 3M□□□ 080-11	
	38	179	1.6	75.033	GKS05 - 3M□□□ 080-11	
	36	190	0.9	79.598	GKS04 - 3M□□□ 080-11	
	34	198	1.5	82.833	GKS05 - 3M□□□ 080-11	
	35	194	3.0	81.111	GKS06 - 3M□□□ 080-11	
	31	223	1.3	93.333	GKS05 - 3M□□□ 080-11	
	31	222	2.9	93.176	GKS06 - 3M□□□ 080-11	
	27	256	1.2	107.196	GKS05 - 3M□□□ 080-11	
	27	251	2.3	104.967	GKS06 - 3M□□□ 080-11	
	24	288	1.1	120.784	GKS05 - 3M□□□ 080-11	
	25	270	2.6	113.082	GKS06 - 3M□□□ 080-11	
	22	311	1.1	130.097	GKS05 - 3M□□□ 080-11	
	22	304	2.1	127.392	GKS06 - 3M□□□ 080-11	
19	350	0.9	146.588	GKS05 - 3M□□□ 080-11		
20	341	2.1	142.941	GKS06 - 3M□□□ 080-11		
18	384	1.7	161.029	GKS06 - 3M□□□ 080-11		
15	454	1.5	190.080	GKS06 - 3M□□□ 080-11		
15	441	3.0	184.600	GKS07 - 3M□□□ 080-11		
13	511	1.2	214.133	GKS06 - 3M□□□ 080-11		
14	497	2.4	208.000	GKS07 - 3M□□□ 080-11		
12	551	1.3	230.688	GKS06 - 3M□□□ 080-11		
13	535	2.5	224.037	GKS07 - 3M□□□ 080-11		
11	620	1.0	259.880	GKS06 - 3M□□□ 080-11		
11	603	2.0	252.436	GKS07 - 3M□□□ 080-11		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=2850	9.8	696	1.0	291.600	GKS06 - 3M□□□ 080-11	
	10	676	2.0	283.193	GKS07 - 3M□□□ 080-11	
	8.7	784	0.8	328.500	GKS06 - 3M□□□ 080-11	
	8.9	762	1.6	319.091	GKS07 - 3M□□□ 080-11	
n1=1410	275	25	3.3	5.123	GKS04 - 3M□□□ 080C32	
	201	34	2.7	7.025	GKS04 - 3M□□□ 080C32	
	173	39	3.3	8.167	GKS04 - 3M□□□ 080C32	
	157	43	2.4	8.991	GKS04 - 3M□□□ 080C32	
	143	48	2.2	9.836	GKS04 - 3M□□□ 080C32	
	120	57	3.2	11.730	GKS04 - 3M□□□ 080C32	
	107	64	2.6	13.176	GKS05 - 3M□□□ 080C32	
	108	63	2.6	13.067	GKS04 - 3M□□□ 080C32	
	98	69	2.4	14.333	GKS04 - 3M□□□ 080C32	
	88	78	2.3	16.087	GKS04 - 3M□□□ 080C32	
	79	87	1.9	17.920	GKS04 - 3M□□□ 080C32	
	69	99	1.8	20.588	GKS04 - 3M□□□ 080C32	
	63	109	1.7	22.522	GKS04 - 3M□□□ 080C32	
	56	121	1.4	25.088	GKS04 - 3M□□□ 080C32	
	49	139	1.3	28.727	GKS04 - 3M□□□ 080C32	
	47	144	2.3	29.931	GKS05 - 3M□□□ 080C32	
	44	154	1.1	32.000	GKS04 - 3M□□□ 080C32	
	43	158	2.1	32.744	GKS05 - 3M□□□ 080C32	
	40	170	1.1	35.191	GKS04 - 3M□□□ 080C32	
	38	178	1.7	36.894	GKS05 - 3M□□□ 080C32	
	36	189	0.9	39.200	GKS04 - 3M□□□ 080C32	
	34	202	1.6	41.765	GKS05 - 3M□□□ 080C32	
	32	213	0.9	44.240	GKS04 - 3M□□□ 080C32	
	30	227	1.3	47.059	GKS05 - 3M□□□ 080C32	
	28	247	1.3	51.162	GKS05 - 3M□□□ 080C32	
	25	278	1.1	57.647	GKS05 - 3M□□□ 080C32	
	24	279	2.5	57.882	GKS06 - 3M□□□ 080C32	
	21	321	1.0	66.592	GKS05 - 3M□□□ 080C32	
	22	315	2.0	65.207	GKS06 - 3M□□□ 080C32	
	19	362	0.9	75.033	GKS05 - 3M□□□ 080C32	
	20	347	2.0	72.000	GKS06 - 3M□□□ 080C32	
	17	400	0.8	82.833	GKS05 - 3M□□□ 080C32	
17	391	1.6	81.111	GKS06 - 3M□□□ 080C32		
15	450	1.6	93.176	GKS06 - 3M□□□ 080C32		
15	447	2.9	92.563	GKS07 - 3M□□□ 080C32		
13	506	1.3	104.967	GKS06 - 3M□□□ 080C32		
14	503	2.4	104.296	GKS07 - 3M□□□ 080C32		
13	546	1.3	113.082	GKS06 - 3M□□□ 080C32		
13	542	2.5	112.338	GKS07 - 3M□□□ 080C32		
11	615	1.0	127.392	GKS06 - 3M□□□ 080C32		
11	611	2.0	126.578	GKS07 - 3M□□□ 080C32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.75 kW</b> n <sub>1</sub> =1410					<b>GKS □□ - 3M</b>	6-94
	9.9	690	1.0	142.941	GKS06 - 3M□□□ 080C32	
	8.8	777	0.8	161.029	GKS06 - 3M□□□ 080C32	
	7.6	891	1.5	184.600	GKS07 - 3M□□□ 080C32	
	6.8	1004	1.2	208.000	GKS07 - 3M□□□ 080C32	
	6.3	1081	1.2	224.037	GKS07 - 3M□□□ 080C32	
	5.6	1218	1.0	252.436	GKS07 - 3M□□□ 080C32	
	5.0	1366	1.0	283.193	GKS07 - 3M□□□ 080C32	
					<b>GKS □□ - 4M</b>	6-110
	4.4	1523	0.9	321.049	GKS07 - 4M□□□ 080C32	
	4.4	1534	2.0	323.365	GKS09 - 4M□□□ 080C32	
	3.9	1728	1.8	364.427	GKS09 - 4M□□□ 080C32	
	3.5	1908	1.6	402.234	GKS09 - 4M□□□ 080C32	
	3.1	2150	1.4	453.311	GKS09 - 4M□□□ 080C32	
	2.7	2469	1.2	520.538	GKS09 - 4M□□□ 080C32	
	2.4	2782	1.1	586.638	GKS09 - 4M□□□ 080C32	
	2.2	2996	1.0	631.744	GKS09 - 4M□□□ 080C32	
	2.0	3377	0.9	711.965	GKS09 - 4M□□□ 080C32	
	1.7	3872	1.5	816.455	GKS11 - 4M□□□ 080C32	
	1.5	4363	1.4	919.949	GKS11 - 4M□□□ 080C32	
1.4	4700	1.3	990.879	GKS11 - 4M□□□ 080C32		
1.3	5295	1.1	1116.484	GKS11 - 4M□□□ 080C32		
1.1	5940	1.0	1252.516	GKS11 - 4M□□□ 080C32		
1.0	6693	0.9	1411.286	GKS11 - 4M□□□ 080C32		
<b>1.1 kW</b> n <sub>1</sub> =2810					<b>GKS □□ - 3M</b>	6-94
	549	18	3.6	5.123	GKS04 - 3M□□□ 080-31	
	400	25	3.0	7.025	GKS04 - 3M□□□ 080-31	
	344	29	3.6	8.167	GKS04 - 3M□□□ 080-31	
	313	32	2.6	8.991	GKS04 - 3M□□□ 080-31	
	286	35	2.5	9.836	GKS04 - 3M□□□ 080-31	
	240	42	3.5	11.730	GKS04 - 3M□□□ 080-31	
	213	47	2.9	13.176	GKS05 - 3M□□□ 080-31	
	215	46	2.9	13.067	GKS04 - 3M□□□ 080-31	
	196	51	2.6	14.333	GKS04 - 3M□□□ 080-31	
	175	57	2.6	16.087	GKS04 - 3M□□□ 080-31	
	157	64	2.1	17.920	GKS04 - 3M□□□ 080-31	
	137	73	2.0	20.588	GKS04 - 3M□□□ 080-31	
	125	80	1.8	22.522	GKS04 - 3M□□□ 080-31	
	112	89	1.5	25.088	GKS04 - 3M□□□ 080-31	
	98	102	1.5	28.727	GKS04 - 3M□□□ 080-31	
	94	106	2.5	29.931	GKS05 - 3M□□□ 080-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=2810	88	114	1.2	32.000	GKS04 - 3M□□□ 080-31	
	86	116	2.3	32.744	GKS05 - 3M□□□ 080-31	
	80	125	1.2	35.191	GKS04 - 3M□□□ 080-31	
	76	131	1.9	36.894	GKS05 - 3M□□□ 080-31	
	72	139	1.0	39.200	GKS04 - 3M□□□ 080-31	
	67	148	1.8	41.765	GKS05 - 3M□□□ 080-31	
	64	157	1.1	44.240	GKS04 - 3M□□□ 080-31	
	60	167	1.7	47.059	GKS05 - 3M□□□ 080-31	
	55	181	0.9	50.943	GKS04 - 3M□□□ 080-31	
	55	182	1.7	51.162	GKS05 - 3M□□□ 080-31	
	49	202	0.9	56.976	GKS04 - 3M□□□ 080-31	
	49	205	1.4	57.647	GKS05 - 3M□□□ 080-31	
	49	206	3.1	57.882	GKS06 - 3M□□□ 080-31	
	42	236	1.3	66.592	GKS05 - 3M□□□ 080-31	
	43	232	2.5	65.207	GKS06 - 3M□□□ 080-31	
	38	266	1.1	75.033	GKS05 - 3M□□□ 080-31	
	39	256	2.5	72.000	GKS06 - 3M□□□ 080-31	
	34	294	1.0	82.833	GKS05 - 3M□□□ 080-31	
	35	288	2.0	81.111	GKS06 - 3M□□□ 080-31	
	30	331	0.9	93.333	GKS05 - 3M□□□ 080-31	
	30	331	2.0	93.176	GKS06 - 3M□□□ 080-31	
	26	381	0.8	107.196	GKS05 - 3M□□□ 080-31	
	27	373	1.6	104.967	GKS06 - 3M□□□ 080-31	
	27	370	3.0	104.296	GKS07 - 3M□□□ 080-31	
	25	402	1.7	113.082	GKS06 - 3M□□□ 080-31	
	22	452	1.4	127.392	GKS06 - 3M□□□ 080-31	
	22	449	2.7	126.578	GKS07 - 3M□□□ 080-31	
	20	508	1.4	142.941	GKS06 - 3M□□□ 080-31	
	18	572	1.1	161.029	GKS06 - 3M□□□ 080-31	
	15	675	1.0	190.080	GKS06 - 3M□□□ 080-31	
	15	656	2.0	184.600	GKS07 - 3M□□□ 080-31	
	13	760	0.8	214.133	GKS06 - 3M□□□ 080-31	
	14	739	1.6	208.000	GKS07 - 3M□□□ 080-31	
	12	819	0.9	230.688	GKS06 - 3M□□□ 080-31	
	13	796	1.7	224.037	GKS07 - 3M□□□ 080-31	
	11	896	1.4	252.436	GKS07 - 3M□□□ 080-31	
	9.9	1006	1.3	283.193	GKS07 - 3M□□□ 080-31	
	8.8	1133	1.1	319.091	GKS07 - 3M□□□ 080-31	
n1=1390	271	37	2.2	5.123	GKS04 - 3M□□□ 080C42	
	198	50	1.8	7.025	GKS04 - 3M□□□ 080C42	
	203	49	3.0	6.863	GKS05 - 3M□□□ 080C42	
	170	59	2.2	8.167	GKS04 - 3M□□□ 080C42	
	155	65	1.6	8.991	GKS04 - 3M□□□ 080C42	
	148	68	2.4	9.412	GKS05 - 3M□□□ 080C42	
	141	71	1.5	9.836	GKS04 - 3M□□□ 080C42	
	132	76	3.0	10.569	GKS05 - 3M□□□ 080C42	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

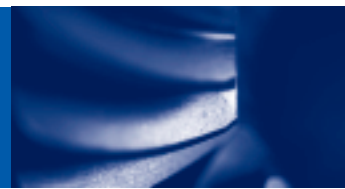
P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1390	119	84	2.1	11.730	GKS04 - 3M□□□ 080C42	
	119	84	3.0	11.667	GKS05 - 3M□□□ 080C42	
	106	95	1.7	13.176	GKS05 - 3M□□□ 080C42	
	106	94	1.8	13.067	GKS04 - 3M□□□ 080C42	
	97	103	1.6	14.333	GKS04 - 3M□□□ 080C42	
	96	104	2.4	14.494	GKS05 - 3M□□□ 080C42	
	86	116	1.6	16.087	GKS04 - 3M□□□ 080C42	
	87	115	2.4	16.000	GKS05 - 3M□□□ 080C42	
	78	129	1.3	17.920	GKS04 - 3M□□□ 080C42	
	82	122	2.6	17.054	GKS05 - 3M□□□ 080C42	
	68	148	1.2	20.588	GKS04 - 3M□□□ 080C42	
	72	138	2.2	19.216	GKS05 - 3M□□□ 080C42	
	62	162	1.1	22.522	GKS04 - 3M□□□ 080C42	
	59	168	2.0	23.388	GKS05 - 3M□□□ 080C42	
	53	189	1.6	26.353	GKS05 - 3M□□□ 080C42	
	55	180	0.9	25.088	GKS04 - 3M□□□ 080C42	
	48	206	0.9	28.727	GKS04 - 3M□□□ 080C42	
	46	215	1.5	29.931	GKS05 - 3M□□□ 080C42	
	43	235	1.4	32.744	GKS05 - 3M□□□ 080C42	
	43	230	2.7	32.063	GKS06 - 3M□□□ 080C42	
	38	265	1.1	36.894	GKS05 - 3M□□□ 080C42	
	38	261	2.6	36.303	GKS06 - 3M□□□ 080C42	
	33	300	1.1	41.765	GKS05 - 3M□□□ 080C42	
	30	338	0.9	47.059	GKS05 - 3M□□□ 080C42	
	31	319	2.2	44.471	GKS06 - 3M□□□ 080C42	
	27	367	0.9	51.162	GKS05 - 3M□□□ 080C42	
	26	381	1.8	53.074	GKS06 - 3M□□□ 080C42	
	24	416	1.7	57.882	GKS06 - 3M□□□ 080C42	
	24	413	3.2	57.501	GKS07 - 3M□□□ 080C42	
	21	468	1.3	65.207	GKS06 - 3M□□□ 080C42	
	22	465	2.6	64.790	GKS07 - 3M□□□ 080C42	
	19	517	1.4	72.000	GKS06 - 3M□□□ 080C42	
	20	506	2.6	70.474	GKS07 - 3M□□□ 080C42	
	17	582	1.1	81.111	GKS06 - 3M□□□ 080C42	
	18	570	2.1	79.407	GKS07 - 3M□□□ 080C42	
	15	669	1.1	93.176	GKS06 - 3M□□□ 080C42	
	15	664	2.0	92.563	GKS07 - 3M□□□ 080C42	
	13	754	0.8	104.967	GKS06 - 3M□□□ 080C42	
	13	749	1.6	104.296	GKS07 - 3M□□□ 080C42	
	12	812	0.9	113.082	GKS06 - 3M□□□ 080C42	
	12	806	1.6	112.338	GKS07 - 3M□□□ 080C42	
	11	909	1.3	126.578	GKS07 - 3M□□□ 080C42	
	9.9	1009	1.3	140.548	GKS07 - 3M□□□ 080C42	
	8.8	1137	1.1	158.364	GKS07 - 3M□□□ 080C42	
	7.5	1325	1.0	184.600	GKS07 - 3M□□□ 080C42	
	6.7	1493	0.8	208.000	GKS07 - 3M□□□ 080C42	
	6.2	1608	0.8	224.037	GKS07 - 3M□□□ 080C42	

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b>					<b>GKS □□ - 4M</b>	<b>6-110</b>
n <sub>1</sub> =1390	6.0	1627	1.9	230.577	GKS09 - 4M□□□ 080C42	
	5.6	1753	1.7	248.439	GKS09 - 4M□□□ 080C42	
	5.0	1976	1.6	279.986	GKS09 - 4M□□□ 080C42	
	4.3	2282	1.3	323.365	GKS09 - 4M□□□ 080C42	
	4.3	2279	2.6	322.931	GKS11 - 4M□□□ 080C42	
	3.8	2571	1.2	364.427	GKS09 - 4M□□□ 080C42	
	3.8	2568	2.3	363.866	GKS11 - 4M□□□ 080C42	
	3.5	2838	1.1	402.234	GKS09 - 4M□□□ 080C42	
	3.5	2793	2.1	395.787	GKS11 - 4M□□□ 080C42	
	3.1	3199	1.0	453.311	GKS09 - 4M□□□ 080C42	
	3.1	3147	1.9	445.958	GKS11 - 4M□□□ 080C42	
	2.7	3673	0.8	520.538	GKS09 - 4M□□□ 080C42	
	2.7	3614	1.7	512.196	GKS11 - 4M□□□ 080C42	
	2.4	4072	1.5	577.122	GKS11 - 4M□□□ 080C42	
	2.2	4386	1.4	621.619	GKS11 - 4M□□□ 080C42	
	2.0	4942	1.2	700.416	GKS11 - 4M□□□ 080C42	
	1.7	5761	1.0	816.455	GKS11 - 4M□□□ 080C42	
	1.5	6491	0.9	919.949	GKS11 - 4M□□□ 080C42	
	1.4	6992	0.9	990.879	GKS11 - 4M□□□ 080C42	
<b>1.5 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =2840	554	25	2.7	5.123	GKS04 - 3M□□□ 090-11	
	404	34	2.2	7.025	GKS04 - 3M□□□ 090-11	
	348	39	2.7	8.167	GKS04 - 3M□□□ 090-11	
	316	43	1.9	8.991	GKS04 - 3M□□□ 090-11	
	302	45	3.0	9.412	GKS05 - 3M□□□ 090-11	
	289	47	1.8	9.836	GKS04 - 3M□□□ 090-11	
	242	56	2.6	11.730	GKS04 - 3M□□□ 090-11	
	216	63	2.1	13.176	GKS05 - 3M□□□ 090-11	
	217	63	2.1	13.067	GKS04 - 3M□□□ 090-11	
	198	69	1.9	14.333	GKS04 - 3M□□□ 090-11	
	196	69	3.0	14.494	GKS05 - 3M□□□ 090-11	
	177	77	1.9	16.087	GKS04 - 3M□□□ 090-11	
	178	77	3.0	16.000	GKS05 - 3M□□□ 090-11	
	159	86	1.6	17.920	GKS04 - 3M□□□ 090-11	
	167	82	3.1	17.054	GKS05 - 3M□□□ 090-11	
	138	99	1.5	20.588	GKS04 - 3M□□□ 090-11	
	148	92	2.6	19.216	GKS05 - 3M□□□ 090-11	
	126	108	1.4	22.522	GKS04 - 3M□□□ 090-11	
	121	112	2.4	23.388	GKS05 - 3M□□□ 090-11	
	108	126	1.9	26.353	GKS05 - 3M□□□ 090-11	
	113	120	1.1	25.088	GKS04 - 3M□□□ 090-11	
	99	138	1.1	28.727	GKS04 - 3M□□□ 090-11	
	95	143	1.9	29.931	GKS05 - 3M□□□ 090-11	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

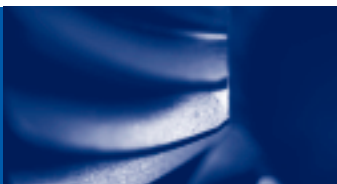
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =2840	89	153	0.9	32.000	GKS04 - 3M□□□ 090-11	
	87	157	1.7	32.744	GKS05 - 3M□□□ 090-11	
	89	154	3.2	32.063	GKS06 - 3M□□□ 090-11	
	81	169	0.9	35.191	GKS04 - 3M□□□ 090-11	
	77	177	1.4	36.894	GKS05 - 3M□□□ 090-11	
	78	174	3.2	36.303	GKS06 - 3M□□□ 090-11	
	68	200	1.3	41.765	GKS05 - 3M□□□ 090-11	
	60	225	1.2	47.059	GKS05 - 3M□□□ 090-11	
	64	213	3.0	44.471	GKS06 - 3M□□□ 090-11	
	56	245	1.2	51.162	GKS05 - 3M□□□ 090-11	
	54	254	2.5	53.074	GKS06 - 3M□□□ 090-11	
	49	276	1.0	57.647	GKS05 - 3M□□□ 090-11	
	49	277	2.3	57.882	GKS06 - 3M□□□ 090-11	
	43	319	1.0	66.592	GKS05 - 3M□□□ 090-11	
	44	312	1.8	65.207	GKS06 - 3M□□□ 090-11	
	39	345	1.9	72.000	GKS06 - 3M□□□ 090-11	
	35	389	1.5	81.111	GKS06 - 3M□□□ 090-11	
	36	380	2.9	79.407	GKS07 - 3M□□□ 090-11	
	31	446	1.4	93.176	GKS06 - 3M□□□ 090-11	
	31	443	2.8	92.563	GKS07 - 3M□□□ 090-11	
	27	503	1.2	104.967	GKS06 - 3M□□□ 090-11	
	27	500	2.2	104.296	GKS07 - 3M□□□ 090-11	
	25	542	1.3	113.082	GKS06 - 3M□□□ 090-11	
	25	538	2.5	112.338	GKS07 - 3M□□□ 090-11	
	22	610	1.0	127.392	GKS06 - 3M□□□ 090-11	
	22	606	2.0	126.578	GKS07 - 3M□□□ 090-11	
	20	673	2.0	140.548	GKS07 - 3M□□□ 090-11	
	18	759	1.6	158.364	GKS07 - 3M□□□ 090-11	
	15	884	1.5	184.600	GKS07 - 3M□□□ 090-11	
	14	997	1.2	208.000	GKS07 - 3M□□□ 090-11	
	14	983	3.1	205.111	GKS09 - 3M□□□ 090-11	
	13	1073	1.2	224.037	GKS07 - 3M□□□ 090-11	
	13	1058	2.9	220.882	GKS09 - 3M□□□ 090-11	
	11	1209	1.0	252.436	GKS07 - 3M□□□ 090-11	
	11	1193	2.6	248.930	GKS09 - 3M□□□ 090-11	
	10	1357	1.0	283.193	GKS07 - 3M□□□ 090-11	
	10	1338	2.3	279.205	GKS09 - 3M□□□ 090-11	
	9.0	1508	2.0	314.659	GKS09 - 3M□□□ 090-11	
n <sub>1</sub> =1390	271	50	1.6	5.123	GKS04 - 3M□□□ 090C32	
	198	69	1.3	7.025	GKS04 - 3M□□□ 090C32	
	203	67	2.2	6.863	GKS05 - 3M□□□ 090C32	
	170	80	1.6	8.167	GKS04 - 3M□□□ 090C32	
	155	88	1.2	8.991	GKS04 - 3M□□□ 090C32	
	148	92	1.8	9.412	GKS05 - 3M□□□ 090C32	
	141	96	1.1	9.836	GKS04 - 3M□□□ 090C32	
	132	103	2.2	10.569	GKS05 - 3M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1390	119	115	1.6	11.730	GKS04 - 3M□□□ 090C32	
	119	114	2.2	11.667	GKS05 - 3M□□□ 090C32	
	122	111	3.0	11.382	GKS06 - 3M□□□ 090C32	
	106	129	1.3	13.176	GKS05 - 3M□□□ 090C32	
	106	128	1.3	13.067	GKS04 - 3M□□□ 090C32	
	97	140	1.2	14.333	GKS04 - 3M□□□ 090C32	
	96	142	1.8	14.494	GKS05 - 3M□□□ 090C32	
	86	158	1.1	16.087	GKS04 - 3M□□□ 090C32	
	87	157	1.8	16.000	GKS05 - 3M□□□ 090C32	
	78	175	0.9	17.920	GKS04 - 3M□□□ 090C32	
	82	167	1.9	17.054	GKS05 - 3M□□□ 090C32	
	78	174	3.0	17.809	GKS06 - 3M□□□ 090C32	
	68	202	0.9	20.588	GKS04 - 3M□□□ 090C32	
	72	188	1.6	19.216	GKS05 - 3M□□□ 090C32	
	62	221	0.8	22.522	GKS04 - 3M□□□ 090C32	
	59	229	1.4	23.388	GKS05 - 3M□□□ 090C32	
	53	258	1.2	26.353	GKS05 - 3M□□□ 090C32	
	53	255	2.7	26.017	GKS06 - 3M□□□ 090C32	
	46	293	1.1	29.931	GKS05 - 3M□□□ 090C32	
	49	279	2.4	28.461	GKS06 - 3M□□□ 090C32	
	43	321	1.0	32.744	GKS05 - 3M□□□ 090C32	
	43	314	1.9	32.063	GKS06 - 3M□□□ 090C32	
	38	361	0.8	36.894	GKS05 - 3M□□□ 090C32	
	38	355	1.9	36.303	GKS06 - 3M□□□ 090C32	
	33	409	0.8	41.765	GKS05 - 3M□□□ 090C32	
	31	435	1.6	44.471	GKS06 - 3M□□□ 090C32	
	26	520	1.3	53.074	GKS06 - 3M□□□ 090C32	
	24	567	1.2	57.882	GKS06 - 3M□□□ 090C32	
	24	563	2.3	57.501	GKS07 - 3M□□□ 090C32	
	21	638	1.0	65.207	GKS06 - 3M□□□ 090C32	
	22	634	1.9	64.790	GKS07 - 3M□□□ 090C32	
	19	705	1.0	72.000	GKS06 - 3M□□□ 090C32	
	20	690	1.9	70.474	GKS07 - 3M□□□ 090C32	
	18	777	1.6	79.407	GKS07 - 3M□□□ 090C32	
	15	906	1.5	92.563	GKS07 - 3M□□□ 090C32	
	15	899	2.8	91.860	GKS09 - 3M□□□ 090C32	
	13	1021	1.2	104.296	GKS07 - 3M□□□ 090C32	
	13	1013	2.8	103.524	GKS09 - 3M□□□ 090C32	
	12	1100	1.2	112.338	GKS07 - 3M□□□ 090C32	
	13	1091	2.5	111.484	GKS09 - 3M□□□ 090C32	
	11	1239	1.0	126.578	GKS07 - 3M□□□ 090C32	
	11	1230	2.5	125.641	GKS09 - 3M□□□ 090C32	
	9.9	1376	1.0	140.548	GKS07 - 3M□□□ 090C32	
	9.9	1379	1.9	140.921	GKS09 - 3M□□□ 090C32	
	8.8	1555	1.9	158.816	GKS09 - 3M□□□ 090C32	
	7.6	1782	1.7	182.000	GKS09 - 3M□□□ 090C32	
	6.8	2008	1.5	205.111	GKS09 - 3M□□□ 090C32	
	6.3	2162	1.4	220.882	GKS09 - 3M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

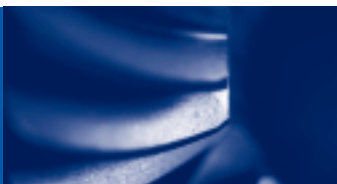
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b> n <sub>1</sub> =1390					<b>GKS □□ - 3M</b>	6-94
	5.6	2437	1.3	248.930	GKS09 - 3M□□□ 090C32	
	5.0	2733	1.1	279.205	GKS09 - 3M□□□ 090C32	
	4.4	3080	1.0	314.659	GKS09 - 3M□□□ 090C32	6-110
					<b>GKS □□ - 4M</b>	
	4.3	3111	1.0	323.365	GKS09 - 4M□□□ 090C32	
	4.3	3107	1.9	322.931	GKS11 - 4M□□□ 090C32	
	3.8	3507	0.9	364.427	GKS09 - 4M□□□ 090C32	
	3.8	3501	1.7	363.866	GKS11 - 4M□□□ 090C32	
	3.5	3808	1.6	395.787	GKS11 - 4M□□□ 090C32	
	3.1	4291	1.4	445.958	GKS11 - 4M□□□ 090C32	
	2.7	4928	1.2	512.196	GKS11 - 4M□□□ 090C32	
	2.4	5553	1.1	577.122	GKS11 - 4M□□□ 090C32	
	2.2	5981	1.0	621.619	GKS11 - 4M□□□ 090C32	
	2.0	6739	0.9	700.416	GKS11 - 4M□□□ 090C32	
	1.7	7754	1.5	805.901	GKS14 - 4M□□□ 090C32	
	1.5	8737	1.3	908.058	GKS14 - 4M□□□ 090C32	
	1.4	9411	1.2	978.071	GKS14 - 4M□□□ 090C32	
	1.3	10604	1.1	1102.052	GKS14 - 4M□□□ 090C32	
1.1	11896	1.0	1236.326	GKS14 - 4M□□□ 090C32		
1.0	13404	0.9	1393.043	GKS14 - 4M□□□ 090C32		
<b>2.2 kW</b> n <sub>1</sub> =2840					<b>GKS □□ - 3M</b>	6-94
	554	36	1.8	5.123	GKS04 - 3M□□□ 090-31	
	404	49	1.5	7.025	GKS04 - 3M□□□ 090-31	
	414	48	2.5	6.863	GKS05 - 3M□□□ 090-31	
	348	57	1.8	8.167	GKS04 - 3M□□□ 090-31	
	316	63	1.3	8.991	GKS04 - 3M□□□ 090-31	
	302	66	2.0	9.412	GKS05 - 3M□□□ 090-31	
	289	69	1.2	9.836	GKS04 - 3M□□□ 090-31	
	269	74	2.5	10.569	GKS05 - 3M□□□ 090-31	
	242	82	1.8	11.730	GKS04 - 3M□□□ 090-31	
	243	82	2.5	11.667	GKS05 - 3M□□□ 090-31	
	216	93	1.4	13.176	GKS05 - 3M□□□ 090-31	
	217	92	1.5	13.067	GKS04 - 3M□□□ 090-31	
	198	101	1.3	14.333	GKS04 - 3M□□□ 090-31	
	196	102	2.0	14.494	GKS05 - 3M□□□ 090-31	
	177	113	1.3	16.087	GKS04 - 3M□□□ 090-31	
	178	112	2.0	16.000	GKS05 - 3M□□□ 090-31	
	159	126	1.1	17.920	GKS04 - 3M□□□ 090-31	
	167	120	2.1	17.054	GKS05 - 3M□□□ 090-31	
	138	145	1.0	20.588	GKS04 - 3M□□□ 090-31	
	148	135	1.8	19.216	GKS05 - 3M□□□ 090-31	
	126	158	0.9	22.522	GKS04 - 3M□□□ 090-31	
	121	164	1.6	23.388	GKS05 - 3M□□□ 090-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=2840	108	185	1.3	26.353	GKS05 - 3M□□□ 090-31	
	109	183	3.0	26.017	GKS06 - 3M□□□ 090-31	
	95	210	1.3	29.931	GKS05 - 3M□□□ 090-31	
	100	200	2.8	28.461	GKS06 - 3M□□□ 090-31	
	87	230	1.2	32.744	GKS05 - 3M□□□ 090-31	
	89	225	2.2	32.063	GKS06 - 3M□□□ 090-31	
	77	259	0.9	36.894	GKS05 - 3M□□□ 090-31	
	78	255	2.2	36.303	GKS06 - 3M□□□ 090-31	
	68	294	0.9	41.765	GKS05 - 3M□□□ 090-31	
	60	331	0.8	47.059	GKS05 - 3M□□□ 090-31	
	64	313	2.0	44.471	GKS06 - 3M□□□ 090-31	
	56	360	0.8	51.162	GKS05 - 3M□□□ 090-31	
	54	373	1.7	53.074	GKS06 - 3M□□□ 090-31	
	49	407	1.6	57.882	GKS06 - 3M□□□ 090-31	
	49	404	3.0	57.501	GKS07 - 3M□□□ 090-31	
	44	458	1.3	65.207	GKS06 - 3M□□□ 090-31	
	44	455	2.4	64.790	GKS07 - 3M□□□ 090-31	
	39	506	1.3	72.000	GKS06 - 3M□□□ 090-31	
	40	495	2.4	70.474	GKS07 - 3M□□□ 090-31	
	35	570	1.0	81.111	GKS06 - 3M□□□ 090-31	
	36	558	2.0	79.407	GKS07 - 3M□□□ 090-31	
	31	655	1.0	93.176	GKS06 - 3M□□□ 090-31	
	31	650	1.9	92.563	GKS07 - 3M□□□ 090-31	
	27	733	1.5	104.296	GKS07 - 3M□□□ 090-31	
	25	795	0.9	113.082	GKS06 - 3M□□□ 090-31	
	25	789	1.7	112.338	GKS07 - 3M□□□ 090-31	
	22	889	1.4	126.578	GKS07 - 3M□□□ 090-31	
	20	988	1.3	140.548	GKS07 - 3M□□□ 090-31	
	20	990	2.7	140.921	GKS09 - 3M□□□ 090-31	
	18	1113	1.1	158.364	GKS07 - 3M□□□ 090-31	
	18	1116	2.7	158.816	GKS09 - 3M□□□ 090-31	
	15	1297	1.0	184.600	GKS07 - 3M□□□ 090-31	
	16	1279	2.4	182.000	GKS09 - 3M□□□ 090-31	
14	1462	0.8	208.000	GKS07 - 3M□□□ 090-31		
14	1441	2.1	205.111	GKS09 - 3M□□□ 090-31		
13	1574	0.8	224.037	GKS07 - 3M□□□ 090-31		
13	1552	2.0	220.882	GKS09 - 3M□□□ 090-31		
11	1749	1.8	248.930	GKS09 - 3M□□□ 090-31		
10	1962	1.5	279.205	GKS09 - 3M□□□ 090-31		
9.0	2211	1.4	314.659	GKS09 - 3M□□□ 090-31		
n1=1440	222	90	2.9	6.485	GKS06 - 3M□□□ 100C12	
	210	95	1.6	6.863	GKS05 - 3M□□□ 100C12	
	153	130	1.3	9.412	GKS05 - 3M□□□ 100C12	
	157	127	2.9	9.196	GKS06 - 3M□□□ 100C12	
	136	147	1.6	10.569	GKS05 - 3M□□□ 100C12	
	142	141	2.9	10.147	GKS06 - 3M□□□ 100C12	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

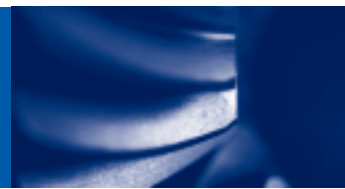
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1440	123	162	1.6	11.667	GKS05 - 3M□□□ 100C12	
	127	158	2.1	11.382	GKS06 - 3M□□□ 100C12	
	109	183	0.9	13.176	GKS05 - 3M□□□ 100C12	
	114	175	2.4	12.612	GKS06 - 3M□□□ 100C12	
	99	201	1.3	14.494	GKS05 - 3M□□□ 100C12	
	97	205	2.9	14.824	GKS06 - 3M□□□ 100C12	
	90	222	1.3	16.000	GKS05 - 3M□□□ 100C12	
	86	231	2.6	16.699	GKS06 - 3M□□□ 100C12	
	84	236	1.3	17.054	GKS05 - 3M□□□ 100C12	
	81	247	2.1	17.809	GKS06 - 3M□□□ 100C12	
	75	266	1.1	19.216	GKS05 - 3M□□□ 100C12	
	71	282	2.4	20.329	GKS06 - 3M□□□ 100C12	
	62	324	1.0	23.388	GKS05 - 3M□□□ 100C12	
	63	317	1.9	22.902	GKS06 - 3M□□□ 100C12	
	55	365	0.8	26.353	GKS05 - 3M□□□ 100C12	
	55	361	1.9	26.017	GKS06 - 3M□□□ 100C12	
	51	394	1.7	28.461	GKS06 - 3M□□□ 100C12	
	51	392	3.1	28.274	GKS07 - 3M□□□ 100C12	
	45	444	1.4	32.063	GKS06 - 3M□□□ 100C12	
	45	442	2.7	31.858	GKS07 - 3M□□□ 100C12	
	40	503	1.4	36.303	GKS06 - 3M□□□ 100C12	
	40	500	2.6	36.063	GKS07 - 3M□□□ 100C12	
	35	575	1.2	41.472	GKS06 - 3M□□□ 100C12	
	32	616	1.1	44.471	GKS06 - 3M□□□ 100C12	
	33	612	2.1	44.178	GKS07 - 3M□□□ 100C12	
	27	736	0.9	53.074	GKS06 - 3M□□□ 100C12	
	29	698	1.9	50.345	GKS07 - 3M□□□ 100C12	
	25	802	0.9	57.882	GKS06 - 3M□□□ 100C12	
	25	797	1.6	57.501	GKS07 - 3M□□□ 100C12	
	22	898	1.3	64.790	GKS07 - 3M□□□ 100C12	
	20	977	1.4	70.474	GKS07 - 3M□□□ 100C12	
	20	984	3.1	70.982	GKS09 - 3M□□□ 100C12	
	18	1100	1.1	79.407	GKS07 - 3M□□□ 100C12	
	18	1109	2.8	79.996	GKS09 - 3M□□□ 100C12	
	16	1283	1.0	92.563	GKS07 - 3M□□□ 100C12	
	16	1273	2.4	91.860	GKS09 - 3M□□□ 100C12	
	14	1445	0.8	104.296	GKS07 - 3M□□□ 100C12	
	14	1435	2.1	103.524	GKS09 - 3M□□□ 100C12	
	13	1557	0.9	112.338	GKS07 - 3M□□□ 100C12	
	13	1545	2.0	111.484	GKS09 - 3M□□□ 100C12	
	13	1543	2.9	111.335	GKS11 - 3M□□□ 100C12	
	12	1741	1.8	125.641	GKS09 - 3M□□□ 100C12	
	12	1738	2.9	125.448	GKS11 - 3M□□□ 100C12	
	10	1953	1.6	140.921	GKS09 - 3M□□□ 100C12	
	10	1950	2.3	140.732	GKS11 - 3M□□□ 100C12	
	9.1	2201	1.4	158.816	GKS09 - 3M□□□ 100C12	
	9.1	2197	2.3	158.571	GKS11 - 3M□□□ 100C12	
	7.9	2522	1.2	182.000	GKS09 - 3M□□□ 100C12	
	7.7	2586	2.3	186.572	GKS11 - 3M□□□ 100C12	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b> n <sub>1</sub> =1440	<b>GKS □□ - 3M</b>					6-94
	7.0	2842	1.1	205.111	GKS09 - 3M□□□ 100C12	
	6.9	2913	2.0	210.222	GKS11 - 3M□□□ 100C12	
	6.5	3061	1.0	220.882	GKS09 - 3M□□□ 100C12	
	6.4	3138	1.9	226.431	GKS11 - 3M□□□ 100C12	
	5.8	3450	0.9	248.930	GKS09 - 3M□□□ 100C12	
	5.6	3536	1.7	255.133	GKS11 - 3M□□□ 100C12	
	5.0	3966	1.5	286.219	GKS11 - 3M□□□ 100C12	
	4.5	4469	1.3	322.500	GKS11 - 3M□□□ 100C12	
	<b>GKS □□ - 4M</b>					
	4.5	4399	1.4	322.931	GKS11 - 4M□□□ 100C12	
	4.0	4957	1.2	363.866	GKS11 - 4M□□□ 100C12	
	4.0	4938	2.3	362.512	GKS14 - 4M□□□ 100C12	
	3.6	5392	1.1	395.787	GKS11 - 4M□□□ 100C12	
	3.7	5322	2.2	390.671	GKS14 - 4M□□□ 100C12	
	3.2	6075	1.0	445.958	GKS11 - 4M□□□ 100C12	
	3.3	5996	1.9	440.193	GKS14 - 4M□□□ 100C12	
	2.8	6977	0.9	512.196	GKS11 - 4M□□□ 100C12	
	2.8	6990	1.6	513.121	GKS14 - 4M□□□ 100C12	
	2.5	7876	1.5	578.164	GKS14 - 4M□□□ 100C12	
2.3	8483	1.4	622.742	GKS14 - 4M□□□ 100C12		
2.1	9558	1.2	701.681	GKS14 - 4M□□□ 100C12		
1.8	10978	1.0	805.901	GKS14 - 4M□□□ 100C12		
1.6	12370	0.9	908.058	GKS14 - 4M□□□ 100C12		
1.5	13323	0.9	978.071	GKS14 - 4M□□□ 100C12		
<b>3 kW</b> n <sub>1</sub> =2850	<b>GKS □□ - 3M</b>					6-94
	440	62	3.4	6.485	GKS06 - 3M□□□ 100-31	
	415	66	1.8	6.863	GKS05 - 3M□□□ 100-31	
	303	90	1.5	9.412	GKS05 - 3M□□□ 100-31	
	270	101	1.8	10.569	GKS05 - 3M□□□ 100-31	
	244	111	1.8	11.667	GKS05 - 3M□□□ 100-31	
	250	109	2.5	11.382	GKS06 - 3M□□□ 100-31	
	216	126	1.1	13.176	GKS05 - 3M□□□ 100-31	
	226	120	2.9	12.612	GKS06 - 3M□□□ 100-31	
	197	138	1.5	14.494	GKS05 - 3M□□□ 100-31	
	178	153	1.5	16.000	GKS05 - 3M□□□ 100-31	
	171	159	3.1	16.699	GKS06 - 3M□□□ 100-31	
	167	163	1.6	17.054	GKS05 - 3M□□□ 100-31	
	160	170	2.5	17.809	GKS06 - 3M□□□ 100-31	
	148	184	1.3	19.216	GKS05 - 3M□□□ 100-31	
	140	194	2.8	20.329	GKS06 - 3M□□□ 100-31	
	122	223	1.2	23.388	GKS05 - 3M□□□ 100-31	
	124	219	2.2	22.902	GKS06 - 3M□□□ 100-31	
	108	252	1.0	26.353	GKS05 - 3M□□□ 100-31	
	110	248	2.2	26.017	GKS06 - 3M□□□ 100-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=2850	95	286	0.9	29.931	GKS05 - 3M□□□ 100-31	
	100	272	2.0	28.461	GKS06 - 3M□□□ 100-31	
	87	313	0.9	32.744	GKS05 - 3M□□□ 100-31	
	89	306	1.6	32.063	GKS06 - 3M□□□ 100-31	
	90	304	3.1	31.858	GKS07 - 3M□□□ 100-31	
	79	347	1.6	36.303	GKS06 - 3M□□□ 100-31	
	79	344	3.0	36.063	GKS07 - 3M□□□ 100-31	
	69	396	1.4	41.472	GKS06 - 3M□□□ 100-31	
	64	425	1.5	44.471	GKS06 - 3M□□□ 100-31	
	65	422	2.8	44.178	GKS07 - 3M□□□ 100-31	
	54	507	1.3	53.074	GKS06 - 3M□□□ 100-31	
	57	481	2.5	50.345	GKS07 - 3M□□□ 100-31	
	49	553	1.2	57.882	GKS06 - 3M□□□ 100-31	
	50	549	2.2	57.501	GKS07 - 3M□□□ 100-31	
	44	623	0.9	65.207	GKS06 - 3M□□□ 100-31	
	44	619	1.8	64.790	GKS07 - 3M□□□ 100-31	
	40	687	0.9	72.000	GKS06 - 3M□□□ 100-31	
	40	673	1.8	70.474	GKS07 - 3M□□□ 100-31	
	36	758	1.5	79.407	GKS07 - 3M□□□ 100-31	
	31	884	1.4	92.563	GKS07 - 3M□□□ 100-31	
	31	877	3.2	91.860	GKS09 - 3M□□□ 100-31	
	27	996	1.1	104.296	GKS07 - 3M□□□ 100-31	
	28	988	2.9	103.524	GKS09 - 3M□□□ 100-31	
	25	1073	1.2	112.338	GKS07 - 3M□□□ 100-31	
	26	1064	2.8	111.484	GKS09 - 3M□□□ 100-31	
	23	1209	1.0	126.578	GKS07 - 3M□□□ 100-31	
	23	1200	2.6	125.641	GKS09 - 3M□□□ 100-31	
	20	1342	1.0	140.548	GKS07 - 3M□□□ 100-31	
	20	1346	2.3	140.921	GKS09 - 3M□□□ 100-31	
	18	1512	0.8	158.364	GKS07 - 3M□□□ 100-31	
	18	1516	2.0	158.816	GKS09 - 3M□□□ 100-31	
	16	1738	1.7	182.000	GKS09 - 3M□□□ 100-31	
	14	1958	1.6	205.111	GKS09 - 3M□□□ 100-31	
	14	2007	2.9	210.222	GKS11 - 3M□□□ 100-31	
13	2109	1.4	220.882	GKS09 - 3M□□□ 100-31		
13	2162	2.8	226.431	GKS11 - 3M□□□ 100-31		
11	2377	1.3	248.930	GKS09 - 3M□□□ 100-31		
11	2436	2.4	255.133	GKS11 - 3M□□□ 100-31		
10	2666	1.1	279.205	GKS09 - 3M□□□ 100-31		
10	2733	2.2	286.219	GKS11 - 3M□□□ 100-31		
9.1	3004	1.0	314.659	GKS09 - 3M□□□ 100-31		
8.8	3079	1.9	322.500	GKS11 - 3M□□□ 100-31		
n1=1430	221	123	2.1	6.485	GKS06 - 3M□□□ 100C32	
	208	131	1.1	6.863	GKS05 - 3M□□□ 100C32	
	152	179	0.9	9.412	GKS05 - 3M□□□ 100C32	
	156	175	2.1	9.196	GKS06 - 3M□□□ 100C32	

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b> n <sub>1</sub> =1430					<b>GKS □□ - 3M</b>	6-94
	135	201	1.1	10.569	GKS05 - 3M□□□ 100C32	
	141	193	2.1	10.147	GKS06 - 3M□□□ 100C32	
	123	222	1.1	11.667	GKS05 - 3M□□□ 100C32	
	126	217	1.5	11.382	GKS06 - 3M□□□ 100C32	
	126	217	2.8	11.378	GKS07 - 3M□□□ 100C32	
	113	240	1.8	12.612	GKS06 - 3M□□□ 100C32	
	99	276	0.9	14.494	GKS05 - 3M□□□ 100C32	
	97	282	2.1	14.824	GKS06 - 3M□□□ 100C32	
	89	305	0.9	16.000	GKS05 - 3M□□□ 100C32	
	86	318	1.9	16.699	GKS06 - 3M□□□ 100C32	
	84	325	1.0	17.054	GKS05 - 3M□□□ 100C32	
	80	339	1.5	17.809	GKS06 - 3M□□□ 100C32	
	83	329	3.0	17.270	GKS07 - 3M□□□ 100C32	
	74	366	0.8	19.216	GKS05 - 3M□□□ 100C32	
	70	387	1.7	20.329	GKS06 - 3M□□□ 100C32	
	62	436	1.4	22.902	GKS06 - 3M□□□ 100C32	
	55	495	1.4	26.017	GKS06 - 3M□□□ 100C32	
	57	480	2.5	25.244	GKS07 - 3M□□□ 100C32	
	50	542	1.3	28.461	GKS06 - 3M□□□ 100C32	
	51	538	2.2	28.274	GKS07 - 3M□□□ 100C32	
	45	610	1.0	32.063	GKS06 - 3M□□□ 100C32	
	45	606	1.9	31.858	GKS07 - 3M□□□ 100C32	
	39	691	1.0	36.303	GKS06 - 3M□□□ 100C32	
	40	686	1.9	36.063	GKS07 - 3M□□□ 100C32	
	35	789	0.9	41.472	GKS06 - 3M□□□ 100C32	
	32	846	0.8	44.471	GKS06 - 3M□□□ 100C32	
	32	841	1.5	44.178	GKS07 - 3M□□□ 100C32	
	28	958	1.4	50.345	GKS07 - 3M□□□ 100C32	
	25	1094	1.2	57.501	GKS07 - 3M□□□ 100C32	
	25	1112	2.7	58.456	GKS09 - 3M□□□ 100C32	
	22	1233	1.0	64.790	GKS07 - 3M□□□ 100C32	
	22	1254	2.4	65.879	GKS09 - 3M□□□ 100C32	
	20	1341	1.0	70.474	GKS07 - 3M□□□ 100C32	
	20	1351	2.2	70.982	GKS09 - 3M□□□ 100C32	
	18	1522	2.0	79.996	GKS09 - 3M□□□ 100C32	
	16	1748	1.7	91.860	GKS09 - 3M□□□ 100C32	
	16	1746	2.5	91.737	GKS11 - 3M□□□ 100C32	
	14	1970	1.6	103.524	GKS09 - 3M□□□ 100C32	
	14	1967	2.5	103.365	GKS11 - 3M□□□ 100C32	
13	2121	1.4	111.484	GKS09 - 3M□□□ 100C32		
13	2119	2.1	111.335	GKS11 - 3M□□□ 100C32		
11	2391	1.3	125.641	GKS09 - 3M□□□ 100C32		
11	2387	2.1	125.448	GKS11 - 3M□□□ 100C32		
10	2682	1.1	140.921	GKS09 - 3M□□□ 100C32		
10	2678	1.7	140.732	GKS11 - 3M□□□ 100C32		
9.0	3022	1.0	158.816	GKS09 - 3M□□□ 100C32		
9.0	3018	1.7	158.571	GKS11 - 3M□□□ 100C32		
7.9	3463	0.9	182.000	GKS09 - 3M□□□ 100C32		
7.7	3550	1.7	186.572	GKS11 - 3M□□□ 100C32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

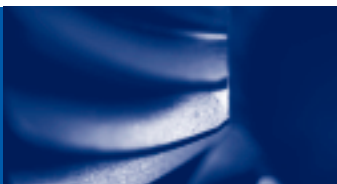
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b> n <sub>1</sub> =1430					<b>GKS □□ - 3M</b>	6-94
	6.8	4000	1.5	210.222	GKS11 - 3M□□□ 100C32	
	6.3	4309	1.4	226.431	GKS11 - 3M□□□ 100C32	
	5.6	4855	1.2	255.133	GKS11 - 3M□□□ 100C32	
	5.0	5447	1.1	286.219	GKS11 - 3M□□□ 100C32	
	4.4	6137	1.0	322.500	GKS11 - 3M□□□ 100C32	
					<b>GKS □□ - 4M</b>	6-110
	4.4	6041	1.0	322.931	GKS11 - 4M□□□ 100C32	
	3.9	6806	0.9	363.866	GKS11 - 4M□□□ 100C32	
	3.9	6781	1.7	362.512	GKS14 - 4M□□□ 100C32	
	3.6	7403	0.8	395.787	GKS11 - 4M□□□ 100C32	
	3.7	7308	1.6	390.671	GKS14 - 4M□□□ 100C32	
	3.3	8234	1.4	440.193	GKS14 - 4M□□□ 100C32	
	2.8	9598	1.2	513.121	GKS14 - 4M□□□ 100C32	
	2.5	10815	1.1	578.164	GKS14 - 4M□□□ 100C32	
	2.3	11649	1.0	622.742	GKS14 - 4M□□□ 100C32	
2.0	13125	0.9	701.681	GKS14 - 4M□□□ 100C32		
<b>4 kW</b> n <sub>1</sub> =2830					<b>GKS □□ - 3M</b>	6-94
	436	83	2.6	6.485	GKS06 - 3M□□□ 100-41	
	412	88	1.4	6.863	GKS05 - 3M□□□ 100-41	
	301	121	1.1	9.412	GKS05 - 3M□□□ 100-41	
	308	118	2.6	9.196	GKS06 - 3M□□□ 100-41	
	268	136	1.4	10.569	GKS05 - 3M□□□ 100-41	
	279	130	2.6	10.147	GKS06 - 3M□□□ 100-41	
	243	150	1.4	11.667	GKS05 - 3M□□□ 100-41	
	249	146	1.8	11.382	GKS06 - 3M□□□ 100-41	
	224	162	2.1	12.612	GKS06 - 3M□□□ 100-41	
	195	186	1.1	14.494	GKS05 - 3M□□□ 100-41	
	191	190	2.6	14.824	GKS06 - 3M□□□ 100-41	
	177	205	1.1	16.000	GKS05 - 3M□□□ 100-41	
	170	214	2.3	16.699	GKS06 - 3M□□□ 100-41	
	166	219	1.2	17.054	GKS05 - 3M□□□ 100-41	
	159	228	1.8	17.809	GKS06 - 3M□□□ 100-41	
	147	246	1.0	19.216	GKS05 - 3M□□□ 100-41	
	139	261	2.1	20.329	GKS06 - 3M□□□ 100-41	
	121	300	0.9	23.388	GKS05 - 3M□□□ 100-41	
	124	294	1.7	22.902	GKS06 - 3M□□□ 100-41	
	109	334	1.6	26.017	GKS06 - 3M□□□ 100-41	
	112	324	2.9	25.244	GKS07 - 3M□□□ 100-41	
	99	365	1.5	28.461	GKS06 - 3M□□□ 100-41	
	100	363	2.7	28.274	GKS07 - 3M□□□ 100-41	
	88	411	1.2	32.063	GKS06 - 3M□□□ 100-41	
	89	408	2.3	31.858	GKS07 - 3M□□□ 100-41	
78	465	1.2	36.303	GKS06 - 3M□□□ 100-41		
79	462	2.3	36.063	GKS07 - 3M□□□ 100-41		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=2830	68	532	1.0	41.472	GKS06 - 3M□□□ 100-41	
	64	570	1.1	44.471	GKS06 - 3M□□□ 100-41	
	64	566	2.1	44.178	GKS07 - 3M□□□ 100-41	
	53	680	0.9	53.074	GKS06 - 3M□□□ 100-41	
	56	646	1.9	50.345	GKS07 - 3M□□□ 100-41	
	49	742	0.9	57.882	GKS06 - 3M□□□ 100-41	
	49	737	1.6	57.501	GKS07 - 3M□□□ 100-41	
	44	831	1.3	64.790	GKS07 - 3M□□□ 100-41	
	40	904	1.3	70.474	GKS07 - 3M□□□ 100-41	
	40	910	3.1	70.982	GKS09 - 3M□□□ 100-41	
	36	1018	1.1	79.407	GKS07 - 3M□□□ 100-41	
	35	1026	2.8	79.996	GKS09 - 3M□□□ 100-41	
	31	1187	1.0	92.563	GKS07 - 3M□□□ 100-41	
	31	1178	2.4	91.860	GKS09 - 3M□□□ 100-41	
	27	1337	0.8	104.296	GKS07 - 3M□□□ 100-41	
	27	1327	2.1	103.524	GKS09 - 3M□□□ 100-41	
	25	1440	0.9	112.338	GKS07 - 3M□□□ 100-41	
	25	1429	2.1	111.484	GKS09 - 3M□□□ 100-41	
	25	1427	3.1	111.335	GKS11 - 3M□□□ 100-41	
	23	1611	1.9	125.641	GKS09 - 3M□□□ 100-41	
	23	1608	3.1	125.448	GKS11 - 3M□□□ 100-41	
	20	1807	1.7	140.921	GKS09 - 3M□□□ 100-41	
	20	1804	2.5	140.732	GKS11 - 3M□□□ 100-41	
	18	2036	1.5	158.816	GKS09 - 3M□□□ 100-41	
	18	2033	2.5	158.571	GKS11 - 3M□□□ 100-41	
	16	2333	1.3	182.000	GKS09 - 3M□□□ 100-41	
	15	2392	2.5	186.572	GKS11 - 3M□□□ 100-41	
	14	2630	1.2	205.111	GKS09 - 3M□□□ 100-41	
	14	2695	2.2	210.222	GKS11 - 3M□□□ 100-41	
	13	2832	1.1	220.882	GKS09 - 3M□□□ 100-41	
	13	2903	2.1	226.431	GKS11 - 3M□□□ 100-41	
	11	3191	1.0	248.930	GKS09 - 3M□□□ 100-41	
	11	3271	1.8	255.133	GKS11 - 3M□□□ 100-41	
	10	3580	0.8	279.205	GKS09 - 3M□□□ 100-41	
	9.9	3670	1.6	286.219	GKS11 - 3M□□□ 100-41	
	8.8	4135	1.4	322.500	GKS11 - 3M□□□ 100-41	
n1=1450	224	162	1.6	6.485	GKS06 - 3M□□□ 112C22	
	244	149	3.2	5.955	GKS07 - 3M□□□ 112C22	
	176	207	2.6	8.254	GKS07 - 3M□□□ 112C22	
	158	230	1.6	9.196	GKS06 - 3M□□□ 112C22	
	158	230	3.2	9.171	GKS07 - 3M□□□ 112C22	
	143	254	1.6	10.147	GKS06 - 3M□□□ 112C22	
	143	253	3.2	10.124	GKS07 - 3M□□□ 112C22	
	127	285	1.2	11.382	GKS06 - 3M□□□ 112C22	
	127	285	2.2	11.378	GKS07 - 3M□□□ 112C22	
	115	316	1.4	12.612	GKS06 - 3M□□□ 112C22	
	114	318	2.6	12.711	GKS07 - 3M□□□ 112C22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

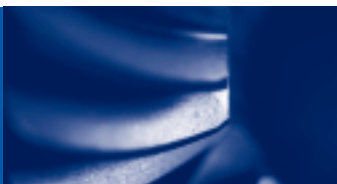
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=1450	98	371	1.6	14.824	GKS06 - 3M□□□ 112C22	
	98	370	2.8	14.798	GKS07 - 3M□□□ 112C22	
	87	418	1.4	16.699	GKS06 - 3M□□□ 112C22	
	87	417	2.6	16.674	GKS07 - 3M□□□ 112C22	
	81	446	1.2	17.809	GKS06 - 3M□□□ 112C22	
	84	432	2.3	17.270	GKS07 - 3M□□□ 112C22	
	71	509	1.3	20.329	GKS06 - 3M□□□ 112C22	
	71	513	2.2	20.511	GKS07 - 3M□□□ 112C22	
	63	573	1.1	22.902	GKS06 - 3M□□□ 112C22	
	63	578	2.0	23.111	GKS07 - 3M□□□ 112C22	
	56	651	1.0	26.017	GKS06 - 3M□□□ 112C22	
	57	632	1.9	25.244	GKS07 - 3M□□□ 112C22	
	51	712	1.0	28.461	GKS06 - 3M□□□ 112C22	
	51	708	1.7	28.274	GKS07 - 3M□□□ 112C22	
	46	797	1.5	31.858	GKS07 - 3M□□□ 112C22	
	40	902	1.4	36.063	GKS07 - 3M□□□ 112C22	
	35	1024	1.3	40.906	GKS07 - 3M□□□ 112C22	
	37	992	3.0	39.662	GKS09 - 3M□□□ 112C22	
	33	1105	1.2	44.178	GKS07 - 3M□□□ 112C22	
	34	1080	2.8	43.146	GKS09 - 3M□□□ 112C22	
	29	1260	1.0	50.345	GKS07 - 3M□□□ 112C22	
	30	1217	2.5	48.625	GKS09 - 3M□□□ 112C22	
	25	1439	0.9	57.501	GKS07 - 3M□□□ 112C22	
	25	1463	2.1	58.456	GKS09 - 3M□□□ 112C22	
	25	1443	3.2	57.683	GKS11 - 3M□□□ 112C22	
	22	1648	1.8	65.879	GKS09 - 3M□□□ 112C22	
	22	1626	3.2	64.995	GKS11 - 3M□□□ 112C22	
	20	1776	1.7	70.982	GKS09 - 3M□□□ 112C22	
	21	1774	2.7	70.887	GKS11 - 3M□□□ 112C22	
	18	2002	1.5	79.996	GKS09 - 3M□□□ 112C22	
	18	1999	2.7	79.873	GKS11 - 3M□□□ 112C22	
	16	2299	1.3	91.860	GKS09 - 3M□□□ 112C22	
	16	2295	2.2	91.737	GKS11 - 3M□□□ 112C22	
	16	2266	2.7	90.551	GKS14 - 3M□□□ 112C22	
	14	2590	1.2	103.524	GKS09 - 3M□□□ 112C22	
	14	2586	2.2	103.365	GKS11 - 3M□□□ 112C22	
	14	2553	2.7	102.029	GKS14 - 3M□□□ 112C22	
	13	2790	1.1	111.484	GKS09 - 3M□□□ 112C22	
	13	2786	1.8	111.335	GKS11 - 3M□□□ 112C22	
	13	2750	2.3	109.896	GKS14 - 3M□□□ 112C22	
	12	3144	1.0	125.641	GKS09 - 3M□□□ 112C22	
	12	3139	1.8	125.448	GKS11 - 3M□□□ 112C22	
	12	3098	2.3	123.826	GKS14 - 3M□□□ 112C22	
	10	3521	1.5	140.732	GKS11 - 3M□□□ 112C22	
	10	3476	1.8	138.913	GKS14 - 3M□□□ 112C22	
	9.1	3968	1.5	158.571	GKS11 - 3M□□□ 112C22	
	9.3	3917	1.8	156.522	GKS14 - 3M□□□ 112C22	
	7.8	4668	1.3	186.572	GKS11 - 3M□□□ 112C22	
	7.8	4668	2.5	186.572	GKS14 - 3M□□□ 112C22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b> n1=1450					<b>GKS □□ - 3M</b>	6-94
	6.9	5260	1.1	210.222	GKS11 - 3M□□□ 112C22	
	6.9	5260	2.2	210.222	GKS14 - 3M□□□ 112C22	
	6.4	5666	1.1	226.431	GKS11 - 3M□□□ 112C22	
	6.4	5666	2.0	226.431	GKS14 - 3M□□□ 112C22	
	5.7	6384	0.9	255.133	GKS11 - 3M□□□ 112C22	
	5.7	6384	1.8	255.133	GKS14 - 3M□□□ 112C22	
	5.1	7162	0.8	286.219	GKS11 - 3M□□□ 112C22	
	5.1	7162	1.6	286.219	GKS14 - 3M□□□ 112C22	
	4.5	8070	1.4	322.500	GKS14 - 3M□□□ 112C22	
					<b>GKS □□ - 4M</b>	6-110
	4.0	8917	1.3	362.512	GKS14 - 4M□□□ 112C22	
	3.7	9609	1.2	390.671	GKS14 - 4M□□□ 112C22	
	3.3	10827	1.1	440.193	GKS14 - 4M□□□ 112C22	
	2.8	12621	0.9	513.121	GKS14 - 4M□□□ 112C22	
2.5	14221	0.8	578.164	GKS14 - 4M□□□ 112C22		
<b>5.5 kW</b> n1=2890					<b>GKS □□ - 3M</b>	6-94
	446	112	1.9	6.485	GKS06 - 3M□□□ 112-31	
	350	143	3.0	8.254	GKS07 - 3M□□□ 112-31	
	314	159	1.9	9.196	GKS06 - 3M□□□ 112-31	
	285	175	1.9	10.147	GKS06 - 3M□□□ 112-31	
	254	197	1.4	11.382	GKS06 - 3M□□□ 112-31	
	254	196	2.5	11.378	GKS07 - 3M□□□ 112-31	
	229	218	1.6	12.612	GKS06 - 3M□□□ 112-31	
	227	219	3.0	12.711	GKS07 - 3M□□□ 112-31	
	195	256	1.9	14.824	GKS06 - 3M□□□ 112-31	
	173	288	1.7	16.699	GKS06 - 3M□□□ 112-31	
	173	288	3.0	16.674	GKS07 - 3M□□□ 112-31	
	162	307	1.4	17.809	GKS06 - 3M□□□ 112-31	
	167	298	2.7	17.270	GKS07 - 3M□□□ 112-31	
	142	351	1.5	20.329	GKS06 - 3M□□□ 112-31	
	141	354	2.5	20.511	GKS07 - 3M□□□ 112-31	
	126	395	1.2	22.902	GKS06 - 3M□□□ 112-31	
	125	399	2.4	23.111	GKS07 - 3M□□□ 112-31	
	111	449	1.2	26.017	GKS06 - 3M□□□ 112-31	
	115	436	2.2	25.244	GKS07 - 3M□□□ 112-31	
	102	491	1.1	28.461	GKS06 - 3M□□□ 112-31	
	102	488	2.0	28.274	GKS07 - 3M□□□ 112-31	
	90	554	0.9	32.063	GKS06 - 3M□□□ 112-31	
	91	550	1.7	31.858	GKS07 - 3M□□□ 112-31	
	80	627	0.9	36.303	GKS06 - 3M□□□ 112-31	
	80	623	1.7	36.063	GKS07 - 3M□□□ 112-31	
	71	706	1.5	40.906	GKS07 - 3M□□□ 112-31	
65	768	0.8	44.471	GKS06 - 3M□□□ 112-31		
65	763	1.6	44.178	GKS07 - 3M□□□ 112-31		
57	869	1.4	50.345	GKS07 - 3M□□□ 112-31		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

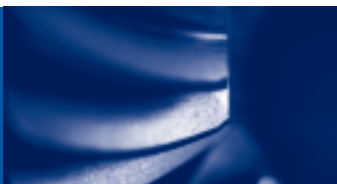
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n1=2890					<b>GKS □□ - 3M</b>	<b>6-94</b>
	50	993	1.2	57.501	GKS07 - 3M□□□ 112-31	
	49	1009	2.7	58.456	GKS09 - 3M□□□ 112-31	
	45	1118	1.0	64.790	GKS07 - 3M□□□ 112-31	
	44	1137	2.4	65.879	GKS09 - 3M□□□ 112-31	
	41	1217	1.0	70.474	GKS07 - 3M□□□ 112-31	
	41	1225	2.3	70.982	GKS09 - 3M□□□ 112-31	
	36	1371	0.8	79.407	GKS07 - 3M□□□ 112-31	
	36	1381	2.0	79.996	GKS09 - 3M□□□ 112-31	
	32	1586	1.7	91.860	GKS09 - 3M□□□ 112-31	
	32	1584	2.9	91.737	GKS11 - 3M□□□ 112-31	
	28	1787	1.6	103.524	GKS09 - 3M□□□ 112-31	
	28	1784	2.9	103.365	GKS11 - 3M□□□ 112-31	
	26	1925	1.6	111.484	GKS09 - 3M□□□ 112-31	
	26	1922	2.6	111.335	GKS11 - 3M□□□ 112-31	
	26	1897	3.0	109.896	GKS14 - 3M□□□ 112-31	
	23	2169	1.4	125.641	GKS09 - 3M□□□ 112-31	
	23	2166	2.6	125.448	GKS11 - 3M□□□ 112-31	
	21	2429	2.1	140.732	GKS11 - 3M□□□ 112-31	
	21	2398	2.6	138.913	GKS14 - 3M□□□ 112-31	
	18	2737	2.1	158.571	GKS11 - 3M□□□ 112-31	
	19	2702	2.6	156.522	GKS14 - 3M□□□ 112-31	
	16	3142	1.0	182.000	GKS09 - 3M□□□ 112-31	
	16	3221	1.9	186.572	GKS11 - 3M□□□ 112-31	
	14	3541	0.9	205.111	GKS09 - 3M□□□ 112-31	
	14	3629	1.6	210.222	GKS11 - 3M□□□ 112-31	
	14	3629	3.2	210.222	GKS14 - 3M□□□ 112-31	
	13	3909	1.5	226.431	GKS11 - 3M□□□ 112-31	
	13	3909	3.0	226.431	GKS14 - 3M□□□ 112-31	
	11	4404	1.3	255.133	GKS11 - 3M□□□ 112-31	
11	4404	2.6	255.133	GKS14 - 3M□□□ 112-31		
10	4941	1.2	286.219	GKS11 - 3M□□□ 112-31		
10	4941	2.4	286.219	GKS14 - 3M□□□ 112-31		
9.0	5567	1.1	322.500	GKS11 - 3M□□□ 112-31		
9.0	5567	2.1	322.500	GKS14 - 3M□□□ 112-31		
n1=1445	223	224	1.2	6.485	GKS06 - 3M□□□ 112C32	
	243	206	2.3	5.955	GKS07 - 3M□□□ 112C32	
	175	285	1.9	8.254	GKS07 - 3M□□□ 112C32	
	157	318	1.2	9.196	GKS06 - 3M□□□ 112C32	
	158	317	2.3	9.171	GKS07 - 3M□□□ 112C32	
	142	350	1.2	10.147	GKS06 - 3M□□□ 112C32	
	143	350	2.3	10.124	GKS07 - 3M□□□ 112C32	
	127	393	0.8	11.382	GKS06 - 3M□□□ 112C32	
	127	393	1.6	11.378	GKS07 - 3M□□□ 112C32	
	115	435	1.0	12.612	GKS06 - 3M□□□ 112C32	
	114	439	1.9	12.711	GKS07 - 3M□□□ 112C32	
	98	512	1.2	14.824	GKS06 - 3M□□□ 112C32	
	98	511	2.0	14.798	GKS07 - 3M□□□ 112C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1445	87	577	1.0	16.699	GKS06 - 3M□□□ 112C32	
	87	576	1.9	16.674	GKS07 - 3M□□□ 112C32	
	90	557	3.2	16.122	GKS09 - 3M□□□ 112C32	
	81	615	0.8	17.809	GKS06 - 3M□□□ 112C32	
	84	596	1.7	17.270	GKS07 - 3M□□□ 112C32	
	82	605	3.2	17.536	GKS09 - 3M□□□ 112C32	
	71	702	0.9	20.329	GKS06 - 3M□□□ 112C32	
	70	708	1.6	20.511	GKS07 - 3M□□□ 112C32	
	63	798	1.5	23.111	GKS07 - 3M□□□ 112C32	
	57	872	1.4	25.244	GKS07 - 3M□□□ 112C32	
	56	886	3.2	25.649	GKS09 - 3M□□□ 112C32	
	51	976	1.2	28.274	GKS07 - 3M□□□ 112C32	
	49	1009	2.9	29.228	GKS09 - 3M□□□ 112C32	
	45	1100	1.1	31.858	GKS07 - 3M□□□ 112C32	
	44	1137	2.6	32.940	GKS09 - 3M□□□ 112C32	
	40	1245	1.0	36.063	GKS07 - 3M□□□ 112C32	
	41	1215	2.5	35.193	GKS09 - 3M□□□ 112C32	
	35	1412	0.9	40.906	GKS07 - 3M□□□ 112C32	
	36	1369	2.2	39.662	GKS09 - 3M□□□ 112C32	
	33	1525	0.9	44.178	GKS07 - 3M□□□ 112C32	
	34	1490	2.0	43.146	GKS09 - 3M□□□ 112C32	
	30	1679	1.8	48.625	GKS09 - 3M□□□ 112C32	
	25	2018	1.5	58.456	GKS09 - 3M□□□ 112C32	
	25	1992	2.4	57.683	GKS11 - 3M□□□ 112C32	
	22	2274	1.3	65.879	GKS09 - 3M□□□ 112C32	
	22	2244	2.4	64.995	GKS11 - 3M□□□ 112C32	
	20	2451	1.2	70.982	GKS09 - 3M□□□ 112C32	
	20	2447	2.0	70.887	GKS11 - 3M□□□ 112C32	
	18	2762	1.1	79.996	GKS09 - 3M□□□ 112C32	
	18	2758	2.0	79.873	GKS11 - 3M□□□ 112C32	
	16	3171	1.0	91.860	GKS09 - 3M□□□ 112C32	
	16	3167	1.6	91.737	GKS11 - 3M□□□ 112C32	
	16	3126	2.0	90.551	GKS14 - 3M□□□ 112C32	
	14	3574	0.9	103.524	GKS09 - 3M□□□ 112C32	
	14	3569	1.6	103.365	GKS11 - 3M□□□ 112C32	
	14	3523	2.0	102.029	GKS14 - 3M□□□ 112C32	
	13	3844	1.3	111.335	GKS11 - 3M□□□ 112C32	
	13	3794	1.6	109.896	GKS14 - 3M□□□ 112C32	
	12	4331	1.3	125.448	GKS11 - 3M□□□ 112C32	
	12	4275	1.6	123.826	GKS14 - 3M□□□ 112C32	
	10	4859	1.1	140.732	GKS11 - 3M□□□ 112C32	
	10	4796	1.3	138.913	GKS14 - 3M□□□ 112C32	
	9.1	5475	1.1	158.571	GKS11 - 3M□□□ 112C32	
	9.2	5404	1.3	156.522	GKS14 - 3M□□□ 112C32	
	7.7	6441	0.9	186.572	GKS11 - 3M□□□ 112C32	
	7.7	6441	1.8	186.572	GKS14 - 3M□□□ 112C32	
	6.9	7258	0.8	210.222	GKS11 - 3M□□□ 112C32	
	6.9	7258	1.6	210.222	GKS14 - 3M□□□ 112C32	
	6.4	7817	1.5	226.431	GKS14 - 3M□□□ 112C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

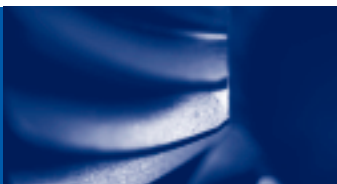
P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n <sub>1</sub> =1445					<b>GKS □□ - 3M</b>	6-94
	5.7	8808	1.3	255.133	GKS14 - 3M□□□ 112C32	
	5.1	9882	1.2	286.219	GKS14 - 3M□□□ 112C32	
	4.5	11134	1.0	322.500	GKS14 - 3M□□□ 112C32	6-110
	4.0	12303	0.9	362.512	GKS14 - 4M□□□ 112C32	
	3.7	13258	0.9	390.671	GKS14 - 4M□□□ 112C32	
<b>7.5 kW</b> n <sub>1</sub> =2900					<b>GKS □□ - 3M</b>	6-94
	447	152	1.4	6.485	GKS06 - 3M□□□ 112-41	
	487	140	2.7	5.955	GKS07 - 3M□□□ 112-41	
	351	194	2.2	8.254	GKS07 - 3M□□□ 112-41	
	315	216	1.4	9.196	GKS06 - 3M□□□ 112-41	
	316	215	2.7	9.171	GKS07 - 3M□□□ 112-41	
	286	238	1.4	10.147	GKS06 - 3M□□□ 112-41	
	287	238	2.7	10.124	GKS07 - 3M□□□ 112-41	
	255	267	1.0	11.382	GKS06 - 3M□□□ 112-41	
	255	267	1.8	11.378	GKS07 - 3M□□□ 112-41	
	230	296	1.2	12.612	GKS06 - 3M□□□ 112-41	
	228	298	2.2	12.711	GKS07 - 3M□□□ 112-41	
	196	348	1.4	14.824	GKS06 - 3M□□□ 112-41	
	196	347	2.4	14.798	GKS07 - 3M□□□ 112-41	
	174	392	1.2	16.699	GKS06 - 3M□□□ 112-41	
	174	391	2.2	16.674	GKS07 - 3M□□□ 112-41	
	163	418	1.0	17.809	GKS06 - 3M□□□ 112-41	
	168	405	2.0	17.270	GKS07 - 3M□□□ 112-41	
	143	477	1.1	20.329	GKS06 - 3M□□□ 112-41	
	141	481	1.9	20.511	GKS07 - 3M□□□ 112-41	
	127	537	0.9	22.902	GKS06 - 3M□□□ 112-41	
	126	542	1.7	23.111	GKS07 - 3M□□□ 112-41	
	112	610	0.9	26.017	GKS06 - 3M□□□ 112-41	
	115	592	1.6	25.244	GKS07 - 3M□□□ 112-41	
	102	668	0.8	28.461	GKS06 - 3M□□□ 112-41	
	103	663	1.5	28.274	GKS07 - 3M□□□ 112-41	
	91	747	1.3	31.858	GKS07 - 3M□□□ 112-41	
	88	773	3.1	32.940	GKS09 - 3M□□□ 112-41	
	80	846	1.2	36.063	GKS07 - 3M□□□ 112-41	
	82	826	2.9	35.193	GKS09 - 3M□□□ 112-41	
	71	960	1.1	40.906	GKS07 - 3M□□□ 112-41	
	73	930	2.6	39.662	GKS09 - 3M□□□ 112-41	
66	1036	1.1	44.178	GKS07 - 3M□□□ 112-41		
67	1012	2.7	43.146	GKS09 - 3M□□□ 112-41		
58	1181	1.0	50.345	GKS07 - 3M□□□ 112-41		
60	1141	2.4	48.625	GKS09 - 3M□□□ 112-41		
50	1349	0.9	57.501	GKS07 - 3M□□□ 112-41		
50	1371	2.0	58.456	GKS09 - 3M□□□ 112-41		
50	1353	3.2	57.683	GKS11 - 3M□□□ 112-41		
44	1545	1.8	65.879	GKS09 - 3M□□□ 112-41		
45	1525	3.2	64.995	GKS11 - 3M□□□ 112-41		

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>7.5 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =2900	41	1665	1.7	70.982	GKS09 - 3M□□□ 112-41	
	41	1663	2.6	70.887	GKS11 - 3M□□□ 112-41	
	36	1877	1.5	79.996	GKS09 - 3M□□□ 112-41	
	36	1874	2.6	79.873	GKS11 - 3M□□□ 112-41	
	32	2155	1.3	91.860	GKS09 - 3M□□□ 112-41	
	32	2152	2.1	91.737	GKS11 - 3M□□□ 112-41	
	32	2124	2.6	90.551	GKS14 - 3M□□□ 112-41	
	28	2429	1.2	103.524	GKS09 - 3M□□□ 112-41	
	28	2425	2.1	103.365	GKS11 - 3M□□□ 112-41	
	28	2393	2.6	102.029	GKS14 - 3M□□□ 112-41	
	26	2615	1.2	111.484	GKS09 - 3M□□□ 112-41	
	26	2612	1.9	111.335	GKS11 - 3M□□□ 112-41	
	26	2578	2.2	109.896	GKS14 - 3M□□□ 112-41	
	23	2947	1.0	125.641	GKS09 - 3M□□□ 112-41	
	23	2943	1.9	125.448	GKS11 - 3M□□□ 112-41	
	23	2905	2.4	123.826	GKS14 - 3M□□□ 112-41	
	21	3301	1.6	140.732	GKS11 - 3M□□□ 112-41	
	21	3259	1.9	138.913	GKS14 - 3M□□□ 112-41	
	18	3720	1.6	158.571	GKS11 - 3M□□□ 112-41	
	19	3672	1.9	156.522	GKS14 - 3M□□□ 112-41	
	16	4377	1.4	186.572	GKS11 - 3M□□□ 112-41	
	16	4377	2.7	186.572	GKS14 - 3M□□□ 112-41	
	14	4931	1.2	210.222	GKS11 - 3M□□□ 112-41	
	14	4931	2.3	210.222	GKS14 - 3M□□□ 112-41	
	13	5312	1.1	226.431	GKS11 - 3M□□□ 112-41	
	13	5312	2.2	226.431	GKS14 - 3M□□□ 112-41	
	11	5985	1.0	255.133	GKS11 - 3M□□□ 112-41	
	11	5985	1.9	255.133	GKS14 - 3M□□□ 112-41	
	10	6714	0.9	286.219	GKS11 - 3M□□□ 112-41	
	10	6714	1.7	286.219	GKS14 - 3M□□□ 112-41	
9.0	7565	1.5	322.500	GKS14 - 3M□□□ 112-41		
n <sub>1</sub> =1455	244	278	1.7	5.955	GKS07 - 3M□□□ 132C22	
	176	386	1.4	8.254	GKS07 - 3M□□□ 132C22	
	159	429	1.7	9.171	GKS07 - 3M□□□ 132C22	
	144	473	1.7	10.124	GKS07 - 3M□□□ 132C22	
	128	532	1.2	11.378	GKS07 - 3M□□□ 132C22	
	115	594	1.4	12.711	GKS07 - 3M□□□ 132C22	
	119	574	2.8	12.283	GKS09 - 3M□□□ 132C22	
	98	692	1.5	14.798	GKS07 - 3M□□□ 132C22	
	109	625	2.8	13.360	GKS09 - 3M□□□ 132C22	
	87	780	1.4	16.674	GKS07 - 3M□□□ 132C22	
	90	754	2.4	16.122	GKS09 - 3M□□□ 132C22	
	84	808	1.2	17.270	GKS07 - 3M□□□ 132C22	
	83	820	2.4	17.536	GKS09 - 3M□□□ 132C22	
	71	959	1.2	20.511	GKS07 - 3M□□□ 132C22	
	75	914	2.8	19.541	GKS09 - 3M□□□ 132C22	
	63	1081	1.1	23.111	GKS07 - 3M□□□ 132C22	
	66	1030	2.6	22.022	GKS09 - 3M□□□ 132C22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

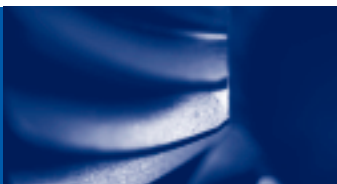
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>7.5 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1455	58	1180	1.0	25.244	GKS07 - 3M□□□ 132C22	
	57	1199	2.4	25.649	GKS09 - 3M□□□ 132C22	
	52	1322	0.9	28.274	GKS07 - 3M□□□ 132C22	
	50	1367	2.1	29.228	GKS09 - 3M□□□ 132C22	
	44	1540	1.9	32.940	GKS09 - 3M□□□ 132C22	
	41	1646	1.8	35.193	GKS09 - 3M□□□ 132C22	
	37	1854	1.6	39.662	GKS09 - 3M□□□ 132C22	
	36	1883	3.1	40.272	GKS11 - 3M□□□ 132C22	
	34	2017	1.5	43.146	GKS09 - 3M□□□ 132C22	
	33	2047	2.8	43.783	GKS11 - 3M□□□ 132C22	
	30	2274	1.3	48.625	GKS09 - 3M□□□ 132C22	
	30	2307	2.6	49.333	GKS11 - 3M□□□ 132C22	
	25	2733	1.1	58.456	GKS09 - 3M□□□ 132C22	
	25	2697	2.2	57.683	GKS11 - 3M□□□ 132C22	
	22	3080	1.0	65.879	GKS09 - 3M□□□ 132C22	
	22	3039	2.0	64.995	GKS11 - 3M□□□ 132C22	
	21	3319	0.9	70.982	GKS09 - 3M□□□ 132C22	
	21	3314	1.8	70.887	GKS11 - 3M□□□ 132C22	
	18	3740	0.8	79.996	GKS09 - 3M□□□ 132C22	
	18	3735	1.6	79.873	GKS11 - 3M□□□ 132C22	
	19	3632	3.2	77.681	GKS14 - 3M□□□ 132C22	
	16	4289	1.4	91.737	GKS11 - 3M□□□ 132C22	
	16	4234	2.7	90.551	GKS14 - 3M□□□ 132C22	
	14	4833	1.3	103.365	GKS11 - 3M□□□ 132C22	
	14	4770	2.4	102.029	GKS14 - 3M□□□ 132C22	
	13	5206	1.1	111.335	GKS11 - 3M□□□ 132C22	
	13	5138	2.3	109.896	GKS14 - 3M□□□ 132C22	
	12	5865	1.0	125.448	GKS11 - 3M□□□ 132C22	
	12	5790	2.0	123.826	GKS14 - 3M□□□ 132C22	
	11	6495	1.8	138.913	GKS14 - 3M□□□ 132C22	
	9.3	7318	1.6	156.522	GKS14 - 3M□□□ 132C22	
	7.8	8723	1.3	186.572	GKS14 - 3M□□□ 132C22	
	6.9	9829	1.2	210.222	GKS14 - 3M□□□ 132C22	
	6.4	10587	1.1	226.431	GKS14 - 3M□□□ 132C22	
	5.7	11929	1.0	255.133	GKS14 - 3M□□□ 132C22	
	5.1	13382	0.9	286.219	GKS14 - 3M□□□ 132C22	
<b>9.2 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =2925	491	170	2.2	5.955	GKS07 - 3M□□□ 132-21	
	354	236	1.8	8.254	GKS07 - 3M□□□ 132-21	
	319	262	2.2	9.171	GKS07 - 3M□□□ 132-21	
	289	289	2.2	10.124	GKS07 - 3M□□□ 132-21	
	257	325	1.5	11.378	GKS07 - 3M□□□ 132-21	
	230	363	1.8	12.711	GKS07 - 3M□□□ 132-21	
	198	422	2.0	14.798	GKS07 - 3M□□□ 132-21	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>9.2 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =2925	175	476	1.8	16.674	GKS07 - 3M□□□ 132-21	
	181	460	3.1	16.122	GKS09 - 3M□□□ 132-21	
	169	493	1.6	17.270	GKS07 - 3M□□□ 132-21	
	167	500	3.1	17.536	GKS09 - 3M□□□ 132-21	
	143	585	1.5	20.511	GKS07 - 3M□□□ 132-21	
	127	659	1.4	23.111	GKS07 - 3M□□□ 132-21	
	116	720	1.3	25.244	GKS07 - 3M□□□ 132-21	
	114	732	3.1	25.649	GKS09 - 3M□□□ 132-21	
	104	807	1.2	28.274	GKS07 - 3M□□□ 132-21	
	100	834	2.8	29.228	GKS09 - 3M□□□ 132-21	
	92	909	1.0	31.858	GKS07 - 3M□□□ 132-21	
	89	940	2.5	32.940	GKS09 - 3M□□□ 132-21	
	81	1029	1.0	36.063	GKS07 - 3M□□□ 132-21	
	83	1004	2.4	35.193	GKS09 - 3M□□□ 132-21	
	72	1167	0.9	40.906	GKS07 - 3M□□□ 132-21	
	74	1132	2.1	39.662	GKS09 - 3M□□□ 132-21	
	66	1260	0.9	44.178	GKS07 - 3M□□□ 132-21	
	68	1231	2.2	43.146	GKS09 - 3M□□□ 132-21	
	58	1436	0.8	50.345	GKS07 - 3M□□□ 132-21	
	60	1387	2.0	48.625	GKS09 - 3M□□□ 132-21	
	50	1668	1.7	58.456	GKS09 - 3M□□□ 132-21	
	44	1880	1.5	65.879	GKS09 - 3M□□□ 132-21	
	45	1854	2.9	64.995	GKS11 - 3M□□□ 132-21	
	41	2025	1.4	70.982	GKS09 - 3M□□□ 132-21	
	41	2022	2.7	70.887	GKS11 - 3M□□□ 132-21	
	37	2282	1.2	79.996	GKS09 - 3M□□□ 132-21	
	37	2279	2.4	79.873	GKS11 - 3M□□□ 132-21	
	32	2617	2.1	91.737	GKS11 - 3M□□□ 132-21	
	28	2949	1.9	103.365	GKS11 - 3M□□□ 132-21	
	26	3176	1.9	111.335	GKS11 - 3M□□□ 132-21	
	23	3579	1.7	125.448	GKS11 - 3M□□□ 132-21	
	21	3963	3.0	138.913	GKS14 - 3M□□□ 132-21	
	19	4466	2.6	156.522	GKS14 - 3M□□□ 132-21	
	16	5323	1.1	186.572	GKS11 - 3M□□□ 132-21	
	16	5323	2.2	186.572	GKS14 - 3M□□□ 132-21	
	14	5998	1.0	210.222	GKS11 - 3M□□□ 132-21	
	14	5998	1.9	210.222	GKS14 - 3M□□□ 132-21	
	13	6460	0.9	226.431	GKS11 - 3M□□□ 132-21	
	13	6460	1.8	226.431	GKS14 - 3M□□□ 132-21	
	12	7279	0.8	255.133	GKS11 - 3M□□□ 132-21	
	12	7279	1.6	255.133	GKS14 - 3M□□□ 132-21	
	10	8166	1.4	286.219	GKS14 - 3M□□□ 132-21	
	9.1	9201	1.3	322.500	GKS14 - 3M□□□ 132-21	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

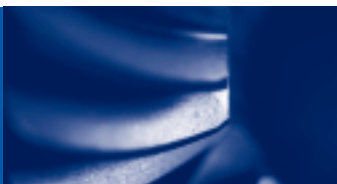
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>9.2 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1450	244	343	1.4	5.955	GKS07 - 3M□□□ 132C32	
	176	475	1.1	8.254	GKS07 - 3M□□□ 132C32	
	158	528	1.4	9.171	GKS07 - 3M□□□ 132C32	
	143	583	1.4	10.124	GKS07 - 3M□□□ 132C32	
	127	655	0.9	11.378	GKS07 - 3M□□□ 132C32	
	114	732	1.1	12.711	GKS07 - 3M□□□ 132C32	
	118	707	2.3	12.283	GKS09 - 3M□□□ 132C32	
	98	852	1.2	14.798	GKS07 - 3M□□□ 132C32	
	109	769	2.3	13.360	GKS09 - 3M□□□ 132C32	
	87	960	1.1	16.674	GKS07 - 3M□□□ 132C32	
	90	928	1.9	16.122	GKS09 - 3M□□□ 132C32	
	84	994	1.0	17.270	GKS07 - 3M□□□ 132C32	
	83	1009	1.9	17.536	GKS09 - 3M□□□ 132C32	
	71	1180	0.9	20.511	GKS07 - 3M□□□ 132C32	
	74	1125	2.3	19.541	GKS09 - 3M□□□ 132C32	
	63	1330	0.9	23.111	GKS07 - 3M□□□ 132C32	
	66	1267	2.1	22.022	GKS09 - 3M□□□ 132C32	
	57	1453	0.8	25.244	GKS07 - 3M□□□ 132C32	
	57	1476	1.9	25.649	GKS09 - 3M□□□ 132C32	
	50	1682	1.7	29.228	GKS09 - 3M□□□ 132C32	
	52	1613	3.2	28.021	GKS11 - 3M□□□ 132C32	
	44	1896	1.6	32.940	GKS09 - 3M□□□ 132C32	
	46	1817	3.0	31.573	GKS11 - 3M□□□ 132C32	
	41	2025	1.5	35.193	GKS09 - 3M□□□ 132C32	
	41	2057	2.7	35.741	GKS11 - 3M□□□ 132C32	
	37	2283	1.3	39.662	GKS09 - 3M□□□ 132C32	
	36	2318	2.5	40.272	GKS11 - 3M□□□ 132C32	
	34	2483	1.2	43.146	GKS09 - 3M□□□ 132C32	
	33	2520	2.3	43.783	GKS11 - 3M□□□ 132C32	
	30	2798	1.1	48.625	GKS09 - 3M□□□ 132C32	
	29	2839	2.1	49.333	GKS11 - 3M□□□ 132C32	
	25	3364	0.9	58.456	GKS09 - 3M□□□ 132C32	
	25	3320	1.8	57.683	GKS11 - 3M□□□ 132C32	
	22	3791	0.8	65.879	GKS09 - 3M□□□ 132C32	
	22	3741	1.6	64.995	GKS11 - 3M□□□ 132C32	
	23	3648	3.1	63.382	GKS14 - 3M□□□ 132C32	
	21	4080	1.5	70.887	GKS11 - 3M□□□ 132C32	
	21	3968	2.9	68.942	GKS14 - 3M□□□ 132C32	
	18	4597	1.3	79.873	GKS11 - 3M□□□ 132C32	
	19	4471	2.6	77.681	GKS14 - 3M□□□ 132C32	
	16	5280	1.1	91.737	GKS11 - 3M□□□ 132C32	
	16	5211	2.2	90.551	GKS14 - 3M□□□ 132C32	
	14	5949	1.0	103.365	GKS11 - 3M□□□ 132C32	
	14	5872	2.0	102.029	GKS14 - 3M□□□ 132C32	
	13	6407	0.9	111.335	GKS11 - 3M□□□ 132C32	
	13	6325	1.9	109.896	GKS14 - 3M□□□ 132C32	
	12	7220	0.8	125.448	GKS11 - 3M□□□ 132C32	
	12	7126	1.6	123.826	GKS14 - 3M□□□ 132C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>9.2 kW</b> n <sub>1</sub> =1450					<b>GKS □□ - 3M</b>	6-94
	10	7995	1.5	138.913	GKS14 - 3M□□□ 132C32	
	9.3	9008	1.3	156.522	GKS14 - 3M□□□ 132C32	
	7.8	10737	1.1	186.572	GKS14 - 3M□□□ 132C32	
	6.9	12099	1.0	210.222	GKS14 - 3M□□□ 132C32	
	6.4	13031	0.9	226.431	GKS14 - 3M□□□ 132C32	
					<b>GKS □□ - 4M</b>	6-110
6.1	13434	0.9	237.467	GKS14 - 4M□□□ 132C32		
<b>11 kW</b> n <sub>1</sub> =1460					<b>GKS □□ - 3M</b>	6-94
	245	407	1.2	5.955	GKS07 - 3M□□□ 160-22	
	177	564	1.0	8.254	GKS07 - 3M□□□ 160-22	
	159	627	1.2	9.171	GKS07 - 3M□□□ 160-22	
	144	692	1.2	10.124	GKS07 - 3M□□□ 160-22	
	115	869	1.0	12.711	GKS07 - 3M□□□ 160-22	
	119	839	1.9	12.283	GKS09 - 3M□□□ 160-22	
	99	1011	1.0	14.798	GKS07 - 3M□□□ 160-22	
	109	913	1.9	13.360	GKS09 - 3M□□□ 160-22	
	88	1140	0.9	16.674	GKS07 - 3M□□□ 160-22	
	91	1102	1.6	16.122	GKS09 - 3M□□□ 160-22	
	92	1085	2.8	15.874	GKS11 - 3M□□□ 160-22	
	85	1180	0.8	17.270	GKS07 - 3M□□□ 160-22	
	83	1198	1.6	17.536	GKS09 - 3M□□□ 160-22	
	85	1180	2.8	17.265	GKS11 - 3M□□□ 160-22	
	75	1335	1.9	19.541	GKS09 - 3M□□□ 160-22	
	66	1505	1.8	22.022	GKS09 - 3M□□□ 160-22	
	66	1503	3.3	21.989	GKS11 - 3M□□□ 160-22	
	57	1753	1.6	25.649	GKS09 - 3M□□□ 160-22	
	57	1751	2.8	25.615	GKS11 - 3M□□□ 160-22	
	50	1997	1.5	29.228	GKS09 - 3M□□□ 160-22	
	52	1915	2.7	28.021	GKS11 - 3M□□□ 160-22	
	44	2251	1.3	32.940	GKS09 - 3M□□□ 160-22	
	46	2158	2.6	31.573	GKS11 - 3M□□□ 160-22	
	42	2405	1.3	35.193	GKS09 - 3M□□□ 160-22	
	41	2443	2.3	35.741	GKS11 - 3M□□□ 160-22	
	37	2711	1.1	39.662	GKS09 - 3M□□□ 160-22	
	36	2752	2.1	40.272	GKS11 - 3M□□□ 160-22	
	34	2949	1.0	43.146	GKS09 - 3M□□□ 160-22	
	33	2992	1.9	43.783	GKS11 - 3M□□□ 160-22	
	30	3323	0.9	48.625	GKS09 - 3M□□□ 160-22	
	30	3371	1.8	49.333	GKS11 - 3M□□□ 160-22	
25	3942	1.5	57.683	GKS11 - 3M□□□ 160-22		
26	3844	3.0	56.251	GKS14 - 3M□□□ 160-22		
23	4442	1.3	64.995	GKS11 - 3M□□□ 160-22		
23	4332	2.7	63.382	GKS14 - 3M□□□ 160-22		
21	4844	1.2	70.887	GKS11 - 3M□□□ 160-22		
21	4712	2.4	68.942	GKS14 - 3M□□□ 160-22		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

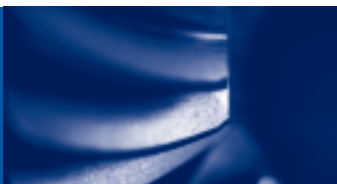
## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>11 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=1460	18	5459	1.1	79.873	GKS11 - 3M□□□ 160-22	
	19	5309	2.2	77.681	GKS14 - 3M□□□ 160-22	
	16	6188	1.9	90.551	GKS14 - 3M□□□ 160-22	
	14	6973	1.7	102.029	GKS14 - 3M□□□ 160-22	
	13	7510	1.6	109.896	GKS14 - 3M□□□ 160-22	
	12	8462	1.4	123.826	GKS14 - 3M□□□ 160-22	
	7.8	12750	0.9	186.572	GKS14 - 3M□□□ 160-22	
	7.0	14367	0.8	210.222	GKS14 - 3M□□□ 160-22	
<b>15 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n1=1460	245	555	0.8	5.955	GKS07 - 3M□□□ 160-32	
	159	855	0.8	9.171	GKS07 - 3M□□□ 160-32	
	144	943	0.8	10.124	GKS07 - 3M□□□ 160-32	
	119	1145	1.4	12.283	GKS09 - 3M□□□ 160-32	
	121	1127	2.5	12.094	GKS11 - 3M□□□ 160-32	
	109	1245	1.4	13.360	GKS09 - 3M□□□ 160-32	
	111	1226	2.5	13.154	GKS11 - 3M□□□ 160-32	
	91	1502	1.2	16.122	GKS09 - 3M□□□ 160-32	
	92	1479	2.1	15.874	GKS11 - 3M□□□ 160-32	
	83	1634	1.2	17.536	GKS09 - 3M□□□ 160-32	
	85	1609	2.1	17.265	GKS11 - 3M□□□ 160-32	
	75	1821	1.4	19.541	GKS09 - 3M□□□ 160-32	
	75	1819	2.5	19.515	GKS11 - 3M□□□ 160-32	
	66	2052	1.3	22.022	GKS09 - 3M□□□ 160-32	
	66	2049	2.4	21.989	GKS11 - 3M□□□ 160-32	
	57	2390	1.2	25.649	GKS09 - 3M□□□ 160-32	
	57	2387	2.1	25.615	GKS11 - 3M□□□ 160-32	
	50	2724	1.1	29.228	GKS09 - 3M□□□ 160-32	
	52	2611	2.0	28.021	GKS11 - 3M□□□ 160-32	
	44	3070	1.0	32.940	GKS09 - 3M□□□ 160-32	
	46	2942	1.9	31.573	GKS11 - 3M□□□ 160-32	
	42	3280	0.9	35.193	GKS09 - 3M□□□ 160-32	
	41	3331	1.7	35.741	GKS11 - 3M□□□ 160-32	
	42	3233	3.1	34.692	GKS14 - 3M□□□ 160-32	
	37	3696	0.8	39.662	GKS09 - 3M□□□ 160-32	
	36	3753	1.6	40.272	GKS11 - 3M□□□ 160-32	
	37	3643	3.0	39.089	GKS14 - 3M□□□ 160-32	
	33	4080	1.4	43.783	GKS11 - 3M□□□ 160-32	
	34	3964	2.7	42.531	GKS14 - 3M□□□ 160-32	
	30	4597	1.3	49.333	GKS11 - 3M□□□ 160-32	
	31	4466	2.5	47.923	GKS14 - 3M□□□ 160-32	
	25	5376	1.1	57.683	GKS11 - 3M□□□ 160-32	
	26	5242	2.2	56.251	GKS14 - 3M□□□ 160-32	
	23	6057	1.0	64.995	GKS11 - 3M□□□ 160-32	
	23	5907	1.9	63.382	GKS14 - 3M□□□ 160-32	
	21	6606	0.9	70.887	GKS11 - 3M□□□ 160-32	
	21	6425	1.8	68.942	GKS14 - 3M□□□ 160-32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>15 kW</b> n <sub>1</sub> =1460					<b>GKS □□ - 3M</b>	6-94
	18	7443	0.8	79.873	GKS11 - 3M□□□ 160-32	
	19	7239	1.6	77.681	GKS14 - 3M□□□ 160-32	
	16	8438	1.4	90.551	GKS14 - 3M□□□ 160-32	
	14	9508	1.2	102.029	GKS14 - 3M□□□ 160-32	
	13	10241	1.2	109.896	GKS14 - 3M□□□ 160-32	
	12	11539	1.0	123.826	GKS14 - 3M□□□ 160-32	
				<b>GKS □□ - 4M</b>	6-110	
11	12334	0.9	134.640	GKS14 - 4M□□□ 160-32		
<b>18.5 kW</b> n <sub>1</sub> =1470					<b>GKS □□ - 3M</b>	6-94
	120	1402	1.2	12.283	GKS09 - 3M□□□ 180-22	
	122	1381	2.0	12.094	GKS11 - 3M□□□ 180-22	
	110	1525	1.2	13.360	GKS09 - 3M□□□ 180-22	
	112	1502	2.0	13.154	GKS11 - 3M□□□ 180-22	
	91	1840	1.0	16.122	GKS09 - 3M□□□ 180-22	
	93	1812	1.7	15.874	GKS11 - 3M□□□ 180-22	
	88	1900	3.1	16.646	GKS14 - 3M□□□ 180-22	
	84	2002	1.0	17.536	GKS09 - 3M□□□ 180-22	
	85	1971	1.7	17.265	GKS11 - 3M□□□ 180-22	
	80	2090	2.9	18.311	GKS14 - 3M□□□ 180-22	
	75	2231	1.2	19.541	GKS09 - 3M□□□ 180-22	
	75	2228	2.0	19.515	GKS11 - 3M□□□ 180-22	
	67	2514	1.1	22.022	GKS09 - 3M□□□ 180-22	
	67	2510	1.9	21.989	GKS11 - 3M□□□ 180-22	
	57	2928	1.0	25.649	GKS09 - 3M□□□ 180-22	
	57	2924	1.7	25.615	GKS11 - 3M□□□ 180-22	
	60	2819	3.1	24.696	GKS14 - 3M□□□ 180-22	
	50	3337	0.9	29.228	GKS09 - 3M□□□ 180-22	
	53	3199	1.6	28.021	GKS11 - 3M□□□ 180-22	
	54	3101	2.9	27.165	GKS14 - 3M□□□ 180-22	
	47	3604	1.5	31.573	GKS11 - 3M□□□ 180-22	
	48	3494	2.9	30.609	GKS14 - 3M□□□ 180-22	
	41	4080	1.4	35.741	GKS11 - 3M□□□ 180-22	
	42	3960	2.5	34.692	GKS14 - 3M□□□ 180-22	
	37	4597	1.3	40.272	GKS11 - 3M□□□ 180-22	
	38	4462	2.5	39.089	GKS14 - 3M□□□ 180-22	
	34	4998	1.2	43.783	GKS11 - 3M□□□ 180-22	
	35	4855	2.2	42.531	GKS14 - 3M□□□ 180-22	
	30	5632	1.1	49.333	GKS11 - 3M□□□ 180-22	
	31	5471	2.1	47.923	GKS14 - 3M□□□ 180-22	
26	6585	0.9	57.683	GKS11 - 3M□□□ 180-22		
26	6421	1.8	56.251	GKS14 - 3M□□□ 180-22		
23	7419	0.8	64.995	GKS11 - 3M□□□ 180-22		
23	7235	1.6	63.382	GKS14 - 3M□□□ 180-22		
21	7870	1.5	68.942	GKS14 - 3M□□□ 180-22		
19	8868	1.3	77.681	GKS14 - 3M□□□ 180-22		
16	10337	1.1	90.551	GKS14 - 3M□□□ 180-22		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

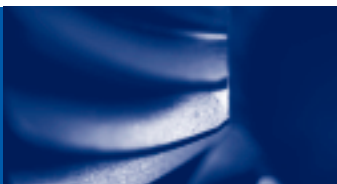
P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>18.5 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1470	14	11647	1.0	102.029	GKS14 - 3M□□□ 180-22	
	13	12545	0.9	109.896	GKS14 - 3M□□□ 180-22	
	12	14135	0.8	123.826	GKS14 - 3M□□□ 180-22	
<b>22 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1465	119	1673	1.0	12.283	GKS09 - 3M□□□ 180-32	
	121	1647	1.7	12.094	GKS11 - 3M□□□ 180-32	
	110	1820	1.0	13.360	GKS09 - 3M□□□ 180-32	
	111	1792	1.7	13.154	GKS11 - 3M□□□ 180-32	
	91	2196	0.8	16.122	GKS09 - 3M□□□ 180-32	
	92	2162	1.4	15.874	GKS11 - 3M□□□ 180-32	
	88	2267	2.6	16.646	GKS14 - 3M□□□ 180-32	
	84	2389	0.8	17.536	GKS09 - 3M□□□ 180-32	
	85	2352	1.4	17.265	GKS11 - 3M□□□ 180-32	
	80	2494	2.5	18.311	GKS14 - 3M□□□ 180-32	
	75	2662	1.0	19.541	GKS09 - 3M□□□ 180-32	
	75	2658	1.7	19.515	GKS11 - 3M□□□ 180-32	
	67	3000	0.9	22.022	GKS09 - 3M□□□ 180-32	
	67	2995	1.6	21.989	GKS11 - 3M□□□ 180-32	
	57	3494	0.8	25.649	GKS09 - 3M□□□ 180-32	
	57	3489	1.4	25.615	GKS11 - 3M□□□ 180-32	
	59	3364	2.6	24.696	GKS14 - 3M□□□ 180-32	
	52	3817	1.4	28.021	GKS11 - 3M□□□ 180-32	
	54	3700	2.5	27.165	GKS14 - 3M□□□ 180-32	
	46	4301	1.3	31.573	GKS11 - 3M□□□ 180-32	
	48	4169	2.4	30.609	GKS14 - 3M□□□ 180-32	
	41	4868	1.2	35.741	GKS11 - 3M□□□ 180-32	
	42	4725	2.1	34.692	GKS14 - 3M□□□ 180-32	
	36	5486	1.1	40.272	GKS11 - 3M□□□ 180-32	
	38	5324	2.1	39.089	GKS14 - 3M□□□ 180-32	
	34	5964	1.0	43.783	GKS11 - 3M□□□ 180-32	
	34	5793	1.9	42.531	GKS14 - 3M□□□ 180-32	
	30	6720	0.9	49.333	GKS11 - 3M□□□ 180-32	
	31	6528	1.7	47.923	GKS14 - 3M□□□ 180-32	
	26	7662	1.5	56.251	GKS14 - 3M□□□ 180-32	
	23	8633	1.3	63.382	GKS14 - 3M□□□ 180-32	
	21	9391	1.2	68.942	GKS14 - 3M□□□ 180-32	
	19	10581	1.1	77.681	GKS14 - 3M□□□ 180-32	
	16	12334	0.9	90.551	GKS14 - 3M□□□ 180-32	
	14	13898	0.8	102.029	GKS14 - 3M□□□ 180-32	
<b>30 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1465	121	2246	1.2	12.094	GKS11 - 3M□□□ 200N32	
	118	2310	2.0	12.435	GKS14 - 3M□□□ 200N32	
	111	2443	1.2	13.154	GKS11 - 3M□□□ 200N32	
	108	2512	2.0	13.525	GKS14 - 3M□□□ 200N32	
	92	2949	1.0	15.874	GKS11 - 3M□□□ 200N32	
	88	3092	1.9	16.646	GKS14 - 3M□□□ 200N32	

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>30 kW</b> n1=1465					<b>GKS □□ - 3M</b>	6-94
	85	3207	1.0	17.265	GKS11 - 3M□□□ 200N32	
	80	3401	1.8	18.311	GKS14 - 3M□□□ 200N32	
	75	3625	1.2	19.515	GKS11 - 3M□□□ 200N32	
	73	3727	2.0	20.065	GKS14 - 3M□□□ 200N32	
	67	4084	1.2	21.989	GKS11 - 3M□□□ 200N32	
	65	4199	2.0	22.609	GKS14 - 3M□□□ 200N32	
	57	4758	1.0	25.615	GKS11 - 3M□□□ 200N32	
	59	4587	1.9	24.696	GKS14 - 3M□□□ 200N32	
	52	5205	1.0	28.021	GKS11 - 3M□□□ 200N32	
	54	5046	1.8	27.165	GKS14 - 3M□□□ 200N32	
	46	5865	0.9	31.573	GKS11 - 3M□□□ 200N32	
	48	5685	1.8	30.609	GKS14 - 3M□□□ 200N32	
	41	6639	0.9	35.741	GKS11 - 3M□□□ 200N32	
	42	6444	1.5	34.692	GKS14 - 3M□□□ 200N32	
	38	7261	1.5	39.089	GKS14 - 3M□□□ 200N32	
	34	7900	1.4	42.531	GKS14 - 3M□□□ 200N32	
	31	8901	1.3	47.923	GKS14 - 3M□□□ 200N32	
	26	10448	1.1	56.251	GKS14 - 3M□□□ 200N32	
	23	11773	1.0	63.382	GKS14 - 3M□□□ 200N32	
<b>37 kW</b> n1=1470					<b>GKS □□ - 3M</b>	6-94
	122	2761	1.0	12.094	GKS11 - 3M□□□ 225N12	
	118	2839	1.6	12.435	GKS14 - 3M□□□ 225N12	
	112	3003	1.0	13.154	GKS11 - 3M□□□ 225N12	
	109	3088	1.6	13.525	GKS14 - 3M□□□ 225N12	
	93	3624	0.9	15.874	GKS11 - 3M□□□ 225N12	
	88	3800	1.6	16.646	GKS14 - 3M□□□ 225N12	
	85	3942	0.9	17.265	GKS11 - 3M□□□ 225N12	
	80	4180	1.5	18.311	GKS14 - 3M□□□ 225N12	
	75	4455	1.0	19.515	GKS11 - 3M□□□ 225N12	
	73	4581	1.6	20.065	GKS14 - 3M□□□ 225N12	
	67	5020	1.0	21.989	GKS11 - 3M□□□ 225N12	
	65	5162	1.6	22.609	GKS14 - 3M□□□ 225N12	
	57	5848	0.9	25.615	GKS11 - 3M□□□ 225N12	
	60	5638	1.6	24.696	GKS14 - 3M□□□ 225N12	
	53	6397	0.8	28.021	GKS11 - 3M□□□ 225N12	
	54	6202	1.5	27.165	GKS14 - 3M□□□ 225N12	
	48	6988	1.5	30.609	GKS14 - 3M□□□ 225N12	
	42	7920	1.3	34.692	GKS14 - 3M□□□ 225N12	
	38	8924	1.2	39.089	GKS14 - 3M□□□ 225N12	
	35	9710	1.1	42.531	GKS14 - 3M□□□ 225N12	
	31	10941	1.0	47.923	GKS14 - 3M□□□ 225N12	
	26	12843	0.9	56.251	GKS14 - 3M□□□ 225N12	
<b>45 kW</b> n1=1470					<b>GKS □□ - 3M</b>	6-94
	122	3358	0.8	12.094	GKS11 - 3M□□□ 225N22	
	118	3453	1.3	12.435	GKS14 - 3M□□□ 225N22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-bevel geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>45 kW</b>					<b>GKS □□ - 3M</b>	<b>6-94</b>
n <sub>1</sub> =1470	112	3652	0.8	13.154	GKS11 - 3M□□□ 225N22	
	109	3755	1.3	13.525	GKS14 - 3M□□□ 225N22	
	88	4622	1.3	16.646	GKS14 - 3M□□□ 225N22	
	80	5084	1.2	18.311	GKS14 - 3M□□□ 225N22	
	75	5419	0.8	19.515	GKS11 - 3M□□□ 225N22	
	73	5572	1.3	20.065	GKS14 - 3M□□□ 225N22	
	65	6278	1.3	22.609	GKS14 - 3M□□□ 225N22	
	60	6857	1.3	24.696	GKS14 - 3M□□□ 225N22	
	54	7543	1.2	27.165	GKS14 - 3M□□□ 225N22	
	48	8499	1.2	30.609	GKS14 - 3M□□□ 225N22	
	42	9633	1.0	34.692	GKS14 - 3M□□□ 225N22	
	38	10854	1.0	39.089	GKS14 - 3M□□□ 225N22	
	35	11810	0.9	42.531	GKS14 - 3M□□□ 225N22	
	31	13307	0.8	47.923	GKS14 - 3M□□□ 225N22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \leq 190 \text{ Nm}$

GKS 04 - 3 N												Dimensions page 6-118			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D		
i	$P_{1perm}$ [kW] $M_{2perm}$ [Nm]														
5.123	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.21	1.21		
	$M_2$		37	50	62		46	62	77		48	80	80		
7.026	$P_1$		2.23	3.04	3.30		1.37	1.87	2.03		0.73	1.02	1.02		
	$M_2$		51	69	75		63	85	93		66	93	93		
8.167	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.21	1.21		
	$M_2$		59	80	99		73	99	122		77	128	128		
8.991	$P_1$		2.23	2.87	2.87		1.37	1.77	1.77		0.78	0.88	0.88		
	$M_2$		65	84	84		80	103	103		90	103	103		
9.836	$P_1$		2.23	2.71	2.71		1.37	1.67	1.67		0.74	0.83	0.83		
	$M_2$		71	86	86		88	106	106		94	106	106		
11.730	$P_1$		2.23	3.04	3.75		1.37	1.87	2.31		0.73	1.18	1.18		
	$M_2$		85	115	143		104	142	175		110	180	180		
13.067	$P_1$		2.23	3.04	3.17		1.37	1.87	1.95		0.73	0.97	0.97		
	$M_2$		95	129	134		116	158	165		123	165	165		
14.333	$P_1$		2.23	2.87	2.87		1.37	1.77	1.77		0.78	0.88	0.88		
	$M_2$		104	133	133		128	164	164		144	164	164		
16.087	$P_1$		2.23	2.82	2.82		1.37	1.74	1.74		0.73	0.87	0.87		
	$M_2$		116	147	147		143	181	181		151	181	181		
17.920	$P_1$		2.23	2.32	2.32		1.37	1.43	1.43		0.72	0.72	0.72		
	$M_2$		130	135	135		160	166	166		166	166	166		
20.588	$P_1$		2.22	2.22	2.22		1.36	1.36	1.36		0.68	0.68	0.68		
	$M_2$		148	148	148		182	182	182		182	182	182		
22.522	$P_1$		2.03	2.03	2.03		1.25	1.25	1.25		0.62	0.62	0.62		
	$M_2$		148	148	148		182	182	182		182	182	182		
25.088	$P_1$		1.67	1.67	1.67		1.03	1.03	1.03		0.51	0.51	0.51		
	$M_2$		136	136	136		167	167	167		167	167	167		
28.727	$P_1$		1.60	1.60	1.60		0.98	0.98	0.98		0.49	0.49	0.49		
	$M_2$		149	149	149		183	183	183		183	183	183		
32.000	$P_1$		1.31	1.31	1.31		0.81	0.81	0.81		0.40	0.40	0.40		
	$M_2$		136	136	136		167	167	167		167	167	167		
35.191	$P_1$		1.30	1.30	1.30		0.80	0.80	0.80		0.40	0.40	0.40		
	$M_2$		149	149	149		183	183	183		183	183	183		
39.200	$P_1$		1.07	1.07	1.07		0.66	0.66	0.66		0.33	0.33	0.33		
	$M_2$		136	136	136		168	168	168		168	168	168		
44.240	$P_1$	1.19	1.19	1.19		0.65	0.65	0.65		0.32	0.32	0.32			
	$M_2$	171	171	171		185	185	185		185	185	185			
50.943	$P_1$		1.02	1.02	1.02		0.55	0.55	0.55		0.28	0.28	0.28		
	$M_2$		168	168	168		182	182	182		182	182	182		
56.976	$P_1$	0.94	0.94	0.94		0.51	0.51	0.51		0.25	0.25	0.25			
	$M_2$	173	173	173		187	187	187		187	187	187			
64.978	$P_1$		0.80	0.80	0.80		0.44	0.44	0.44		0.22	0.22	0.22		
	$M_2$		169	169	169		183	183	183		183	183	183		
72.210	$P_1$	0.75	0.75			0.41	0.41			0.20	0.20				
	$M_2$	175	175			190	190			190	190				
79.599	$P_1$		0.66	0.66	0.66		0.36	0.36	0.36		0.18	0.18	0.18		
	$M_2$		169	169	169		183	183	183		183	183	183		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \leq 190 \text{ Nm}$

GKS 04 - 3 N												Dimensions page 6-118	
$n_1$	2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>				
IEC connection	63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80	
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]												
90.491	P <sub>1</sub> M <sub>2</sub>	0.60 175	0.60 175			0.32 190	0.32 190			0.16 190	0.16 190		
100.067	P <sub>1</sub> M <sub>2</sub>	0.53 171	0.53 171	0.53 171		0.29 185	0.29 185	0.29 185		0.14 185	0.14 185	0.14 185	
111.467	P <sub>1</sub> M <sub>2</sub>	0.47 170	0.47 170	0.47 170		0.24 170	0.24 170	0.24 170		0.12 170	0.12 170	0.12 170	
128.874	P <sub>1</sub> M <sub>2</sub>	0.45 187	0.45 187	0.45 187		0.22 187	0.22 187	0.22 187		0.11 187	0.11 187	0.11 187	
143.556	P <sub>1</sub> M <sub>2</sub>	0.37 172	0.37 172	0.37 172		0.19 172	0.19 172	0.19 172		0.09 172	0.09 172	0.09 172	
163.332	P <sub>1</sub> M <sub>2</sub>	0.36 190	0.36 190			0.18 190	0.18 190			0.09 190	0.09 190		
181.939	P <sub>1</sub> M <sub>2</sub>	0.30 174	0.30 174			0.15 174	0.15 174			0.07 174	0.07 174		
204.682	P <sub>1</sub> M <sub>2</sub>	0.29 190	0.29 190			0.14 190	0.14 190			0.07 190	0.07 190		
228.000	P <sub>1</sub> M <sub>2</sub>	0.24 177	0.24 177			0.12 177	0.12 177			0.06 177	0.06 177		
269.660	P <sub>1</sub> M <sub>2</sub>	0.22 190				0.11 190				0.05 190			
300.381	P <sub>1</sub> M <sub>2</sub>	0.18 178				0.09 178				0.05 178			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 331 \text{ Nm}$

GKS 05 - 3 N													Dimensions page 6-118			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>						
IEC connection		71	71 100/112	80 71	90 80	100/112	71 80/90	80 71	90 80	100/112	71 80/90	80 80	90 80/90			
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E			
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]															
6.863	P <sub>1</sub> M <sub>2</sub>	3.75 83 5.39 120				2.31 103 3.32 147				1.54 137 1.66 147						
9.412	P <sub>1</sub> M <sub>2</sub>	3.75 114 4.39 134				2.31 141 2.70 165				1.35 165 1.35 165						
10.569	P <sub>1</sub> M <sub>2</sub>	3.75 128 5.39 184				2.31 158 3.32 227				1.54 211 1.66 227						
11.667	P <sub>1</sub> M <sub>2</sub>	3.75 142 5.39 204				2.31 175 3.32 251				1.54 233 1.66 251						
13.177	P <sub>1</sub> M <sub>2</sub>	2.23 95	3.04 130	3.15 134	3.15 134	1.37 117	1.87 160	1.94 165	1.94 165	0.73 124	0.97 165	0.97 165	0.97 165			
14.494	P <sub>1</sub> M <sub>2</sub>	3.75 176 4.39 206				2.31 217 2.70 254				1.35 254 1.35 254						
16.000	P <sub>1</sub> M <sub>2</sub>	3.75 194 4.39 227				2.31 239 2.70 280				1.35 280 1.35 280						
17.054	P <sub>1</sub> M <sub>2</sub>	3.75 207 4.61 255				2.31 255 2.84 313				1.42 313 1.42 313						
19.216	P <sub>1</sub> M <sub>2</sub>	3.75 233 3.88 241				2.31 287 2.39 297				1.19 297 1.19 297						
23.388	P <sub>1</sub> M <sub>2</sub>	3.53 267 3.53 267				2.17 329 2.17 329				1.09 329 1.09 329						
26.353	P <sub>1</sub> M <sub>2</sub>	2.84 242 2.84 242				1.75 298 1.75 298				0.87 298 0.87 298						
29.931	P <sub>1</sub> M <sub>2</sub>	2.76 268 2.76 268				1.70 330 1.70 330				0.85 330 0.85 330						
32.744	P <sub>1</sub> M <sub>2</sub>	2.23 237	2.53 269	2.53 269	2.53 269	1.37 292	1.56 331	1.56 331	1.56 331	0.73 308	0.78 331	0.78 331	0.78 331			
36.894	P <sub>1</sub> M <sub>2</sub>	2.05 245	2.05 245	2.05 245	2.05 245	1.26 302	1.26 302	1.26 302	1.26 302	0.63 302	0.63 302	0.63 302	0.63 302			
41.765	P <sub>1</sub> M <sub>2</sub>	1.99 269	1.99 269	1.99 269	1.99 269	1.22 331	1.22 331	1.22 331	1.22 331	0.61 331	0.61 331	0.61 331	0.61 331			
47.059	P <sub>1</sub> M <sub>2</sub>	1.84 281	1.84 281	1.84 281	1.84 281	1.00 304	1.00 304	1.00 304	1.00 304	0.50 304	0.50 304	0.50 304	0.50 304			
51.162	P <sub>1</sub> M <sub>2</sub>	1.84 305 1.84 305				1.00 331 1.00 331				0.50 331 0.50 331						
57.647	P <sub>1</sub> M <sub>2</sub>	1.52 283 1.52 283				0.82 307 0.82 307				0.41 307 0.41 307						
66.592	P <sub>1</sub> M <sub>2</sub>	1.42 305	1.42 305	1.42 305		0.77 331	0.77 331	0.77 331		0.38 331	0.38 331	0.38 331				
75.033	P <sub>1</sub> M <sub>2</sub>	1.18 286	1.18 286	1.18 286		0.64 310	0.64 310	0.64 310		0.32 310	0.32 310	0.32 310				
82.833	P <sub>1</sub> M <sub>2</sub>	1.14 305	1.14 305	1.14 305		0.62 331	0.62 331	0.62 331		0.31 331	0.31 331	0.31 331				
93.333	P <sub>1</sub> M <sub>2</sub>	0.96 291	0.96 291	0.96 291		0.52 315	0.52 315	0.52 315		0.26 315	0.26 315	0.26 315				
107.196	P <sub>1</sub> M <sub>2</sub>	0.88 305	0.88 305			0.48 331	0.48 331			0.24 331	0.24 331					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 331 \text{ Nm}$

GKS 05 - 3 N													Dimensions page 6-118		
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		71	71 100/112	80 71	90 80	100/112	71 80/90	80 71	90 80	100/112	71 80/90	80 80	90 80/90		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]														
120.784	P <sub>1</sub> M <sub>2</sub>	0.81 315	0.81 315			0.40 315	0.40 315			0.20 315	0.20 315				
130.097	P <sub>1</sub> M <sub>2</sub>	0.79 331	0.79 331			0.39 331	0.39 331			0.20 331	0.20 331				
146.588	P <sub>1</sub> M <sub>2</sub>	0.66 315	0.66 315			0.33 315	0.33 315			0.17 315	0.17 315				
166.276	P <sub>1</sub> M <sub>2</sub>	0.61 331				0.31 331				0.15 331					
187.353	P <sub>1</sub> M <sub>2</sub>	0.52 315				0.26 315				0.13 315					
211.200	P <sub>1</sub> M <sub>2</sub>	0.46 314	0.46 314			0.23 314	0.23 314			0.12 314	0.12 314				
227.484	P <sub>1</sub> M <sub>2</sub>	0.38 278	0.38 278			0.19 278	0.19 278			0.09 278	0.09 278				
256.320	P <sub>1</sub> M <sub>2</sub>	0.38 313	0.38 313			0.19 313	0.19 313			0.09 313	0.09 313				
290.745	P <sub>1</sub> M <sub>2</sub>	0.29 277				0.15 277				0.07 277					
327.600	P <sub>1</sub> M <sub>2</sub>	0.29 312				0.15 312				0.07 312					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 325 \text{ Nm}$

GKS 05 - 4 N											Dimensions page 6-126		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	63	71 63	80 71	63	71 63	80 71			
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1A	□B	□C	1A	□B	□C	1A	□B	□C			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
95.238	$P_1$	0.51	0.51	0.51	0.28	0.28	0.28	0.14	0.14	0.14			
	$M_2$	156	156	156	169	169	169	169	169	169			
114.987	$P_1$	0.68	0.68	0.68	0.34	0.34	0.34	0.17	0.17	0.17			
	$M_2$	250	250	250	250	250	250	250	250	250			
126.933	$P_1$	0.70	0.70	0.70	0.35	0.35	0.35	0.18	0.18	0.18			
	$M_2$	284	284	284	284	284	284	284	284	284			
146.667	$P_1$	0.54	0.54	0.54	0.27	0.27	0.27	0.13	0.13	0.13			
	$M_2$	250	250	250	250	250	250	250	250	250			
161.905	$P_1$	0.55	0.55	0.55	0.28	0.28	0.28	0.14	0.14	0.14			
	$M_2$	284	284	284	284	284	284	284	284	284			
185.547	$P_1$	0.55	0.55	0.55	0.28	0.28	0.28	0.14	0.14	0.14			
	$M_2$	325	325	325	325	325	325	325	325	325			
209.067	$P_1$	0.47	0.47	0.47	0.24	0.24	0.24	0.12	0.12	0.12			
	$M_2$	315	315	315	315	315	315	315	315	315			
225.867	$P_1$	0.35	0.35	0.35	0.17	0.17	0.17	0.09	0.09	0.09			
	$M_2$	250	250	250	250	250	250	250	250	250			
236.667	$P_1$	0.43	0.43	0.43	0.22	0.22	0.22	0.11	0.11	0.11			
	$M_2$	325	325	325	325	325	325	325	325	325			
289.917	$P_1$		0.35	0.35		0.18	0.18		0.09	0.09			
	$M_2$		325	325		325	325		325	325			
326.667	$P_1$		0.30	0.30		0.15	0.15		0.08	0.08			
	$M_2$		315	315		315	315		315	315			
364.467	$P_1$	0.28	0.28	0.28	0.14	0.14	0.14	0.07	0.07	0.07			
	$M_2$	325	325	325	325	325	325	325	325	325			
410.667	$P_1$	0.24	0.24	0.24	0.12	0.12	0.12	0.06	0.06	0.06			
	$M_2$	315	315	315	315	315	315	315	315	315			
469.389	$P_1$	0.22	0.22	0.22	0.11	0.11	0.11	0.05	0.05	0.05			
	$M_2$	325	325	325	325	325	325	325	325	325			
510.000	$P_1$	0.18	0.18		0.09	0.09		0.04	0.04				
	$M_2$	284	284		284	284		284	284				
528.889	$P_1$	0.19	0.19	0.19	0.09	0.09	0.09	0.05	0.05	0.05			
	$M_2$	315	315	315	315	315	315	315	315	315			
594.894	$P_1$	0.17	0.17		0.09	0.09		0.04	0.04				
	$M_2$	325	325		325	325		325	325				
670.303	$P_1$	0.15	0.15		0.07	0.07		0.04	0.04				
	$M_2$	315	315		315	315		315	315				
820.760	$P_1$	0.12	0.12	0.12	0.06	0.06	0.06	0.03	0.03	0.03			
	$M_2$	325	325	325	325	325	325	325	325	325			
924.800	$P_1$	0.11	0.11	0.11	0.05	0.05	0.05	0.03	0.03	0.03			
	$M_2$	315	315	315	315	315	315	315	315	315			
1040.215	$P_1$	0.10	0.10		0.05	0.05		0.03	0.03				
	$M_2$	325	325		325	325		325	325				

Thermal power limit not considered (see page 2-4)

## Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 325 \text{ Nm}$

GKS 05 - 4 N										Dimensions page 6-126		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		63	71 63	80 71	63	71 63	80 71	63	71 63	80 71		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		1A	□B	□C	1A	□B	□C	1A	□B	□C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
1172.073	$P_1$	0.08	0.08		0.04	0.04		0.02	0.02			
	$M_2$	315	315		315	315		315	315			
1303.560	$P_1$	0.08	0.08		0.04	0.04		0.02	0.02			
	$M_2$	325	325		325	325		325	325			
1468.800	$P_1$	0.07	0.07		0.03	0.03		0.02	0.02			
	$M_2$	315	315		315	315		315	315			
1717.389	$P_1$	0.06			0.03			0.02				
	$M_2$	325			325			325				
1935.086	$P_1$	0.05			0.03			0.01				
	$M_2$	315			315			315				

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 702 \text{ Nm}$

GKS 06 - 3 N											Dimensions page 6-118					
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F
i	$P_{1perm}$ [kW] $M_{2perm}$ [Nm]															
6.485	$P_1$				10.2	10.2				6.26	6.26				3.13	3.13
	$M_2$				214	214				263	263				263	263
9.196	$P_1$				10.2	10.2				6.26	6.26				3.13	3.13
	$M_2$				303	303				373	373				373	373
10.147	$P_1$				10.2	10.2				6.26	6.26				3.13	3.13
	$M_2$				334	334				412	412				412	412
11.382	$P_1$			3.75	7.30	7.30			2.31	4.49	4.49			1.54	2.25	2.25
	$M_2$			138	269	269			170	331	331			227	331	331
12.612	$P_1$				8.47	8.47				5.21	5.21				2.61	2.61
	$M_2$				346	346				426	426				426	426
14.824	$P_1$				10.2	10.2				6.25	6.25				3.13	3.13
	$M_2$				488	488				600	600				600	600
16.699	$P_1$				9.07	9.07				5.58	5.58				2.79	2.79
	$M_2$				491	491				604	604				604	604
17.809	$P_1$			3.75	7.30	7.30			2.31	4.49	4.49			1.54	2.25	2.25
	$M_2$			216	421	421			266	518	518			355	518	518
20.329	$P_1$				8.20	8.20				5.05	5.05				2.53	2.53
	$M_2$				540	540				665	665				665	665
22.902	$P_1$				6.63	6.63				4.08	4.08				2.04	2.04
	$M_2$				492	492				606	606				606	606
26.017	$P_1$			3.75	6.54	6.54			2.31	4.03	4.03			1.54	2.01	2.01
	$M_2$			316	551	551			389	679	679			519	679	679
28.461	$P_1$			3.75	6.01	6.01			2.31	3.70	3.70			1.54	1.85	1.85
	$M_2$			346	554	554			426	682	682			568	682	682
32.063	$P_1$			3.75	4.77	4.77			2.31	2.94	2.94			1.47	1.47	1.47
	$M_2$			390	495	495			480	610	610			610	610	610
36.303	$P_1$		3.04	3.75	4.73	4.73		1.87	2.31	2.91	2.91		1.25	1.46	1.46	1.46
	$M_2$		357	441	556	556		440	543	685	685		586	685	685	685
41.472	$P_1$				4.17	4.17				2.56	2.56				1.28	1.28
	$M_2$				560	560				689	689				689	689
44.471	$P_1$			4.26	4.41	4.41			2.31	2.39	2.39			1.20	1.20	1.20
	$M_2$			614	636	636			665	689	689			689	689	689
53.074	$P_1$			3.73	3.73	3.73			2.02	2.02	2.02			1.01	1.01	1.01
	$M_2$			641	641	641			695	695	695			695	695	695
57.882	$P_1$		3.42	3.42	3.42			1.85	1.85	1.85			0.93	0.93	0.93	0.93
	$M_2$		641	641	641			695	695	695			695	695	695	695
65.207	$P_1$		2.73	2.73	2.73			1.48	1.48	1.48			0.74	0.74	0.74	0.74
	$M_2$		576	576	576			624	624	624			624	624	624	624
72.000	$P_1$		2.78	2.78	2.78			1.51	1.51	1.51			0.75	0.75	0.75	0.75
	$M_2$		648	648	648			702	702	702			702	702	702	702
81.111	$P_1$		2.21	2.21	2.21			1.20	1.20	1.20			0.60	0.60	0.60	0.60
	$M_2$		581	581	581			630	630	630			630	630	630	630
93.177	$P_1$	1.63	2.15	2.15			0.88	1.16	1.16			0.44	0.58	0.58		
	$M_2$	491	648	648			532	702	702			532	702	702		
104.967	$P_1$	1.63	1.72	1.72			0.88	0.93	0.93			0.44	0.47	0.47		
	$M_2$	553	586	586			599	635	635			599	635	635		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 702 \text{ Nm}$

GKS 06 - 3 N																Dimensions page 6-118				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>								
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90				
For the geometrical assignment of servo/DC motors see section 2																				
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F				
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																			
113.082	P <sub>1</sub>	1.47	1.92	1.92						0.74	0.96	0.96	0.37	0.48	0.48					
	M <sub>2</sub>	539	702	702						539	702	702	539	702	702					
127.392	P <sub>1</sub>	1.47	1.54	1.54						0.74	0.77	0.77	0.37	0.39	0.39					
	M <sub>2</sub>	607	635	635						607	635	635	607	635	635					
142.941	P <sub>1</sub>	1.18	1.52						0.59	0.76										
	M <sub>2</sub>	546	702						546	702										
161.029	P <sub>1</sub>	1.18	1.22						0.59	0.61										
	M <sub>2</sub>	615	635						615	635										
190.080	P <sub>1</sub>	1.14	1.14	1.14						0.57	0.57	0.57	0.29	0.29	0.29					
	M <sub>2</sub>	702	702	702						702	702	702	702	702	702					
214.133	P <sub>1</sub>	0.92	0.92	0.92						0.46	0.46	0.46	0.23	0.23	0.23					
	M <sub>2</sub>	635	635	635						635	635	635	635	635	635					
230.688	P <sub>1</sub>	0.94	0.94	0.94						0.47	0.47	0.47	0.24	0.24	0.24					
	M <sub>2</sub>	702	702	702						702	702	702	702	702	702					
259.880	P <sub>1</sub>	0.75	0.75	0.75						0.38	0.38	0.38	0.19	0.19	0.19					
	M <sub>2</sub>	635	635	635						635	635	635	635	635	635					
291.600	P <sub>1</sub>	0.74	0.74						0.37	0.37										
	M <sub>2</sub>	702	702						702	702										
328.500	P <sub>1</sub>	0.60	0.60						0.30	0.30										
	M <sub>2</sub>	635	635						635	635										

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 702 \text{ Nm}$

GKS 06 - 4 N													Dimensions page 6-126			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>						
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80			
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D			
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]															
103.721	P <sub>1</sub> M <sub>2</sub>	1.09 360	1.91 632	1.91 632	1.91 632	0.59 390	1.04 685	1.04 685	1.04 685	0.30 390	0.52 685	0.52 685	0.52 685			
113.205	P <sub>1</sub> M <sub>2</sub>	1.18 425	1.49 537	1.49 537	1.49 537	0.59 425	0.75 537	0.75 537	0.75 537	0.30 425	0.37 537	0.37 537	0.37 537			
127.059	P <sub>1</sub> M <sub>2</sub>	1.18 478	1.70 689	1.70 689	1.70 689	0.59 478	0.85 689	0.85 689	0.85 689	0.30 478	0.43 689	0.43 689	0.43 689			
140.816	P <sub>1</sub> M <sub>2</sub>	1.18 529	1.20 537	1.20 537	1.20 537	0.59 529	0.60 537	0.60 537	0.60 537	0.30 529	0.30 537	0.30 537	0.30 537			
155.647	P <sub>1</sub> M <sub>2</sub>		1.39 689	1.39 689	1.39 689		0.70 689	0.70 689	0.70 689		0.35 689	0.35 689	0.35 689			
174.336	P <sub>1</sub> M <sub>2</sub>	0.97 537	0.97 537	0.97 537		0.48 537	0.48 537	0.48 537		0.24 537	0.24 537	0.24 537				
202.588	P <sub>1</sub> M <sub>2</sub>		1.08 695	1.08 695	1.08 695		0.54 695	0.54 695	0.54 695		0.27 695	0.27 695	0.27 695			
224.524	P <sub>1</sub> M <sub>2</sub>	0.75 537	0.75 537	0.75 537		0.38 537	0.38 537	0.38 537		0.19 537	0.19 537	0.19 537				
252.000	P <sub>1</sub> M <sub>2</sub>		0.88 702	0.88 702	0.88 702		0.44 702	0.44 702	0.44 702		0.22 702	0.22 702	0.22 702			
279.286	P <sub>1</sub> M <sub>2</sub>	0.60 537	0.60 537	0.60 537		0.30 537	0.30 537	0.30 537		0.15 537	0.15 537	0.15 537				
316.800	P <sub>1</sub> M <sub>2</sub>	0.70 702	0.70 702	0.70 702		0.35 702	0.35 702	0.35 702		0.17 702	0.17 702	0.17 702				
361.429	P <sub>1</sub> M <sub>2</sub>	0.47 537	0.47 537	0.47 537		0.23 537	0.23 537	0.23 537		0.12 537	0.12 537	0.12 537				
408.000	P <sub>1</sub> M <sub>2</sub>	0.54 702	0.54 702	0.54 702		0.27 702	0.27 702	0.27 702		0.14 702	0.14 702	0.14 702				
458.067	P <sub>1</sub> M <sub>2</sub>	0.37 537	0.37 537			0.18 537	0.18 537			0.09 537	0.09 537					
517.091	P <sub>1</sub> M <sub>2</sub>	0.43 702	0.43 702			0.21 702	0.21 702			0.11 702	0.11 702					
555.927	P <sub>1</sub> M <sub>2</sub>	0.30 537	0.30 537			0.15 537	0.15 537			0.08 537	0.08 537					
640.800	P <sub>1</sub> M <sub>2</sub>	0.34 702	0.34 702	0.34 702		0.17 702	0.17 702	0.17 702		0.09 702	0.09 702	0.09 702				
696.668	P <sub>1</sub> M <sub>2</sub>	0.24 537	0.24 537			0.12 537	0.12 537			0.06 537	0.06 537					
812.137	P <sub>1</sub> M <sub>2</sub>	0.27 702	0.27 702			0.14 702	0.14 702			0.07 702	0.07 702					
914.907	P <sub>1</sub> M <sub>2</sub>	0.22 635	0.22 635			0.11 635	0.11 635			0.05 635	0.05 635					
1017.741	P <sub>1</sub> M <sub>2</sub>	0.22 702	0.22 702			0.11 702	0.11 702			0.05 702	0.05 702					
1146.529	P <sub>1</sub> M <sub>2</sub>	0.17 635	0.17 635			0.09 635	0.09 635			0.04 635	0.04 635					
1340.834	P <sub>1</sub> M <sub>2</sub>	0.16 702				0.08 702				0.04 702						
1510.507	P <sub>1</sub> M <sub>2</sub>	0.13 635				0.07 635				0.03 635						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 1330 \text{ Nm}$

GKS 07 - 3 N														Dimensions page 6-118					
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>					
IEC connection		80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160
		71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
5.955	$P_1$	10.7 19.8 19.8						6.60 12.2 12.2						4.40 6.10 6.10					
	$M_2$	207 382 382						255 470 470						339 470 470					
8.254	$P_1$	10.7 16.4 16.4						6.60 10.1 10.1						4.40 5.05 5.05					
	$M_2$	287 439 439						353 540 540						470 540 540					
9.171	$P_1$	10.7 19.8 19.8						6.60 12.2 12.2						4.40 6.10 6.10					
	$M_2$	318 588 588						392 725 725						523 725 725					
10.124	$P_1$	10.7 19.8 19.8						6.60 12.2 12.2						4.40 6.10 6.10					
	$M_2$	351 650 650						433 800 800						577 800 800					
11.378	$P_1$	10.7	10.7	13.5	13.5			6.60	6.60	8.32	8.32			4.16	4.16	4.16	4.16		
	$M_2$	395	395	498	498			486	486	613	613			613	613	613	613		
12.711	$P_1$	10.7 16.4 16.4						6.60 10.1 10.1						4.40 5.05 5.05					
	$M_2$	441 676 676						543 832 832						724 832 832					
14.799	$P_1$	10.7 17.6 17.6						6.60 10.9 10.9						4.40 5.42 5.42					
	$M_2$	514 845 845						633 1040 1040						843 1040 1040					
16.674	$P_1$	10.7 16.1 16.1						6.60 9.91 9.91						4.40 4.96 4.96					
	$M_2$	579 870 870						713 1071 1071						950 1071 1071					
17.270	$P_1$	10.7	10.7	14.5	14.5			6.60	6.60	8.92	8.92			4.40	4.40	4.46	4.46		
	$M_2$	600	600	811	811			738	738	998	998			984	984	998	998		
20.511	$P_1$	10.7 13.6 13.6						6.60 8.35 8.35						4.18 4.18 4.18					
	$M_2$	712 902 902						877 1110 1110						1110 1110 1110					
23.111	$P_1$	10.7 12.7 12.7						6.60 7.80 7.80						3.90 3.90 3.90					
	$M_2$	802 949 949						988 1168 1168						1168 1168 1168					
25.244	$P_1$	10.7	10.7	11.7	11.7			6.60	6.60	7.20	7.20			3.60	3.60	3.60	3.60		
	$M_2$	876	876	956	956			1079	1079	1177	1177			1177	1177	1177	1177		
28.274	$P_1$	10.7	10.7	10.7	10.7			6.56	6.56	6.56	6.56			3.28	3.28	3.28	3.28		
	$M_2$	976	976	976	976			1202	1202	1202	1202			1202	1202	1202	1202		
31.858	$P_1$	9.22 9.22 9.22 9.22						5.68 5.68 5.68 5.68						2.84 2.84 2.84 2.84					
	$M_2$	952 952 952 952						1172 1172 1172 1172						1172 1172 1172 1172					
36.064	$P_1$	3.75	8.97	8.97	8.97			2.31	5.52	5.52	5.52			1.54	2.76	2.76	2.76		
	$M_2$	438	1048	1048	1048			540	1290	1290	1290			719	1290	1290	1290		
40.906	$P_1$	7.91 7.91 7.91						4.87 4.87 4.87						2.43 2.43 2.43					
	$M_2$	1048 1048 1048						1290 1290 1290						1290 1290 1290					
44.178	$P_1$	8.38 8.38 8.38						4.54 4.54 4.54						2.27 2.27 2.27					
	$M_2$	1200 1200 1200						1300 1300 1300						1300 1300 1300					
50.346	$P_1$	7.36 7.36 7.36 7.36						3.99 3.99 3.99 3.99						1.99 1.99 1.99 1.99					
	$M_2$	1200 1200 1200 1200						1300 1300 1300 1300						1300 1300 1300 1300					
57.501	$P_1$	4.26	6.49	6.49			2.31	3.52	3.52			1.54	1.76	1.76					
	$M_2$	794	1209	1209			860	1310	1310			1147	1310	1310					
64.790	$P_1$	4.26	5.25	5.25			2.31	2.85	2.85			1.42	1.42	1.42					
	$M_2$	894	1103	1103			969	1195	1195			1195	1195	1195					
70.474	$P_1$	4.26	5.34	5.34			2.31	2.89	2.89			1.43	1.45	1.45					
	$M_2$	973	1218	1218			1054	1320	1320			1307	1320	1320					
79.407	$P_1$	4.26	4.32	4.32			2.31	2.34	2.34			1.17	1.17	1.17					
	$M_2$	1096	1112	1112			1188	1205	1205			1205	1205	1205					
92.563	$P_1$	3.11	4.09	4.09			1.69	2.22	2.22			0.84	1.11	1.11					
	$M_2$	932	1227	1227			1010	1330	1330			1010	1330	1330					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 1330 \text{ Nm}$

GKS 07 - 3 N														Dimensions page 6-118					
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>					
IEC connection		80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160
		71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
104.296	P <sub>1</sub>	3.11	3.32	3.32				1.69	1.80	1.80				0.84	0.90	0.90			
	M <sub>2</sub>	1050	1121	1121				1138	1215	1215				1138	1215	1215			
112.338	P <sub>1</sub>	2.81	3.65	3.65				1.41	1.83	1.83				0.70	0.91	0.91			
	M <sub>2</sub>	1024	1330	1330				1024	1330	1330				1024	1330	1330			
126.578	P <sub>1</sub>	2.81	2.96	2.96				1.41	1.48	1.48				0.70	0.74	0.74			
	M <sub>2</sub>	1154	1215	1215				1154	1215	1215				1154	1215	1215			
140.548	P <sub>1</sub>		2.92	2.92	2.92				1.46	1.46	1.46				0.73	0.73	0.73		
	M <sub>2</sub>		1330	1330	1330				1330	1330	1330				1330	1330	1330		
158.364	P <sub>1</sub>		2.37	2.37	2.37				1.18	1.18	1.18				0.59	0.59	0.59		
	M <sub>2</sub>		1215	1215	1215				1215	1215	1215				1215	1215	1215		
184.600	P <sub>1</sub>	2.22	2.22	2.22				1.11	1.11	1.11				0.56	0.56	0.56			
	M <sub>2</sub>	1330	1330	1330				1330	1330	1330				1330	1330	1330			
208.000	P <sub>1</sub>	1.80	1.80	1.80				0.90	0.90	0.90				0.45	0.45	0.45			
	M <sub>2</sub>	1215	1215	1215				1215	1215	1215				1215	1215	1215			
224.037	P <sub>1</sub>	1.83	1.83	1.83				0.92	0.92	0.92				0.46	0.46	0.46			
	M <sub>2</sub>	1330	1330	1330				1330	1330	1330				1330	1330	1330			
252.436	P <sub>1</sub>	1.49	1.49	1.49				0.74	0.74	0.74				0.37	0.37	0.37			
	M <sub>2</sub>	1215	1215	1215				1215	1215	1215				1215	1215	1215			
283.193	P <sub>1</sub>	1.45	1.45					0.73	0.73					0.36	0.36				
	M <sub>2</sub>	1330	1330					1330	1330					1330	1330				
319.091	P <sub>1</sub>	1.18	1.18					0.59	0.59					0.29	0.29				
	M <sub>2</sub>	1215	1215					1215	1215					1215	1215				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 1330 \text{ Nm}$

GKS 07 - 4 N														Dimensions page 6-126			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>							
IEC connection		71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90	71	80 71	90 80	100/112 80/90				
For the geometrical assignment of servo/DC motors see section 2																	
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E				
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																
103.039	P <sub>1</sub>	2.54	3.45	3.63	3.63	1.37	1.87	1.97	1.97	0.77	0.98	0.98	0.98				
	M <sub>2</sub>	832	1132	1190	1190	902	1227	1290	1290	1014	1290	1290	1290				
112.391	P <sub>1</sub>	2.75	2.94	2.94	2.94	1.37	1.47	1.47	1.47	0.74	0.74	0.74	0.74				
	M <sub>2</sub>	984	1053	1053	1053	984	1053	1053	1053	1053	1053	1053	1053				
126.222	P <sub>1</sub>	2.75	3.23	3.23	3.23	1.37	1.62	1.62	1.62	0.77	0.81	0.81	0.81				
	M <sub>2</sub>	1105	1300	1300	1300	1105	1300	1300	1300	1242	1300	1300	1300				
137.748	P <sub>1</sub>	2.40	2.40	2.40	2.40	1.20	1.20	1.20	1.20	0.60	0.60	0.60	0.60				
	M <sub>2</sub>	1053	1053	1053	1053	1053	1053	1053	1053	1053	1053	1053	1053				
154.622	P <sub>1</sub>		2.64	2.64	2.64		1.32	1.32	1.32		0.66	0.66	0.66				
	M <sub>2</sub>		1300	1300	1300		1300	1300	1300		1300	1300	1300				
179.201	P <sub>1</sub>	1.85	1.85	1.85		0.92	0.92	0.92		0.46	0.46	0.46					
	M <sub>2</sub>	1053	1053	1053		1053	1053	1053		1053	1053	1053					
201.254	P <sub>1</sub>		2.04	2.04	2.04		1.02	1.02	1.02		0.51	0.51	0.51				
	M <sub>2</sub>		1310	1310	1310		1310	1310	1310		1310	1310	1310				
222.909	P <sub>1</sub>	1.48	1.48	1.48		0.74	0.74	0.74		0.37	0.37	0.37					
	M <sub>2</sub>	1053	1053	1053		1053	1053	1053		1053	1053	1053					
246.659	P <sub>1</sub>		1.68	1.68	1.68		0.84	0.84	0.84		0.42	0.42	0.42				
	M <sub>2</sub>		1320	1320	1320		1320	1320	1320		1320	1320	1320				
273.199	P <sub>1</sub>	1.21	1.21	1.21		0.61	0.61	0.61		0.30	0.30	0.30					
	M <sub>2</sub>	1053	1053	1053		1053	1053	1053		1053	1053	1053					
321.049	P <sub>1</sub>	1.29	1.29	1.29		0.65	0.65	0.65		0.32	0.32	0.32					
	M <sub>2</sub>	1320	1320	1320		1320	1320	1320		1320	1320	1320					
358.829	P <sub>1</sub>	0.92	0.92	0.92		0.46	0.46	0.46		0.23	0.23	0.23					
	M <sub>2</sub>	1053	1053	1053		1053	1053	1053		1053	1053	1053					
399.353	P <sub>1</sub>	1.04	1.04	1.04		0.52	0.52	0.52		0.26	0.26	0.26					
	M <sub>2</sub>	1320	1320	1320		1320	1320	1320		1320	1320	1320					
464.367	P <sub>1</sub>	0.71	0.71			0.36	0.36			0.18	0.18						
	M <sub>2</sub>	1053	1053			1053	1053			1053	1053						
516.810	P <sub>1</sub>	0.80	0.80			0.40	0.40			0.20	0.20						
	M <sub>2</sub>	1320	1320			1320	1320			1320	1320						
563.573	P <sub>1</sub>	0.59	0.59			0.29	0.29			0.15	0.15						
	M <sub>2</sub>	1053	1053			1053	1053			1053	1053						
636.581	P <sub>1</sub>	0.66	0.66	0.66		0.33	0.33	0.33		0.16	0.16	0.16					
	M <sub>2</sub>	1330	1330	1330		1330	1330	1330		1330	1330	1330					
683.972	P <sub>1</sub>	0.48	0.48			0.24	0.24			0.12	0.12						
	M <sub>2</sub>	1053	1053			1053	1053			1053	1053						
823.810	P <sub>1</sub>	0.51	0.51			0.25	0.25			0.13	0.13						
	M <sub>2</sub>	1330	1330			1330	1330			1330	1330						
928.237	P <sub>1</sub>	0.41	0.41			0.21	0.21			0.10	0.10						
	M <sub>2</sub>	1215	1215			1215	1215			1215	1215						
999.806	P <sub>1</sub>	0.42	0.42			0.21	0.21			0.10	0.10						
	M <sub>2</sub>	1330	1330			1330	1330			1330	1330						
1126.542	P <sub>1</sub>	0.34	0.34			0.17	0.17			0.09	0.09						
	M <sub>2</sub>	1215	1215			1215	1215			1215	1215						
1277.842	P <sub>1</sub>	0.33				0.16				0.08							
	M <sub>2</sub>	1330				1330				1330							
1439.822	P <sub>1</sub>	0.27				0.13				0.07							
	M <sub>2</sub>	1215				1215				1215							

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 3080 Nm**

GKS 09 - 3 N																Dimensions page 6-118					
n <sub>1</sub>		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>							
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200		
For the geometrical assignment of servo/DC motors see section 2																					
Drive size		□D	□E	□F	□G	□H	1K	□D	□E	□F	□G	□H	1K	□D	□E	□F	□G	□H	1K		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																				
12.283	P <sub>1</sub> M <sub>2</sub>	28.6 33.0 33.0 1137 1312 1312						17.6 20.3 20.3 1400 1615 1615						10.2 10.2 10.2 1615 1615 1615							
13.360	P <sub>1</sub> M <sub>2</sub>	28.6 33.0 33.0 1237 1427 1427						17.6 20.3 20.3 1523 1757 1757						10.2 10.2 10.2 1757 1757 1757							
16.122	P <sub>1</sub> M <sub>2</sub>	10.7 28.0 28.0 28.0 560 1462 1462 1462						6.60 17.2 17.2 17.2 689 1801 1801 1801						4.40 8.62 8.62 8.62 919 1801 1801 1801							
17.536	P <sub>1</sub> M <sub>2</sub>	10.7 28.0 28.0 28.0 609 1591 1591 1591						6.60 17.2 17.2 17.2 750 1958 1958 1958						4.40 8.62 8.62 8.62 999 1958 1958 1958							
19.541	P <sub>1</sub> M <sub>2</sub>	28.6 33.0 33.0 1809 2087 2087						17.6 20.3 20.3 2227 2570 2570						10.2 10.2 10.2 2570 2570 2570							
22.022	P <sub>1</sub> M <sub>2</sub>	28.6 30.4 30.4 2039 2170 2170						17.6 18.7 18.7 2510 2672 2672						9.36 9.36 9.36 2672 2672 2672							
25.649	P <sub>1</sub> M <sub>2</sub>	10.7 28.0 28.0 28.0 890 2325 2325 2325						6.60 17.2 17.2 17.2 1096 2862 2862 2862						4.40 8.61 8.61 8.61 1462 2862 2862 2862							
29.228	P <sub>1</sub> M <sub>2</sub>	10.7 25.0 25.0 1015 2367 2367						6.60 15.4 15.4 1249 2914 2914						4.40 7.69 7.69 1666 2914 2914							
32.940	P <sub>1</sub> M <sub>2</sub>	10.7 22.7 22.7 1143 2424 2424						6.60 14.0 14.0 1408 2984 2984						4.40 6.99 6.99 1877 2984 2984							
35.193	P <sub>1</sub> M <sub>2</sub>	10.7 10.7 21.6 21.6 1222 1222 2460 2460						6.60 6.60 13.3 13.3 1504 1504 3029 3029						4.40 4.40 6.64 6.64 2006 2006 3029 3029							
39.662	P <sub>1</sub> M <sub>2</sub>	10.7 10.7 19.0 19.0 1377 1377 2438 2438						6.60 6.60 11.7 11.7 1695 1695 3002 3002						4.40 4.40 5.84 5.84 2260 2260 3002 3002							
43.146	P <sub>1</sub> M <sub>2</sub>	12.2 20.0 20.0 1702 2790 2790						6.60 10.8 10.8 1844 3024 3024						4.40 5.41 5.41 2459 3024 3024							
48.625	P <sub>1</sub> M <sub>2</sub>	12.2 17.7 17.7 1918 2784 2784						6.60 9.58 9.58 2078 3017 3017						4.40 4.79 4.79 2771 3017 3017							
58.456	P <sub>1</sub> M <sub>2</sub>	12.2 12.2 14.8 2306 2306 2797						6.60 6.60 8.00 2499 2499 3031						3.53 3.75 4.00 2674 2838 3031							
65.879	P <sub>1</sub> M <sub>2</sub>	12.2 12.2 13.2 2598 2598 2813						6.60 6.60 7.14 2816 2816 3048						3.53 3.57 3.57 3013 3048 3048							
70.982	P <sub>1</sub> M <sub>2</sub>	11.2 11.9 12.2 2571 2726 2797						6.06 6.42 6.59 2786 2954 3031						3.03 3.21 3.30 2786 2954 3031							
79.996	P <sub>1</sub> M <sub>2</sub>	10.9 10.9 10.9 2834 2834 2834						5.93 5.93 5.93 3071 3071 3071						2.96 2.96 2.96 3071 3071 3071							
91.860	P <sub>1</sub> M <sub>2</sub>	4.26 8.98 9.40 1268 2671 2797						2.31 4.86 5.09 1374 2895 3031						1.44 2.43 2.55 1718 2895 3031							
103.524	P <sub>1</sub> M <sub>2</sub>	4.26 8.47 8.47 1429 2842 2842						2.31 4.59 4.59 1549 3080 3080						1.44 2.30 2.30 1936 3080 3080							
111.484	P <sub>1</sub> M <sub>2</sub>	4.62 8.12 8.39 1668 2934 3031						2.31 4.06 4.20 1668 2934 3031						1.21 2.03 2.10 1742 2934 3031							
125.641	P <sub>1</sub> M <sub>2</sub>	4.62 7.57 7.57 1880 3080 3080						2.31 3.78 3.78 1880 3080 3080						1.21 1.89 1.89 1963 3080 3080							
140.921	P <sub>1</sub> M <sub>2</sub>	3.87 6.51 1766 2973						1.93 3.26 1766 2973						0.97 1.63 1766 2973							

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 3080 \text{ Nm}$

GKS 09 - 3 N														Dimensions page 6-118											
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>											
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	200						
For the geometrical assignment of servo/DC motors see section 2																									
Drive size		□D	□E	□F	□G	□H	1K	□D	□E	□F	□G	□H	1K	□D	□E	□F	□G	□H	1K						
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																								
158.816	$P_1$ $M_2$	3.87 1990	5.99 3080							1.93 1990	2.99 3080							0.97 1990	1.50 3080						
182.000	$P_1$ $M_2$	4.62 2723	5.14 3031	5.14 3031							2.31 2723	2.57 3031	2.57 3031							1.29 3031	1.29 3031	1.29 3031			
205.111	$P_1$ $M_2$	4.62 3069	4.64 3080	4.64 3080							2.31 3069	2.32 3080	2.32 3080							1.16 3080	1.16 3080	1.16 3080			
220.882	$P_1$ $M_2$	4.24 3031	4.24 3031	4.24 3031							2.12 3031	2.12 3031	2.12 3031							1.06 3031	1.06 3031	1.06 3031			
248.930	$P_1$ $M_2$	3.82 3080	3.82 3080	3.82 3080							1.91 3080	1.91 3080	1.91 3080							0.96 3080	0.96 3080	0.96 3080			
279.205	$P_1$ $M_2$	3.35 3031	3.35 3031							1.68 3031	1.68 3031							0.84 3031	0.84 3031						
314.659	$P_1$ $M_2$	3.02 3080	3.02 3080							1.51 3080	1.51 3080							0.76 3080	0.76 3080						

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 3080 \text{ Nm}$

GKS 09 - 4 N											Dimensions page 6-126					
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90
For the geometrical assignment of servo/DC motors see section 2																
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]															
100.551	$P_1$ $M_2$	3.45 1105	4.26 1364	8.73 2795	8.73 2795		1.87 1197	2.31 1479	4.73 3029	4.73 3029		1.25 1596	1.54 1972	2.37 3029	2.37 3029	
113.320	$P_1$ $M_2$	3.74 1349	4.62 1666	8.32 3002	8.32 3002		1.87 1349	2.31 1666	4.16 3002	4.16 3002		1.25 1799	1.54 2222	2.08 3002	2.08 3002	
123.275	$P_1$ $M_2$	3.74 1468	4.62 1813	7.70 3024	7.70 3024		1.87 1468	2.31 1813	3.85 3024	3.85 3024		1.25 1957	1.54 2417	1.93 3024	1.93 3024	
138.929	$P_1$ $M_2$	3.74 1654	4.62 2043	6.82 3017	6.82 3017		1.87 1654	2.31 2043	3.41 3017	3.41 3017		1.25 2205	1.54 2724	1.71 3017	1.71 3017	
151.012	$P_1$ $M_2$		4.62 2221	6.29 3024	6.29 3024			2.31 2221	3.14 3024	3.14 3024			1.54 2961	1.57 3024	1.57 3024	
170.188	$P_1$ $M_2$		4.62 2503	5.57 3017	5.57 3017			2.31 2503	2.78 3017	2.78 3017			1.39 3017	1.39 3017	1.39 3017	
204.596	$P_1$ $M_2$		4.62 3009	4.65 3031	4.65 3031			2.31 3009	2.33 3031	2.33 3031			1.16 3031	1.16 3031	1.16 3031	
230.577	$P_1$ $M_2$		4.15 3048	4.15 3048	4.15 3048			2.08 3048	2.08 3048	2.08 3048			1.04 3048	1.04 3048	1.04 3048	
248.439	$P_1$ $M_2$		3.83 3031	3.83 3031	3.83 3031			1.92 3031	1.92 3031	1.92 3031			0.96 3031	0.96 3031	0.96 3031	
279.986	$P_1$ $M_2$		3.44 3071	3.44 3071	3.44 3071			1.72 3071	1.72 3071	1.72 3071			0.86 3071	0.86 3071	0.86 3071	
323.365	$P_1$ $M_2$	2.94 3031	2.94 3031	2.94 3031			1.47 3031	1.47 3031	1.47 3031			0.74 3031	0.74 3031	0.74 3031		
364.427	$P_1$ $M_2$	2.65 3071	2.65 3071	2.65 3071			1.32 3071	1.32 3071	1.32 3071			0.66 3071	0.66 3071	0.66 3071		
402.234	$P_1$ $M_2$	2.37 3031	2.37 3031	2.37 3031			1.18 3031	1.18 3031	1.18 3031			0.59 3031	0.59 3031	0.59 3031		
453.311	$P_1$ $M_2$	2.13 3071	2.13 3071	2.13 3071			1.06 3071	1.06 3071	1.06 3071			0.53 3071	0.53 3071	0.53 3071		
520.538	$P_1$ $M_2$	1.83 3031	1.83 3031	1.83 3031			0.91 3031	0.91 3031	0.91 3031			0.46 3031	0.46 3031	0.46 3031		
586.638	$P_1$ $M_2$	1.65 3080	1.65 3080	1.65 3080			0.82 3080	0.82 3080	0.82 3080			0.41 3080	0.41 3080	0.41 3080		
631.744	$P_1$ $M_2$	1.51 3031	1.51 3031	1.51 3031			0.75 3031	0.75 3031	0.75 3031			0.38 3031	0.38 3031	0.38 3031		
711.965	$P_1$ $M_2$	1.36 3080	1.36 3080	1.36 3080			0.68 3080	0.68 3080	0.68 3080			0.34 3080	0.34 3080	0.34 3080		
817.551	$P_1$ $M_2$	1.16 3031	1.16 3031	1.16 3031			0.58 3031	0.58 3031	0.58 3031			0.29 3031	0.29 3031	0.29 3031		
921.367	$P_1$ $M_2$	1.05 3080	1.05 3080	1.05 3080			0.53 3080	0.53 3080	0.53 3080			0.26 3080	0.26 3080	0.26 3080		
992.209	$P_1$ $M_2$	0.96 3031	0.96 3031	0.96 3031			0.48 3031	0.48 3031	0.48 3031			0.24 3031	0.24 3031	0.24 3031		
1118.204	$P_1$ $M_2$	0.87 3080	0.87 3080	0.87 3080			0.43 3080	0.43 3080	0.43 3080			0.22 3080	0.22 3080	0.22 3080		
1254.197	$P_1$ $M_2$	0.76 3031	0.76 3031				0.38 3031	0.38 3031				0.19 3031	0.19 3031			
1413.461	$P_1$ $M_2$	0.68 3080	0.68 3080				0.34 3080	0.34 3080				0.17 3080	0.17 3080			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

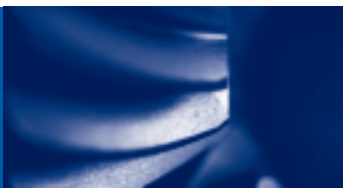
$M_2 \text{ perm} \leq 6072 \text{ Nm}$

GKS 11 - 3 N															Dimensions page 6-118				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□E	□F	□G	□H	□K	□E	□F	□G	□H	□K	□E	□F	□G	□H	□K			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
12.094	$P_1$ $M_2$				57.4 2250	57.4 2250				35.4 2770	35.4 2770				17.7 2770	17.7 2770			
13.154	$P_1$ $M_2$				57.4 2447	57.4 2447				35.4 3013	35.4 3013				17.7 3013	17.7 3013			
15.874	$P_1$ $M_2$				48.8 2509	48.8 2509				30.0 3089	30.0 3089				15.0 3089	15.0 3089			
17.265	$P_1$ $M_2$				48.8 2729	48.8 2729				30.0 3360	30.0 3360				15.0 3360	15.0 3360			
19.515	$P_1$ $M_2$				57.4 3630	57.4 3630				35.4 4470	35.4 4470				17.7 4470	17.7 4470			
21.989	$P_1$ $M_2$				55.7 3967	55.7 3967				34.3 4884	34.3 4884				17.1 4884	17.1 4884			
25.615	$P_1$ $M_2$				48.8 4049	48.8 4049				30.0 4985	30.0 4985				15.0 4985	15.0 4985			
28.021	$P_1$ $M_2$			28.6 2594	46.2 4193	46.2 4193			17.6 3194	28.4 5163	28.4 5163			11.7 4259	14.2 5163	14.2 5163			
31.573	$P_1$ $M_2$			28.6 2923	43.8 4484	43.8 4484			17.6 3599	27.0 5521	27.0 5521			11.7 4798	13.5 5521	13.5 5521			
35.741	$P_1$ $M_2$		10.7 1241	28.6 3309	39.7 4593	39.7 4593		6.60 1528	17.6 4074	24.4 5655	24.4 5655		4.40 2037	11.7 5432	12.2 5655	12.2 5655			
40.272	$P_1$ $M_2$		10.7 1398	28.6 3728	36.5 4767	36.5 4767		6.60 1721	17.6 4590	22.5 5869	22.5 5869		4.40 2295	11.3 5869	11.3 5869	11.3 5869			
43.783	$P_1$ $M_2$			32.5 4605	37.7 5352	37.7 5352			17.6 4991	20.4 5800	20.4 5800			10.2 5800	10.2 5800	10.2 5800			
49.333	$P_1$ $M_2$			32.5 5189	34.2 5466	34.2 5466			17.6 5623	18.5 5923	18.5 5923			9.27 5923	9.27 5923	9.27 5923			
57.683	$P_1$ $M_2$		12.2 2275	29.5 5511	29.5 5511			6.60 2466	16.0 5972	16.0 5972			4.40 3287	7.99 5972	7.99 5972				
64.995	$P_1$ $M_2$		12.2 2564	26.3 5529	26.3 5529			6.60 2778	14.2 5992	14.2 5992			4.40 3704	7.11 5992	7.11 5992				
70.887	$P_1$ $M_2$		12.2 2796	24.0 5512	24.0 5512			6.60 3030	13.0 5973	13.0 5973			3.92 3600	6.50 5973	6.50 5973				
79.873	$P_1$ $M_2$		12.2 3150	21.5 5566	21.5 5566			6.60 3414	11.7 6032	11.7 6032			3.92 4057	5.83 6032	5.83 6032				
91.737	$P_1$ $M_2$	10.9 3239	11.6 3454	18.6 5513			5.91 3510	6.30 3743	10.1 5975			2.95 3510	3.15 3743	5.03 5975					
103.365	$P_1$ $M_2$	10.9 3649	11.6 3892	16.7 5603			5.91 3955	6.30 4218	9.07 6072			2.95 3955	3.15 4218	4.53 6072					
111.335	$P_1$ $M_2$	9.87 3559	10.5 3793	16.6 5975			4.93 3559	5.26 3793	8.28 5975			2.47 3559	2.63 3793	4.14 5975					
125.448	$P_1$ $M_2$	9.87 4010	10.5 4274	14.9 6072			4.93 4010	5.26 4274	7.47 6072			2.47 4010	2.63 4274	3.74 6072					
140.732	$P_1$ $M_2$	7.92 3609	8.43 3845				3.96 3609	4.22 3845				1.98 3609	2.11 3845						
158.571	$P_1$ $M_2$	7.92 4067	8.43 4332				3.96 4067	4.22 4332				1.98 4067	2.11 4332						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 6072 \text{ Nm}$

GKS 11 - 3 N															Dimensions page 6-118				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225	80/90/100 112	112 90/100	132 100/112	160/180 132	200/225			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□E	□F	□G	□H	□K	□E	□F	□G	□H	□K	□E	□F	□G	□H	□K			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
186.572	P <sub>1</sub>	9.89	9.89	9.89			4.94	4.94	4.94			2.47	2.47	2.47					
	M <sub>2</sub>	5975	5975	5975			5975	5975	5975			5975	5975	5975					
210.222	P <sub>1</sub>	8.65	8.65	8.65			4.33	4.33	4.33			2.16	2.16	2.16					
	M <sub>2</sub>	5892	5892	5892			5892	5892	5892			5892	5892	5892					
226.431	P <sub>1</sub>	8.15	8.15	8.15			4.07	4.07	4.07			2.04	2.04	2.04					
	M <sub>2</sub>	5975	5975	5975			5975	5975	5975			5975	5975	5975					
255.133	P <sub>1</sub>	7.13	7.13	7.13			3.56	3.56	3.56			1.78	1.78	1.78					
	M <sub>2</sub>	5892	5892	5892			5892	5892	5892			5892	5892	5892					
286.219	P <sub>1</sub>	6.44	6.44				3.22	3.22				1.61	1.61						
	M <sub>2</sub>	5975	5975				5975	5975				5975	5975						
322.500	P <sub>1</sub>	5.64	5.64				2.82	2.82				1.41	1.41						
	M <sub>2</sub>	5892	5892				5892	5892				5892	5892						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

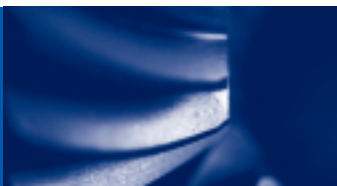
$M_2 \text{ perm} \leq 6072 \text{ Nm}$

GKS 11 - 4 N											Dimensions page 6-126					
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>				
IEC connection		80 71	90 80	100/112 80/90	100/112 90	132 100/112	80 71	90 80	100/112 80/90	100/112 90	132 100/112	80 71	90 80	100/112 80/90	100/112 90	132 100/112
For the geometrical assignment of servo/DC motors see section 2																
Drive size		□C	□D	□E	□F	□G	□C	□D	□E	□F	□G	□C	□D	□E	□F	□G
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]															
102.119	P <sub>1</sub> M <sub>2</sub>	4.26 1386	12.2 3959	12.2 3959	16.1 5218		2.31 1502	6.60 4291	6.60 4291	8.69 5655		1.54 2002	3.97 5160	4.15 5400	4.35 5655	
115.063	P <sub>1</sub> M <sub>2</sub>	4.62 1692	13.2 4835	13.2 4835	16.0 5869		2.31 1692	6.60 4835	6.60 4835	8.01 5869		1.54 2256	3.97 5814	4.00 5869	4.00 5869	
125.095	P <sub>1</sub> M <sub>2</sub>	4.62 1840	13.2 5256	13.2 5256	14.6 5800		2.31 1840	6.60 5256	6.60 5256	7.28 5800		1.54 2453	3.64 5800	3.64 5800	3.64 5800	
140.952	P <sub>1</sub> M <sub>2</sub>	4.62 2073	13.2 5922	13.2 5922	13.2 5923		2.31 2073	6.60 5922	6.60 5922	6.60 5923		1.54 2764	3.30 5923	3.30 5923	3.30 5923	
153.242	P <sub>1</sub> M <sub>2</sub>		11.9 5800	11.9 5800	11.9 5800			5.94 5800	5.94 5800	5.94 5800			2.97 5800	2.97 5800	2.97 5800	
172.667	P <sub>1</sub> M <sub>2</sub>		10.8 5923	10.8 5923	10.8 5923			5.39 5923	5.39 5923	5.39 5923			2.69 5923	2.69 5923	2.69 5923	
201.890	P <sub>1</sub> M <sub>2</sub>		9.29 5972	9.29 5972	9.29 5972			4.64 5972	4.64 5972	4.64 5972			2.32 5972	2.32 5972	2.32 5972	
227.481	P <sub>1</sub> M <sub>2</sub>		8.27 5992	8.27 5992	8.27 5992			4.14 5992	4.14 5992	4.14 5992			2.07 5992	2.07 5992	2.07 5992	
248.106	P <sub>1</sub> M <sub>2</sub>		7.56 5973	7.56 5973	7.56 5973			3.78 5973	3.78 5973	3.78 5973			1.89 5973	1.89 5973	1.89 5973	
279.556	P <sub>1</sub> M <sub>2</sub>		6.78 6032	6.78 6032	6.78 6032			3.39 6032	3.39 6032	3.39 6032			1.69 6032	1.69 6032	1.69 6032	
322.931	P <sub>1</sub> M <sub>2</sub>	4.62 4749	5.81 5973	5.81 5973			2.31 4749	2.90 5973	2.90 5973			1.45 5973	1.45 5973	1.45 5973		
363.866	P <sub>1</sub> M <sub>2</sub>	4.62 5351	5.21 6032	5.21 6032			2.31 5351	2.60 6032	2.60 6032			1.30 6032	1.30 6032	1.30 6032		
395.787	P <sub>1</sub> M <sub>2</sub>	4.62 5820	4.74 5973	4.74 5973			2.31 5820	2.37 5973	2.37 5973			1.19 5973	1.19 5973	1.19 5973		
445.958	P <sub>1</sub> M <sub>2</sub>	4.25 6032	4.25 6032	4.25 6032			2.12 6032	2.12 6032	2.12 6032			1.06 6032	1.06 6032	1.06 6032		
512.195	P <sub>1</sub> M <sub>2</sub>	3.66 5975	3.66 5975	3.66 5975			1.83 5975	1.83 5975	1.83 5975			0.92 5975	0.92 5975	0.92 5975		
577.122	P <sub>1</sub> M <sub>2</sub>	3.30 6072	3.30 6072	3.30 6072			1.65 6072	1.65 6072	1.65 6072			0.83 6072	0.83 6072	0.83 6072		
621.619	P <sub>1</sub> M <sub>2</sub>	3.02 5975	3.02 5975	3.02 5975			1.51 5975	1.51 5975	1.51 5975			0.76 5975	0.76 5975	0.76 5975		
700.416	P <sub>1</sub> M <sub>2</sub>	2.72 6072	2.72 6072	2.72 6072			1.36 6072	1.36 6072	1.36 6072			0.68 6072	0.68 6072	0.68 6072		
816.455	P <sub>1</sub> M <sub>2</sub>	2.30 5975	2.30 5975	2.30 5975			1.15 5975	1.15 5975	1.15 5975			0.57 5975	0.57 5975	0.57 5975		
919.949	P <sub>1</sub> M <sub>2</sub>	2.07 6072	2.07 6072	2.07 6072			1.04 6072	1.04 6072	1.04 6072			0.52 6072	0.52 6072	0.52 6072		
990.879	P <sub>1</sub> M <sub>2</sub>	1.89 5975	1.89 5975	1.89 5975			0.95 5975	0.95 5975	0.95 5975			0.47 5975	0.47 5975	0.47 5975		
1116.484	P <sub>1</sub> M <sub>2</sub>	1.71 6072	1.71 6072	1.71 6072			0.85 6072	0.85 6072	0.85 6072			0.43 6072	0.43 6072	0.43 6072		
1252.516	P <sub>1</sub> M <sub>2</sub>	1.50 5975	1.50 5975				0.75 5975	0.75 5975				0.37 5975	0.37 5975			
1411.286	P <sub>1</sub> M <sub>2</sub>	1.35 6072	1.35 6072				0.68 6072	0.68 6072				0.34 6072	0.34 6072			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 11790 \text{ Nm}$

GKS 14 - 3 N										Dimensions page 6-118		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		□G	□H	□K	□G	□H	□K	□G	□H	□K		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
12.435	P <sub>1</sub> M <sub>2</sub>	93.8 3777			57.7 4651			31.0 4994				
13.525	P <sub>1</sub> M <sub>2</sub>	93.8 4108			57.7 5058			31.0 5432				
16.646	P <sub>1</sub> M <sub>2</sub>	80.4 4334	89.0 4797		49.5 5336	54.8 5906		27.4 5906	27.4 5906			
18.311	P <sub>1</sub> M <sub>2</sub>	80.4 4767	83.9 4978		49.5 5870	51.7 6130		25.8 6130	25.8 6130			
20.065	P <sub>1</sub> M <sub>2</sub>	93.8 6095			57.7 7505			31.0 8059				
22.609	P <sub>1</sub> M <sub>2</sub>	93.8 6868			57.7 8456			31.0 9073				
24.696	P <sub>1</sub> M <sub>2</sub>	80.4 6430	89.0 7117		49.5 7917	54.8 8763		27.4 8763	27.4 8763			
27.165	P <sub>1</sub> M <sub>2</sub>	80.4 7073	83.9 7386		49.5 8709	51.7 9094		25.8 9094	25.8 9094			
30.609	P <sub>1</sub> M <sub>2</sub>	80.4 7969	83.0 8229		49.5 9812	51.1 10132		25.5 10132	25.5 10132			
34.692	P <sub>1</sub> M <sub>2</sub>	72.1 8099	72.1 8099		44.4 9973	44.4 9973		22.2 9973	22.2 9973			
39.089	P <sub>1</sub> M <sub>2</sub>	70.2 8883	70.2 8883		43.2 10937	43.2 10937		21.6 10937	21.6 10937			
42.531	P <sub>1</sub> M <sub>2</sub>	71.9 9908	71.9 9908		39.0 10737	39.0 10737		19.5 10737	19.5 10737			
47.923	P <sub>1</sub> M <sub>2</sub>	66.9 10391	66.9 10391		36.3 11261	36.3 11261		18.1 11261	18.1 11261			
56.251	P <sub>1</sub> M <sub>2</sub>	32.5 5916	58.3 10632	58.3 10632	17.6 6412	31.6 11522	31.6 11522	10.8 7860	15.8 11522	15.8 11522		
63.382	P <sub>1</sub> M <sub>2</sub>	32.5 6666	51.6 10591	51.6 10591	17.6 7224	28.0 11477	28.0 11477	10.8 8856	14.0 11477	14.0 11477		
68.942	P <sub>1</sub> M <sub>2</sub>	32.5 7251	47.3 10569		17.6 7858	25.6 11454		9.26 8271	12.8 11454			
77.681	P <sub>1</sub> M <sub>2</sub>	32.5 8170	42.2 10630		17.6 8854	22.9 11520		9.26 9319	11.4 11520			
90.551	P <sub>1</sub> M <sub>2</sub>	26.8 7863	36.1 10601		14.5 8521	19.6 11488		7.26 8521	9.79 11488			
102.029	P <sub>1</sub> M <sub>2</sub>	26.8 8860	32.5 10740		14.5 9601	17.6 11639		7.26 9601	8.80 11639			
109.896	P <sub>1</sub> M <sub>2</sub>	22.4 7973	30.6 10879		12.1 8640	16.6 11790		6.07 8640	8.28 11790			
123.826	P <sub>1</sub> M <sub>2</sub>	24.3 9735	29.0 11639		12.1 9735	14.5 11639		6.07 9735	7.25 11639			
138.913	P <sub>1</sub> M <sub>2</sub>	19.5 8765			9.74 8765			4.87 8765				
156.522	P <sub>1</sub> M <sub>2</sub>	19.5 9876			9.74 9876			4.87 9876				

Thermal power limit not considered (see page 2-4)

## Selection tables - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 11790 \text{ Nm}$

GKS 14 - 3 N										Dimensions page 6-118
$n_1$	2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>			
IEC connection	100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225	100/112/132	160/180 132	200/225	
For the geometrical assignment of servo/DC motors see section 2										
Drive size		□G	□H	□K	□G	□H	□K	□G	□H	□K
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]									
186.572	$P_1$	19.2	19.2		9.60	9.60		4.80	4.80	
	$M_2$	11609	11609		11609	11609		11609	11609	
210.222	$P_1$	17.0	17.0		8.48	8.48		4.24	4.24	
	$M_2$	11555	11555		11555	11555		11555	11555	
226.431	$P_1$	15.8	15.8		7.91	7.91		3.96	3.96	
	$M_2$	11609	11609		11609	11609		11609	11609	
255.133	$P_1$	14.0	14.0		6.99	6.99		3.50	3.50	
	$M_2$	11555	11555		11555	11555		11555	11555	
286.219	$P_1$	12.5			6.26			3.13		
	$M_2$	11609			11609			11609		
322.500	$P_1$	11.1			5.53			2.77		
	$M_2$	11555			11555			11555		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 11639 \text{ Nm}$

GKS 14 - 4 N															Dimensions page 6-126				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132	80/90	100/112 80/90	100/112 90	132 100/112	160/180 132			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		OD	OE	OF	OG	OH	OD	OE	OF	OG	OH	OD	OE	OF	OG	OH			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
97.467	P <sub>1</sub>	12.2	12.2	29.7	29.7		6.60	6.60	16.1	16.1		4.40	4.40	8.03	8.03				
	M <sub>2</sub>	3779	3779	9202	9202		4095	4095	9973	9973		5460	5460	9973	9973				
109.822	P <sub>1</sub>	12.2	12.2	28.9	28.9		6.60	6.60	15.6	15.6		4.40	4.40	7.82	7.82				
	M <sub>2</sub>	4258	4258	10093	10093		4614	4614	10937	10937		6153	6153	10937	10937				
119.493	P <sub>1</sub>	13.2	13.2	28.2	28.2		6.60	6.60	14.1	14.1		4.40	4.40	7.05	7.05				
	M <sub>2</sub>	5021	5021	10737	10737		5021	5021	10737	10737		6694	6694	10737	10737				
134.640	P <sub>1</sub>	13.2	13.2	26.3	26.3		6.60	6.60	13.1	13.1		4.40	4.40	6.57	6.57				
	M <sub>2</sub>	5657	5657	11261	11261		5657	5657	11261	11261		7543	7543	11261	11261				
158.039	P <sub>1</sub>	13.2	13.2	22.9	22.9		6.60	6.60	11.5	11.5		4.40	4.40	5.72	5.72				
	M <sub>2</sub>	6640	6640	11522	11522		6640	6640	11522	11522		8854	8854	11522	11522				
178.072	P <sub>1</sub>	13.2	13.2	20.2	20.2		6.60	6.60	10.1	10.1		4.40	4.40	5.06	5.06				
	M <sub>2</sub>	7482	7482	11477	11477		7482	7482	11477	11477		9976	9976	11477	11477				
193.754	P <sub>1</sub>		13.2	18.7	18.7			6.60	9.34	9.34			4.40	4.67	4.67				
	M <sub>2</sub>		8141	11522	11522			8141	11522	11522			10855	11522	11522				
218.315	P <sub>1</sub>		13.2	16.5	16.5			6.60	8.25	8.25			4.13	4.13	4.13				
	M <sub>2</sub>		9173	11477	11477			9173	11477	11477			11477	11477	11477				
237.467	P <sub>1</sub>		13.2	15.2	15.2			6.60	7.57	7.57			3.79	3.79	3.79				
	M <sub>2</sub>		9978	11454	11454			9978	11454	11454			11454	11454	11454				
267.568	P <sub>1</sub>		13.2	13.5	13.5			6.60	6.76	6.76			3.38	3.38	3.38				
	M <sub>2</sub>		11242	11520	11520			11242	11520	11520			11520	11520	11520				
321.729	P <sub>1</sub>	11.2	11.2	11.2			5.59	5.59	5.59			2.80	2.80	2.80					
	M <sub>2</sub>	11454	11454	11454			11454	11454	11454			11454	11454	11454					
362.512	P <sub>1</sub>	9.98	9.98	9.98			4.99	4.99	4.99			2.50	2.50	2.50					
	M <sub>2</sub>	11520	11520	11520			11520	11520	11520			11520	11520	11520					
390.672	P <sub>1</sub>	9.21	9.21	9.21			4.60	4.60	4.60			2.30	2.30	2.30					
	M <sub>2</sub>	11454	11454	11454			11454	11454	11454			11454	11454	11454					
440.193	P <sub>1</sub>	8.22	8.22	8.22			4.11	4.11	4.11			2.05	2.05	2.05					
	M <sub>2</sub>	11520	11520	11520			11520	11520	11520			11520	11520	11520					
513.121	P <sub>1</sub>	7.03	7.03	7.03			3.52	3.52	3.52			1.76	1.76	1.76					
	M <sub>2</sub>	11488	11488	11488			11488	11488	11488			11488	11488	11488					
578.164	P <sub>1</sub>	6.32	6.32	6.32			3.16	3.16	3.16			1.58	1.58	1.58					
	M <sub>2</sub>	11639	11639	11639			11639	11639	11639			11639	11639	11639					
622.742	P <sub>1</sub>	5.79	5.79	5.79			2.90	2.90	2.90			1.45	1.45	1.45					
	M <sub>2</sub>	11488	11488	11488			11488	11488	11488			11488	11488	11488					
701.681	P <sub>1</sub>	5.21	5.21	5.21			2.60	2.60	2.60			1.30	1.30	1.30					
	M <sub>2</sub>	11639	11639	11639			11639	11639	11639			11639	11639	11639					
805.901	P <sub>1</sub>	4.48	4.48	4.48			2.24	2.24	2.24			1.12	1.12	1.12					
	M <sub>2</sub>	11488	11488	11488			11488	11488	11488			11488	11488	11488					
908.058	P <sub>1</sub>	4.03	4.03	4.03			2.01	2.01	2.01			1.01	1.01	1.01					
	M <sub>2</sub>	11639	11639	11639			11639	11639	11639			11639	11639	11639					
978.071	P <sub>1</sub>	3.69	3.69	3.69			1.84	1.84	1.84			0.92	0.92	0.92					
	M <sub>2</sub>	11488	11488	11488			11488	11488	11488			11488	11488	11488					
1102.052	P <sub>1</sub>	3.32	3.32	3.32			1.66	1.66	1.66			0.83	0.83	0.83					
	M <sub>2</sub>	11639	11639	11639			11639	11639	11639			11639	11639	11639					
1236.326	P <sub>1</sub>	2.92	2.92				1.46	1.46				0.73	0.73						
	M <sub>2</sub>	11488	11488				11488	11488				11488	11488						
1393.043	P <sub>1</sub>	2.62	2.62				1.31	1.31				0.66	0.66						
	M <sub>2</sub>	11639	11639				11639	11639				11639	11639						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 190 \text{ Nm}$

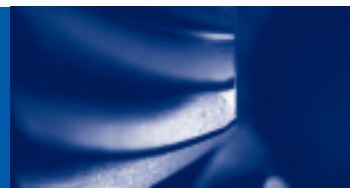
		GKS 04 - 3 W						Dimensions page 6-134		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]									
5.123	$P_1$		2.36	3.88		1.45	2.39		0.73	1.20
	$M_2$		39	64		48	79		48	79
7.026	$P_1$		2.36	3.30		1.45	2.03		0.73	1.02
	$M_2$		54	75		66	93		66	93
8.167	$P_1$		2.36	3.88		1.45	2.39		0.73	1.20
	$M_2$		62	103		77	126		77	126
8.991	$P_1$		2.71	2.87		1.67	1.77		0.83	0.88
	$M_2$		79	84		97	103		97	103
9.836	$P_1$		2.68	2.71		1.65	1.67		0.83	0.83
	$M_2$		85	86		105	106		105	106
11.730	$P_1$		2.36	3.85		1.45	2.37		0.73	1.18
	$M_2$		90	146		110	180		110	180
13.067	$P_1$		2.36	3.17		1.45	1.95		0.73	0.97
	$M_2$		100	134		123	165		123	165
14.333	$P_1$		2.71	2.87		1.67	1.77		0.83	0.88
	$M_2$		126	133		155	164		155	164
16.087	$P_1$		2.36	2.82		1.45	1.74		0.73	0.87
	$M_2$		123	147		151	181		151	181
17.920	$P_1$		2.32	2.32		1.43	1.43		0.72	0.72
	$M_2$		135	135		166	166		166	166
20.588	$P_1$		2.22	2.22		1.36	1.36		0.68	0.68
	$M_2$		148	148		182	182		182	182
22.522	$P_1$		2.03	2.03		1.25	1.25		0.62	0.62
	$M_2$		148	148		182	182		182	182
25.088	$P_1$		1.67	1.67		1.03	1.03		0.51	0.51
	$M_2$		136	136		167	167		167	167
28.727	$P_1$		1.60	1.60		0.98	0.98		0.49	0.49
	$M_2$		149	149		183	183		183	183
32.000	$P_1$		1.31	1.31		0.81	0.81		0.40	0.40
	$M_2$		136	136		167	167		167	167
35.191	$P_1$		1.30	1.30		0.80	0.80		0.40	0.40
	$M_2$		149	149		183	183		183	183
39.200	$P_1$		1.07	1.07		0.66	0.66		0.33	0.33
	$M_2$		136	136		168	168		168	168
44.240	$P_1$	1.05	1.05	1.05	0.65	0.65	0.65	0.32	0.32	0.32
	$M_2$	150	150	150	185	185	185	185	185	185
50.943	$P_1$		0.90	0.90		0.55	0.55		0.28	0.28
	$M_2$		148	148		182	182		182	182
56.976	$P_1$	0.82	0.82	0.82	0.51	0.51	0.51	0.25	0.25	0.25
	$M_2$	152	152	152	187	187	187	187	187	187
64.978	$P_1$		0.71	0.71		0.44	0.44		0.22	0.22
	$M_2$		149	149		183	183		183	183
72.210	$P_1$	0.66	0.66		0.41	0.41		0.20	0.20	
	$M_2$	154	154		190	190		190	190	
79.599	$P_1$		0.58	0.58		0.36	0.36		0.18	0.18
	$M_2$		149	149		183	183		183	183
90.491	$P_1$	0.53	0.53		0.32	0.32		0.16	0.16	
	$M_2$	154	154		190	190		190	190	
100.067	$P_1$	0.46	0.46	0.46	0.29	0.29	0.29	0.14	0.14	0.14
	$M_2$	150	150	150	185	185	185	185	185	185
111.467	$P_1$	0.38	0.38	0.38	0.24	0.24	0.24	0.12	0.12	0.12
	$M_2$	138	138	138	170	170	170	170	170	170

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 190 \text{ Nm}$

GKS 04 - 3 W											Dimensions page 6-134		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>					
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
128.874	$P_1$	0.36	0.36	0.36	0.22	0.22	0.22	0.11	0.11	0.11			
	$M_2$	152	152	152	187	187	187	187	187	187			
143.556	$P_1$	0.30	0.30	0.30	0.19	0.19	0.19	0.09	0.09	0.09			
	$M_2$	140	140	140	172	172	172	172	172	172			
163.332	$P_1$	0.29	0.29		0.18	0.18		0.09	0.09				
	$M_2$	154	154		190	190		190	190				
181.939	$P_1$	0.24	0.24		0.15	0.15		0.07	0.07				
	$M_2$	141	141		174	174		174	174				
204.682	$P_1$	0.23	0.23		0.14	0.14		0.07	0.07				
	$M_2$	154	154		190	190		190	190				
228.000	$P_1$	0.20	0.20		0.12	0.12		0.06	0.06				
	$M_2$	144	144		177	177		177	177				
269.660	$P_1$	0.18			0.11			0.05					
	$M_2$	154			190			190					
300.381	$P_1$	0.15			0.09			0.05					
	$M_2$	145			178			178					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 331 \text{ Nm}$

GKS 05 - 3 W										Dimensions page 6-134		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
6.863	$P_1$ $M_2$			5.39 120			3.32 147			1.66 147		
9.412	$P_1$ $M_2$			4.39 134			2.70 165			1.35 165		
10.569	$P_1$ $M_2$			5.39 184			3.32 227			1.66 227		
11.667	$P_1$ $M_2$			5.39 204			3.32 251			1.66 251		
13.177	$P_1$ $M_2$	2.36 101	3.15 134	3.15 134	1.45 124	1.94 165	1.94 165	0.73 124	0.97 165	0.97 165		
14.494	$P_1$ $M_2$			4.39 206			2.70 254			1.35 254		
16.000	$P_1$ $M_2$			4.39 227			2.70 280			1.35 280		
17.054	$P_1$ $M_2$			4.61 255			2.84 313			1.42 313		
19.216	$P_1$ $M_2$			3.88 241			2.39 297			1.19 297		
23.388	$P_1$ $M_2$			3.53 267			2.17 329			1.09 329		
26.353	$P_1$ $M_2$			2.84 242			1.75 298			0.87 298		
29.931	$P_1$ $M_2$		2.76 268	2.76 268		1.70 330	1.70 330		0.85 330	0.85 330		
32.744	$P_1$ $M_2$	2.36 250	2.53 269	2.53 269	1.45 308	1.56 331	1.56 331	0.73 308	0.78 331	0.78 331		
36.894	$P_1$ $M_2$	2.05 245	2.05 245	2.05 245	1.26 302	1.26 302	1.26 302	0.63 302	0.63 302	0.63 302		
41.765	$P_1$ $M_2$	1.99 269	1.99 269	1.99 269	1.22 331	1.22 331	1.22 331	0.61 331	0.61 331	0.61 331		
47.059	$P_1$ $M_2$	1.62 247	1.62 247	1.62 247	1.00 304	1.00 304	1.00 304	0.50 304	0.50 304	0.50 304		
51.162	$P_1$ $M_2$		1.62 269	1.62 269		1.00 331	1.00 331		0.50 331	0.50 331		
57.647	$P_1$ $M_2$		1.34 249	1.34 249		0.82 307	0.82 307		0.41 307	0.41 307		
66.592	$P_1$ $M_2$	1.25 269	1.25 269	1.25 269	0.77 331	0.77 331	0.77 331	0.38 331	0.38 331	0.38 331		
75.033	$P_1$ $M_2$	1.04 252	1.04 252	1.04 252	0.64 310	0.64 310	0.64 310	0.32 310	0.32 310	0.32 310		
82.833	$P_1$ $M_2$	1.00 269	1.00 269	1.00 269	0.62 331	0.62 331	0.62 331	0.31 331	0.31 331	0.31 331		
93.333	$P_1$ $M_2$	0.85 256	0.85 256	0.85 256	0.52 315	0.52 315	0.52 315	0.26 315	0.26 315	0.26 315		
107.196	$P_1$ $M_2$	0.77 269	0.77 269		0.48 331	0.48 331		0.24 331	0.24 331			
120.784	$P_1$ $M_2$	0.65 256	0.65 256		0.40 315	0.40 315		0.20 315	0.20 315			
130.097	$P_1$ $M_2$	0.64 269	0.64 269		0.39 331	0.39 331		0.20 331	0.20 331			
146.588	$P_1$ $M_2$	0.54 256	0.54 256		0.33 315	0.33 315		0.17 315	0.17 315			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 331 \text{ Nm}$

GKS 05 - 3 W										Dimensions page 6-134		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
166.276	$P_1$ $M_2$	0.50 269			0.31 331			0.15 331				
187.353	$P_1$ $M_2$	0.42 256			0.26 315			0.13 315				
211.200	$P_1$ $M_2$	0.37 255	0.37 255		0.23 314	0.23 314		0.12 314	0.12 314			
227.484	$P_1$ $M_2$	0.31 226	0.31 226		0.19 278	0.19 278		0.09 278	0.09 278			
256.320	$P_1$ $M_2$	0.31 254	0.31 254		0.19 313	0.19 313		0.09 313	0.09 313			
290.745	$P_1$ $M_2$	0.24 225			0.15 277			0.07 277				
327.600	$P_1$ $M_2$	0.24 253			0.15 312			0.07 312				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 325 \text{ Nm}$

GKS 05 - 4 W											Dimensions page 6-135		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>					
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
95.238	P <sub>1</sub>	0.45	0.45	0.45	0.28	0.28	0.28	0.14	0.14	0.14			
	M <sub>2</sub>	137	137	137	169	169	169	169	169	169			
114.987	P <sub>1</sub>	0.55	0.55	0.55	0.34	0.34	0.34	0.17	0.17	0.17			
	M <sub>2</sub>	203	203	203	250	250	250	250	250	250			
126.933	P <sub>1</sub>	0.57	0.57	0.57	0.35	0.35	0.35	0.18	0.18	0.18			
	M <sub>2</sub>	230	230	230	284	284	284	284	284	284			
146.667	P <sub>1</sub>	0.44	0.44	0.44	0.27	0.27	0.27	0.13	0.13	0.13			
	M <sub>2</sub>	203	203	203	250	250	250	250	250	250			
161.905	P <sub>1</sub>	0.45	0.45	0.45	0.28	0.28	0.28	0.14	0.14	0.14			
	M <sub>2</sub>	230	230	230	284	284	284	284	284	284			
185.547	P <sub>1</sub>	0.45	0.45	0.45	0.28	0.28	0.28	0.14	0.14	0.14			
	M <sub>2</sub>	264	264	264	325	325	325	325	325	325			
209.067	P <sub>1</sub>	0.38	0.38	0.38	0.24	0.24	0.24	0.12	0.12	0.12			
	M <sub>2</sub>	256	256	256	315	315	315	315	315	315			
225.867	P <sub>1</sub>	0.28	0.28	0.28	0.17	0.17	0.17	0.09	0.09	0.09			
	M <sub>2</sub>	203	203	203	250	250	250	250	250	250			
236.667	P <sub>1</sub>	0.35	0.35	0.35	0.22	0.22	0.22	0.11	0.11	0.11			
	M <sub>2</sub>	264	264	264	325	325	325	325	325	325			
289.917	P <sub>1</sub>		0.29	0.29		0.18	0.18		0.09	0.09			
	M <sub>2</sub>		264	264		325	325		325	325			
326.667	P <sub>1</sub>		0.25	0.25		0.15	0.15		0.08	0.08			
	M <sub>2</sub>		256	256		315	315		315	315			
364.467	P <sub>1</sub>	0.23	0.23	0.23	0.14	0.14	0.14	0.07	0.07	0.07			
	M <sub>2</sub>	264	264	264	325	325	325	325	325	325			
410.667	P <sub>1</sub>	0.20	0.20	0.20	0.12	0.12	0.12	0.06	0.06	0.06			
	M <sub>2</sub>	256	256	256	315	315	315	315	315	315			
469.389	P <sub>1</sub>	0.18	0.18	0.18	0.11	0.11	0.11	0.05	0.05	0.05			
	M <sub>2</sub>	264	264	264	325	325	325	325	325	325			
510.000	P <sub>1</sub>	0.14	0.14		0.09	0.09		0.04	0.04				
	M <sub>2</sub>	230	230		284	284		284	284				
528.889	P <sub>1</sub>	0.15	0.15	0.15	0.09	0.09	0.09	0.05	0.05	0.05			
	M <sub>2</sub>	256	256	256	315	315	315	315	315	315			
594.894	P <sub>1</sub>	0.14	0.14		0.09	0.09		0.04	0.04				
	M <sub>2</sub>	264	264		325	325		325	325				
670.303	P <sub>1</sub>	0.12	0.12		0.07	0.07		0.04	0.04				
	M <sub>2</sub>	256	256		315	315		315	315				
820.760	P <sub>1</sub>	0.10	0.10	0.10	0.06	0.06	0.06	0.03	0.03	0.03			
	M <sub>2</sub>	264	264	264	325	325	325	325	325	325			
924.800	P <sub>1</sub>	0.09	0.09	0.09	0.05	0.05	0.05	0.03	0.03	0.03			
	M <sub>2</sub>	256	256	256	315	315	315	315	315	315			
1040.215	P <sub>1</sub>	0.08	0.08		0.05	0.05		0.03	0.03				
	M <sub>2</sub>	264	264		325	325		325	325				
1172.073	P <sub>1</sub>	0.07	0.07		0.04	0.04		0.02	0.02				
	M <sub>2</sub>	256	256		315	315		315	315				
1303.560	P <sub>1</sub>	0.06	0.06		0.04	0.04		0.02	0.02				
	M <sub>2</sub>	264	264		325	325		325	325				
1468.800	P <sub>1</sub>	0.06	0.06		0.03	0.03		0.02	0.02				
	M <sub>2</sub>	256	256		315	315		315	315				
1717.389	P <sub>1</sub>	0.05			0.03			0.02					
	M <sub>2</sub>	264			325			325					
1935.086	P <sub>1</sub>	0.04			0.03			0.01					
	M <sub>2</sub>	256			315			315					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 702 \text{ Nm}$

GKS 06 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
6.485	P <sub>1</sub>			10.2	10.2			6.26	6.26			3.13	3.13		
	M2			214	214			263	263			263	263		
9.196	P <sub>1</sub>			10.2	10.2			6.26	6.26			3.13	3.13		
	M2			303	303			373	373			373	373		
10.147	P <sub>1</sub>			10.2	10.2			6.26	6.26			3.13	3.13		
	M2			334	334			412	412			412	412		
11.382	P <sub>1</sub>		7.30	7.30	7.30		4.49	4.49	4.49		2.25	2.25	2.25		
	M2		269	269	269		331	331	331		331	331	331		
12.612	P <sub>1</sub>			8.47	8.47			5.21	5.21			2.61	2.61		
	M2			346	346			426	426			426	426		
14.824	P <sub>1</sub>			10.2	10.2			6.25	6.25			3.13	3.13		
	M2			488	488			600	600			600	600		
16.699	P <sub>1</sub>			9.07	9.07			5.58	5.58			2.79	2.79		
	M2			491	491			604	604			604	604		
17.809	P <sub>1</sub>		7.30	7.30	7.30		4.49	4.49	4.49		2.25	2.25	2.25		
	M2		421	421	421		518	518	518		518	518	518		
20.329	P <sub>1</sub>			8.20	8.20			5.05	5.05			2.53	2.53		
	M2			540	540			665	665			665	665		
22.902	P <sub>1</sub>			6.63	6.63			4.08	4.08			2.04	2.04		
	M2			492	492			606	606			606	606		
26.017	P <sub>1</sub>		6.54	6.54	6.54		4.03	4.03	4.03		2.01	2.01	2.01		
	M2		551	551	551		679	679	679		679	679	679		
28.461	P <sub>1</sub>		6.01	6.01	6.01		3.70	3.70	3.70		1.85	1.85	1.85		
	M2		554	554	554		682	682	682		682	682	682		
32.063	P <sub>1</sub>		4.77	4.77	4.77		2.94	2.94	2.94		1.47	1.47	1.47		
	M2		495	495	495		610	610	610		610	610	610		
36.303	P <sub>1</sub>	4.01	4.73	4.73	4.73	2.47	2.91	2.91	2.91	1.23	1.46	1.46	1.46		
	M2	471	556	556	556	580	685	685	685	580	685	685	685		
41.472	P <sub>1</sub>			4.17	4.17			2.56	2.56			1.28	1.28		
	M2			560	560			689	689			689	689		
44.471	P <sub>1</sub>		3.88	3.88	3.88		2.39	2.39	2.39		1.20	1.20	1.20		
	M2		560	560	560		689	689	689		689	689	689		
53.074	P <sub>1</sub>		3.28	3.28	3.28		2.02	2.02	2.02		1.01	1.01	1.01		
	M2		564	564	564		695	695	695		695	695	695		
57.882	P <sub>1</sub>	2.77	3.01	3.01		1.71	1.85	1.85		0.85	0.93	0.93			
	M2	519	564	564		639	695	695		639	695	695			
65.207	P <sub>1</sub>	2.40	2.40	2.40		1.48	1.48	1.48		0.74	0.74	0.74			
	M2	507	507	507		624	624	624		624	624	624			
72.000	P <sub>1</sub>	2.32	2.44	2.44		1.43	1.51	1.51		0.71	0.75	0.75			
	M2	540	570	570		665	702	702		665	702	702			
81.111	P <sub>1</sub>	1.95	1.95	1.95		1.20	1.20	1.20		0.60	0.60	0.60			
	M2	512	512	512		630	630	630		630	630	630			
93.177	P <sub>1</sub>	1.79	1.89			1.10	1.16			0.55	0.58				
	M2	540	570			664	702			664	702				
104.967	P <sub>1</sub>	1.52	1.52			0.93	0.93			0.47	0.47				
	M2	516	516			635	635			635	635				
113.082	P <sub>1</sub>	1.55	1.56			0.96	0.96			0.48	0.48				
	M2	568	570			700	702			700	702				
127.392	P <sub>1</sub>	1.25	1.25			0.77	0.77			0.39	0.39				
	M2	516	516			635	635			635	635				
142.941	P <sub>1</sub>	1.23				0.76				0.38					
	M2	570				702				702					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 702 \text{ Nm}$

GKS 06 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
161.029	$P_1$ $M_2$	0.99 516				0.61 635				0.30 635					
190.080	$P_1$ $M_2$	0.93 570	0.93 570			0.57 702	0.57 702			0.29 702	0.29 702				
214.133	$P_1$ $M_2$	0.74 516	0.74 516			0.46 635	0.46 635			0.23 635	0.23 635				
230.688	$P_1$ $M_2$	0.76 570	0.76 570			0.47 702	0.47 702			0.24 702	0.24 702				
259.880	$P_1$ $M_2$	0.61 516	0.61 516			0.38 635	0.38 635			0.19 635	0.19 635				
291.600	$P_1$ $M_2$	0.60 570				0.37 702				0.19 702					
328.500	$P_1$ $M_2$	0.49 516				0.30 635				0.15 635					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft



$M_2 \text{ perm} \leq 702 \text{ Nm}$

GKS 06 - 4 W										Dimensions page 6-135
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]									
103.721	P <sub>1</sub>	0.96	1.68	1.68	0.59	1.04	1.04	0.30	0.52	0.52
	M <sub>2</sub>	317	556	556	390	685	685	390	685	685
113.205	P <sub>1</sub>	0.96	1.21	1.21	0.59	0.75	0.75	0.30	0.37	0.37
	M <sub>2</sub>	346	436	436	425	537	537	425	537	537
127.059	P <sub>1</sub>	0.96	1.38	1.38	0.59	0.85	0.85	0.30	0.43	0.43
	M <sub>2</sub>	388	560	560	478	689	689	478	689	689
140.816	P <sub>1</sub>	0.96	0.97	0.97	0.59	0.60	0.60	0.30	0.30	0.30
	M <sub>2</sub>	430	436	436	529	537	537	529	537	537
155.647	P <sub>1</sub>		1.13	1.13		0.70	0.70		0.35	0.35
	M <sub>2</sub>		560	560		689	689		689	689
174.336	P <sub>1</sub>	0.79	0.79	0.79	0.48	0.48	0.48	0.24	0.24	0.24
	M <sub>2</sub>	436	436	436	537	537	537	537	537	537
202.588	P <sub>1</sub>		0.88	0.88		0.54	0.54		0.27	0.27
	M <sub>2</sub>		564	564		695	695		695	695
224.524	P <sub>1</sub>	0.61	0.61	0.61	0.38	0.38	0.38	0.19	0.19	0.19
	M <sub>2</sub>	436	436	436	537	537	537	537	537	537
252.000	P <sub>1</sub>		0.71	0.71		0.44	0.44		0.22	0.22
	M <sub>2</sub>		570	570		702	702		702	702
279.286	P <sub>1</sub>	0.49	0.49	0.49	0.30	0.30	0.30	0.15	0.15	0.15
	M <sub>2</sub>	436	436	436	537	537	537	537	537	537
316.800	P <sub>1</sub>	0.57	0.57	0.57	0.35	0.35	0.35	0.17	0.17	0.17
	M <sub>2</sub>	570	570	570	702	702	702	702	702	702
361.429	P <sub>1</sub>	0.38	0.38	0.38	0.23	0.23	0.23	0.12	0.12	0.12
	M <sub>2</sub>	436	436	436	537	537	537	537	537	537
408.000	P <sub>1</sub>	0.44	0.44	0.44	0.27	0.27	0.27	0.14	0.14	0.14
	M <sub>2</sub>	570	570	570	702	702	702	702	702	702
458.067	P <sub>1</sub>	0.30	0.30		0.18	0.18		0.09	0.09	
	M <sub>2</sub>	436	436		537	537		537	537	
517.091	P <sub>1</sub>	0.35	0.35		0.21	0.21		0.11	0.11	
	M <sub>2</sub>	570	570		702	702		702	702	
555.927	P <sub>1</sub>	0.25	0.25		0.15	0.15		0.08	0.08	
	M <sub>2</sub>	436	436		537	537		537	537	
640.800	P <sub>1</sub>	0.28	0.28	0.28	0.17	0.17	0.17	0.09	0.09	0.09
	M <sub>2</sub>	570	570	570	702	702	702	702	702	702
696.668	P <sub>1</sub>	0.20	0.20		0.12	0.12		0.06	0.06	
	M <sub>2</sub>	436	436		537	537		537	537	
812.137	P <sub>1</sub>	0.22	0.22		0.14	0.14		0.07	0.07	
	M <sub>2</sub>	570	570		702	702		702	702	
914.907	P <sub>1</sub>	0.18	0.18		0.11	0.11		0.05	0.05	
	M <sub>2</sub>	516	516		635	635		635	635	
1017.741	P <sub>1</sub>	0.18	0.18		0.11	0.11		0.05	0.05	
	M <sub>2</sub>	570	570		702	702		702	702	
1146.529	P <sub>1</sub>	0.14	0.14		0.09	0.09		0.04	0.04	
	M <sub>2</sub>	516	516		635	635		635	635	
1340.834	P <sub>1</sub>	0.13			0.08			0.04		
	M <sub>2</sub>	570			702			702		
1510.507	P <sub>1</sub>	0.11			0.07			0.03		
	M <sub>2</sub>	516			635			635		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 1330 \text{ Nm}$

GKS 07 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
5.955	P <sub>1</sub>			19.8	19.8			12.2	12.2			6.10	6.10		
	M <sub>2</sub>			382	382			470	470			470	470		
8.254	P <sub>1</sub>			16.4	16.4			10.1	10.1			5.05	5.05		
	M <sub>2</sub>			439	439			540	540			540	540		
9.171	P <sub>1</sub>			19.8	19.8			12.2	12.2			6.10	6.10		
	M <sub>2</sub>			588	588			725	725			725	725		
10.124	P <sub>1</sub>			19.8	19.8			12.2	12.2			6.10	6.10		
	M <sub>2</sub>			650	650			800	800			800	800		
11.378	P <sub>1</sub>		13.5	13.5	13.5		8.32	8.32	8.32		4.16	4.16	4.16		
	M <sub>2</sub>		498	498	498		613	613	613		613	613	613		
12.711	P <sub>1</sub>			16.4	16.4			10.1	10.1			5.05	5.05		
	M <sub>2</sub>			676	676			832	832			832	832		
14.799	P <sub>1</sub>			17.6	17.6			10.9	10.9			5.42	5.42		
	M <sub>2</sub>			845	845			1040	1040			1040	1040		
16.674	P <sub>1</sub>			16.1	16.1			9.91	9.91			4.96	4.96		
	M <sub>2</sub>			870	870			1071	1071			1071	1071		
17.270	P <sub>1</sub>		14.5	14.5	14.5		8.92	8.92	8.92		4.46	4.46	4.46		
	M <sub>2</sub>		811	811	811		998	998	998		998	998	998		
20.511	P <sub>1</sub>			13.6	13.6			8.35	8.35			4.18	4.18		
	M <sub>2</sub>			902	902			1110	1110			1110	1110		
23.111	P <sub>1</sub>			12.7	12.7			7.80	7.80			3.90	3.90		
	M <sub>2</sub>			949	949			1168	1168			1168	1168		
25.244	P <sub>1</sub>		11.7	11.7	11.7		7.20	7.20	7.20		3.60	3.60	3.60		
	M <sub>2</sub>		956	956	956		1177	1177	1177		1177	1177	1177		
28.274	P <sub>1</sub>		10.7	10.7	10.7		6.56	6.56	6.56		3.28	3.28	3.28		
	M <sub>2</sub>		976	976	976		1202	1202	1202		1202	1202	1202		
31.858	P <sub>1</sub>		9.22	9.22	9.22		5.68	5.68	5.68		2.84	2.84	2.84		
	M <sub>2</sub>		952	952	952		1172	1172	1172		1172	1172	1172		
36.064	P <sub>1</sub>	7.37	8.97	8.97	8.97	4.54	5.52	5.52	5.52	2.27	2.76	2.76	2.76		
	M <sub>2</sub>	861	1048	1048	1048	1061	1290	1290	1290	1061	1290	1290	1290		
40.906	P <sub>1</sub>			7.91	7.91			4.87	4.87			2.43	2.43		
	M <sub>2</sub>			1048	1048			1290	1290			1290	1290		
44.178	P <sub>1</sub>		7.38	7.38	7.38		4.54	4.54	4.54		2.27	2.27	2.27		
	M <sub>2</sub>		1056	1056	1056		1300	1300	1300		1300	1300	1300		
50.346	P <sub>1</sub>		6.47	6.47	6.47		3.99	3.99	3.99		1.99	1.99	1.99		
	M <sub>2</sub>		1056	1056	1056		1300	1300	1300		1300	1300	1300		
57.501	P <sub>1</sub>	5.17	5.71	5.71	5.71	3.18	3.52	3.52	3.52	1.59	1.76	1.76	1.76		
	M <sub>2</sub>	963	1064	1064	1064	1186	1310	1310	1310	1186	1310	1310	1310		
64.790	P <sub>1</sub>	4.62	4.62	4.62	4.62	2.85	2.85	2.85	2.85	1.42	1.42	1.42	1.42		
	M <sub>2</sub>	971	971	971	971	1195	1195	1195	1195	1195	1195	1195	1195		
70.474	P <sub>1</sub>	4.46	4.70	4.70	4.70	2.74	2.89	2.89	2.89	1.37	1.45	1.45	1.45		
	M <sub>2</sub>	1017	1072	1072	1072	1252	1320	1320	1320	1252	1320	1320	1320		
79.407	P <sub>1</sub>	3.80	3.80	3.80	3.80	2.34	2.34	2.34	2.34	1.17	1.17	1.17	1.17		
	M <sub>2</sub>	979	979	979	979	1205	1205	1205	1205	1205	1205	1205	1205		
92.563	P <sub>1</sub>	3.51	3.60	3.60	3.60	2.16	2.22	2.22	2.22	1.08	1.11	1.11	1.11		
	M <sub>2</sub>	1052	1080	1080	1080	1295	1330	1330	1330	1295	1330	1330	1330		
104.296	P <sub>1</sub>	2.92	2.92	2.92	2.92	1.80	1.80	1.80	1.80	0.90	0.90	0.90	0.90		
	M <sub>2</sub>	987	987	987	987	1215	1215	1215	1215	1215	1215	1215	1215		
112.338	P <sub>1</sub>	2.94	2.97	2.97	2.97	1.81	1.83	1.83	1.83	0.90	0.91	0.91	0.91		
	M <sub>2</sub>	1068	1080	1080	1080	1315	1330	1330	1330	1315	1330	1330	1330		
126.578	P <sub>1</sub>	2.41	2.41	2.41	2.41	1.48	1.48	1.48	1.48	0.74	0.74	0.74	0.74		
	M <sub>2</sub>	987	987	987	987	1215	1215	1215	1215	1215	1215	1215	1215		

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 1330 \text{ Nm}$

GKS 07 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
140.548	P <sub>1</sub>	2.37	2.37	2.37		1.46	1.46	1.46		0.73	0.73	0.73			
	M <sub>2</sub>	1080	1080	1080		1330	1330	1330		1330	1330	1330			
158.364	P <sub>1</sub>	1.92	1.92	1.92		1.18	1.18	1.18		0.59	0.59	0.59			
	M <sub>2</sub>	987	987	987		1215	1215	1215		1215	1215	1215			
184.600	P <sub>1</sub>	1.81	1.81			1.11	1.11			0.56	0.56				
	M <sub>2</sub>	1080	1080			1330	1330			1330	1330				
208.000	P <sub>1</sub>	1.46	1.46			0.90	0.90			0.45	0.45				
	M <sub>2</sub>	987	987			1215	1215			1215	1215				
224.037	P <sub>1</sub>	1.49	1.49			0.92	0.92			0.46	0.46				
	M <sub>2</sub>	1080	1080			1330	1330			1330	1330				
252.436	P <sub>1</sub>	1.21	1.21			0.74	0.74			0.37	0.37				
	M <sub>2</sub>	987	987			1215	1215			1215	1215				
283.193	P <sub>1</sub>	1.18				0.73				0.36					
	M <sub>2</sub>	1080				1330				1330					
319.091	P <sub>1</sub>	0.96				0.59				0.29					
	M <sub>2</sub>	987				1215				1215					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 1330 \text{ Nm}$

GKS 07 - 4 W										Dimensions page 6-135		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
103.039	P <sub>1</sub>	2.31	3.19	3.19	1.42	1.97	1.97	0.71	0.98	0.98		
	M <sub>2</sub>	758	1048	1048	933	1290	1290	933	1290	1290		
112.391	P <sub>1</sub>	2.31	2.39	2.39	1.42	1.47	1.47	0.71	0.74	0.74		
	M <sub>2</sub>	827	855	855	1018	1053	1053	1018	1053	1053		
126.222	P <sub>1</sub>	2.31	2.63	2.63	1.42	1.62	1.62	0.71	0.81	0.81		
	M <sub>2</sub>	928	1056	1056	1143	1300	1300	1143	1300	1300		
137.748	P <sub>1</sub>	1.95	1.95	1.95	1.20	1.20	1.20	0.60	0.60	0.60		
	M <sub>2</sub>	855	855	855	1053	1053	1053	1053	1053	1053		
154.622	P <sub>1</sub>		2.14	2.14		1.32	1.32		0.66	0.66		
	M <sub>2</sub>		1056	1056		1300	1300		1300	1300		
179.201	P <sub>1</sub>	1.50	1.50	1.50	0.92	0.92	0.92	0.46	0.46	0.46		
	M <sub>2</sub>	855	855	855	1053	1053	1053	1053	1053	1053		
201.254	P <sub>1</sub>		1.66	1.66		1.02	1.02		0.51	0.51		
	M <sub>2</sub>		1064	1064		1310	1310		1310	1310		
222.909	P <sub>1</sub>	1.21	1.21	1.21	0.74	0.74	0.74	0.37	0.37	0.37		
	M <sub>2</sub>	855	855	855	1053	1053	1053	1053	1053	1053		
246.659	P <sub>1</sub>		1.37	1.37		0.84	0.84		0.42	0.42		
	M <sub>2</sub>		1072	1072		1320	1320		1320	1320		
273.199	P <sub>1</sub>	0.98	0.98	0.98	0.61	0.61	0.61	0.30	0.30	0.30		
	M <sub>2</sub>	855	855	855	1053	1053	1053	1053	1053	1053		
321.049	P <sub>1</sub>	1.05	1.05	1.05	0.65	0.65	0.65	0.32	0.32	0.32		
	M <sub>2</sub>	1072	1072	1072	1320	1320	1320	1320	1320	1320		
358.829	P <sub>1</sub>	0.75	0.75	0.75	0.46	0.46	0.46	0.23	0.23	0.23		
	M <sub>2</sub>	855	855	855	1053	1053	1053	1053	1053	1053		
399.353	P <sub>1</sub>	0.84	0.84	0.84	0.52	0.52	0.52	0.26	0.26	0.26		
	M <sub>2</sub>	1072	1072	1072	1320	1320	1320	1320	1320	1320		
464.367	P <sub>1</sub>	0.58	0.58		0.36	0.36		0.18	0.18			
	M <sub>2</sub>	855	855		1053	1053		1053	1053			
516.810	P <sub>1</sub>	0.65	0.65		0.40	0.40		0.20	0.20			
	M <sub>2</sub>	1072	1072		1320	1320		1320	1320			
563.573	P <sub>1</sub>	0.48	0.48		0.29	0.29		0.15	0.15			
	M <sub>2</sub>	855	855		1053	1053		1053	1053			
636.581	P <sub>1</sub>	0.53	0.53	0.53	0.33	0.33	0.33	0.16	0.16	0.16		
	M <sub>2</sub>	1080	1080	1080	1330	1330	1330	1330	1330	1330		
683.972	P <sub>1</sub>	0.39	0.39		0.24	0.24		0.12	0.12			
	M <sub>2</sub>	855	855		1053	1053		1053	1053			
823.810	P <sub>1</sub>	0.41	0.41		0.25	0.25		0.13	0.13			
	M <sub>2</sub>	1080	1080		1330	1330		1330	1330			
928.237	P <sub>1</sub>	0.33	0.33		0.21	0.21		0.10	0.10			
	M <sub>2</sub>	987	987		1215	1215		1215	1215			
999.806	P <sub>1</sub>	0.34	0.34		0.21	0.21		0.10	0.10			
	M <sub>2</sub>	1080	1080		1330	1330		1330	1330			
1126.542	P <sub>1</sub>	0.28	0.28		0.17	0.17		0.09	0.09			
	M <sub>2</sub>	987	987		1215	1215		1215	1215			
1277.842	P <sub>1</sub>	0.27			0.16			0.08				
	M <sub>2</sub>	1080			1330			1330				
1439.822	P <sub>1</sub>	0.22			0.13			0.07				
	M <sub>2</sub>	987			1215			1215				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft



$M_2 \text{ perm} \leq 3080 \text{ Nm}$

GKS 09 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
12.283	P <sub>1</sub>			33.0	33.0			20.3	20.3			10.2	10.2		
	M <sub>2</sub>			1312	1312			1615	1615			1615	1615		
13.360	P <sub>1</sub>			33.0	33.0			20.3	20.3			10.2	10.2		
	M <sub>2</sub>			1427	1427			1757	1757			1757	1757		
16.122	P <sub>1</sub>		28.0	28.0	28.0		17.2	17.2	17.2		8.62	8.62	8.62		
	M <sub>2</sub>		1462	1462	1462		1801	1801	1801		1801	1801	1801		
17.536	P <sub>1</sub>		28.0	28.0	28.0		17.2	17.2	17.2		8.62	8.62	8.62		
	M <sub>2</sub>		1591	1591	1591		1958	1958	1958		1958	1958	1958		
19.541	P <sub>1</sub>			33.0	33.0			20.3	20.3			10.2	10.2		
	M <sub>2</sub>			2087	2087			2570	2570			2570	2570		
22.022	P <sub>1</sub>			30.4	30.4			18.7	18.7			9.36	9.36		
	M <sub>2</sub>			2170	2170			2672	2672			2672	2672		
25.649	P <sub>1</sub>		28.0	28.0	28.0		17.2	17.2	17.2		8.61	8.61	8.61		
	M <sub>2</sub>		2325	2325	2325		2862	2862	2862		2862	2862	2862		
29.228	P <sub>1</sub>		25.0	25.0	25.0		15.4	15.4	15.4		7.69	7.69	7.69		
	M <sub>2</sub>		2367	2367	2367		2914	2914	2914		2914	2914	2914		
32.940	P <sub>1</sub>		22.7	22.7	22.7		14.0	14.0	14.0		6.99	6.99	6.99		
	M <sub>2</sub>		2424	2424	2424		2984	2984	2984		2984	2984	2984		
35.193	P <sub>1</sub>	14.9	21.6	21.6	21.6	9.16	13.3	13.3	13.3	4.58	6.64	6.64	6.64		
	M <sub>2</sub>	1697	2460	2460	2460	2089	3029	3029	3029	2089	3029	3029	3029		
39.662	P <sub>1</sub>	14.9	19.0	19.0	19.0	9.16	11.7	11.7	11.7	4.58	5.84	5.84	5.84		
	M <sub>2</sub>	1912	2438	2438	2438	2355	3002	3002	3002	2355	3002	3002	3002		
43.146	P <sub>1</sub>		17.6	17.6	17.6		10.8	10.8	10.8		5.41	5.41	5.41		
	M <sub>2</sub>		2456	2456	2456		3024	3024	3024		3024	3024	3024		
48.625	P <sub>1</sub>		15.6	15.6	15.6		9.58	9.58	9.58		4.79	4.79	4.79		
	M <sub>2</sub>		2450	2450	2450		3017	3017	3017		3017	3017	3017		
58.456	P <sub>1</sub>	10.1	13.0	13.0		6.22	8.00	8.00		3.11	4.00	4.00			
	M <sub>2</sub>	1913	2462	2462		2355	3031	3031		2355	3031	3031			
65.879	P <sub>1</sub>	10.1	11.6	11.6		6.22	7.14	7.14		3.11	3.57	3.57			
	M <sub>2</sub>	2155	2475	2475		2654	3048	3048		2654	3048	3048			
70.982	P <sub>1</sub>	8.64	10.7	10.7		5.32	6.59	6.59		2.66	3.30	3.30			
	M <sub>2</sub>	1986	2462	2462		2445	3031	3031		2445	3031	3031			
79.996	P <sub>1</sub>	8.64	9.62	9.62		5.32	5.93	5.93		2.66	2.96	2.96			
	M <sub>2</sub>	2238	2494	2494		2756	3071	3071		2756	3071	3071			
91.860	P <sub>1</sub>	6.94	8.27			4.27	5.09			2.14	2.55				
	M <sub>2</sub>	2064	2462			2542	3031			2542	3031				
103.524	P <sub>1</sub>	6.94	7.46			4.27	4.59			2.14	2.30				
	M <sub>2</sub>	2326	2501			2864	3080			2864	3080				
111.484	P <sub>1</sub>	5.83	6.82			3.59	4.20			1.79	2.10				
	M <sub>2</sub>	2105	2462			2591	3031			2591	3031				
125.641	P <sub>1</sub>	5.83	6.15			3.59	3.78			1.79	1.89				
	M <sub>2</sub>	2372	2501			2920	3080			2920	3080				
140.921	P <sub>1</sub>	4.70				2.89				1.45					
	M <sub>2</sub>	2146				2642				2642					
158.816	P <sub>1</sub>	4.70				2.89				1.45					
	M <sub>2</sub>	2418				2978				2978					
182.000	P <sub>1</sub>	4.18	4.18			2.57	2.57			1.29	1.29				
	M <sub>2</sub>	2462	2462			3031	3031			3031	3031				
205.111	P <sub>1</sub>	3.76	3.76			2.32	2.32			1.16	1.16				
	M <sub>2</sub>	2501	2501			3080	3080			3080	3080				
220.882	P <sub>1</sub>	3.44	3.44			2.12	2.12			1.06	1.06				
	M <sub>2</sub>	2462	2462			3031	3031			3031	3031				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 3080 \text{ Nm}$

GKS 09 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
248.930	$P_1$	3.10	3.10			1.91	1.91			0.96	0.96				
	$M_2$	2501	2501			3080	3080			3080	3080				
279.205	$P_1$	2.72				1.68				0.84					
	$M_2$	2462				3031				3031					
314.659	$P_1$	2.45				1.51				0.76					
	$M_2$	2501				3080				3080					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 3080 \text{ Nm}$

GKS 09 - 4 W										Dimensions page 6-135			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
100.551	P <sub>1</sub>	4.01	6.18	7.68	7.68	2.47	3.80	4.73	4.73	1.23	1.90	2.37	2.37
	M <sub>2</sub>	1284	1979	2460	2460	1580	2436	3029	3029	1580	2436	3029	3029
113.320	P <sub>1</sub>	4.01	6.18	6.76	6.76	2.47	3.80	4.16	4.16	1.23	1.90	2.08	2.08
	M <sub>2</sub>	1447	2230	2438	2438	1781	2746	3002	3002	1781	2746	3002	3002
123.275	P <sub>1</sub>	4.01	6.18	6.26	6.26	2.47	3.80	3.85	3.85	1.23	1.90	1.93	1.93
	M <sub>2</sub>	1574	2426	2456	2456	1938	2987	3024	3024	1938	2987	3024	3024
138.929	P <sub>1</sub>	4.01	5.54	5.54	5.54	2.47	3.41	3.41	3.41	1.23	1.71	1.71	1.71
	M <sub>2</sub>	1774	2450	2450	2450	2184	3017	3017	3017	2184	3017	3017	3017
151.012	P <sub>1</sub>		5.11	5.11	5.11		3.14	3.14	3.14		1.57	1.57	1.57
	M <sub>2</sub>		2456	2456	2456		3024	3024	3024		3024	3024	3024
170.188	P <sub>1</sub>		4.52	4.52	4.52		2.78	2.78	2.78		1.39	1.39	1.39
	M <sub>2</sub>		2450	2450	2450		3017	3017	3017		3017	3017	3017
204.596	P <sub>1</sub>		3.78	3.78	3.78		2.33	2.33	2.33		1.16	1.16	1.16
	M <sub>2</sub>		2462	2462	2462		3031	3031	3031		3031	3031	3031
230.577	P <sub>1</sub>		3.37	3.37	3.37		2.08	2.08	2.08		1.04	1.04	1.04
	M <sub>2</sub>		2475	2475	2475		3048	3048	3048		3048	3048	3048
248.439	P <sub>1</sub>		3.11	3.11	3.11		1.92	1.92	1.92		0.96	0.96	0.96
	M <sub>2</sub>		2462	2462	2462		3031	3031	3031		3031	3031	3031
279.986	P <sub>1</sub>		2.80	2.80	2.80		1.72	1.72	1.72		0.86	0.86	0.86
	M <sub>2</sub>		2494	2494	2494		3071	3071	3071		3071	3071	3071
323.365	P <sub>1</sub>	2.39	2.39	2.39		1.47	1.47	1.47		0.74	0.74	0.74	
	M <sub>2</sub>	2462	2462	2462		3031	3031	3031		3031	3031	3031	
364.427	P <sub>1</sub>	2.15	2.15	2.15		1.32	1.32	1.32		0.66	0.66	0.66	
	M <sub>2</sub>	2494	2494	2494		3071	3071	3071		3071	3071	3071	
402.234	P <sub>1</sub>	1.92	1.92	1.92		1.18	1.18	1.18		0.59	0.59	0.59	
	M <sub>2</sub>	2462	2462	2462		3031	3031	3031		3031	3031	3031	
453.311	P <sub>1</sub>	1.73	1.73	1.73		1.06	1.06	1.06		0.53	0.53	0.53	
	M <sub>2</sub>	2494	2494	2494		3071	3071	3071		3071	3071	3071	
520.538	P <sub>1</sub>	1.49	1.49	1.49		0.91	0.91	0.91		0.46	0.46	0.46	
	M <sub>2</sub>	2462	2462	2462		3031	3031	3031		3031	3031	3031	
586.638	P <sub>1</sub>	1.34	1.34	1.34		0.82	0.82	0.82		0.41	0.41	0.41	
	M <sub>2</sub>	2501	2501	2501		3080	3080	3080		3080	3080	3080	
631.744	P <sub>1</sub>	1.22	1.22	1.22		0.75	0.75	0.75		0.38	0.38	0.38	
	M <sub>2</sub>	2462	2462	2462		3031	3031	3031		3031	3031	3031	
711.965	P <sub>1</sub>	1.10	1.10	1.10		0.68	0.68	0.68		0.34	0.34	0.34	
	M <sub>2</sub>	2501	2501	2501		3080	3080	3080		3080	3080	3080	
817.551	P <sub>1</sub>	0.95	0.95			0.58	0.58			0.29	0.29		
	M <sub>2</sub>	2462	2462			3031	3031			3031	3031		
921.367	P <sub>1</sub>	0.85	0.85			0.53	0.53			0.26	0.26		
	M <sub>2</sub>	2501	2501			3080	3080			3080	3080		
992.209	P <sub>1</sub>	0.78	0.78			0.48	0.48			0.24	0.24		
	M <sub>2</sub>	2462	2462			3031	3031			3031	3031		
1118.204	P <sub>1</sub>	0.70	0.70			0.43	0.43			0.22	0.22		
	M <sub>2</sub>	2501	2501			3080	3080			3080	3080		
1254.197	P <sub>1</sub>	0.62				0.38				0.19			
	M <sub>2</sub>	2462				3031				3031			
1413.461	P <sub>1</sub>	0.56				0.34				0.17			
	M <sub>2</sub>	2501				3080				3080			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

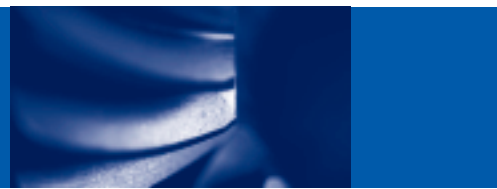
$M_2 \text{ perm} \leq 6072 \text{ Nm}$

GKS 11 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1F	1G	1H	1K	1F	1G	1H	1K	1F	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
12.094	$P_1$			57.4	57.4			35.4	35.4			17.7	17.7		
	$M_2$			2250	2250			2770	2770			2770	2770		
13.154	$P_1$			57.4	57.4			35.4	35.4			17.7	17.7		
	$M_2$			2447	2447			3013	3013			3013	3013		
15.874	$P_1$			48.8	48.8			30.0	30.0			15.0	15.0		
	$M_2$			2509	2509			3089	3089			3089	3089		
17.265	$P_1$			48.8	48.8			30.0	30.0			15.0	15.0		
	$M_2$			2729	2729			3360	3360			3360	3360		
19.515	$P_1$			57.4	57.4			35.4	35.4			17.7	17.7		
	$M_2$			3630	3630			4470	4470			4470	4470		
21.989	$P_1$			55.7	55.7			34.3	34.3			17.1	17.1		
	$M_2$			3967	3967			4884	4884			4884	4884		
25.615	$P_1$			48.8	48.8			30.0	30.0			15.0	15.0		
	$M_2$			4049	4049			4985	4985			4985	4985		
28.021	$P_1$		46.2	46.2	46.2		28.4	28.4	28.4		14.2	14.2	14.2		
	$M_2$		4193	4193	4193		5163	5163	5163		5163	5163	5163		
31.573	$P_1$		43.8	43.8	43.8		27.0	27.0	27.0		13.5	13.5	13.5		
	$M_2$		4484	4484	4484		5521	5521	5521		5521	5521	5521		
35.741	$P_1$	27.3	39.7	39.7	39.7	16.8	24.4	24.4	24.4	8.40	12.2	12.2	12.2		
	$M_2$	3160	4593	4593	4593	3890	5655	5655	5655	3890	5655	5655	5655		
40.272	$P_1$	27.3	36.5	36.5	36.5	16.8	22.5	22.5	22.5	8.40	11.3	11.3	11.3		
	$M_2$	3560	4767	4767	4767	4383	5869	5869	5869	4383	5869	5869	5869		
43.783	$P_1$		33.2	33.2	33.2		20.4	20.4	20.4		10.2	10.2	10.2		
	$M_2$		4711	4711	4711		5800	5800	5800		5800	5800	5800		
49.333	$P_1$		30.1	30.1	30.1		18.5	18.5	18.5		9.27	9.27	9.27		
	$M_2$		4810	4810	4810		5923	5923	5923		5923	5923	5923		
57.683	$P_1$	19.0	26.0	26.0		11.7	16.0	16.0		5.85	7.99	7.99			
	$M_2$	3548	4850	4850		4369	5972	5972		4369	5972	5972			
64.995	$P_1$	19.0	23.1	23.1		11.7	14.2	14.2		5.85	7.11	7.11			
	$M_2$	3998	4866	4866		4923	5992	5992		4923	5992	5992			
70.887	$P_1$	15.9	21.1	21.1		9.77	13.0	13.0		4.89	6.50	6.50			
	$M_2$	3645	4851	4851		4488	5973	5973		4488	5973	5973			
79.873	$P_1$	15.9	18.9	18.9		9.77	11.7	11.7		4.89	5.83	5.83			
	$M_2$	4107	4899	4899		5057	6032	6032		5057	6032	6032			
91.737	$P_1$	12.8	16.3			7.85	10.1			3.93	5.03				
	$M_2$	3790	4853			4666	5975			4666	5975				
103.365	$P_1$	12.8	14.7			7.85	9.07			3.93	4.53				
	$M_2$	4270	4931			5258	6072			5258	6072				
111.335	$P_1$	10.7	13.5			6.55	8.28			3.28	4.14				
	$M_2$	3840	4853			4728	5975			4728	5975				
125.448	$P_1$	10.7	12.1			6.55	7.47			3.28	3.74				
	$M_2$	4327	4931			5328	6072			5328	6072				
140.732	$P_1$	8.54				5.26				2.63					
	$M_2$	3893				4794				4794					
158.571	$P_1$	8.54				5.26				2.63					
	$M_2$	4387				5401				5401					
186.572	$P_1$	8.03	8.03			4.94	4.94			2.47	2.47				
	$M_2$	4853	4853			5975	5975			5975	5975				
210.222	$P_1$	7.03	7.03			4.33	4.33			2.16	2.16				
	$M_2$	4785	4785			5892	5892			5892	5892				
226.431	$P_1$	6.62	6.62			4.07	4.07			2.04	2.04				
	$M_2$	4853	4853			5975	5975			5975	5975				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft



$M_2 \text{ perm} \leq 6072 \text{ Nm}$

GKS 11 - 3 W												Dimensions page 6-134			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1F	1G	1H	1K	1F	1G	1H	1K	1F	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
255.133	$P_1$	5.79	5.79			3.56	3.56			1.78	1.78				
	$M_2$	4785	4785			5892	5892			5892	5892				
286.219	$P_1$	5.23				3.22				1.61					
	$M_2$	4853				5975				5975					
322.500	$P_1$	4.58				2.82				1.41					
	$M_2$	4785				5892				5892					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 6072 \text{ Nm}$

GKS 11 - 4 W										Dimensions page 6-135			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
102.119	P <sub>1</sub>	7.37	12.0	14.1	14.1	4.54	7.38	8.69	8.69	2.27	3.69	4.35	4.35
	M <sub>2</sub>	2398	3897	4593	4593	2952	4798	5655	5655	2952	4798	5655	5655
115.063	P <sub>1</sub>	7.37	12.0	13.0	13.0	4.54	7.38	8.01	8.01	2.27	3.69	4.00	4.00
	M <sub>2</sub>	2701	4391	4767	4767	3326	5406	5869	5869	3326	5406	5869	5869
125.095	P <sub>1</sub>	7.37	11.8	11.8	11.8	4.54	7.28	7.28	7.28	2.27	3.64	3.64	3.64
	M <sub>2</sub>	2937	4711	4711	4711	3616	5800	5800	5800	3616	5800	5800	5800
140.952	P <sub>1</sub>	7.37	10.7	10.7	10.7	4.54	6.60	6.60	6.60	2.27	3.30	3.30	3.30
	M <sub>2</sub>	3309	4810	4810	4810	4075	5923	5923	5923	4075	5923	5923	5923
153.242	P <sub>1</sub>		9.65	9.65	9.65		5.94	5.94	5.94		2.97	2.97	2.97
	M <sub>2</sub>		4711	4711	4711		5800	5800	5800		5800	5800	5800
172.667	P <sub>1</sub>		8.75	8.75	8.75		5.39	5.39	5.39		2.69	2.69	2.69
	M <sub>2</sub>		4810	4810	4810		5923	5923	5923		5923	5923	5923
201.890	P <sub>1</sub>		7.54	7.54	7.54		4.64	4.64	4.64		2.32	2.32	2.32
	M <sub>2</sub>		4850	4850	4850		5972	5972	5972		5972	5972	5972
227.481	P <sub>1</sub>		6.72	6.72	6.72		4.14	4.14	4.14		2.07	2.07	2.07
	M <sub>2</sub>		4866	4866	4866		5992	5992	5992		5992	5992	5992
248.106	P <sub>1</sub>		6.14	6.14	6.14		3.78	3.78	3.78		1.89	1.89	1.89
	M <sub>2</sub>		4851	4851	4851		5973	5973	5973		5973	5973	5973
279.556	P <sub>1</sub>		5.50	5.50	5.50		3.39	3.39	3.39		1.69	1.69	1.69
	M <sub>2</sub>		4899	4899	4899		6032	6032	6032		6032	6032	6032
322.931	P <sub>1</sub>	4.72	4.72	4.72		2.90	2.90	2.90		1.45	1.45	1.45	
	M <sub>2</sub>	4851	4851	4851		5973	5973	5973		5973	5973	5973	
363.866	P <sub>1</sub>	4.23	4.23	4.23		2.60	2.60	2.60		1.30	1.30	1.30	
	M <sub>2</sub>	4899	4899	4899		6032	6032	6032		6032	6032	6032	
395.787	P <sub>1</sub>	3.85	3.85	3.85		2.37	2.37	2.37		1.19	1.19	1.19	
	M <sub>2</sub>	4851	4851	4851		5973	5973	5973		5973	5973	5973	
445.958	P <sub>1</sub>	3.45	3.45	3.45		2.12	2.12	2.12		1.06	1.06	1.06	
	M <sub>2</sub>	4899	4899	4899		6032	6032	6032		6032	6032	6032	
512.195	P <sub>1</sub>	2.98	2.98	2.98		1.83	1.83	1.83		0.92	0.92	0.92	
	M <sub>2</sub>	4853	4853	4853		5975	5975	5975		5975	5975	5975	
577.122	P <sub>1</sub>	2.68	2.68	2.68		1.65	1.65	1.65		0.83	0.83	0.83	
	M <sub>2</sub>	4931	4931	4931		6072	6072	6072		6072	6072	6072	
621.619	P <sub>1</sub>	2.45	2.45	2.45		1.51	1.51	1.51		0.76	0.76	0.76	
	M <sub>2</sub>	4853	4853	4853		5975	5975	5975		5975	5975	5975	
700.416	P <sub>1</sub>	2.21	2.21	2.21		1.36	1.36	1.36		0.68	0.68	0.68	
	M <sub>2</sub>	4931	4931	4931		6072	6072	6072		6072	6072	6072	
816.455	P <sub>1</sub>	1.87	1.87			1.15	1.15			0.57	0.57		
	M <sub>2</sub>	4853	4853			5975	5975			5975	5975		
919.949	P <sub>1</sub>	1.68	1.68			1.04	1.04			0.52	0.52		
	M <sub>2</sub>	4931	4931			6072	6072			6072	6072		
990.879	P <sub>1</sub>	1.54	1.54			0.95	0.95			0.47	0.47		
	M <sub>2</sub>	4853	4853			5975	5975			5975	5975		
1116.484	P <sub>1</sub>	1.39	1.39			0.85	0.85			0.43	0.43		
	M <sub>2</sub>	4931	4931			6072	6072			6072	6072		
1252.516	P <sub>1</sub>	1.22				0.75				0.37			
	M <sub>2</sub>	4853				5975				5975			
1411.286	P <sub>1</sub>	1.10				0.68				0.34			
	M <sub>2</sub>	4931				6072				6072			

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-bevel gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 11790 \text{ Nm}$

GKS 14 - 3 W										Dimensions page 6-134		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1G	1H	1K	1G	1H	1K	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
12.435	P <sub>1</sub> M <sub>2</sub>			100.7 4056			62.0 4994			31.0 4994		
13.525	P <sub>1</sub> M <sub>2</sub>			100.7 4412			62.0 5432			31.0 5432		
16.646	P <sub>1</sub> M <sub>2</sub>		89.0 4797	89.0 4797		54.8 5906	54.8 5906		27.4 5906	27.4 5906		
18.311	P <sub>1</sub> M <sub>2</sub>		83.9 4978	83.9 4978		51.7 6130	51.7 6130		25.8 6130	25.8 6130		
20.065	P <sub>1</sub> M <sub>2</sub>			100.7 6545			62.0 8059			31.0 8059		
22.609	P <sub>1</sub> M <sub>2</sub>			100.6 7369			61.9 9073			31.0 9073		
24.696	P <sub>1</sub> M <sub>2</sub>		89.0 7117	89.0 7117		54.8 8763	54.8 8763		27.4 8763	27.4 8763		
27.165	P <sub>1</sub> M <sub>2</sub>		83.9 7386	83.9 7386		51.7 9094	51.7 9094		25.8 9094	25.8 9094		
30.609	P <sub>1</sub> M <sub>2</sub>		83.0 8229	83.0 8229		51.1 10132	51.1 10132		25.5 10132	25.5 10132		
34.692	P <sub>1</sub> M <sub>2</sub>		72.1 8099	72.1 8099		44.4 9973	44.4 9973		22.2 9973	22.2 9973		
39.089	P <sub>1</sub> M <sub>2</sub>		70.2 8883	70.2 8883		43.2 10937	43.2 10937		21.6 10937	21.6 10937		
42.531	P <sub>1</sub> M <sub>2</sub>		63.3 8720	63.3 8720		39.0 10737	39.0 10737		19.5 10737	19.5 10737		
47.923	P <sub>1</sub> M <sub>2</sub>		58.9 9146	58.9 9146		36.3 11261	36.3 11261		18.1 11261	18.1 11261		
56.251	P <sub>1</sub> M <sub>2</sub>	38.1 6934	51.4 9358	51.4 9358	23.4 8538	31.6 11522	31.6 11522	11.7 8538	15.8 11522	15.8 11522		
63.382	P <sub>1</sub> M <sub>2</sub>	38.1 7813	45.4 9321	45.4 9321	23.4 9621	28.0 11477	28.0 11477	11.7 9621	14.0 11477	14.0 11477		
68.942	P <sub>1</sub> M <sub>2</sub>	32.6 7270	41.7 9303		20.0 8952	25.6 11454		10.0 8952	12.8 11454			
77.681	P <sub>1</sub> M <sub>2</sub>	32.6 8192	37.2 9356		20.0 10087	22.9 11520		10.0 10087	11.4 11520			
90.551	P <sub>1</sub> M <sub>2</sub>	25.7 7526	31.8 9330		15.8 9267	19.6 11488		7.90 9267	9.79 11488			
102.029	P <sub>1</sub> M <sub>2</sub>	25.7 8480	28.6 9453		15.8 10441	17.6 11639		7.90 10441	8.80 11639			
109.896	P <sub>1</sub> M <sub>2</sub>	21.5 7656	26.9 9575		13.2 9427	16.6 11790		6.62 9427	8.28 11790			
123.826	P <sub>1</sub> M <sub>2</sub>	21.5 8627	23.6 9453		13.2 10622	14.5 11639		6.62 10622	7.25 11639			
138.913	P <sub>1</sub> M <sub>2</sub>	17.3 7793			10.7 9595			5.33 9595				
156.522	P <sub>1</sub> M <sub>2</sub>	17.3 8781			10.7 10812			5.33 10812				
186.572	P <sub>1</sub> M <sub>2</sub>	15.6 9429	15.6 9429		9.60 11609	9.60 11609		4.80 11609	4.80 11609			
210.222	P <sub>1</sub> M <sub>2</sub>	13.8 9385	13.8 9385		8.48 11555	8.48 11555		4.24 11555	4.24 11555			
226.431	P <sub>1</sub> M <sub>2</sub>	12.9 9429	12.9 9429		7.91 11609	7.91 11609		3.96 11609	3.96 11609			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 11790 \text{ Nm}$

GKS 14 - 3 W										Dimensions page 6-134		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1G	1H	1K	1G	1H	1K	1G	1H	1K		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
255.133	$P_1$	11.4	11.4		6.99	6.99		3.50	3.50			
	$M_2$	9385	9385		11555	11555		11555	11555			
286.219	$P_1$	10.2			6.26			3.13				
	$M_2$	9429			11609			11609				
322.500	$P_1$	8.98			5.53			2.77				
	$M_2$	9385			11555			11555				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-bevel gearboxes

Gearbox with free input shaft



$M_2 \text{ perm} \leq 11639 \text{ Nm}$

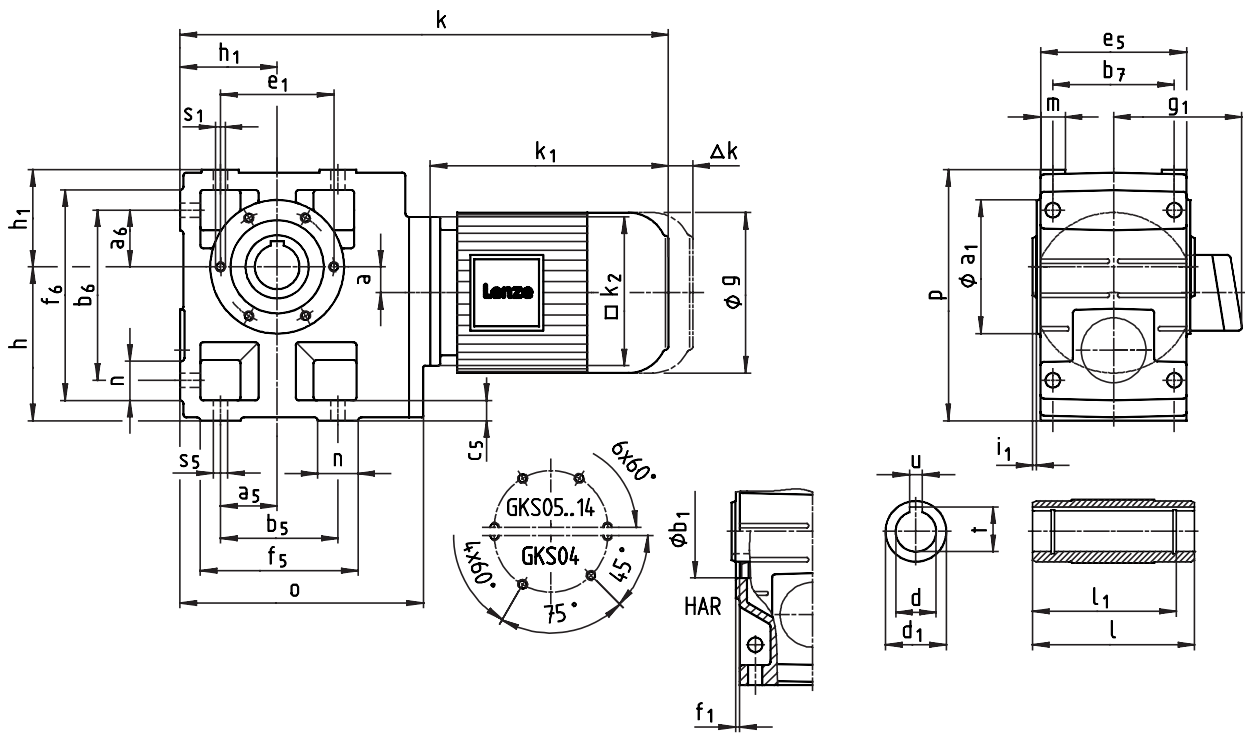
GKS 14 - 4 W										Dimensions page 6-135			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>			
Drive size		1E	1F	1G	1H	1E	1F	1G	1H	1E	1F	1G	1H
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
97.467	P <sub>1</sub>	14.9	22.5	26.1	26.1	9.16	13.9	16.1	16.1	4.58	6.93	8.03	8.03
	M <sub>2</sub>	4619	6982	8099	8099	5688	8597	9973	9973	5688	8597	9973	9973
109.822	P <sub>1</sub>	14.9	22.5	25.4	25.4	9.16	13.9	15.6	15.6	4.58	6.93	7.82	7.82
	M <sub>2</sub>	5205	7868	8883	8883	6409	9687	10937	10937	6409	9687	10937	10937
119.493	P <sub>1</sub>	14.9	22.5	22.9	22.9	9.16	13.9	14.1	14.1	4.58	6.93	7.05	7.05
	M <sub>2</sub>	5663	8560	8720	8720	6973	10540	10737	10737	6973	10540	10737	10737
134.640	P <sub>1</sub>	14.9	21.3	21.3	21.3	9.16	13.1	13.1	13.1	4.58	6.57	6.57	6.57
	M <sub>2</sub>	6381	9146	9146	9146	7857	11261	11261	11261	7857	11261	11261	11261
158.039	P <sub>1</sub>	14.9	18.6	18.6	18.6	9.16	11.5	11.5	11.5	4.58	5.72	5.72	5.72
	M <sub>2</sub>	7490	9358	9358	9358	9223	11522	11522	11522	9223	11522	11522	11522
178.072	P <sub>1</sub>	14.9	16.4	16.4	16.4	9.16	10.1	10.1	10.1	4.58	5.06	5.06	5.06
	M <sub>2</sub>	8440	9321	9321	9321	10392	11477	11477	11477	10392	11477	11477	11477
193.754	P <sub>1</sub>		15.2	15.2	15.2		9.34	9.34	9.34		4.67	4.67	4.67
	M <sub>2</sub>		9358	9358	9358		11522	11522	11522		11522	11522	11522
218.315	P <sub>1</sub>		13.4	13.4	13.4		8.25	8.25	8.25		4.13	4.13	4.13
	M <sub>2</sub>		9321	9321	9321		11477	11477	11477		11477	11477	11477
237.467	P <sub>1</sub>		12.3	12.3	12.3		7.57	7.57	7.57		3.79	3.79	3.79
	M <sub>2</sub>		9303	9303	9303		11454	11454	11454		11454	11454	11454
267.568	P <sub>1</sub>		11.0	11.0	11.0		6.76	6.76	6.76		3.38	3.38	3.38
	M <sub>2</sub>		9356	9356	9356		11520	11520	11520		11520	11520	11520
321.729	P <sub>1</sub>	9.08	9.08	9.08		5.59	5.59	5.59		2.80	2.80	2.80	
	M <sub>2</sub>	9303	9303	9303		11454	11454	11454		11454	11454	11454	
362.512	P <sub>1</sub>	8.10	8.10	8.10		4.99	4.99	4.99		2.50	2.50	2.50	
	M <sub>2</sub>	9356	9356	9356		11520	11520	11520		11520	11520	11520	
390.672	P <sub>1</sub>	7.48	7.48	7.48		4.60	4.60	4.60		2.30	2.30	2.30	
	M <sub>2</sub>	9303	9303	9303		11454	11454	11454		11454	11454	11454	
440.193	P <sub>1</sub>	6.67	6.67	6.67		4.11	4.11	4.11		2.05	2.05	2.05	
	M <sub>2</sub>	9356	9356	9356		11520	11520	11520		11520	11520	11520	
513.121	P <sub>1</sub>	5.71	5.71	5.71		3.52	3.52	3.52		1.76	1.76	1.76	
	M <sub>2</sub>	9330	9330	9330		11488	11488	11488		11488	11488	11488	
578.164	P <sub>1</sub>	5.13	5.13	5.13		3.16	3.16	3.16		1.58	1.58	1.58	
	M <sub>2</sub>	9453	9453	9453		11639	11639	11639		11639	11639	11639	
622.742	P <sub>1</sub>	4.71	4.71	4.71		2.90	2.90	2.90		1.45	1.45	1.45	
	M <sub>2</sub>	9330	9330	9330		11488	11488	11488		11488	11488	11488	
701.681	P <sub>1</sub>	4.23	4.23	4.23		2.60	2.60	2.60		1.30	1.30	1.30	
	M <sub>2</sub>	9453	9453	9453		11639	11639	11639		11639	11639	11639	
805.901	P <sub>1</sub>	3.64	3.64			2.24	2.24			1.12	1.12		
	M <sub>2</sub>	9330	9330			11488	11488			11488	11488		
908.058	P <sub>1</sub>	3.27	3.27			2.01	2.01			1.01	1.01		
	M <sub>2</sub>	9453	9453			11639	11639			11639	11639		
978.071	P <sub>1</sub>	3.00	3.00			1.84	1.84			0.92	0.92		
	M <sub>2</sub>	9330	9330			11488	11488			11488	11488		
1102.052	P <sub>1</sub>	2.69	2.69			1.66	1.66			0.83	0.83		
	M <sub>2</sub>	9453	9453			11639	11639			11639	11639		
1236.326	P <sub>1</sub>	2.37				1.46				0.73			
	M <sub>2</sub>	9330				11488				11488			
1393.043	P <sub>1</sub>	2.13				1.31				0.66			
	M <sub>2</sub>	9453				11639				11639			

Thermal power limit not considered (see page 2-4)

# Dimensions - Helical-bevel gearboxes

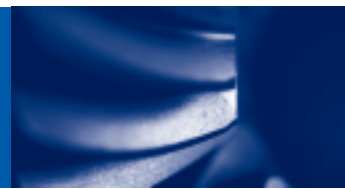
Geared motors (4-pole)

## GKS □□ - 3 M H□R



# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																						
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22												
GKS □□ - 3 M H□□		063C32	071C42	080C42		100C32			132C32			180-32												
Motor	g	123	138	156	176	196	220		261	310		355												
	g <sub>1</sub>	Without option																						
		Brake motor																						
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592												
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300												
	Δk **	Brake																						
Separate fan																								
Separate fan + brake																								
Gearbox size	Gearbox						Total length																	
	o	l*	p*	h*	h <sub>1</sub>	a	k																	
04	203	115	171	100	71	20	399	419	441	502														
05	232	140	205	125	80	23	419	439	461	522	556													
06	291	160	250	150	100	28	475	495	517	578	612	628	672											
07	354	200	310	190	120	34			573	634	668	684	728	776	853	897								
09	429	240	386	236	150	41				705	739	755	799	847	924	968	1040							
11	527	290	485	300	185	54					830	846	890	938	1015	1059	1131							
14	636	350	605	375	230	67						945	989	1037	1114	1158	1230							

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm]

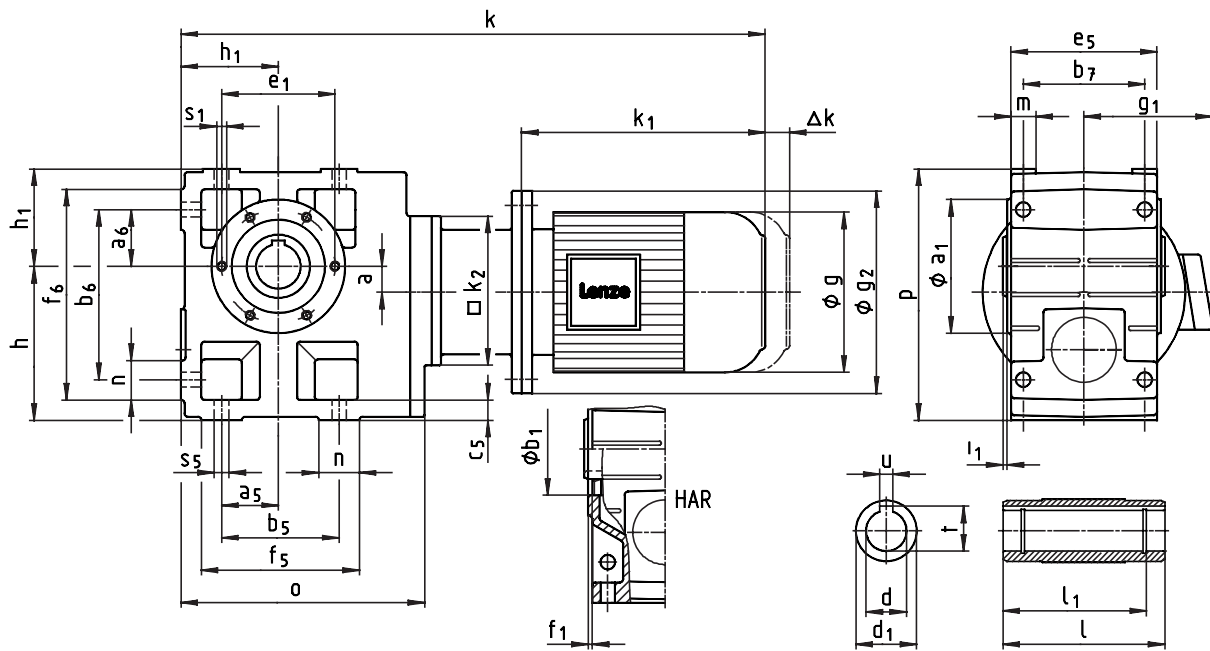
\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

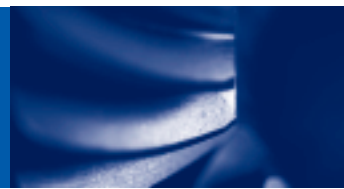
Geared motors (4-pole)

GKS □□ - 3 M H□R



# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size						
<b>GKS□□ - 3 M HOR</b>		<b>200N32</b>	<b>225N12 225N22</b>					
Motor	<b>g</b>	388	433					
	<b>g<sub>1</sub></b>	Without option	291	319				
		Brake motor	309	327				
	<b>g<sub>2</sub></b>	400	450					
	<b>k<sub>1</sub></b>	661	693					
	<b>k<sub>2</sub></b>	300	300					
	<b>Δk</b>	Brake	175	200				
		Separate fan	387	388				
Separate fan + brake		507	518					
Gearbox size	Gearbox						Total length	
	<b>o</b>	<b>l*</b>	<b>p*</b>	<b>h</b>	<b>h<sub>1</sub></b>	<b>a</b>	<b>k</b>	
<b>09</b>	429	240	386	236	150	41	1353	
<b>11</b>	527	290	485	300	185	54	1444	
<b>14</b>	636	350	605	375	230	67	1543	

Gearbox size	Hollow shaft						Pitch circle					Foot												
	<b>d</b> H7	<b>l</b>	<b>d<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>u</b> JS9	<b>t</b> +0.2	<b>a<sub>1</sub></b>	<b>b<sub>1</sub></b> H7	<b>e<sub>1</sub></b>	<b>f<sub>1</sub></b>	<b>i<sub>1</sub></b>	<b>s<sub>1</sub></b>	<b>a<sub>5</sub></b>	<b>a<sub>6</sub></b>	<b>b<sub>5</sub></b>	<b>b<sub>6</sub></b>	<b>b<sub>7</sub></b>	<b>c<sub>5</sub></b>	<b>e<sub>5</sub></b>	<b>f<sub>5</sub></b>	<b>f<sub>6</sub></b>	<b>n</b>	<b>m</b>	<b>s<sub>5</sub></b>
<b>09</b>	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
<b>11</b>	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
<b>14</b>	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

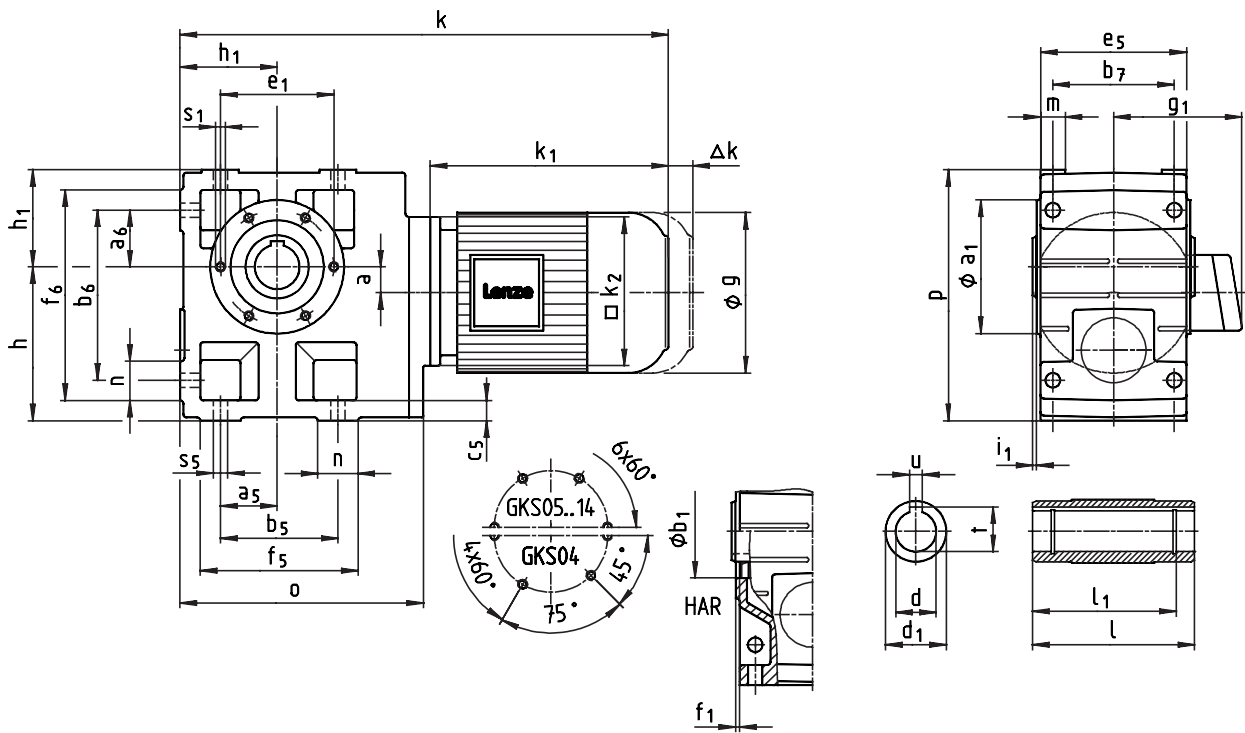
Dimensions in [mm]

\* Observe dimension  $k_2$

# Dimensions - Helical-bevel gearboxes

Geared motors (2- and 6-pole)

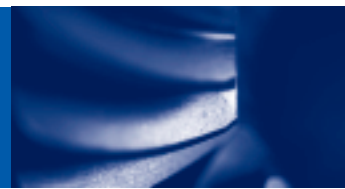
## GKS □□ - 3 M HQR





# Dimensions - Helical-bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size																						
<b>GKS □□ - 3 M □□□</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21														
Motor	g	129		142	156	178	194		222	262														
	g <sub>1</sub>	Without option		105	131	141	158		165	197														
		Brake motor		105	131	140	159		165	197														
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409														
	k <sub>2</sub>	100		145	145	180	180		222	265														
	Δk **	Brake		56	66	68	74	94		101	127													
Separate fan		71	80	94	101	97		95	104															
Separate fan + brake		118	134	150	164	169		183	218															
Gearbox size	Gearbox						Total length																	
	o	l*	p*	h*	h <sub>1</sub>	a	k																	
04	203	115	171	100	71	20	379	390	392	441	469													
05	232	140	205	125	80	23			412	461	489	527	557											
06	291	160	250	150	100	28			468	517	545	583	613	631										
07	354	200	310	190	120	34					573	601	639	669	687	782								
09	429	240	386	236	150	41					672	710	740	758	853									
11	527	290	485	300	185	54							801	831	849	944								
14	636	350	605	375	230	67									948	1043								

Gearbox size	Hollow shaft						Pitch circle						Foot													
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>		
04	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9		
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11		
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14		
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18		
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22		
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26		
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33		

Dimensions in [mm]

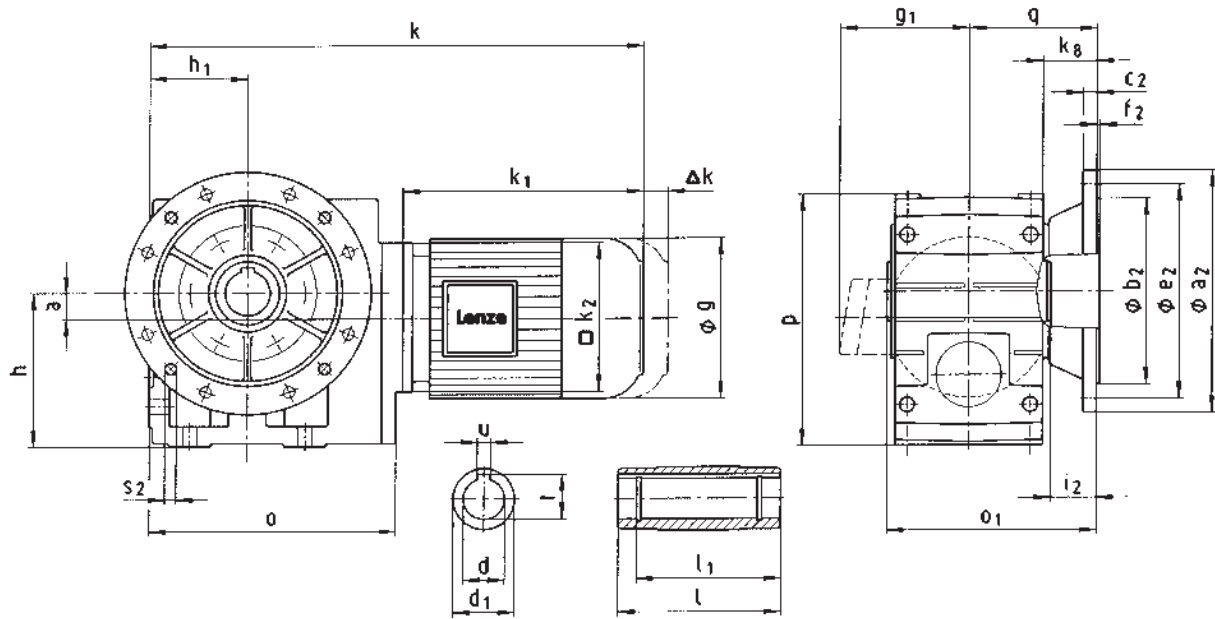
\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

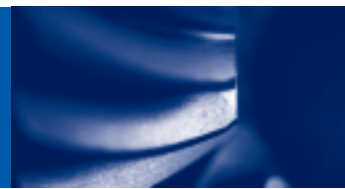
Geared motors (4-pole)

GKS □□ - 3 M HAK



# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																					
GKS □□ - 3 M HAK		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22											
		063C32	071C42	080C42		100C32			132C32			180-32											
		063C42																					
Motor	g	123	138	156	176	196	220		261	310		355											
	g <sub>1</sub>	Without option		100	109	141	146	157		167	195		226										
		Brake motor		107	116	130	135	146		156	195		226										
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592											
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300											
	Δk **	Brake		40	52	73	70	79		90	109		83										
Separate fan		130	128	128	127	109		102	115		83												
Separate fan + brake		170	165	184	180	170		183	201		198												
Gearbox size	Gearbox								Total length														
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>g</sub>	q	k														
04	203	148	171	100	71	20	38	90.5	399	419	441	502											
05	232	173	205	125	80	23	40	103	419	439	461	522	556										
06	291	201	250	150	100	28	49	121	475	495	517	578	612	628	672								
07	354	255	310	190	120	34	65	155			573	634	668	684	728	776	853	897					
09	429	300	386	236	150	41	69	180				705	739	755	799	847	924	968	1040				
11	527	350	485	300	185	54	70	205					830	846	890	938	1015	1059	1131				
14	636	410	605	375	230	67	71	235						945	989	1037	1114	1158	1230				

Gearbox size	Hollow shaft						Output flange							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9	
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14	
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14	
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5	
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5	
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

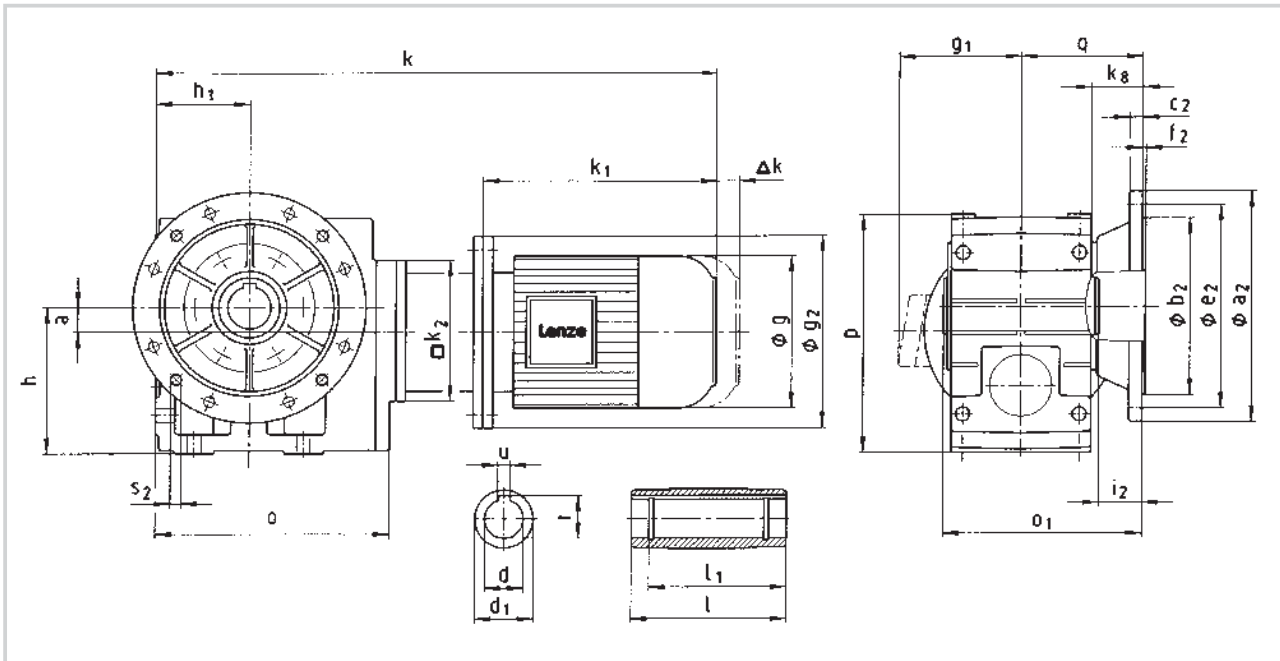
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



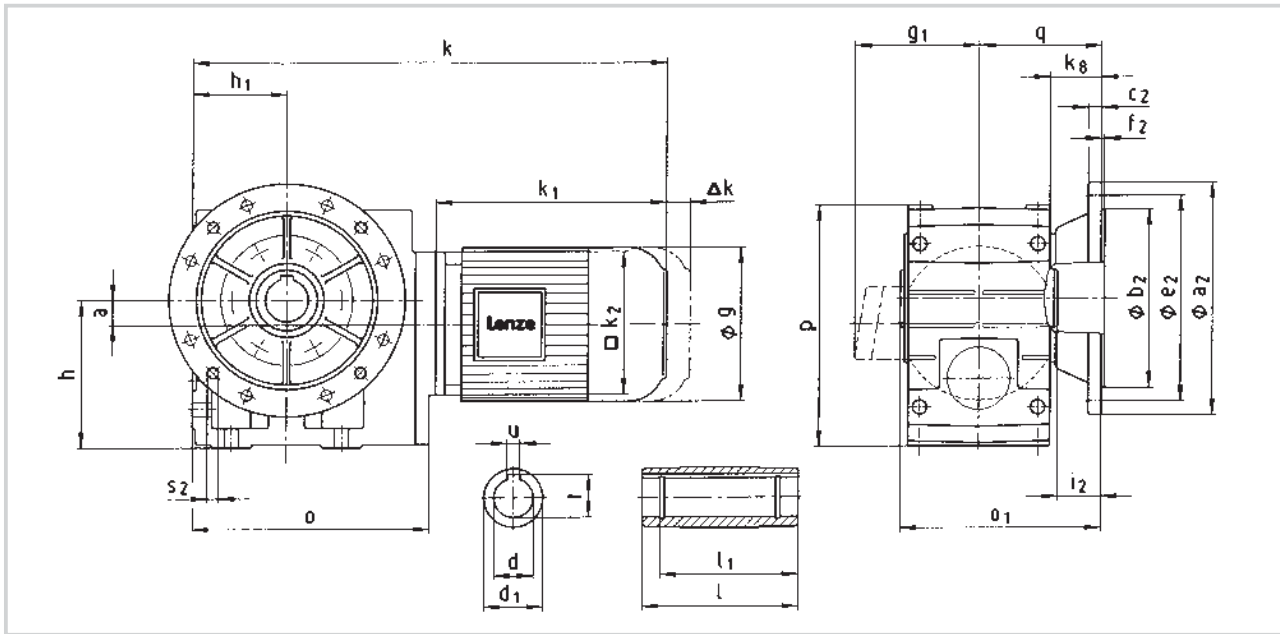
Geared motor		Motor frame size											
<b>GKS□□ - 3 M HAK</b>		<b>200N32</b>	<b>225N12 225N22</b>										
Motor	<b>g</b>	388	433										
	<b>g<sub>1</sub></b>	Without option	291	319									
		Brake motor	309	327									
	<b>g<sub>2</sub></b>	400	450										
	<b>k<sub>1</sub></b>	661	693										
	<b>k<sub>2</sub></b>	300	300										
	<b>Δk</b>	Brake	175	200									
		Separate fan	387	388									
Separate fan + brake		507	518										
Gearbox size	Gearbox								Total length				
	<b>o</b>	<b>o<sub>1</sub>*</b>	<b>p*</b>	<b>h</b>	<b>h<sub>1</sub></b>	<b>a</b>	<b>k<sub>8</sub></b>	<b>q</b>	<b>k</b>				
<b>09</b>	429	300	386	236	150	41	69	180	1353				
<b>11</b>	527	350	485	300	185	54	70	205	1444				
<b>14</b>	636	410	605	375	230	67	71	235	1543				
Gearbox size	Hollow shaft		Output flange										
	<b>d</b> H7	<b>l</b>	<b>d<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>u</b> JS9	<b>t</b> +0.2	<b>a<sub>2</sub></b>	<b>b<sub>2</sub></b> j7	<b>c<sub>2</sub></b>	<b>e<sub>2</sub></b>	<b>f<sub>2</sub></b>	<b>i<sub>2</sub></b>	<b>s<sub>2</sub></b>
<b>09</b>	60	240	95	210	18	64.4	350	250	18	300	4	60	4 x 17.5
	70												74.9
<b>11</b>	70	290	105	250	20	74.9	400	300	20	350	5	60	4 x 17.5
	80												85.4
<b>14</b>	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

Dimensions in [mm]

\* Observe dimension  $k_2$

# Dimensions - Helical-bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size																	
<b>GKS □□ - 3 M HAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21									
Motor	$g$	129		142	156	178	194		222	262									
	$g_1$	Without option		105	131	131	141	158	165	197									
		Brake motor		105	131	131	140	159	165	197									
	$k_1$	193	204	176	225	242	280	310	323	409									
	$k_2$	100		145	145	180	180		222	265									
$\Delta k^{**}$	Brake		56		66	68	74	94	101	127									
	Separate fan		71		80	94	101	97	95	104									
	Separate fan + brake		118		134	150	164	169	183	218									
Gearbox size	Gearbox									Total length									
	$o$	$o_1^*$	$p^*$	$h^*$	$h_1$	$a$	$k_8$	$q$	$k$										
04	203	148	171	100	71	20	38	90.5	379	390	392	441	469						
05	232	173	205	125	80	23	40	103			412	461	489	527	557				
06	291	201	250	150	100	28	49	121			468	517	545	583	613	631			
07	354	255	310	190	120	34	65	155				573	601	639	669	687	782		
09	429	300	386	236	150	41	69	180					672	710	740	758	853		
11	527	350	485	300	185	54	70	205						801	831	849	944		
14	636	410	605	375	230	67	71	235								948	1043		

Gearbox size	Hollow shaft						Output flange						
	$d$ H7	$l$	$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

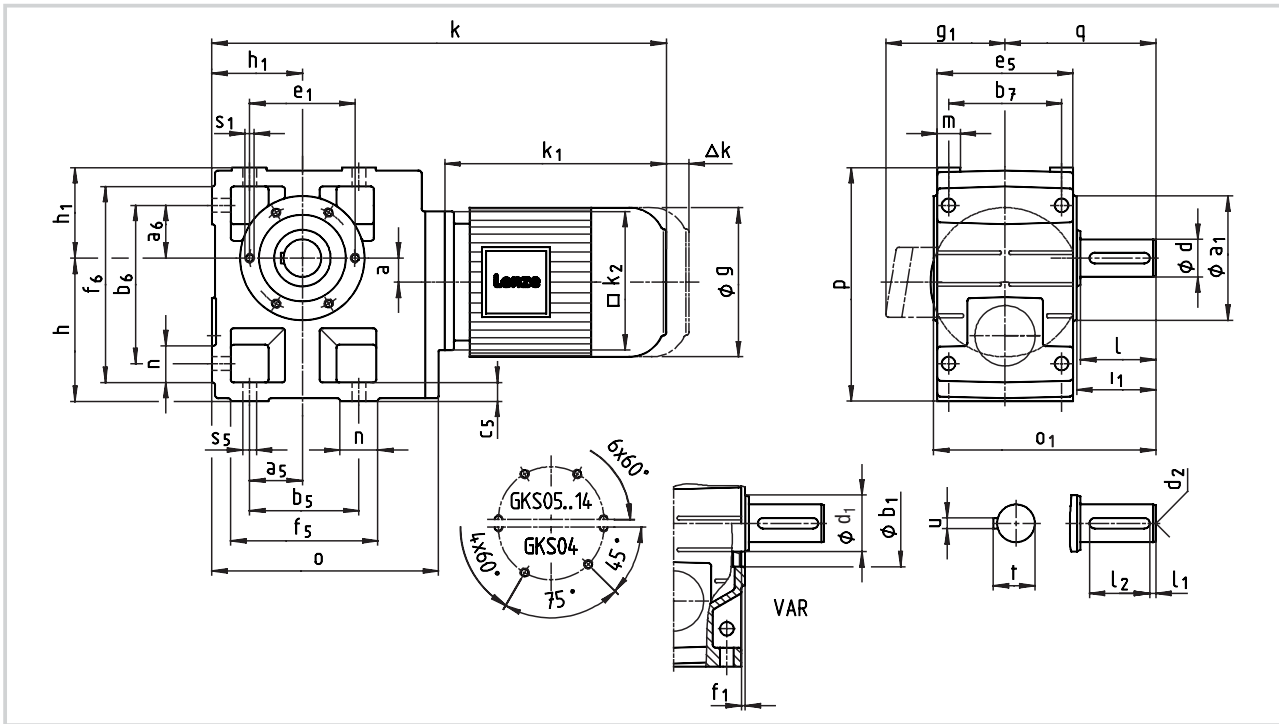
Dimensions in [mm]

\* Observe dimension  $k_2$ . With gearbox size 04 and motor frame size 090, dimension  $k_2/2 > h-a$

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size											
GKS □□ - 3 M VOR		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22	
		063C32	071C42	080C42		100C32			132C32			180-32	
		063C42											
Motor	g	123	138	156	176	196		220	261	310		355	
	g <sub>1</sub>	Without option		100	109	141	146	157	167	195	207	226	
		Brake motor		107	116	130	135	146	156	195	207	226	
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592	
	k <sub>2</sub>	120	120	145	180	180		222	265	300	300		
Δk**	Brake		40	52	73	70	79	90	109	96	83		
	Separate fan		130	128	128	127	109	102	115	96	83		
	Separate fan + brake		170	165	184	180	170	183	201	208	198		
Gearbox size	Gearbox								Total length				
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	q	k					
04	203	163	171	100	71	20	107.5	399	419	441	502		
05	232	197	205	125	80	23	130	419	439	461	522	556	
06	291	236	250	150	100	28	160	475	495	517	578	612	
07	354	296	310	190	120	34	200			573	634	668	
09	429	356	386	236	150	41	240				705	739	
11	527	445	485	300	185	54	305					755	
14	636	544	605	375	230	67	375					799	

Gearbox size	Solid shaft								Pitch circle						Foot											
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm]

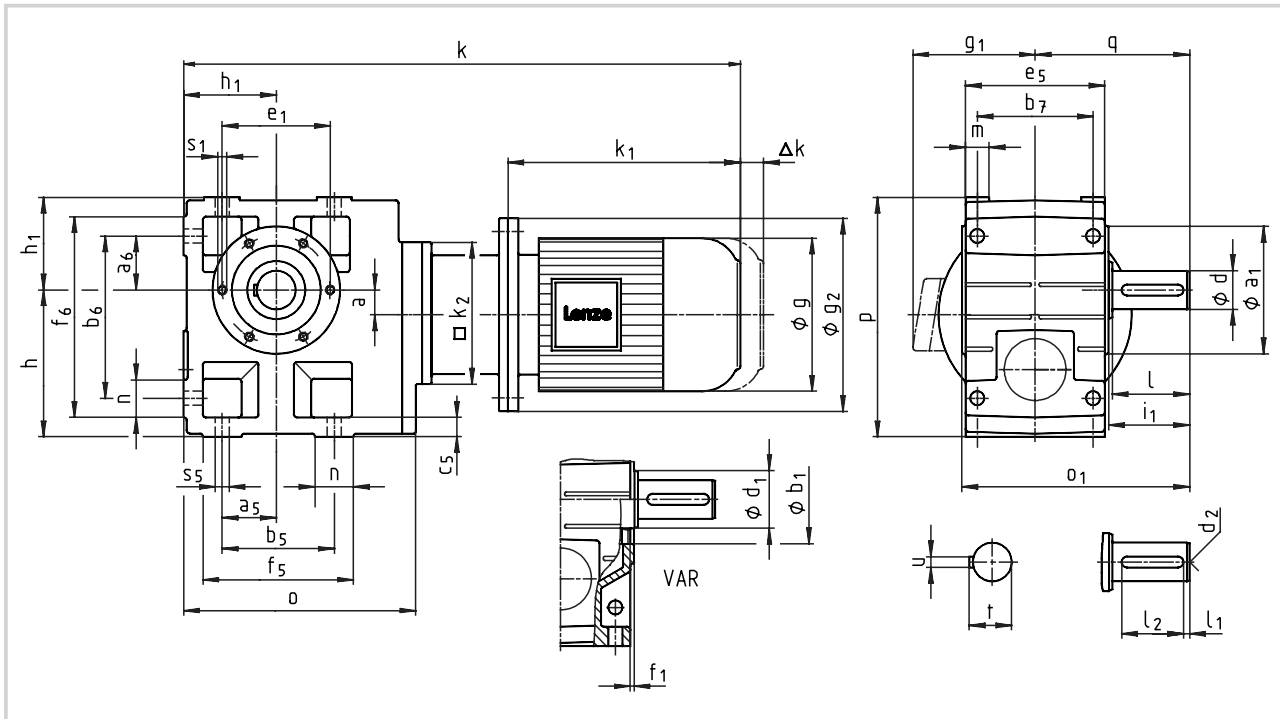
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

Geared motors (4-pole)



Geared motor		Motor frame size							
<b>GKS□□ - 3 M VDR</b>		<b>200N32</b>	<b>225N12 225N22</b>						
Motor	$g$	388	433						
	$g_1$	Without option 291	319						
		Brake motor 309	327						
	$g_2$	400	450						
	$k_1$	661	693						
	$k_2$	300	300						
	$\Delta k$	Brake 175	200						
	Separate fan 387	388							
	Separate fan + brake 507	518							
Gearbox size	Gearbox							Total length	
	$o^*$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$q$	$k$	
09	429	356	386	236	150	41	240	1353	
11	527	445	485	300	185	54	305	1444	
14	636	544	605	375	230	67	375	1543	

Gearbox size	Solid shaft									Pitch circle				
	$d$	$l$	$d_1$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$ H7	$e_1$	$f_1$	$i_1$	$s_1$
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35

Gearbox size	Foot												
	$a_5$	$a_6$	$b_5$	$b_6$	$b_7$	$c_5$	$e_5$	$f_5$	$f_6$	$n$	$m$	$s_5$	
09	90	90	240	266	185	30	222	300	326	60	37	22	
11	105	105	290	325	225	40	270	363	398	73	43	26	
14	135	135	360	415	275	50	328	442	497	82	52	33	

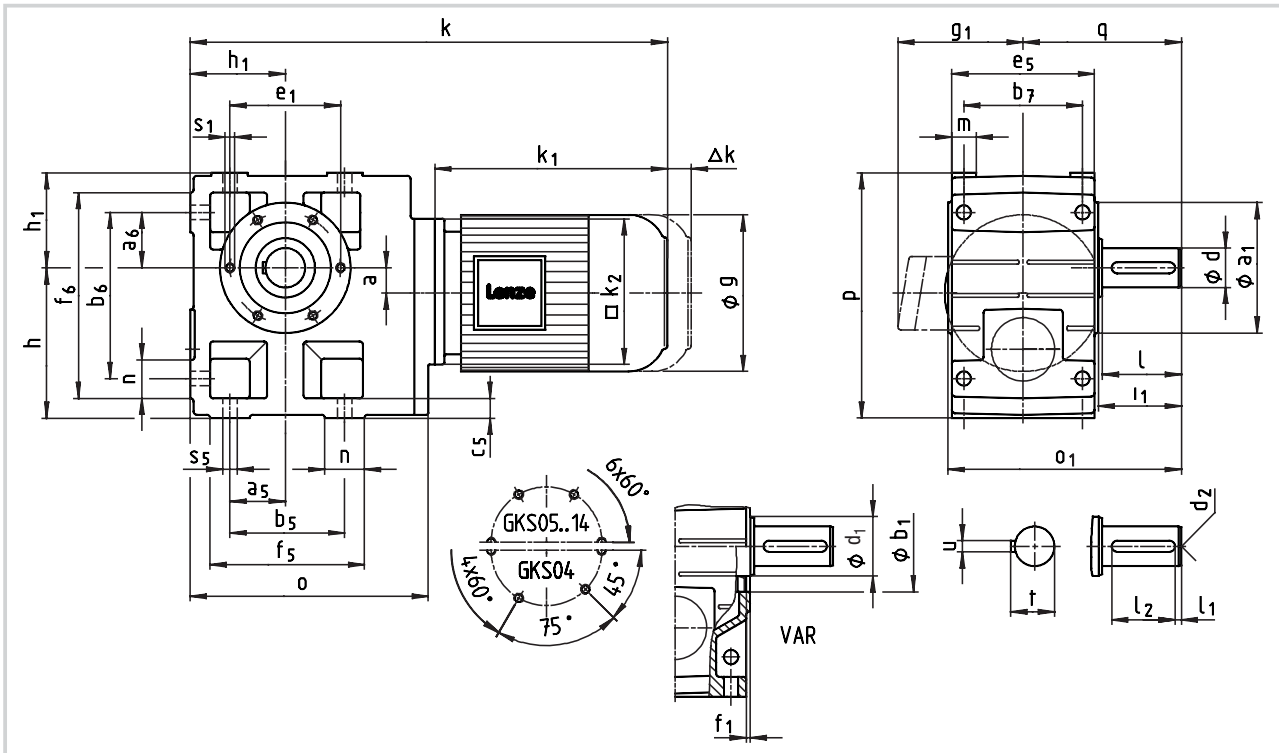
Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$

# Dimensions - Helical-bevel gearboxes

Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GKS □□ - 3 M V0R</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21						
Motor	g		129	142	156	178	194	222	262							
	g <sub>1</sub>	Without option	105	131	131	141	158	165	197							
		Brake motor	105	131	131	140	159	165	197							
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409					
	k <sub>2</sub>		100		145	145	180	180	222	265						
	Δk**	Brake		56	66	68	74	94	101	127						
Separate fan			71	80	94	101	97	95	104							
Separate fan + brake			118	134	150	164	169	183	218							
Gearbox size	Gearbox							Total length								
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	q	k								
04	203	163	171	100	71	20	107.5	379	390	392	441	469				
05	232	197	205	125	80	23	130			412	461	489	527	557		
06	291	236	250	150	100	28	160			468	517	545	583	613	631	
07	354	296	310	190	120	34	200				573	601	639	669	687	782
09	429	356	386	236	150	41	240					672	710	740	758	853
11	527	445	485	300	185	54	305						801	831	849	944
14	636	544	605	375	230	67	375								948	1043

Gearbox size	Solid shaft								Pitch circle						Foot											
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm]

d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

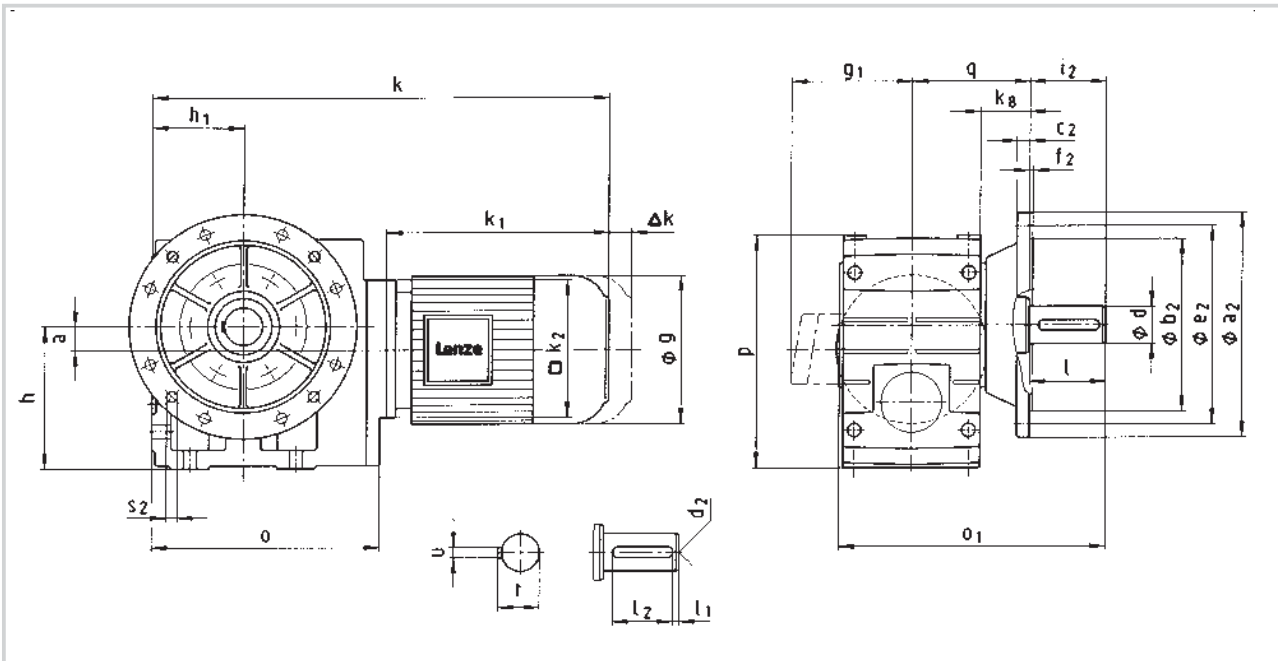
\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8



# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																	
GKS □□ - 3 M VAK		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22							
		063C32	071C42	080C42		100C32			132C32			180-32							
		063C42																	
Motor	g	123	138	156	176	196	220		261	310		355							
	g <sub>1</sub>	Without option		100	109	141	146	157	167		195	207	226						
		Brake motor		107	116	130	135	146	156		195	207	226						
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592							
	k <sub>2</sub>	120	120	145	180	180	222		265	300		300							
Δk**	Brake		40	52	73	70	79	90		109	96	83							
	Separate fan		130	128	128	127	109	102		115	96	83							
	Separate fan + brake		170	165	184	180	170	183		201	208	198							
Gearbox size	Gearbox									Total length									
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k										
04	203	196	171	100	71	20	38	90.5	399	419	441	502							
05	232	230	205	125	80	23	40	103	419	439	461	522	556						
06	291	277	250	150	100	28	49	121	475	495	517	578	612	628	672				
07	354	351	310	190	120	34	65	155			573	634	668	684	728	776	853	897	
09	429	416	386	236	150	41	69	180			705	739	755	799	847	924	968	1040	
11	527	505	485	300	185	54	70	205				830	846	890	938	1015	1059	1131	
14	636	604	605	375	230	67	71	235						945	989	1037	1114	1158	1230

Gearbox size	Solid shaft							Output flange							
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

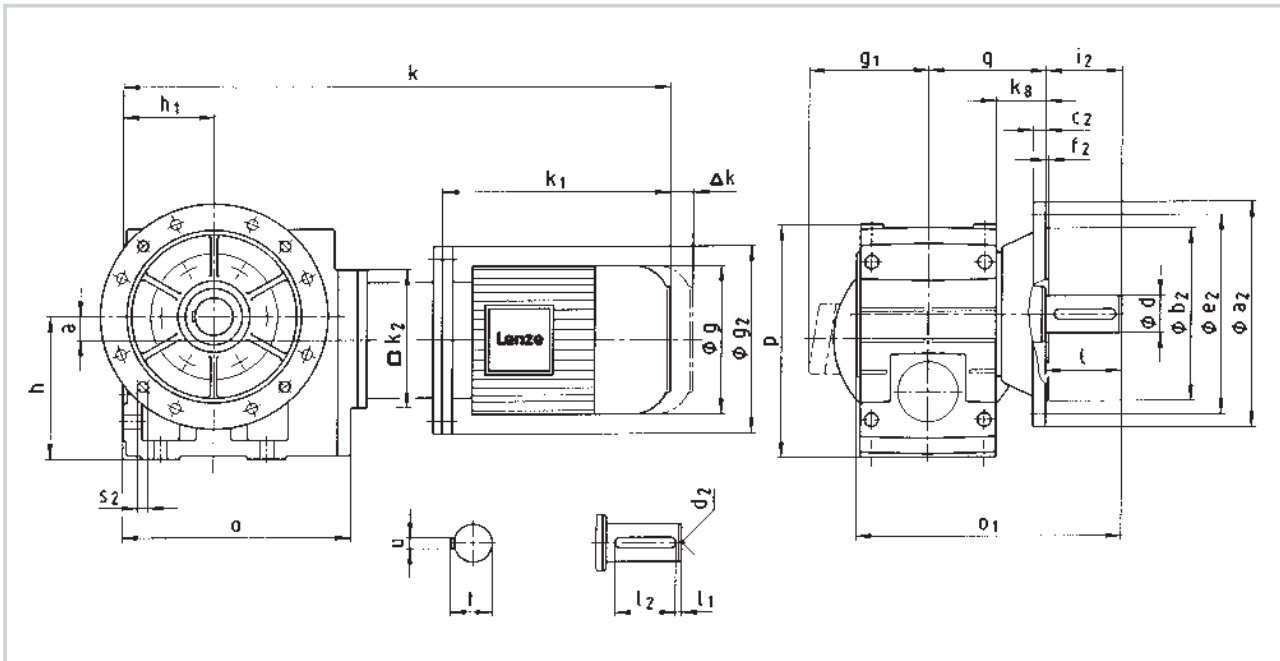
Dimensions in [mm]

d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a  
\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size								
<b>GKS□□ - 3 M VAK</b>		<b>200N32</b>	<b>225N12 225N22</b>							
Motor	$g$	388	433							
	$g_1$	Without option	291	319						
		Brake motor	309	327						
	$g_2$	400	450							
	$k_1$	661	693							
	$k_2$	300	300							
	$\Delta k$	Brake	175	200						
		Separate fan	387	388						
Separate fan + brake		507	518							
Gearbox size	Gearbox								Total length	
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$	
09	429	416	386	236	150	41	69	180	1353	
11	527	505	485	300	185	54	70	205	1444	
14	636	604	605	375	230	67	71	235	1543	

Gearbox size	Solid shaft								Output flange					
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5
11	80	160	15	125	M20	22	85	400	300	20	350	5	160	4 x 17.5
								450	350	22	400	8 x 17.5		
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5

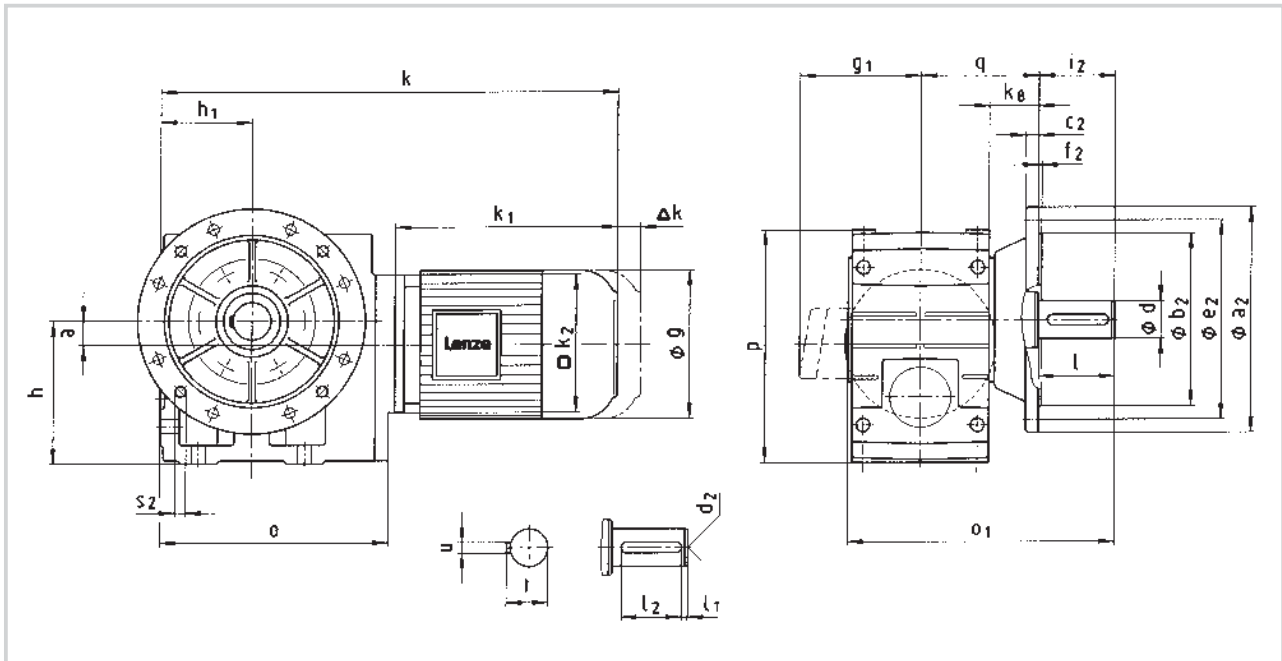
Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$

# Dimensions - Helical-bevel gearboxes

Geared motors (2- and 6-pole)



Geared motor		Motor frame size																		
<b>GKS □□ - 3 M VAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21										
Motor	g	129		142	156	178	194		222	262										
	g <sub>1</sub>	Without option		105	131	131	141	158		165	197									
		Brake motor		105	131	131	140	159		165	197									
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409										
	k <sub>2</sub>	100		145	145	180	180		222	265										
	Δk**	Brake		56	66	68	74	94		101	127									
Separate fan		71	80	94	101	97		95	104											
Separate fan + brake		118	134	150	164	169		183	218											
Gearbox size	Gearbox									Total length										
	o*	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k											
04	203	196	171	100	71	20	38	90.5	379	390	392	441	469							
05	232	230	205	125	80	23	40	103			412	461	489	527	557					
06	291	277	250	150	100	28	49	121			468	517	545	583	613	631				
07	354	351	310	190	120	34	65	155				573	601	639	669	687	782			
09	429	416	386	236	150	41	69	180					672	710	740	758	853			
11	527	505	485	300	185	54	70	205						801	831	849	944			
14	636	604	605	375	230	67	71	235								948	1043			

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm]

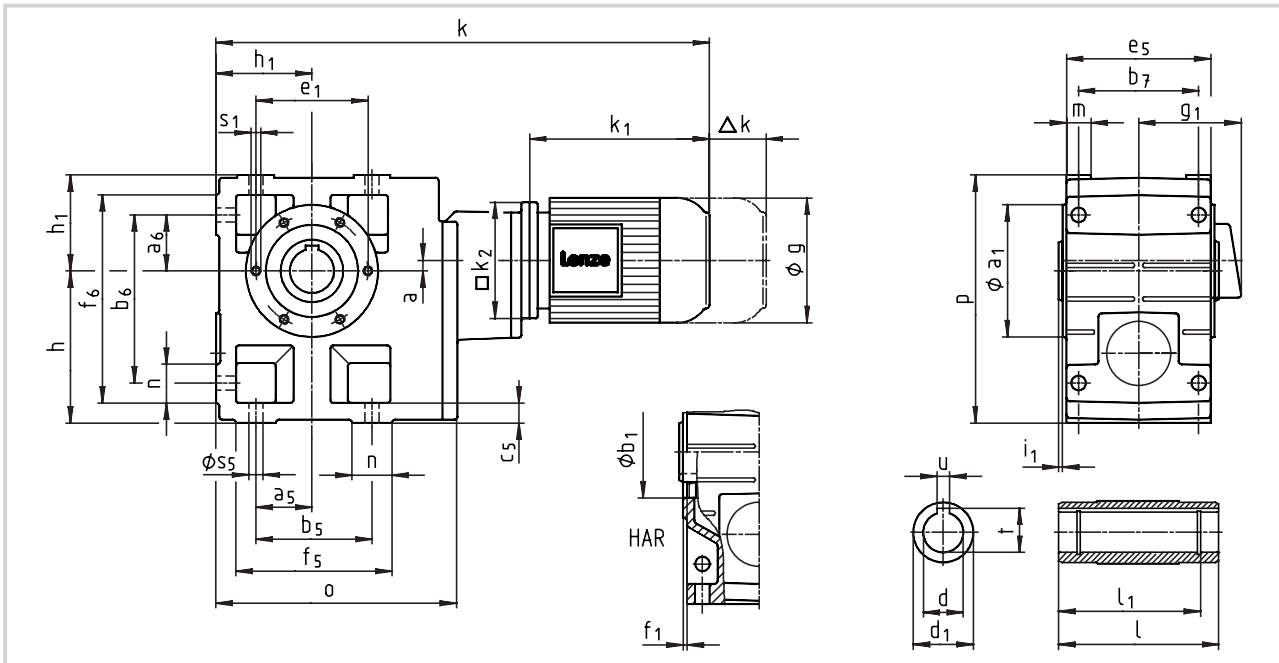
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																					
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22											
<b>GKS □□ - 4 M HOR</b>		063C32	071C42	080C42		100C32			132C32			180-32											
Motor	g	123	138	156	176	196		220	261		310	355											
	g <sub>1</sub>	Without option	100	109	141	146	157		167	195		207	226										
		Brake motor	107	116	130	135	146		156	195		207	226										
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519	592											
	k <sub>2</sub>	120	120	145	180	180		222	265		300	300											
	Δk**	Brake	40	52	73	70	79		90	109		96	83										
Separate fan		130	128	128	127	109		102	115		96	83											
Separate fan + brake		170	165	184	180	170		183	201		208	198											
Gearbox size	Gearbox						Total length																
	o	l*	p*	h	h <sub>1</sub>	a	k																
05	226	140	205	125	80	13	496	515	538	599													
06	288	160	250	150	100	8	569	588	611	672													
07	351	200	310	190	120	11	636	655	678	739	772												
09	426	240	386	236	150	15	725	744	767	828	861	877	921										
11	523	290	485	300	185	16			877	938	971	987	1031	1080	1156	1200							
14	632	350	605	375	230	22				1071	1104	1120	1164	1213	1289	1333	1406						

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

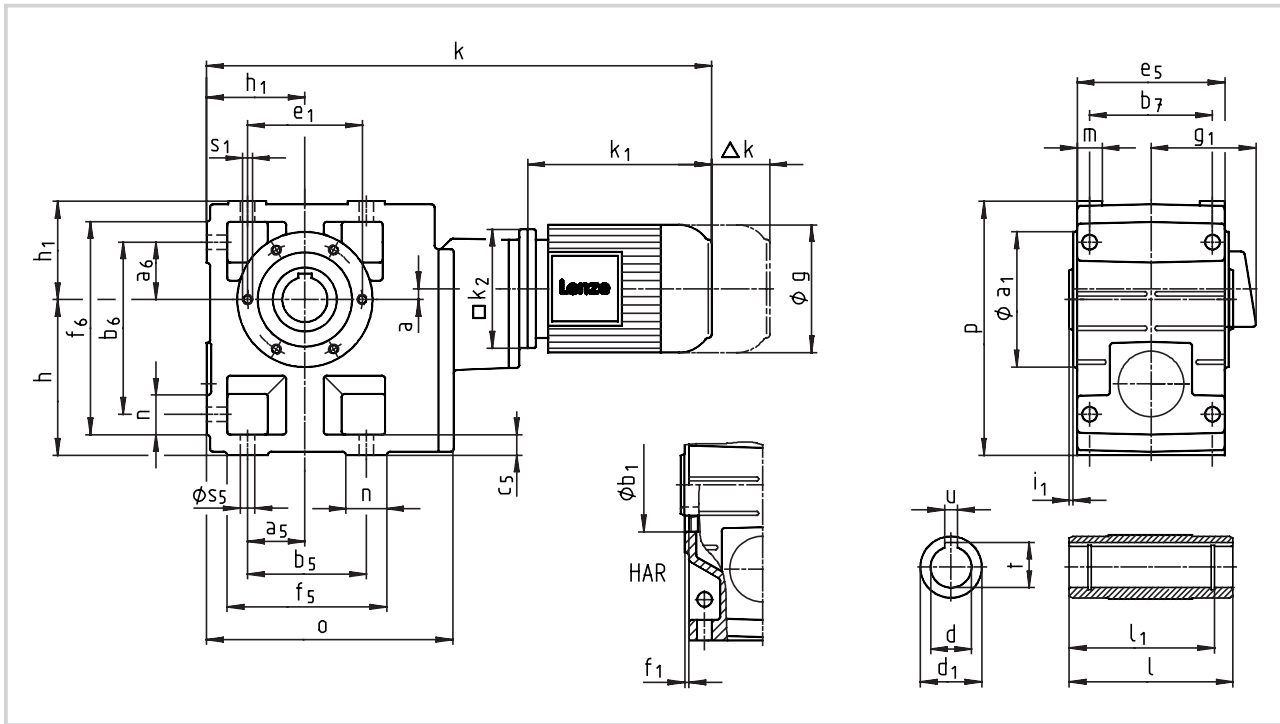
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

Geared motors (2- and 6-pole)



Geared motor		Motor frame size																				
<b>GKS □□ - 4 M HDR</b>		063-11	063-31	071-□□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21												
Motor	<b>g</b>		129	142	156	178	194		222	262												
	<b>g<sub>1</sub></b>	Without option	105	131	131	141	158		165	197												
		Brake motor	105	131	131	140	159		165	197												
	<b>k<sub>1</sub></b>		193	204	176	225	242	280	310	323	409											
	<b>k<sub>2</sub></b>		100	145	145	180	180	180		222	265											
	<b>Δk**</b>	Brake	56	66	68	74	94		101	127												
Separate fan		71	80	94	101	97		95	104													
Separate fan + brake		118	134	150	164	169		183	218													
Gearbox size	Gearbox						Total length															
	<b>o</b>	<b>l*</b>	<b>p*</b>	<b>h</b>	<b>h<sub>1</sub></b>	<b>a</b>	<b>k</b>															
<b>05</b>	226	140	205	125	80	13	476	487	489	538	565											
<b>06</b>	288	160	250	150	100	8	549	560	562	611	638											
<b>07</b>	351	200	310	190	120	11			629	678	705	743	773									
<b>09</b>	426	240	386	236	150	15			718	767	794	832	862	881								
<b>11</b>	523	290	485	300	185	16				877	904	942	972	991	1085							
<b>14</b>	632	350	605	375	230	22					1037	1075	1105	1124	1218							

Gearbox size	Hollow shaft						Pitch circle					Foot												
	<b>d</b> H7	<b>l</b>	<b>d<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>u</b> JS9	<b>t</b> +0.2	<b>a<sub>1</sub></b>	<b>b<sub>1</sub></b> H7	<b>e<sub>1</sub></b>	<b>f<sub>1</sub></b>	<b>i<sub>1</sub></b>	<b>s<sub>1</sub></b> 6x60°	<b>a<sub>5</sub></b>	<b>a<sub>6</sub></b>	<b>b<sub>5</sub></b>	<b>b<sub>6</sub></b>	<b>b<sub>7</sub></b>	<b>c<sub>5</sub></b>	<b>e<sub>5</sub></b>	<b>f<sub>5</sub></b>	<b>f<sub>6</sub></b>	<b>n</b>	<b>m</b>	<b>s<sub>5</sub></b>
<b>05</b>	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
<b>06</b>	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
<b>07</b>	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
<b>09</b>	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
<b>11</b>	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
<b>14</b>	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

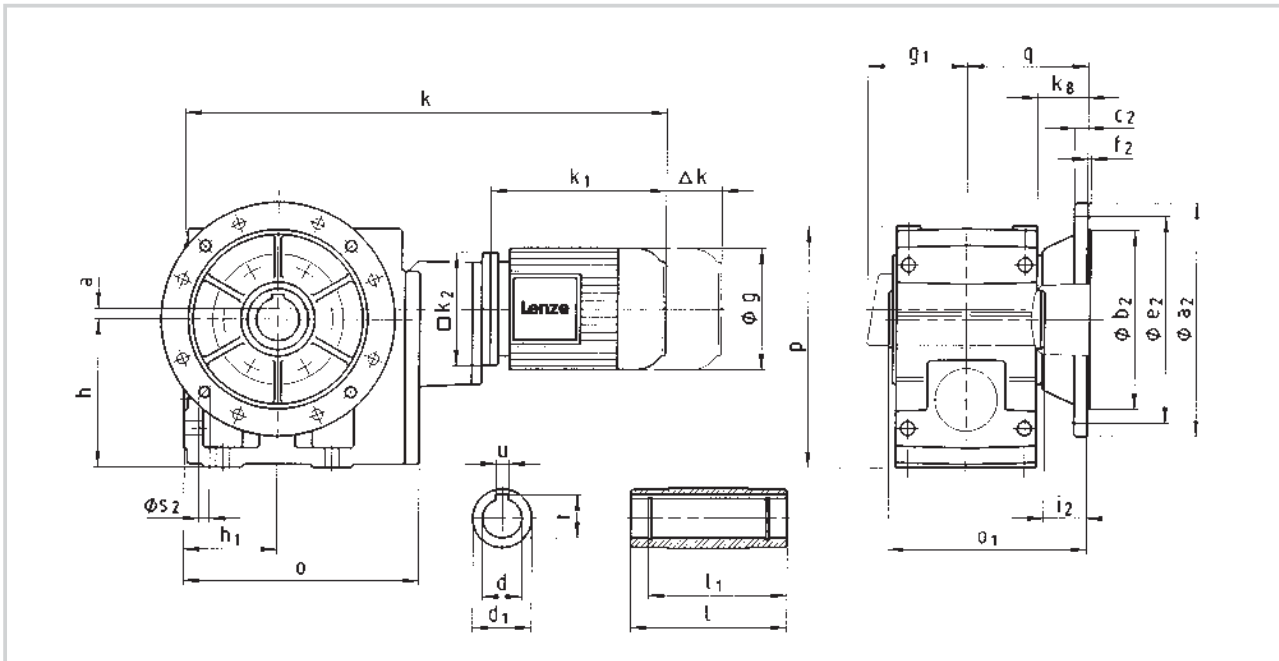
Dimensions in [mm]

\* Observe dimension  $k_2$

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																	
GKS □□ - 4 M HAK		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22							
		063C32	071C42	080C42		100C32			132C32			180-32							
		063C42																	
Motor	$g$	123	138	156	176	196	220		261	310		355							
	$g_1$	Without option		100	109	141	146	157	167		195	207	226						
		Brake motor		107	116	130	135	146	156		195	207	226						
	$k_1$	188	207	225	276	309	319	363	404	475	519	592							
	$k_2$	120	120	145	180	180	222		265	300		300							
	$\Delta k^{**}$	Brake		40	52	73	70	79	90		109	96	83						
Separate fan		130	128	128	127	109	102		115	96	83								
Separate fan + brake		170	165	184	180	170	183		201	208	198								
Gearbox size	Gearbox								Total length										
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$										
05	226	173	205	125	80	13	40	103	496	515	538	599							
06	288	201	250	150	100	8	49	121	569	588	611	672							
07	351	255	310	190	120	11	65	155	636	655	678	739	772						
09	426	300	386	236	150	15	69	180	725	744	767	828	861	877	921				
11	523	350	485	300	185	16	70	205			877	938	971	987	1031	1080	1156	1200	
14	632	410	605	375	230	22	71	235				1071	1104	1120	1164	1213	1289	1333	1406

Gearbox size	Hollow shaft						Output flange							
	$d$	$l$	$d_1$	$l_1$	$u$	$t$	$a_2$	$b_2$	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
	H7				J59	+0.2		j7						
05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11	
	35													38.3
06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11	
	45													48.8
07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14	
	55													59.3
09	60	240	95	210	18	64.4	350	250	18	300	4	60	4 x 17.5	
	70													74.9
11	70	290	105	250	20	74.9	400	300	20	350	5	60	4 x 17.5	
	80													85.4
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

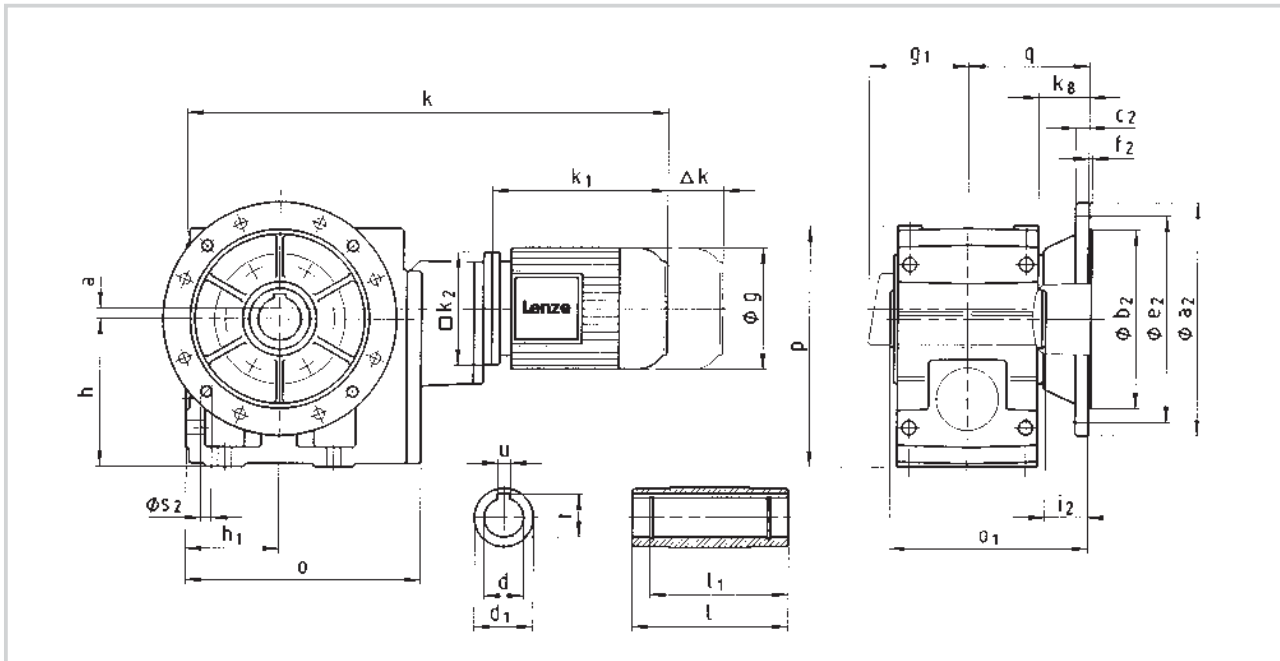
Dimensions in [mm]

\* Observe dimension  $k_2$

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size															
<b>GKS □□ - 4 M HAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21							
Motor	$g$	129		142	156	178	194		222	262							
	$g_1$	Without option		105	131	131	141		158	165	197						
		Brake motor		105	131	131	140		159	165	197						
	$k_1$	193	204	176	225	242	280	310	323	409							
	$k_2$	100		145	145	180	180		222	265							
	$\Delta k^{**}$	Brake		56	66	68	74	94		101	127						
Separate fan		71	80	94	101	97		95	104								
Separate fan + brake		118	134	150	164	169		183	218								
Gearbox size	Gearbox									Total length							
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$								
05	226	173	205	125	80	13	40	103	476	487	489	538	565				
06	288	201	250	150	100	8	49	121	549	560	562	611	638				
07	351	255	310	190	120	11	65	155			629	678	705	743	773		
09	426	300	386	236	150	15	69	180			718	767	794	832	862	881	
11	523	350	485	300	185	16	70	205				877	904	942	972	991	1085
14	632	410	605	375	230	22	71	235					1037	1075	1105	1124	1218

Gearbox size	Hollow shaft						Output flange						
	$d$ H7	$l$	$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

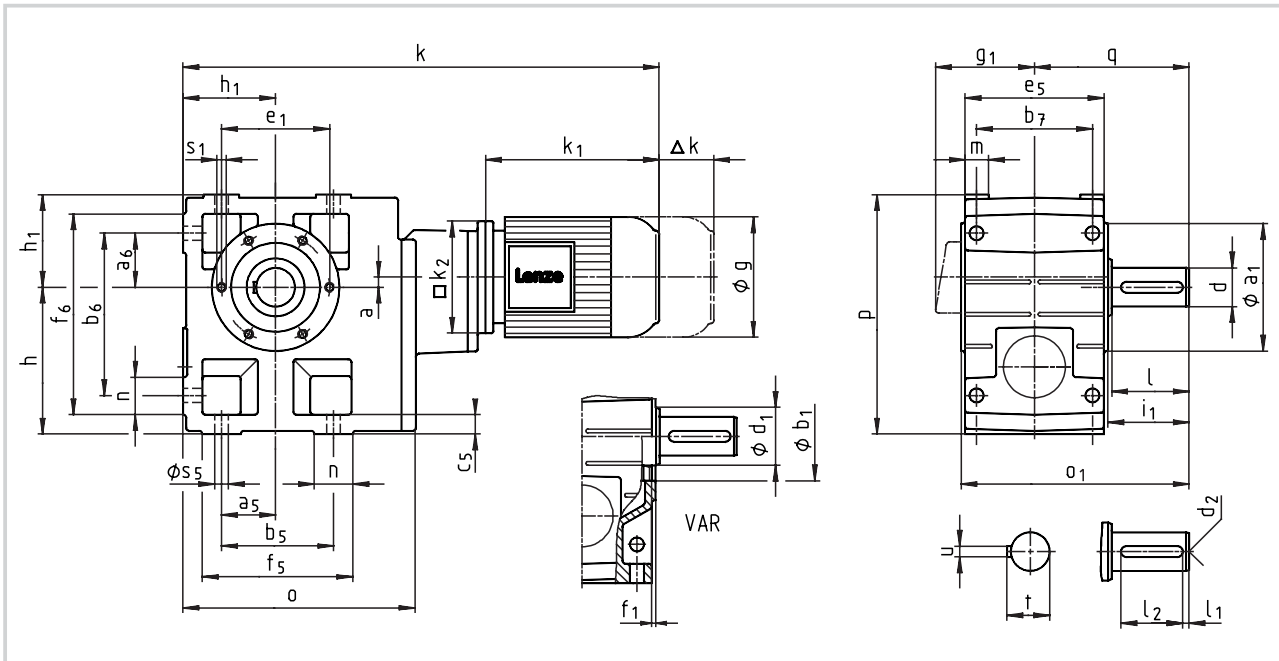
Dimensions in [mm]

\* Observe dimension  $k_2$

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

Geared motors (4-pole)



Geared motor		Motor frame size																
GKS □□ - 4 M VOR		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22						
		063C32	071C42	080C42		100C32			132C32			180-32						
		063C42																
Motor	g	123	138	156	176	196	220		261	310		355						
	g <sub>1</sub>	Without option		100	109	141	146	167		195	207		226					
		Brake motor		107	116	130	135	146		156	195		207	226				
	k <sub>1</sub>			188	207	225	276	309	319	363	404	475	519	592				
	k <sub>2</sub>			120	120	145	180	180	222		265	300		300				
	Δk**	Brake		40	52	73	70	79	90		109	96		83				
Separate fan		130	128	128	127	109	102		115	96		83						
Separate fan + brake		170	165	184	180	170	183		201	208		198						
Gearbox size	Gearbox								Total length									
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	q	k										
05	226	197	205	125	80	13	130	496	515	538	599							
06	288	236	250	150	100	8	160	569	588	611	672							
07	351	296	310	190	120	11	200	636	655	678	739	772						
09	426	356	386	236	150	15	240	725	744	767	828	861	877	921				
11	523	445	485	300	185	16	305			877	938	971	987	1031	1080	1156	1200	
14	632	544	605	375	230	22	375				1071	1104	1120	1164	1213	1289	1333	1406

Gearbox size	Solid shaft								Pitch circle					Foot												
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

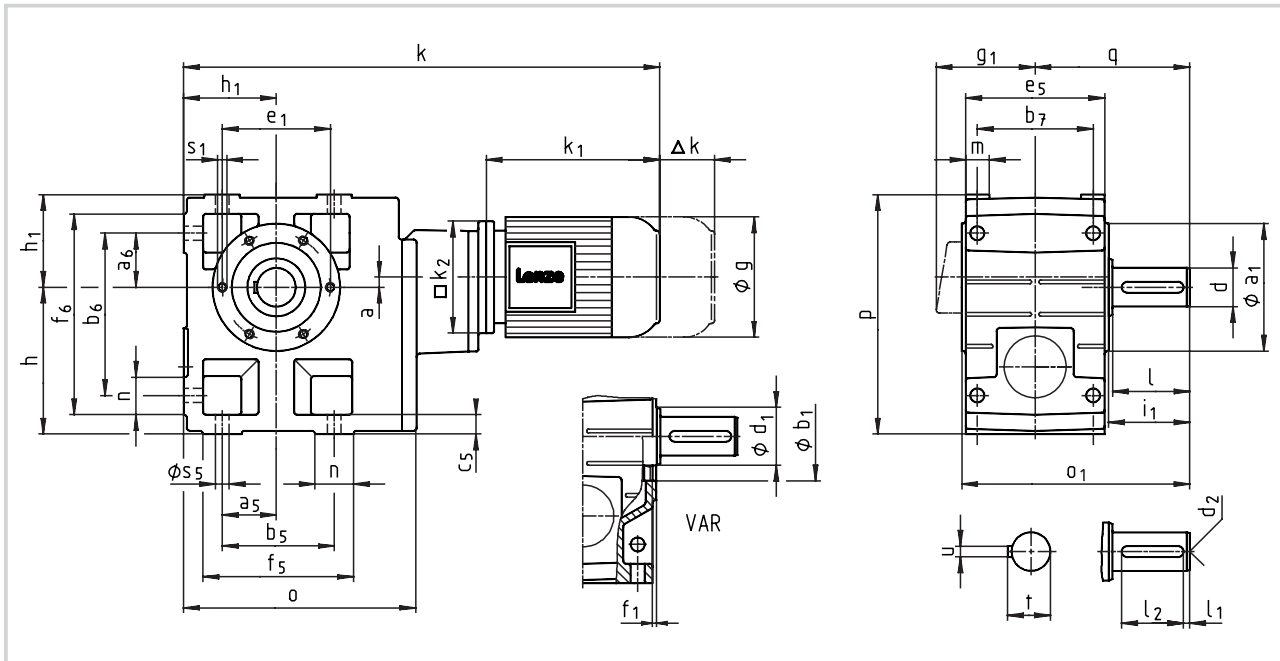
\* Observe dimension k

\*\* For additional attachments see section 8



# Dimensions - Helical-bevel gearboxes

Geared motors (2- and 6-pole)



Geared motor		Motor frame size																						
		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21														
Motor	<b>GKS □□ - 4 M V□R</b>																							
	g	129		142	156	178	194		222	262														
	g <sub>1</sub>	Without option		105	131	131	141	158		165	197													
		Brake motor		105	131	131	140	159		165	197													
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409														
	k <sub>2</sub>	100		145	145	180	180		222	265														
Δk**	Brake		56	66	68	74	94		101	127														
	Separate fan		71	80	94	101	97		95	104														
	Separate fan + brake		118	134	150	164	169		183	218														
Gearbox size	Gearbox							Total length																
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	q	k																
05	226	197	205	125	80	13	130	476	487	489	538	565												
06	288	236	250	150	100	8	160	549	560	562	611	638												
07	351	296	310	190	120	11	200			629	678	705	743	773										
09	426	356	386	236	150	15	240			718	767	794	832	862	881									
11	523	445	485	300	185	16	305				877	904	942	972	991	1085								
14	632	544	605	375	230	22	375					1037	1075	1105	1124	1218								

Gearbox size	Solid shaft								Pitch circle					Foot												
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm]

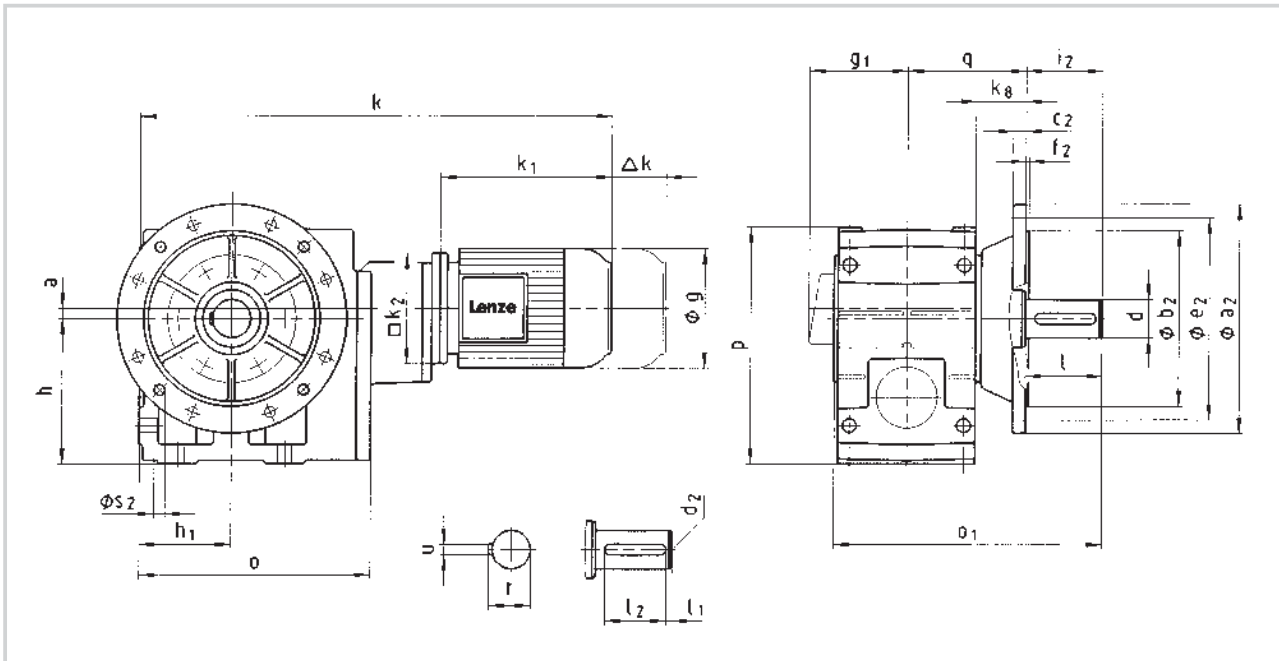
d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																	
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32	180-22							
<b>GKS □□ - 4 M VAK</b>		063C32	071C42	080C42		100C32			132C32			180-32							
Motor	$g$	123	138	156	176	196	220	261	310	355									
	$g_1$	Without option	100	109	141	146	157	167	195	207	226								
		Brake motor	107	116	130	135	146	156	195	207	226								
	$k_1$	188	207	225	276	309	319	363	404	475	519	592							
	$k_2$	120	120	145	180	180	222	265	300	300									
$\Delta k^{**}$	Brake	40	52	73	70	79	90	109	96	83									
	Separate fan	130	128	128	127	109	102	115	96	83									
	Separate fan + brake	170	165	184	180	170	183	201	208	198									
Gearbox size	Gearbox								Total length										
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$										
05	226	230	205	125	80	13	40	103	496	515	538	599							
06	288	277	250	150	100	8	49	121	569	588	611	672							
07	351	351	310	190	120	11	65	155	636	655	678	739	772						
09	426	416	386	236	150	15	69	180	725	744	767	828	861	877	921				
11	523	505	485	300	185	16	70	205			877	938	971	987	1031	1080	1156	1200	
14	632	604	605	375	230	22	71	235				1071	1104	1120	1164	1213	1289	1333	1406

Gearbox size	Solid shaft							Output flange							
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400	300	20	350	5	160	4 x 17.5	
								450	350	22	400	8 x 17.5			
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm]

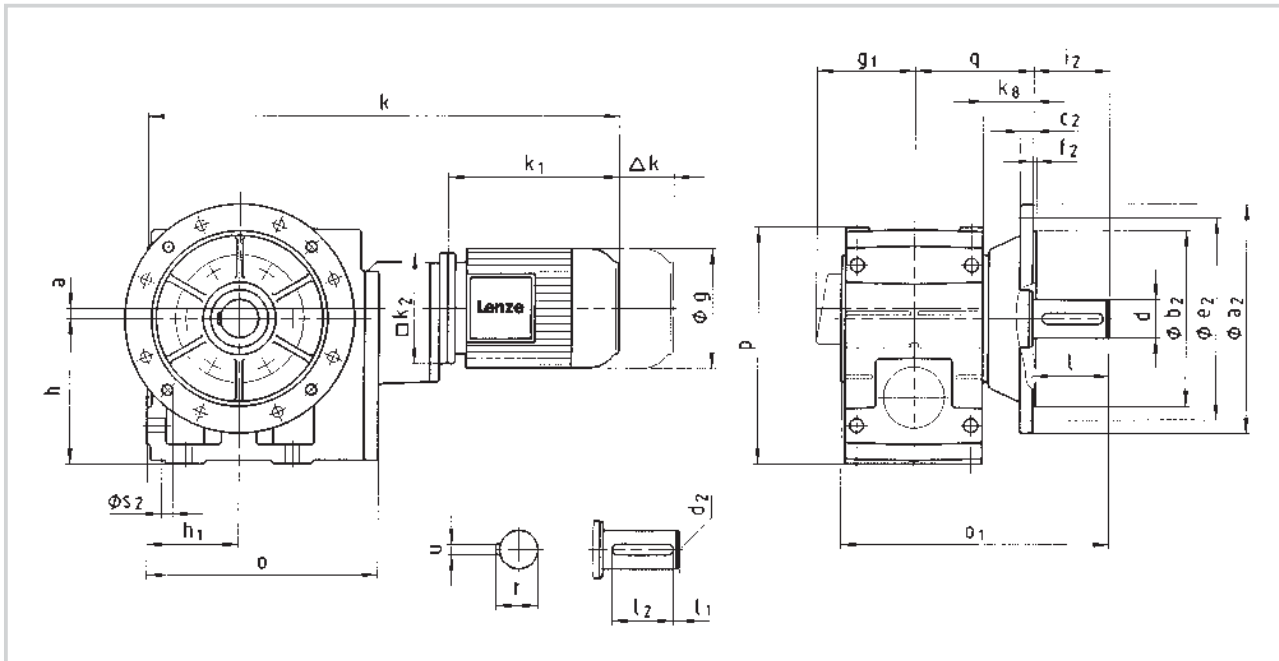
$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension k

\*\* For additional attachments see section 8

# Dimensions - Helical-bevel gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size															
<b>GKS □□ - 4 M VAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21							
Motor	$g$	129		142	156	178	194		222	262							
	$g_1$	Without option		105	131	131	141	158		165	197						
		Brake motor		105	131	131	140	159		165	197						
	$k_1$	193	204	176	225	242	280	310	323	409							
	$k_2$	100		145	145	180	180		222	265							
	$\Delta k^{**}$	Brake		56	66	68	74	94		101	127						
Separate fan		71	80	94	101	97		95	104								
Separate fan + brake		118	134	150	164	169		183	218								
Gearbox size	Gearbox									Total length							
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$								
05	226	230	205	125	80	13	40	103	476	487	489	538	565				
06	288	277	250	150	100	8	49	121	549	560	562	611	638				
07	351	351	310	190	120	11	65	155			629	678	705	743	773		
09	426	416	386	236	150	15	69	180			718	767	794	832	862	881	
11	523	505	485	300	185	16	70	205				877	904	942	972	991	1085
14	632	604	605	375	230	22	71	235					1037	1075	1105	1124	1218

Gearbox size	Solid shaft								Output flange						
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm]

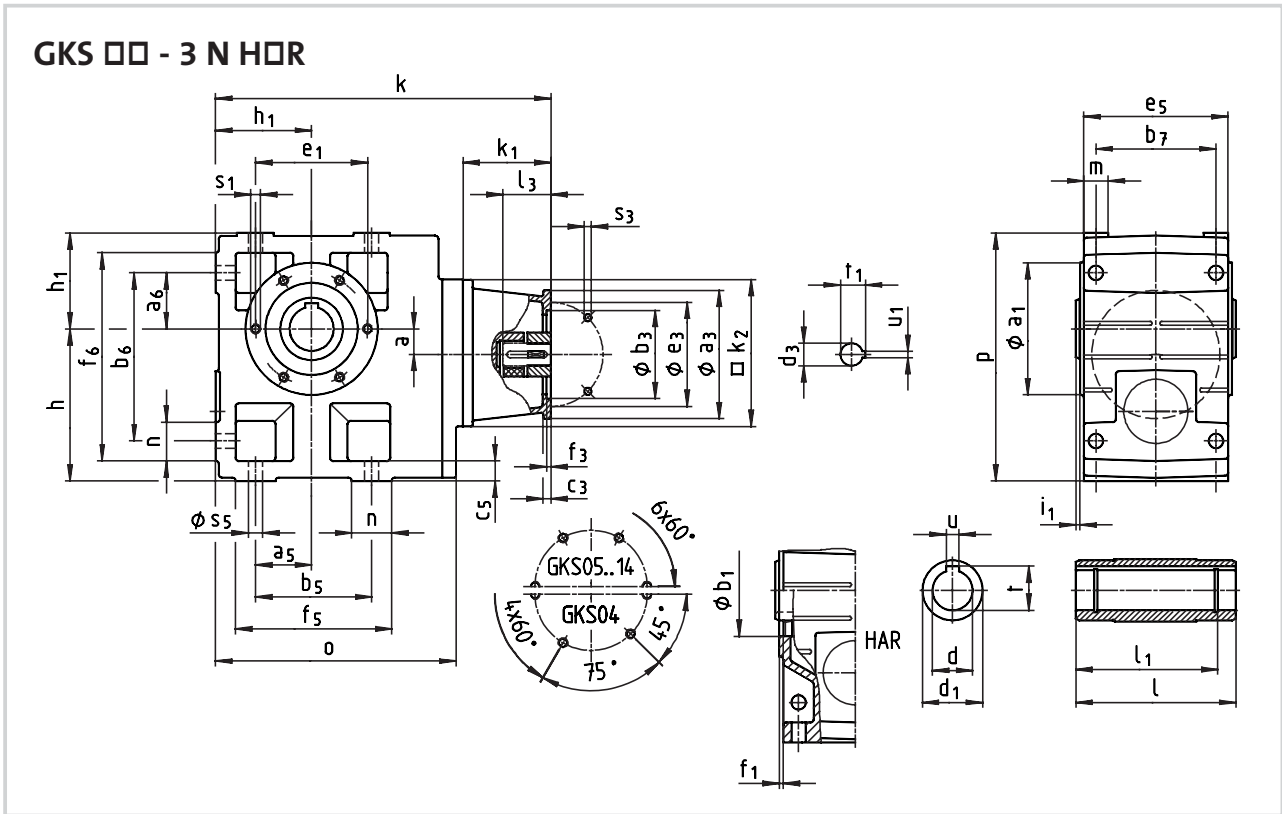
$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension k

\*\* For additional attachments see section 8

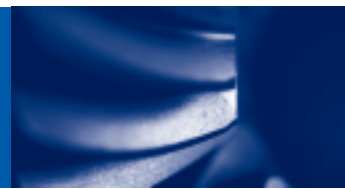
# Dimensions - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors



# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GKS □□ - 3 N HOR</b> corresponds to IEC motor			Drive size																									
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	1K	2K				
			63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	200	225				
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188	243	273			
		$k_2$	120	145	120	145			180			180			180			265			300			300				
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450		
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350		
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20			
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400		
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5	6			
		$s_3$ 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5		
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60				
		$l_3$	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80	110	140			
max			23	30	23	40			50	50	60			60			80	60	80	110	110	80	110	140				
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18					
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64						
Gearbox size	Gearbox						Total length																					
	o	l*	p*	h*	h <sub>1</sub>	a	k																					
04	203	115	171	100	71	20	287	294	287	308			342															
05	232	140	205	125	80	23	314		328			362			357													
06	291	160	250	150	100	28	370		384			418			413			442										
07	354	200	310	190	120	34			440			474			469			498			553	533	553	596	566			
09	429	240	386	236	150	41						545			540			569			624	604	624	667	667	637	692	
11	527	290	485	300	185	54									631			660			715	695	715	758	758	728	783	813
14	636	350	605	375	230	67															814	794	814	857	857	827	882	912

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

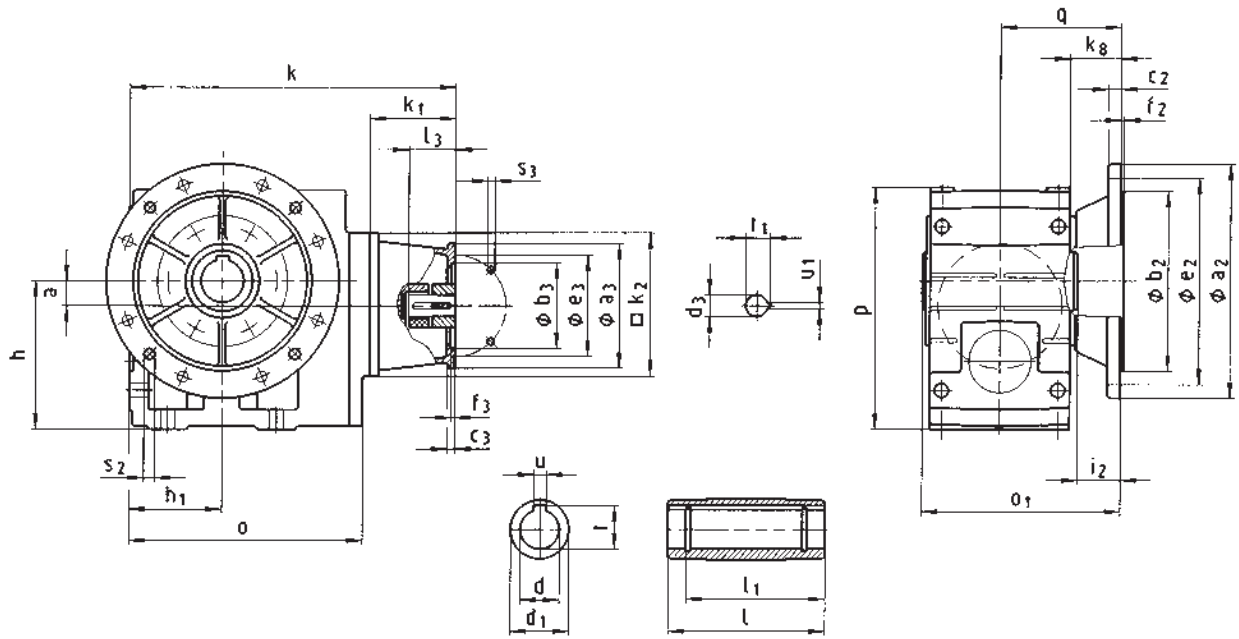
Dimensions in [mm]

\* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical-bevel gearboxes

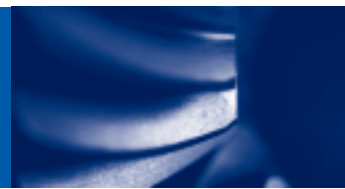
Gearbox with mounting flange for IEC standard motors

## GKS □□ - 3 N HAK



# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GKS □□ - 3 N HAK</b> corresponds to IEC motor			Drive size																												
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132	1K 200	2K 225							
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188	243	273						
		$k_2$	120	145	120	145			180			180			180			265			300			300							
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450					
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350					
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20						
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400					
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5	6						
		$s_3$ 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5					
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60							
		$l_3$	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80	110	140						
max			23	30	23	40			50	50	60			60			80	80	80	110	110	80	110	140							
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18								
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64									
Gearbox size	Gearbox								Total length																						
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k																						
04	203	148	171	100	71	20	38	90.5	287	294	287	308			342																
05	232	173	205	125	80	23	40	103		314		328			362			357													
06	291	201	250	150	100	28	49	121		370		384			418			413			442										
07	354	255	310	190	120	34	65	155				440			474			469			498			553	533	553	596		566		
09	429	300	386	236	150	41	69	180							545			540			569			624	604	624	667	667	637	692	
11	527	350	485	300	185	54	70	205										631			660			715	695	715	758	758	728	783	813
14	636	410	605	375	230	67	71	235													814			794	814	857	857	827	882	912	

Gearbox size	Hollow shaft						Output flange						
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

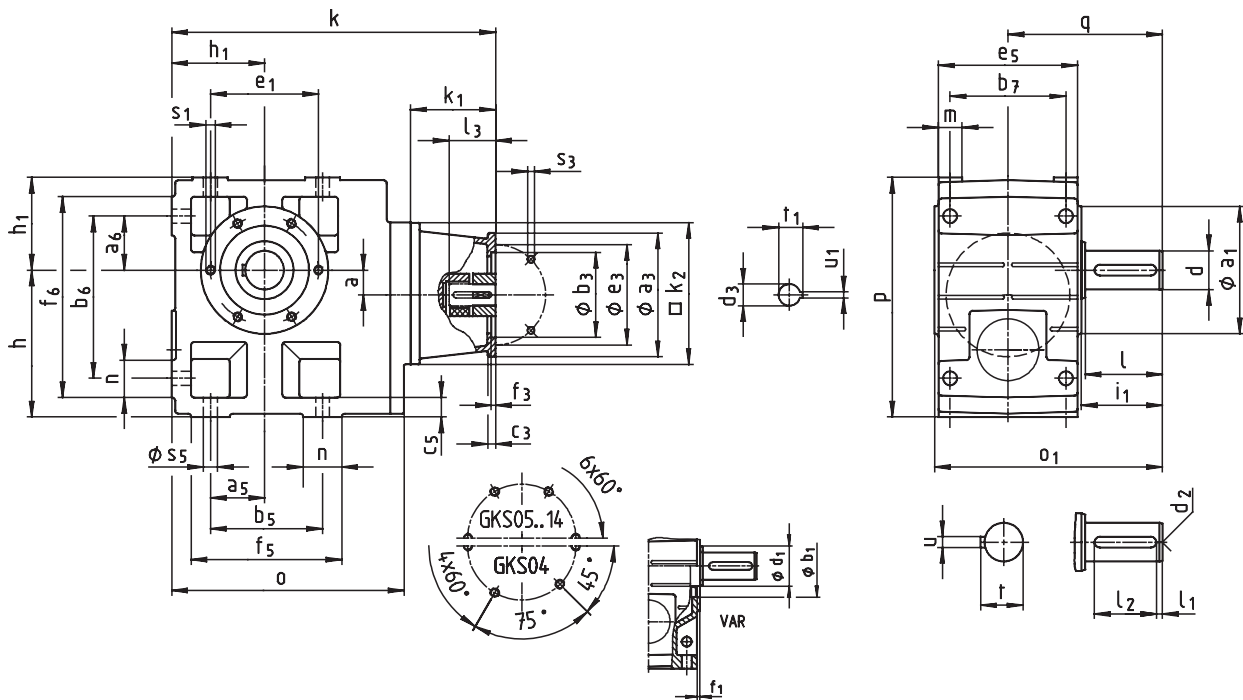
Dimensions in [mm]

\* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

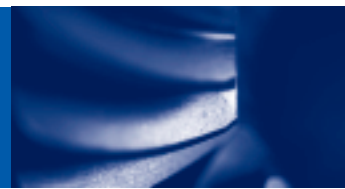
## GKS □□ - 3 N VOR





# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GKS □□ - 3 N VDR</b> corresponds to IEC motor			Drive size																											
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H	1K	2K						
			63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132	200	225						
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188	243	273					
		$k_2$	120	145	120	145			180			180			180			265			300			300						
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450				
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350				
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20					
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400				
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5	6					
		$s_3$ 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5				
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60						
		$l_3$	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80	110	140					
max			23	30	23	40			50	50	60			60			80	80	80	110	110	80	110	140						
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18							
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64								
Gearbox size	Gearbox							Total length																						
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	q	k																						
04	203	163	171	100	71	20	1075	287	294	287	308			342																
05	232	197	205	125	80	23	130	314		328			362			357														
06	291	236	250	150	100	28	160	370			384			418			413			442										
07	354	296	310	190	120	34	200				440			474			469			498			553	533	553	596	566			
09	429	356	386	236	150	41	240							545			540			569			624	604	624	667	667	637	692	
11	527	445	485	300	185	54	305										631			660			715	695	715	758	758	728	783	813
14	636	544	605	375	230	67	375																814	794	814	857	857	827	882	912

Gearbox size	Solid shaft									Pitch circle						Foot										
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm]

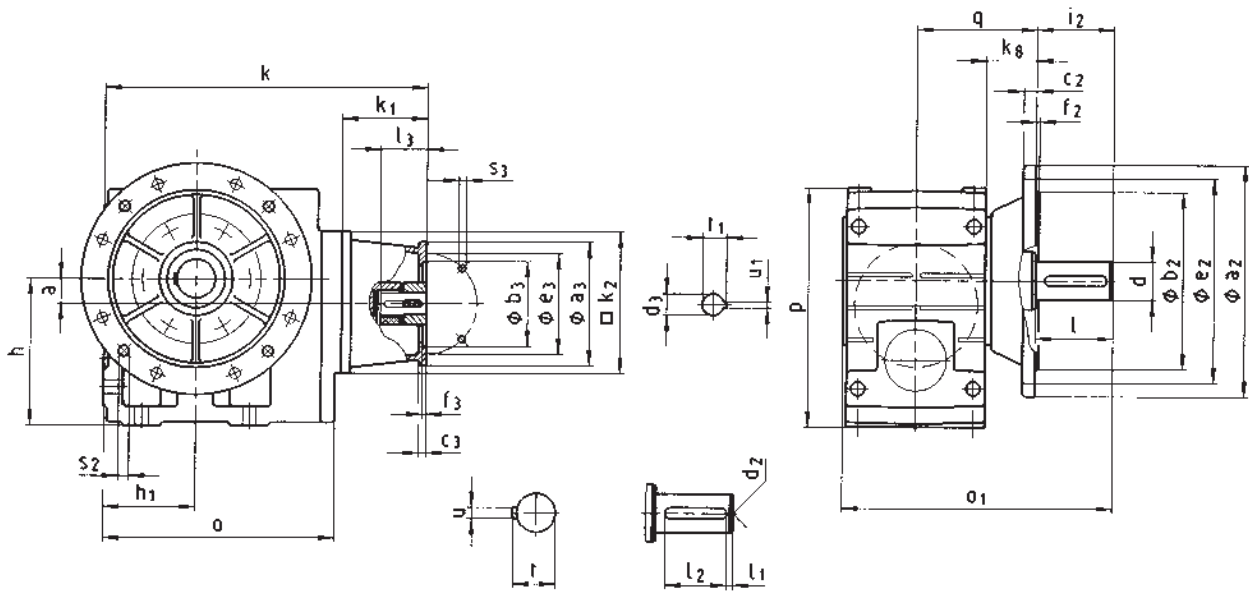
d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical-bevel gearboxes

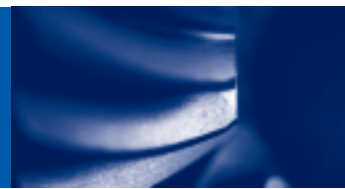
Gearbox with mounting flange for IEC standard motors

## GKS □□ - 3 N VAK



# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GKS □□ - 3 N VAK</b> corresponds to IEC motor			Drive size																																
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	2H 180	3H 132	1K 200	2K 225											
Housing	$k_1$		75	77	75	91			115			110			139			180	160	180	218	218	188	243	273										
		$k_2$	120	145	120	145			180			180			180			265			300			300											
	Flange	$a_3$	90	105	90	160	160	105	120	160			160			160			300	250	250	350	350	300	400	450									
		$b_3$ H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	250	230	300	350									
		$c_3$	7	8	7	10	10	8	8	10			10			10			18	18	35	20	20	18	20										
		$e_3$	75	85	75	130	130	85	100	130			130			130			265	215	215	300	300	265	350	400									
		$f_3$	3	3		4	4	3	3.5	4			4			4			4.5			6	6	4.5	6										
		$s_3$ 4 x 8 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5			17.5	17.5	13.5	17.5	17.5									
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38	55	60											
		$l_3$	min	23	30	23	25			50	40	30			30			80	60	80	110	110	80	110	140										
max			23	30	23	40			50	50	60			60			80	60	80	110	110	80	110	140											
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10	16	18												
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41	59	64													
Gearbox size	Gearbox								Total length																										
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k																										
04	203	169	171	100	71	20	38	90.5	287	294	287	308			342																				
05	232	230	205	125	80	23	40	103	314		328			362			357																		
06	291	277	250	150	100	28	49	121	370		384			418			413			442															
07	354	351	310	190	120	34	65	155			440			474			469			498			553	533	553	596	566								
09	429	416	386	236	150	41	69	180						545			540			569			624	604	624	667	667	637	692						
11	527	505	485	300	185	54	70	205									631			660			715	695	715	758	758	728	783	813					
14	636	604	605	375	230	67	71	235															814	794	814	857	857	827	882	912					

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm]

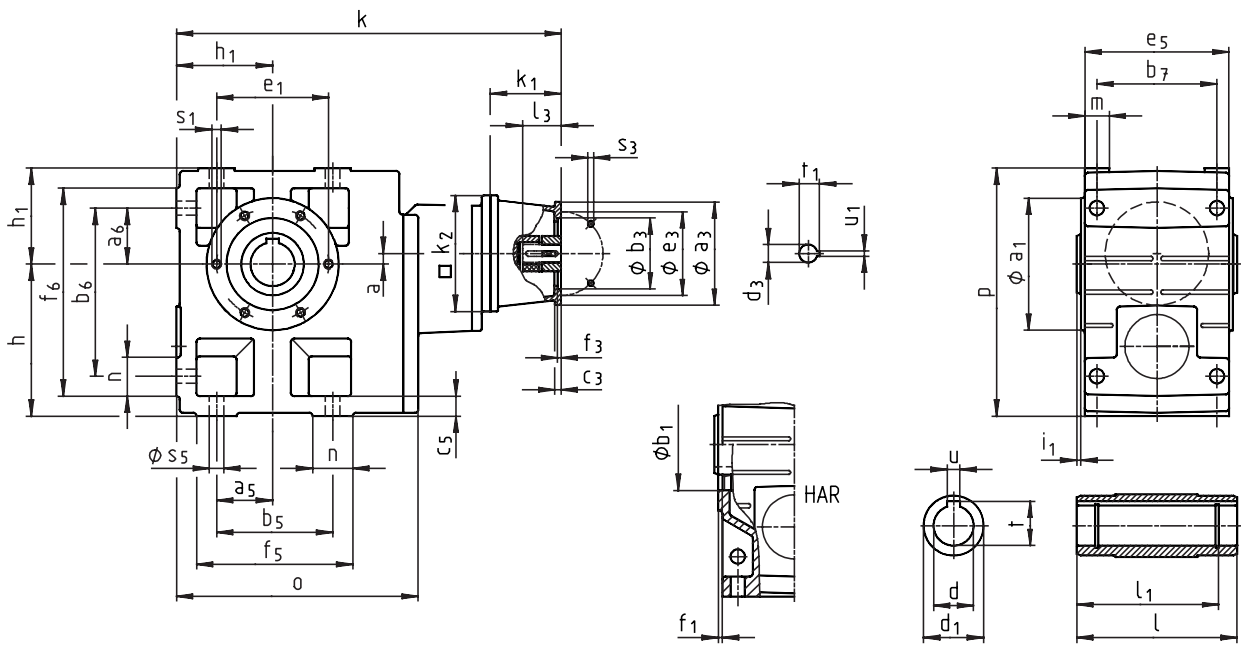
d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and drive size 1D/2D, dimension k<sub>2</sub>/2 > h-a

# Dimensions - Helical-bevel gearboxes

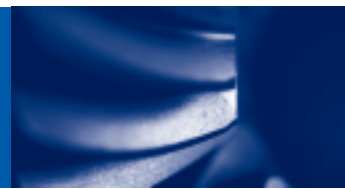
Gearbox with mounting flange for IEC standard motors

## GKS □□ - 4 N HOR



# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox		GKS □□ - 4 N HOR		corresponds to IEC motor		Drive size																																					
						1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H																		
						63	71	63	80		71	71	90	80	100	90	80	100	90	132	100	112	112	160	180	132																	
Housing	k <sub>1</sub>	75		77		75		91				115		110		139		180		160		180		218		218		188															
		k <sub>2</sub>		120		145		120		145				180		180		180		265				300																			
	Flange	a <sub>3</sub>		90		105		90		160		160		105		120		160		160		160		300		250		250		350		350		300									
		b <sub>3</sub> H8		60		70		60		110		110		70		80		110		110		110		230		180		180		250		250		230									
		c <sub>3</sub>		7		8		7		10		10		8		8		10		10		10		18		18		35		20		20		18									
		e <sub>3</sub>		75		85		75		130		130		85		100		130		130		130		265		215		215		300		300		265									
		f <sub>3</sub>		3		3		4		4		3		3.5		4		4		4		4		4.5		4.5		6		6		4.5											
		s <sub>3</sub> 4 x		5.5		6.6		5.5		9		9		6.6		6.6		9		9		9		13.5		13.5		17.5		17.5		13.5											
	Required motor shafts	d <sub>3</sub>		11		14		11		19		14		14		14		24		19		28		24		19		28		24		38		28		38		42		48		38	
		l <sub>3</sub>	min	23		30		23		25				50		40		30		30		80		60		80		110		110		80											
			max	23		30		23		40				50		50		60		60		80		60		80		110		110		80											
		u <sub>1</sub>		4		5		4		6		5		5		5		8		6		8		6		8		8		10		8		10		12		14		10			
	t <sub>1</sub>		12.5		16		12.5		21.5		16		16		16		27		21.5		31		27		21.5		31		27		41		31		41		45		51.5		41		
Gearbox size	Gearbox						Total length																																				
	o	l*	p*	h	h <sub>1</sub>	a	k																																				
05	226	140	205	125	80	13	383	390	383	404				438																													
06	288	160	250	150	100	8	456	463	456	477				511																													
07	351	200	310	190	120	11	530		544				578		573																												
09	426	240	386	236	150	15	619		633				667		662		691																										
11	523	290	485	300	185	16			743				777		772		801		856		836		856																				
14	632	350	605	375	230	22							910		905		934		989		969		989		1032		1032		1002														

Gearbox size	Hollow shaft						Pitch circle							Foot										
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

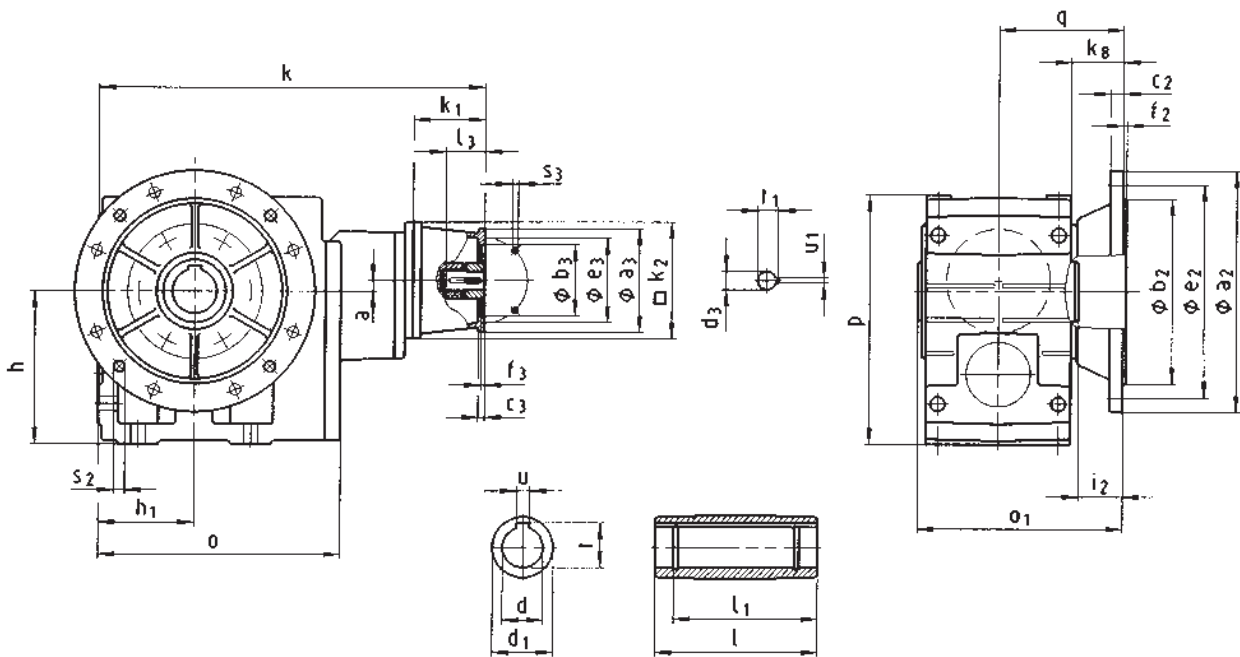
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical-bevel gearboxes

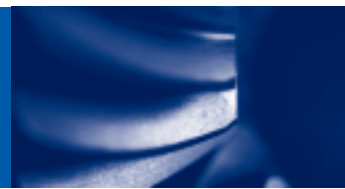
Gearbox with mounting flange for IEC standard motors

## GKS □□ - 4 N HAK



# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GKS □□ - 4 N HAK</b> corresponds to IEC motor		Drive size																						
		1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H			
		63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	180	132			
Housing	$k_1$	75	77	75	91			115		110			139		180	160	180	218	218	188				
	$k_2$	120	145	120	145			180		180			180		265			300						
	Flange	$a_3$	90	105	90	160	160	105	120	160	160			160		300		250	250	350	350	300		
		$b_3$ H8	60	70	60	110	110	70	80	110	110			110		230		180	180	250	250	230		
		$c_3$	7	8	7	10	10	8	8	10	10			10		18		18	35	20	20	18		
		$e_3$	75	85	75	130	130	85	100	130	130			130		265		215	215	300	300	265		
		$f_3$	3	3	4	4	3	3.5	4	4			4		4		4.5			6	6	4.5		
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9	9			9		9		13.5			17.5	17.5	13.5	
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38		
		$l_3$	min	23	30	23	25			50	40	30			30		80	60	80	110	110	80		
max			23	30	23	40			50	50	60			60		80	60	80	110	110	80			
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	14	10			
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41				
Gearbox size	Gearbox								Total length															
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	k <sub>g</sub>	q	k															
05	226	173	205	125	80	13	40	103	383	390	383	404		438										
06	288	201	250	150	100	8	49	121	456	463	456	477		511										
07	351	255	310	190	120	11	65	155	530		544		578		573									
09	426	300	386	236	150	15	69	180	619		633		667		662		691							
11	523	350	485	300	185	16	70	205			743		777		772		801		856	836	856			
14	632	410	605	375	230	22	71	235					910		905		934		989	969	989	1032	1032	1002

Gearbox size	Hollow shaft						Output flange						
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

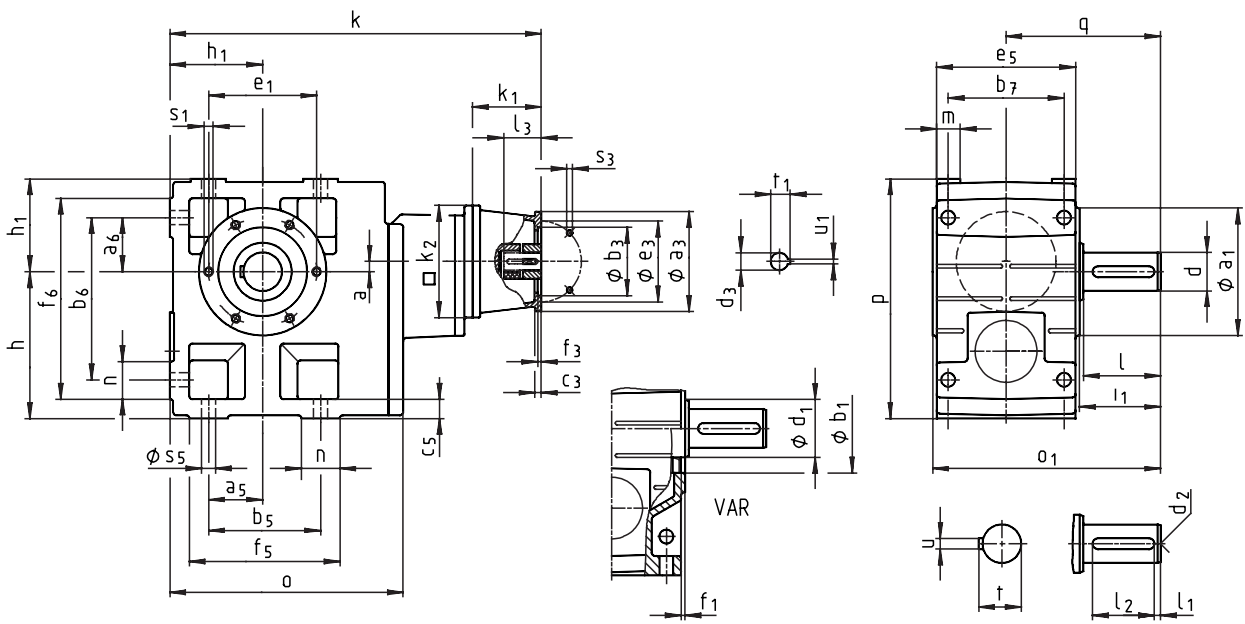
Dimensions in [mm]

\* Observe dimension  $k_2$

# Dimensions - Helical-bevel gearboxes

Gearbox with mounting flange for IEC standard motors

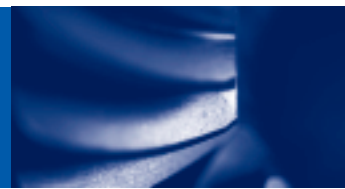
## GKS □□ - 4 N VOR





# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox		GKS □□ - 4 N VDR corresponds to IEC motor		Drive size																														
				1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H											
				63	71	63	80			71	71	90	80	100	90	80	100	90	132	100	3G	1H	2H	3H										
Housing	k <sub>1</sub>	75		77	75	91					115		110		139		180		160	180	218	218	188											
		k <sub>2</sub>		120	145	120	145					180		180		180		265		300														
	Flange	a <sub>3</sub>	90	105	90	160	160	105	120	160		160		160		300		250	250	350	350	300												
		b <sub>3</sub> H8	60	70	60	110	110	70	80	110		110		110		230		180	180	250	250	230												
		c <sub>3</sub>	7	8	7	10	10	8	8	10		10		10		18		18	35	20	20	18												
		e <sub>3</sub>	75	85	75	130	130	85	100	130		130		130		265		215	215	300	300	265												
		f <sub>3</sub>	3	3	3	4	4	3	3.5	4		4		4		4.5		6	6	4.5														
		s <sub>3</sub> 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9		9		13.5		17.5	17.5	13.5														
	Required motor shafts	d <sub>3</sub>	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	48	38												
		l <sub>3</sub>	min	23	30	23	25			50	40	30		30		80	60	80	110	110	80													
max			23	30	23	40			50	50	60		60		80	60	80	110	110	80														
u <sub>1</sub>		4	5	4	6	5	5	5	8	6	8	6	8	8	8	10	8	10	12	14	10													
t <sub>1</sub>	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	51.5	41														
Gearbox size	Gearbox							Total length																										
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	q	k																										
05	226	197	205	125	80	13	130	383	390	383	404					438																		
06	288	236	250	150	100	8	160	456	463	456	477					511																		
07	351	296	310	190	120	11	200	530		544					578		573																	
09	426	356	386	236	150	15	240	619		633					667		662		691															
11	523	445	485	300	185	16	305	743					777		772		801		856	836	856													
14	632	544	605	375	230	22	375						910		905		934		989	969	989	1032	1032	1002										

Gearbox size	Solid shaft								Pitch circle						Foot											
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm]

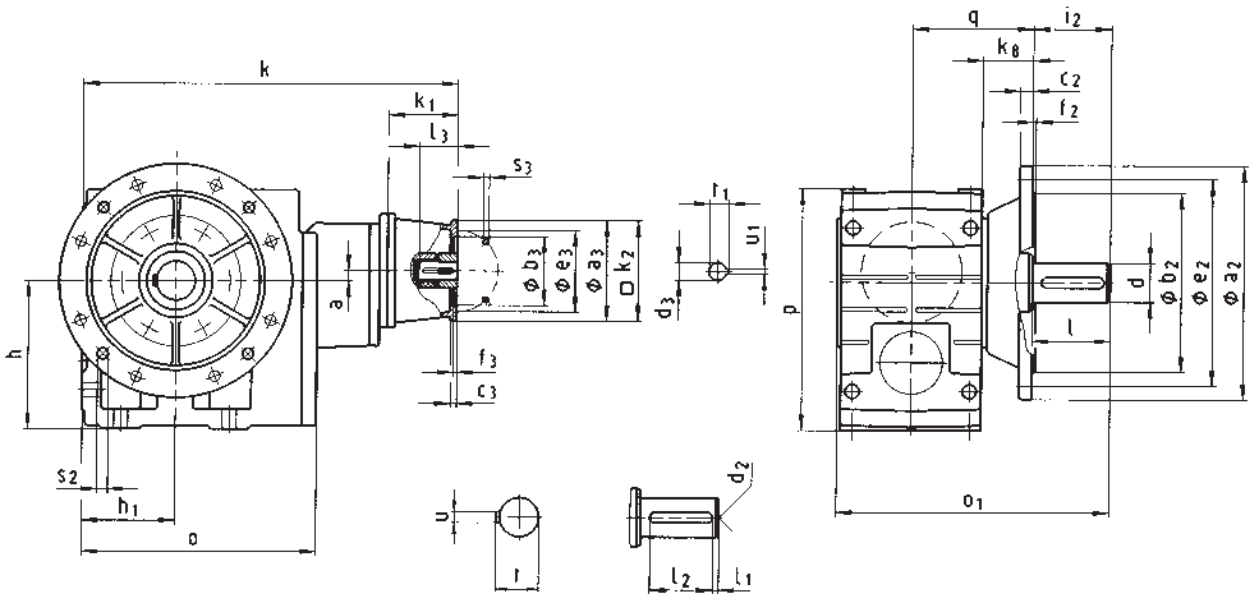
d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical-bevel gearboxes

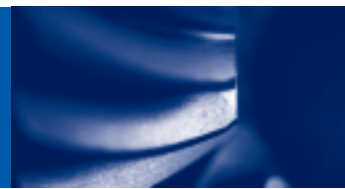
Gearbox with mounting flange for IEC standard motors

## GKS □□ - 4 N VAK



# Dimensions - Helical-bevel gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox		GKS □□ - 4 N VAK corresponds to IEC motor		Drive size																							
				1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	2H	3H				
				63	71	63	80			71	71	90	80	100	90	80	100	90	132	100	3G	160	180	132			
														112			112			112							
Housing	k <sub>1</sub>			75	77	75				91			115			110			139	180	160	180	218	188			
		k <sub>2</sub>			120	145	120				145			180			180			180			265		300		
	Flange	a <sub>3</sub>			90	105	90	160	160	105	120			160			160			160	300	250	250	350	300		
		b <sub>3</sub> H8			60	70	60	110	110	70	80			110			110			110	230	180	180	250	230		
		c <sub>3</sub>			7	8	7	10	10	8	8			10			10			10	18	18	35	20	18		
		e <sub>3</sub>			75	85	75	130	130	85	100			130			130			130	265	215	215	300	265		
		f <sub>3</sub>			3	3	3	4	4	3	3.5			4			4			4	4.5	4.5	6	6	4.5		
		s <sub>3</sub> 4 x			5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			9	13.5	13.5	17.5	13.5		
	Required motor shafts	d <sub>3</sub>			11	14	11	19	14	14	14			24	19		28	24	19	28	24	38	28	38	42	38	
		l <sub>3</sub>	min			23	30	23				25			50	40		30			30	80	60	80	110	80	
max					23	30	23				40			50	50		60			60	80	60	80	110	80		
u <sub>1</sub>				4	5	4	6	5	5	5			8	6		8	6		8	8	10	8	10	12	10		
t <sub>1</sub>			12.5	16	12.5	21.5	16	16	16	16			27	21.5		31	27		21.5	31	27	41	31	41	45	51.5	41
Gearbox size	Gearbox									Total length																	
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	k <sub>g</sub>	q			k																
05	226	230	205	125	80	13	40	103	383	390	383			404													
06	288	277	250	150	100	8	49	121	456	463	456			477													
07	351	351	310	190	120	11	65	155			530			544						578							
09	426	416	386	236	150	15	69	180			619			633						667							
11	523	505	485	300	185	16	70	205						743						777							
14	632	604	605	375	230	22	71	235												910							

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

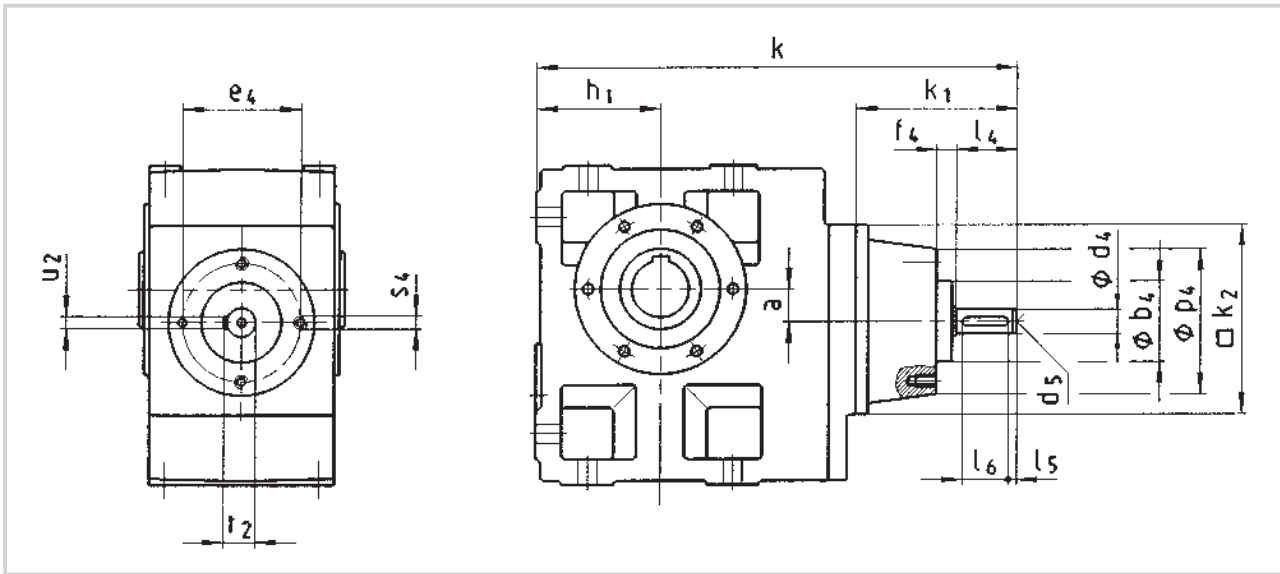
Dimensions in [mm]

d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical-bevel gearboxes

## Gearbox with free input shaft



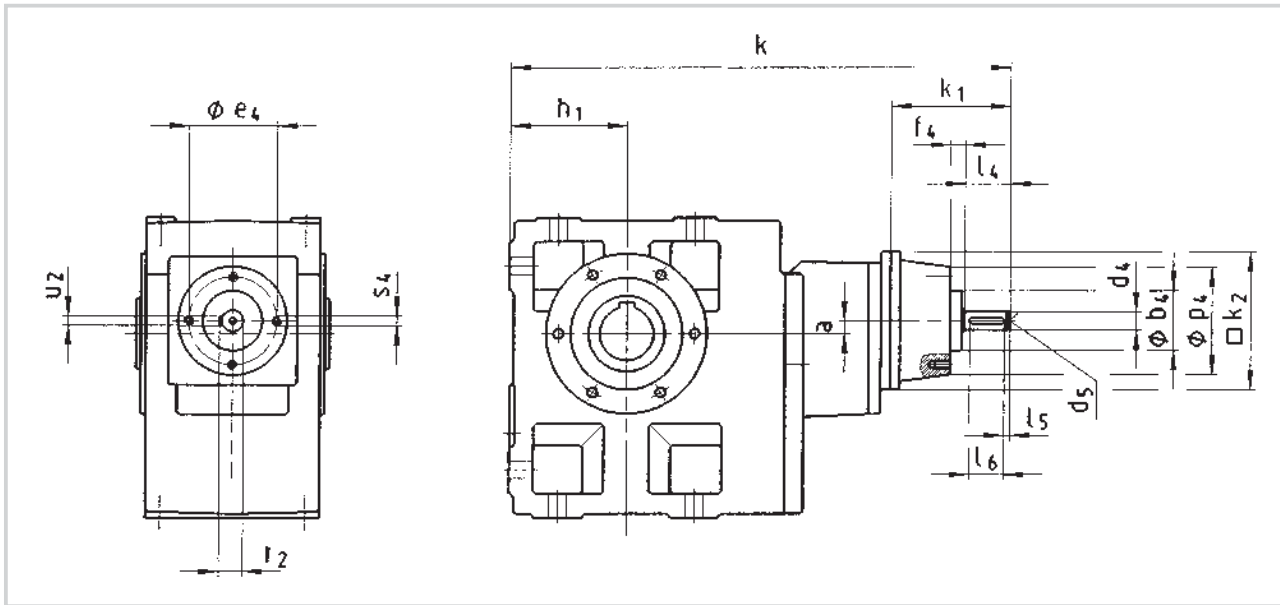
Gearbox			Drive size								
GKS □□ - 3 W □□□			1A	1B	1C	1D	1E	1F	1G	1H	1K
Housing	$k_1$		100	100	102	130	160	175	175	182	220
	$k_2$		115	115	145	145	180	222	222	300	300
Pitch circle with centring	$p_4$		80	86	90	120	142	178	216	262	262
	$b_4$	js8	52	52	52	65	78	98	125	155	155
	$e_4$		67	67	67	90	115	145	175	210	210
	$f_4$		12	12	12	12	22	23	23	23	32
	$s_4$	4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	M20x36	M20x36
Free input shaft	$d_4$	k6	14	14	14	19	24	28	38	42	48
	$l_4$		35	35	40	50	60	80	100	110	110
	$l_5$		4.5	4.5	4	4	6	7	8	8	8
	$l_6$		25	25	32	40	45	63	80	90	90
	$d_5$		M6	M6	M6	M6	M8	M10	M12	M16	M16
	$u_2$		5	5	5	6	8	8	10	12	14
	$t_2$		16	16	16	21.5	27	31	41	45	51.5
Gearbox size	Gearbox *		Total length								
	$h_1$	$a$	$k$								
04	71	20	287	287	319						
05	80	23		314	339	367					
06	100	28			395	423	463	484			
07	120	34				479	519	540	540		
09	150	41					590	611	611	631	
11	185	54						702	702	722	760
14	230	67							801	821	859

Dimensions in [mm]

\* For further dimensions see Dimensions - Helical-bevel geared motors

# Dimensions - Helical-bevel gearboxes

## Gearbox with free input shaft

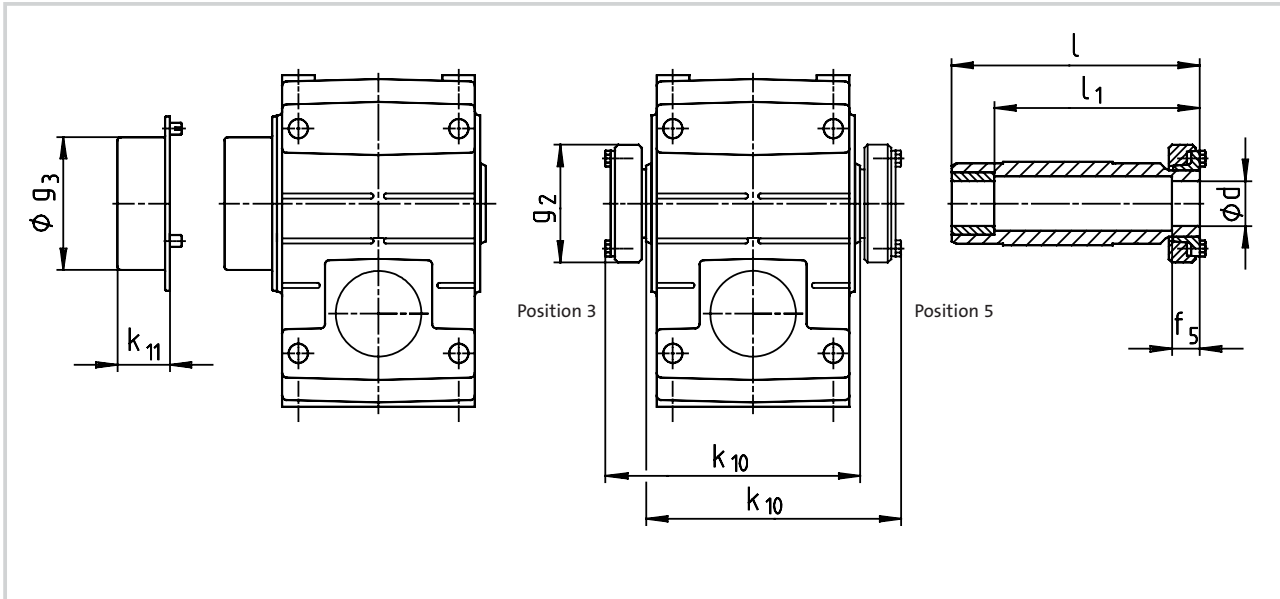


Gearbox		Drive size								
<b>GKS 00 - 4 W 000</b>		1A	1B	1C	1D	1E	1F	1G	1H	
Housing	$k_1$	100	100	102	130	160	175	175	182	
	$k_2$	115	115	145	145	180	222	222	300	
	Pitch circle	$p_4$	80	86	90	120	142	178	216	262
	with centring	$b_4$ js8	52	52	52	65	78	98	125	155
		$e_4$	67	67	67	90	115	145	175	210
	$f_4$	12	12	12	12	22	23	23	23	
	$s_4$ 4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	M20x36	
Input shaft	$d_4$ k6	14	14	14	19	24	28	38	42	
	$l_4$	35	35	40	50	60	80	100	110	
	$l_5$	4.5	4.5	4	4	6	7	8	8	
	$l_6$	25	25	32	40	45	63	80	90	
	$d_5$	M6	M6	M6	M6	M8	M10	M12	M16	
	$u_2$	5	5	5	6	8	8	10	12	
	$t_2$	16	16	16	21.5	27	31	41	45	
Gearbox size	Gearbox *		Total length							
	$h_1$	$a$	$k$							
05	80	13	383	383	415					
06	100	8	456	456	488					
07	120	11		530	555	583				
09	150	15			644	672	712	733		
11	185	16				782	822	843	843	
14	230	22					955	976	976	

Dimensions in [mm]

\* For further dimensions see Dimensions - Helical-bevel geared motors

### Hollow shaft with shrink disc

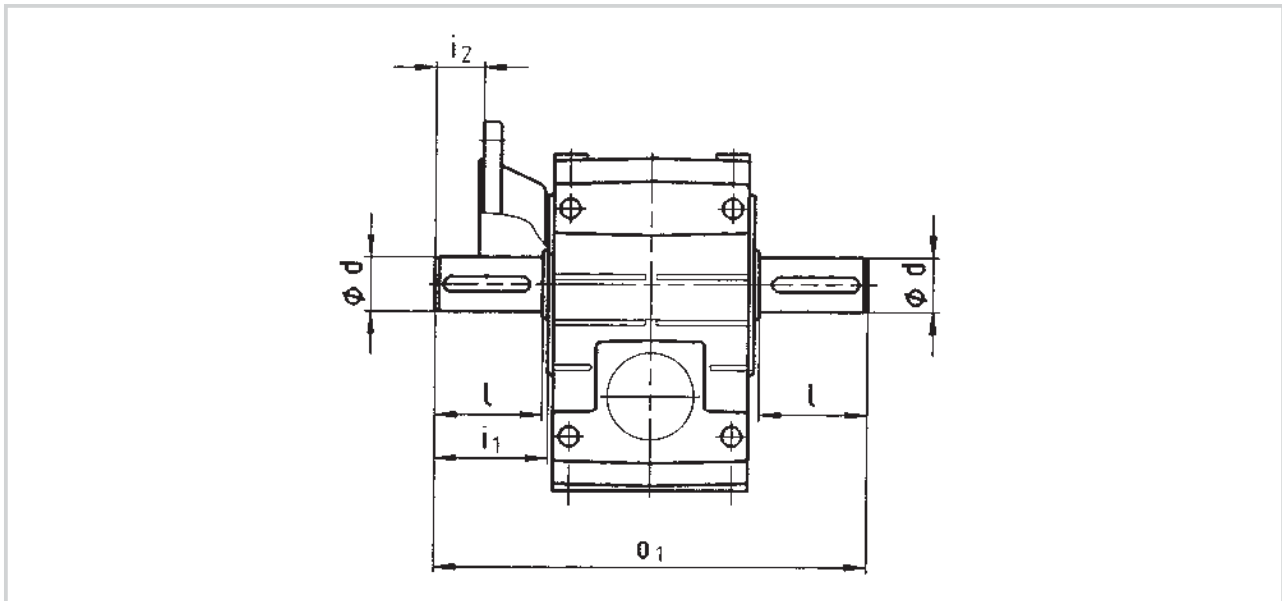


Gearbox size	Machine shaft*		Hollow shaft			Gearbox		Protective cover	
	d	Fit	l	l <sub>1</sub>	f <sub>5</sub>	g <sub>2</sub>	k <sub>10</sub>	g <sub>3</sub>	k <sub>11</sub>
04	25 30	h6	142	122	26	72	146	79	41
05	35	h6	168	148	28	80	171	90	43
06	40	h6	194	164	30	90	197	100	49
07	50	h6	232	192	26	110	234	124	49
09	65	h6	278	228	30	141	281	159	52
11	80	h6	338	238	42	170	65	344	191
14	100	h6	407	307	55	215	415	253	78

Dimensions in [mm]

\* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4) the torque values given in the selection tables can be transmitted without restriction. If less rigid materials are being used, please contact us. The average surface roughness  $R_z$  should not exceed 15  $\mu\text{m}$  (turning is sufficient).

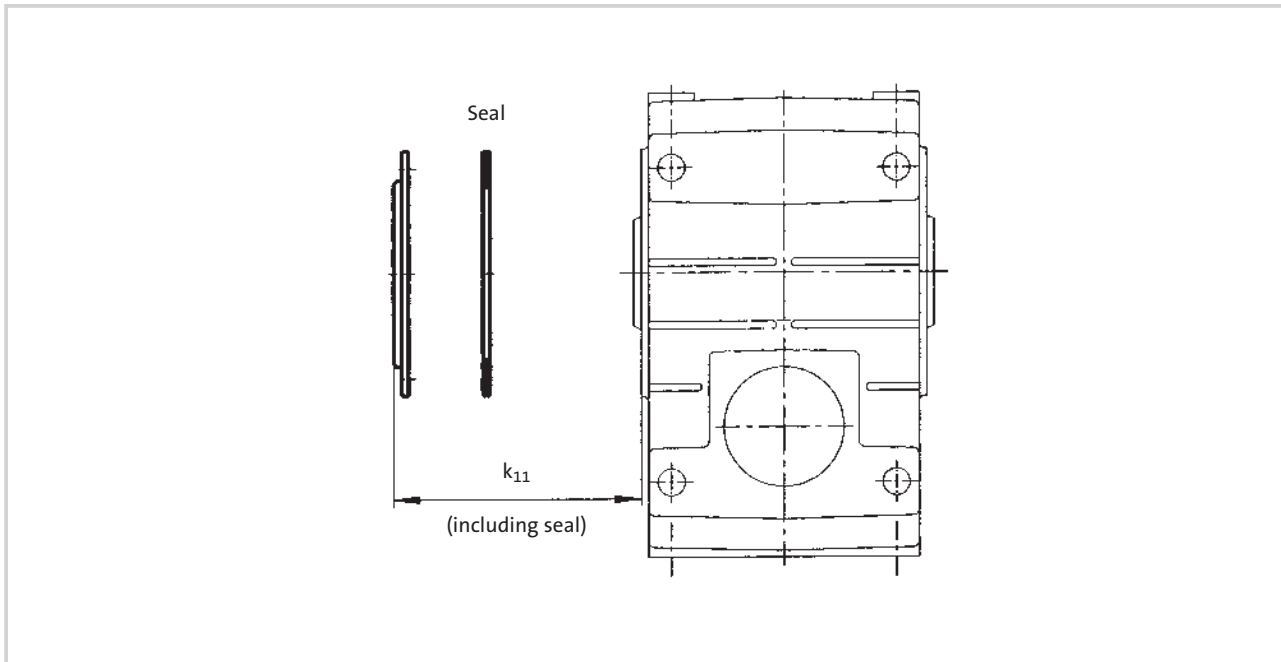
## Gearbox with 2nd output shaft



Gearbox size	d	l	$i_1$	$i_2$	$o_1$
04	25	50	52.5	17	215
05	30	60	64	27	260
06	40	80	85	39	320
07	50	100	105	45	400
09	60	120	125	60	480
11	80	160	166	100	610
14	100	200	207	140	750

Dimensions in [mm]

## Jet-proof hollow shaft cover

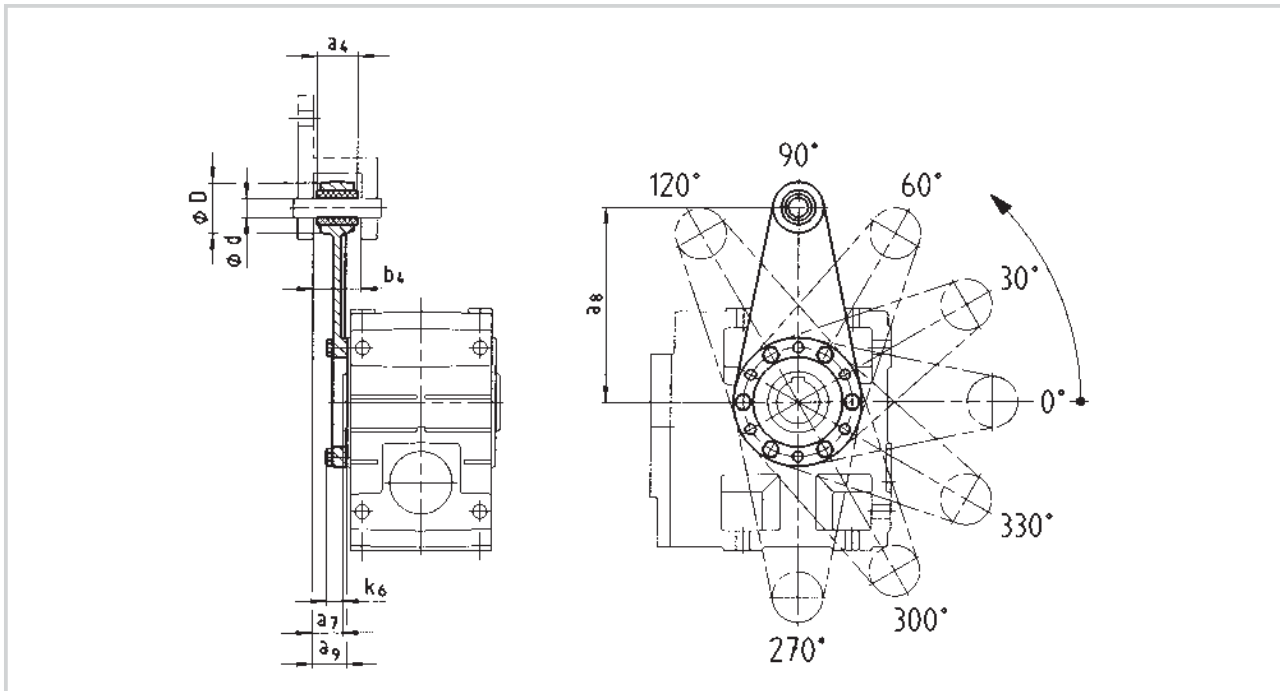


Gearbox size	Protective cover $k_{11}$
04	9
05	10
06	11
07	11
09	54
11	67
14	80

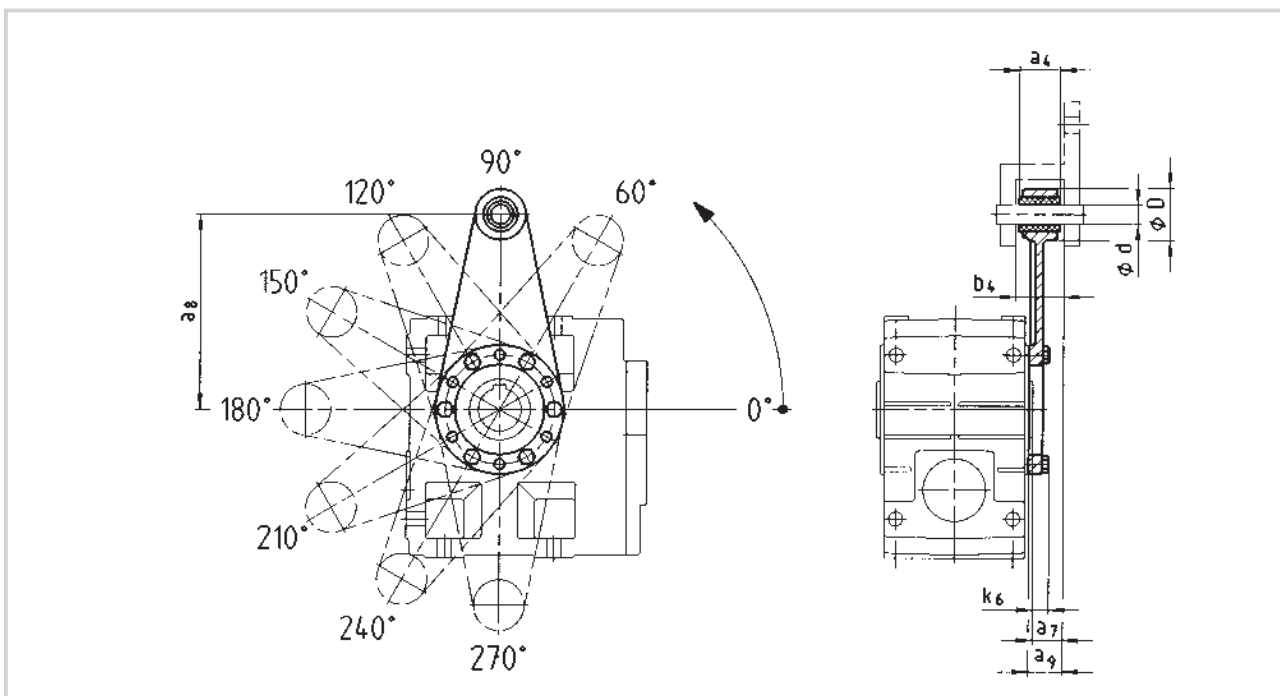
Dimensions in [mm]



## Torque plate at pitch circle, position 3



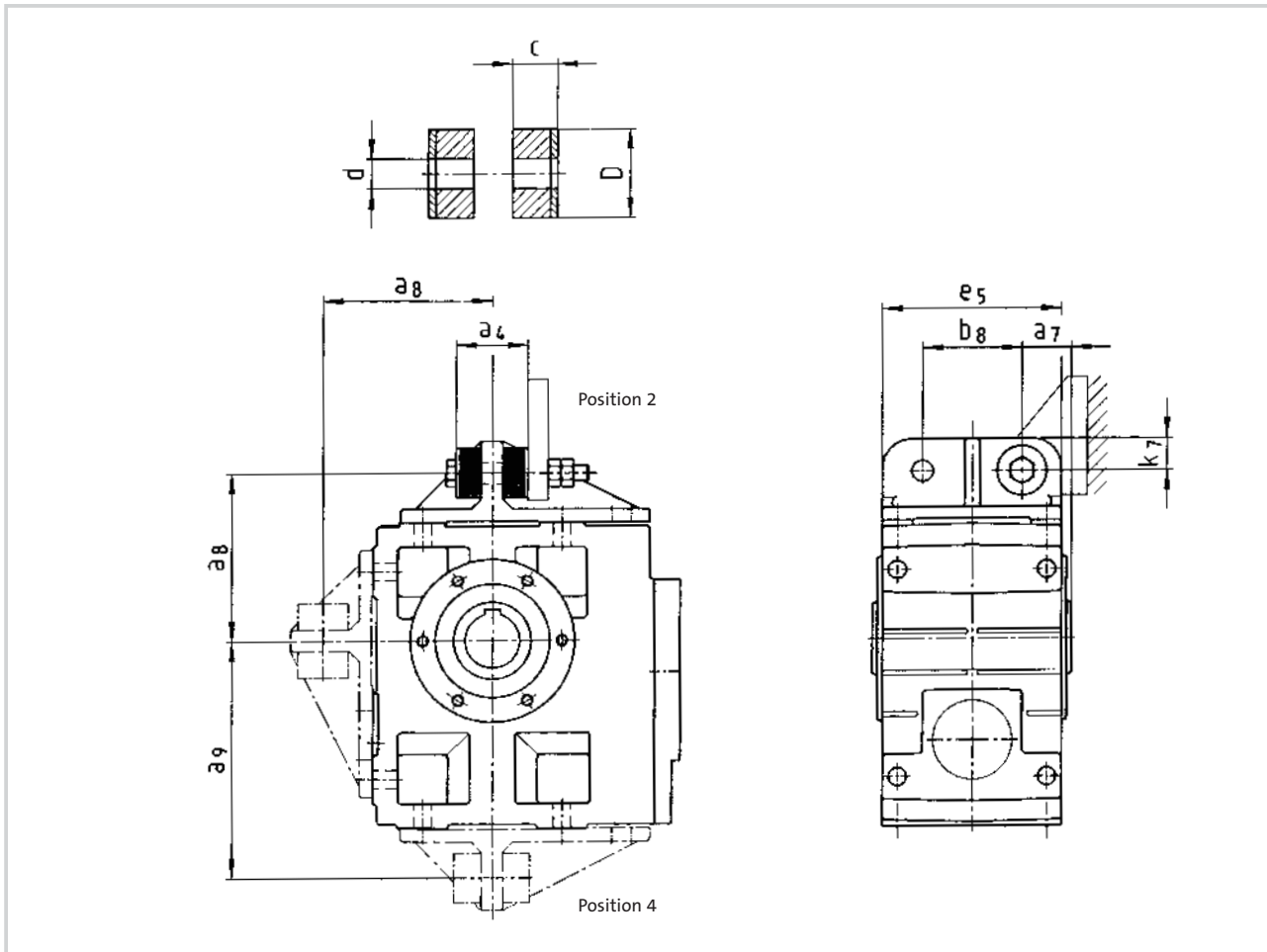
## Torque plate at pitch circle, position 5



Gearbox size	Assembly space		Torque plate						
	a <sub>7</sub>	b <sub>4</sub>	a <sub>4</sub>	a <sub>8</sub>	a <sub>9</sub>	d	D	k <sub>6</sub>	
04	24	34.5	30	130	26.5	12	35	16	
05	23.5	38.5	34	160	27.5	16	45	15	
06	28	44.5	40	200	33	20	50	18	
07	32.5	50.5	46	250	37.5	25	65	21	

Dimensions in [mm]

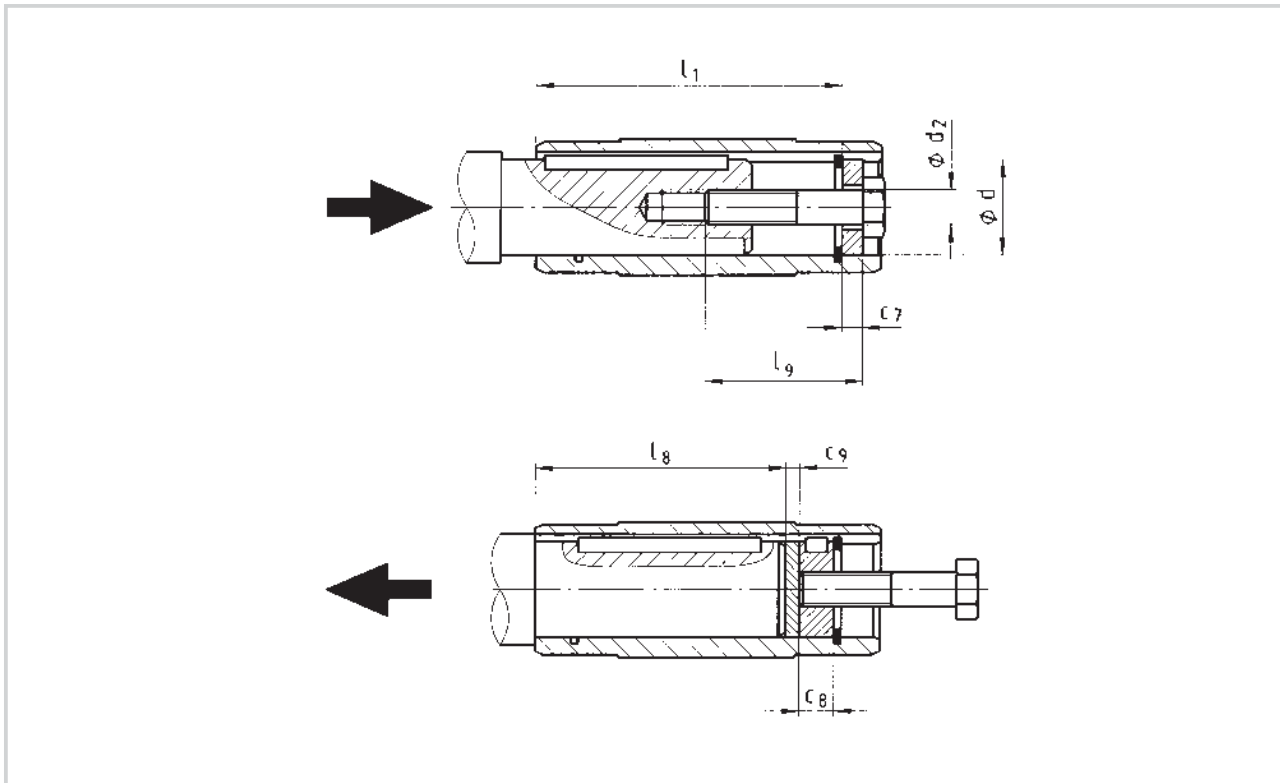
### Torque plate at housing foot



Gearbox size	a <sub>4</sub>	a <sub>7</sub>	a <sub>8</sub>	a <sub>9</sub>	b <sub>8</sub>	c	d	D	e <sub>5</sub>	k <sub>7</sub>
04	41	27.5	106	135	60	14.5	11	30	100	20
05	45	35	115	160	70	15	13	40	127	25
06	72	40	145	195	80	27	17	50	145	28
07	78	50	170	240	100	28	21	60	180	35
09	86	60	214	300	120	29	26	72	222	46
11	94	72.5	260	375	145	30	33	92	270	55
14	100	85	320	465	180	30	39	110	328	70

Dimensions in [mm]

## Assembly kit for hollow shaft retention / Proposal for auxiliary tool



## Helical-bevel gearboxes GKS □□

Gearbox size	Hollow shaft (design H)			Assembly kit for hollow shaft circlip (auxiliary tool assembly)			Auxiliary tool disassembly		Machine shaft max l <sub>8</sub>
	l	l <sub>1</sub>	d H7	d <sub>2</sub>	l <sub>9</sub>	c <sub>7</sub>	c <sub>8</sub>	c <sub>9</sub>	
04	115	100	25 30	M10 M10	40	5 6	10	3	85
05	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
06	160	140	40 45	M16	60	8 9	16	4	118
07	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148
09	240	210	60 70	M20	80	13 14	20	5	182
11	290	250	70 80	M20	80	14 16	20	6	221
14	350	305	100	M24	100	20	24	8	270

Dimensions in [mm]

# Helical-worm gearboxes | G-motion const

## Technical data

Permissible radial and axial forces	7-2
Output	7-2
Input	7-4
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# Technical data - Helical-worm gearboxes

## Permissible radial and axial forces - output

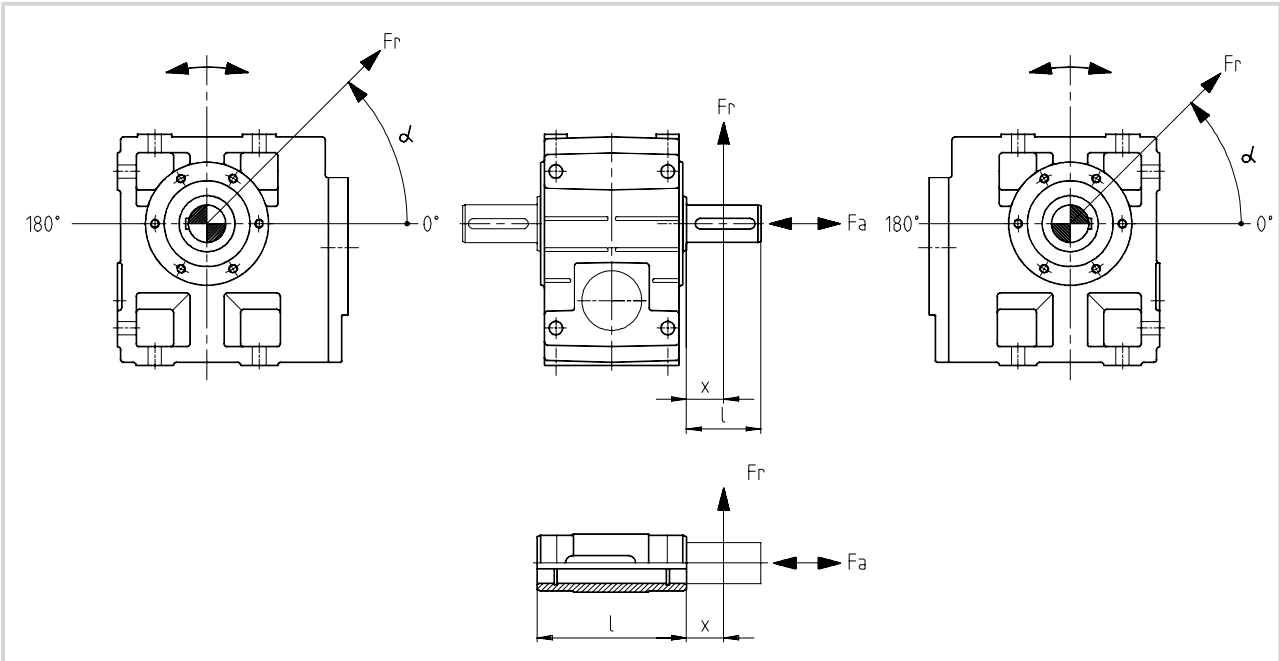
### Permissible radial force

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

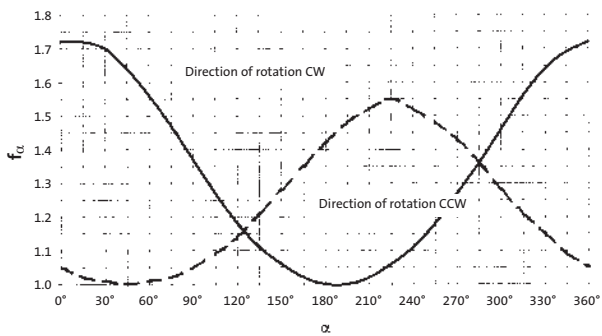
### Permissible axial force

$$F_{Aperm} = F_{ATab} \quad \text{at } F_R = 0$$

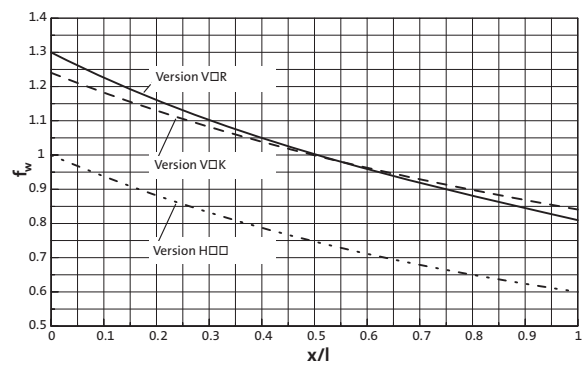
Contact Lenze if  $F_R$  and  $F_A \neq 0$



$f_\alpha$  Effective direction factor at output shaft



$f_w$  Additional load factor at output shaft



# Technical data - Helical-worm gearboxes

## Permissible radial and axial forces - output



VAK	Solid shaft with flange							
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$							
$n_2$ [min <sup>-1</sup> ]	GSS 04		GSS 05		GSS 06		GSS 07	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
250	4100	3500	4900	2500	7000	2800	7900	2400
160	4400	4000	4900	3100	8100	3500	9100	3200
100	4700	4200	4900	4000	9400	4500	10600	4300
63	4700	4200	4900	4900	9400	5700	12400	5900
40	4700	4200	4900	5500	9400	7300	14000	8000
25	4700	4200	4900	5500	9400	8800	14000	10000
≤ 16	4700	4200	4900	5500	9400	8800	14000	10000
$F_{rmax}$	4700	–	4900	–	9400	–	14000	–

VOR	Solid shaft without flange							
	Application of force $F_r$ : Centre of shaft journal ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$							
$n_2$ [min <sup>-1</sup> ]	GSS 04		GSS 05		GSS 06		GSS 07	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
250	3000	3700	2900	2800	3600	3200	4200	3100
160	3500	4200	3400	3500	4200	4100	5100	4100
100	4100	4900	4000	4400	5000	5200	6300	5500
63	4200	5500	4300	5500	5900	6500	7700	7200
40	4200	5500	4300	6000	6900	8200	9300	9500
25	4200	5500	4300	6000	8200	9000	11300	12500
≤ 16	4200	5500	4300	6000	8500	9000	12000	12500
$F_{rmax}$	4200	–	4300	–	8500	–	12000	–

HOO	Hollow shaft							
	Application of force $F_r$ : At hollow shaft end face ( $x = 0$ ) $F_{aTab}$ only valid for $F_r = 0$							
$n_2$ [min <sup>-1</sup> ]	GSS 04		GSS 05		GSS 06		GSS 07	
	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
250	3800	3700	3600	2800	4800	3200	5600	3100
160	4500	4200	4300	3500	5600	4100	6700	4100
100	5300	4900	5100	4400	6600	5200	8200	5500
63	6000	5500	6000	5500	7700	6500	10000	7200
40	6000	5500	7000	6000	9100	8200	12100	9500
25	6000	5500	7500	6000	10700	9000	14800	12500
≤ 16	6000	5500	7500	6000	11500	9000	16000	12500
$F_{rmax}$	6000	–	7500	–	11500	–	16000	–

Neither radial nor axial forces are permitted on hollow shafts with shrink discs (S□□).

# Technical data - Helical-worm gearboxes

## Permissible radial and axial forces - input

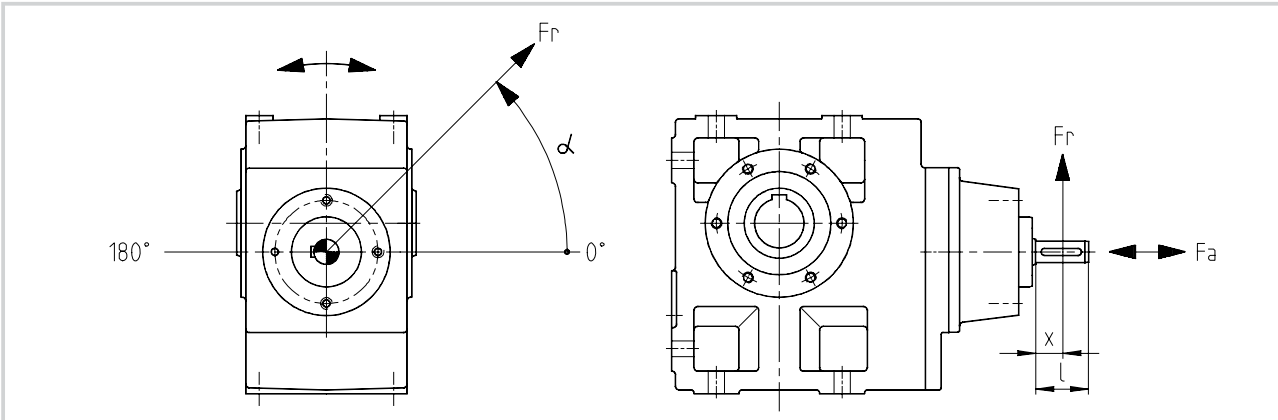
### Permissible radial force

$$F_{Rperm} = f_w \cdot f_\alpha \cdot F_{RTab} \leq f_w \cdot F_{Rmax}$$

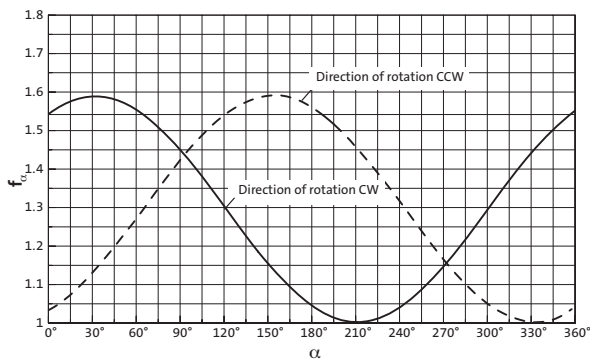
### Permissible axial force

$$F_{Aperm} = F_{ATab} \quad \text{at } F_R = 0$$

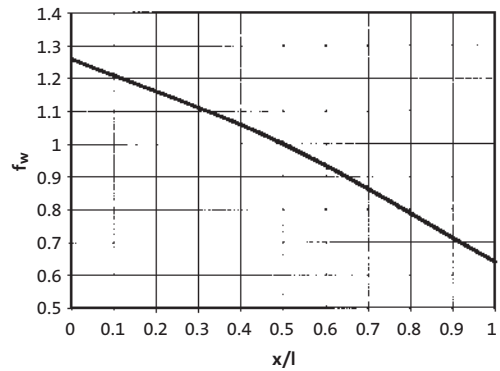
Contact Lenze if  $F_R$  and  $F_A \neq 0$



**$f_\alpha$**  Effective direction factor at input shaft



**$f_w$**  Additional load factor at input shaft



**W**

Application of force  $F_r$ : Centre of shaft journal ( $x = l/2$ )  
 $F_{ATab}$  only valid for  $F_r = 0$

$n_1$ [min <sup>-1</sup> ]	Drive size											
	1A 1B		1C		1D		1E		1F		1G	
	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]	$F_{RTab}$ [N]	$F_{ATab}$ [N]
700	830	1200	1150	1400	1470	1500	2140	1600	3200	2800	4000	4500
1400	570	770	780	900	1000	740	1400	800	2200	1700	3200	2000
2800	440	530	590	620	770	470	940	460	1700	1100	2300	1600
$F_{Rmax}$	1850	—	1650	—	3000	—	4900	—	5600	—	8000	—

## Technical data - Helical-worm gearboxes

### Start-up efficiency



During start-up, the start-up efficiency  $\eta_A$  of a helical-worm gearbox is lower than its operative efficiency  $\eta$  at rated speed.

**The start-up efficiency  $\eta_A$  must therefore always be considered when starting under load.**

The start-up efficiency is determined by the oil temperature and the degree to which the tooth faces have been run-in.

The values given in the tables are theoretical values and are valid with a tolerance of  $\pm 10\%$ .

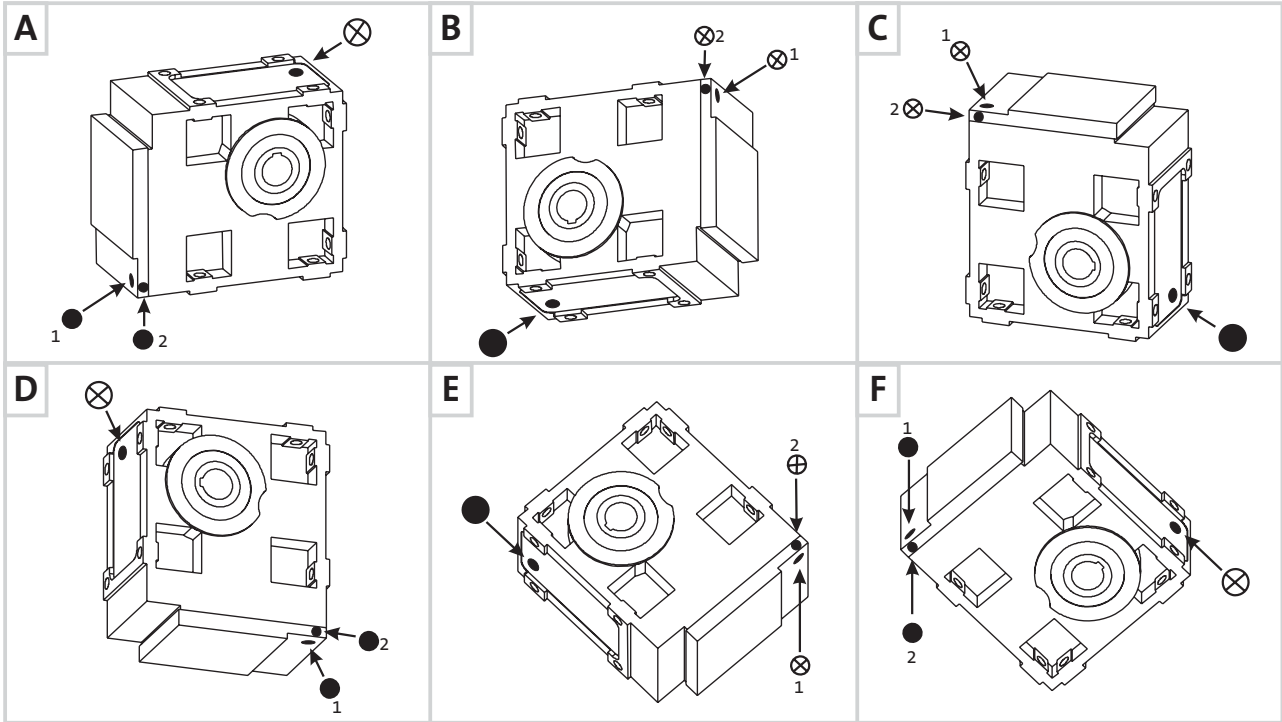
Ratio $i_{\text{rated}}$	Start-up efficiency $\eta_A$
5.6	0.71
8	0.71
9	0.67
10	0.71
11.2	0.71
12.5	0.67
14	0.71
16	0.67
18	0.67
20	0.55
22.4	0.67
25	0.55
28	0.67
31.5	0.55
35.5	0.67

Ratio $i_{\text{rated}}$	Start-up efficiency $\eta_A$
40	0.55
45	0.67
50	0.55
56	0.55
63	0.55
71	0.55
80	0.55
90	0.55
100	0.55
112	0.55
125	0.55
140	0.55
160	0.55
180	0.55
200	0.55

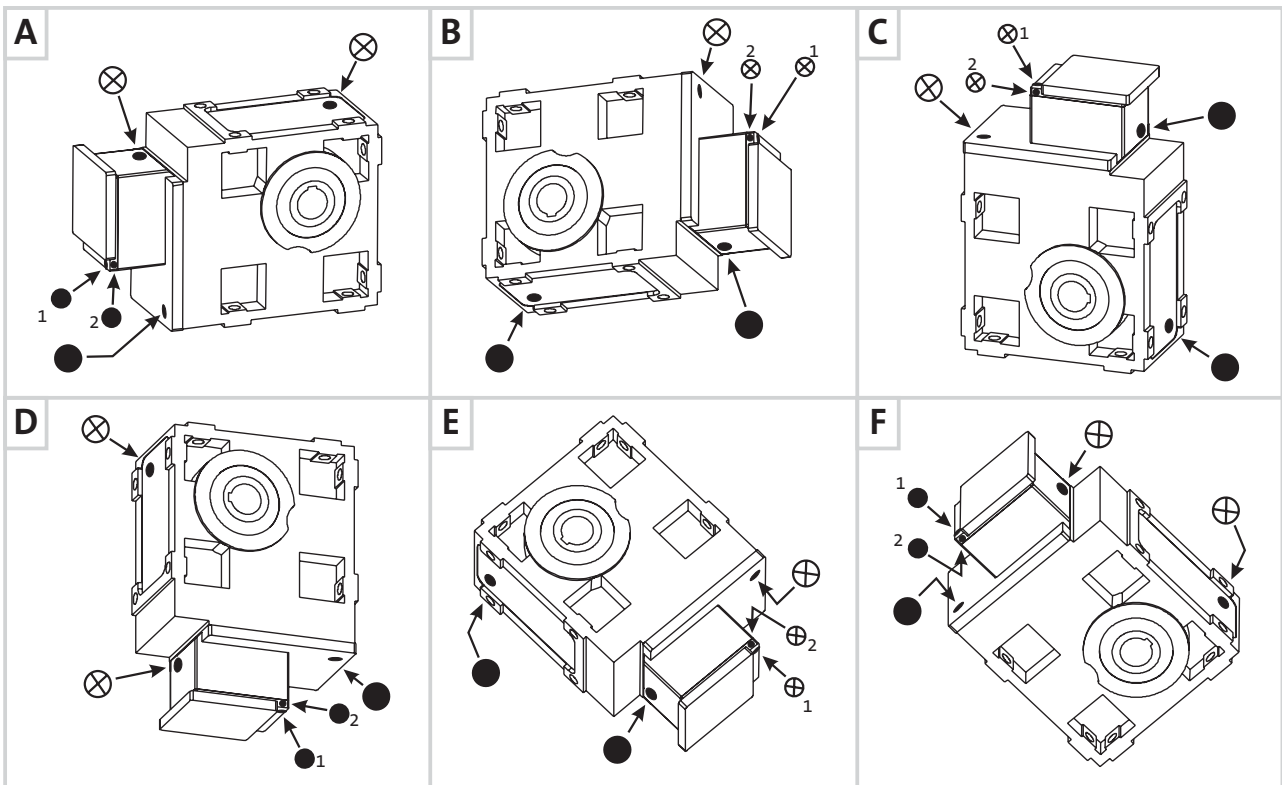


### Position of ventilation, oil filler plug and oil drain plug

Helical-worm gearboxes GSS 05 ... 07-2



Helical worm gearboxes GSS 05 ... 07-3



(A ... F) Mounting position

⊗ Ventilation/oil filler plug  
● Oil drain plug

Pos. 1 or 2 depending on version  
(see table on page 7-7)



On the **versions listed** in the table, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.

On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

### Helical-worm gearboxes

GSS	05	-2	M	□□□	090 100
			N	□□□	1D/2D 1E/2E/3E
	06	-2	M	□□□	112
			W	□□□	1F
	07	-2	M	□□□	160
			N	□□□	1H/3H
		-3	M	□□□	090 100
			N	□□□	1D/2D 1E/2E/3E

### Helical-worm gearboxes GSS □□-2

Gearbox size	Geared motors GSS□□-2M HQR with motor frame size									
	063	071	080	090	100	112 C22/-31	132 C32/-41	160 -22	180 -32	
04	16	18	23	30						
05	25	28	32	39	46					
06	38	40	44	52	59	71	77			
07			69	77	84	96	102	129	168	188

Gearbox size	Gearbox with mounting flange for IEC motors GSS□□-2N HQR with drive size										Gearbox with free input shaft GSS□□-2W HQR with drive size						
	1A	□B	□C	□D	□E	□F	1G 3G	2G	1H	3H	1A	1B	1C	1D	1E	1F	1G
04	15	15	18	21							13	14	16				
05		25	28	30	33							23	25	27			
06		37	40	43	45	47							37	39	43	51	
07			65	68	70	72	95	92	103	99				64	67	76	81

Weights in [kg] with oil capacity for mounting position A. All data is approximate

Observe extra weights on page 7-9!



### Helical-worm gearboxes GSS □□-3

Gearbox size	Geared motors GSS□□-3M H□R with motor frame size				
	063	071	080	090	100
05	26	29	34	40	
06	41	44	49	55	
07	71	73	77	84	91

Gearbox size	Gearbox with mounting flange for IEC motors GSS□□-3N H□R with drive size					Gearbox with free input shaft GSS□□-3W H□R with drive size			
	1A	□B	□C	□D	□E	1A	1B	1C	1D
05	25	26	29			23	24	26	
06	40	41	44	46		39	39	41	
07		70	73	75	78		68	70	72

### Extra weights

Gearbox size	Solid shaft V□□	2nd output shaft end V□□	Hollow shaft with shrink disk S□□	Flange □□K	Torque plate Housing foot	Torque plate Pitch circle
04	0.6	0.2	0.6	2.5	1.3	0.9
05	1	0.3	0.8	4	2.2	1.3
06	2.5	0.8	1	7	3.7	2.1
07	5	1.5	1.5	11	6.6	3.7

Weights in [kg] with oil capacity for mounting position A. All data is approximate

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.12 kW</b> n <sub>1</sub> =1425					<b>GSS □□ - 2M</b>	<b>7-63</b>
	132	8	5.4	10.827	GSS04 - 2M□□□ 063C12	
	103	10	5.0	13.810	GSS04 - 2M□□□ 063C12	
	82	12	5.4	17.360	GSS04 - 2M□□□ 063C12	
	64	15	5.0	22.143	GSS04 - 2M□□□ 063C12	
	42	22	5.5	34.100	GSS04 - 2M□□□ 063C12	
	36	23	5.4	39.200	GSS04 - 2M□□□ 063C12	
	32	29	4.6	43.917	GSS04 - 2M□□□ 063C12	
	29	29	5.0	50.000	GSS04 - 2M□□□ 063C12	
	21	41	4.2	68.200	GSS04 - 2M□□□ 063C12	
	19	45	3.9	77.000	GSS04 - 2M□□□ 063C12	
	16	52	3.3	87.833	GSS04 - 2M□□□ 063C12	
	14	57	3.1	99.167	GSS04 - 2M□□□ 063C12	
	13	66	2.7	111.318	GSS04 - 2M□□□ 063C12	
	11	72	2.5	125.682	GSS04 - 2M□□□ 063C12	
	10	82	2.2	139.500	GSS04 - 2M□□□ 063C12	
	9.1	89	2.0	157.500	GSS04 - 2M□□□ 063C12	
	7.8	106	1.7	183.786	GSS04 - 2M□□□ 063C12	
	6.9	116	1.5	207.500	GSS04 - 2M□□□ 063C12	
					<b>GSS □□ - 3M</b>	<b>7-71</b>
	6.4	131	2.7	222.133	GSS05 - 3M□□□ 063C12	
	5.7	148	2.4	250.952	GSS05 - 3M□□□ 063C12	
	5.0	163	2.2	283.333	GSS05 - 3M□□□ 063C12	
	4.6	169	4.1	310.689	GSS06 - 3M□□□ 063C12	
	4.1	187	3.7	350.778	GSS06 - 3M□□□ 063C12	
	3.7	218	1.6	386.467	GSS05 - 3M□□□ 063C12	
	3.3	239	1.5	436.333	GSS05 - 3M□□□ 063C12	
	3.3	230	3.0	436.333	GSS06 - 3M□□□ 063C12	
	2.9	272	1.3	497.722	GSS05 - 3M□□□ 063C12	
	2.9	263	2.7	497.722	GSS06 - 3M□□□ 063C12	
	2.5	298	1.2	561.944	GSS05 - 3M□□□ 063C12	
	2.5	290	2.4	561.944	GSS06 - 3M□□□ 063C12	
	2.3	335	1.1	630.803	GSS05 - 3M□□□ 063C12	
2.3	327	2.2	630.803	GSS06 - 3M□□□ 063C12		
2.0	367	1.0	712.197	GSS05 - 3M□□□ 063C12		
2.0	361	2.0	712.197	GSS06 - 3M□□□ 063C12		
1.8	407	0.9	790.500	GSS05 - 3M□□□ 063C12		
1.8	415	1.7	816.333	GSS06 - 3M□□□ 063C12		
1.6	445	0.8	892.500	GSS05 - 3M□□□ 063C12		
1.6	459	1.6	921.667	GSS06 - 3M□□□ 063C12		
1.4	512	1.4	1023.000	GSS06 - 3M□□□ 063C12		
1.2	567	1.3	1155.000	GSS06 - 3M□□□ 063C12		
1.2	614	1.2	1241.550	GSS06 - 3M□□□ 063C12		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.12 kW</b> n <sub>1</sub> =1425					<b>GSS □□ - 3M</b>	7-71	
	1.0	681	1.1	1401.750	GSS06 - 3M□□□ 063C12		
	0.9	797	0.9	1635.693	GSS06 - 3M□□□ 063C12		
	0.8	886	0.8	1846.750	GSS06 - 3M□□□ 063C12		
<b>0.18 kW</b> n <sub>1</sub> =2760					<b>GSS □□ - 2M</b>	7-63	
	63	22	5.9	43.917	GSS04 - 2M□□□ 063-11		
	41	32	5.3	68.200	GSS04 - 2M□□□ 063-11		
	36	36	4.8	77.000	GSS04 - 2M□□□ 063-11		
	31	42	4.1	87.833	GSS04 - 2M□□□ 063-11		
	28	46	3.8	99.167	GSS04 - 2M□□□ 063-11		
	25	53	3.3	111.318	GSS04 - 2M□□□ 063-11		
	22	58	3.0	125.682	GSS04 - 2M□□□ 063-11		
	20	66	2.7	139.500	GSS04 - 2M□□□ 063-11		
	18	72	2.4	157.500	GSS04 - 2M□□□ 063-11		
	15	86	2.1	183.786	GSS04 - 2M□□□ 063-11		
	13	94	1.9	207.500	GSS04 - 2M□□□ 063-11		
	n <sub>1</sub> =1365	126	12	3.4	10.827		GSS04 - 2M□□□ 063C32
		99	16	3.2	13.810		GSS04 - 2M□□□ 063C32
		79	19	3.4	17.360		GSS04 - 2M□□□ 063C32
		62	24	3.2	22.143		GSS04 - 2M□□□ 063C32
		40	36	3.5	34.100		GSS04 - 2M□□□ 063C32
		35	37	3.4	39.200		GSS04 - 2M□□□ 063C32
		31	46	2.9	43.917		GSS04 - 2M□□□ 063C32
		27	47	3.2	50.000		GSS04 - 2M□□□ 063C32
		20	65	2.7	68.200		GSS04 - 2M□□□ 063C32
		18	72	2.5	77.000		GSS04 - 2M□□□ 063C32
		16	83	2.1	87.833		GSS04 - 2M□□□ 063C32
		14	91	2.0	99.167		GSS04 - 2M□□□ 063C32
		12	104	1.7	111.318		GSS04 - 2M□□□ 063C32
		11	114	1.6	125.682		GSS04 - 2M□□□ 063C32
		9.8	129	1.4	139.500		GSS04 - 2M□□□ 063C32
		8.7	141	1.3	157.500		GSS04 - 2M□□□ 063C32
		7.4	168	1.1	183.786		GSS04 - 2M□□□ 063C32
	6.6	183	1.0	207.500	GSS04 - 2M□□□ 063C32		
	n <sub>1</sub> =870	6.2	197	0.9	139.500		GSS04 - 2M□□□ 071-13
		6.3	209	1.7	137.950		GSS05 - 2M□□□ 071-13
		5.5	214	0.8	157.500		GSS04 - 2M□□□ 071-13
5.6		230	1.6	155.750	GSS05 - 2M□□□ 071-13		
5.6		223	3.1	155.750	GSS06 - 2M□□□ 071-13		
4.9		260	1.4	176.313	GSS05 - 2M□□□ 071-13		
5.0		252	2.8	174.375	GSS06 - 2M□□□ 071-13		
4.4		286	1.3	199.063	GSS05 - 2M□□□ 071-13		
4.4		279	2.5	196.875	GSS06 - 2M□□□ 071-13		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.18 kW</b>					<b>GSS □□ - 3M</b>	<b>7-71</b>
n1=1365	6.1	208	1.7	222.133	GSS05 - 3M□□□ 063C32	
	5.4	235	1.5	250.952	GSS05 - 3M□□□ 063C32	
	4.8	258	1.4	283.333	GSS05 - 3M□□□ 063C32	
	5.1	233	3.0	269.500	GSS06 - 3M□□□ 063C32	
	4.4	270	2.6	310.689	GSS06 - 3M□□□ 063C32	
	3.9	299	2.4	350.778	GSS06 - 3M□□□ 063C32	
	3.5	344	1.0	386.467	GSS05 - 3M□□□ 063C32	
	3.5	331	2.1	386.467	GSS06 - 3M□□□ 063C32	
	3.1	377	1.0	436.333	GSS05 - 3M□□□ 063C32	
	3.1	365	1.9	436.333	GSS06 - 3M□□□ 063C32	
	2.7	429	0.8	497.722	GSS05 - 3M□□□ 063C32	
	2.7	417	1.7	497.722	GSS06 - 3M□□□ 063C32	
	2.4	460	1.6	561.944	GSS06 - 3M□□□ 063C32	
	2.2	518	1.4	630.803	GSS06 - 3M□□□ 063C32	
	1.9	572	1.3	712.197	GSS06 - 3M□□□ 063C32	
	1.7	656	1.1	816.333	GSS06 - 3M□□□ 063C32	
	1.5	725	1.0	921.667	GSS06 - 3M□□□ 063C32	
	1.3	808	0.9	1023.000	GSS06 - 3M□□□ 063C32	
	1.2	895	0.8	1155.000	GSS06 - 3M□□□ 063C32	
n1=870	1.0	1070	1.2	833.556	GSS07 - 3M□□□ 071-13	
	0.9	1184	1.1	941.111	GSS07 - 3M□□□ 071-13	
	0.9	1284	1.0	1011.633	GSS07 - 3M□□□ 071-13	
	0.8	1420	0.9	1142.167	GSS07 - 3M□□□ 071-13	
	0.7	1542	0.8	1227.755	GSS07 - 3M□□□ 071-13	
<b>0.25 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n1=2760	255	8	5.0	10.827	GSS04 - 2M□□□ 063-31	
	200	10	4.7	13.810	GSS04 - 2M□□□ 063-31	
	159	13	5.0	17.360	GSS04 - 2M□□□ 063-31	
	125	16	4.7	22.143	GSS04 - 2M□□□ 063-31	
	81	25	5.1	34.100	GSS04 - 2M□□□ 063-31	
	70	26	5.0	39.200	GSS04 - 2M□□□ 063-31	
	63	32	4.3	43.917	GSS04 - 2M□□□ 063-31	
	55	33	4.7	50.000	GSS04 - 2M□□□ 063-31	
	41	46	3.8	68.200	GSS04 - 2M□□□ 063-31	
	36	50	3.5	77.000	GSS04 - 2M□□□ 063-31	
	31	59	3.0	87.833	GSS04 - 2M□□□ 063-31	
	28	65	2.7	99.167	GSS04 - 2M□□□ 063-31	
	25	74	2.4	111.318	GSS04 - 2M□□□ 063-31	
	22	82	2.2	125.682	GSS04 - 2M□□□ 063-31	
	20	92	1.9	139.500	GSS04 - 2M□□□ 063-31	
	18	101	1.8	157.500	GSS04 - 2M□□□ 063-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.25 kW</b>	n <sub>1</sub> =2760	15	120	1.5	183.786	GSS04 - 2M□□□ 063-31	7-63
		13	132	1.4	207.500	GSS04 - 2M□□□ 063-31	
	n <sub>1</sub> =1370	243	9	4.5	5.639	GSS04 - 2M□□□ 063C42	
		177	12	4.5	7.733	GSS04 - 2M□□□ 063C42	
		152	13	4.5	9.042	GSS04 - 2M□□□ 063C42	
		138	15	5.2	9.897	GSS04 - 2M□□□ 063C42	
		127	17	4.5	10.827	GSS05 - 2M□□□ 063C42	
		111	18	4.5	12.400	GSS04 - 2M□□□ 063C42	
		99	21	4.8	13.810	GSS04 - 2M□□□ 063C42	
		86	23	5.2	15.869	GSS04 - 2M□□□ 063C42	
		79	26	4.5	17.360	GSS05 - 2M□□□ 063C42	
		67	27	4.5	20.417	GSS04 - 2M□□□ 063C42	
		62	32	4.8	22.143	GSS04 - 2M□□□ 063C42	
		55	34	4.5	24.800	GSS04 - 2M□□□ 063C42	
		51	39	4.3	27.125	GSS04 - 2M□□□ 063C42	
		43	43	4.1	31.738	GSS04 - 2M□□□ 063C42	
		40	50	3.5	34.100	GSS04 - 2M□□□ 063C42	
		35	52	3.4	39.200	GSS04 - 2M□□□ 063C42	
		31	64	2.8	43.917	GSS04 - 2M□□□ 063C42	
		27	66	2.7	50.000	GSS04 - 2M□□□ 063C42	
		25	73	2.4	54.250	GSS04 - 2M□□□ 063C42	
		22	80	2.2	61.250	GSS04 - 2M□□□ 063C42	
		20	91	2.0	68.200	GSS04 - 2M□□□ 063C42	
		18	100	1.8	77.000	GSS04 - 2M□□□ 063C42	
		17	110	3.2	79.722	GSS05 - 2M□□□ 063C42	
		16	116	1.5	87.833	GSS04 - 2M□□□ 063C42	
		16	122	2.9	87.833	GSS05 - 2M□□□ 063C42	
		14	127	1.4	99.167	GSS04 - 2M□□□ 063C42	
		14	136	2.6	99.167	GSS05 - 2M□□□ 063C42	
		12	145	1.2	111.318	GSS04 - 2M□□□ 063C42	
		12	158	2.2	113.667	GSS05 - 2M□□□ 063C42	
		11	159	1.1	125.682	GSS04 - 2M□□□ 063C42	
		11	174	2.0	128.333	GSS05 - 2M□□□ 063C42	
9.8	180	1.0	139.500	GSS04 - 2M□□□ 063C42			
9.9	190	1.9	137.950	GSS05 - 2M□□□ 063C42			
9.9	182	3.2	137.950	GSS06 - 2M□□□ 063C42			
8.7	196	0.9	157.500	GSS04 - 2M□□□ 063C42			
8.8	210	1.7	155.750	GSS05 - 2M□□□ 063C42			
8.8	202	3.2	155.750	GSS06 - 2M□□□ 063C42			
7.8	240	1.4	176.313	GSS05 - 2M□□□ 063C42			
7.9	228	2.6	174.375	GSS06 - 2M□□□ 063C42			
6.9	265	1.4	199.063	GSS05 - 2M□□□ 063C42			
7.0	254	2.6	196.875	GSS06 - 2M□□□ 063C42			

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.25 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>	
n1=920	6.7	276	1.3	137.950	GSS05 - 2M□□□ 071-33		
	6.7	266	2.6	137.950	GSS06 - 2M□□□ 071-33		
	5.9	304	1.2	155.750	GSS05 - 2M□□□ 071-33		
	5.9	296	2.4	155.750	GSS06 - 2M□□□ 071-33		
	5.2	343	1.0	176.313	GSS05 - 2M□□□ 071-33		
	5.3	334	2.1	174.375	GSS06 - 2M□□□ 071-33		
	4.6	377	1.0	199.063	GSS05 - 2M□□□ 071-33		
4.7	370	1.9	196.875	GSS06 - 2M□□□ 071-33			
					<b>GSS □□ - 3M</b>		<b>7-71</b>
n1=1370	6.2	289	1.2	222.133	GSS05 - 3M□□□ 063C42		
	6.2	269	2.6	220.000	GSS06 - 3M□□□ 063C42		
	5.5	326	1.1	250.952	GSS05 - 3M□□□ 063C42		
	5.7	294	2.4	238.700	GSS06 - 3M□□□ 063C42		
	4.8	359	1.0	283.333	GSS05 - 3M□□□ 063C42		
	5.1	327	2.2	269.500	GSS06 - 3M□□□ 063C42		
	4.5	390	0.9	307.417	GSS05 - 3M□□□ 063C42		
	4.4	378	1.9	310.689	GSS06 - 3M□□□ 063C42		
	4.3	402	3.0	321.673	GSS07 - 3M□□□ 063C42		
	4.0	429	0.8	347.083	GSS05 - 3M□□□ 063C42		
	3.9	418	1.7	350.778	GSS06 - 3M□□□ 063C42		
	3.8	447	2.7	363.179	GSS07 - 3M□□□ 063C42		
	3.5	462	1.5	386.467	GSS06 - 3M□□□ 063C42		
	3.5	488	2.5	394.245	GSS07 - 3M□□□ 063C42		
	3.1	510	1.4	436.333	GSS06 - 3M□□□ 063C42		
	3.1	542	2.3	445.116	GSS07 - 3M□□□ 063C42		
	2.8	582	1.2	497.722	GSS06 - 3M□□□ 063C42		
	2.8	599	2.1	490.403	GSS07 - 3M□□□ 063C42		
	2.4	641	1.1	561.944	GSS06 - 3M□□□ 063C42		
	2.5	664	1.9	553.681	GSS07 - 3M□□□ 063C42		
2.2	721	1.0	630.803	GSS06 - 3M□□□ 063C42			
2.2	760	1.6	634.639	GSS07 - 3M□□□ 063C42			
1.9	796	0.9	712.197	GSS06 - 3M□□□ 063C42			
1.9	842	1.5	716.528	GSS07 - 3M□□□ 063C42			
1.6	977	1.3	833.556	GSS07 - 3M□□□ 063C42			
1.5	1081	1.2	941.111	GSS07 - 3M□□□ 063C42			
1.4	1168	1.1	1011.633	GSS07 - 3M□□□ 063C42			
1.2	1292	1.0	1142.167	GSS07 - 3M□□□ 063C42			
1.1	1399	0.9	1227.755	GSS07 - 3M□□□ 063C42			
1.0	1546	0.8	1386.175	GSS07 - 3M□□□ 063C42			
<b>0.37 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>	
n1=2840	139	19	5.8	20.417	GSS04 - 2M□□□ 071-11		
	115	24	5.3	24.800	GSS04 - 2M□□□ 071-11		
	105	28	5.8	27.125	GSS04 - 2M□□□ 071-11		
	90	31	4.5	31.738	GSS04 - 2M□□□ 071-11		
	83	36	4.8	34.100	GSS04 - 2M□□□ 071-11		
	72	38	3.9	39.200	GSS04 - 2M□□□ 071-11		
	65	46	3.8	43.917	GSS04 - 2M□□□ 071-11		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b>					<b>GSS □□ - 2M</b>	7-63
n1=2840	57	48	3.3	50.000	GSS04 - 2M□□□ 071-11	
	52	53	3.2	54.250	GSS04 - 2M□□□ 071-11	
	46	59	2.9	61.250	GSS04 - 2M□□□ 071-11	
	42	67	2.7	68.200	GSS04 - 2M□□□ 071-11	
	37	74	2.4	77.000	GSS04 - 2M□□□ 071-11	
	32	86	2.1	87.833	GSS04 - 2M□□□ 071-11	
	29	94	1.9	99.167	GSS04 - 2M□□□ 071-11	
	26	108	1.7	111.318	GSS04 - 2M□□□ 071-11	
	25	114	3.1	113.667	GSS05 - 2M□□□ 071-11	
	23	118	1.5	125.682	GSS04 - 2M□□□ 071-11	
	22	127	2.8	128.333	GSS05 - 2M□□□ 071-11	
	20	134	1.3	139.500	GSS04 - 2M□□□ 071-11	
	21	139	2.6	137.950	GSS05 - 2M□□□ 071-11	
	18	147	1.2	157.500	GSS04 - 2M□□□ 071-11	
	18	155	2.3	155.750	GSS05 - 2M□□□ 071-11	
	16	177	2.0	176.313	GSS05 - 2M□□□ 071-11	
	14	197	1.8	199.063	GSS05 - 2M□□□ 071-11	
n1=1410	250	12	4.0	5.639	GSS04 - 2M□□□ 071C32	
	182	17	4.0	7.733	GSS04 - 2M□□□ 071C32	
	156	19	4.0	9.042	GSS04 - 2M□□□ 071C32	
	143	22	4.5	9.897	GSS04 - 2M□□□ 071C32	
	130	24	4.0	10.827	GSS05 - 2M□□□ 071C32	
	114	26	4.0	12.400	GSS04 - 2M□□□ 071C32	
	102	31	4.2	13.810	GSS04 - 2M□□□ 071C32	
	89	34	4.5	15.869	GSS04 - 2M□□□ 071C32	
	81	37	4.0	17.360	GSS05 - 2M□□□ 071C32	
	69	39	3.8	20.417	GSS04 - 2M□□□ 071C32	
	64	47	3.7	22.143	GSS04 - 2M□□□ 071C32	
	57	49	3.4	24.800	GSS04 - 2M□□□ 071C32	
	52	57	3.1	27.125	GSS04 - 2M□□□ 071C32	
	44	62	2.8	31.738	GSS04 - 2M□□□ 071C32	
	41	72	2.5	34.100	GSS04 - 2M□□□ 071C32	
	36	75	2.3	39.200	GSS04 - 2M□□□ 071C32	
	32	93	1.9	43.917	GSS04 - 2M□□□ 071C32	
	32	95	3.2	43.917	GSS05 - 2M□□□ 071C32	
	28	96	1.9	50.000	GSS04 - 2M□□□ 071C32	
	26	106	1.7	54.250	GSS04 - 2M□□□ 071C32	
	23	116	1.5	61.250	GSS04 - 2M□□□ 071C32	
	21	132	1.4	68.200	GSS04 - 2M□□□ 071C32	
	20	143	2.5	70.611	GSS05 - 2M□□□ 071C32	
	18	145	1.2	77.000	GSS04 - 2M□□□ 071C32	
	18	159	2.2	79.722	GSS05 - 2M□□□ 071C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n1=1410	16	168	1.1	87.833	GSS04 - 2M□□□ 071C32	
	16	178	2.0	87.833	GSS05 - 2M□□□ 071C32	
	14	184	1.0	99.167	GSS04 - 2M□□□ 071C32	
	14	198	1.8	99.167	GSS05 - 2M□□□ 071C32	
	13	210	0.9	111.318	GSS04 - 2M□□□ 071C32	
	12	229	1.6	113.667	GSS05 - 2M□□□ 071C32	
	12	218	3.2	113.667	GSS06 - 2M□□□ 071C32	
	11	253	1.4	128.333	GSS05 - 2M□□□ 071C32	
	11	244	2.9	128.333	GSS06 - 2M□□□ 071C32	
	10	275	1.3	137.950	GSS05 - 2M□□□ 071C32	
	10	264	2.7	137.950	GSS06 - 2M□□□ 071C32	
	9.1	303	1.2	155.750	GSS05 - 2M□□□ 071C32	
	9.1	294	2.4	155.750	GSS06 - 2M□□□ 071C32	
	8.0	347	1.0	176.313	GSS05 - 2M□□□ 071C32	
	8.1	330	2.1	174.375	GSS06 - 2M□□□ 071C32	
	7.1	383	0.9	199.063	GSS05 - 2M□□□ 071C32	
	7.2	368	1.9	196.875	GSS06 - 2M□□□ 071C32	
	n1=900	7.0	387	0.9	128.333	
7.0		376	1.9	128.333	GSS06 - 2M□□□ 080-13	
7.0		387	3.1	128.333	GSS07 - 2M□□□ 080-13	
6.5		420	0.9	137.950	GSS05 - 2M□□□ 080-13	
6.5		407	1.8	137.950	GSS06 - 2M□□□ 080-13	
6.5		417	2.9	137.950	GSS07 - 2M□□□ 080-13	
5.8		453	1.6	155.750	GSS06 - 2M□□□ 080-13	
5.8		465	2.6	155.750	GSS07 - 2M□□□ 080-13	
5.2		509	1.4	174.375	GSS06 - 2M□□□ 080-13	
5.2		525	2.3	174.375	GSS07 - 2M□□□ 080-13	
4.6		565	1.3	196.875	GSS06 - 2M□□□ 080-13	
4.6		585	2.1	196.875	GSS07 - 2M□□□ 080-13	
n1=1410					<b>GSS □□ - 3M</b>	<b>7-71</b>
	6.4	418	0.9	222.133	GSS05 - 3M□□□ 071C32	
	6.4	391	1.8	220.000	GSS06 - 3M□□□ 071C32	
	6.2	414	2.9	227.778	GSS07 - 3M□□□ 071C32	
	5.9	427	1.7	238.700	GSS06 - 3M□□□ 071C32	
	5.7	453	2.7	247.139	GSS07 - 3M□□□ 071C32	
	5.2	474	1.5	269.500	GSS06 - 3M□□□ 071C32	
	5.1	504	2.4	279.028	GSS07 - 3M□□□ 071C32	
	4.5	547	1.3	310.689	GSS06 - 3M□□□ 071C32	
	4.4	585	2.1	321.673	GSS07 - 3M□□□ 071C32	
	4.0	605	1.2	350.778	GSS06 - 3M□□□ 071C32	
	3.9	650	1.9	363.179	GSS07 - 3M□□□ 071C32	
	3.7	668	1.1	386.467	GSS06 - 3M□□□ 071C32	
	3.6	709	1.7	394.245	GSS07 - 3M□□□ 071C32	
	3.2	737	1.0	436.333	GSS06 - 3M□□□ 071C32	
	3.2	787	1.6	445.116	GSS07 - 3M□□□ 071C32	
	2.8	841	0.9	497.722	GSS06 - 3M□□□ 071C32	
	2.9	869	1.4	490.403	GSS07 - 3M□□□ 071C32	
	2.6	963	1.3	553.681	GSS07 - 3M□□□ 071C32	
	2.2	1101	1.1	634.639	GSS07 - 3M□□□ 071C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.37 kW</b> n <sub>1</sub> =1410					<b>GSS □□ - 3M</b>	7-71
	2.0	1218	1.0	716.528	GSS07 - 3M□□□ 071C32	
	1.7	1413	0.9	833.556	GSS07 - 3M□□□ 071C32	
	1.5	1563	0.8	941.111	GSS07 - 3M□□□ 071C32	
<b>0.55 kW</b> n <sub>1</sub> =2840					<b>GSS □□ - 2M</b>	7-63
	504	9	5.4	5.639	GSS04 - 2M□□□ 071-31	
	367	12	5.4	7.733	GSS04 - 2M□□□ 071-31	
	314	14	5.4	9.042	GSS04 - 2M□□□ 071-31	
	262	17	5.4	10.827	GSS05 - 2M□□□ 071-31	
	229	19	5.4	12.400	GSS04 - 2M□□□ 071-31	
	206	22	5.6	13.810	GSS04 - 2M□□□ 071-31	
	179	25	5.6	15.869	GSS04 - 2M□□□ 071-31	
	164	27	5.3	17.360	GSS04 - 2M□□□ 071-31	
	139	29	3.9	20.417	GSS04 - 2M□□□ 071-31	
	128	35	4.5	22.143	GSS04 - 2M□□□ 071-31	
	115	37	3.6	24.800	GSS04 - 2M□□□ 071-31	
	105	43	3.9	27.125	GSS04 - 2M□□□ 071-31	
	90	47	3.0	31.738	GSS04 - 2M□□□ 071-31	
	83	54	3.3	34.100	GSS04 - 2M□□□ 071-31	
	72	57	2.6	39.200	GSS04 - 2M□□□ 071-31	
	65	69	2.6	43.917	GSS04 - 2M□□□ 071-31	
	57	72	2.2	50.000	GSS04 - 2M□□□ 071-31	
	52	80	2.2	54.250	GSS04 - 2M□□□ 071-31	
	46	88	2.0	61.250	GSS04 - 2M□□□ 071-31	
	42	100	1.8	68.200	GSS04 - 2M□□□ 071-31	
	40	105	2.9	70.611	GSS05 - 2M□□□ 071-31	
	37	110	1.6	77.000	GSS04 - 2M□□□ 071-31	
	36	117	2.7	79.722	GSS05 - 2M□□□ 071-31	
	32	128	1.4	87.833	GSS04 - 2M□□□ 071-31	
	32	131	2.6	87.833	GSS05 - 2M□□□ 071-31	
	29	141	1.3	99.167	GSS04 - 2M□□□ 071-31	
	29	146	2.4	99.167	GSS05 - 2M□□□ 071-31	
	26	161	1.1	111.318	GSS04 - 2M□□□ 071-31	
	25	171	2.1	113.667	GSS05 - 2M□□□ 071-31	
	23	177	1.0	125.682	GSS04 - 2M□□□ 071-31	
	22	190	1.9	128.333	GSS05 - 2M□□□ 071-31	
20	200	0.9	139.500	GSS04 - 2M□□□ 071-31		
21	208	1.7	137.950	GSS05 - 2M□□□ 071-31		
18	219	0.8	157.500	GSS04 - 2M□□□ 071-31		
18	232	1.5	155.750	GSS05 - 2M□□□ 071-31		
18	224	3.1	155.750	GSS06 - 2M□□□ 071-31		
16	266	1.4	176.313	GSS05 - 2M□□□ 071-31		
16	252	2.8	174.375	GSS06 - 2M□□□ 071-31		
14	295	1.2	199.063	GSS05 - 2M□□□ 071-31		
14	282	2.5	196.875	GSS06 - 2M□□□ 071-31		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n <sub>1</sub> =1405	249	18	4.5	5.639	GSS04 - 2M□□□ 071C42	
	182	25	4.5	7.733	GSS04 - 2M□□□ 071C42	
	155	29	4.5	9.042	GSS04 - 2M□□□ 071C42	
	142	33	4.2	9.897	GSS04 - 2M□□□ 071C42	
	130	36	4.2	10.827	GSS04 - 2M□□□ 071C42	
	113	39	4.2	12.400	GSS04 - 2M□□□ 071C42	
	102	46	3.4	13.810	GSS04 - 2M□□□ 071C42	
	89	51	3.5	15.869	GSS04 - 2M□□□ 071C42	
	81	55	3.2	17.360	GSS04 - 2M□□□ 071C42	
	69	60	2.5	20.417	GSS04 - 2M□□□ 071C42	
	64	71	2.5	22.143	GSS04 - 2M□□□ 071C42	
	57	74	2.3	24.800	GSS04 - 2M□□□ 071C42	
	52	87	2.1	27.125	GSS04 - 2M□□□ 071C42	
	44	94	1.9	31.738	GSS04 - 2M□□□ 071C42	
	44	95	3.1	31.738	GSS05 - 2M□□□ 071C42	
	41	109	1.6	34.100	GSS04 - 2M□□□ 071C42	
	40	114	3.1	35.306	GSS05 - 2M□□□ 071C42	
	36	114	1.6	39.200	GSS04 - 2M□□□ 071C42	
	36	116	2.7	39.200	GSS05 - 2M□□□ 071C42	
	32	139	1.3	43.917	GSS04 - 2M□□□ 071C42	
	32	143	2.5	43.917	GSS05 - 2M□□□ 071C42	
	32	140	3.2	43.917	GSS06 - 2M□□□ 071C42	
	28	144	1.2	50.000	GSS04 - 2M□□□ 071C42	
	28	149	2.3	50.000	GSS05 - 2M□□□ 071C42	
	26	159	1.1	54.250	GSS04 - 2M□□□ 071C42	
	26	165	2.2	54.250	GSS05 - 2M□□□ 071C42	
	23	174	1.0	61.250	GSS04 - 2M□□□ 071C42	
	23	183	1.9	61.250	GSS05 - 2M□□□ 071C42	
	21	198	0.9	68.200	GSS04 - 2M□□□ 071C42	
	20	215	1.7	70.611	GSS05 - 2M□□□ 071C42	
	18	217	0.8	77.000	GSS04 - 2M□□□ 071C42	
	18	240	1.5	79.722	GSS05 - 2M□□□ 071C42	
	18	232	3.0	79.722	GSS06 - 2M□□□ 071C42	
	16	268	1.3	87.833	GSS05 - 2M□□□ 071C42	
	16	257	2.7	87.833	GSS06 - 2M□□□ 071C42	
	14	297	1.2	99.167	GSS05 - 2M□□□ 071C42	
	14	287	2.5	99.167	GSS06 - 2M□□□ 071C42	
	12	344	1.0	113.667	GSS05 - 2M□□□ 071C42	
	12	330	2.2	113.667	GSS06 - 2M□□□ 071C42	
	11	379	1.0	128.333	GSS05 - 2M□□□ 071C42	
	11	368	1.9	128.333	GSS06 - 2M□□□ 071C42	
	10	413	0.9	137.950	GSS05 - 2M□□□ 071C42	
	10	398	1.8	137.950	GSS06 - 2M□□□ 071C42	
	9.0	443	1.6	155.750	GSS06 - 2M□□□ 071C42	
	8.1	498	1.4	174.375	GSS06 - 2M□□□ 071C42	
	7.1	554	1.3	196.875	GSS06 - 2M□□□ 071C42	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>0.55 kW</b> n <sub>1</sub> =1405					<b>GSS □□ - 3M</b>	7-71
	7.0	561	2.2	201.746	GSS07 - 3M□□□ 071C42	
	6.4	589	1.2	220.000	GSS06 - 3M□□□ 071C42	
	6.2	625	2.0	227.778	GSS07 - 3M□□□ 071C42	
	5.9	642	1.1	238.700	GSS06 - 3M□□□ 071C42	
	5.7	684	1.8	247.139	GSS07 - 3M□□□ 071C42	
	5.2	712	1.0	269.500	GSS06 - 3M□□□ 071C42	
	5.0	761	1.6	279.028	GSS07 - 3M□□□ 071C42	
	4.5	821	0.9	310.689	GSS06 - 3M□□□ 071C42	
	4.4	881	1.4	321.673	GSS07 - 3M□□□ 071C42	
	3.9	978	1.3	363.179	GSS07 - 3M□□□ 071C42	
	3.6	1066	1.2	394.245	GSS07 - 3M□□□ 071C42	
	3.2	1182	1.1	445.116	GSS07 - 3M□□□ 071C42	
	2.9	1304	1.0	490.403	GSS07 - 3M□□□ 071C42	
2.5	1445	0.9	553.681	GSS07 - 3M□□□ 071C42		
<b>0.75 kW</b> n <sub>1</sub> =2850					<b>GSS □□ - 2M</b>	7-63
	505	12	5.8	5.639	GSS04 - 2M□□□ 080-11	
	315	19	5.9	9.042	GSS04 - 2M□□□ 080-11	
	263	23	6.0	10.827	GSS04 - 2M□□□ 080-11	
	230	27	4.9	12.400	GSS04 - 2M□□□ 080-11	
	206	30	5.0	13.810	GSS04 - 2M□□□ 080-11	
	180	34	4.1	15.869	GSS04 - 2M□□□ 080-11	
	164	37	3.9	17.360	GSS04 - 2M□□□ 080-11	
	140	40	2.9	20.417	GSS04 - 2M□□□ 080-11	
	129	48	3.3	22.143	GSS04 - 2M□□□ 080-11	
	115	50	2.6	24.800	GSS04 - 2M□□□ 080-11	
	105	59	2.9	27.125	GSS04 - 2M□□□ 080-11	
	90	64	2.2	31.738	GSS04 - 2M□□□ 080-11	
	84	74	2.4	34.100	GSS04 - 2M□□□ 080-11	
	73	78	1.9	39.200	GSS04 - 2M□□□ 080-11	
	73	77	3.1	39.200	GSS05 - 2M□□□ 080-11	
	65	95	1.9	43.917	GSS04 - 2M□□□ 080-11	
	57	99	1.6	50.000	GSS04 - 2M□□□ 080-11	
	57	99	2.7	50.000	GSS05 - 2M□□□ 080-11	
	53	109	1.6	54.250	GSS04 - 2M□□□ 080-11	
	53	110	2.6	54.250	GSS05 - 2M□□□ 080-11	
	47	121	1.4	61.250	GSS04 - 2M□□□ 080-11	
	47	122	2.4	61.250	GSS05 - 2M□□□ 080-11	
	42	137	1.3	68.200	GSS04 - 2M□□□ 080-11	
	40	144	2.2	70.611	GSS05 - 2M□□□ 080-11	
	37	151	1.2	77.000	GSS04 - 2M□□□ 080-11	
	36	160	2.0	79.722	GSS05 - 2M□□□ 080-11	
	32	175	1.0	87.833	GSS04 - 2M□□□ 080-11	
32	180	1.9	87.833	GSS05 - 2M□□□ 080-11		
29	192	0.9	99.167	GSS04 - 2M□□□ 080-11		
29	200	1.7	99.167	GSS05 - 2M□□□ 080-11		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.75 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>	
n1=2850	25	234	1.5	113.667	GSS05 - 2M□□□ 080-11		
	25	227	3.1	113.667	GSS06 - 2M□□□ 080-11		
	22	260	1.4	128.333	GSS05 - 2M□□□ 080-11		
	22	254	2.8	128.333	GSS06 - 2M□□□ 080-11		
	21	284	1.3	137.950	GSS05 - 2M□□□ 080-11		
	21	275	2.6	137.950	GSS06 - 2M□□□ 080-11		
	18	317	1.1	155.750	GSS05 - 2M□□□ 080-11		
	18	308	2.3	155.750	GSS06 - 2M□□□ 080-11		
	16	346	2.1	174.375	GSS06 - 2M□□□ 080-11		
	15	386	1.8	196.875	GSS06 - 2M□□□ 080-11		
	15	393	3.1	196.875	GSS07 - 2M□□□ 080-11		
	n1=1410	250	25	4.2	5.639		GSS04 - 2M□□□ 080C32
		182	35	4.2	7.733		GSS04 - 2M□□□ 080C32
		156	39	3.8	9.042		GSS04 - 2M□□□ 080C32
143		45	3.5	9.897	GSS04 - 2M□□□ 080C32		
130		49	3.2	10.827	GSS04 - 2M□□□ 080C32		
114		54	3.1	12.400	GSS04 - 2M□□□ 080C32		
102		63	2.5	13.810	GSS04 - 2M□□□ 080C32		
89		69	2.5	15.869	GSS04 - 2M□□□ 080C32		
81		76	2.3	17.360	GSS04 - 2M□□□ 080C32		
69		82	1.9	20.417	GSS04 - 2M□□□ 080C32		
64		97	1.8	22.143	GSS04 - 2M□□□ 080C32		
57		101	1.7	24.800	GSS04 - 2M□□□ 080C32		
52		118	1.5	27.125	GSS04 - 2M□□□ 080C32		
52		120	2.9	27.125	GSS05 - 2M□□□ 080C32		
44		129	1.4	31.738	GSS04 - 2M□□□ 080C32		
44		131	2.3	31.738	GSS05 - 2M□□□ 080C32		
41		148	1.2	34.100	GSS04 - 2M□□□ 080C32		
40		157	2.3	35.306	GSS05 - 2M□□□ 080C32		
36		155	1.2	39.200	GSS04 - 2M□□□ 080C32		
36		159	2.0	39.200	GSS05 - 2M□□□ 080C32		
32		190	1.0	43.917	GSS04 - 2M□□□ 080C32		
32		196	1.8	43.917	GSS05 - 2M□□□ 080C32		
32		191	2.9	43.917	GSS06 - 2M□□□ 080C32		
28		196	0.9	50.000	GSS04 - 2M□□□ 080C32		
28		204	1.7	50.000	GSS05 - 2M□□□ 080C32		
26		217	0.8	54.250	GSS04 - 2M□□□ 080C32		
26		226	1.6	54.250	GSS05 - 2M□□□ 080C32		
23		251	1.4	61.250	GSS05 - 2M□□□ 080C32		
20		294	1.2	70.611	GSS05 - 2M□□□ 080C32		
20		285	2.5	70.611	GSS06 - 2M□□□ 080C32		
18		328	1.1	79.722	GSS05 - 2M□□□ 080C32		
18		318	2.2	79.722	GSS06 - 2M□□□ 080C32		
16	365	1.0	87.833	GSS05 - 2M□□□ 080C32			
16	352	2.0	87.833	GSS06 - 2M□□□ 080C32			
14	405	0.9	99.167	GSS05 - 2M□□□ 080C32			
14	393	1.8	99.167	GSS06 - 2M□□□ 080C32			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>0.75 kW</b> n <sub>1</sub> =1410	<b>GSS □□ - 2M</b>						7-63
	12	452	1.6	113.667	GSS06 - 2M□□□ 080C32		
	12	462	2.7	113.667	GSS07 - 2M□□□ 080C32		
	11	503	1.4	128.333	GSS06 - 2M□□□ 080C32		
	11	516	2.4	128.333	GSS07 - 2M□□□ 080C32		
	10	544	1.3	137.950	GSS06 - 2M□□□ 080C32		
	10	560	2.2	137.950	GSS07 - 2M□□□ 080C32		
	9.1	605	1.2	155.750	GSS06 - 2M□□□ 080C32		
	9.1	623	2.0	155.750	GSS07 - 2M□□□ 080C32		
	8.1	679	1.1	174.375	GSS06 - 2M□□□ 080C32		
	8.1	701	1.8	174.375	GSS07 - 2M□□□ 080C32		
	7.2	755	1.0	196.875	GSS06 - 2M□□□ 080C32		
	7.2	782	1.6	196.875	GSS07 - 2M□□□ 080C32		
	<b>GSS □□ - 3M</b>						7-71
	6.4	803	0.9	220.000	GSS06 - 3M□□□ 080C32		
	6.2	855	1.5	227.778	GSS07 - 3M□□□ 080C32		
	5.9	876	0.8	238.700	GSS06 - 3M□□□ 080C32		
	5.7	935	1.3	247.139	GSS07 - 3M□□□ 080C32		
	5.1	1039	1.2	279.028	GSS07 - 3M□□□ 080C32		
4.4	1203	1.0	321.673	GSS07 - 3M□□□ 080C32			
3.9	1335	0.9	363.179	GSS07 - 3M□□□ 080C32			
3.6	1455	0.9	394.245	GSS07 - 3M□□□ 080C32			
<b>1.1 kW</b> n <sub>1</sub> =2810	<b>GSS □□ - 2M</b>						7-63
	498	18	3.9	5.639	GSS04 - 2M□□□ 080-31		
	363	25	4.2	7.733	GSS04 - 2M□□□ 080-31		
	311	29	4.0	9.042	GSS04 - 2M□□□ 080-31		
	284	32	4.3	9.897	GSS04 - 2M□□□ 080-31		
	260	35	4.0	10.827	GSS04 - 2M□□□ 080-31		
	227	40	3.3	12.400	GSS04 - 2M□□□ 080-31		
	204	46	3.4	13.810	GSS04 - 2M□□□ 080-31		
	177	52	2.8	15.869	GSS04 - 2M□□□ 080-31		
	162	56	2.6	17.360	GSS04 - 2M□□□ 080-31		
	138	61	1.9	20.417	GSS04 - 2M□□□ 080-31		
	127	72	2.2	22.143	GSS04 - 2M□□□ 080-31		
	113	75	1.8	24.800	GSS04 - 2M□□□ 080-31		
	104	88	1.9	27.125	GSS04 - 2M□□□ 080-31		
	104	88	3.2	27.125	GSS05 - 2M□□□ 080-31		
	89	97	1.5	31.738	GSS04 - 2M□□□ 080-31		
	89	96	2.4	31.738	GSS05 - 2M□□□ 080-31		
	82	111	1.6	34.100	GSS04 - 2M□□□ 080-31		
	80	115	2.6	35.306	GSS05 - 2M□□□ 080-31		
	72	117	1.3	39.200	GSS04 - 2M□□□ 080-31		
	72	116	2.1	39.200	GSS05 - 2M□□□ 080-31		
	64	142	1.3	43.917	GSS04 - 2M□□□ 080-31		
	64	144	2.3	43.917	GSS05 - 2M□□□ 080-31		
56	148	1.1	50.000	GSS04 - 2M□□□ 080-31			
56	149	1.8	50.000	GSS05 - 2M□□□ 080-31			

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c				
<b>1.1 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>	
n1=2810	52	164	1.1	54.250	GSS04 - 2M□□□ 080-31		
	52	166	1.7	54.250	GSS05 - 2M□□□ 080-31		
	46	180	1.0	61.250	GSS04 - 2M□□□ 080-31		
	46	184	1.6	61.250	GSS05 - 2M□□□ 080-31		
	41	204	0.9	68.200	GSS04 - 2M□□□ 080-31		
	40	216	1.5	70.611	GSS05 - 2M□□□ 080-31		
	40	213	2.9	70.611	GSS06 - 2M□□□ 080-31		
	37	226	0.8	77.000	GSS04 - 2M□□□ 080-31		
	35	240	1.3	79.722	GSS05 - 2M□□□ 080-31		
	35	239	2.6	79.722	GSS06 - 2M□□□ 080-31		
	32	270	1.3	87.833	GSS05 - 2M□□□ 080-31		
	32	265	2.5	87.833	GSS06 - 2M□□□ 080-31		
	28	300	1.2	99.167	GSS05 - 2M□□□ 080-31		
	28	297	2.3	99.167	GSS06 - 2M□□□ 080-31		
	25	350	1.0	113.667	GSS05 - 2M□□□ 080-31		
	25	342	2.1	113.667	GSS06 - 2M□□□ 080-31		
	22	389	0.9	128.333	GSS05 - 2M□□□ 080-31		
	22	383	1.9	128.333	GSS06 - 2M□□□ 080-31		
	22	388	3.1	128.333	GSS07 - 2M□□□ 080-31		
	20	425	0.8	137.950	GSS05 - 2M□□□ 080-31		
	20	414	1.7	137.950	GSS06 - 2M□□□ 080-31		
	20	419	2.9	137.950	GSS07 - 2M□□□ 080-31		
	18	462	1.5	155.750	GSS06 - 2M□□□ 080-31		
	18	470	2.6	155.750	GSS07 - 2M□□□ 080-31		
	16	519	1.4	174.375	GSS06 - 2M□□□ 080-31		
	16	529	2.3	174.375	GSS07 - 2M□□□ 080-31		
	14	578	1.2	196.875	GSS06 - 2M□□□ 080-31		
	14	592	2.1	196.875	GSS07 - 2M□□□ 080-31		
	n1=1390	247	37	3.9	5.639		GSS04 - 2M□□□ 080C42
		180	52	3.0	7.733		GSS04 - 2M□□□ 080C42
154		59	2.6	9.042	GSS04 - 2M□□□ 080C42		
140		67	2.4	9.897	GSS04 - 2M□□□ 080C42		
128		74	2.2	10.827	GSS04 - 2M□□□ 080C42		
112		82	2.1	12.400	GSS04 - 2M□□□ 080C42		
101		95	1.7	13.810	GSS04 - 2M□□□ 080C42		
101		94	2.9	13.810	GSS05 - 2M□□□ 080C42		
88		104	1.7	15.869	GSS04 - 2M□□□ 080C42		
88		104	2.8	15.869	GSS05 - 2M□□□ 080C42		
80		114	1.6	17.360	GSS04 - 2M□□□ 080C42		
80		114	2.7	17.360	GSS05 - 2M□□□ 080C42		
68		123	1.2	20.417	GSS04 - 2M□□□ 080C42		
68		123	2.0	20.417	GSS05 - 2M□□□ 080C42		
63		145	1.2	22.143	GSS04 - 2M□□□ 080C42		
63		147	2.3	22.143	GSS05 - 2M□□□ 080C42		
63		145	4.5	22.143	GSS07 - 2M□□□ 080C42		
56		152	1.1	24.800	GSS04 - 2M□□□ 080C42		
56		153	1.8	24.800	GSS05 - 2M□□□ 080C42		
51		177	1.0	27.125	GSS04 - 2M□□□ 080C42		
51	180	2.0	27.125	GSS05 - 2M□□□ 080C42			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.1 kW</b> n <sub>1</sub> =1390	<b>GSS □□ - 2M</b>					7-63
	44	193	0.9	31.738	GSS04 - 2M□□□ 080C42	
	44	196	1.5	31.738	GSS05 - 2M□□□ 080C42	
	44	194	3.1	31.738	GSS06 - 2M□□□ 080C42	
	39	235	1.5	35.306	GSS05 - 2M□□□ 080C42	
	39	229	3.1	35.306	GSS06 - 2M□□□ 080C42	
	36	239	1.3	39.200	GSS05 - 2M□□□ 080C42	
	36	238	2.6	39.200	GSS06 - 2M□□□ 080C42	
	32	293	1.2	43.917	GSS05 - 2M□□□ 080C42	
	32	285	2.5	43.917	GSS06 - 2M□□□ 080C42	
	32	283	3.1	43.271	GSS07 - 2M□□□ 080C42	
	28	306	1.2	50.000	GSS05 - 2M□□□ 080C42	
	28	303	2.3	50.000	GSS06 - 2M□□□ 080C42	
	26	338	1.1	54.250	GSS05 - 2M□□□ 080C42	
	26	331	2.1	54.250	GSS06 - 2M□□□ 080C42	
	23	375	1.0	61.250	GSS05 - 2M□□□ 080C42	
	23	370	1.9	61.250	GSS06 - 2M□□□ 080C42	
	20	440	0.8	70.611	GSS05 - 2M□□□ 080C42	
	20	428	1.7	70.611	GSS06 - 2M□□□ 080C42	
	20	434	2.8	70.611	GSS07 - 2M□□□ 080C42	
	17	478	1.5	79.722	GSS06 - 2M□□□ 080C42	
	17	487	2.5	79.722	GSS07 - 2M□□□ 080C42	
	16	528	1.4	87.833	GSS06 - 2M□□□ 080C42	
	16	531	2.3	86.542	GSS07 - 2M□□□ 080C42	
	14	589	1.2	99.167	GSS06 - 2M□□□ 080C42	
	14	594	2.1	97.708	GSS07 - 2M□□□ 080C42	
	12	676	1.1	113.667	GSS06 - 2M□□□ 080C42	
	12	694	1.8	113.667	GSS07 - 2M□□□ 080C42	
	11	753	1.0	128.333	GSS06 - 2M□□□ 080C42	
	11	774	1.6	128.333	GSS07 - 2M□□□ 080C42	
10	814	0.9	137.950	GSS06 - 2M□□□ 080C42		
10	840	1.5	137.950	GSS07 - 2M□□□ 080C42		
8.9	934	1.3	155.750	GSS07 - 2M□□□ 080C42		
8.0	1051	1.2	174.375	GSS07 - 2M□□□ 080C42		
7.1	1171	1.1	196.875	GSS07 - 2M□□□ 080C42		
<b>GSS □□ - 3M</b>					7-71	
6.9	1150	1.1	201.746	GSS07 - 3M□□□ 080C42		
6.1	1280	1.0	227.778	GSS07 - 3M□□□ 080C42		
5.6	1398	0.9	247.139	GSS07 - 3M□□□ 080C42		
5.0	1554	0.8	279.028	GSS07 - 3M□□□ 080C42		
<b>1.5 kW</b> n <sub>1</sub> =2840	<b>GSS □□ - 2M</b>					7-63
	504	25	2.9	5.639	GSS04 - 2M□□□ 090-11	
	367	34	3.1	7.733	GSS04 - 2M□□□ 090-11	
	314	40	3.0	9.042	GSS04 - 2M□□□ 090-11	
	287	44	3.2	9.897	GSS04 - 2M□□□ 090-11	
	262	48	3.0	10.827	GSS04 - 2M□□□ 090-11	
	229	55	2.4	12.400	GSS04 - 2M□□□ 090-11	
	206	62	2.5	13.810	GSS04 - 2M□□□ 090-11	
	179	70	2.1	15.869	GSS04 - 2M□□□ 090-11	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n1=2840	164	77	1.9	17.360	GSS04 - 2M□□□ 090-11	
	164	76	3.2	17.360	GSS05 - 2M□□□ 090-11	
	139	82	1.4	20.417	GSS04 - 2M□□□ 090-11	
	139	80	2.2	20.417	GSS05 - 2M□□□ 090-11	
	128	98	1.7	22.143	GSS04 - 2M□□□ 090-11	
	128	97	2.7	22.143	GSS05 - 2M□□□ 090-11	
	115	102	1.3	24.800	GSS04 - 2M□□□ 090-11	
	115	101	2.1	24.800	GSS05 - 2M□□□ 090-11	
	105	120	1.4	27.125	GSS04 - 2M□□□ 090-11	
	105	120	2.3	27.125	GSS05 - 2M□□□ 090-11	
	90	131	1.1	31.738	GSS04 - 2M□□□ 090-11	
	90	130	1.8	31.738	GSS05 - 2M□□□ 090-11	
	90	131	3.1	31.738	GSS06 - 2M□□□ 090-11	
	80	156	2.0	35.306	GSS05 - 2M□□□ 090-11	
	72	158	1.0	39.200	GSS04 - 2M□□□ 090-11	
	72	158	1.6	39.200	GSS05 - 2M□□□ 090-11	
	72	160	2.9	39.200	GSS06 - 2M□□□ 090-11	
	65	195	1.7	43.917	GSS05 - 2M□□□ 090-11	
	57	200	0.8	50.000	GSS04 - 2M□□□ 090-11	
	57	203	1.3	50.000	GSS05 - 2M□□□ 090-11	
	57	205	2.6	50.000	GSS06 - 2M□□□ 090-11	
	52	225	1.3	54.250	GSS05 - 2M□□□ 090-11	
	52	224	2.5	54.250	GSS06 - 2M□□□ 090-11	
	46	249	1.2	61.250	GSS05 - 2M□□□ 090-11	
	46	251	2.3	61.250	GSS06 - 2M□□□ 090-11	
	40	293	1.1	70.611	GSS05 - 2M□□□ 090-11	
	40	290	2.1	70.611	GSS06 - 2M□□□ 090-11	
	36	326	1.0	79.722	GSS05 - 2M□□□ 090-11	
	36	325	1.9	79.722	GSS06 - 2M□□□ 090-11	
	32	366	0.9	87.833	GSS05 - 2M□□□ 090-11	
	32	361	1.9	87.833	GSS06 - 2M□□□ 090-11	
	29	406	0.9	99.167	GSS05 - 2M□□□ 090-11	
	29	404	1.7	99.167	GSS06 - 2M□□□ 090-11	
	29	402	3.0	97.708	GSS07 - 2M□□□ 090-11	
	25	465	1.5	113.667	GSS06 - 2M□□□ 090-11	
	25	471	2.6	113.667	GSS07 - 2M□□□ 090-11	
	22	519	1.4	128.333	GSS06 - 2M□□□ 090-11	
	22	528	2.3	128.333	GSS07 - 2M□□□ 090-11	
	21	561	1.3	137.950	GSS06 - 2M□□□ 090-11	
	21	571	2.2	137.950	GSS07 - 2M□□□ 090-11	
	18	626	1.1	155.750	GSS06 - 2M□□□ 090-11	
	18	640	1.9	155.750	GSS07 - 2M□□□ 090-11	
	16	719	1.7	174.375	GSS07 - 2M□□□ 090-11	
	14	804	1.5	196.875	GSS07 - 2M□□□ 090-11	
n1=1390	247	52	2.8	5.639	GSS04 - 2M□□□ 090C32	
	180	72	2.2	7.733	GSS04 - 2M□□□ 090C32	
	154	82	1.9	9.042	GSS04 - 2M□□□ 090C32	
	154	81	3.0	9.042	GSS05 - 2M□□□ 090C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>1.5 kW</b> n <sub>1</sub> =1390					<b>GSS □□ - 2M</b>	7-63
	140	92	1.7	9.897	GSS04 - 2M□□□ 090C32	
	140	91	2.9	9.897	GSS05 - 2M□□□ 090C32	
	128	101	1.6	10.827	GSS04 - 2M□□□ 090C32	
	128	100	2.7	10.827	GSS05 - 2M□□□ 090C32	
	112	112	1.5	12.400	GSS04 - 2M□□□ 090C32	
	112	112	2.5	12.400	GSS05 - 2M□□□ 090C32	
	101	130	1.2	13.810	GSS04 - 2M□□□ 090C32	
	101	129	2.1	13.810	GSS05 - 2M□□□ 090C32	
	88	143	1.3	15.869	GSS04 - 2M□□□ 090C32	
	88	143	2.1	15.869	GSS05 - 2M□□□ 090C32	
	80	156	1.2	17.360	GSS04 - 2M□□□ 090C32	
	80	157	2.0	17.360	GSS05 - 2M□□□ 090C32	
	68	168	0.9	20.417	GSS04 - 2M□□□ 090C32	
	68	168	1.5	20.417	GSS05 - 2M□□□ 090C32	
	63	198	0.9	22.143	GSS04 - 2M□□□ 090C32	
	63	201	1.7	22.143	GSS05 - 2M□□□ 090C32	
	63	198	4.1	22.143	GSS07 - 2M□□□ 090C32	
	56	208	0.8	24.800	GSS04 - 2M□□□ 090C32	
	56	210	1.3	24.800	GSS05 - 2M□□□ 090C32	
	51	247	1.5	27.125	GSS05 - 2M□□□ 090C32	
	51	242	2.9	27.125	GSS06 - 2M□□□ 090C32	
	44	269	1.1	31.738	GSS05 - 2M□□□ 090C32	
	44	267	2.2	31.738	GSS06 - 2M□□□ 090C32	
	39	322	1.1	35.306	GSS05 - 2M□□□ 090C32	
	39	316	2.2	35.306	GSS06 - 2M□□□ 090C32	
	36	327	1.0	39.200	GSS05 - 2M□□□ 090C32	
	36	327	1.9	39.200	GSS06 - 2M□□□ 090C32	
	32	401	0.9	43.917	GSS05 - 2M□□□ 090C32	
	32	392	1.8	43.917	GSS06 - 2M□□□ 090C32	
	32	388	2.8	43.271	GSS07 - 2M□□□ 090C32	
	28	418	0.8	50.000	GSS05 - 2M□□□ 090C32	
28	416	1.7	50.000	GSS06 - 2M□□□ 090C32		
28	420	2.9	50.000	GSS07 - 2M□□□ 090C32		
26	454	1.6	54.250	GSS06 - 2M□□□ 090C32		
23	507	1.4	61.250	GSS06 - 2M□□□ 090C32		
20	587	1.2	70.611	GSS06 - 2M□□□ 090C32		
20	597	2.1	70.611	GSS07 - 2M□□□ 090C32		
17	654	1.1	79.722	GSS06 - 2M□□□ 090C32		
17	669	1.8	79.722	GSS07 - 2M□□□ 090C32		
16	723	1.0	87.833	GSS06 - 2M□□□ 090C32		
16	729	1.7	86.542	GSS07 - 2M□□□ 090C32		
14	806	0.9	99.167	GSS06 - 2M□□□ 090C32		
14	816	1.5	97.708	GSS07 - 2M□□□ 090C32		
12	952	1.3	113.667	GSS07 - 2M□□□ 090C32		
11	1062	1.2	128.333	GSS07 - 2M□□□ 090C32		
10	1151	1.1	137.950	GSS07 - 2M□□□ 090C32		
8.9	1279	1.0	155.750	GSS07 - 2M□□□ 090C32		
8.0	1438	0.9	174.375	GSS07 - 2M□□□ 090C32		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n <sub>1</sub> =2840	504	37	2.0	5.639	GSS04 - 2M□□□ 090-31	
	367	51	2.1	7.733	GSS04 - 2M□□□ 090-31	
	314	59	2.0	9.042	GSS04 - 2M□□□ 090-31	
	314	57	2.8	9.042	GSS05 - 2M□□□ 090-31	
	287	65	2.2	9.897	GSS04 - 2M□□□ 090-31	
	287	65	3.1	9.897	GSS05 - 2M□□□ 090-31	
	262	72	2.0	10.827	GSS04 - 2M□□□ 090-31	
	262	71	3.0	10.827	GSS05 - 2M□□□ 090-31	
	229	81	1.7	12.400	GSS04 - 2M□□□ 090-31	
	229	79	2.7	12.400	GSS05 - 2M□□□ 090-31	
	206	92	1.7	13.810	GSS04 - 2M□□□ 090-31	
	206	92	2.8	13.810	GSS05 - 2M□□□ 090-31	
	179	104	1.4	15.869	GSS04 - 2M□□□ 090-31	
	179	102	2.3	15.869	GSS05 - 2M□□□ 090-31	
	164	113	1.3	17.360	GSS04 - 2M□□□ 090-31	
	164	112	2.2	17.360	GSS05 - 2M□□□ 090-31	
	139	121	1.0	20.417	GSS04 - 2M□□□ 090-31	
	139	118	1.5	20.417	GSS05 - 2M□□□ 090-31	
	128	144	1.1	22.143	GSS04 - 2M□□□ 090-31	
	128	144	1.8	22.143	GSS05 - 2M□□□ 090-31	
	128	142	4.9	22.143	GSS07 - 2M□□□ 090-31	
	115	151	0.9	24.800	GSS04 - 2M□□□ 090-31	
	115	149	1.4	24.800	GSS05 - 2M□□□ 090-31	
	105	176	1.0	27.125	GSS04 - 2M□□□ 090-31	
	105	177	1.6	27.125	GSS05 - 2M□□□ 090-31	
	105	175	3.1	27.125	GSS06 - 2M□□□ 090-31	
	90	192	1.2	31.738	GSS05 - 2M□□□ 090-31	
	90	195	2.1	31.738	GSS06 - 2M□□□ 090-31	
	80	231	1.3	35.306	GSS05 - 2M□□□ 090-31	
	80	229	2.7	35.306	GSS06 - 2M□□□ 090-31	
	72	233	1.1	39.200	GSS05 - 2M□□□ 090-31	
	72	238	2.0	39.200	GSS06 - 2M□□□ 090-31	
	65	288	1.2	43.917	GSS05 - 2M□□□ 090-31	
	65	284	2.3	43.917	GSS06 - 2M□□□ 090-31	
	57	299	0.9	50.000	GSS05 - 2M□□□ 090-31	
	57	303	1.8	50.000	GSS06 - 2M□□□ 090-31	
	57	305	2.8	50.000	GSS07 - 2M□□□ 090-31	
	52	331	0.9	54.250	GSS05 - 2M□□□ 090-31	
	52	331	1.7	54.250	GSS06 - 2M□□□ 090-31	
	46	367	0.8	61.250	GSS05 - 2M□□□ 090-31	
	46	371	1.6	61.250	GSS06 - 2M□□□ 090-31	
	40	429	1.5	70.611	GSS06 - 2M□□□ 090-31	
	40	434	2.6	70.611	GSS07 - 2M□□□ 090-31	
	36	481	1.3	79.722	GSS06 - 2M□□□ 090-31	
	36	487	2.4	79.722	GSS07 - 2M□□□ 090-31	
	32	533	1.3	87.833	GSS06 - 2M□□□ 090-31	
	33	532	2.3	86.542	GSS07 - 2M□□□ 090-31	
	29	596	1.2	99.167	GSS06 - 2M□□□ 090-31	
	29	596	2.1	97.708	GSS07 - 2M□□□ 090-31	
	25	686	1.0	113.667	GSS06 - 2M□□□ 090-31	
	25	698	1.8	113.667	GSS07 - 2M□□□ 090-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n1=2840	22	766	0.9	128.333	GSS06 - 2M□□□ 090-31	
	22	782	1.6	128.333	GSS07 - 2M□□□ 090-31	
	21	827	0.9	137.950	GSS06 - 2M□□□ 090-31	
	21	844	1.5	137.950	GSS07 - 2M□□□ 090-31	
	18	945	1.3	155.750	GSS07 - 2M□□□ 090-31	
	16	1061	1.2	174.375	GSS07 - 2M□□□ 090-31	
	14	1186	1.1	196.875	GSS07 - 2M□□□ 090-31	
n1=1440	255	73	3.0	5.639	GSS05 - 2M□□□ 100C12	
	186	101	2.6	7.733	GSS05 - 2M□□□ 100C12	
	159	115	2.1	9.042	GSS05 - 2M□□□ 100C12	
	146	131	2.1	9.897	GSS05 - 2M□□□ 100C12	
	133	143	1.9	10.827	GSS05 - 2M□□□ 100C12	
	116	159	1.7	12.400	GSS05 - 2M□□□ 100C12	
	116	158	3.2	12.400	GSS06 - 2M□□□ 100C12	
	104	184	1.5	13.810	GSS05 - 2M□□□ 100C12	
	101	189	2.7	14.286	GSS06 - 2M□□□ 100C12	
	91	204	1.5	15.869	GSS05 - 2M□□□ 100C12	
	91	203	2.9	15.869	GSS06 - 2M□□□ 100C12	
	83	224	1.4	17.360	GSS05 - 2M□□□ 100C12	
	83	222	2.8	17.360	GSS06 - 2M□□□ 100C12	
	71	240	1.1	20.417	GSS05 - 2M□□□ 100C12	
	71	244	2.0	20.417	GSS06 - 2M□□□ 100C12	
	65	286	1.2	22.143	GSS05 - 2M□□□ 100C12	
	65	282	2.3	22.143	GSS06 - 2M□□□ 100C12	
	65	280	4.2	22.143	GSS07 - 2M□□□ 100C12	
	58	298	0.9	24.800	GSS05 - 2M□□□ 100C12	
	58	298	1.9	24.800	GSS06 - 2M□□□ 100C12	
	53	351	1.0	27.125	GSS05 - 2M□□□ 100C12	
	53	346	2.0	27.125	GSS06 - 2M□□□ 100C12	
	45	383	0.8	31.738	GSS05 - 2M□□□ 100C12	
	45	381	1.6	31.738	GSS06 - 2M□□□ 100C12	
	47	376	2.8	31.000	GSS07 - 2M□□□ 100C12	
	41	450	1.6	35.306	GSS06 - 2M□□□ 100C12	
	41	451	2.7	35.306	GSS07 - 2M□□□ 100C12	
	37	466	1.4	39.200	GSS06 - 2M□□□ 100C12	
	37	472	2.5	39.200	GSS07 - 2M□□□ 100C12	
	33	558	1.3	43.917	GSS06 - 2M□□□ 100C12	
	33	552	2.2	43.271	GSS07 - 2M□□□ 100C12	
	29	592	1.2	50.000	GSS06 - 2M□□□ 100C12	
29	601	2.1	50.000	GSS07 - 2M□□□ 100C12		
27	646	1.1	54.250	GSS06 - 2M□□□ 100C12		
27	657	1.9	54.250	GSS07 - 2M□□□ 100C12		
24	722	1.0	61.250	GSS06 - 2M□□□ 100C12		
24	736	1.7	61.250	GSS07 - 2M□□□ 100C12		
20	834	0.9	70.611	GSS06 - 2M□□□ 100C12		
20	851	1.5	70.611	GSS07 - 2M□□□ 100C12		
18	954	1.3	79.722	GSS07 - 2M□□□ 100C12		
17	1038	1.2	86.542	GSS07 - 2M□□□ 100C12		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>2.2 kW</b> n1=1440					<b>GSS □□ - 2M</b>	7-63
	15	1161	1.1	97.708	GSS07 - 2M□□□ 100C12	
	13	1354	0.9	113.667	GSS07 - 2M□□□ 100C12	
	11	1509	0.8	128.333	GSS07 - 2M□□□ 100C12	
<b>3 kW</b> n1=2850					<b>GSS □□ - 2M</b>	7-63
	505	50	2.7	5.639	GSS05 - 2M□□□ 100-31	
	369	69	2.4	7.733	GSS05 - 2M□□□ 100-31	
	315	78	2.0	9.042	GSS05 - 2M□□□ 100-31	
	315	80	3.1	9.042	GSS06 - 2M□□□ 100-31	
	288	89	2.2	9.897	GSS05 - 2M□□□ 100-31	
	263	98	2.2	10.827	GSS05 - 2M□□□ 100-31	
	230	109	2.0	12.400	GSS05 - 2M□□□ 100-31	
	230	110	2.8	12.400	GSS06 - 2M□□□ 100-31	
	206	125	2.0	13.810	GSS05 - 2M□□□ 100-31	
	180	140	1.7	15.869	GSS05 - 2M□□□ 100-31	
	180	141	2.7	15.869	GSS06 - 2M□□□ 100-31	
	164	154	1.6	17.360	GSS05 - 2M□□□ 100-31	
	164	154	2.6	17.360	GSS06 - 2M□□□ 100-31	
	140	161	1.1	20.417	GSS05 - 2M□□□ 100-31	
	140	169	1.8	20.417	GSS06 - 2M□□□ 100-31	
	129	197	1.3	22.143	GSS05 - 2M□□□ 100-31	
	129	196	2.4	22.143	GSS06 - 2M□□□ 100-31	
	129	195	3.6	22.143	GSS07 - 2M□□□ 100-31	
	115	203	1.1	24.800	GSS05 - 2M□□□ 100-31	
	115	208	1.7	24.800	GSS06 - 2M□□□ 100-31	
	105	242	1.2	27.125	GSS05 - 2M□□□ 100-31	
	105	241	2.3	27.125	GSS06 - 2M□□□ 100-31	
	90	262	0.9	31.738	GSS05 - 2M□□□ 100-31	
	90	266	1.6	31.738	GSS06 - 2M□□□ 100-31	
	92	261	2.4	31.000	GSS07 - 2M□□□ 100-31	
	81	313	2.0	35.306	GSS06 - 2M□□□ 100-31	
	81	312	3.2	35.306	GSS07 - 2M□□□ 100-31	
	73	325	1.5	39.200	GSS06 - 2M□□□ 100-31	
	73	328	2.2	39.200	GSS07 - 2M□□□ 100-31	
	65	389	1.7	43.917	GSS06 - 2M□□□ 100-31	
	66	382	3.0	43.271	GSS07 - 2M□□□ 100-31	
	57	414	1.3	50.000	GSS06 - 2M□□□ 100-31	
57	419	2.1	50.000	GSS07 - 2M□□□ 100-31		
53	452	1.3	54.250	GSS06 - 2M□□□ 100-31		
53	458	2.1	54.250	GSS07 - 2M□□□ 100-31		
47	506	1.2	61.250	GSS06 - 2M□□□ 100-31		
47	512	2.0	61.250	GSS07 - 2M□□□ 100-31		
40	586	1.1	70.611	GSS06 - 2M□□□ 100-31		
40	595	1.9	70.611	GSS07 - 2M□□□ 100-31		
36	656	1.0	79.722	GSS06 - 2M□□□ 100-31		
36	666	1.8	79.722	GSS07 - 2M□□□ 100-31		
32	727	0.9	87.833	GSS06 - 2M□□□ 100-31		
33	729	1.7	86.542	GSS07 - 2M□□□ 100-31		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>3 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n1=2850	29	813	0.8	99.167	GSS06 - 2M□□□ 100-31	
	29	815	1.5	97.708	GSS07 - 2M□□□ 100-31	
	25	954	1.3	113.667	GSS07 - 2M□□□ 100-31	
	22	1068	1.2	128.333	GSS07 - 2M□□□ 100-31	
	21	1152	1.1	137.950	GSS07 - 2M□□□ 100-31	
	18	1290	1.0	155.750	GSS07 - 2M□□□ 100-31	
n1=1430	254	102	2.2	5.639	GSS05 - 2M□□□ 100C32	
	185	140	1.9	7.733	GSS05 - 2M□□□ 100C32	
	158	159	1.6	9.042	GSS05 - 2M□□□ 100C32	
	158	160	2.6	9.042	GSS06 - 2M□□□ 100C32	
	145	181	1.5	9.897	GSS05 - 2M□□□ 100C32	
	140	185	2.8	10.238	GSS06 - 2M□□□ 100C32	
	132	198	1.4	10.827	GSS05 - 2M□□□ 100C32	
	128	203	2.5	11.200	GSS06 - 2M□□□ 100C32	
	115	220	1.3	12.400	GSS05 - 2M□□□ 100C32	
	115	219	2.4	12.400	GSS06 - 2M□□□ 100C32	
	104	254	1.1	13.810	GSS05 - 2M□□□ 100C32	
	100	261	2.0	14.286	GSS06 - 2M□□□ 100C32	
	90	282	1.1	15.869	GSS05 - 2M□□□ 100C32	
	90	281	2.1	15.869	GSS06 - 2M□□□ 100C32	
	82	309	1.0	17.360	GSS05 - 2M□□□ 100C32	
	82	307	2.0	17.360	GSS06 - 2M□□□ 100C32	
	82	306	3.2	17.360	GSS07 - 2M□□□ 100C32	
	70	337	1.4	20.417	GSS06 - 2M□□□ 100C32	
	65	395	0.9	22.143	GSS05 - 2M□□□ 100C32	
	65	391	1.7	22.143	GSS06 - 2M□□□ 100C32	
	65	389	3.0	22.143	GSS07 - 2M□□□ 100C32	
	58	412	1.4	24.800	GSS06 - 2M□□□ 100C32	
	53	478	1.5	27.125	GSS06 - 2M□□□ 100C32	
	53	478	2.6	27.125	GSS07 - 2M□□□ 100C32	
	45	525	1.2	31.738	GSS06 - 2M□□□ 100C32	
	46	521	2.0	31.000	GSS07 - 2M□□□ 100C32	
	41	621	1.2	35.306	GSS06 - 2M□□□ 100C32	
	41	624	2.0	35.306	GSS07 - 2M□□□ 100C32	
	37	643	1.0	39.200	GSS06 - 2M□□□ 100C32	
	37	653	1.8	39.200	GSS07 - 2M□□□ 100C32	
33	770	0.9	43.917	GSS06 - 2M□□□ 100C32		
33	764	1.6	43.271	GSS07 - 2M□□□ 100C32		
29	817	0.9	50.000	GSS06 - 2M□□□ 100C32		
29	831	1.5	50.000	GSS07 - 2M□□□ 100C32		
26	891	0.8	54.250	GSS06 - 2M□□□ 100C32		
26	908	1.4	54.250	GSS07 - 2M□□□ 100C32		
23	1016	1.2	61.250	GSS07 - 2M□□□ 100C32		
20	1175	1.1	70.611	GSS07 - 2M□□□ 100C32		
18	1315	1.0	79.722	GSS07 - 2M□□□ 100C32		
17	1432	0.9	86.542	GSS07 - 2M□□□ 100C32		

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b>					<b>GSS □□ - 2M</b>	<b>7-63</b>
n <sub>1</sub> =2830	502	68	2.0	5.639	GSS05 - 2M□□□ 100-41	
	485	70	2.7	5.833	GSS06 - 2M□□□ 100-41	
	366	94	1.8	7.733	GSS05 - 2M□□□ 100-41	
	354	97	2.7	8.000	GSS06 - 2M□□□ 100-41	
	313	106	1.5	9.042	GSS05 - 2M□□□ 100-41	
	313	108	2.3	9.042	GSS06 - 2M□□□ 100-41	
	286	121	1.7	9.897	GSS05 - 2M□□□ 100-41	
	276	124	2.6	10.238	GSS06 - 2M□□□ 100-41	
	261	132	1.6	10.827	GSS05 - 2M□□□ 100-41	
	253	136	2.5	11.200	GSS06 - 2M□□□ 100-41	
	228	147	1.5	12.400	GSS05 - 2M□□□ 100-41	
	228	149	2.1	12.400	GSS06 - 2M□□□ 100-41	
	205	169	1.5	13.810	GSS05 - 2M□□□ 100-41	
	198	174	2.6	14.286	GSS06 - 2M□□□ 100-41	
	178	189	1.3	15.869	GSS05 - 2M□□□ 100-41	
	178	190	2.0	15.869	GSS06 - 2M□□□ 100-41	
	183	185	3.0	15.500	GSS07 - 2M□□□ 100-41	
	163	207	1.2	17.360	GSS05 - 2M□□□ 100-41	
	163	208	1.9	17.360	GSS06 - 2M□□□ 100-41	
	163	208	2.9	17.360	GSS07 - 2M□□□ 100-41	
	139	217	0.8	20.417	GSS05 - 2M□□□ 100-41	
	139	228	1.3	20.417	GSS06 - 2M□□□ 100-41	
	128	265	1.0	22.143	GSS05 - 2M□□□ 100-41	
	128	266	1.8	22.143	GSS06 - 2M□□□ 100-41	
	128	265	2.7	22.143	GSS07 - 2M□□□ 100-41	
	114	281	1.2	24.800	GSS06 - 2M□□□ 100-41	
	104	325	0.9	27.125	GSS05 - 2M□□□ 100-41	
	104	325	1.7	27.125	GSS06 - 2M□□□ 100-41	
	104	325	2.6	27.125	GSS07 - 2M□□□ 100-41	
	89	359	1.2	31.738	GSS06 - 2M□□□ 100-41	
	91	353	1.8	31.000	GSS07 - 2M□□□ 100-41	
	80	423	1.5	35.306	GSS06 - 2M□□□ 100-41	
	80	423	2.4	35.306	GSS07 - 2M□□□ 100-41	
	72	439	1.1	39.200	GSS06 - 2M□□□ 100-41	
	72	444	1.7	39.200	GSS07 - 2M□□□ 100-41	
	64	525	1.3	43.917	GSS06 - 2M□□□ 100-41	
	65	517	2.3	43.271	GSS07 - 2M□□□ 100-41	
	57	558	1.0	50.000	GSS06 - 2M□□□ 100-41	
	57	565	1.6	50.000	GSS07 - 2M□□□ 100-41	
	52	610	0.9	54.250	GSS06 - 2M□□□ 100-41	
	52	618	1.6	54.250	GSS07 - 2M□□□ 100-41	
	46	682	0.9	61.250	GSS06 - 2M□□□ 100-41	
	46	692	1.5	61.250	GSS07 - 2M□□□ 100-41	
	40	804	1.4	70.611	GSS07 - 2M□□□ 100-41	
	36	899	1.3	79.722	GSS07 - 2M□□□ 100-41	
	33	983	1.3	86.542	GSS07 - 2M□□□ 100-41	
	29	1099	1.1	97.708	GSS07 - 2M□□□ 100-41	
	25	1286	1.0	113.667	GSS07 - 2M□□□ 100-41	
	22	1439	0.9	128.333	GSS07 - 2M□□□ 100-41	
	21	1552	0.8	137.950	GSS07 - 2M□□□ 100-41	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>4 kW</b> n <sub>1</sub> =1450					<b>GSS □□ - 2M</b>	7-63
	249	139	2.5	5.833	GSS06 - 2M□□□ 112C22	
	181	191	2.5	8.000	GSS06 - 2M□□□ 112C22	
	160	212	2.0	9.042	GSS06 - 2M□□□ 112C22	
	160	212	2.9	9.086	GSS07 - 2M□□□ 112C22	
	142	246	2.1	10.238	GSS06 - 2M□□□ 112C22	
	130	269	1.9	11.200	GSS06 - 2M□□□ 112C22	
	130	268	3.2	11.200	GSS07 - 2M□□□ 112C22	
	117	290	1.8	12.400	GSS06 - 2M□□□ 112C22	
	115	294	2.7	12.594	GSS07 - 2M□□□ 112C22	
	102	345	1.5	14.286	GSS06 - 2M□□□ 112C22	
	102	344	2.6	14.286	GSS07 - 2M□□□ 112C22	
	91	371	1.6	15.869	GSS06 - 2M□□□ 112C22	
	94	362	2.5	15.500	GSS07 - 2M□□□ 112C22	
	84	406	1.5	17.360	GSS06 - 2M□□□ 112C22	
	84	406	2.5	17.360	GSS07 - 2M□□□ 112C22	
	71	446	1.1	20.417	GSS06 - 2M□□□ 112C22	
	71	453	1.7	20.517	GSS07 - 2M□□□ 112C22	
	66	516	1.3	22.143	GSS06 - 2M□□□ 112C22	
	66	516	2.3	22.143	GSS07 - 2M□□□ 112C22	
	59	544	1.0	24.800	GSS06 - 2M□□□ 112C22	
	58	560	1.6	25.188	GSS07 - 2M□□□ 112C22	
	54	631	1.1	27.125	GSS06 - 2M□□□ 112C22	
	54	633	2.0	27.125	GSS07 - 2M□□□ 112C22	
46	693	0.9	31.738	GSS06 - 2M□□□ 112C22		
47	689	1.5	31.000	GSS07 - 2M□□□ 112C22		
41	825	1.5	35.306	GSS07 - 2M□□□ 112C22		
37	863	1.4	39.200	GSS07 - 2M□□□ 112C22		
34	1009	1.2	43.271	GSS07 - 2M□□□ 112C22		
29	1098	1.1	50.000	GSS07 - 2M□□□ 112C22		
27	1198	1.0	54.250	GSS07 - 2M□□□ 112C22		
24	1341	0.9	61.250	GSS07 - 2M□□□ 112C22		
21	1549	0.8	70.611	GSS07 - 2M□□□ 112C22		
<b>5.5 kW</b> n <sub>1</sub> =2890					<b>GSS □□ - 2M</b>	7-63
	495	95	2.0	5.833	GSS06 - 2M□□□ 112-31	
	361	131	2.0	8.000	GSS06 - 2M□□□ 112-31	
	356	134	3.0	8.125	GSS07 - 2M□□□ 112-31	
	320	146	1.7	9.042	GSS06 - 2M□□□ 112-31	
	318	146	2.8	9.086	GSS07 - 2M□□□ 112-31	
	282	169	1.9	10.238	GSS06 - 2M□□□ 112-31	
	289	165	2.9	10.000	GSS07 - 2M□□□ 112-31	
	258	185	1.9	11.200	GSS06 - 2M□□□ 112-31	
	258	185	2.8	11.200	GSS07 - 2M□□□ 112-31	
	233	201	1.6	12.400	GSS06 - 2M□□□ 112-31	
	230	204	2.4	12.594	GSS07 - 2M□□□ 112-31	
	202	236	1.9	14.286	GSS06 - 2M□□□ 112-31	
	202	237	2.6	14.286	GSS07 - 2M□□□ 112-31	
	182	258	1.5	15.869	GSS06 - 2M□□□ 112-31	
	187	252	2.2	15.500	GSS07 - 2M□□□ 112-31	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n1=2890					<b>GSS □□ - 2M</b>	7-63
	167	282	1.4	17.360	GSS06 - 2M□□□ 112-31	
	167	282	2.1	17.360	GSS07 - 2M□□□ 112-31	
	142	308	1.0	20.417	GSS06 - 2M□□□ 112-31	
	141	313	1.6	20.517	GSS07 - 2M□□□ 112-31	
	131	359	1.3	22.143	GSS06 - 2M□□□ 112-31	
	131	360	2.0	22.143	GSS07 - 2M□□□ 112-31	
	117	380	0.9	24.800	GSS06 - 2M□□□ 112-31	
	115	388	1.4	25.188	GSS07 - 2M□□□ 112-31	
	107	440	1.3	27.125	GSS06 - 2M□□□ 112-31	
	107	441	1.9	27.125	GSS07 - 2M□□□ 112-31	
	91	485	0.9	31.738	GSS06 - 2M□□□ 112-31	
	93	478	1.3	31.000	GSS07 - 2M□□□ 112-31	
	82	573	1.8	35.306	GSS07 - 2M□□□ 112-31	
	74	593	0.8	39.200	GSS06 - 2M□□□ 112-31	
	74	601	1.2	39.200	GSS07 - 2M□□□ 112-31	
	67	701	1.7	43.271	GSS07 - 2M□□□ 112-31	
	58	765	1.2	50.000	GSS07 - 2M□□□ 112-31	
	53	836	1.2	54.250	GSS07 - 2M□□□ 112-31	
	47	936	1.1	61.250	GSS07 - 2M□□□ 112-31	
	41	1087	1.1	70.611	GSS07 - 2M□□□ 112-31	
	36	1215	1.0	79.722	GSS07 - 2M□□□ 112-31	
	33	1329	0.9	86.542	GSS07 - 2M□□□ 112-31	
30	1485	0.8	97.708	GSS07 - 2M□□□ 112-31		
n1=1445	248	193	1.8	5.833	GSS06 - 2M□□□ 112C32	
	247	194	2.7	5.862	GSS07 - 2M□□□ 112C32	
	181	265	1.8	8.000	GSS06 - 2M□□□ 112C32	
	178	270	2.5	8.125	GSS07 - 2M□□□ 112C32	
	160	294	1.4	9.042	GSS06 - 2M□□□ 112C32	
	159	295	2.1	9.086	GSS07 - 2M□□□ 112C32	
	141	341	1.5	10.238	GSS06 - 2M□□□ 112C32	
	145	333	2.4	10.000	GSS07 - 2M□□□ 112C32	
	129	374	1.4	11.200	GSS06 - 2M□□□ 112C32	
	129	373	2.3	11.200	GSS07 - 2M□□□ 112C32	
	117	402	1.3	12.400	GSS06 - 2M□□□ 112C32	
	115	409	1.9	12.594	GSS07 - 2M□□□ 112C32	
	101	479	1.1	14.286	GSS06 - 2M□□□ 112C32	
	101	478	1.9	14.286	GSS07 - 2M□□□ 112C32	
	91	514	1.2	15.869	GSS06 - 2M□□□ 112C32	
	93	504	1.8	15.500	GSS07 - 2M□□□ 112C32	
	83	563	1.1	17.360	GSS06 - 2M□□□ 112C32	
	83	564	1.8	17.360	GSS07 - 2M□□□ 112C32	
	70	629	1.2	20.517	GSS07 - 2M□□□ 112C32	
	65	715	0.9	22.143	GSS06 - 2M□□□ 112C32	
	65	717	1.7	22.143	GSS07 - 2M□□□ 112C32	
	57	777	1.2	25.188	GSS07 - 2M□□□ 112C32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>5.5 kW</b> n1=1445					<b>GSS □□ - 2M</b>	7-63
	53	874	0.8	27.125	GSS06 - 2M□□□ 112C32	
	53	879	1.4	27.125	GSS07 - 2M□□□ 112C32	
	47	955	1.1	31.000	GSS07 - 2M□□□ 112C32	
	41	1143	1.1	35.306	GSS07 - 2M□□□ 112C32	
	37	1195	1.0	39.200	GSS07 - 2M□□□ 112C32	
	33	1397	0.9	43.271	GSS07 - 2M□□□ 112C32	
	29	1520	0.8	50.000	GSS07 - 2M□□□ 112C32	
<b>7.5 kW</b> n1=2900					<b>GSS □□ - 2M</b>	7-63
	497	130	1.5	5.833	GSS06 - 2M□□□ 112-41	
	495	131	2.4	5.862	GSS07 - 2M□□□ 112-41	
	363	179	1.5	8.000	GSS06 - 2M□□□ 112-41	
	357	183	2.2	8.125	GSS07 - 2M□□□ 112-41	
	321	200	1.3	9.042	GSS06 - 2M□□□ 112-41	
	319	201	2.0	9.086	GSS07 - 2M□□□ 112-41	
	283	231	1.4	10.238	GSS06 - 2M□□□ 112-41	
	290	226	2.1	10.000	GSS07 - 2M□□□ 112-41	
	259	253	1.4	11.200	GSS06 - 2M□□□ 112-41	
	259	253	2.0	11.200	GSS07 - 2M□□□ 112-41	
	234	275	1.2	12.400	GSS06 - 2M□□□ 112-41	
	230	279	1.7	12.594	GSS07 - 2M□□□ 112-41	
	203	323	1.4	14.286	GSS06 - 2M□□□ 112-41	
	203	324	1.9	14.286	GSS07 - 2M□□□ 112-41	
	183	352	1.1	15.869	GSS06 - 2M□□□ 112-41	
	187	344	1.6	15.500	GSS07 - 2M□□□ 112-41	
	167	385	1.1	17.360	GSS06 - 2M□□□ 112-41	
	167	385	1.6	17.360	GSS07 - 2M□□□ 112-41	
	141	427	1.2	20.517	GSS07 - 2M□□□ 112-41	
	131	490	1.0	22.143	GSS06 - 2M□□□ 112-41	
	131	492	1.5	22.143	GSS07 - 2M□□□ 112-41	
	115	530	1.1	25.188	GSS07 - 2M□□□ 112-41	
	107	600	0.9	27.125	GSS06 - 2M□□□ 112-41	
	107	602	1.4	27.125	GSS07 - 2M□□□ 112-41	
	94	653	1.0	31.000	GSS07 - 2M□□□ 112-41	
	82	783	1.3	35.306	GSS07 - 2M□□□ 112-41	
	74	819	0.9	39.200	GSS07 - 2M□□□ 112-41	
	67	957	1.2	43.271	GSS07 - 2M□□□ 112-41	
	58	1043	0.8	50.000	GSS07 - 2M□□□ 112-41	
	54	1140	0.8	54.250	GSS07 - 2M□□□ 112-41	
	47	1276	0.8	61.250	GSS07 - 2M□□□ 112-41	
n1=1455	248	264	2.0	5.862	GSS07 - 2M□□□ 132C22	
	179	368	1.8	8.125	GSS07 - 2M□□□ 132C22	
	160	402	1.6	9.086	GSS07 - 2M□□□ 132C22	
	146	454	1.7	10.000	GSS07 - 2M□□□ 132C22	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors

P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c					
<b>7.5 kW</b> n <sub>1</sub> =1455					<b>GSS □□ - 2M</b>	7-63		
	130	508	1.7	11.200	GSS07 - 2M□□□ 132C22			
	116	557	1.4	12.594	GSS07 - 2M□□□ 132C22			
	102	650	1.6	14.286	GSS07 - 2M□□□ 132C22			
	94	686	1.4	15.500	GSS07 - 2M□□□ 132C22			
	84	768	1.3	17.360	GSS07 - 2M□□□ 132C22			
	71	854	0.9	20.517	GSS07 - 2M□□□ 132C22			
	66	976	1.2	22.143	GSS07 - 2M□□□ 132C22			
	58	1056	0.9	25.188	GSS07 - 2M□□□ 132C22			
	54	1195	1.0	27.125	GSS07 - 2M□□□ 132C22			
47	1298	0.8	31.000	GSS07 - 2M□□□ 132C22				
<b>9.2 kW</b> n <sub>1</sub> =2925					<b>GSS □□ - 2M</b>	7-63		
	499	160	2.0	5.862	GSS07 - 2M□□□ 132-21			
	360	224	1.8	8.125	GSS07 - 2M□□□ 132-21			
	322	245	1.7	9.086	GSS07 - 2M□□□ 132-21			
	293	276	1.7	10.000	GSS07 - 2M□□□ 132-21			
	261	309	1.7	11.200	GSS07 - 2M□□□ 132-21			
	232	341	1.4	12.594	GSS07 - 2M□□□ 132-21			
	205	396	1.6	14.286	GSS07 - 2M□□□ 132-21			
	189	420	1.3	15.500	GSS07 - 2M□□□ 132-21			
	169	470	1.3	17.360	GSS07 - 2M□□□ 132-21			
	143	521	1.0	20.517	GSS07 - 2M□□□ 132-21			
	132	600	1.2	22.143	GSS07 - 2M□□□ 132-21			
	116	646	0.9	25.188	GSS07 - 2M□□□ 132-21			
	108	734	1.1	27.125	GSS07 - 2M□□□ 132-21			
	94	795	0.8	31.000	GSS07 - 2M□□□ 132-21			
	n <sub>1</sub> =1450	247	327	1.6	5.862		GSS07 - 2M□□□ 132C32	
		179	454	1.5	8.125		GSS07 - 2M□□□ 132C32	
		160	496	1.3	9.086		GSS07 - 2M□□□ 132C32	
		145	560	1.4	10.000		GSS07 - 2M□□□ 132C32	
		130	628	1.4	11.200		GSS07 - 2M□□□ 132C32	
		115	688	1.2	12.594		GSS07 - 2M□□□ 132C32	
		102	802	1.3	14.286		GSS07 - 2M□□□ 132C32	
		94	846	1.1	15.500		GSS07 - 2M□□□ 132C32	
		84	947	1.1	17.360		GSS07 - 2M□□□ 132C32	
		66	1204	1.0	22.143		GSS07 - 2M□□□ 132C32	
	54	1474	0.8	27.125	GSS07 - 2M□□□ 132C32			
	<b>11 kW</b> n <sub>1</sub> =1460						<b>GSS □□ - 2M</b>	7-63
		249	389	1.4	5.862		GSS07 - 2M□□□ 160-22	
180		541	1.3	8.125	GSS07 - 2M□□□ 160-22			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Geared motors



P <sub>1</sub>	50 Hz			i	Helical-worm geared motor	Dimensions Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c			
<b>11 kW</b> n <sub>1</sub> =1460					<b>GSS □□ - 2M</b>	7-63
	161	591	1.1	9.086	GSS07 - 2M□□□ 160-22	
	146	667	1.2	10.000	GSS07 - 2M□□□ 160-22	
	130	747	1.2	11.200	GSS07 - 2M□□□ 160-22	
	116	819	1.0	12.594	GSS07 - 2M□□□ 160-22	
	94	1007	0.9	15.500	GSS07 - 2M□□□ 160-22	
	84	1127	0.9	17.360	GSS07 - 2M□□□ 160-22	
<b>15 kW</b> n <sub>1</sub> =1460					<b>GSS □□ - 2M</b>	7-63
	249	533	1.0	5.862	GSS07 - 2M□□□ 160-32	
	180	740	0.9	8.125	GSS07 - 2M□□□ 160-32	
	146	912	0.9	10.000	GSS07 - 2M□□□ 160-32	
	130	1023	0.8	11.200	GSS07 - 2M□□□ 160-32	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors

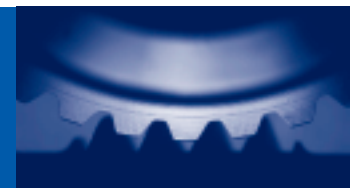
$M_2 \text{ perm} \leq 180 \text{ Nm}$

GSS 04 - 2 N												Dimensions page 7-79			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
5.639	$P_1$	2.75	3.74	4.26		1.37	1.87	2.31		0.73	1.25	1.54			
	$M_2$	47	64	73		48	65	80		51	88	108			
	$\eta$	0.89	0.89	0.89		0.91	0.91	0.91		0.91	0.91	0.91			
7.733	$P_1$	2.75	3.74	4.57		1.37	1.87	2.31		0.73	1.25	1.54			
	$M_2$	65	88	108		66	90	111		70	120	149			
	$\eta$	0.90	0.90	0.90		0.91	0.91	0.91		0.92	0.92	0.92			
9.042	$P_1$	2.75	3.74	4.36		1.37	1.87	2.31		0.73	1.25	1.54			
	$M_2$	75	102	120		75	102	126		78	134	166			
	$\eta$	0.89	0.89	0.89		0.88	0.88	0.88		0.87	0.87	0.87			
9.897	$P_1$	2.75	3.74	4.62		1.37	1.87	2.31		0.78	1.21	1.30			
	$M_2$	84	114	141		85	115	142		96	149	161			
	$\eta$	0.90	0.90	0.90		0.91	0.91	0.91		0.92	0.92	0.92			
10.827	$P_1$	2.75	3.74	4.39		1.37	1.87	2.31		0.74	1.15	1.20			
	$M_2$	92	125	147		93	126	156		100	156	162			
	$\eta$	0.90	0.90	0.90		0.91	0.91	0.91		0.92	0.92	0.92			
12.400	$P_1$	2.75	3.60	3.60		1.37	1.87	2.29		0.73	1.23	1.23			
	$M_2$	103	135	135		102	139	170		106	180	180			
	$\eta$	0.89	0.89	0.89		0.88	0.88	0.88		0.87	0.87	0.87			
13.810	$P_1$	2.50	3.72	3.72		1.25	1.87	1.89		0.63	0.94	0.94			
	$M_2$	107	159	159		108	161	163		107	162	162			
	$\eta$	0.91	0.91	0.91		0.91	0.91	0.91		0.91	0.91	0.91			
15.869	$P_1$	2.75	3.04	3.04		1.37	1.87	1.90		0.78	0.97	0.97			
	$M_2$	132	146	146		130	177	180		145	180	180			
	$\eta$	0.89	0.89	0.89		0.88	0.88	0.88		0.86	0.86	0.86			
17.360	$P_1$	2.75	2.87	2.87		1.37	1.74	1.74		0.74	0.89	0.89			
	$M_2$	144	150	150		142	180	180		151	180	180			
	$\eta$	0.89	0.89	0.89		0.88	0.88	0.88		0.86	0.86	0.86			
20.417	$P_1$	2.13	2.13	2.13		1.37	1.38	1.38		0.73	0.83	0.83			
	$M_2$	119	119	119		153	153	153		158	180	180			
	$\eta$	0.80	0.80	0.80		0.80	0.80	0.80		0.78	0.78	0.78			
22.143	$P_1$	2.44	2.44	2.44		1.25	1.37	1.37		0.63	0.70	0.70			
	$M_2$	162	162	162		164	180	180		160	180	180			
	$\eta$	0.88	0.88	0.88		0.87	0.87	0.87		0.85	0.85	0.85			
24.800	$P_1$	1.93	1.93	1.93		1.24	1.24	1.24		0.67	0.67	0.67			
	$M_2$	134	134	134		171	171	171		180	180	180			
	$\eta$	0.82	0.82	0.82		0.81	0.81	0.81		0.79	0.79	0.79			
27.125	$P_1$	2.13	2.13	2.13		1.08	1.13	1.13		0.54	0.58	0.58			
	$M_2$	173	173	173		172	180	180		167	180	180			
	$\eta$	0.88	0.88	0.88		0.86	0.86	0.86		0.84	0.84	0.84			
31.738	$P_1$	1.64	1.64	1.64		1.04	1.04	1.04		0.53	0.53	0.53			
	$M_2$	146	146	146		180	180	180		180	180	180			
	$\eta$	0.82	0.82	0.82		0.80	0.80	0.80		0.78	0.78	0.78			
34.100	$P_1$	1.29	1.77	1.77		0.65	0.90	0.90		0.32	0.45	0.47			
	$M_2$	132	180	180		129	179	180		125	174	180			
	$\eta$	0.88	0.88	0.88		0.86	0.86	0.86		0.83	0.83	0.83			
39.200	$P_1$	1.41	1.41	1.41		0.86	0.86	0.86		0.45	0.45	0.45			
	$M_2$	150	150	150		180	180	180		180	180	180			
	$\eta$	0.80	0.80	0.80		0.78	0.78	0.78		0.75	0.75	0.75			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 180 \text{ Nm}$

GSS 04 - 2 N												Dimensions page 7-79			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
43.917	$P_1$	1.08	1.38	1.38		0.54	0.71	0.71		0.27	0.36	0.37			
	$M_2$	141	180	180		138	180	180		133	177	180			
	$\eta$	0.87	0.87	0.87		0.85	0.85	0.85		0.82	0.82	0.82			
50.000	$P_1$		1.21	1.21	1.21		0.69	0.69	0.69		0.36	0.36	0.36		
	$M_2$		163	163	163		180	180	180		180	180	180		
	$\eta$		0.79	0.79	0.79		0.77	0.77	0.77		0.74	0.74	0.74		
54.250	$P_1$		1.17	1.17	1.17		0.62	0.62	0.62		0.32	0.32	0.32		
	$M_2$		175	175	175		180	180	180		180	180	180		
	$\eta$		0.81	0.81	0.81		0.79	0.79	0.79		0.75	0.75	0.75		
61.250	$P_1$		1.06	1.06	1.06		0.57	0.57	0.57		0.30	0.30	0.30		
	$M_2$		174	174	174		180	180	180		180	180	180		
	$\eta$		0.79	0.79	0.79		0.76	0.76	0.76		0.73	0.73	0.73		
68.200	$P_1$	0.97	0.97	0.97		0.50	0.50	0.50		0.26	0.26	0.26			
	$M_2$	180	180	180		180	180	180		180	180	180			
	$\eta$	0.80	0.80	0.80		0.78	0.78	0.78		0.74	0.74	0.74			
77.000	$P_1$	0.88	0.88	0.88		0.46	0.46	0.46		0.24	0.24	0.24			
	$M_2$	180	180	180		180	180	180		180	180	180			
	$\eta$	0.78	0.78	0.78		0.75	0.75	0.75		0.72	0.72	0.72			
87.833	$P_1$	0.76	0.76	0.76		0.39	0.39	0.39		0.21	0.21	0.21			
	$M_2$	180	180	180		180	180	180		180	180	180			
	$\eta$	0.79	0.79	0.79		0.76	0.76	0.76		0.73	0.73	0.73			
99.167	$P_1$	0.69	0.69	0.69		0.36	0.36	0.36		0.19	0.19	0.19			
	$M_2$	180	180	180		180	180	180		180	180	180			
	$\eta$	0.77	0.77	0.77		0.74	0.74	0.74		0.70	0.70	0.70			
111.318	$P_1$	0.60	0.60			0.32	0.32			0.17	0.17				
	$M_2$	180	180			180	180			180	180				
	$\eta$	0.79	0.79			0.75	0.75			0.71	0.71				
125.682	$P_1$	0.55	0.55			0.29	0.29			0.15	0.15				
	$M_2$	180	180			180	180			180	180				
	$\eta$	0.76	0.76			0.73	0.73			0.68	0.68				
139.500	$P_1$	0.49	0.49			0.26	0.26			0.14	0.14				
	$M_2$	180	180			180	180			180	180				
	$\eta$	0.78	0.78			0.74	0.74			0.69	0.69				
157.500	$P_1$	0.45	0.45			0.24	0.24			0.13	0.13				
	$M_2$	180	180			180	180			180	180				
	$\eta$	0.75	0.75			0.71	0.71			0.67	0.67				
183.786	$P_1$	0.38				0.20				0.10					
	$M_2$	180				180				169					
	$\eta$	0.76				0.73				0.67					
207.500	$P_1$	0.35				0.18				0.10					
	$M_2$	180				180				180					
	$\eta$	0.74				0.70				0.64					

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 360 \text{ Nm}$

<b>GSS 05 - 2 N</b>														Dimensions page 7-79			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>							
IEC connection		71	71 100/112	80 71	90 80	100/112	71 80/90	80 71	90 80	100/112	71 80/90	80 80	90 80/90				
For the geometrical assignment of servo/DC motors see section 2																	
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E				
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																
5.639	$P_1$			4.62	7.85			2.31	5.68			1.54	2.84				
	$M_2$			80	136			81	199			108	200				
	$\eta$			0.90	0.90			0.91	0.91			0.92	0.92				
7.733	$P_1$			4.62	7.13			2.31	5.54			1.54	2.77				
	$M_2$			110	170			111	267			149	268				
	$\eta$			0.91	0.91			0.91	0.91			0.92	0.92				
9.042	$P_1$			4.62	6.00			2.31	4.60			1.54	2.84				
	$M_2$			124	161			126	251			169	311				
	$\eta$			0.87	0.87			0.89	0.89			0.89	0.89				
9.897	$P_1$		3.74	4.62	6.63		1.87	2.31	4.39		1.25	1.54	2.19				
	$M_2$		115	142	203		116	143	271		149	184	263				
	$\eta$		0.91	0.91	0.91		0.92	0.92	0.92		0.89	0.89	0.89				
10.827	$P_1$	2.75	3.74	4.62	6.45	1.37	1.87	2.31	4.03	0.73	1.25	1.54	2.01				
	$M_2$	92	126	155	217	93	126	156	272	96	165	204	267				
	$\eta$	0.91	0.91	0.91	0.91	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90				
12.400	$P_1$			4.62	5.86			2.31	3.71			1.54	2.36				
	$M_2$			172	218			173	279			231	354				
	$\eta$			0.88	0.88			0.89	0.89			0.89	0.89				
13.810	$P_1$	2.75	3.74	4.62	6.01	1.37	1.87	2.31	3.18	0.77	1.20	1.54	1.59				
	$M_2$	118	161	199	258	119	161	199	275	133	207	264	273				
	$\eta$	0.91	0.91	0.91	0.91	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.91				
15.869	$P_1$		3.74	4.62	4.95		1.87	2.31	3.14		1.25	1.54	1.87				
	$M_2$		179	221	237		180	222	301		239	296	360				
	$\eta$		0.88	0.88	0.88		0.89	0.89	0.89		0.89	0.89	0.89				
17.360	$P_1$	2.75	3.74	4.62	4.67	1.37	1.87	2.31	2.96	0.73	1.25	1.54	1.71				
	$M_2$	144	196	242	245	144	196	243	311	153	262	323	360				
	$\eta$	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89				
20.417	$P_1$			3.21	3.21			2.26	2.26			1.46	1.46				
	$M_2$			175	175			253	253			330	330				
	$\eta$			0.79	0.79			0.81	0.81			0.81	0.81				
22.143	$P_1$	2.75	3.74	3.97	3.97	1.37	1.87	2.31	2.51	0.77	1.20	1.35	1.35				
	$M_2$	184	250	266	266	184	251	310	337	207	322	360	360				
	$\eta$	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89				
24.800	$P_1$			3.11	3.11			2.01	2.01			1.29	1.29				
	$M_2$			214	214			280	280			360	360				
	$\eta$			0.81	0.81			0.82	0.82			0.82	0.82				
27.125	$P_1$		3.46	3.46	3.46		1.87	2.19	2.19		1.03	1.10	1.10				
	$M_2$		284	284	284		307	360	360		337	360	360				
	$\eta$		0.89	0.89	0.89		0.89	0.89	0.89		0.88	0.88	0.88				
31.738	$P_1$		2.65	2.65	2.65		1.71	1.71	1.71		1.01	1.01	1.01				
	$M_2$		235	235	235		305	305	305		360	360	360				
	$\eta$		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82				
35.306	$P_1$	2.13	2.90	2.90		1.07	1.66	1.69		0.53	0.83	0.86					
	$M_2$	228	310	310		228	354	360		224	349	360					
	$\eta$	0.89	0.89	0.89		0.89	0.89	0.89		0.87	0.87	0.87					
39.200	$P_1$	2.31	2.31	2.31	2.31	1.37	1.49	1.49	1.49	0.73	0.83	0.83	0.83				
	$M_2$	248	248	248	248	298	323	323	323	315	360	360	360				
	$\eta$	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_{2\text{ perm}} \leq 360 \text{ Nm}$

GSS 05 - 2 N													Dimensions page 7-79		
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		71	71 100/112	80 71	90 80	100/112	71 80/90	80 71	90 80	100/112	71 80/90	80 80	90 80/90		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E		
i	$P_{1\text{ perm}}$ [kW] $M_{2\text{ perm}}$ [Nm]														
43.917	$P_1$	1.78	2.51	2.51		0.89	1.36	1.36		0.45	0.69	0.70			
	$M_2$	237	334	334		237	360	360		231	358	360			
	$\eta$	0.89	0.89	0.89		0.89	0.89	0.89		0.86	0.86	0.86			
50.000	$P_1$	1.97	1.97	1.97	1.97	1.28	1.28	1.28	1.28	0.66	0.66	0.66	0.66		
	$M_2$	272	272	272	272	353	353	353	353	360	360	360	360		
	$\eta$	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.80	0.80	0.80	0.80		
54.250	$P_1$		1.89	1.89	1.89		1.18	1.18	1.18		0.60	0.60	0.60		
	$M_2$		288	288	288		360	360	360		360	360	360		
	$\eta$		0.82	0.82	0.82		0.82	0.82	0.82		0.81	0.81	0.81		
61.250	$P_1$		1.74	1.74	1.74		1.06	1.06	1.06		0.54	0.54	0.54		
	$M_2$		293	293	293		360	360	360		360	360	360		
	$\eta$		0.81	0.81	0.81		0.81	0.81	0.81		0.79	0.79	0.79		
70.611	$P_1$	1.59	1.59	1.59		0.91	0.91	0.91		0.47	0.47	0.47			
	$M_2$	316	316	316		360	360	360		360	360	360			
	$\eta$	0.82	0.82	0.82		0.82	0.82	0.82		0.80	0.80	0.80			
79.722	$P_1$	1.47	1.47	1.47		0.82	0.82	0.82		0.43	0.43	0.43			
	$M_2$	323	323	323		360	360	360		360	360	360			
	$\eta$	0.81	0.81	0.81		0.81	0.81	0.81		0.78	0.78	0.78			
87.833	$P_1$	1.39	1.39	1.39		0.73	0.73	0.73		0.38	0.38	0.38			
	$M_2$	342	342	342		360	360	360		360	360	360			
	$\eta$	0.82	0.82	0.82		0.82	0.82	0.82		0.79	0.79	0.79			
99.167	$P_1$	1.28	1.28	1.28		0.66	0.66	0.66		0.35	0.35	0.35			
	$M_2$	350	350	350		360	360	360		360	360	360			
	$\eta$	0.81	0.81	0.81		0.80	0.80	0.80		0.77	0.77	0.77			
113.667	$P_1$	1.13	1.13			0.57	0.57			0.30	0.30				
	$M_2$	360	360			360	360			360	360				
	$\eta$	0.83	0.83			0.81	0.81			0.77	0.77				
128.333	$P_1$	1.02	1.02			0.52	0.52			0.28	0.28				
	$M_2$	360	360			360	360			360	360				
	$\eta$	0.81	0.81			0.79	0.79			0.75	0.75				
137.950	$P_1$	0.93	0.93			0.48	0.48			0.26	0.26				
	$M_2$	360	360			360	360			360	360				
	$\eta$	0.82	0.82			0.80	0.80			0.75	0.75				
155.750	$P_1$	0.84	0.84			0.44	0.44			0.23	0.23				
	$M_2$	360	360			360	360			360	360				
	$\eta$	0.81	0.81			0.78	0.78			0.73	0.73				
176.313	$P_1$	0.73				0.38				0.20					
	$M_2$	360				360				352					
	$\eta$	0.82				0.79				0.73					
199.063	$P_1$	0.66				0.35				0.19					
	$M_2$	360				360				360					
	$\eta$	0.80				0.77				0.71					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 360 \text{ Nm}$

GSS 05 - 3 N										Dimensions page 7-83		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		63	71 63	80 71	63	71 63	80 71	63	71 63	80 71		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		1A	□B	□C	1A	□B	□C	1A	□B	□C		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
125.476	P <sub>1</sub>		0.77	0.77		0.48	0.48		0.24	0.24		
	M <sub>2</sub>		285	285		339	339		319	319		
	η		0.86	0.86		0.83	0.83		0.78	0.78		
153.708	P <sub>1</sub>		0.67	0.67		0.41	0.41		0.21	0.21		
	M <sub>2</sub>		302	302		356	356		334	334		
	η		0.86	0.86		0.82	0.82		0.77	0.77		
193.233	P <sub>1</sub>	0.58	0.58	0.58	0.34	0.34	0.34	0.18	0.18	0.18		
	M <sub>2</sub>	321	321	321	360	360	360	353	353	353		
	η	0.85	0.85	0.85	0.80	0.80	0.80	0.75	0.75	0.75		
222.133	P <sub>1</sub>		0.61	0.61		0.32	0.32		0.17	0.17		
	M <sub>2</sub>		360	360		360	360		360	360		
	η		0.79	0.79		0.75	0.75		0.68	0.68		
250.952	P <sub>1</sub>		0.53	0.53		0.28	0.28		0.15	0.15		
	M <sub>2</sub>		360	360		360	360		360	360		
	η		0.79	0.79		0.75	0.75		0.68	0.68		
283.333	P <sub>1</sub>		0.48	0.48		0.26	0.26		0.14	0.14		
	M <sub>2</sub>		360	360		360	360		360	360		
	η		0.77	0.77		0.73	0.73		0.66	0.66		
307.417	P <sub>1</sub>		0.44	0.44		0.24	0.24		0.13	0.13		
	M <sub>2</sub>		360	360		360	360		360	360		
	η		0.78	0.78		0.73	0.73		0.66	0.66		
347.083	P <sub>1</sub>		0.40	0.40		0.22	0.22		0.12	0.12		
	M <sub>2</sub>		360	360		360	360		360	360		
	η		0.76	0.76		0.71	0.71		0.64	0.64		
386.467	P <sub>1</sub>	0.36	0.36	0.36	0.19	0.19	0.19	0.11	0.11	0.11		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	η	0.77	0.77	0.77	0.71	0.71	0.71	0.64	0.64	0.64		
436.333	P <sub>1</sub>	0.32	0.32	0.32	0.18	0.18	0.18	0.10	0.10	0.10		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	η	0.75	0.75	0.75	0.69	0.69	0.69	0.62	0.62	0.62		
497.722	P <sub>1</sub>	0.28	0.28	0.28	0.16	0.16	0.16	0.09	0.09	0.09		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	η	0.75	0.75	0.75	0.68	0.68	0.68	0.62	0.62	0.62		
561.945	P <sub>1</sub>	0.26	0.26	0.26	0.14	0.14	0.14	0.08	0.08	0.08		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	η	0.73	0.73	0.73	0.66	0.66	0.66	0.60	0.60	0.60		
630.803	P <sub>1</sub>	0.23	0.23		0.13	0.13		0.07	0.07			
	M <sub>2</sub>	360	360		360	360		360	360			
	η	0.73	0.73		0.66	0.66		0.60	0.60			
712.197	P <sub>1</sub>	0.21	0.21		0.12	0.12		0.06	0.06			
	M <sub>2</sub>	360	360		360	360		360	360			
	η	0.71	0.71		0.64	0.64		0.58	0.58			
790.500	P <sub>1</sub>	0.19	0.19		0.10	0.10		0.06	0.06			
	M <sub>2</sub>	360	360		360	360		360	360			
	η	0.71	0.71		0.64	0.64		0.58	0.58			
892.500	P <sub>1</sub>	0.17	0.17		0.10	0.10		0.05	0.05			
	M <sub>2</sub>	360	360		360	360		360	360			
	η	0.68	0.68		0.62	0.62		0.55	0.55			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 360 \text{ Nm}$

<b>GSS 05 - 3 N</b>										Dimensions page 7-83		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
IEC connection		63	71 63	80 71	63	71 63	80 71	63	71 63	80 71		
For the geometrical assignment of servo/DC motors see section 2												
Drive size		1A	□B	□C	1A	□B	□C	1A	□B	□C		
i	P <sub>1perm</sub> [kW]											
	M <sub>2perm</sub> [Nm]											
1041.452	P <sub>1</sub>	0.15			0.08			0.05				
	M <sub>2</sub>	360			360			360				
	η	0.68			0.61			0.55				
1175.833	P <sub>1</sub>	0.14			0.08			0.04				
	M <sub>2</sub>	360			360			360				
	η	0.66			0.59			0.53				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 720 \text{ Nm}$

GSS 06 - 2 N															Dimensions page 7-79				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F			
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																		
5.833	P <sub>1</sub>				10.5	10.5				6.60	6.60				4.40	4.40			
	M <sub>2</sub>				190	190				241	241				323	323			
	η				0.91	0.91				0.92	0.92				0.92	0.92			
8.000	P <sub>1</sub>				10.7	10.7				6.60	6.60				4.40	4.40			
	M <sub>2</sub>				267	267				331	331				443	443			
	η				0.91	0.91				0.92	0.92				0.92	0.92			
9.042	P <sub>1</sub>				9.17	9.17				6.60	6.60				4.40	4.40			
	M <sub>2</sub>				254	254				365	365				484	484			
	η				0.90	0.90				0.90	0.90				0.89	0.89			
10.238	P <sub>1</sub>			4.62	10.2	10.2			2.31	6.60	6.60			1.54	4.01	4.06			
	M <sub>2</sub>			148	326	326			149	424	424			193	504	510			
	η			0.92	0.92	0.92			0.92	0.92	0.92			0.90	0.90	0.90			
11.200	P <sub>1</sub>			4.62	9.90	9.90			2.31	6.60	6.60			1.54	3.72	3.72			
	M <sub>2</sub>			162	347	347			163	464	464			214	517	517			
	η			0.92	0.92	0.92			0.92	0.92	0.92			0.91	0.91	0.91			
12.400	P <sub>1</sub>				8.37	8.37				6.60	6.60				4.40	4.40			
	M <sub>2</sub>				318	318				500	500				659	659			
	η				0.90	0.90				0.90	0.90				0.89	0.89			
14.286	P <sub>1</sub>		3.74	4.62	10.2	10.2		1.87	2.31	5.88	5.88		1.25	1.54	2.94	2.94			
	M <sub>2</sub>		167	207	456	456		168	208	528	528		223	276	527	527			
	η		0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92			
15.869	P <sub>1</sub>			4.62	7.81	7.81			2.31	6.26	6.26			1.54	3.77	3.77			
	M <sub>2</sub>			225	380	380			223	605	605			294	720	720			
	η			0.90	0.90	0.90			0.89	0.89	0.89			0.88	0.88	0.88			
17.360	P <sub>1</sub>			4.62	7.62	7.62			2.31	5.90	5.90			1.54	3.45	3.45			
	M <sub>2</sub>			246	405	405			244	624	624			321	720	720			
	η			0.90	0.90	0.90			0.89	0.89	0.89			0.88	0.88	0.88			
20.417	P <sub>1</sub>				5.17	5.17				4.23	4.23				2.86	2.86			
	M <sub>2</sub>				299	299				488	488				650	650			
	η				0.83	0.83				0.83	0.83				0.82	0.82			
22.143	P <sub>1</sub>		3.74	4.62	7.12	7.12		1.87	2.31	5.02	5.02		1.25	1.54	2.73	2.73			
	M <sub>2</sub>		253	313	482	482		251	310	673	673		329	406	720	720			
	η		0.90	0.90	0.90	0.90		0.89	0.89	0.89	0.89		0.87	0.87	0.87	0.87			
24.800	P <sub>1</sub>				4.92	4.92				3.98	3.98				2.58	2.58			
	M <sub>2</sub>				350	350				561	561				715	715			
	η				0.84	0.84				0.83	0.83				0.82	0.82			
27.125	P <sub>1</sub>			4.62	6.74	6.74			2.31	4.38	4.38			1.54	2.24	2.24			
	M <sub>2</sub>			382	558	558			378	718	718			494	720	720			
	η			0.90	0.90	0.90			0.89	0.89	0.89			0.87	0.87	0.87			
31.738	P <sub>1</sub>			4.60	4.60	4.60			2.31	3.40	3.40			1.54	2.05	2.05			
	M <sub>2</sub>			418	418	418			414	609	609			541	720	720			
	η			0.84	0.84	0.84			0.83	0.83	0.83			0.81	0.81	0.81			
35.306	P <sub>1</sub>		3.74	4.62	5.79			1.87	2.31	3.40			1.02	1.36	1.74				
	M <sub>2</sub>		402	496	622			396	489	720			423	563	720				
	η		0.89	0.89	0.89			0.88	0.88	0.88			0.86	0.86	0.86				
39.200	P <sub>1</sub>			4.28	4.28	4.28			2.31	2.91	2.91			1.54	1.69	1.69			
	M <sub>2</sub>			474	474	474			505	637	637			657	720	720			
	η			0.83	0.83	0.83			0.82	0.82	0.82			0.80	0.80	0.80			

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 720 \text{ Nm}$

GSS 06 - 2 N															Dimensions page 7-79				
$n_1$		2800 min <sup>-1</sup>					1400 min <sup>-1</sup>					700 min <sup>-1</sup>							
IEC connection		71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90	71	80 71	90 80	100/112 80/90	100/112 90			
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		1B	□C	□D	□E	□F	1B	□C	□D	□E	□F	1B	□C	□D	□E	□F			
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]																		
	43.917	$P_1$	3.42	4.55	5.01			1.71	2.27	2.75			0.86	1.14	1.41				
	$M_2$	455	605	666			448	595	720			436	580	720					
	$\eta$	0.89	0.89	0.89			0.87	0.87	0.87			0.85	0.85	0.85					
50.000	$P_1$	3.74	3.86	3.86	3.86		1.87	2.31	2.50	2.50		1.25	1.34	1.34	1.34				
	$M_2$	527	544	544	544		519	641	693	693		669	720	720	720				
	$\eta$	0.83	0.83	0.83	0.83		0.81	0.81	0.81	0.81		0.79	0.79	0.79	0.79				
54.250	$P_1$		3.74	3.74	3.74			2.31	2.38	2.38			1.23	1.23	1.23				
	$M_2$		576	576	576			699	720	720			720	720	720				
	$\eta$		0.83	0.83	0.83			0.82	0.82	0.82			0.79	0.79	0.79				
61.250	$P_1$		3.39	3.39	3.39			2.13	2.13	2.13			1.11	1.11	1.11				
	$M_2$		584	584	584			720	720	720			720	720	720				
	$\eta$		0.82	0.82	0.82			0.81	0.81	0.81			0.78	0.78	0.78				
70.611	$P_1$	3.16	3.16	3.16			1.85	1.85	1.85			0.96	0.96	0.96					
	$M_2$	630	630	630			720	720	720			720	720	720					
	$\eta$	0.83	0.83	0.83			0.81	0.81	0.81			0.78	0.78	0.78					
79.722	$P_1$	2.87	2.87	2.87			1.66	1.66	1.66			0.86	0.86	0.86					
	$M_2$	638	638	638			720	720	720			720	720	720					
	$\eta$	0.82	0.82	0.82			0.80	0.80	0.80			0.77	0.77	0.77					
87.833	$P_1$	2.76	2.76	2.76			1.50	1.50	1.50			0.78	0.78	0.78					
	$M_2$	680	680	680			720	720	720			720	720	720					
	$\eta$	0.82	0.82	0.82			0.80	0.80	0.80			0.77	0.77	0.77					
99.167	$P_1$	2.50	2.50	2.50			1.35	1.35	1.35			0.71	0.71	0.71					
	$M_2$	688	688	688			720	720	720			720	720	720					
	$\eta$	0.81	0.81	0.81			0.79	0.79	0.79			0.76	0.76	0.76					
113.667	$P_1$	1.76	2.28	2.28			0.88	1.18	1.18			0.44	0.61	0.61					
	$M_2$	558	720	720			538	720	720			517	720	720					
	$\eta$	0.82	0.82	0.82			0.79	0.79	0.79			0.76	0.76	0.76					
128.333	$P_1$	1.76	2.04	2.04			0.88	1.06	1.06			0.44	0.55	0.55					
	$M_2$	622	720	720			598	720	720			573	720	720					
	$\eta$	0.81	0.81	0.81			0.78	0.78	0.78			0.74	0.74	0.74					
137.950	$P_1$	1.47	1.89	1.89			0.74	0.98	0.98			0.37	0.51	0.51					
	$M_2$	560	720	720			540	720	720			517	720	720					
	$\eta$	0.81	0.81	0.81			0.78	0.78	0.78			0.75	0.75	0.75					
155.750	$P_1$	1.47	1.70	1.70			0.74	0.88	0.88			0.37	0.46	0.46					
	$M_2$	624	720	720			600	720	720			572	720	720					
	$\eta$	0.80	0.80	0.80			0.77	0.77	0.77			0.73	0.73	0.73					
174.375	$P_1$	1.18	1.52				0.59	0.79				0.30	0.41						
	$M_2$	561	720				538	720				513	720						
	$\eta$	0.80	0.80				0.77	0.77				0.73	0.73						
196.875	$P_1$	1.18	1.36				0.59	0.71				0.30	0.38						
	$M_2$	624	720				598	720				566	720						
	$\eta$	0.79	0.79				0.76	0.76				0.72	0.72						

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 720 \text{ Nm}$

GSS 06 - 3 N												Dimensions page 7-83			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
126.531	$P_1$		2.15	2.15	2.15		1.12	1.12	1.12		0.58	0.58	0.58		
	$M_2$		720	720	720		720	720	720		720	720	720		
	$\eta$		0.78	0.78	0.78		0.75	0.75	0.75		0.72	0.72	0.72		
142.857	$P_1$		1.93	1.93	1.93		1.01	1.01	1.01		0.53	0.53	0.53		
	$M_2$		720	720	720		720	720	720		720	720	720		
	$\eta$		0.77	0.77	0.77		0.73	0.73	0.73		0.70	0.70	0.70		
155.000	$P_1$		1.77	1.77	1.77		0.92	0.92	0.92		0.48	0.48	0.48		
	$M_2$		720	720	720		720	720	720		720	720	720		
	$\eta$		0.77	0.77	0.77		0.74	0.74	0.74		0.71	0.71	0.71		
175.000	$P_1$		1.59	1.59	1.59		0.83	0.83	0.83		0.44	0.44	0.44		
	$M_2$		720	720	720		720	720	720		720	720	720		
	$\eta$		0.76	0.76	0.76		0.73	0.73	0.73		0.69	0.69	0.69		
194.857	$P_1$	1.29	1.43	1.43		0.65	0.74	0.74		0.32	0.39	0.39			
	$M_2$	652	720	720		626	720	720		593	720	720			
	$\eta$	0.76	0.76	0.76		0.73	0.73	0.73		0.69	0.69	0.69			
220.000	$P_1$	1.28	1.28	1.28		0.65	0.67	0.67		0.32	0.36	0.36			
	$M_2$	720	720	720		697	720	720		653	720	720			
	$\eta$	0.75	0.75	0.75		0.72	0.72	0.72		0.67	0.67	0.67			
238.700	$P_1$	1.18	1.18	1.18		0.61	0.61	0.61		0.32	0.33	0.33			
	$M_2$	720	720	720		720	720	720		711	720	720			
	$\eta$	0.75	0.75	0.75		0.72	0.72	0.72		0.68	0.68	0.68			
269.500	$P_1$	1.06	1.06	1.06		0.55	0.55	0.55		0.30	0.30	0.30			
	$M_2$	720	720	720		720	720	720		720	720	720			
	$\eta$	0.74	0.74	0.74		0.71	0.71	0.71		0.66	0.66	0.66			
310.689	$P_1$	0.92	0.92	0.92		0.48	0.48	0.48		0.26	0.26	0.26			
	$M_2$	720	720	720		720	720	720		720	720	720			
	$\eta$	0.74	0.74	0.74		0.71	0.71	0.71		0.66	0.66	0.66			
350.778	$P_1$	0.83	0.83	0.83		0.44	0.44	0.44		0.24	0.24	0.24			
	$M_2$	720	720	720		720	720	720		720	720	720			
	$\eta$	0.73	0.73	0.73		0.69	0.69	0.69		0.64	0.64	0.64			
386.467	$P_1$	0.75	0.75	0.75		0.40	0.40	0.40		0.21	0.21	0.21			
	$M_2$	720	720	720		720	720	720		720	720	720			
	$\eta$	0.73	0.73	0.73		0.69	0.69	0.69		0.64	0.64	0.64			
436.333	$P_1$	0.67	0.67	0.67		0.36	0.36	0.36		0.19	0.19	0.19			
	$M_2$	720	720	720		720	720	720		720	720	720			
	$\eta$	0.72	0.72	0.72		0.67	0.67	0.67		0.63	0.63	0.63			
497.722	$P_1$	0.59	0.59	0.59		0.32	0.32	0.32		0.17	0.17	0.17			
	$M_2$	720	720	720		720	720	720		720	720	720			
	$\eta$	0.72	0.72	0.72		0.67	0.67	0.67		0.63	0.63	0.63			
561.945	$P_1$	0.53	0.53	0.53		0.29	0.29	0.29		0.15	0.15	0.15			
	$M_2$	720	720	720		720	720	720		720	720	720			
	$\eta$	0.71	0.71	0.71		0.66	0.66	0.66		0.62	0.62	0.62			
630.803	$P_1$	0.48	0.48			0.26	0.26			0.14	0.14				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.71	0.71			0.66	0.66			0.62	0.62				
712.197	$P_1$	0.43	0.43			0.23	0.23			0.12	0.12				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.69	0.69			0.64	0.64			0.60	0.60				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 720 \text{ Nm}$

GSS 06 - 3 N												Dimensions page 7-83			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		63	71 63	80 71	90 80	63	71 63	80 71	90 80	63	71 63	80 71	90 80		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1A	□B	□C	□D	1A	□B	□C	□D	1A	□B	□C	□D		
i	$P_{1\text{perm}}$ [kW]														
	$M_{2\text{perm}}$ [Nm]														
816.333	$P_1$	0.38	0.38			0.20	0.20			0.11	0.11				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.69	0.69			0.64	0.64			0.61	0.61				
921.667	$P_1$	0.34	0.34			0.18	0.18			0.10	0.10				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.67	0.67			0.63	0.63			0.60	0.60				
1023.000	$P_1$	0.31	0.31			0.17	0.17			0.09	0.09				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.67	0.67			0.63	0.63			0.60	0.60				
1155.000	$P_1$	0.28	0.28			0.15	0.15			0.08	0.08				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.65	0.65			0.61	0.61			0.59	0.59				
1241.550	$P_1$	0.26	0.26			0.14	0.14			0.07	0.07				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.66	0.66			0.62	0.62			0.59	0.59				
1401.750	$P_1$	0.24	0.24			0.12	0.12			0.07	0.07				
	$M_2$	720	720			720	720			720	720				
	$\eta$	0.64	0.64			0.61	0.61			0.58	0.58				
1635.693	$P_1$	0.20				0.11				0.06					
	$M_2$	720				720				720					
	$\eta$	0.64				0.61				0.59					
1846.750	$P_1$	0.18				0.10				0.05					
	$M_2$	720				720				720					
	$\eta$	0.63				0.60				0.58					

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors

$M_2 \text{ perm} \leq 1250 \text{ Nm}$

GSS 07 - 2 N													Dimensions page 7-79								
$n_1$		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>						700 min <sup>-1</sup>							
IEC connection		80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160		
		71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132		
For the geometrical assignment of servo/DC motors see section 2																					
Drive size		OC	OD	OE	OF	OG	OH	OC	OD	OE	OF	OG	OH	OC	OD	OE	OF	OG	OH		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																				
5.862	P <sub>1</sub>	13.2 17.6 17.6						6.60 14.6 14.6						4.40 11.2 12.1							
	M <sub>2</sub>	243 324 324						244 539 539						327 830 896							
	η	0.92 0.92 0.92						0.93 0.93 0.93						0.93 0.93 0.93							
8.125	P <sub>1</sub>	13.2 16.1 16.1						6.60 13.3 13.3						4.40 10.5 10.5							
	M <sub>2</sub>	338 412 412						339 685 685						453 1079 1079							
	η	0.92 0.92 0.92						0.93 0.93 0.93						0.93 0.93 0.93							
9.086	P <sub>1</sub>	13.2 14.7 14.7						6.60 11.2 11.2						4.40 9.38 9.38							
	M <sub>2</sub>	370 412 412						370 628 628						491 1047 1047							
	η	0.90 0.90 0.90						0.90 0.90 0.90						0.90 0.90 0.90							
10.000	P <sub>1</sub>	13.2 13.2 15.2 15.2						6.60 6.60 12.6 12.6						4.40 4.40 8.58 8.58							
	M <sub>2</sub>	416 416 480 480						418 418 797 797						547 547 1067 1067							
	η	0.93 0.93 0.93 0.93						0.93 0.93 0.93 0.93						0.91 0.91 0.91 0.91							
11.200	P <sub>1</sub>	13.2 13.2 14.7 14.7						6.60 6.60 12.2 12.2						4.40 4.40 7.70 7.70							
	M <sub>2</sub>	467 467 521 521						468 468 866 866						618 618 1083 1083							
	η	0.93 0.93 0.93 0.93						0.93 0.93 0.93 0.93						0.92 0.92 0.92 0.92							
12.594	P <sub>1</sub>	12.6 12.6 12.6						6.60 10.3 10.3						4.40 8.12 8.12							
	M <sub>2</sub>	490 490 490						512 799 799						677 1250 1250							
	η	0.91 0.91 0.91						0.90 0.90 0.90						0.90 0.90 0.90							
14.286	P <sub>1</sub>	4.62	13.2	13.2	13.8							2.31	6.60	6.60	11.4						
	M <sub>2</sub>	209	596	596	623							209	598	598	1036						
	η	0.93	0.93	0.93	0.93							0.93	0.93	0.93	0.93						
15.500	P <sub>1</sub>	11.7 11.7 11.7 11.7						6.60 6.60 9.76 9.76						4.40 4.40 6.61 6.61							
	M <sub>2</sub>	559 559 559 559						629 629 931 931						831 831 1250 1250							
	η	0.91 0.91 0.91 0.91						0.90 0.90 0.90 0.90						0.89 0.89 0.89 0.89							
17.360	P <sub>1</sub>	11.3 11.3 11.3 11.3						6.60 6.60 9.48 9.48						4.40 4.40 5.92 5.92							
	M <sub>2</sub>	607 607 607 607						704 704 1012 1012						929 929 1250 1250							
	η	0.90 0.90 0.90 0.90						0.90 0.90 0.90 0.90						0.89 0.89 0.89 0.89							
20.517	P <sub>1</sub>	8.47 8.47 8.47						6.46 6.46 6.46						4.40 5.12 5.12							
	M <sub>2</sub>	500 500 500						764 764 764						1032 1201 1201							
	η	0.84 0.84 0.84						0.85 0.85 0.85						0.84 0.84 0.84							
22.143	P <sub>1</sub>	4.62	10.7	10.7	10.7							2.31	6.60	6.60	8.93						
	M <sub>2</sub>	315	727	727	727							313	894	894	1211						
	η	0.90	0.90	0.90	0.90							0.90	0.90	0.90	0.90						
25.188	P <sub>1</sub>	7.64 7.64 7.64						6.25 6.25 6.25						4.33 4.33 4.33							
	M <sub>2</sub>	559 559 559						913 913 913						1250 1250 1250							
	η	0.85 0.85 0.85						0.85 0.85 0.85						0.84 0.84 0.84							
27.125	P <sub>1</sub>	10.1 10.1 10.1						6.60 6.60 7.54						3.41 3.58 3.83							
	M <sub>2</sub>	844 844 844						1093 1093 1250						1113 1168 1250							
	η	0.90 0.90 0.90						0.90 0.90 0.90						0.88 0.88 0.88							
31.000	P <sub>1</sub>	7.07 7.07 7.07 7.07						5.94 5.94 5.94 5.94						3.54 3.54 3.54 3.54							
	M <sub>2</sub>	637 637 637 637						1065 1065 1065 1065						1250 1250 1250 1250							
	η	0.85 0.85 0.85 0.85						0.85 0.85 0.85 0.85						0.84 0.84 0.84 0.84							
35.306	P <sub>1</sub>	4.62	9.45	9.45							2.31	5.49	5.75								
	M <sub>2</sub>	501	1025	1025							496	1179	1235								
	η	0.90	0.90	0.90							0.89	0.89	0.89								
39.200	P <sub>1</sub>	6.54 6.54 6.54 6.54						5.24 5.24 5.24 5.24						2.84 2.84 2.84 2.84							
	M <sub>2</sub>	739 739 739 739						1175 1175 1175 1175						1250 1250 1250 1250							
	η	0.85 0.85 0.85 0.85						0.84 0.84 0.84 0.84						0.82 0.82 0.82 0.82							

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



**M<sub>2</sub> perm ≤ 1250 Nm**

GSS 07 - 2 N													Dimensions page 7-79						
n <sub>1</sub>		2800 min <sup>-1</sup>						1400 min <sup>-1</sup>					700 min <sup>-1</sup>						
IEC connection		80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160	80	90	100/112	100/112	132	160
		71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132	71	80	80/90	90	100/112	132
For the geometrical assignment of servo/DC motors see section 2																			
Drive size		□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H	□C	□D	□E	□F	□G	□H
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]																		
43.271	P <sub>1</sub>	4.62	8.98	8.98				2.31	4.70	4.77				1.43	2.35	2.44			
	M <sub>2</sub>	612	1190	1190				605	1231	1250				734	1207	1250			
	η	0.90	0.90	0.90				0.89	0.89	0.89				0.87	0.87	0.87			
50.000	P <sub>1</sub>	4.62	6.14	6.14	6.14			2.31	4.39	4.39	4.39			1.54	2.25	2.25	2.25		
	M <sub>2</sub>	664	882	882	882			657	1250	1250	1250			855	1250	1250	1250		
	η	0.84	0.84	0.84	0.84			0.84	0.84	0.84	0.84			0.81	0.81	0.81	0.81		
54.250	P <sub>1</sub>		6.14	6.14	6.14				4.03	4.03	4.03				2.07	2.07	2.07		
	M <sub>2</sub>		965	965	965				1250	1250	1250				1250	1250	1250		
	η		0.85	0.85	0.85				0.84	0.84	0.84				0.82	0.82	0.82		
61.250	P <sub>1</sub>		5.82	5.82	5.82				3.60	3.60	3.60				1.86	1.86	1.86		
	M <sub>2</sub>		1023	1023	1023				1250	1250	1250				1250	1250	1250		
	η		0.84	0.84	0.84				0.83	0.83	0.83				0.81	0.81	0.81		
70.611	P <sub>1</sub>	4.62	5.69	5.69				2.31	3.12	3.12				1.54	1.60	1.60			
	M <sub>2</sub>	943	1161	1161				924	1250	1250				1201	1250	1250			
	η	0.85	0.85	0.85				0.83	0.83	0.83				0.81	0.81	0.81			
79.722	P <sub>1</sub>	4.62	5.16	5.16				2.31	2.79	2.79				1.44	1.44	1.44			
	M <sub>2</sub>	1053	1177	1177				1033	1250	1250				1250	1250	1250			
	η	0.84	0.84	0.84				0.82	0.82	0.82				0.80	0.80	0.80			
86.542	P <sub>1</sub>	4.62	5.01	5.01				2.31	2.57	2.57				1.32	1.32	1.32			
	M <sub>2</sub>	1151	1248	1248				1124	1250	1250				1250	1250	1250			
	η	0.84	0.84	0.84				0.82	0.82	0.82				0.80	0.80	0.80			
97.708	P <sub>1</sub>	4.49	4.49	4.49				2.30	2.30	2.30				1.19	1.19	1.19			
	M <sub>2</sub>	1250	1250	1250				1250	1250	1250				1250	1250	1250			
	η	0.84	0.84	0.84				0.82	0.82	0.82				0.79	0.79	0.79			
113.667	P <sub>1</sub>	3.37	3.85	3.85				1.69	1.98	1.98				0.84	1.03	1.03			
	M <sub>2</sub>	1094	1250	1250				1066	1250	1250				1026	1250	1250			
	η	0.84	0.84	0.84				0.82	0.82	0.82				0.79	0.79	0.79			
128.333	P <sub>1</sub>	3.37	3.44	3.44				1.69	1.78	1.78				0.84	0.92	0.92			
	M <sub>2</sub>	1223	1250	1250				1186	1250	1250				1140	1250	1250			
	η	0.83	0.83	0.83				0.80	0.80	0.80				0.77	0.77	0.77			
137.950	P <sub>1</sub>	2.81	3.19	3.19				1.41	1.64	1.64				0.70	0.85	0.85			
	M <sub>2</sub>	1101	1250	1250				1072	1250	1250				1030	1250	1250			
	η	0.83	0.83	0.83				0.81	0.81	0.81				0.78	0.78	0.78			
155.750	P <sub>1</sub>	2.81	2.86	2.86				1.41	1.48	1.48				0.70	0.77	0.77			
	M <sub>2</sub>	1231	1250	1250				1190	1250	1250				1142	1250	1250			
	η	0.82	0.82	0.82				0.80	0.80	0.80				0.76	0.76	0.76			
174.375	P <sub>1</sub>	2.26	2.55					1.13	1.32					0.56	0.69				
	M <sub>2</sub>	1106	1250					1072	1250					1028	1250				
	η	0.82	0.82					0.80	0.80					0.77	0.77				
196.875	P <sub>1</sub>	2.26	2.28					1.13	1.18					0.56	0.62				
	M <sub>2</sub>	1235	1250					1193	1250					1139	1250				
	η	0.82	0.82					0.79	0.79					0.75	0.75				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors

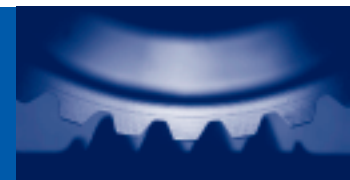
$M_2 \text{ perm} \leq 1250 \text{ Nm}$

GSS 07 - 3 N										Dimensions page 7-83			
$n_1$	2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>				
IEC connection	71	71 100/112	80 71	90 80	100/112	71 80/90	80 71	90 80	100/112	71 80/90	80 80	90 80/90	
For the geometrical assignment of servo/DC motors see section 2													
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]												
126.531	$P_1$	2.75	3.63	3.63	3.63	1.37	1.87	1.87	1.87	0.77	0.97	0.97	0.97
	$M_2$	946	1250	1250	1250	921	1250	1250	1250	996	1250	1250	1250
	$\eta$	0.80	0.80	0.80	0.80	0.78	0.78	0.78	0.78	0.75	0.75	0.75	0.75
142.857	$P_1$	2.75	3.25	3.25	3.25	1.37	1.68	1.68	1.68	0.77	0.87	0.87	0.87
	$M_2$	1058	1250	1250	1250	1023	1250	1250	1250	1105	1250	1250	1250
	$\eta$	0.79	0.79	0.79	0.79	0.76	0.76	0.76	0.76	0.73	0.73	0.73	0.73
155.000	$P_1$	2.75	2.99	2.99	2.99	1.37	1.53	1.53	1.53	0.77	0.80	0.80	0.80
	$M_2$	1150	1250	1250	1250	1121	1250	1250	1250	1206	1250	1250	1250
	$\eta$	0.79	0.79	0.79	0.79	0.77	0.77	0.77	0.77	0.74	0.74	0.74	0.74
175.000	$P_1$	2.67	2.67	2.67	2.67	1.37	1.39	1.39	1.39	0.72	0.72	0.72	0.72
	$M_2$	1250	1250	1250	1250	1240	1250	1250	1250	1250	1250	1250	1250
	$\eta$	0.78	0.78	0.78	0.78	0.76	0.76	0.76	0.76	0.73	0.73	0.73	0.73
201.746	$P_1$	2.13	2.32	2.32		1.07	1.20	1.20		0.53	0.63	0.63	
	$M_2$	1150	1250	1250		1109	1250	1250		1063	1250	1250	
	$\eta$	0.78	0.78	0.78		0.76	0.76	0.76		0.72	0.72	0.72	
227.778	$P_1$	2.08	2.08	2.08		1.07	1.08	1.08		0.53	0.57	0.57	
	$M_2$	1250	1250	1250		1232	1250	1250		1176	1250	1250	
	$\eta$	0.77	0.77	0.77		0.74	0.74	0.74		0.71	0.71	0.71	
247.139	$P_1$	1.91	1.91	1.91		0.99	0.99	0.99		0.52	0.52	0.52	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.78	0.78	0.78		0.75	0.75	0.75		0.71	0.71	0.71	
279.028	$P_1$	1.72	1.72	1.72		0.89	0.89	0.89		0.47	0.47	0.47	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.77	0.77	0.77		0.74	0.74	0.74		0.70	0.70	0.70	
321.673	$P_1$	1.48	1.48	1.48		0.77	0.77	0.77		0.41	0.41	0.41	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.77	0.77	0.77		0.74	0.74	0.74		0.69	0.69	0.69	
363.179	$P_1$	1.34	1.34	1.34		0.70	0.70	0.70		0.37	0.37	0.37	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.75	0.75	0.75		0.72	0.72	0.72		0.68	0.68	0.68	
394.245	$P_1$	1.23	1.23	1.23		0.64	0.64	0.64		0.34	0.34	0.34	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.76	0.76	0.76		0.73	0.73	0.73		0.68	0.68	0.68	
445.116	$P_1$	1.11	1.11	1.11		0.58	0.58	0.58		0.31	0.31	0.31	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.75	0.75	0.75		0.71	0.71	0.71		0.66	0.66	0.66	
490.403	$P_1$	1.00	1.00	1.00		0.53	0.53	0.53		0.28	0.28	0.28	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.75	0.75	0.75		0.71	0.71	0.71		0.67	0.67	0.67	
553.681	$P_1$	0.90	0.90	0.90		0.48	0.48	0.48		0.25	0.25	0.25	
	$M_2$	1250	1250	1250		1250	1250	1250		1250	1250	1250	
	$\eta$	0.74	0.74	0.74		0.70	0.70	0.70		0.65	0.65	0.65	
634.639	$P_1$	0.78	0.78			0.42	0.42			0.22	0.22		
	$M_2$	1250	1250			1250	1250			1250	1250		
	$\eta$	0.74	0.74			0.69	0.69			0.65	0.65		
716.528	$P_1$	0.71	0.71			0.38	0.38			0.20	0.20		
	$M_2$	1250	1250			1250	1250			1250	1250		
	$\eta$	0.72	0.72			0.68	0.68			0.64	0.64		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



$M_2 \text{ perm} \leq 1250 \text{ Nm}$

GSS 07 - 3 N													Dimensions page 7-83		
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
IEC connection		71	71 100/112	80 71	90 80	100/112	71 80/90	80 71	90 80	100/112	71 80/90	80 80	90 80/90		
For the geometrical assignment of servo/DC motors see section 2															
Drive size		1B	□C	□D	□E	1B	□C	□D	□E	1B	□C	□D	□E		
i	$P_1 \text{ perm}$ [kW] $M_2 \text{ perm}$ [Nm]														
833.556	$P_1$	0.61	0.61			0.33	0.33			0.17	0.17				
	$M_2$	1250	1250			1250	1250			1250	1250				
	$\eta$	0.72	0.72			0.68	0.68			0.64	0.64				
941.111	$P_1$	0.55	0.55			0.30	0.30			0.16	0.16				
	$M_2$	1250	1250			1250	1250			1250	1250				
	$\eta$	0.71	0.71			0.66	0.66			0.62	0.62				
1011.633	$P_1$	0.51	0.51			0.27	0.27			0.14	0.14				
	$M_2$	1250	1250			1250	1250			1250	1250				
	$\eta$	0.71	0.71			0.66	0.66			0.63	0.63				
1142.167	$P_1$	0.46	0.46			0.25	0.25			0.13	0.13				
	$M_2$	1250	1250			1250	1250			1250	1250				
	$\eta$	0.70	0.70			0.65	0.65			0.62	0.62				
1227.755	$P_1$	0.43	0.43			0.23	0.23			0.12	0.12				
	$M_2$	1250	1250			1250	1250			1250	1250				
	$\eta$	0.70	0.70			0.65	0.65			0.62	0.62				
1386.175	$P_1$	0.39	0.39			0.21	0.21			0.11	0.11				
	$M_2$	1250	1250			1250	1250			1250	1250				
	$\eta$	0.68	0.68			0.64	0.64			0.61	0.61				
1569.181	$P_1$	0.34				0.18				0.10					
	$M_2$	1250				1250				1250					
	$\eta$	0.68				0.64				0.62					
1771.656	$P_1$	0.31				0.17				0.09					
	$M_2$	1250				1250				1250					
	$\eta$	0.67				0.63				0.60					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 180 \text{ Nm}$

GSS 04 - 2 W										Dimensions page 7-87		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
5.639	P <sub>1</sub>		2.90	4.26		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		50	73		51	83		51	84		
	η		0.89	0.89		0.91	0.91		0.91	0.91		
7.733	P <sub>1</sub>		2.90	4.57		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		69	108		70	115		70	115		
	η		0.90	0.90		0.91	0.91		0.92	0.92		
9.042	P <sub>1</sub>		2.90	4.36		1.45	2.39		0.73	1.20		
	M <sub>2</sub>		80	120		79	130		78	129		
	η		0.89	0.89		0.88	0.88		0.87	0.87		
9.897	P <sub>1</sub>		3.34	4.03		1.67	2.01		0.83	1.01		
	M <sub>2</sub>		102	123		103	124		103	124		
	η		0.90	0.90		0.91	0.91		0.92	0.92		
10.827	P <sub>1</sub>		3.30	3.84		1.65	1.92		0.83	0.96		
	M <sub>2</sub>		110	128		111	130		111	130		
	η		0.90	0.90		0.91	0.91		0.92	0.92		
12.400	P <sub>1</sub>		2.90	3.60		1.45	2.29		0.73	1.20		
	M <sub>2</sub>		109	135		108	170		106	175		
	η		0.89	0.89		0.88	0.88		0.87	0.87		
13.810	P <sub>1</sub>		2.80	3.24		1.40	1.62		0.70	0.81		
	M <sub>2</sub>		120	139		121	140		120	139		
	η		0.91	0.91		0.91	0.91		0.91	0.91		
15.869	P <sub>1</sub>		3.04	3.04		1.67	1.90		0.83	0.97		
	M <sub>2</sub>		146	146		158	180		155	180		
	η		0.89	0.89		0.88	0.88		0.86	0.86		
17.360	P <sub>1</sub>		2.87	2.87		1.65	1.74		0.83	0.89		
	M <sub>2</sub>		150	150		171	180		168	180		
	η		0.89	0.89		0.88	0.88		0.86	0.86		
20.417	P <sub>1</sub>		2.13	2.13		1.38	1.38		0.73	0.83		
	M <sub>2</sub>		119	119		153	153		158	180		
	η		0.80	0.80		0.80	0.80		0.78	0.78		
22.143	P <sub>1</sub>		2.44	2.44		1.37	1.37		0.70	0.70		
	M <sub>2</sub>		162	162		180	180		180	180		
	η		0.88	0.88		0.87	0.87		0.85	0.85		
24.800	P <sub>1</sub>		1.93	1.93		1.24	1.24		0.67	0.67		
	M <sub>2</sub>		134	134		171	171		180	180		
	η		0.82	0.82		0.81	0.81		0.79	0.79		
27.125	P <sub>1</sub>		2.13	2.13		1.13	1.13		0.58	0.58		
	M <sub>2</sub>		173	173		180	180		180	180		
	η		0.88	0.88		0.86	0.86		0.84	0.84		
31.738	P <sub>1</sub>		1.64	1.64		1.04	1.04		0.53	0.53		
	M <sub>2</sub>		146	146		180	180		180	180		
	η		0.82	0.82		0.80	0.80		0.78	0.78		
34.100	P <sub>1</sub>	1.29	1.77	1.77	0.65	0.90	0.90	0.32	0.47	0.47		
	M <sub>2</sub>	132	180	180	129	180	180	125	180	180		
	η	0.88	0.88	0.88	0.86	0.86	0.86	0.83	0.83	0.83		
39.200	P <sub>1</sub>		1.41	1.41		0.86	0.86		0.45	0.45		
	M <sub>2</sub>		150	150		180	180		180	180		
	η		0.80	0.80		0.78	0.78		0.75	0.75		
43.917	P <sub>1</sub>	1.08	1.38	1.38	0.54	0.71	0.71	0.27	0.37	0.37		
	M <sub>2</sub>	141	180	180	138	180	180	133	180	180		
	η	0.87	0.87	0.87	0.85	0.85	0.85	0.82	0.82	0.82		
50.000	P <sub>1</sub>		1.21	1.21		0.69	0.69		0.36	0.36		
	M <sub>2</sub>		163	163		180	180		180	180		
	η		0.79	0.79		0.77	0.77		0.74	0.74		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 180 \text{ Nm}$

GSS 04 - 2 W										Dimensions page 7-87		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
54.250	$P_1$		1.17	1.17		0.62	0.62		0.32	0.32		
	$M_2$		175	175		180	180		180	180		
	$\eta$		0.81	0.81		0.79	0.79		0.75	0.75		
61.250	$P_1$		1.06	1.06		0.57	0.57		0.30	0.30		
	$M_2$		174	174		180	180		180	180		
	$\eta$		0.79	0.79		0.76	0.76		0.73	0.73		
68.200	$P_1$	0.97	0.97	0.97	0.50	0.50	0.50	0.26	0.26	0.26		
	$M_2$	180	180	180	180	180	180	180	180	180		
	$\eta$	0.80	0.80	0.80	0.78	0.78	0.78	0.74	0.74	0.74		
77.000	$P_1$	0.88	0.88	0.88	0.46	0.46	0.46	0.24	0.24	0.24		
	$M_2$	180	180	180	180	180	180	180	180	180		
	$\eta$	0.78	0.78	0.78	0.75	0.75	0.75	0.72	0.72	0.72		
87.833	$P_1$	0.76	0.76	0.76	0.39	0.39	0.39	0.21	0.21	0.21		
	$M_2$	180	180	180	180	180	180	180	180	180		
	$\eta$	0.79	0.79	0.79	0.76	0.76	0.76	0.73	0.73	0.73		
99.167	$P_1$	0.69	0.69	0.69	0.36	0.36	0.36	0.19	0.19	0.19		
	$M_2$	180	180	180	180	180	180	180	180	180		
	$\eta$	0.77	0.77	0.77	0.74	0.74	0.74	0.70	0.70	0.70		
111.318	$P_1$	0.60	0.60		0.32	0.32		0.17	0.17			
	$M_2$	180	180		180	180		180	180			
	$\eta$	0.79	0.79		0.75	0.75		0.71	0.71			
125.682	$P_1$	0.55	0.55		0.29	0.29		0.15	0.15			
	$M_2$	180	180		180	180		180	180			
	$\eta$	0.76	0.76		0.73	0.73		0.68	0.68			
139.500	$P_1$	0.49	0.49		0.26	0.26		0.14	0.14			
	$M_2$	180	180		180	180		180	180			
	$\eta$	0.78	0.78		0.74	0.74		0.69	0.69			
157.500	$P_1$	0.45	0.45		0.24	0.24		0.13	0.13			
	$M_2$	180	180		180	180		180	180			
	$\eta$	0.75	0.75		0.71	0.71		0.67	0.67			
183.786	$P_1$	0.38			0.20			0.10				
	$M_2$	180			180			169				
	$\eta$	0.76			0.73			0.67				
207.500	$P_1$	0.35			0.18			0.10				
	$M_2$	180			180			180				
	$\eta$	0.74			0.70			0.64				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 360 \text{ Nm}$

GSS 05 - 2 W										Dimensions page 7-87		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
5.639	$P_1$			7.85			4.56			2.28		
	$M_2$			136			160			161		
	$\eta$			0.90			0.91			0.92		
7.733	$P_1$			7.13			4.56			2.28		
	$M_2$			170			220			221		
	$\eta$			0.91			0.91			0.92		
9.042	$P_1$			6.00			4.56			2.28		
	$M_2$			161			249			250		
	$\eta$			0.87			0.89			0.89		
9.897	$P_1$		4.98	6.63		2.49	3.87		1.24	1.93		
	$M_2$		153	203		154	239		149	232		
	$\eta$		0.91	0.91		0.92	0.92		0.89	0.89		
10.827	$P_1$	2.90	4.75	6.45	1.45	2.38	3.70	0.73	1.19	1.85		
	$M_2$	98	160	217	98	161	250	96	158	246		
	$\eta$	0.91	0.91	0.91	0.92	0.92	0.92	0.90	0.90	0.90		
12.400	$P_1$			5.86			3.71			2.28		
	$M_2$			218			279			343		
	$\eta$			0.88			0.89			0.89		
13.810	$P_1$	2.84	4.01	6.01	1.42	2.01	3.14	0.71	1.00	1.57		
	$M_2$	122	172	258	123	173	271	122	172	270		
	$\eta$	0.91	0.91	0.91	0.92	0.92	0.92	0.91	0.91	0.91		
15.869	$P_1$		4.95	4.95		2.49	3.14		1.24	1.87		
	$M_2$		237	237		239	301		239	360		
	$\eta$		0.88	0.88		0.89	0.89		0.89	0.89		
17.360	$P_1$	2.90	4.67	4.67	1.45	2.38	2.96	0.73	1.19	1.71		
	$M_2$	152	245	245	153	250	311	153	250	360		
	$\eta$	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
20.417	$P_1$			3.21			2.26			1.46		
	$M_2$			175			253			330		
	$\eta$			0.79			0.81			0.81		
22.143	$P_1$	2.84	3.97	3.97	1.42	2.01	2.51	0.71	1.00	1.35		
	$M_2$	190	266	266	191	269	337	190	268	360		
	$\eta$	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
24.800	$P_1$			3.11			2.01			1.29		
	$M_2$			214			280			360		
	$\eta$			0.81			0.82			0.82		
27.125	$P_1$		3.45	3.46		1.72	2.19		0.86	1.10		
	$M_2$		283	284		283	360		281	360		
	$\eta$		0.89	0.89		0.89	0.89		0.88	0.88		
31.738	$P_1$		2.65	2.65		1.71	1.71		1.01	1.01		
	$M_2$		235	235		305	305		360	360		
	$\eta$		0.82	0.82		0.82	0.82		0.82	0.82		
35.306	$P_1$	1.98	2.77	2.90	0.99	1.38	1.69	0.50	0.69	0.86		
	$M_2$	212	296	310	212	296	360	208	291	360		
	$\eta$	0.89	0.89	0.89	0.89	0.89	0.89	0.87	0.87	0.87		
39.200	$P_1$	2.31	2.31	2.31	1.45	1.49	1.49	0.73	0.83	0.83		
	$M_2$	248	248	248	314	323	323	315	360	360		
	$\eta$	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		
43.917	$P_1$	1.66	2.31	2.51	0.83	1.16	1.36	0.42	0.58	0.70		
	$M_2$	221	307	334	221	307	360	215	299	360		
	$\eta$	0.89	0.89	0.89	0.89	0.89	0.89	0.86	0.86	0.86		
50.000	$P_1$	1.97	1.97	1.97	1.28	1.28	1.28	0.66	0.66	0.66		
	$M_2$	272	272	272	353	353	353	360	360	360		
	$\eta$	0.81	0.81	0.81	0.81	0.81	0.81	0.80	0.80	0.80		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 360 \text{ Nm}$

GSS 05 - 2 W										Dimensions page 7-87		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
54.250	$P_1$		1.89	1.89		1.18	1.18		0.60	0.60		
	$M_2$		288	288		360	360		360	360		
	$\eta$		0.82	0.82		0.82	0.82		0.81	0.81		
61.250	$P_1$		1.74	1.74		1.06	1.06		0.54	0.54		
	$M_2$		293	293		360	360		360	360		
	$\eta$		0.81	0.81		0.81	0.81		0.79	0.79		
70.611	$P_1$	1.59	1.59	1.59	0.91	0.91	0.91	0.47	0.47	0.47		
	$M_2$	316	316	316	360	360	360	360	360	360		
	$\eta$	0.82	0.82	0.82	0.82	0.82	0.82	0.80	0.80	0.80		
79.722	$P_1$	1.47	1.47	1.47	0.82	0.82	0.82	0.43	0.43	0.43		
	$M_2$	323	323	323	360	360	360	360	360	360		
	$\eta$	0.81	0.81	0.81	0.81	0.81	0.81	0.78	0.78	0.78		
87.833	$P_1$	1.39	1.39	1.39	0.73	0.73	0.73	0.38	0.38	0.38		
	$M_2$	342	342	342	360	360	360	360	360	360		
	$\eta$	0.82	0.82	0.82	0.82	0.82	0.82	0.79	0.79	0.79		
99.167	$P_1$	1.28	1.28	1.28	0.66	0.66	0.66	0.35	0.35	0.35		
	$M_2$	350	350	350	360	360	360	360	360	360		
	$\eta$	0.81	0.81	0.81	0.80	0.80	0.80	0.77	0.77	0.77		
113.667	$P_1$	1.13	1.13		0.57	0.57		0.30	0.30			
	$M_2$	360	360		360	360		360	360			
	$\eta$	0.83	0.83		0.81	0.81		0.77	0.77			
128.333	$P_1$	1.02	1.02		0.52	0.52		0.28	0.28			
	$M_2$	360	360		360	360		360	360			
	$\eta$	0.81	0.81		0.79	0.79		0.75	0.75			
137.950	$P_1$	0.93	0.93		0.48	0.48		0.26	0.26			
	$M_2$	360	360		360	360		360	360			
	$\eta$	0.82	0.82		0.80	0.80		0.75	0.75			
155.750	$P_1$	0.84	0.84		0.44	0.44		0.23	0.23			
	$M_2$	360	360		360	360		360	360			
	$\eta$	0.81	0.81		0.78	0.78		0.73	0.73			
176.313	$P_1$	0.73			0.38			0.20				
	$M_2$	360			360			352				
	$\eta$	0.82			0.79			0.73				
199.063	$P_1$	0.66			0.35			0.19				
	$M_2$	360			360			360				
	$\eta$	0.80			0.77			0.71				

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-worm gearboxes

## Gearbox with free input shaft

$M_2 \text{ perm} \leq 360 \text{ Nm}$

GSS 05 - 3 W										Dimensions page 7-88		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
125.476	P <sub>1</sub>		0.77	0.77		0.48	0.48		0.24	0.24		
	M <sub>2</sub>		285	285		339	339		319	319		
	$\eta$		0.86	0.86		0.83	0.83		0.78	0.78		
153.708	P <sub>1</sub>		0.67	0.67		0.41	0.41		0.21	0.21		
	M <sub>2</sub>		302	302		356	356		334	334		
	$\eta$		0.86	0.86		0.82	0.82		0.77	0.77		
193.233	P <sub>1</sub>	0.58	0.58	0.58	0.34	0.34	0.34	0.18	0.18	0.18		
	M <sub>2</sub>	321	321	321	360	360	360	353	353	353		
	$\eta$	0.85	0.85	0.85	0.80	0.80	0.80	0.75	0.75	0.75		
222.133	P <sub>1</sub>		0.61	0.61		0.32	0.32		0.17	0.17		
	M <sub>2</sub>		360	360		360	360		360	360		
	$\eta$		0.79	0.79		0.75	0.75		0.68	0.68		
250.952	P <sub>1</sub>		0.53	0.53		0.28	0.28		0.15	0.15		
	M <sub>2</sub>		360	360		360	360		360	360		
	$\eta$		0.79	0.79		0.75	0.75		0.68	0.68		
283.333	P <sub>1</sub>		0.48	0.48		0.26	0.26		0.14	0.14		
	M <sub>2</sub>		360	360		360	360		360	360		
	$\eta$		0.77	0.77		0.73	0.73		0.66	0.66		
307.417	P <sub>1</sub>		0.44	0.44		0.24	0.24		0.13	0.13		
	M <sub>2</sub>		360	360		360	360		360	360		
	$\eta$		0.78	0.78		0.73	0.73		0.66	0.66		
347.083	P <sub>1</sub>		0.40	0.40		0.22	0.22		0.12	0.12		
	M <sub>2</sub>		360	360		360	360		360	360		
	$\eta$		0.76	0.76		0.71	0.71		0.64	0.64		
386.467	P <sub>1</sub>	0.36	0.36	0.36	0.19	0.19	0.19	0.11	0.11	0.11		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	$\eta$	0.77	0.77	0.77	0.71	0.71	0.71	0.64	0.64	0.64		
436.333	P <sub>1</sub>	0.32	0.32	0.32	0.18	0.18	0.18	0.10	0.10	0.10		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	$\eta$	0.75	0.75	0.75	0.69	0.69	0.69	0.62	0.62	0.62		
497.722	P <sub>1</sub>	0.28	0.28	0.28	0.16	0.16	0.16	0.09	0.09	0.09		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	$\eta$	0.75	0.75	0.75	0.68	0.68	0.68	0.62	0.62	0.62		
561.945	P <sub>1</sub>	0.26	0.26	0.26	0.14	0.14	0.14	0.08	0.08	0.08		
	M <sub>2</sub>	360	360	360	360	360	360	360	360	360		
	$\eta$	0.73	0.73	0.73	0.66	0.66	0.66	0.60	0.60	0.60		
630.803	P <sub>1</sub>	0.23	0.23		0.13	0.13		0.07	0.07			
	M <sub>2</sub>	360	360		360	360		360	360			
	$\eta$	0.73	0.73		0.66	0.66		0.60	0.60			
712.197	P <sub>1</sub>	0.21	0.21		0.12	0.12		0.06	0.06			
	M <sub>2</sub>	360	360		360	360		360	360			
	$\eta$	0.71	0.71		0.64	0.64		0.58	0.58			
790.500	P <sub>1</sub>	0.19	0.19		0.10	0.10		0.06	0.06			
	M <sub>2</sub>	360	360		360	360		360	360			
	$\eta$	0.71	0.71		0.64	0.64		0.58	0.58			
892.500	P <sub>1</sub>	0.17	0.17		0.10	0.10		0.05	0.05			
	M <sub>2</sub>	360	360		360	360		360	360			
	$\eta$	0.68	0.68		0.62	0.62		0.55	0.55			
1041.452	P <sub>1</sub>	0.15			0.08			0.05				
	M <sub>2</sub>	360			360			360				
	$\eta$	0.68			0.61			0.55				
1175.833	P <sub>1</sub>	0.14			0.08			0.04				
	M <sub>2</sub>	360			360			360				
	$\eta$	0.66			0.59			0.53				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 720 \text{ Nm}$

GSS 06 - 2 W												Dimensions page 7-87			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
5.833	$P_1$			10.5	10.5			8.82	9.75			4.41	6.67		
	$M_2$			190	190			322	356			323	489		
	$\eta$			0.91	0.91			0.92	0.92			0.92	0.92		
8.000	$P_1$			10.7	10.7			8.82	9.74			4.41	5.13		
	$M_2$			267	267			442	489			444	517		
	$\eta$			0.91	0.91			0.92	0.92			0.92	0.92		
9.042	$P_1$			9.17	9.17			7.53	7.53			4.41	5.82		
	$M_2$			254	254			417	417			485	640		
	$\eta$			0.90	0.90			0.90	0.90			0.89	0.89		
10.238	$P_1$		9.31	10.2	10.2		4.66	7.50	8.11		2.33	3.75	4.06		
	$M_2$		298	326	326		300	483	522		293	472	510		
	$\eta$		0.92	0.92	0.92		0.92	0.92	0.92		0.90	0.90	0.90		
11.200	$P_1$		8.95	9.90	9.90		4.48	7.12	7.45		2.24	3.56	3.72		
	$M_2$		313	347	347		315	501	524		311	494	517		
	$\eta$		0.92	0.92	0.92		0.92	0.92	0.92		0.91	0.91	0.91		
12.400	$P_1$			8.37	8.37			6.91	6.91			4.41	4.70		
	$M_2$			318	318			523	523			661	705		
	$\eta$			0.90	0.90			0.90	0.90			0.89	0.89		
14.286	$P_1$	4.94	7.61	10.2	10.2	2.47	3.80	5.88	5.88	1.23	1.90	2.94	2.94		
	$M_2$	221	341	456	456	222	342	528	528	221	341	527	527		
	$\eta$	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
15.869	$P_1$		7.81	7.81	7.81		4.66	6.26	6.26		2.33	3.75	3.77		
	$M_2$		380	380	380		450	605	605		445	717	720		
	$\eta$		0.90	0.90	0.90		0.89	0.89	0.89		0.88	0.88	0.88		
17.360	$P_1$		7.62	7.62	7.62		4.48	5.90	5.90		2.24	3.45	3.45		
	$M_2$		405	405	405		473	624	624		467	720	720		
	$\eta$		0.90	0.90	0.90		0.89	0.89	0.89		0.88	0.88	0.88		
20.417	$P_1$			5.17	5.17			4.23	4.23			2.86	2.86		
	$M_2$			299	299			488	488			650	650		
	$\eta$			0.83	0.83			0.83	0.83			0.82	0.82		
22.143	$P_1$	4.94	7.12	7.12	7.12	2.47	3.80	5.02	5.02	1.23	1.90	2.73	2.73		
	$M_2$	334	482	482	482	331	510	673	673	326	502	720	720		
	$\eta$	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.87	0.87	0.87	0.87		
24.800	$P_1$			4.92	4.92			3.98	3.98			2.58	2.58		
	$M_2$			350	350			561	561			715	715		
	$\eta$			0.84	0.84			0.83	0.83			0.82	0.82		
27.125	$P_1$		6.58	6.74	6.74		3.29	4.38	4.38		1.65	2.24	2.24		
	$M_2$		545	558	558		539	718	718		528	720	720		
	$\eta$		0.90	0.90	0.90		0.89	0.89	0.89		0.87	0.87	0.87		
31.738	$P_1$		4.60	4.60	4.60		3.40	3.40	3.40		2.05	2.05	2.05		
	$M_2$		418	418	418		609	609	609		720	720	720		
	$\eta$		0.84	0.84	0.84		0.83	0.83	0.83		0.81	0.81	0.81		
35.306	$P_1$	3.41	5.30	5.79		1.71	2.65	3.40		0.85	1.33	1.74			
	$M_2$	366	570	622		361	562	720		353	549	720			
	$\eta$	0.89	0.89	0.89		0.88	0.88	0.88		0.86	0.86	0.86			
39.200	$P_1$		4.28	4.28	4.28		2.91	2.91	2.91		1.69	1.69	1.69		
	$M_2$		474	474	474		637	637	637		720	720	720		
	$\eta$		0.83	0.83	0.83		0.82	0.82	0.82		0.80	0.80	0.80		
43.917	$P_1$	2.85	4.45	5.01		1.43	2.23	2.75		0.71	1.11	1.41			
	$M_2$	379	592	666		373	583	720		363	568	720			
	$\eta$	0.89	0.89	0.89		0.87	0.87	0.87		0.85	0.85	0.85			
50.000	$P_1$	3.86	3.86	3.86	3.86	2.47	2.50	2.50	2.50	1.23	1.34	1.34	1.34		
	$M_2$	544	544	544	544	685	693	693	693	663	720	720	720		
	$\eta$	0.83	0.83	0.83	0.83	0.81	0.81	0.81	0.81	0.79	0.79	0.79	0.79		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 720 \text{ Nm}$

GSS 06 - 2 W												Dimensions page 7-87			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1C	1D	1E	1F	1C	1D	1E	1F	1C	1D	1E	1F		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
54.250	P <sub>1</sub>		3.74	3.74	3.74		2.38	2.38	2.38		1.23	1.23	1.23		
	M <sub>2</sub>		576	576	576		720	720	720		720	720	720		
	$\eta$		0.83	0.83	0.83		0.82	0.82	0.82		0.79	0.79	0.79		
61.250	P <sub>1</sub>		3.39	3.39	3.39		2.13	2.13	2.13		1.11	1.11	1.11		
	M <sub>2</sub>		584	584	584		720	720	720		720	720	720		
	$\eta$		0.82	0.82	0.82		0.81	0.81	0.81		0.78	0.78	0.78		
70.611	P <sub>1</sub>	3.16	3.16	3.16		1.71	1.85	1.85		0.85	0.96	0.96			
	M <sub>2</sub>	630	630	630		664	720	720		639	720	720			
	$\eta$	0.83	0.83	0.83		0.81	0.81	0.81		0.78	0.78	0.78			
79.722	P <sub>1</sub>	2.87	2.87	2.87		1.66	1.66	1.66		0.85	0.86	0.86			
	M <sub>2</sub>	638	638	638		720	720	720		710	720	720			
	$\eta$	0.82	0.82	0.82		0.80	0.80	0.80		0.77	0.77	0.77			
87.833	P <sub>1</sub>	2.76	2.76	2.76		1.43	1.50	1.50		0.71	0.78	0.78			
	M <sub>2</sub>	680	680	680		682	720	720		655	720	720			
	$\eta$	0.82	0.82	0.82		0.80	0.80	0.80		0.77	0.77	0.77			
99.167	P <sub>1</sub>	2.50	2.50	2.50		1.35	1.35	1.35		0.71	0.71	0.71			
	M <sub>2</sub>	688	688	688		720	720	720		720	720	720			
	$\eta$	0.81	0.81	0.81		0.79	0.79	0.79		0.76	0.76	0.76			
113.667	P <sub>1</sub>	2.20	2.28			1.10	1.18			0.55	0.61				
	M <sub>2</sub>	697	720			672	720			646	720				
	$\eta$	0.82	0.82			0.79	0.79			0.76	0.76				
128.333	P <sub>1</sub>	2.04	2.04			1.06	1.06			0.55	0.55				
	M <sub>2</sub>	720	720			720	720			715	720				
	$\eta$	0.81	0.81			0.78	0.78			0.74	0.74				
137.950	P <sub>1</sub>	1.89	1.89			0.96	0.98			0.48	0.51				
	M <sub>2</sub>	720	720			700	720			670	720				
	$\eta$	0.81	0.81			0.78	0.78			0.75	0.75				
155.750	P <sub>1</sub>	1.70	1.70			0.88	0.88			0.46	0.46				
	M <sub>2</sub>	720	720			720	720			720	720				
	$\eta$	0.80	0.80			0.77	0.77			0.73	0.73				
174.375	P <sub>1</sub>	1.52				0.77				0.38					
	M <sub>2</sub>	720				698				665					
	$\eta$	0.80				0.77				0.73					
196.875	P <sub>1</sub>	1.36				0.71				0.38					
	M <sub>2</sub>	720				720				720					
	$\eta$	0.79				0.76				0.72					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 720 \text{ Nm}$

		GSS 06 - 3 W						Dimensions page 7-88		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]									
126.531	$P_1$		2.15	2.15		1.12	1.12		0.58	0.58
	$M_2$		720	720		720	720		720	720
	$\eta$		0.78	0.78		0.75	0.75		0.72	0.72
142.857	$P_1$		1.93	1.93		1.01	1.01		0.53	0.53
	$M_2$		720	720		720	720		720	720
	$\eta$		0.77	0.77		0.73	0.73		0.70	0.70
155.000	$P_1$		1.77	1.77		0.92	0.92		0.48	0.48
	$M_2$		720	720		720	720		720	720
	$\eta$		0.77	0.77		0.74	0.74		0.71	0.71
175.000	$P_1$		1.59	1.59		0.83	0.83		0.44	0.44
	$M_2$		720	720		720	720		720	720
	$\eta$		0.76	0.76		0.73	0.73		0.69	0.69
194.857	$P_1$	1.29	1.43	1.43	0.65	0.74	0.74	0.32	0.39	0.39
	$M_2$	652	720	720	626	720	720	593	720	720
	$\eta$	0.76	0.76	0.76	0.73	0.73	0.73	0.69	0.69	0.69
220.000	$P_1$	1.28	1.28	1.28	0.65	0.67	0.67	0.32	0.36	0.36
	$M_2$	720	720	720	697	720	720	653	720	720
	$\eta$	0.75	0.75	0.75	0.72	0.72	0.72	0.67	0.67	0.67
238.700	$P_1$	1.18	1.18	1.18	0.61	0.61	0.61	0.32	0.33	0.33
	$M_2$	720	720	720	720	720	720	711	720	720
	$\eta$	0.75	0.75	0.75	0.72	0.72	0.72	0.68	0.68	0.68
269.500	$P_1$	1.06	1.06	1.06	0.55	0.55	0.55	0.30	0.30	0.30
	$M_2$	720	720	720	720	720	720	720	720	720
	$\eta$	0.74	0.74	0.74	0.71	0.71	0.71	0.66	0.66	0.66
310.689	$P_1$	0.92	0.92	0.92	0.48	0.48	0.48	0.26	0.26	0.26
	$M_2$	720	720	720	720	720	720	720	720	720
	$\eta$	0.74	0.74	0.74	0.71	0.71	0.71	0.66	0.66	0.66
350.778	$P_1$	0.83	0.83	0.83	0.44	0.44	0.44	0.24	0.24	0.24
	$M_2$	720	720	720	720	720	720	720	720	720
	$\eta$	0.73	0.73	0.73	0.69	0.69	0.69	0.64	0.64	0.64
386.467	$P_1$	0.75	0.75	0.75	0.40	0.40	0.40	0.21	0.21	0.21
	$M_2$	720	720	720	720	720	720	720	720	720
	$\eta$	0.73	0.73	0.73	0.69	0.69	0.69	0.64	0.64	0.64
436.333	$P_1$	0.67	0.67	0.67	0.36	0.36	0.36	0.19	0.19	0.19
	$M_2$	720	720	720	720	720	720	720	720	720
	$\eta$	0.72	0.72	0.72	0.67	0.67	0.67	0.63	0.63	0.63
497.722	$P_1$	0.59	0.59	0.59	0.32	0.32	0.32	0.17	0.17	0.17
	$M_2$	720	720	720	720	720	720	720	720	720
	$\eta$	0.72	0.72	0.72	0.67	0.67	0.67	0.63	0.63	0.63
561.945	$P_1$	0.53	0.53	0.53	0.29	0.29	0.29	0.15	0.15	0.15
	$M_2$	720	720	720	720	720	720	720	720	720
	$\eta$	0.71	0.71	0.71	0.66	0.66	0.66	0.62	0.62	0.62
630.803	$P_1$	0.48	0.48		0.26	0.26		0.14	0.14	
	$M_2$	720	720		720	720		720	720	
	$\eta$	0.71	0.71		0.66	0.66		0.62	0.62	
712.197	$P_1$	0.43	0.43		0.23	0.23		0.12	0.12	
	$M_2$	720	720		720	720		720	720	
	$\eta$	0.69	0.69		0.64	0.64		0.60	0.60	
816.333	$P_1$	0.38	0.38		0.20	0.20		0.11	0.11	
	$M_2$	720	720		720	720		720	720	
	$\eta$	0.69	0.69		0.64	0.64		0.61	0.61	
921.667	$P_1$	0.34	0.34		0.18	0.18		0.10	0.10	
	$M_2$	720	720		720	720		720	720	
	$\eta$	0.67	0.67		0.63	0.63		0.60	0.60	

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with free input shaft

$M_2 \text{ perm} \leq 720 \text{ Nm}$

GSS 06 - 3 W										Dimensions page 7-88		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1A	1B	1C	1A	1B	1C	1A	1B	1C		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]											
1023.000	$P_1$	0.31	0.31		0.17	0.17		0.09	0.09			
	$M_2$	720	720		720	720		720	720			
	$\eta$	0.67	0.67		0.63	0.63		0.60	0.60			
1155.000	$P_1$	0.28	0.28		0.15	0.15		0.08	0.08			
	$M_2$	720	720		720	720		720	720			
	$\eta$	0.65	0.65		0.61	0.61		0.59	0.59			
1241.550	$P_1$	0.26	0.26		0.14	0.14		0.07	0.07			
	$M_2$	720	720		720	720		720	720			
	$\eta$	0.66	0.66		0.62	0.62		0.59	0.59			
1401.750	$P_1$	0.24	0.24		0.12	0.12		0.07	0.07			
	$M_2$	720	720		720	720		720	720			
	$\eta$	0.64	0.64		0.61	0.61		0.58	0.58			
1635.693	$P_1$	0.20			0.11			0.06				
	$M_2$	720			720			720				
	$\eta$	0.64			0.61			0.59				
1846.750	$P_1$	0.18			0.10			0.05				
	$M_2$	720			720			720				
	$\eta$	0.63			0.60			0.58				

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 1250 \text{ Nm}$

GSS 07 - 2 W												Dimensions page 7-87			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
5.862	$P_1$			17.6	17.6			14.6	14.6			8.07	12.1		
	$M_2$			324	324			539	539			599	896		
	$\eta$			0.92	0.92			0.93	0.93			0.93	0.93		
8.125	$P_1$			16.1	16.1			13.3	13.3			8.07	10.5		
	$M_2$			412	412			685	685			831	1079		
	$\eta$			0.92	0.92			0.93	0.93			0.93	0.93		
9.086	$P_1$			14.7	14.7			11.2	11.2			8.07	9.38		
	$M_2$			412	412			628	628			900	1047		
	$\eta$			0.90	0.90			0.90	0.90			0.90	0.90		
10.000	$P_1$		15.2	15.2	15.2		9.39	12.6	12.6		4.69	7.09	8.58		
	$M_2$		480	480	480		595	797	797		584	882	1067		
	$\eta$		0.93	0.93	0.93		0.93	0.93	0.93		0.91	0.91	0.91		
11.200	$P_1$		14.7	14.7	14.7		8.73	12.2	12.2		4.37	6.60	7.70		
	$M_2$		521	521	521		620	866	866		614	928	1083		
	$\eta$		0.93	0.93	0.93		0.93	0.93	0.93		0.92	0.92	0.92		
12.594	$P_1$			12.6	12.6			10.3	10.3			8.07	8.12		
	$M_2$			490	490			799	799			1242	1250		
	$\eta$			0.91	0.91			0.90	0.90			0.90	0.90		
14.286	$P_1$	9.08	13.8	13.8	13.8	4.54	7.38	11.1	11.4	2.27	3.69	5.57	6.07		
	$M_2$	410	623	623	623	411	668	1009	1036	411	668	1007	1099		
	$\eta$	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93		
15.500	$P_1$		11.7	11.7	11.7		9.39	9.76	9.76		4.69	6.61	6.61		
	$M_2$		559	559	559		896	931	931		887	1250	1250		
	$\eta$		0.91	0.91	0.91		0.90	0.90	0.90		0.89	0.89	0.89		
17.360	$P_1$		11.3	11.3	11.3		8.73	9.48	9.48		4.37	5.92	5.92		
	$M_2$		607	607	607		932	1012	1012		922	1250	1250		
	$\eta$		0.90	0.90	0.90		0.90	0.90	0.90		0.89	0.89	0.89		
20.517	$P_1$			8.47	8.47			6.46	6.46			5.12	5.12		
	$M_2$			500	500			764	764			1201	1201		
	$\eta$			0.84	0.84			0.85	0.85			0.84	0.84		
22.143	$P_1$	9.08	10.7	10.7	10.7	4.54	7.38	8.93	8.93	2.27	3.69	4.67	4.67		
	$M_2$	620	727	727	727	615	1000	1211	1211	608	988	1250	1250		
	$\eta$	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.89		
25.188	$P_1$			7.64	7.64			6.25	6.25			4.33	4.33		
	$M_2$			559	559			913	913			1250	1250		
	$\eta$			0.85	0.85			0.85	0.85			0.84	0.84		
27.125	$P_1$		10.1	10.1	10.1		6.35	7.54	7.54		3.18	3.83	3.83		
	$M_2$		844	844	844		1052	1250	1250		1035	1250	1250		
	$\eta$		0.90	0.90	0.90		0.90	0.90	0.90		0.88	0.88	0.88		
31.000	$P_1$		7.07	7.07	7.07		5.94	5.94	5.94		3.54	3.54	3.54		
	$M_2$		637	637	637		1065	1065	1065		1250	1250	1250		
	$\eta$		0.85	0.85	0.85		0.85	0.85	0.85		0.84	0.84	0.84		
35.306	$P_1$	6.37	9.45	9.45		3.18	5.14	5.82		1.59	2.57	2.97			
	$M_2$	690	1025	1025		683	1104	1250		670	1082	1250			
	$\eta$	0.90	0.90	0.90		0.89	0.89	0.89		0.87	0.87	0.87			
39.200	$P_1$		6.54	6.54	6.54		5.24	5.24	5.24		2.84	2.84	2.84		
	$M_2$		739	739	739		1175	1175	1175		1250	1250	1250		
	$\eta$		0.85	0.85	0.85		0.84	0.84	0.84		0.82	0.82	0.82		
43.271	$P_1$	5.49	8.75	8.98		2.74	4.37	4.77		1.37	2.19	2.44			
	$M_2$	727	1159	1190		718	1145	1250		704	1122	1250			
	$\eta$	0.90	0.90	0.90		0.89	0.89	0.89		0.87	0.87	0.87			
50.000	$P_1$	6.14	6.14	6.14	6.14	4.39	4.39	4.39	4.39	2.25	2.25	2.25	2.25		
	$M_2$	882	882	882	882	1250	1250	1250	1250	1250	1250	1250	1250		
	$\eta$	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.81	0.81	0.81	0.81		

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

Gearbox with free input shaft

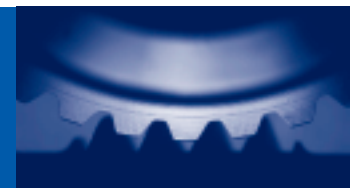
$M_2 \text{ perm} \leq 1250 \text{ Nm}$

GSS 07 - 2 W												Dimensions page 7-87			
$n_1$		2800 min <sup>-1</sup>				1400 min <sup>-1</sup>				700 min <sup>-1</sup>					
Drive size		1D	1E	1F	1G	1D	1E	1F	1G	1D	1E	1F	1G		
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]														
54.250	P <sub>1</sub>		6.14	6.14	6.14		4.03	4.03	4.03		2.07	2.07	2.07		
	M <sub>2</sub>		965	965	965		1250	1250	1250		1250	1250	1250		
	$\eta$		0.85	0.85	0.84		0.84	0.84	0.82		0.82	0.82	0.85		
61.250	P <sub>1</sub>		5.82	5.82	5.82		3.60	3.60	3.60		1.86	1.86	1.86		
	M <sub>2</sub>		1023	1023	1023		1250	1250	1250		1250	1250	1250		
	$\eta$		0.84	0.84	0.84		0.83	0.83	0.83		0.81	0.81	0.81		
70.611	P <sub>1</sub>	5.69	5.69	5.69		3.12	3.12	3.12		1.59	1.60	1.60			
	M <sub>2</sub>	1161	1161	1161		1250	1250	1250		1241	1250	1250			
	$\eta$	0.85	0.85	0.85		0.83	0.83	0.83		0.81	0.81	0.81			
79.722	P <sub>1</sub>	5.16	5.16	5.16		2.79	2.79	2.79		1.44	1.44	1.44			
	M <sub>2</sub>	1177	1177	1177		1250	1250	1250		1250	1250	1250			
	$\eta$	0.84	0.84	0.84		0.82	0.82	0.82		0.80	0.80	0.80			
86.542	P <sub>1</sub>	5.01	5.01	5.01		2.57	2.57	2.57		1.32	1.32	1.32			
	M <sub>2</sub>	1248	1248	1248		1250	1250	1250		1250	1250	1250			
	$\eta$	0.84	0.84	0.84		0.82	0.82	0.82		0.80	0.80	0.80			
97.708	P <sub>1</sub>	4.49	4.49	4.49		2.30	2.30	2.30		1.19	1.19	1.19			
	M <sub>2</sub>	1250	1250	1250		1250	1250	1250		1250	1250	1250			
	$\eta$	0.84	0.84	0.84		0.82	0.82	0.82		0.79	0.79	0.79			
113.667	P <sub>1</sub>	3.85	3.85			1.98	1.98			1.03	1.03				
	M <sub>2</sub>	1250	1250			1250	1250			1250	1250				
	$\eta$	0.84	0.84			0.82	0.82			0.79	0.79				
128.333	P <sub>1</sub>	3.44	3.44			1.78	1.78			0.92	0.92				
	M <sub>2</sub>	1250	1250			1250	1250			1250	1250				
	$\eta$	0.83	0.83			0.80	0.80			0.77	0.77				
137.950	P <sub>1</sub>	3.19	3.19			1.64	1.64			0.85	0.85				
	M <sub>2</sub>	1250	1250			1250	1250			1250	1250				
	$\eta$	0.83	0.83			0.81	0.81			0.78	0.78				
155.750	P <sub>1</sub>	2.86	2.86			1.48	1.48			0.77	0.77				
	M <sub>2</sub>	1250	1250			1250	1250			1250	1250				
	$\eta$	0.82	0.82			0.80	0.80			0.76	0.76				
174.375	P <sub>1</sub>	2.55				1.32				0.69					
	M <sub>2</sub>	1250				1250				1250					
	$\eta$	0.82				0.80				0.77					
196.875	P <sub>1</sub>	2.28				1.18				0.62					
	M <sub>2</sub>	1250				1250				1250					
	$\eta$	0.82				0.79				0.75					

Thermal power limit not considered (see page 2-4)

# Selection tables - Helical-worm gearboxes

## Gearbox with free input shaft



$M_2 \text{ perm} \leq 1250 \text{ Nm}$

<b>GSS 07 - 3 W</b>										Dimensions page 7-88		
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>				
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D		
i	P <sub>1perm</sub> [kW] M <sub>2perm</sub> [Nm]											
126.531	P <sub>1</sub>	2.84	3.63	3.63	1.42	1.87	1.87	0.71	0.97	0.97		
	M <sub>2</sub>	979	1250	1250	953	1250	1250	917	1250	1250		
	η	0.80	0.80	0.80	0.78	0.78	0.78	0.75	0.75	0.75		
142.857	P <sub>1</sub>	2.84	3.25	3.25	1.42	1.68	1.68	0.71	0.87	0.87		
	M <sub>2</sub>	1095	1250	1250	1059	1250	1250	1017	1250	1250		
	η	0.79	0.79	0.79	0.76	0.76	0.76	0.73	0.73	0.73		
155.000	P <sub>1</sub>	2.84	2.99	2.99	1.42	1.53	1.53	0.71	0.80	0.80		
	M <sub>2</sub>	1190	1250	1250	1160	1250	1250	1110	1250	1250		
	η	0.79	0.79	0.79	0.77	0.77	0.77	0.74	0.74	0.74		
175.000	P <sub>1</sub>	2.67	2.67	2.67	1.39	1.39	1.39	0.71	0.72	0.72		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1231	1250	1250		
	η	0.78	0.78	0.78	0.76	0.76	0.76	0.73	0.73	0.73		
201.746	P <sub>1</sub>	1.98	2.32	2.32	0.99	1.20	1.20	0.50	0.63	0.63		
	M <sub>2</sub>	1068	1250	1250	1029	1250	1250	987	1250	1250		
	η	0.78	0.78	0.78	0.76	0.76	0.76	0.72	0.72	0.72		
227.778	P <sub>1</sub>	1.98	2.08	2.08	0.99	1.08	1.08	0.50	0.57	0.57		
	M <sub>2</sub>	1191	1250	1250	1144	1250	1250	1092	1250	1250		
	η	0.77	0.77	0.77	0.74	0.74	0.74	0.71	0.71	0.71		
247.139	P <sub>1</sub>	1.91	1.91	1.91	0.99	0.99	0.99	0.50	0.52	0.52		
	M <sub>2</sub>	1250	1250	1250	1249	1250	1250	1187	1250	1250		
	η	0.78	0.78	0.78	0.75	0.75	0.75	0.71	0.71	0.71		
279.028	P <sub>1</sub>	1.72	1.72	1.72	0.89	0.89	0.89	0.47	0.47	0.47		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1250	1250	1250		
	η	0.77	0.77	0.77	0.74	0.74	0.74	0.70	0.70	0.70		
321.673	P <sub>1</sub>	1.48	1.48	1.48	0.77	0.77	0.77	0.41	0.41	0.41		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1250	1250	1250		
	η	0.77	0.77	0.77	0.74	0.74	0.74	0.69	0.69	0.69		
363.179	P <sub>1</sub>	1.34	1.34	1.34	0.70	0.70	0.70	0.37	0.37	0.37		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1250	1250	1250		
	η	0.75	0.75	0.75	0.72	0.72	0.72	0.68	0.68	0.68		
394.245	P <sub>1</sub>	1.23	1.23	1.23	0.64	0.64	0.64	0.34	0.34	0.34		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1250	1250	1250		
	η	0.76	0.76	0.76	0.73	0.73	0.73	0.68	0.68	0.68		
445.116	P <sub>1</sub>	1.11	1.11	1.11	0.58	0.58	0.58	0.31	0.31	0.31		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1250	1250	1250		
	η	0.75	0.75	0.75	0.71	0.71	0.71	0.66	0.66	0.66		
490.403	P <sub>1</sub>	1.00	1.00	1.00	0.53	0.53	0.53	0.28	0.28	0.28		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1250	1250	1250		
	η	0.75	0.75	0.75	0.71	0.71	0.71	0.67	0.67	0.67		
553.681	P <sub>1</sub>	0.90	0.90	0.90	0.48	0.48	0.48	0.25	0.25	0.25		
	M <sub>2</sub>	1250	1250	1250	1250	1250	1250	1250	1250	1250		
	η	0.74	0.74	0.74	0.70	0.70	0.70	0.65	0.65	0.65		
634.639	P <sub>1</sub>	0.78	0.78		0.42	0.42		0.22	0.22			
	M <sub>2</sub>	1250	1250		1250	1250		1250	1250			
	η	0.74	0.74		0.69	0.69		0.65	0.65			
716.528	P <sub>1</sub>	0.71	0.71		0.38	0.38		0.20	0.20			
	M <sub>2</sub>	1250	1250		1250	1250		1250	1250			
	η	0.72	0.72		0.68	0.68		0.64	0.64			
833.556	P <sub>1</sub>	0.61	0.61		0.33	0.33		0.17	0.17			
	M <sub>2</sub>	1250	1250		1250	1250		1250	1250			
	η	0.72	0.72		0.68	0.68		0.64	0.64			
941.111	P <sub>1</sub>	0.55	0.55		0.30	0.30		0.16	0.16			
	M <sub>2</sub>	1250	1250		1250	1250		1250	1250			
	η	0.71	0.71		0.66	0.66		0.62	0.62			

Thermal power limit not considered (see page 2-4)



# Selection tables - Helical-worm gearboxes

Gearbox with free input shaft

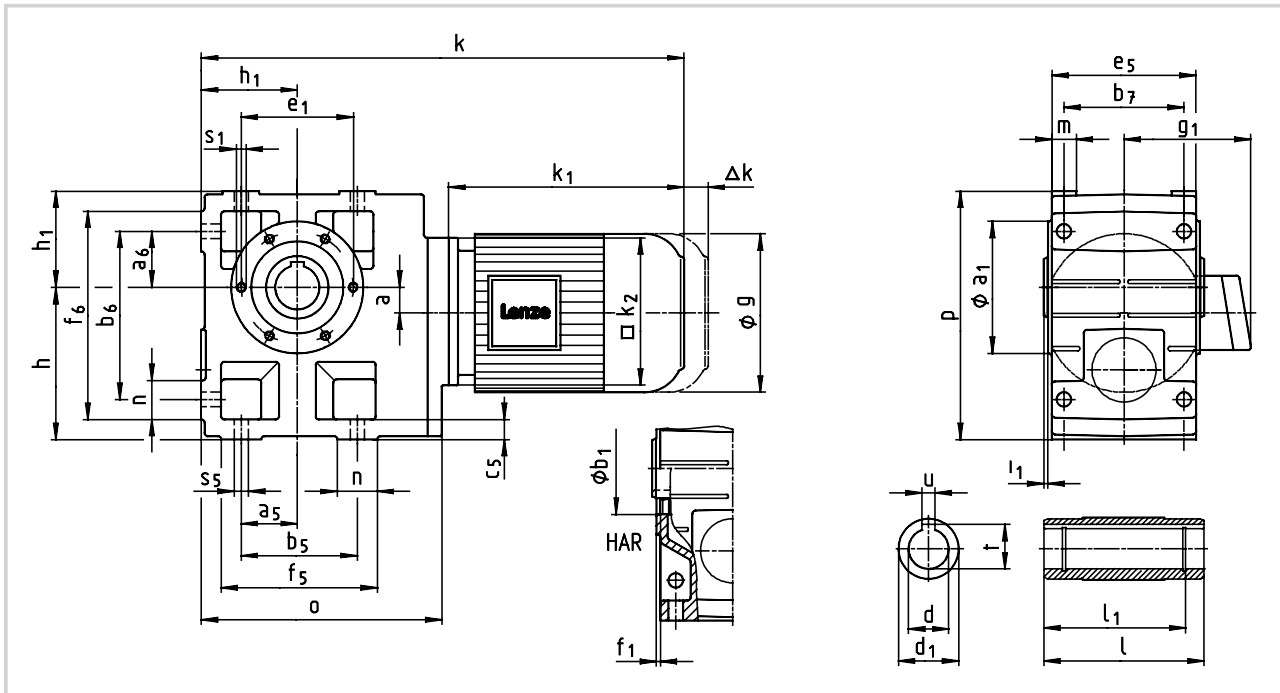
$M_2 \text{ perm} \leq 1250 \text{ Nm}$

GSS 07 - 3 W							Dimensions page 7-88			
$n_1$		2800 min <sup>-1</sup>			1400 min <sup>-1</sup>			700 min <sup>-1</sup>		
Drive size		1B	1C	1D	1B	1C	1D	1B	1C	1D
i	$P_{1\text{perm}}$ [kW] $M_{2\text{perm}}$ [Nm]									
1011.633	$P_1$	0.51	0.51		0.27	0.27		0.14	0.14	
	$M_2$	1250	1250		1250	1250		1250	1250	
	$\eta$	0.71	0.71		0.66	0.66		0.63	0.63	
1142.167	$P_1$	0.46	0.46		0.25	0.25		0.13	0.13	
	$M_2$	1250	1250		1250	1250		1250	1250	
	$\eta$	0.70	0.70		0.65	0.65		0.62	0.62	
1227.755	$P_1$	0.43	0.43		0.23	0.23		0.12	0.12	
	$M_2$	1250	1250		1250	1250		1250	1250	
	$\eta$	0.70	0.70		0.65	0.65		0.62	0.62	
1386.175	$P_1$	0.39	0.39		0.21	0.21		0.11	0.11	
	$M_2$	1250	1250		1250	1250		1250	1250	
	$\eta$	0.68	0.68		0.64	0.64		0.61	0.61	
1569.181	$P_1$	0.34			0.18			0.10		
	$M_2$	1250			1250			1250		
	$\eta$	0.68			0.64			0.62		
1771.656	$P_1$	0.31			0.17			0.09		
	$M_2$	1250			1250			1250		
	$\eta$	0.67			0.63			0.60		

Thermal power limit not considered (see page 2-4)

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		063C12	071C32	080C32	090C32	Motor frame size																
<b>GSS □□ - 2 M HQR</b>		063C32	071C42	080C42		100C12	112C22	112C32	132C22	160-22	160-32											
		063C42				100C32			132C32													
Motor	g	123	138	156	176	196		220	261		310											
	g <sub>1</sub>	Without option	100	109	141	146	157		167	195		207										
		Brake motor	107	116	130	135	146		156	195		207										
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519											
	k <sub>2</sub>	120	120	145	180	180		222	265		300											
	Δk**	Brake	40	52	73	70	79		90	109		96										
Separate fan		130	128	128	127	109		102	115		96											
Separate fan + brake		170	165	184	180	170		183	201		208											
Gearbox size	Gearbox						Total length															
	o	l*	p*	h*	h <sub>1</sub>	a	k															
04	181	115	171	100	71	20	378	397	420	481												
05	212	140	205	125	80	23	399	419	441	502	536											
06	255	160	250	150	100	26	439	459	481	542	576	592	636									
07	305	200	310	190	120	33			524	585	619	635	679	727	804	848						

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d	l	d <sub>1</sub>	l <sub>1</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25	115	45	100	8	28.3	105	75	90	3	2.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9
	8				33.3																			
05	30	140	50	124	8	33.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
	10				38.3																			
06	40	160	65	140	12	43.3	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
	14				48.8																			
07	50	200	75	175	14	53.8	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18
	16				59.3																			

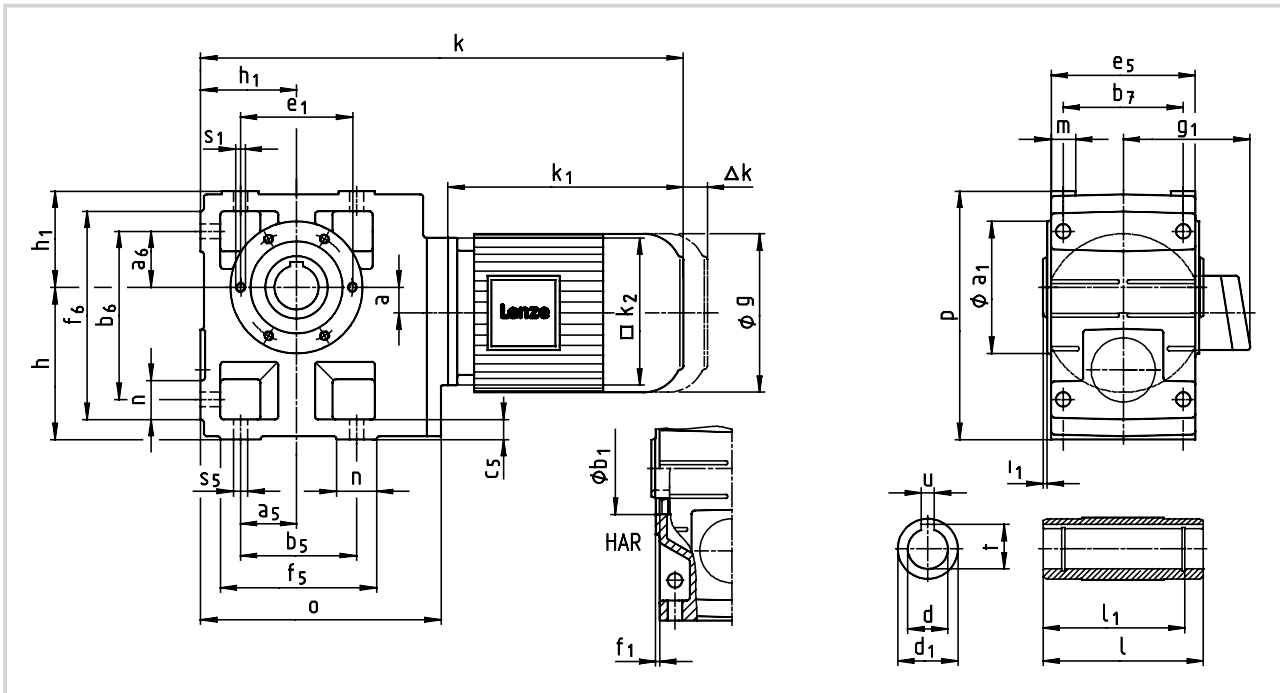
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size													
<b>GSS □□ - 2 M HOR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21					
Motor	$g$	129		142	156	178		194	222	262					
	$g_1$	Without option	105		131	131	141		158	165	197				
		Brake motor	105		131	131	140		159	165	197				
	$k_1$	193	204	176	225	242	280	310	323	409					
	$k_2$	100		145	145	180		180	222	265					
	$\Delta k^{**}$	Brake	56		66	68	74		94	101	127				
Separate fan		71		80	94	101		97	95	104					
Separate fan + brake		118		134	150	164		169	183	218					
Gearbox size	Gearbox						Total length								
	$o$	$l^*$	$p^*$	$h^*$	$h_1$	$a$	$k$								
	04	181	115	171	100	71	20	358	369	371	420	447			
	05	212	140	205	125	80	23			392	441	469	507	537	
	06	255	160	250	150	100	26			432	481	509	547	577	595
07	305	200	310	190	120	33				524	552	590	620	638	733

Gearbox size	Hollow shaft						Pitch circle						Foot											
	$d$ H7	$l$	$d_1$	$l_1$	$u$ J59	$t$ +0.2	$a_1$	$b_1$ H7	$e_1$	$f_1$	$i_1$	$s_1$ 6x60°	$a_5$	$a_6$	$b_5$	$b_6$	$b_7$	$c_5$	$e_5$	$f_5$	$f_6$	$n$	$m$	$s_5$
04	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

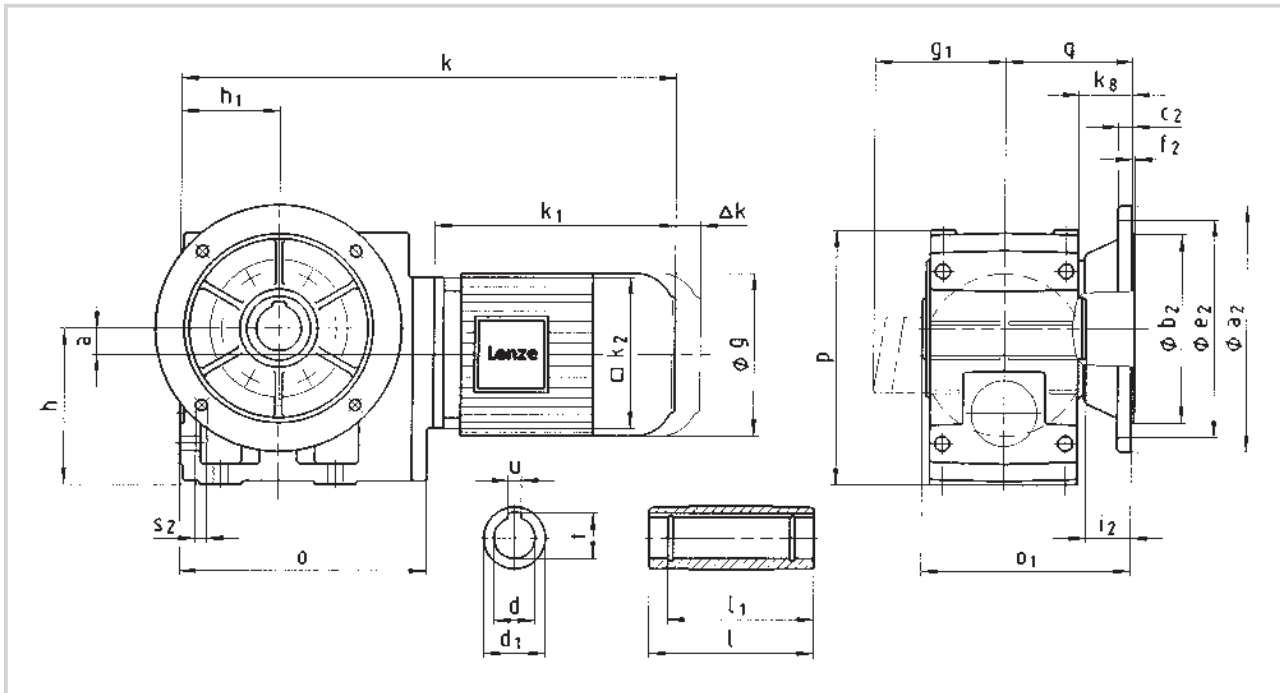
Dimensions in [mm]

\* Observe dimension  $k_2$ . With gearbox size 04 and motor frame size 090, dimension  $k_2/2 > h-a$

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size																
		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32							
<b>GSS □□ - 2 M HAK</b>		063C32	071C42	080C42		100C32			132C32									
Motor	g	123	138	156	176	196	220	261		310								
	g <sub>1</sub>	Without option		100	109	141	146	157	167	195	207							
		Brake motor		107	116	130	135	146	156	195	207							
	k <sub>1</sub>	188	207	225	276	309	319	363	404	475	519							
	k <sub>2</sub>	120	120	145	180	180	222	265	300									
Δk**	Brake		40	52	73	70	79	90	109	96								
	Separate fan		130	128	128	127	109	102	115	96								
	Separate fan + brake		170	165	184	180	170	183	201	208								
Gearbox size	Gearbox									Total length								
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k									
04	181	148	171	100	71	20	38	90.5	378	397	420	481						
05	212	173	205	125	80	23	40	103	399	419	441	502	536					
06	255	201	250	150	100	26	49	121	439	459	481	542	576	592	636			
07	305	255	310	190	120	33	65	155			524	585	619	635	679	727	804	848

Gearbox size	Hollow shaft						Output flange						
	d	l	d <sub>1</sub>	l <sub>1</sub>	u	t	a <sub>2</sub>	b <sub>2</sub>	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
	H7				JS9	+0.2		H7					
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14

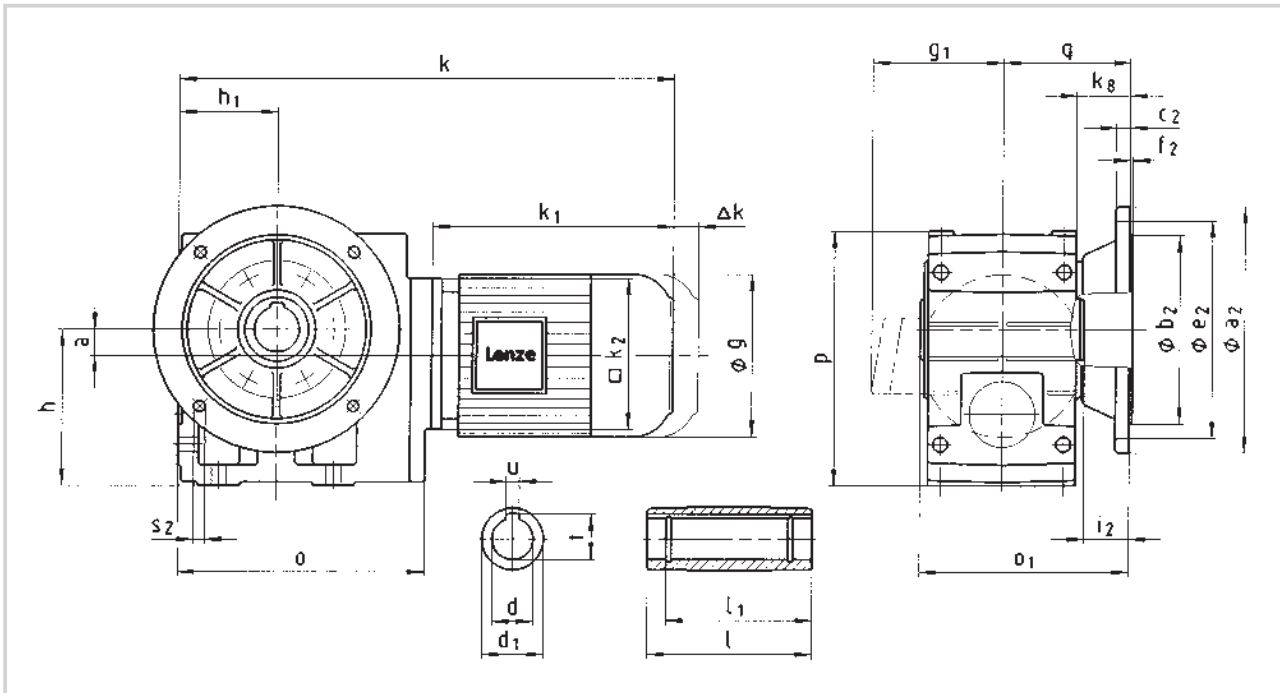
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size															
<b>GSS □□ - 2 M HAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21							
Motor	$g$	129		142	156	178	194		222	262							
	$g_1$	Without option		105	131	131	141		158	165	197						
		Brake motor		105	131	131	140		159	165	197						
	$k_1$	193	204	176	225	242	280	310	323	409							
	$k_2$	100		145	145	180	180		222	265							
	$\Delta k^{**}$	Brake		56	66	68	74	94		101	127						
Separate fan		71	80	94	101	97		95	104								
Separate fan + brake		118	134	150	164	169		183	218								
Gearbox size	Gearbox									Total length							
	$o$	$o_1^*$	$p^*$	$h^*$	$h_1$	$a$	$k_8$	$q$	$k$								
	04	181	148	171	100	71	20	38	90.5	358	369	371	420	447			
	05	212	173	205	125	80	23	40	103			392	441	469	507	537	
	06	255	201	250	150	100	26	49	121			432	481	509	547	577	595
07	305	255	310	190	120	33	65	155				524	552	590	620	638	733

Gearbox size	Hollow shaft						Output flange						
	$d$ H7	$l$	$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_2$	$b_2$ H7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$
04	25	115	45	100	8	28.3	160	110	10	130	3.5	33	4 x 9
	30				8	33.3							
05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11
	35				10	38.3							
06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11
	45				14	48.8							
07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14
	55				16	59.3							

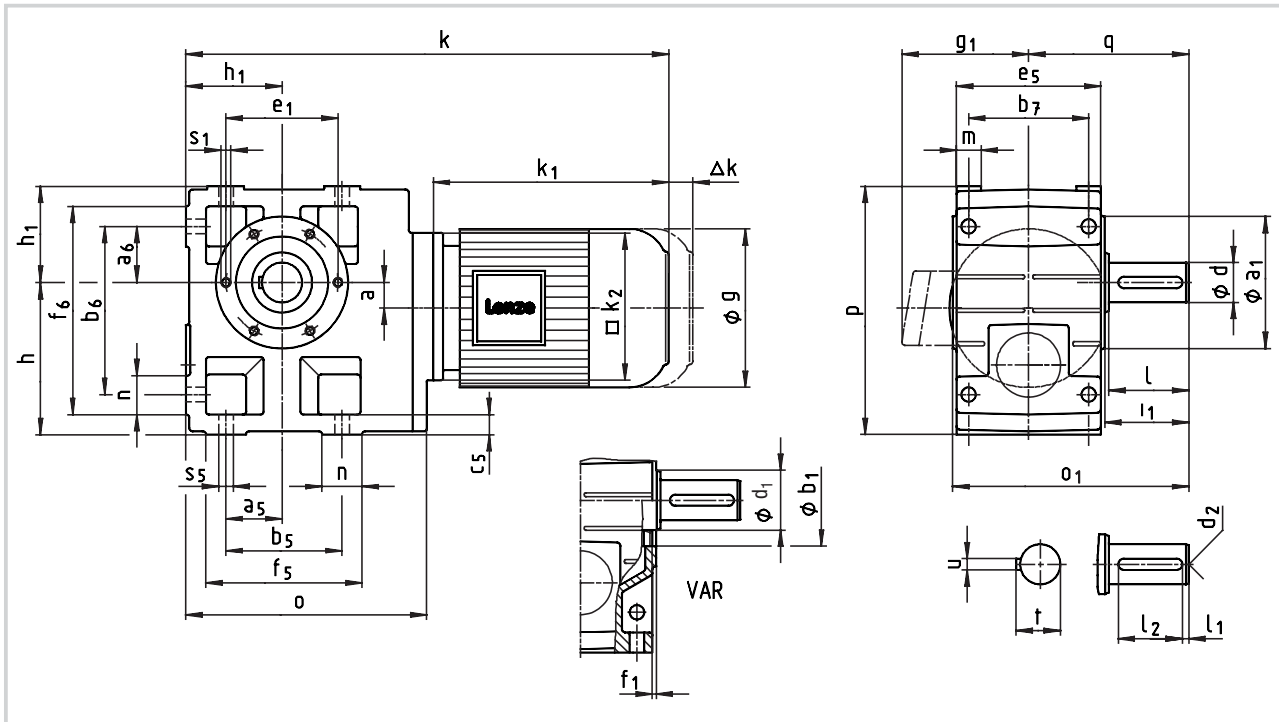
Dimensions in [mm]

\* Observe dimension  $k_2$ . With gearbox size 04 and motor size frame 090, dimension  $k_2/2 > h-a$

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size															
<b>GSS □□ - 2 M VOR</b>		063C12	071C32	080C32	090C32	100C12	112C22	112C32	132C22	160-22	160-32						
		063C32	071C42	080C42		100C32			132C32								
		063C42															
Motor	$g$	123	138	156	176	196	220	261	310								
	$g_1$	Without option	100	109	141	146	157	167	195	207							
		Brake motor	107	116	130	135	146	156	195	207							
	$k_1$	188	207	225	276	309	319	363	404	475	519						
	$k_2$	120	120	145	180	180	222	265	300								
	$\Delta k^{**}$	Brake	40	52	73	70	79	90	109	96							
Separate fan		130	128	128	127	109	102	115	96								
Separate fan + brake		170	165	184	180	170	183	201	208								
Gearbox size	Gearbox								Total length								
	$o$	$o_1^*$	$p^*$	$h^*$	$h_1$	$a$	$q$	$k$									
04	181	163	171	100	71	20	107.5	378	397	420	481						
05	212	197	205	125	80	23	130	399	419	441	502	536					
06	255	236	250	150	100	26	160	439	459	481	542	576	592	636			
07	305	296	310	190	120	33	200			524	585	619	635	679	727	804	848

Gearbox size	Solid shaft								Pitch circle					Foot												
	$d$	$l$	$d_1$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$	$e_1$	$f_1$	$i_1$	$s_1$	$a_5$	$a_6$	$b_5$	$b_6$	$b_7$	$c_5$	$e_5$	$f_5$	$f_6$	$n$	$m$	$s_5$
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm]

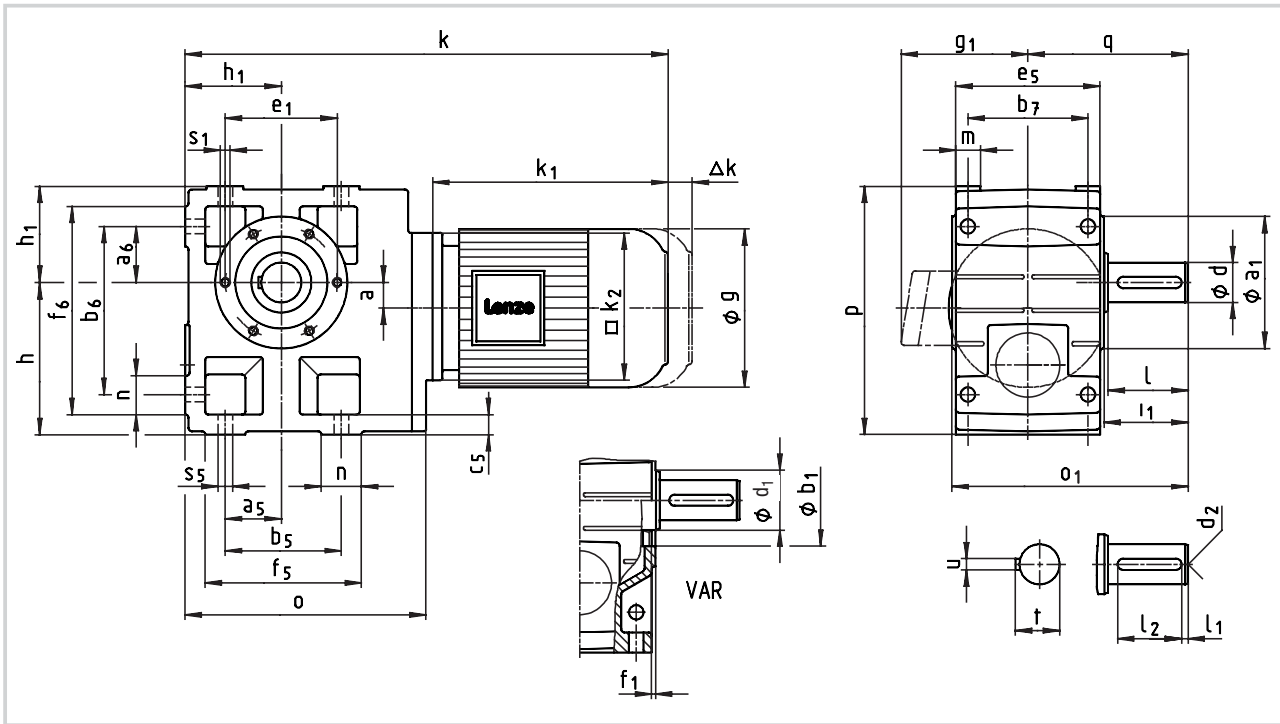
$d \leq 50$  mm:  $k_6$   
 $d > 50$  mm:  $m_6$

\* Observe dimension  $k_2$ . With gearbox size 04 and motor frame size 090, dimension  $k_2/2 > h-a$

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GSS □□ - 2 M VOR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21						
Motor	g		129	142	156	178	194	222	262							
	g <sub>1</sub>	Without option	105	131	131	141	158	165	197							
		Brake motor	105	131	131	140	159	165	197							
	k <sub>1</sub>		193	204	176	225	242	280	310	323	409					
	k <sub>2</sub>		100	145	145	180	180	180	222	265						
	Δk**	Brake	56	66	68	74	94	101	127							
Separate fan		71	80	94	101	97	95	104								
Separate fan + brake		118	134	150	164	169	183	218								
Gearbox size	Gearbox							Total length								
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	q	k								
04	181	163	171	100	71	20	107.5	358	369	371	420	447				
05	212	197	205	125	80	23	130			392	441	469	507	537		
06	255	236	250	150	100	26	160			432	481	509	547	577	595	
07	305	296	310	190	120	33	200				524	552	590	620	638	733

Gearbox size	Solid shaft								Pitch circle					Foot												
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm]

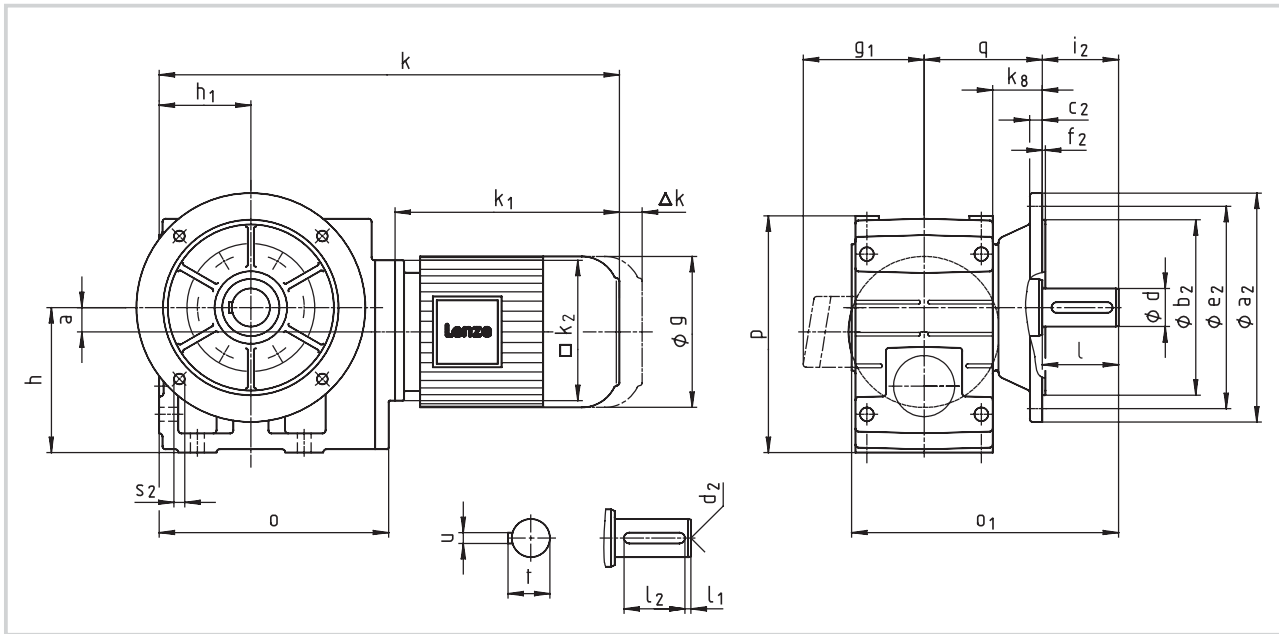
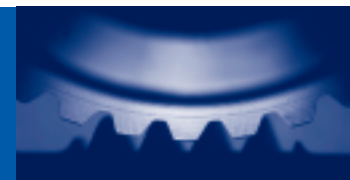
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		063C12	071C32	080C32	090C32	Motor frame size												
<b>GSS □□ - 2 M VAK</b>		063C32	071C42	080C42		100C12	112C22	112C32	132C22	160-22	160-32							
		063C42				100C32			132C32									
Motor	$g$	123	138	156	176	196	220	261	310									
	$g_1$	Without option		100	109	141	146	157	167	195	207							
		Brake motor		107	116	130	135	146	156	195	207							
	$k_1$	188	207	225	276	309	319	363	404	475	519							
	$k_2$	120	120	145	180	180	222	265	300									
	$\Delta k^{**}$	Brake		40	52	73	70	79	90	109	96							
Separate fan		130	128	128	127	109	102	115	96									
Separate fan + brake		170	165	184	180	170	183	201	208									
Gearbox size	Gearbox									Total length								
	$o$	$o_1^*$	$p^*$	$h^*$	$h_1$	$a$	$k_8$	$q$	$k$									
	04	181	196	171	100	71	20	38	90.5	378	397	420	481					
	05	212	230	205	125	80	23	40	103	399	419	441	502	536				
	06	255	277	250	150	100	26	49	121	439	459	481	542	576	592	636		
07	305	351	310	190	120	33	65	155			524	585	619	635	679	727	804	848

Gearbox size	Solid shaft								Output flange						
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250	180	14.5	215	4	100	4 x 14	
								300	230	16.5	265				

Dimensions in [mm]

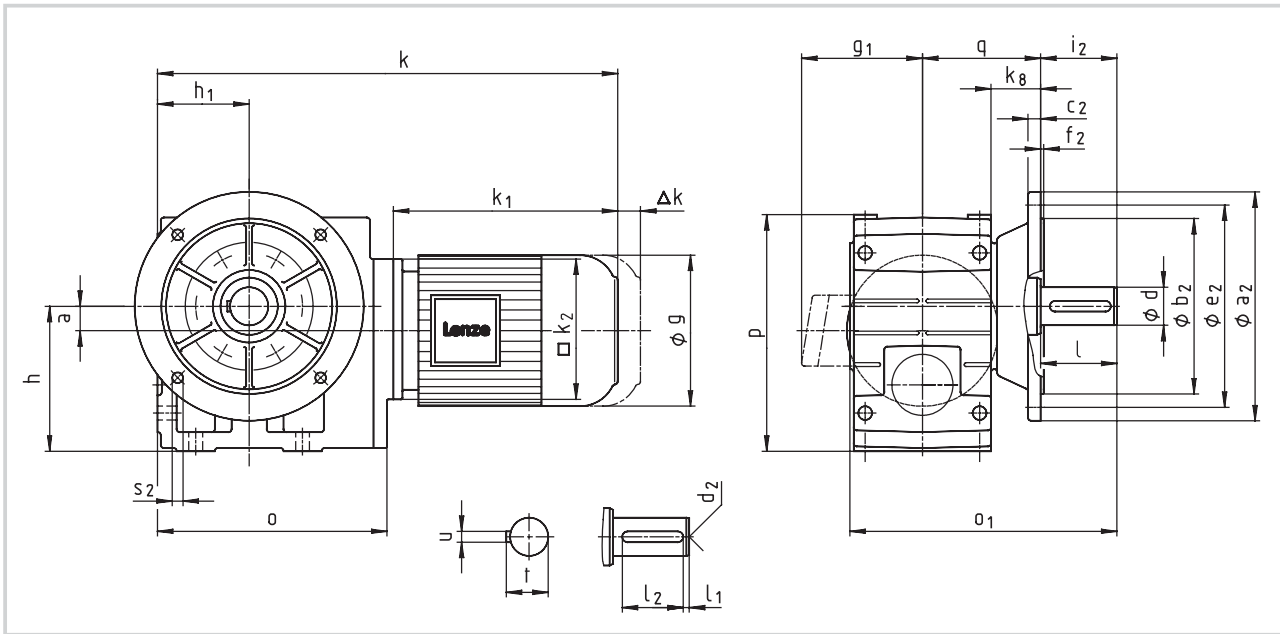
$d \leq 50$  mm:  $k_6$   
 $d > 50$  mm:  $m_6$

\* Observe dimension  $k_2$ . With gearbox size 04 and motor frame size 090, dimension  $k_2/2 > h-a$   
 \*\* For additional attachments see section 8



# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size															
<b>GSS □□ - 2 M VAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41	112-31 112-41	132-21							
Motor	g	129	142	156	178	194	222	262									
	g <sub>1</sub>	Without option	105	131	131	141	158	165	197								
		Brake motor	105	131	131	140	159	165	197								
	k <sub>1</sub>	193	204	176	225	242	280	310	323	409							
	k <sub>2</sub>	100	145	145	180	180	222	265									
Δk**	Brake	56	66	68	74	94	101	127									
	Separate fan	71	80	94	101	97	95	104									
	Separate fan + brake	118	134	150	164	169	183	218									
Gearbox size	Gearbox								Total length								
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k								
04	181	196	171	100	71	20	38	90.5	358	369	371	420	447				
05	212	230	205	125	80	23	40	103			392	441	469	507	537		
06	255	277	250	150	100	26	49	121			432	481	509	547	577		
07	305	351	310	190	120	33	65	155				524	552	590	620	638	733

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250	180	14.5	215	4	100	4 x 14	
								300	230	16.5	265				

Dimensions in [mm]

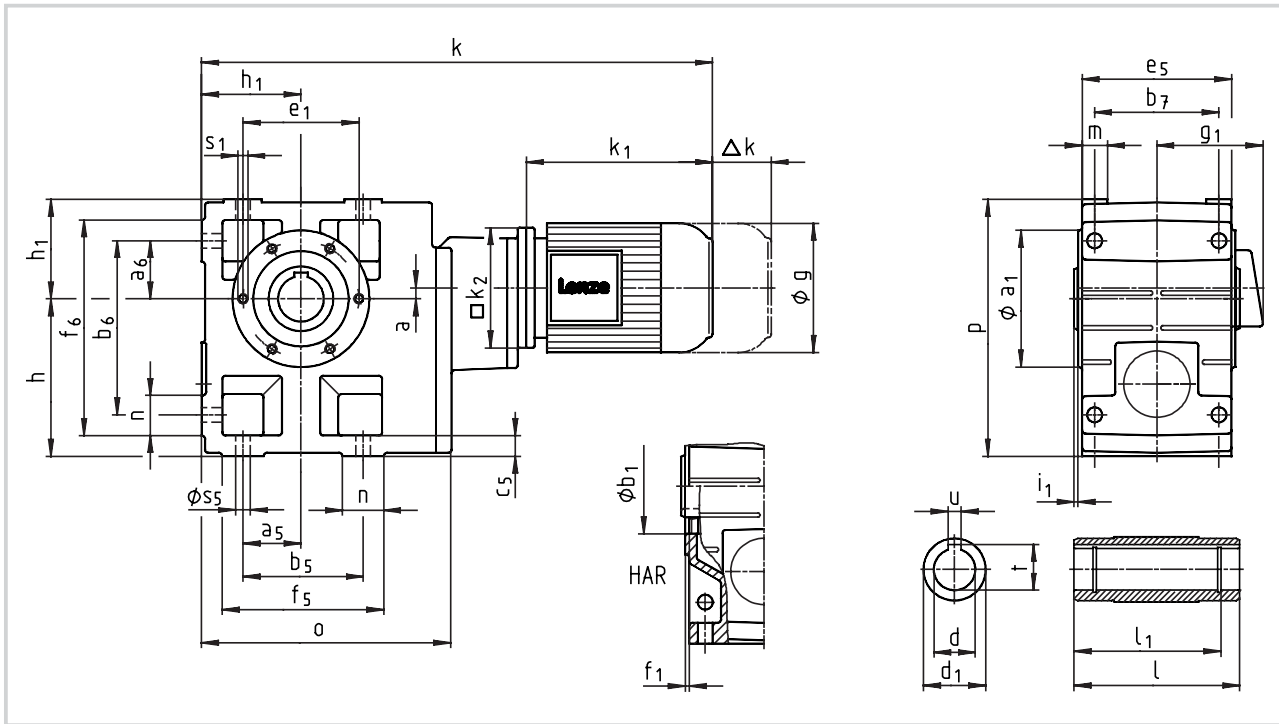
d ≤ 50 mm: k<sub>6</sub>  
d > 50 mm: m<sub>6</sub>

\* Observe dimension k<sub>2</sub>. With gearbox size 04 and motor frame size 090, dimension k<sub>2</sub>/2 > h-a

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size									
<b>GSS □□ - 3 M HQR</b>		063C12	071C32	080C32	090C32	100C12					
		063C32	071C42	080C42		100C32					
		063C42									
Motor	g	123	138	156	176	196					
	g <sub>1</sub>	Without option	100	109	141	146	157				
		Brake motor	107	116	130	135	146				
	k <sub>1</sub>	188	207	225	276	309					
	k <sub>2</sub>	120	120	145	180	180					
	Δk **	Brake	40	52	73	70	79				
Separate fan		130	128	128	127	109					
Separate fan + brake		170	165	184	180	170					
Gearbox size	Gearbox						Total length				
	o	l*	p*	h	h <sub>1</sub>	a	k				
05	209	140	205	125	80	13	476	495	518	579	
06	252	160	250	150	100	10	533	552	575	636	
07	299	200	310	190	120	12	587	606	629	690	723

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d	l	d <sub>1</sub>	l <sub>1</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
	H7				JS9	+0.2	H7					6x60°												
05	30	140	50	124	8	33.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
	35				10	38.3																		
06	40	160	65	140	12	43.3	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
	45				14	48.8																		
07	50	200	75	175	14	53.8	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18
	55				16	59.3																		

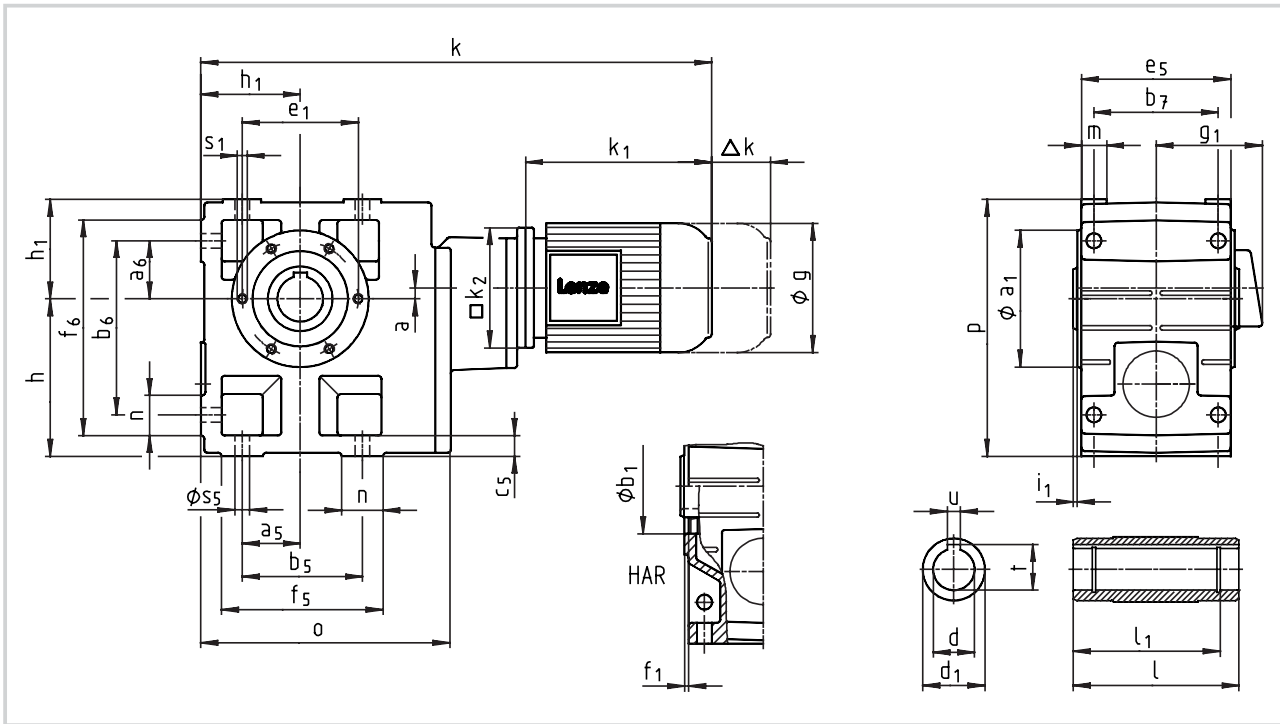
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size												
<b>GSS □□ - 3 M HOR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41						
Motor	g		129	142	156	178	194							
	g <sub>1</sub>	Without option	105	131	131	141	158							
		Brake motor	105	131	131	140	159							
	k <sub>1</sub>		193	204	176	225	242	280	310					
	k <sub>2</sub>		100		145	145	180		180					
	Δk**	Brake	56		66	68	74		94					
Separate fan		71		80	94	101		97						
Separate fan + brake		118		134	150	164		169						
Gearbox size	Gearbox						Total length							
	o	l*	p*	h	h <sub>1</sub>	a	k							
05	209	140	205	125	80	13	456	467	469	518	545			
06	252	160	250	150	100	10	513	524	526	575	602			
07	299	200	310	190	120	12			580	629	656	694		724

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d	l	d <sub>1</sub>	l <sub>1</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
	H7				JS9	+0.2	H7					6x60°												
05	30	140	50	124	8	33.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
	35				10	38.3																		
06	40	160	65	140	12	43.3	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
	45				14	48.8																		
07	50	200	75	175	14	53.8	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18
	55				16	59.3																		

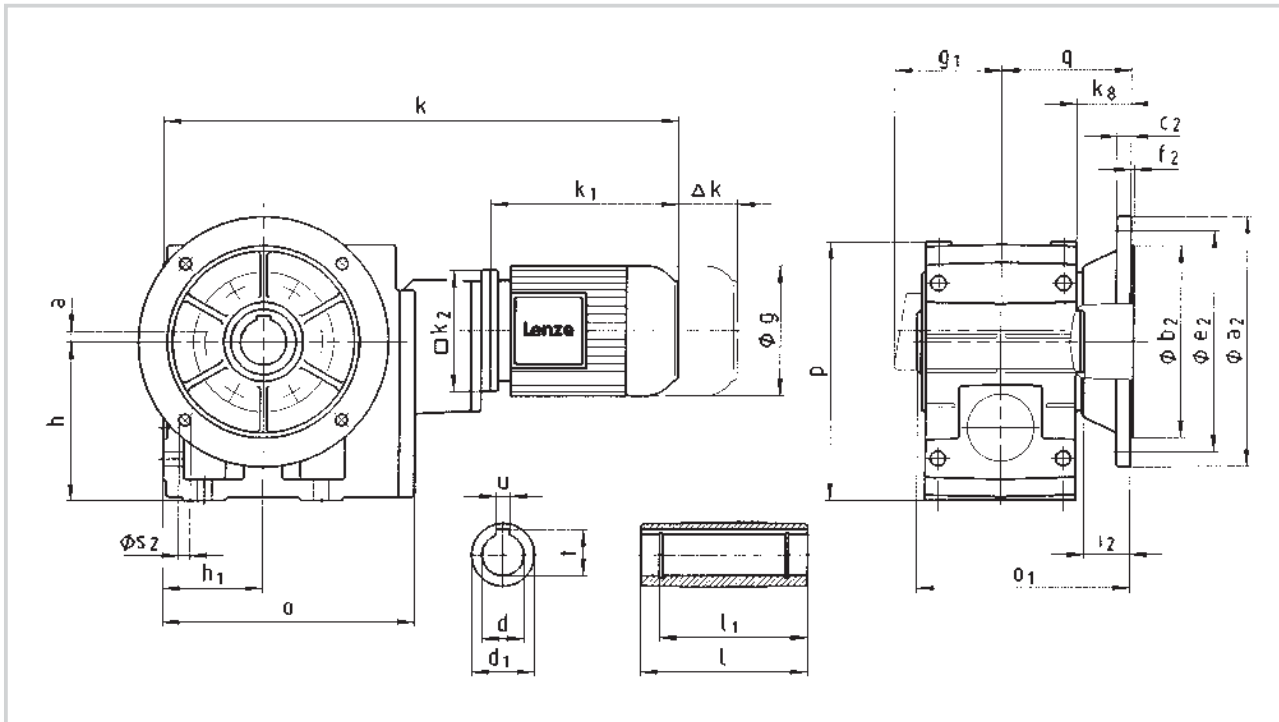
Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size												
<b>GSS □□ - 3 M HAK</b>		063C12	071C32	080C32	090C32	100C12								
		063C32	071C42	080C42		100C32								
		063C42												
Motor	$g$	123	138	156	176	196								
	$g_1$	Without option	100	109	141	146	157							
		Brake motor	107	116	130	135	146							
	$k_1$	188	207	225	276	309								
	$k_2$	120	120	145	180	180								
	$\Delta k^{**}$	Brake	40	52	73	70	79							
Separate fan		130	128	128	127	109								
Separate fan + brake		170	165	184	180	170								
Gearbox size	Gearbox								Total length					
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$					
05	209	173	205	125	80	13	40	103	476	495	518	579		
06	252	201	250	150	100	10	49	121	533	552	575	636		
07	299	255	310	190	120	12	65	155	587	606	629	690	723	

Gearbox size	Hollow shaft						Output flange						
	$d$	$l$	$d_1$	$l_1$	$u$	$t$	$a_2$	$b_2$	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$
	H7				JS9	+0.2		$j_7$					
05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11
	35												
06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11
	45												
07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14
	55												

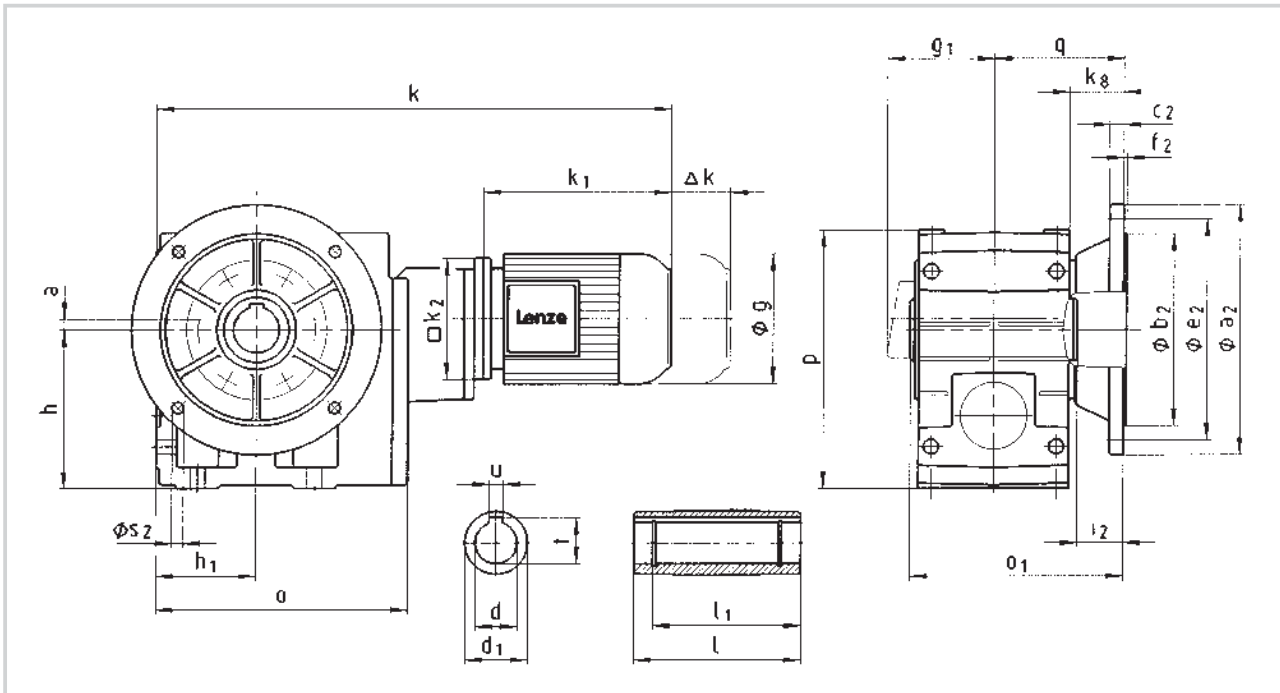
Dimensions in [mm]

\* Observe dimension  $k_2$

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GSS □□ - 3 M HAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41								
Motor	$g$		129	142	156	178		194								
	$g_1$	Without option	105	131	131	141		158								
		Brake motor	105	131	131	140		159								
	$k_1$		193	204	176	225	242	280	310							
	$k_2$		100	145	145	180		180								
	$\Delta k^{**}$	Brake	56	66	68	74		94								
Separate fan		71	80	94	101		97									
Separate fan + brake		118	134	150	164		169									
Gearbox size	Gearbox							Total length								
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$							
05	209	173	205	125	80	13	40	103	456	467	469	518	545			
06	252	201	250	150	100	10	49	121	513	524	526	575	602			
07	299	255	310	190	120	12	65	155			580	629	656	694		724

Gearbox size	Hollow shaft						Output flange							
	$d$ h7	$l$	$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11	
	35													38.3
06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11	
	45													48.8
07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14	
	55													59.3

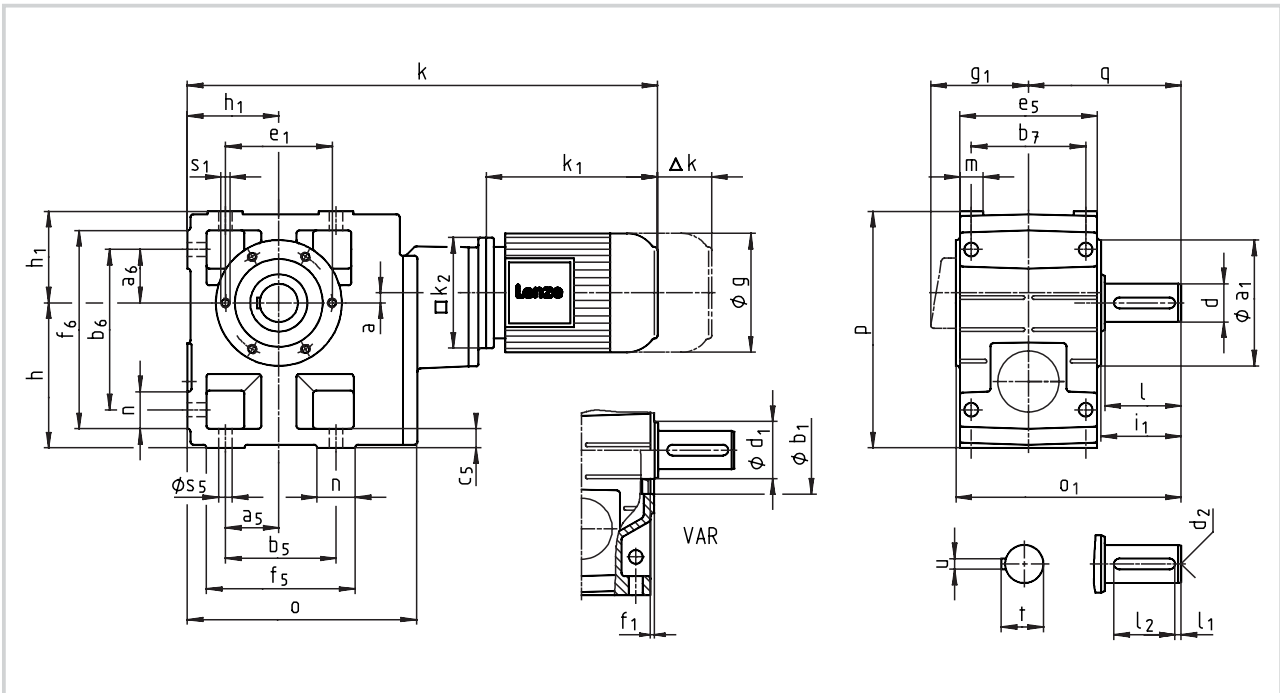
Dimensions in [mm]

\* Observe dimension  $k_2$

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size										
<b>GSS □□ - 3 M VOR</b>		063C12	071C32	080C32	090C32	100C12						
		063C32	071C42	080C42		100C32						
		063C42										
Motor	g	123	138	156	176	196						
	g <sub>1</sub>	Without option	100	109	141	146	157					
		Brake motor	107	116	130	135	146					
	k <sub>1</sub>	188	207	225	276	309						
	k <sub>2</sub>	120	120	145	180	180						
	Δk **	Brake	40	52	73	70	79					
Separate fan		130	128	128	127	109						
Separate fan + brake		170	165	184	180	170						
Gearbox size	Gearbox											
	Total length											
	k											
	05	209	197	205	125	80	13	130	476	495	518	579
06	252	236	250	150	100	10	160	533	552	575	636	
07	299	296	310	190	120	12	200	587	606	629	690	723

Gearbox size	Solid shaft								Pitch circle					Foot												
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm]

d ≤ 50 mm: k6

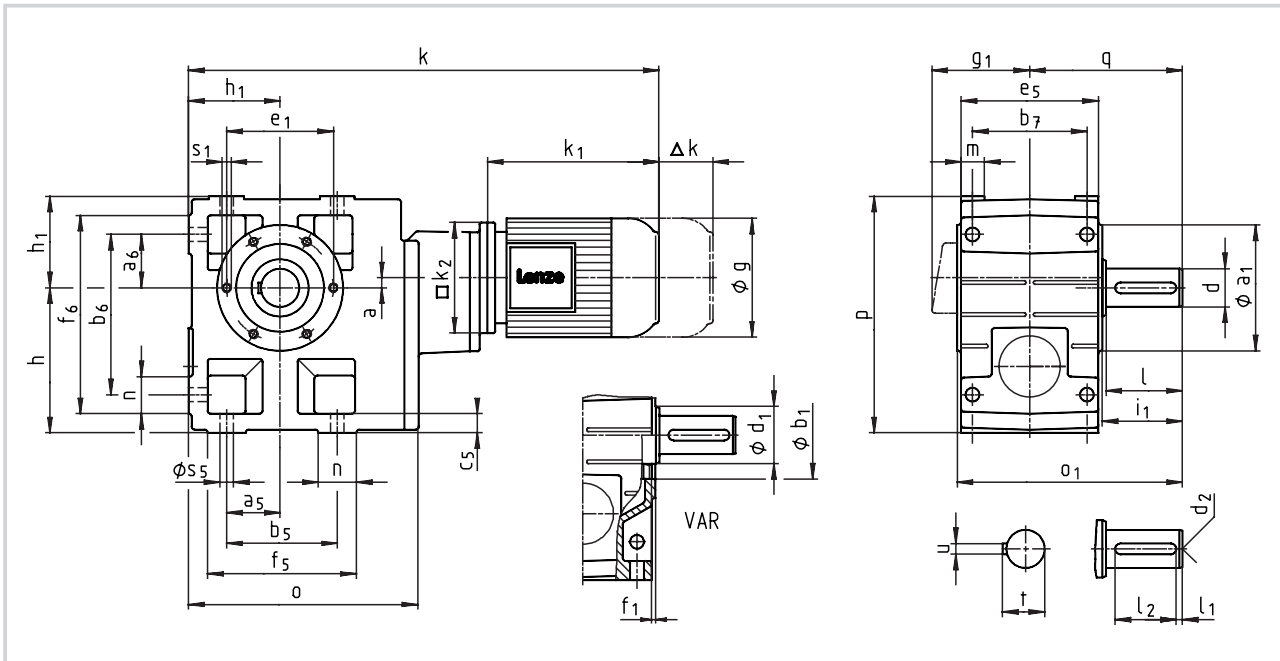
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size														
<b>GSS □□ - 3 M VOR</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41								
Motor	g		129	142	156	178		194								
	g <sub>1</sub>	Without option	105	131	131	141		158								
		Brake motor	105	131	131	140		159								
	k <sub>1</sub>		193	204	176	225	242	280	310							
	k <sub>2</sub>		100		145	145	180		180							
	Δk**	Brake	56		66	68	74		94							
Separate fan		71		80	94	101		97								
Separate fan + brake		118		134	150	164		169								
Gearbox size	Gearbox								Total length							
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	q	k								
	05	209	197	205	125	80	13	130	456	467	469	518	545			
	06	252	236	250	150	100	10	160	513	524	526	575	602			
07	299	296	310	190	120	12	200			580	629	656	694		724	

Gearbox size	Solid shaft								Pitch circle					Foot												
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm]

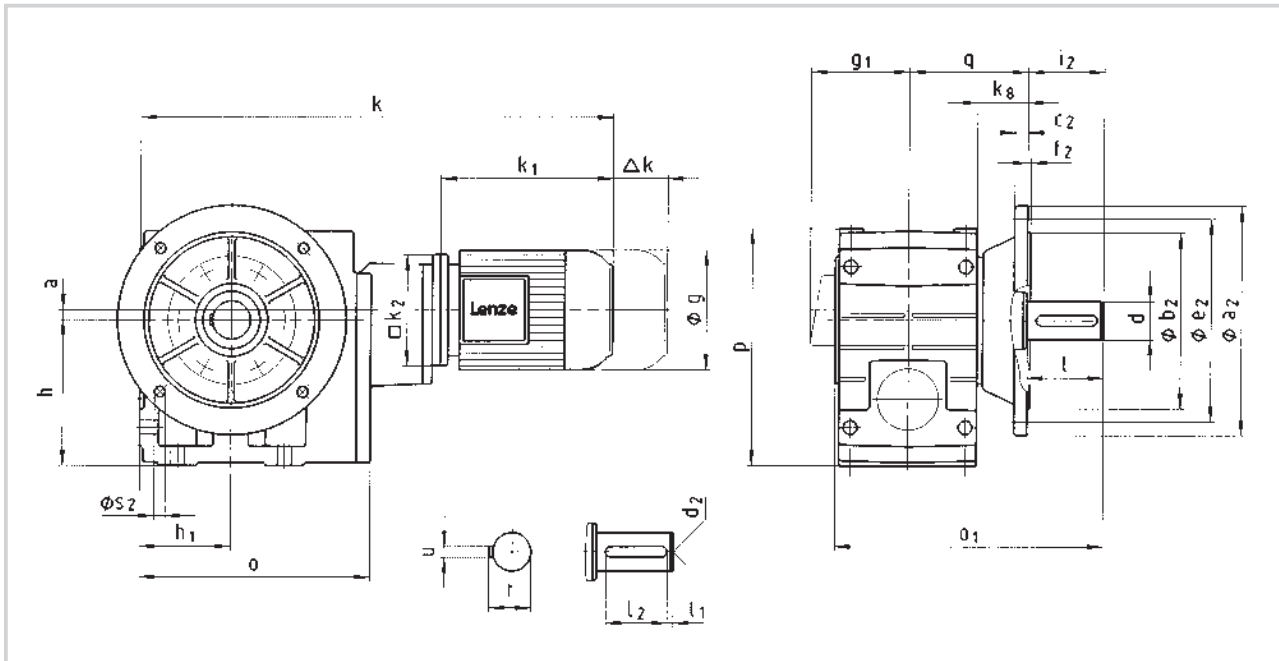
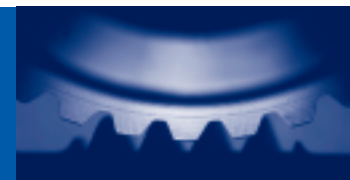
d ≤ 50 mm: k6  
d > 50 mm: m6

\* Observe dimension k<sub>2</sub>

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Geared motors (4-pole)



Geared motor		Motor frame size													
<b>GSS □□ - 3 M VAK</b>		063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32									
Motor	$g$	123	138	156	176	196									
	$g_1$	Without option	100	109	141	146	157								
		Brake motor	107	116	130	135	146								
	$k_1$	188	207	225	276	309									
	$k_2$	120	120	145	180	180									
	$\Delta k^{**}$	Brake	40	52	73	70	79								
Separate fan		130	128	128	127	109									
Separate fan + brake		170	165	184	180	170									
Gearbox size	Gearbox							Total length							
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$						
	05	209	230	205	125	80	13	40	103	476	495	518	579		
	06	252	277	250	150	100	10	49	121	533	552	575	636		
07	299	351	310	190	120	12	65	155	587	606	629	690	723		

Gearbox size	Solid shaft								Output flange						
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	

Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

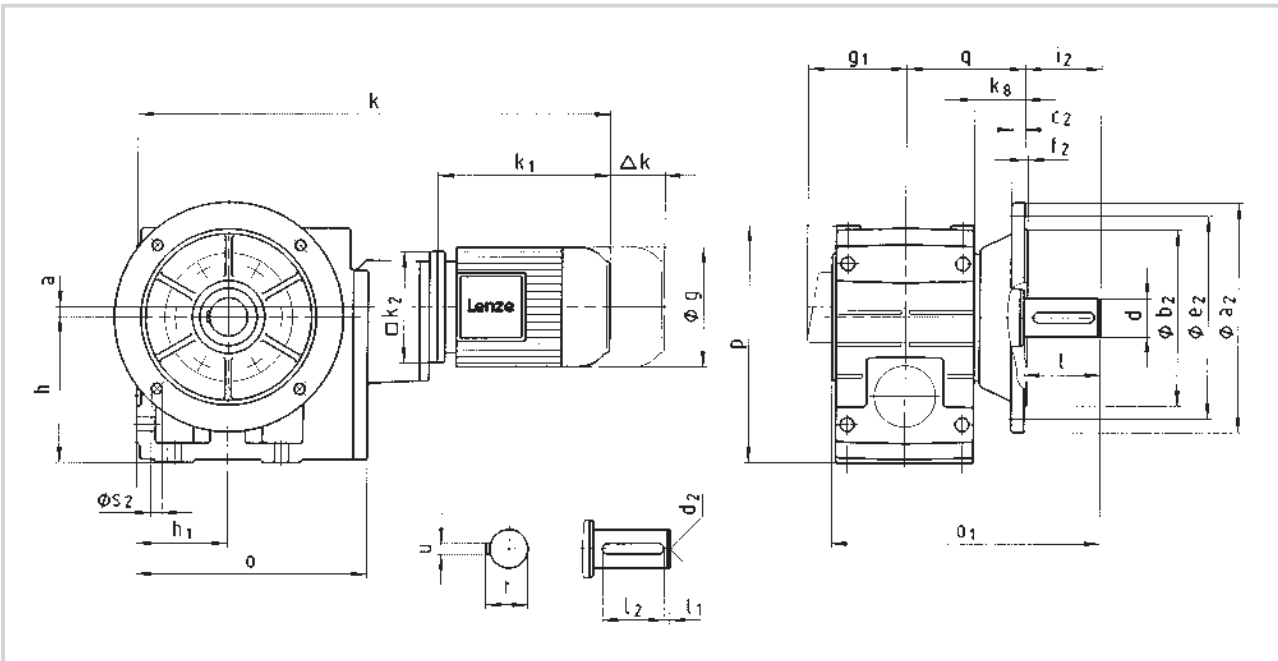
\* Observe dimension  $k_2$

\*\* For additional attachments see section 8



# Dimensions - Helical-worm gearboxes

## Geared motors (2- and 6-pole)



Geared motor		Motor frame size															
<b>GSS □□ - 3 M VAK</b>		063-11	063-31	071-1□ 071-3□	080-1□ 080-3□	090-11 090-31	100-31	100-41									
Motor	$g$		129	142	156	178		194									
	$g_1$	Without option	105	131	131	141		158									
		Brake motor	105	131	131	140		159									
	$k_1$		193	204	176	225	242	280	310								
	$k_2$		100	145	145	180		180									
	$\Delta k^{**}$	Brake	56	66	68	74		94									
Separate fan		71	80	94	101		97										
Separate fan + brake		118	134	150	164		169										
Gearbox size	Gearbox								Total length								
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$								
	05	209	230	205	125	80	13	40	103	456	467	469	518	545			
	06	252	277	250	150	100	10	49	121	513	524	526	575	602			
07	299	351	310	190	120	12	65	155			580	629	656	694		724	

Gearbox size	Solid shaft								Output flange						
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ $j_7$	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
05	30	60	6	45	M10	8	33	200	130	12	165	3,5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14,5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53,5	250	180	14,5	215	4	100	4 x 14	
								300	230	16,5	265				

Dimensions in [mm]

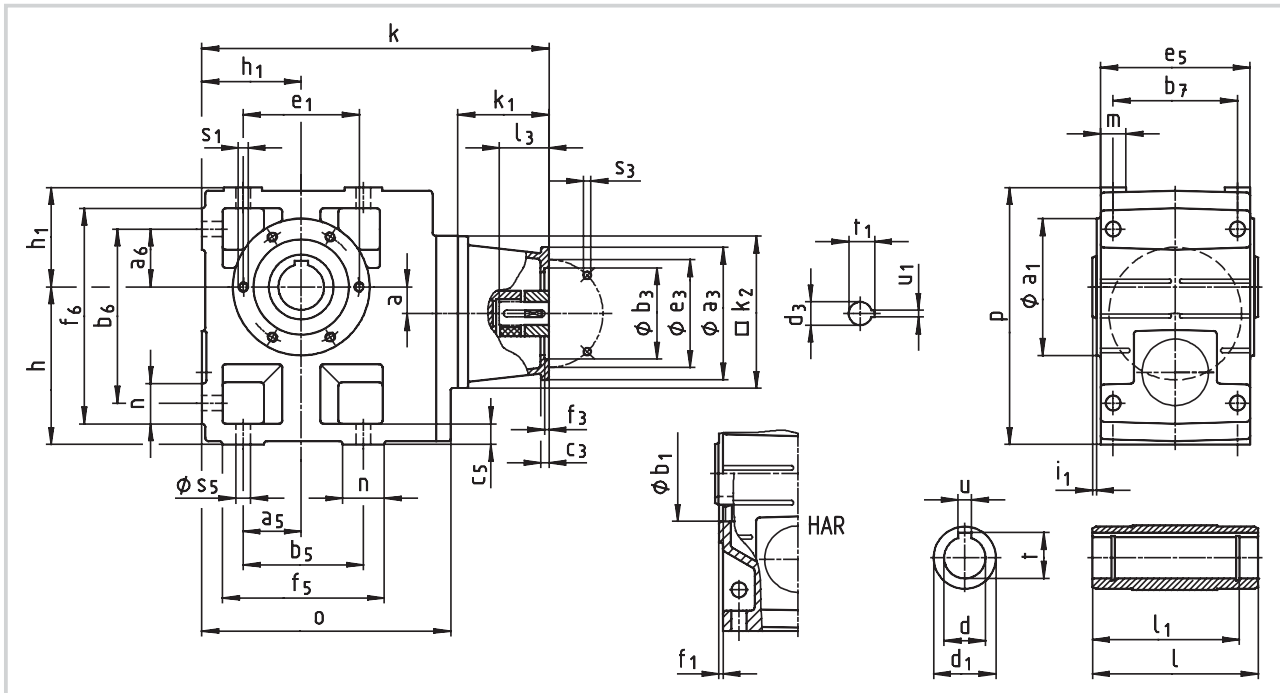
$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$

\*\* For additional attachments see section 8

# Dimensions - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



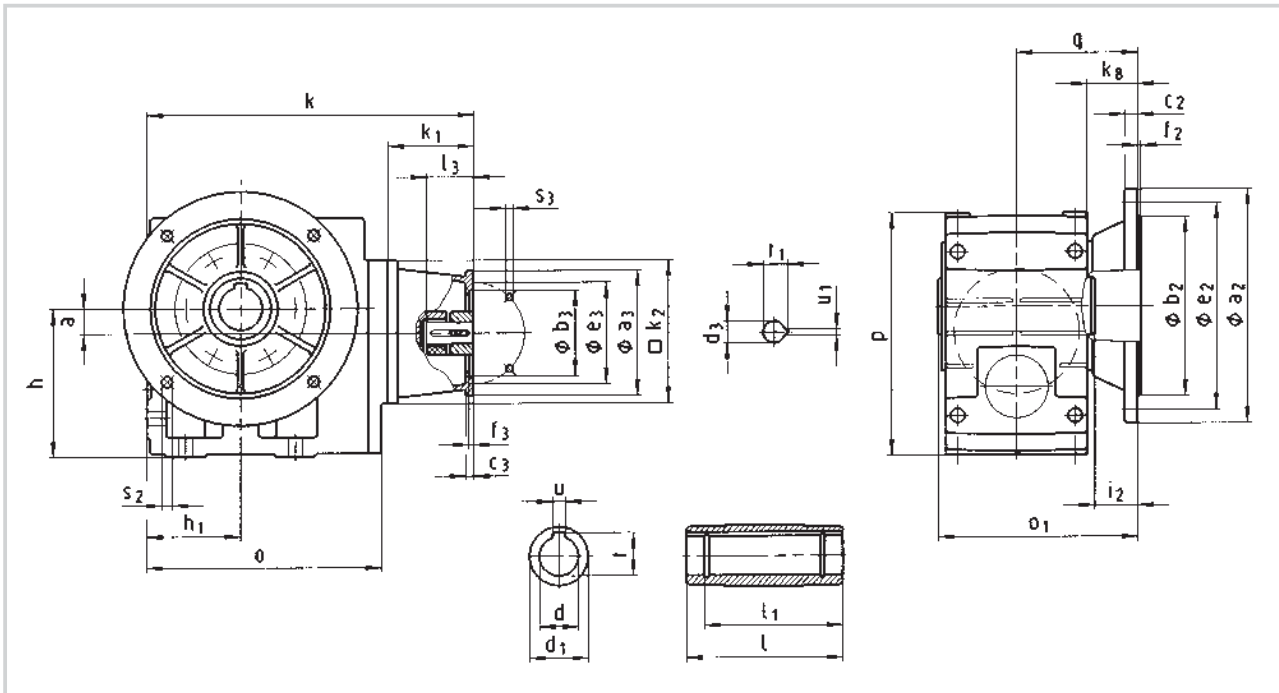
Gearbox <b>GSS □□ - 2 N HOR</b> corresponds to IEC motor			Drive size																					
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	3H			
			63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	132			
											112			112										
Housing	$k_1$		75	77	75		91		115		110		139	180	160	180	218	188						
	$k_2$		120	145	120		145		180		180		180		265		300							
Flange	$a_3$		90	105	90	160	160	105	120	160	160	160	160	300	250	250	350	300						
	$b_3$ H8		60	70	60	110	110	70	80	110	110	110	110	230	180	180	250	230						
	$c_3$		7	8	7	10	10	8	8	10	10	10	10	18	18	35	20	18						
	$e_3$		75	85	75	130	130	85	100	130	130	130	130	265	215	215	300	265						
	$f_3$		3	3	4	4	3	3.5	4	4	4	4	4	4.5	6	4.5								
	$s_3$ 4 x		5.5	6.6	5.5	9	9	6.6	6.6	9	9	9	9	13.5	17.5	13.5								
Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	38			
	$l_3$ min max		25						50		40		30		80		60		80		110			
			40						50		50		60		80		60		80		110			
	$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	10			
	$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	41			
Gearbox size	Gearbox						Total length																	
	o	l*	p*	h*	$h_1$	a	k																	
04	181	115	171	100	71	20	265	272	265		286		320											
05	212	140	205	125	80	23		294			308		342		337									
06	255	160	250	150	100	26		334			348		382		377		406							
07	305	200	310	190	120	33					391		425		420		449	504	484	504	547	517		

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	$d_1$	$l_1$	u JS9	t +0.2	$a_1$	$b_1$ H7	$e_1$	$f_1$	$i_1$	$s_1$ 6x60°	$a_5$	$a_6$	$b_5$	$b_6$	$b_7$	$c_5$	$e_5$	$f_5$	$f_6$	n	m	$s_5$
04	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm] \* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors



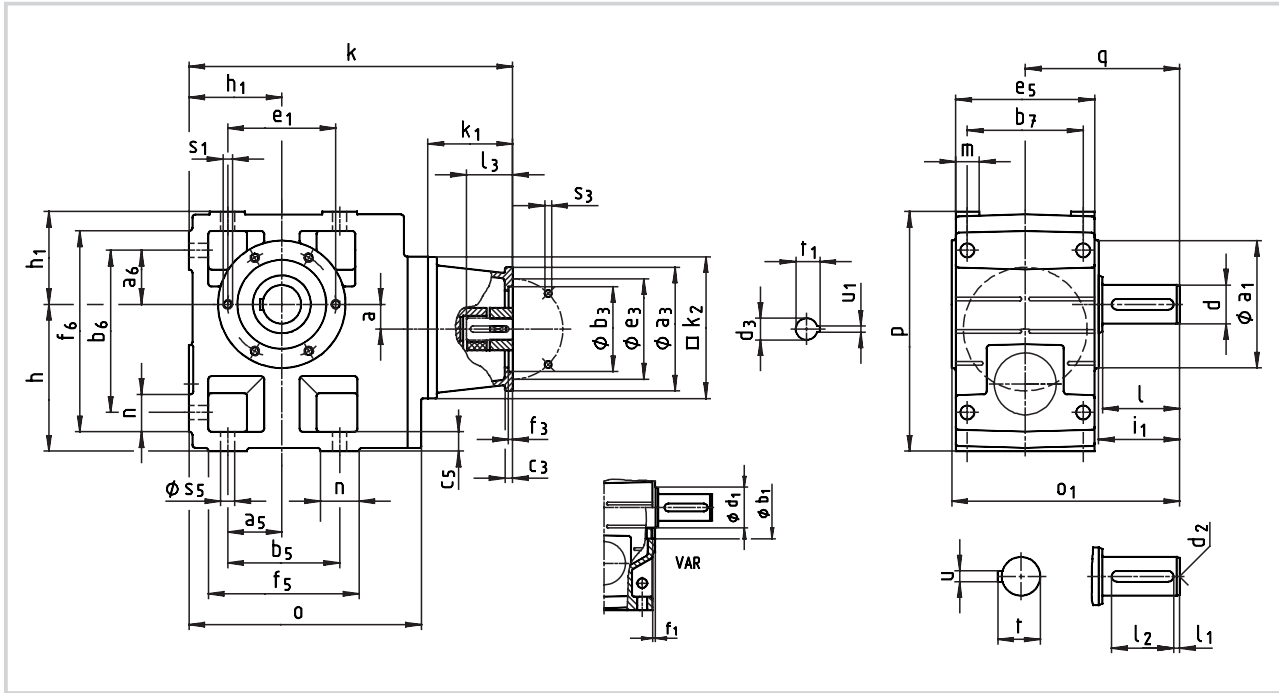
Gearbox <b>GSS □□ - 2 N HAK</b> corresponds to IEC motor			Drive size																		
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100	2E 90	3E 80	1F 100	2F 90	1G 132	2G 100	3G	1H 160	3H 132
Housing	$k_1$		75	77	75			91		115		110		139	180	160	180	218	188		
		$k_2$	120	145	120			145		180		180		180		265		300			
	Flange	$a_3$	90	105	90	160	160	105	120	160	160	160	160	160	300	250	250	350	300		
		$b_3$ H8	60	70	60	110	110	70	80	110	110	110	110	110	230	180	180	250	230		
		$c_3$	7	8	7	10	10	8	8	10	10	10	10	10	18	18	35	20	18		
		$e_3$	75	85	75	130	130	85	100	130	130	130	130	130	265	215	215	300	265		
		$f_3$	3	3	4	4	3	3.5	4	4	4	4	4	4	4.5	6	4.5				
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9	9	9	9	9	13.5	17.5	13.5				
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	38
		$l_3$	min	23	30	23		25		50	40	30		30	80	60	80	110	80		
max			23	30	23		40		50	50	60		60	80	60	80	110	80			
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	10	
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	41		
Gearbox size	Gearbox									Total length											
	$o$	$o_1^*$	$p^*$	$h^*$	$h_1$	$a$	$k_8$	$q$	$k$												
04	181	148	171	100	71	20	38	90.5	265	272	265		286	320							
05	212	173	205	125	80	23	40	103		294			308	342	337						
06	255	201	250	150	100	26	49	121		334			348	382	377	406					
07	305	255	310	190	120	33	65	155					391	425	420	449	504	484	504	547	517

Gearbox size	Hollow shaft						Output flange						
	$d$ H7	$l$	$d_1$	$l_1$	$u$ JS9	$t$ +0.2	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14

\* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



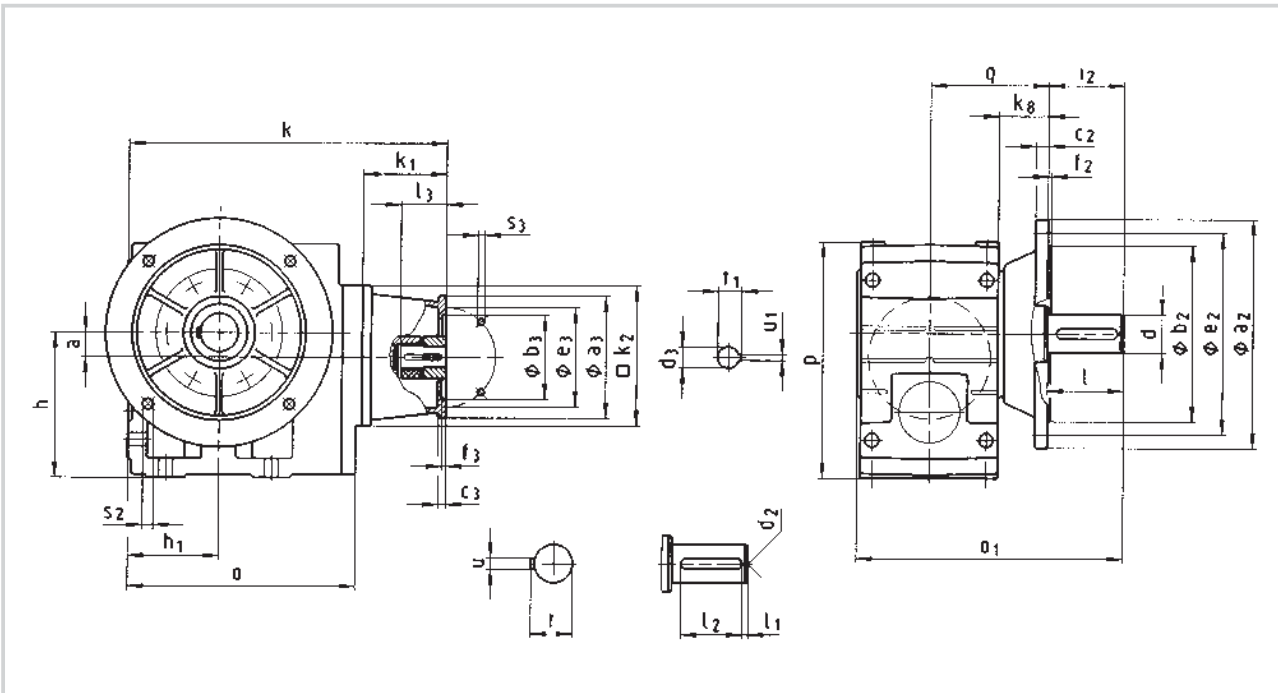
Gearbox			Drive size																									
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	1F	2F	1G	2G	3G	1H	3H							
<b>GSS □□ - 2 N VOR</b> corresponds to IEC motor			63	71	63	80		71	71	90	80	100	90	80	100	90	132	100		160	132							
											112			112			112											
Housing	$k_1$		75	77	75			91			115			110			139	180	160	180	218	188						
	$k_2$		120	145	120			145			180			180			180			265		300						
Flange	$a_3$		90	105	90	160	160	105	120	160			160			160			300	250	250	350	300					
	$b_3$	H8	60	70	60	110	110	70	80	110			110			110			230	180	180	250	230					
	$c_3$		7	8	7	10	10	8	8	10			10			10			18	18	35	20	18					
	$e_3$		75	85	75	130	130	85	100	130			130			130			265	215	215	300	265					
	$f_3$		3	3	4	4	3	3.5	4	4			4			4			4.5		6	4.5						
	$s_3$	4 x	5.5	6.6	5.5	9	9	6.6	6.6	9			9			9			13.5		17.5	13.5						
Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	38	42	38						
	$l_3$	min	23	30	23			25		50	40		30		30	80	60	80	80	110	80							
		max	23	30	23			40		50	50		60		60	80	60	80	80	110	80							
	$u_1$		4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	10							
	$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	41							
Gearbox size	Gearbox							Total length																				
	$o$	$o_1^*$	$p^*$	$h^*$	$h_1$	$a$	$q$	$k$																				
04	181	163	171	100	71	20	1075	265	272	265				286														
05	212	197	205	125	80	23	130			294				308														
06	255	236	250	150	100	26	160			334				348														
07	305	296	310	190	120	33	200							391														

Gearbox size	Solid shaft								Pitch circle						Foot											
	$d$	$l$	$d_1$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$	$e_1$	$f_1$	$i_1$	$s_1$	$a_5$	$a_6$	$b_5$	$b_6$	$b_7$	$c_5$	$e_5$	$f_5$	$f_6$	$n$	$m$	$s_5$
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm]  $d \leq 50$  mm: k6  $d > 50$  mm: m6 \* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors



Gearbox <b>GSS □□ - 2 N VAK</b> corresponds to IEC motor			Drive size																				
			1A 63	1B 71	2B 63	1C 80	2C	3C 71	4C 71	1D 90	2D 80	1E 100 112	2E 90	3E 80	1F 100 112	2F 90	1G 132	2G 100 112	3G	1H 160	3H 132		
Housing	$k_1$		75	77	75	91			115		110			139		180	160	180	218	188			
		$k_2$	120	145	120	145			180		180			180		265			300				
	Flange	$a_3$	90	105	90	160	160	105	120	160	160			160	300	250	250	350	300				
		$b_3$ H8	60	70	60	110	110	70	80	110	110			110	230	180	180	250	230				
		$c_3$	7	8	7	10	10	8	8	10	10			10	18	18	35	20	18				
		$e_3$	75	85	75	130	130	85	100	130	130			130	265	215	215	300	265				
		$f_3$	3	3	4	4	3	3.5	4	4	4			4	4.5		6		4.5				
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9	9			9	13.5		17.5		13.5				
Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	28	24	38	28	38	42	38			
	$l_3$	min	23	30	23	25			50	40	30			30	80	60	80	110	80				
		max	23	30	23	40			50	50	60			60	80	60	80	110	80				
	$u_1$	4	5	4	6	5	5	5	8	6	8	8	6	8	8	10	8	10	12	10			
$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5	31	27	41	31	41	45	41				
Gearbox size	Gearbox									Total length													
	$o$	$o_1^*$	$p^*$	$h^*$	$h_1$	$a$	$k_8$	$q$	$k$														
04	181	196	171	100	71	20	38	90.5	265	272	265	286		320									
05	212	230	205	125	80	23	40	103	294		308		342		337								
06	255	277	250	150	100	26	49	121	334		348		382		377		406						
07	305	351	310	190	120	33	65	155			391		425		420		449		504	484	504	547	517

Gearbox size	Solid shaft								Output flange						
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ j7	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	

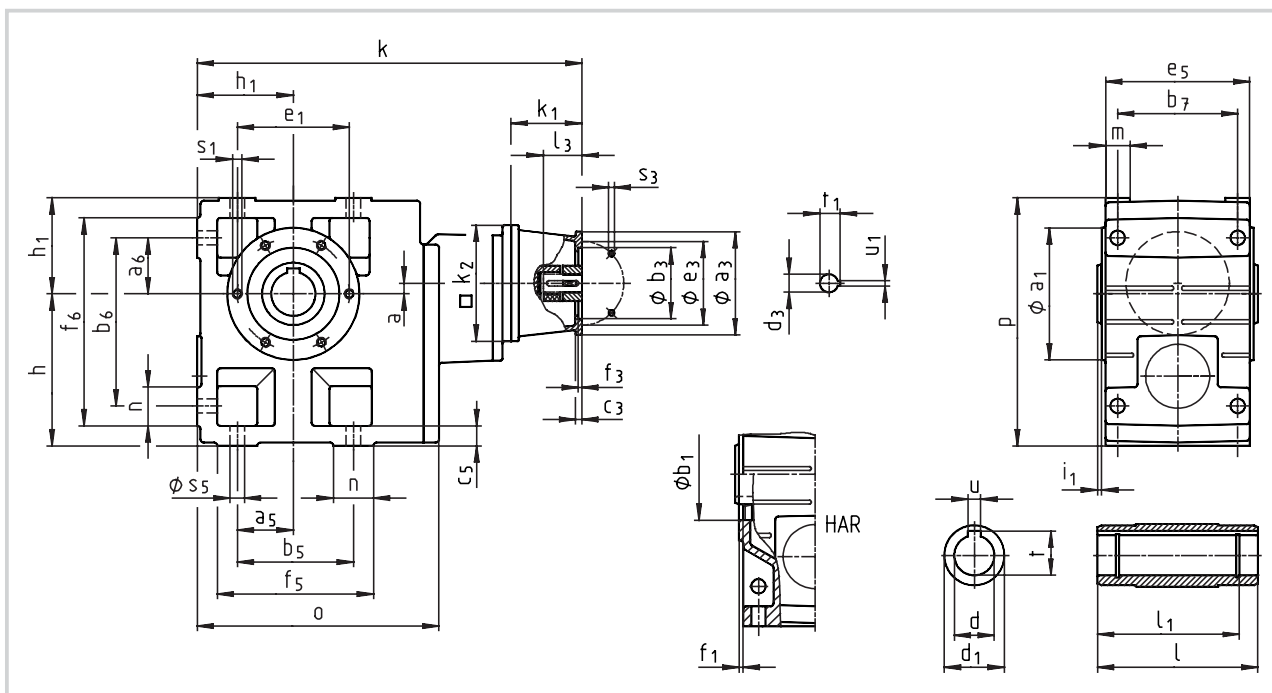
Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6

\* Observe dimension  $k_2$ . With gearbox size 04 and drive size 1D/2D, dimension  $k_2/2 > h-a$

# Dimensions - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox <b>GSS □□ - 3 N HOR</b> corresponds to IEC motor			Drive size																	
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E						
			63	71	63	80		71	71	90	80	100	90	80						
Housing	$k_1$		75	77	75	91				115		110								
	$k_2$		120	145	120	145				180		180								
Flange	$a_3$		90	105	90	160	160	105	120	160		160								
	$b_3$ H8		60	70	60	110	110	70	80	110		110								
	$c_3$		7	8	7	10	10	8	8	10		10								
	$e_3$		75	85	75	130	130	85	100	130		130								
	$f_3$		3		3	4	4	3	3.5	4		4								
	$s_3$ 4 x		5.5	6.6	5.5	9	9	6.6	6.6	9		9								
Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19						
	$l_3$	min	23	30	23	25				50	40	30								
		max	23	30	23	40				50	50	60								
	$u_1$		4	5	4	6	5	5	5	8	6	8	8	6						
$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5							
Gearbox size	Gearbox						Total length													
	o	l*	p*	h	h <sub>1</sub>	a	k													
05	209	140	205	125	80	13	363	370	363	363				418						
06	252	160	250	150	100	10	420	427	420	441				475						
07	299	200	310	190	120	12	481		495				529		524					

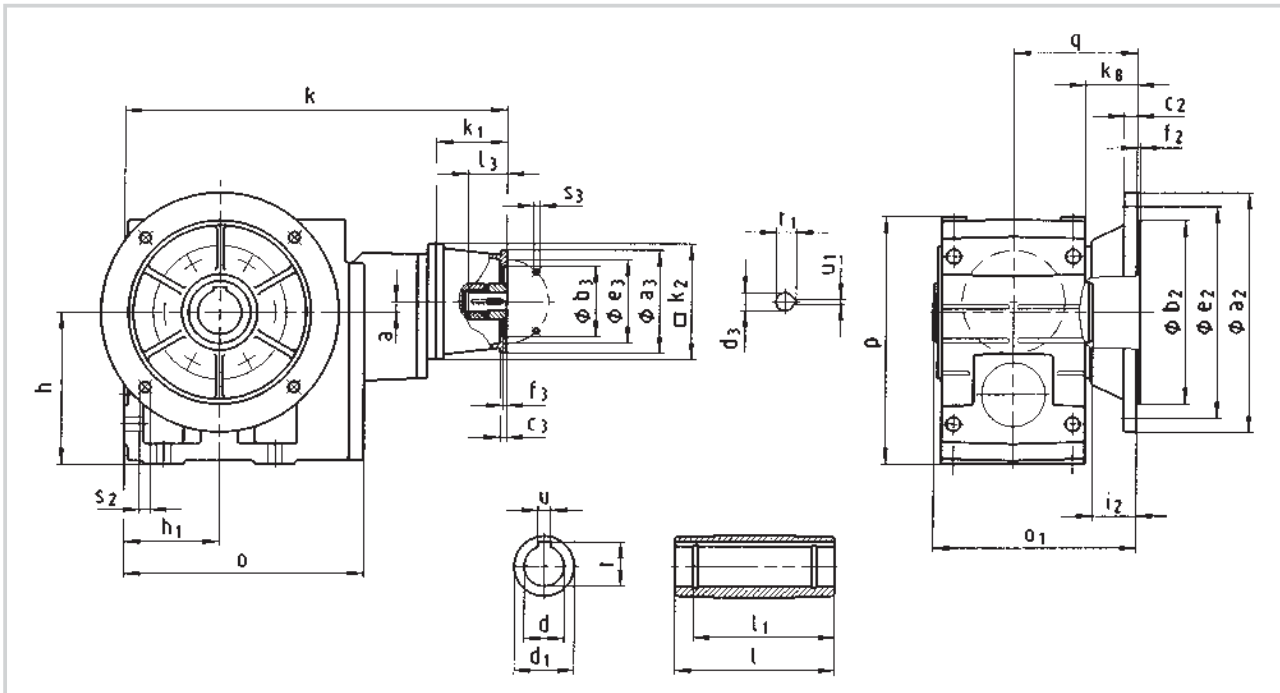
Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub> H7	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm]

\* Observe dimension k<sub>2</sub>

# Dimensions - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors



Gearbox <b>GSS □□ - 3 N HOK</b> corresponds to IEC motor			Drive size													
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E		
			63	71	63	80		71	71	90	80	100	90	80		
											112					
Housing	$k_1$		75	77	75	91				115		110				
	$k_2$		120	145	120	145				180		180				
	Flange	$a_3$	90	105	90	160	160	105	120	160		160				
		$b_3$ H8	60	70	60	110	110	70	80	110		110				
		$c_3$	7	8	7	10	10	8	8	10		10				
		$e_3$	75	85	75	130	130	85	100	130		130				
		$f_3$	3		3	4	4	3	3.5	4		4				
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9				
	Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19	
		$l_3$	min	23	30	23	25				50	40	30			
max			23	30	23	40				50	50	60				
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6			
$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5			
Gearbox size	Gearbox								Total length							
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	k <sub>8</sub>	q	k							
05	209	173	205	125	80	13	40	103	363	370	363	363			418	
06	252	201	250	150	100	10	49	121	420	427	420	441			475	
07	299	255	310	190	120	12	65	155		481		495			529	524

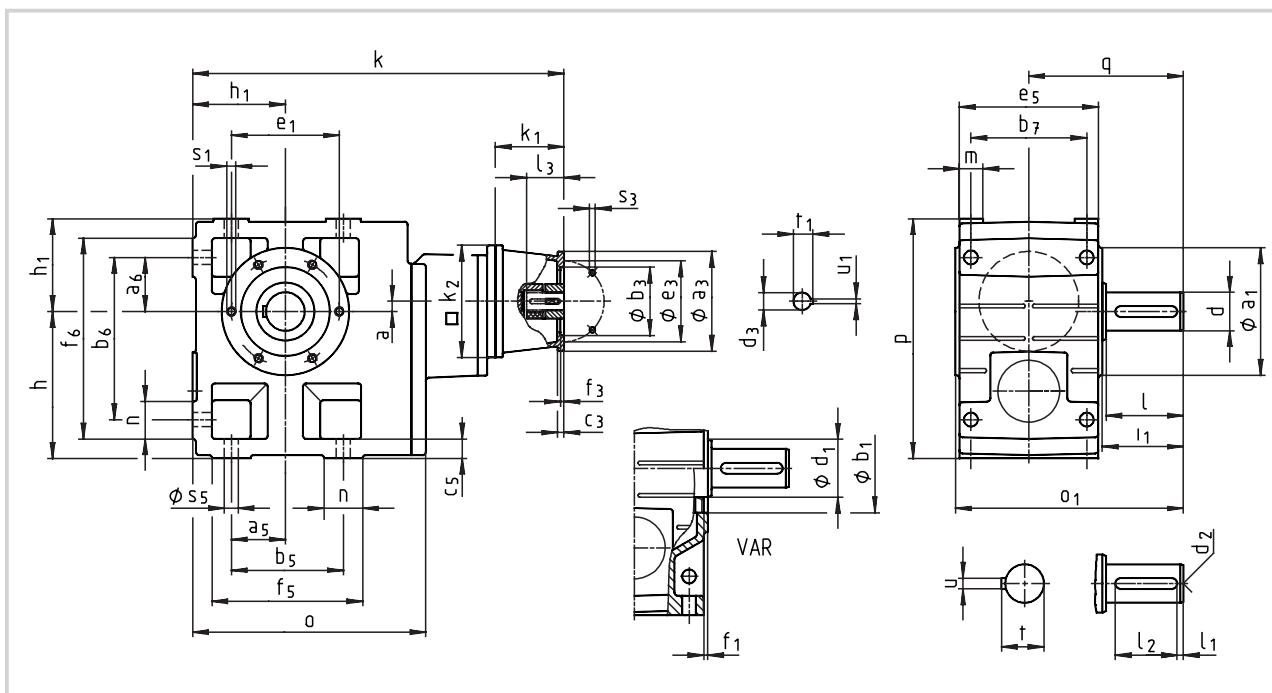
Gearbox size	Hollow shaft						Output flange						
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14

Dimensions in [mm]

\* Observe dimension  $k_2$

# Dimensions - Helical-worm gearboxes

## Gearbox with mounting flange for IEC standard motors



Gearbox			Drive size																							
<b>GSS □□ - 3 N VOR</b> corresponds to IEC motor			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E												
			63	71	63	80		71	71	90	80	100	90	80												
												112														
Housing	$k_1$		75	77	75	91				115		110														
	$k_2$		120	145	120	145				180		180														
Flange	$a_3$		90	105	90	160	160	105	120	160		160														
	$b_3$ H8		60	70	60	110	110	70	80	110		110														
	$c_3$		7	8	7	10	10	8	8	10		10														
	$e_3$		75	85	75	130	130	85	100	130		130														
	$f_3$		3		3	4	4	3	3.5	4		4														
	$s_3$ 4 x		5.5	6.6	5.5	9	9	6.6	6.6	9		9														
Required motor shafts	$d_3$		11	14	11	19	14	14	14	24	19	28	24	19												
	$l_3$ min max		23	30	23	25				50	40	30														
			23	30	23	40				50	50	60														
	$u_1$		4	5	4	6	5	5	5	8	6	8	8	6												
$t_1$		12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5													
Gearbox size	Gearbox							Total length																		
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$q$	$k$																		
05	209	197	205	125	80	13	130	363	370	363	363				418											
06	252	236	250	150	100	10	160	420	427	420	441				475											
07	299	296	310	190	120	12	200		481		495				529											
Gearbox size	Solid shaft								Pitch circle					Foot												
	$d$	$l$	$d_1$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_1$	$b_1$	$e_1$	$f_1$	$i_1$	$s_1$	$a_5$	$a_6$	$b_5$	$b_6$	$b_7$	$c_5$	$e_5$	$f_5$	$f_6$	$n$	$m$	$s_5$
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

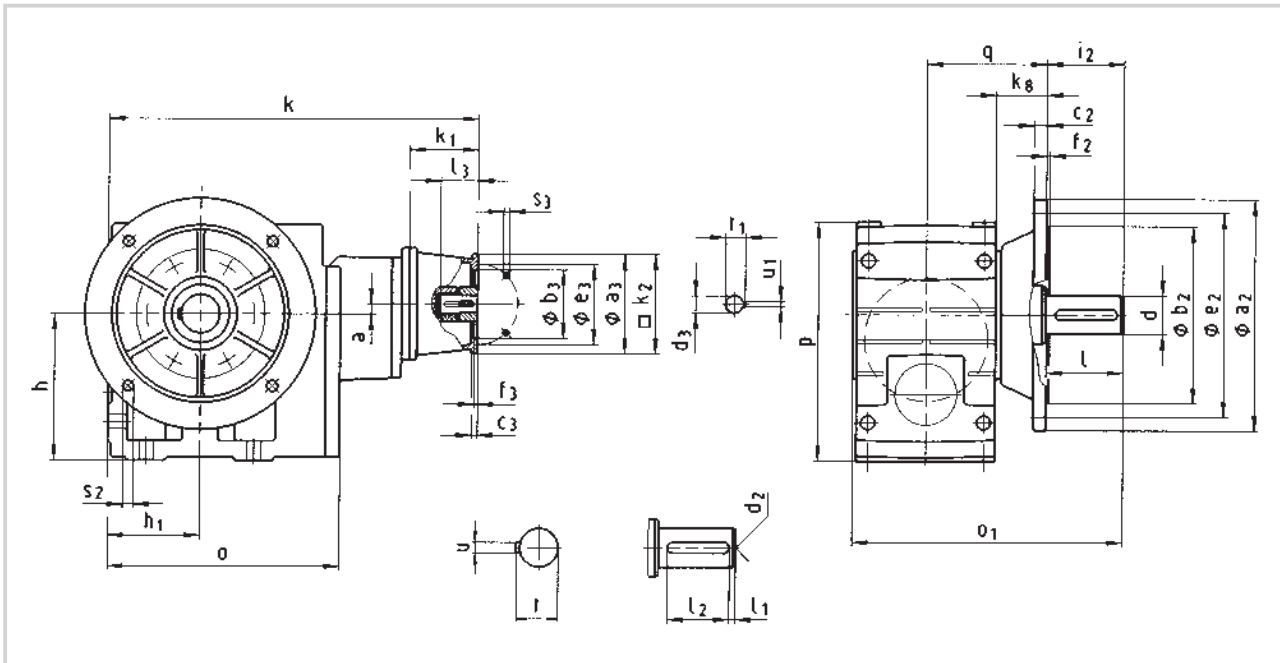
Dimensions in [mm]

$d \leq 50$  mm: k6  
 $d > 50$  mm: m6  
 \* Observe dimension  $k_2$



# Dimensions - Helical-worm gearboxes

Gearbox with mounting flange for IEC standard motors



Gearbox <b>GSS □□ - 3 N VAK</b> corresponds to IEC motor			Drive size												
			1A	1B	2B	1C	2C	3C	4C	1D	2D	1E	2E	3E	
			63	71	63	80		71	71	90	80	100	90	80	
											112				
Housing	$k_1$		75	77	75	91				115		110			
	$k_2$		120	145	120	145				180		180			
	Flange	$a_3$	90	105	90	160	160	105	120	160		160			
		$b_3$ H8	60	70	60	110	110	70	80	110		110			
		$c_3$	7	8	7	10	10	8	8	10		10			
		$e_3$	75	85	75	130	130	85	100	130		130			
		$f_3$	3		3	4	4	3	3.5	4		4			
		$s_3$ 4 x	5.5	6.6	5.5	9	9	6.6	6.6	9		9			
	Required motor shafts	$d_3$	11	14	11	19	14	14	14	24	19	28	24	19	
		$l_3$ min	23	30	23					25	50	40	30		
$l_3$ max		23	30	23					40	50	50	60			
$u_1$		4	5	4	6	5	5	5	8	6	8	8	6		
	$t_1$	12.5	16	12.5	21.5	16	16	16	27	21.5	31	27	21.5		
Gearbox size	Gearbox									Total length					
	$o$	$o_1^*$	$p^*$	$h$	$h_1$	$a$	$k_8$	$q$	$k$						
05	209	230	205	125	80	13	40	103	363	370	363	384		418	
06	252	277	250	150	100	10	49	121	420	427	420	441		475	
07	299	351	310	190	120	12	65	155	481		495		529		524

Gearbox size	Solid shaft								Output flange						
	$d$	$l$	$l_1$	$l_2$	$d_2$	$u$	$t$	$a_2$	$b_2$ $j_7$	$c_2$	$e_2$	$f_2$	$i_2$	$s_2$	
05	30	60	6	45	M10	8	33	200	130	12	165	3,5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14,5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53,5	250 300	180 230	14,5 16,5	215 265	4	100	4 x 14	

Dimensions in [mm]

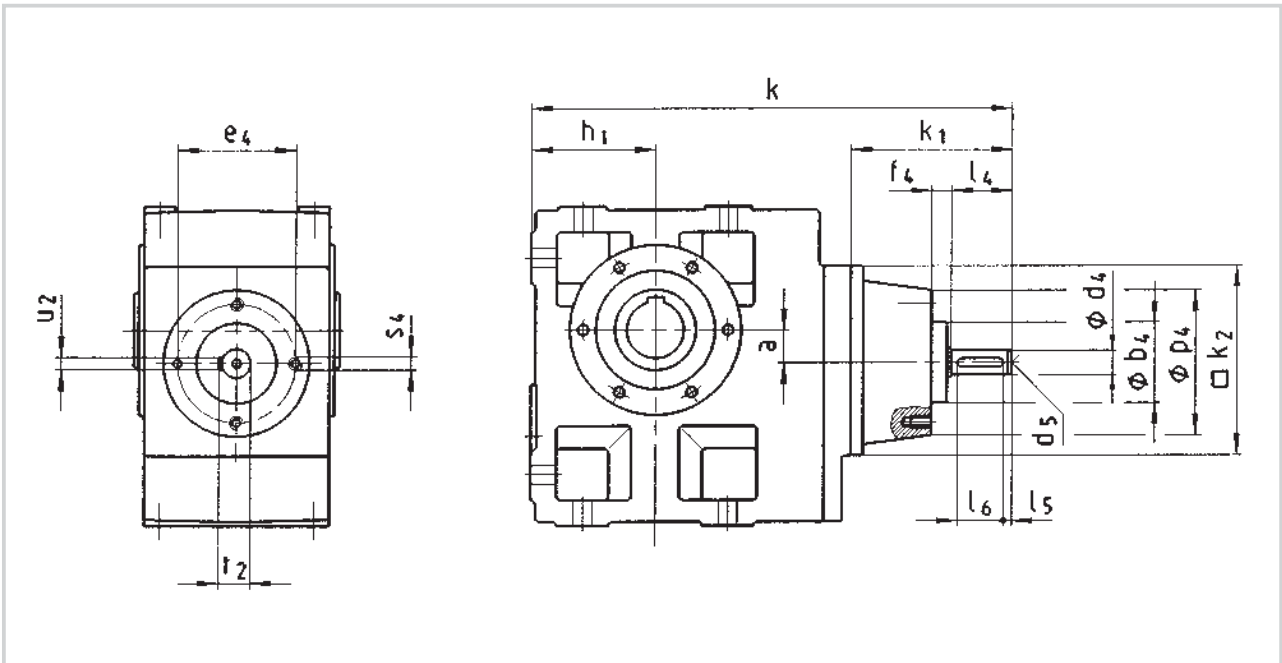
$d \leq 50$  mm:  $k_6$

$d > 50$  mm:  $m_6$

\* Observe dimension  $k_2$

# Dimensions - Helical-worm gearboxes

## Gearbox with free input shaft



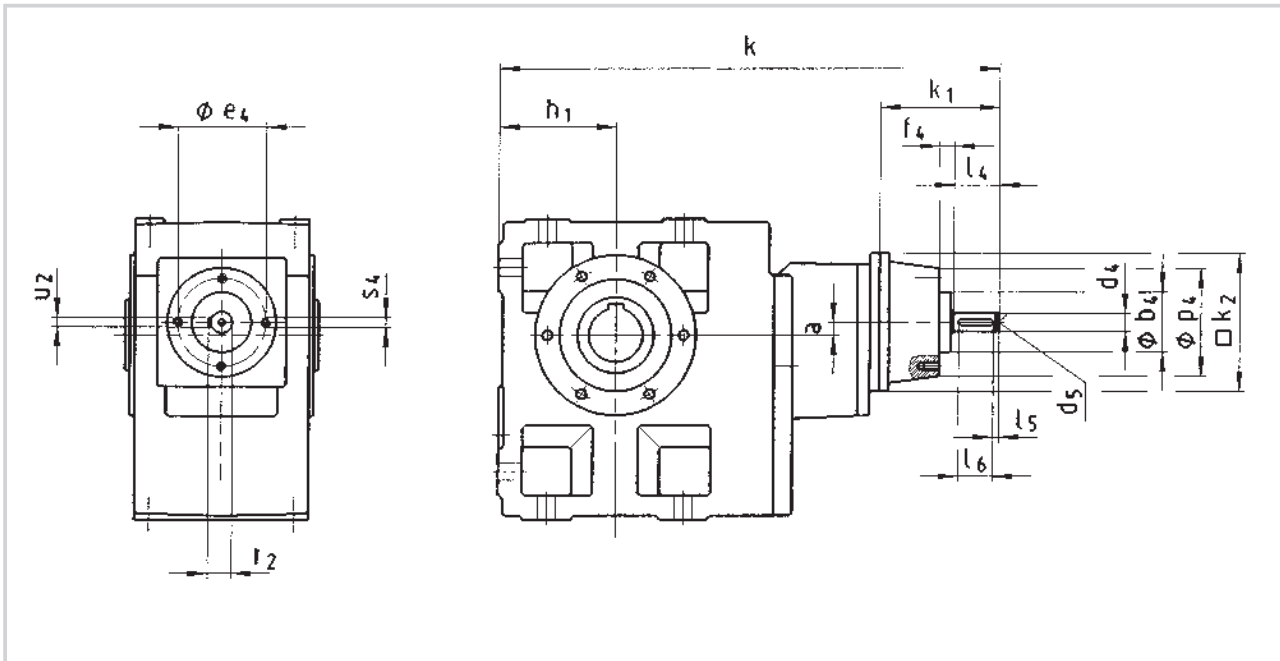
Gearbox		Drive size							
<b>GSS □□ - 2 W □□□</b>		<b>1A</b>	<b>1B</b>	<b>1C</b>	<b>1D</b>	<b>1E</b>	<b>1F</b>	<b>1G</b>	
Housing	$k_1$	100	100	102	130	160	175	175	
	$k_2$	115	115	145	145	180	222	222	
	Pitch circle with centring	$p_4$	80	86	90	120	142	178	216
	$b_4$ js8	52	52	52	65	78	98	125	
	$e_4$	67	67	67	90	115	145	175	
	$f_4$	12	12	12	12	22	23	23	
Input shaft	$s_4$ 4 x 8 x	M6x12	M6x12	M6x12	M8x16	M10x20	M12x24	M16x30	
	$d_4$ k6	14	14	14	19	24	28	38	
	$l_4$	35	35	40	50	60	80	100	
	$l_5$	4.5	4.5	4	4	6	7	8	
	$l_6$	25	25	32	40	45	63	80	
	$d_5$	M6	M6	M6	M6	M8	M10	M12	
	$u_2$	5	5	5	6	8	8	10	
	$t_2$	16	16	16	21.5	27	31	41	
<b>Gearbox size</b>	<b>Gearbox *</b>		<b>Total length</b>						
	$h_1$	$a$	$k$						
<b>04</b>	71	20	265	265	297				
<b>05</b>	80	23		293	318	346			
<b>06</b>	100	26			358	386	426	447	
<b>07</b>	120	33				429	469	490 490	

Dimensions in [mm]

\* For further dimensions see Dimensions- Helical-worm geared motors

# Dimensions - Helical-worm gearboxes

## Gearbox with free input shaft



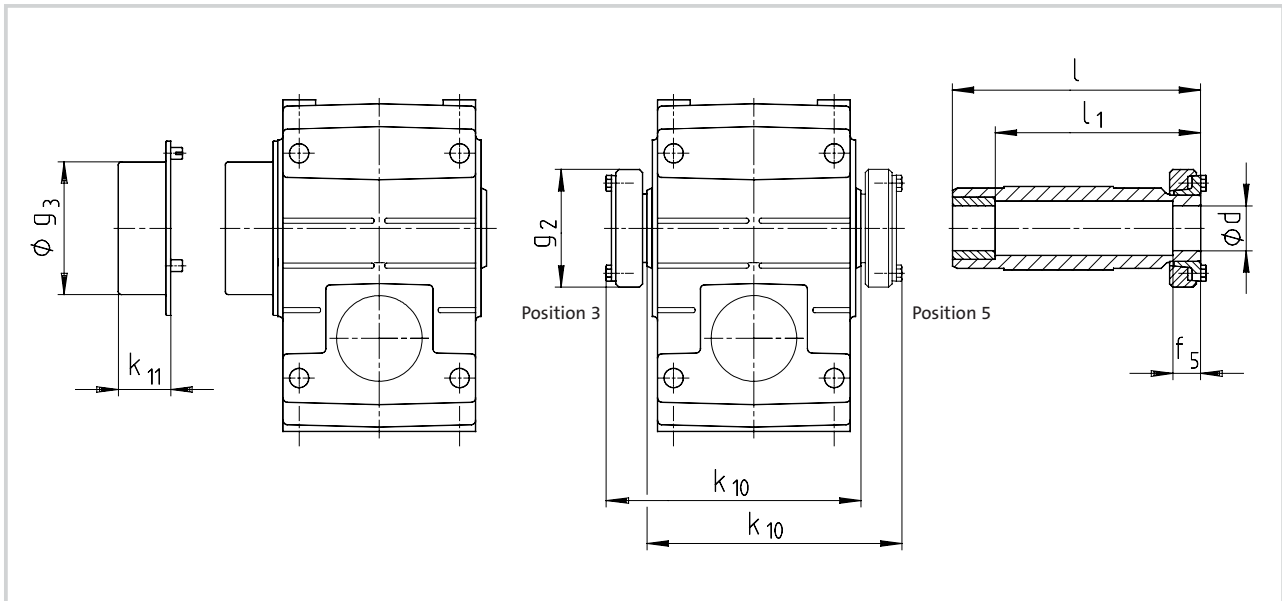
Gearbox		Drive size			
GSS □□ - 3 W □□□		1A	1B	1C	1D
Housing	$k_1$	100	100	102	130
	$k_2$	115	115	145	145
Pitch circle with centring	$p_4$	80	86	90	120
	$b_4$ js8	52	52	52	65
	$e_4$	67	67	67	90
	$f_4$	12	12	12	12
Input shaft	$s_4$ 4 x	M6x12	M6x12	M6x12	M8x16
	$d_4$ k6	14	14	14	19
	$l_4$	35	35	40	50
	$l_5$	4.5	4.5	4	4
	$l_6$	25	25	32	40
	$d_5$	M6	M6	M6	M6
	$u_2$	5	5	5	6
	$t_2$	16	16	16	21.5
Gearbox size	Gearbox *		Total length		
	$h_1$	$a$	$k$		
05	80	13	363	363	395
06	100	10	420	420	452
07	120	12	481	481	534

Dimensions in [mm]

\* For further dimensions see Dimensions- Helical-worm geared motors



## Hollow shaft with shrink disc

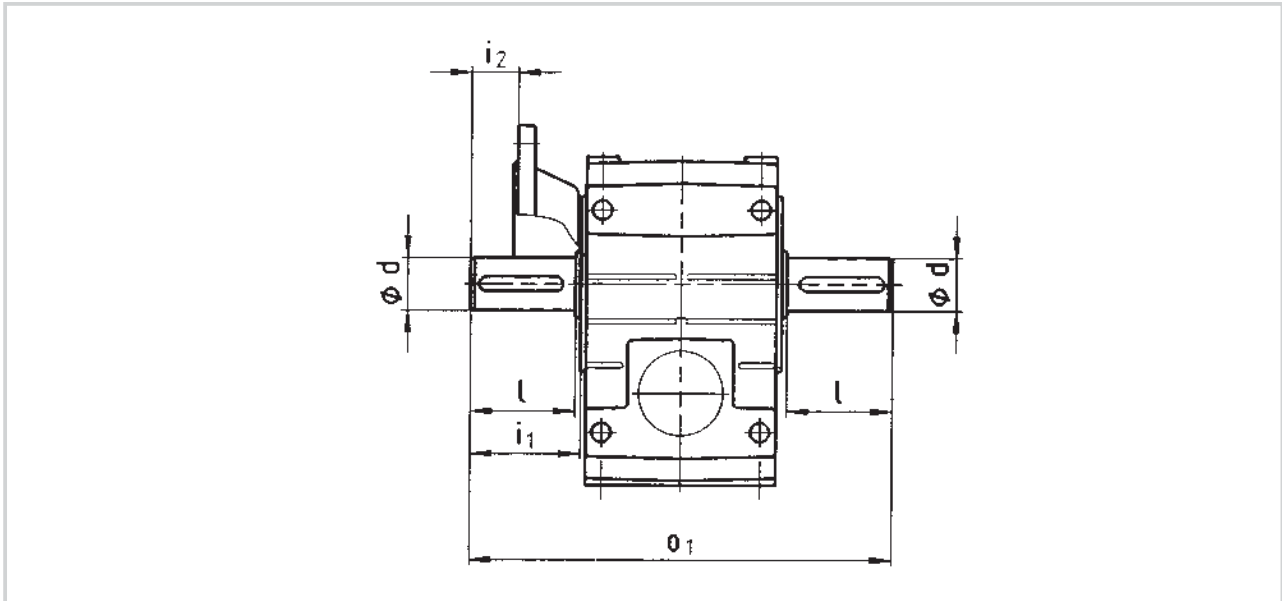


Gearbox size	Machine shaft*		Hollow shaft			Gearbox		Protective cover	
	d	Fit	l	l <sub>1</sub>	f <sub>5</sub>	g <sub>2</sub>	k <sub>10</sub>	g <sub>3</sub>	k <sub>11</sub>
04	25 30	h6	142	122	26	72	146	79	41
05	35	h6	168	148	28	80	171	90	43
06	40	h6	194	164	30	90	197	100	49
07	50	h6	232	192	26	110	234	124	49

Dimensions in [mm]

\* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4) the torque values given in the selection tables can be transmitted without restriction. If less rigid materials are being used, please contact us. The average surface roughness  $R_z$  should not exceed 15  $\mu\text{m}$  (turning is sufficient).

## Gearbox with 2nd output shaft

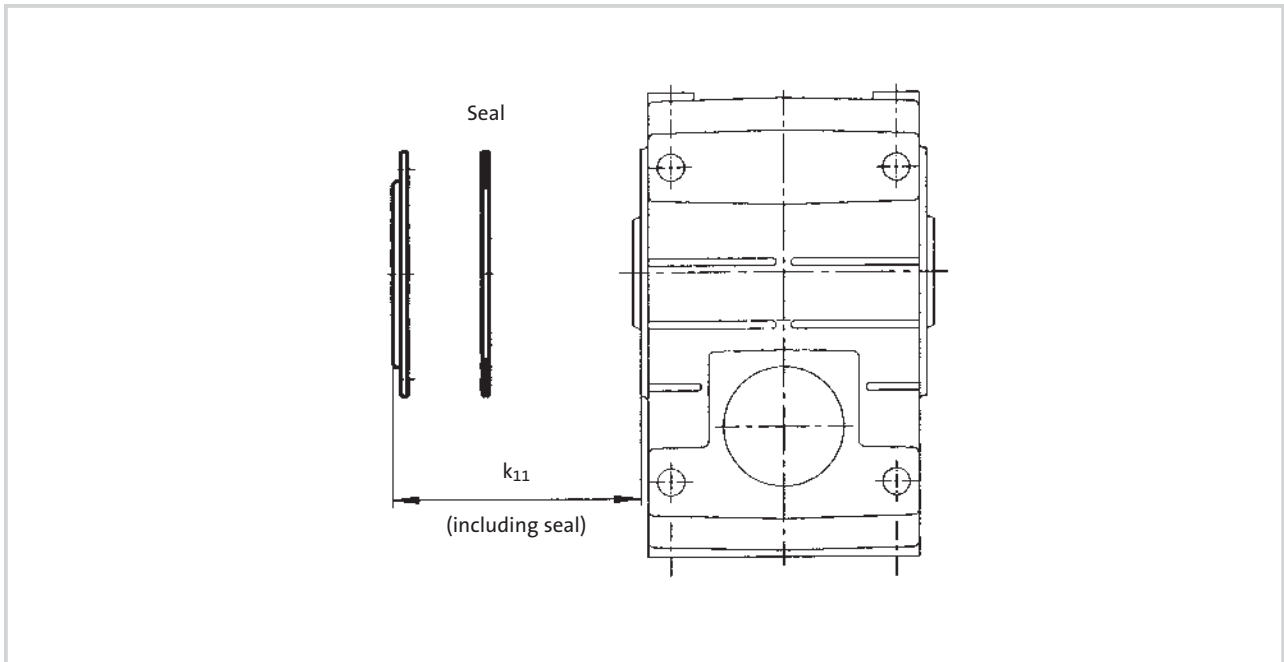


Gearbox size	d	l	$i_1$	$i_2$	$o_1$
04	25	50	52.5	17	215
05	30	60	64	27	260
06	40	80	85	39	320
07	50	100	105	45	400

Dimensions in [mm]



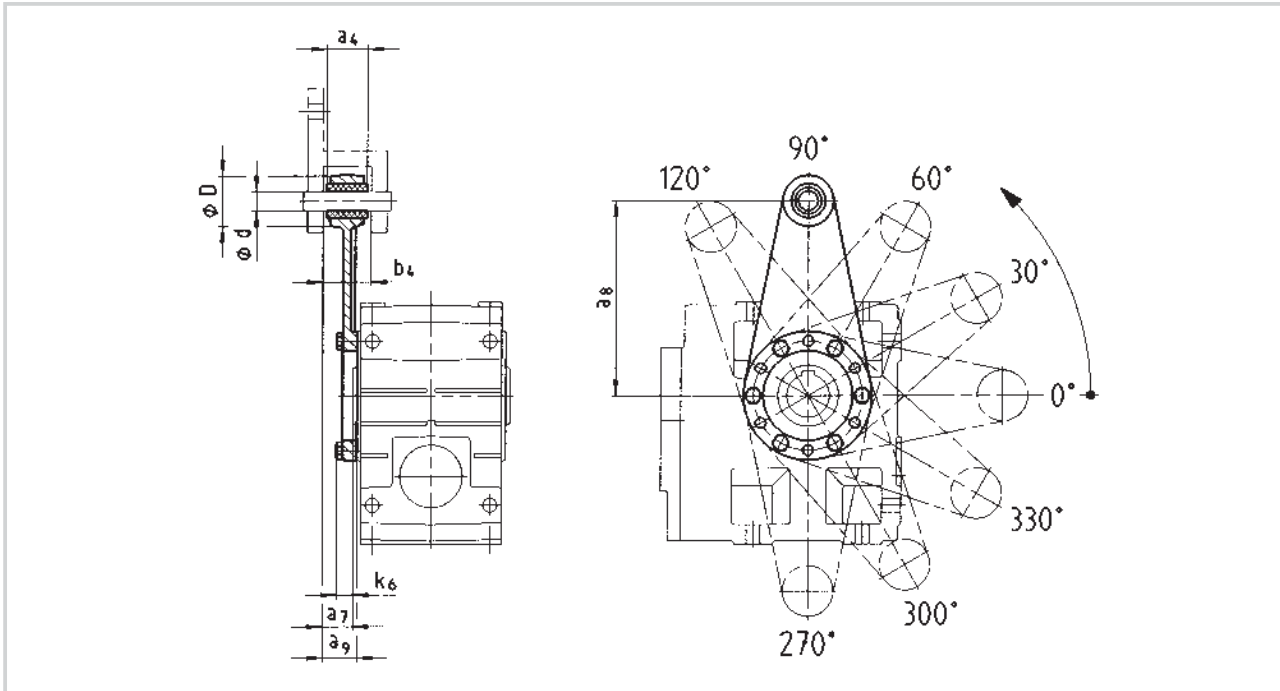
## Jet-proof hollow shaft cover



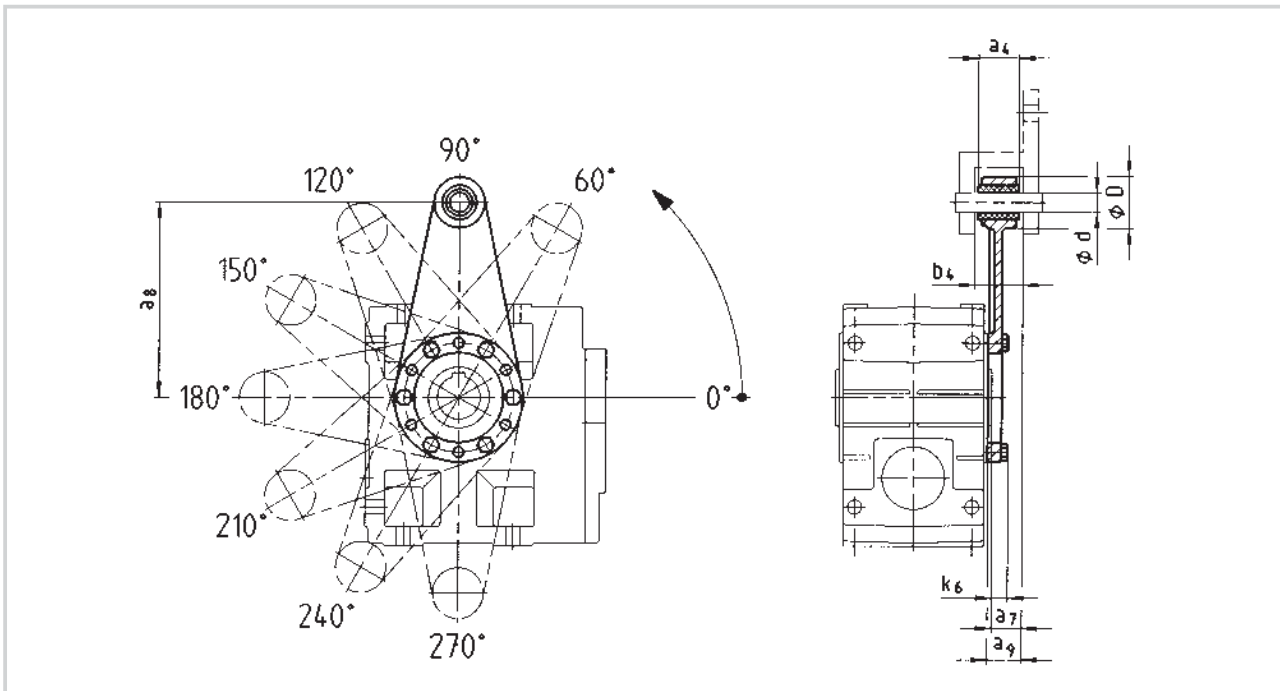
Gearbox size	Protective cover $k_{11}$
04	9
05	10
06	11
07	11

Dimensions in [mm]

## Torque plate at pitch circle, position 3



## Torque plate at pitch circle, position 5

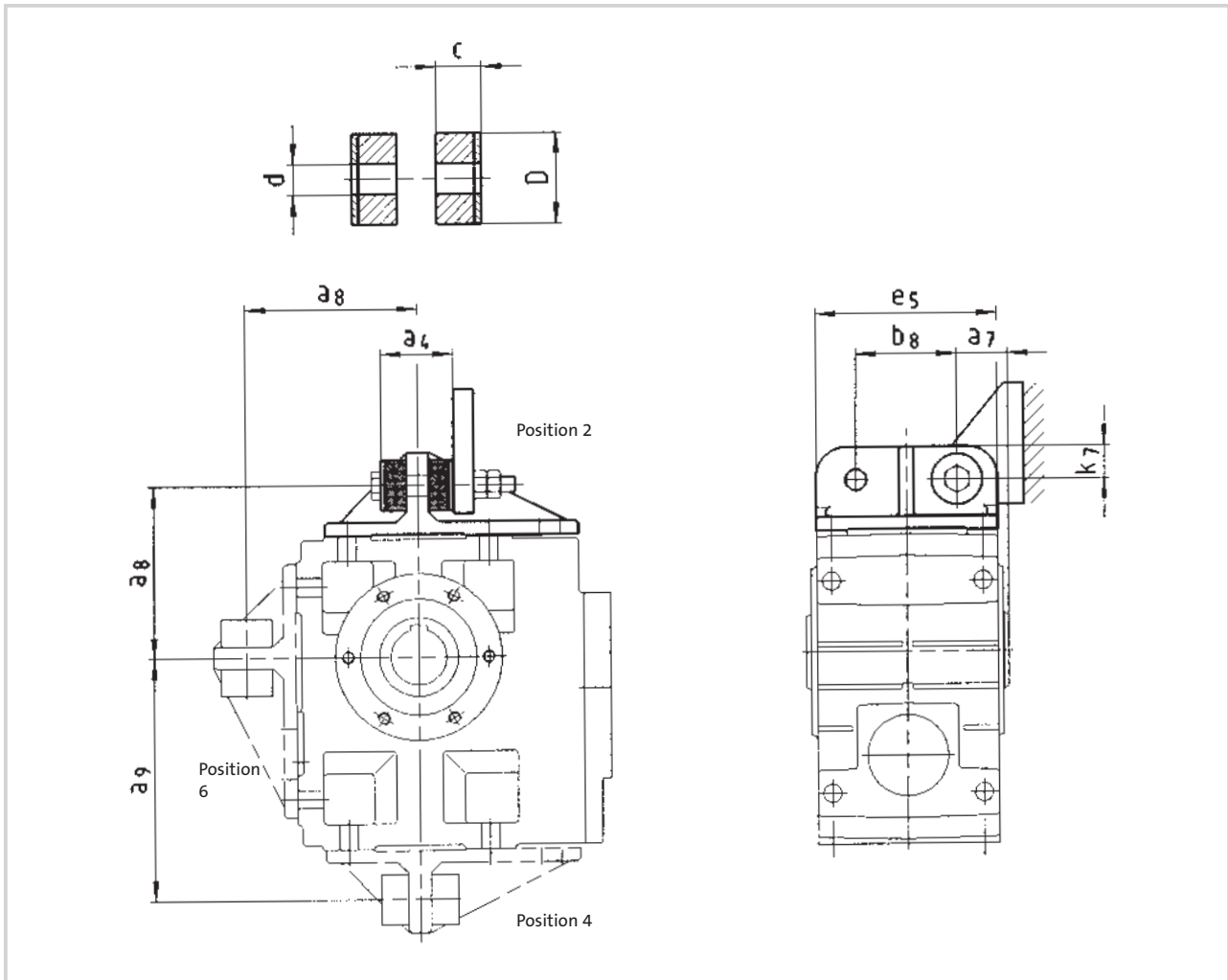


Gearbox size	Assembly space		Torque plate						
	a <sub>7</sub>	b <sub>4</sub>	a <sub>4</sub>	a <sub>8</sub>	a <sub>9</sub>	d	D	k <sub>6</sub>	
04	24	34.5	30	130	26.5	12	35	16	
05	23.5	38.5	34	160	27.5	16	45	15	
06	28	44.5	40	200	33	20	50	18	
07	32.5	50.5	46	250	37.5	25	65	21	

Dimensions in [mm]



## Torque plate at housing foot

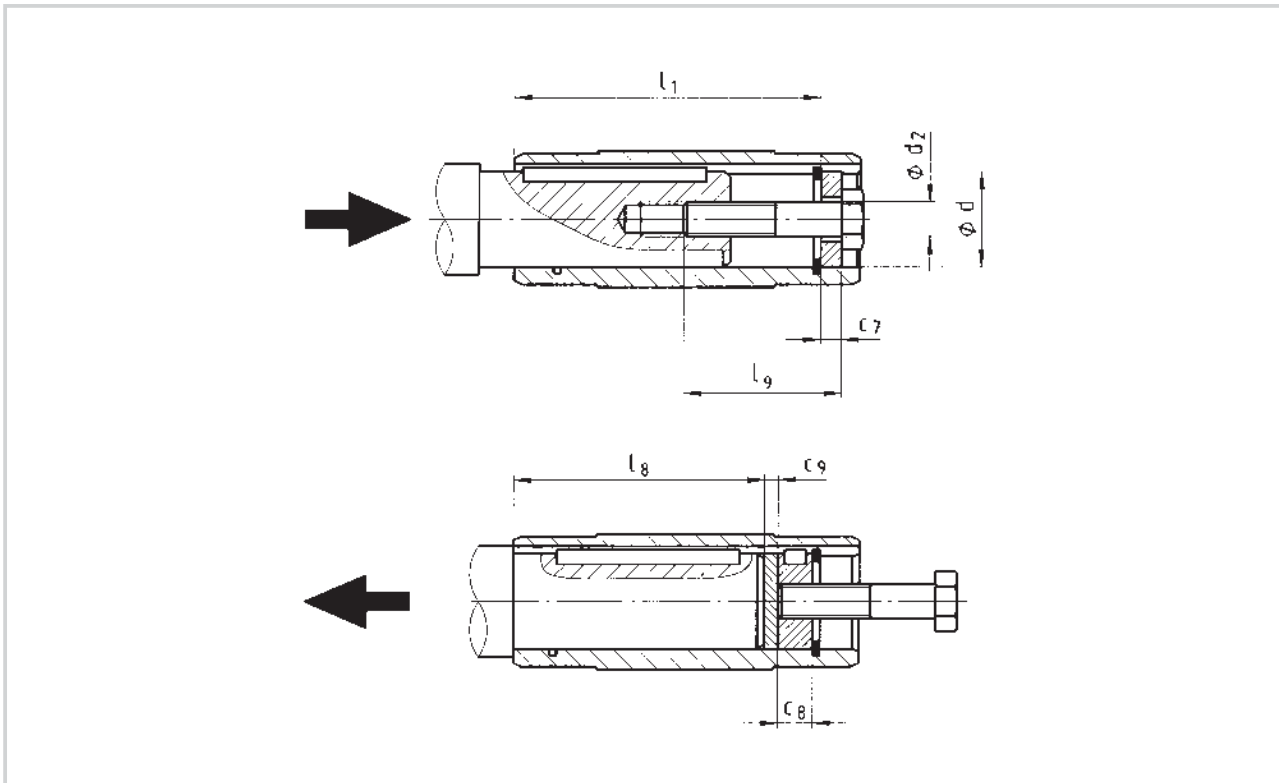


Gearbox size	$a_4$	$a_7$	$a_8$	$a_9$	$b_8$	$c$	$d$	$D$	$e_5$	$k_7$
04	41	27.5	106	135	60	14.5	11	30	100	20
05	45	35	115	160	70	15	13	40	127	25
06	72	40	145	195	80	27	17	50	145	28
07	78	50	170	240	100	28	21	60	180	35

Dimensions in [mm]



## Assembly kit for hollow shaft retention / Proposal for auxiliary tool



Gearbox size	Hollow shaft (design H)			Assembly kit for hollow shaft circlip (auxiliary tool assembly)			Auxiliary tool disassembly		Machine shaft max $l_8$
	$l$	$l_1$	$d$ H7	$d_2$	$l_9$	$c_7$	$c_8$	$c_9$	
04	115	100	25 30	M10 M10	40	5 6	10	3	85
05	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
06	160	140	40 45	M16	60	8 9	16	4	118
07	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148

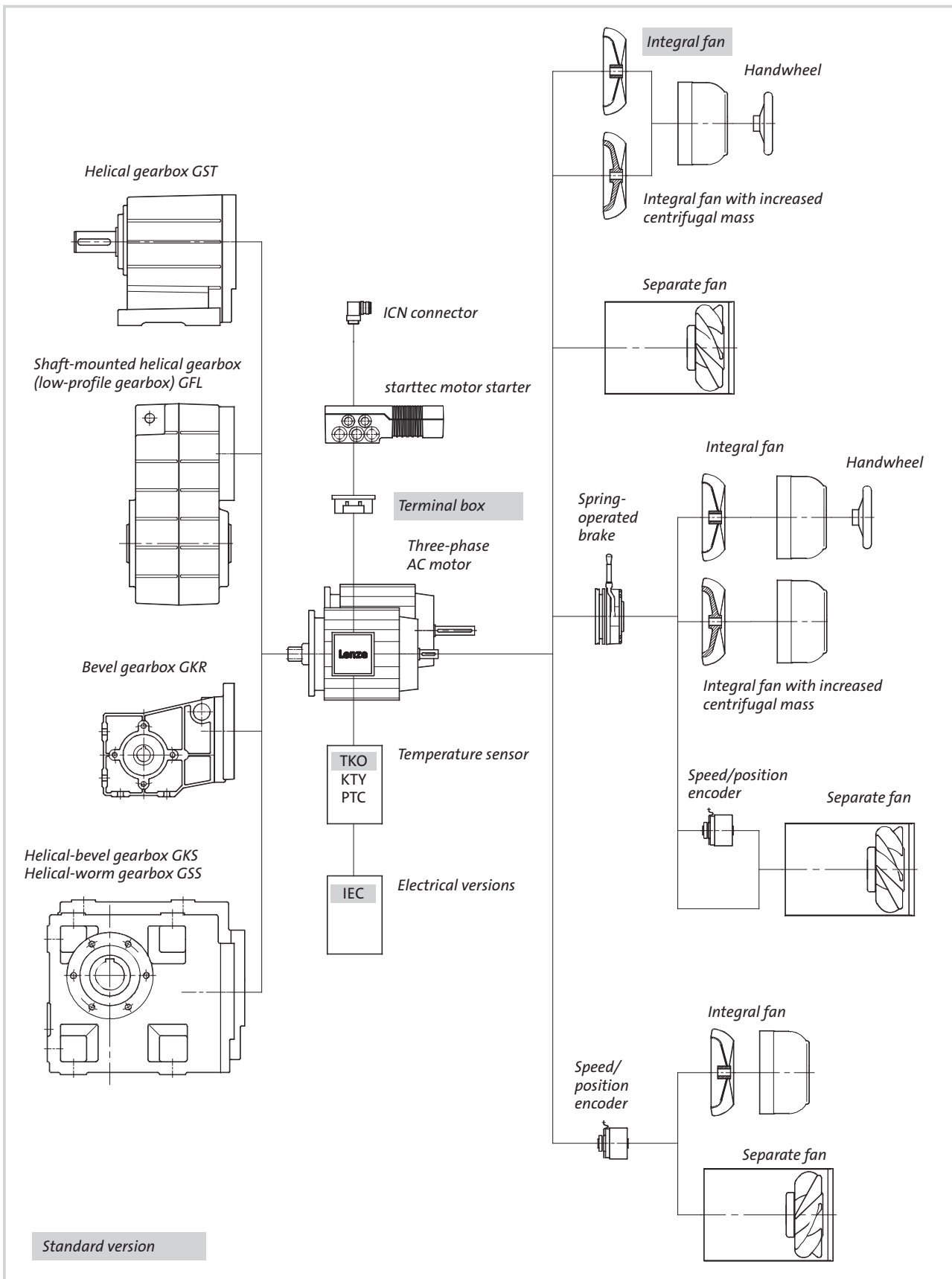
Dimensions in [mm]

## Technical data

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## Dimensions

Motor terminal box assignment	8-21
Motor terminal box	8-22
Geared motor with starttec	8-25
Geared motor with integral fan	8-26
Geared motor with integral fan and protective cover	8-27
Geared motor with integral fan and handwheel	8-28
Geared motor with integral fan and 2nd shaft	8-29
Geared motor with separate fan	8-31
Geared motor with separate fan and protective cover	8-32
Geared motor with manual release lever	8-33



## No. of pairs of poles 2 (4-pole)

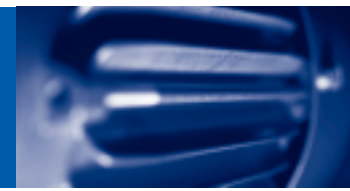
Motor frame size	P <sub>r</sub> [kW]	n <sub>r</sub> [min <sup>-1</sup> ]	I <sub>r</sub> [A] Y/Δ	I <sub>A</sub> /I <sub>r</sub>	U <sup>1)</sup> [V] Y/Δ	f <sub>r</sub> [Hz]	cos φ	η [%]	M <sub>r</sub> [Nm]	M <sub>stall</sub> [Nm]	M <sub>A</sub> [Nm]	J [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
063C02	0.06	1425	0.24/0.42	3.5	400/230	50	0.57	63	0.40	1.36	1.3	0.33	3.9
063C22	0.09	1375	0.28/0.48	2.9	400/230	50	0.71	65	0.63	1.39	1.3	0.33	3.9
063C12	0.12	1425	0.49/0.85	3.1	400/230	50	0.56	63	0.80	2.64	2.5	0.33	4.1
063C32	0.18	1365	0.58/1.0	2.7	400/230	50	0.70	64	1.26	2.61	2.5	0.33	4.1
063C42	0.25	1370	0.82/1.4	2.9	400/230	50	0.67	66	1.74	4.10	3.8	0.37	4.4
071C32	0.37	1410	0.95/1.6	3.3	400/230	50	0.77	73	2.51	5.81	4.8	1.07	5.8
071C42	0.55	1405	1.4/2.4	3.5	400/230	50	0.77	74	3.74	9.12	7.9	1.28	6.4
080C32	0.75	1410	1.9/3.3	4.6	400/230	50	0.80	74	5.10	12.1	11.0	2.6	10.8
080C42	1.1	1390	2.8/4.8	4.4	400/230	50	0.80	77	7.50	18.4	16.5	2.6	11
090C32	1.5	1395	3.6/6.3	4.8	400/230	50	0.79	79	10.3	27.1	23.7	3.5	17
100C12	2.2	1440	5.3/9.2	6.0	400/230	50	0.73	84	15.0	44.0	38.0	6.1	24
100C32	3	1430	7.2/12.5	4.6	400/230	50	0.75	83	20.5	50.0	43.0	6.1	24
112C22	4	1450	9.3/16.1	6.2	400/230	50	0.73	86	26.4	95.0	70.0	10.7	31
112C32	5.5	1445	-/12.5 12.5/21.7	6.1	-/400 * 400/230 **	50	0.77	86	36.6	120	95	13.5	38
132C22	7.5	1455	-/17.0 17.0/29.3	5.9	-/400 * 400/230 **	50	0.76	88	49.5	150	100	33.6	66
132C32	9.2	1450	-/19.7 19.7/34.1	5.1	-/400 * 400/230 **	50	0.80	88	61.0	150	100	33.6	66
160-22	11	1460	-/21.0 21.0/36.5	7.0	-/400 * 400/230 **	50	0.85 0.86	89	71.9	204	150	61.0	110
160-32	15	1460	-/27.7 27.8/48.4	7.1	-/400 * 400/230 **	50	0.87 0.88	90	98.1	288	214	75.0	130
180-22	18.5	1470	-/32.8 32.8/57.8	6.8	-/400 * 400/230 **	50	0.90	91	120	313	260	135	165
180-32	22	1465	-/38.8 38.8/67.4	7.3	-/400 * 400/230 **	50	0.90	91	143	360	330	155	175
200N32	30	1465	-/55.5	7.0	-/400 *	50	0.85	92	196	490	392	168	245
225N12	37	1470	-/67	7.0	-/400 *	50	0.86	93	240	600	480	275	290
225N22	45	1470	-/81	7.0	-/400 *	50	0.86	93	292	730	584	313	360

1) The motors can be used in the voltage range specified in the "Voltages/Frequencies" table on page 8-7.

\* Star/delta start-up possible at 400 V

\*\* No standard voltage – only for 87 Hz frequency inverter operation

Values are guide values



## No. of pairs of poles 1 (2-pole)

Motor frame size	P <sub>r</sub> [kW]	n <sub>r</sub> [min <sup>-1</sup> ]	I <sub>r</sub> [A] Y/Δ	I <sub>A</sub> /I <sub>r</sub>	U <sup>1)</sup> [V] Y/Δ	f <sub>r</sub> [Hz]	cos φ	η [%]	M <sub>r</sub> [Nm]	M <sub>stall</sub> [Nm]	M <sub>A</sub> [Nm]	J [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
063-11	0.18	2760	0.55/0.95	3.8	400/230	50	0.80	65	0.62	1.37	1.31	0.18	3.6
063-31	0.25	2780	0.65/1.1	4.4	400/230	50	0.83	70	0.86	2.06	1.80	0.24	4.2
071-11	0.37	2840	1.0/1.73	5.6	400/230	50	0.80	72	1.25	3.73	3.55	0.47	6.2
071-31	0.55	2840	1.5/2.6	6.1	400/230	50	0.82	82	1.86	4.98	5.06	0.59	6.5
080-11	0.75	2850	1.9/3.3	6.1	400/230	50	0.80	80	2.52	7.81	8.82	0.68	9.2
080-31	1.1	2810	2.8/4.8	6.9	400/230	50	0.82	79	3.70	13.1	12.2	1.01	9.6
090-11	1.5	2840	3.2/5.5	5.9	400/230	50	0.85	82	5.10	13.6	11.9	1.72	14
090-31	2.2	2840	4.8/8.3	6.9	400/230	50	0.86	82	7.40	21.5	20.9	2.54	17
100-31	3	2850	6.2/10.7	7.1	400/230	50	0.88	84	10.0	34.0	30.0	2.80	20
100-41	4	2830	8.5/14.7	7.6	400/230	50	0.85	85	13.3	34.6	29.3	7.45	24
112-31	5.5	2890	-/12.2	6.6	-/400*	50	0.83	84	18.2	53.9	43.1	7.45	32
112-41	7.5	2900	-/15.5	6.4	-/400*	50	0.87	83	24.9	67.2	53.3	10.5	41
132-21	9.2	2925	-/18.7	9.5	-/400*	50	0.89	82	29.5	76.7	103	18	60

## No. of pairs of poles 3 (6-pole)

Motor frame size	P <sub>r</sub> [kW]	n <sub>r</sub> [min <sup>-1</sup> ]	I <sub>r</sub> [A] Y/Δ	I <sub>A</sub> /I <sub>r</sub>	U <sup>1)</sup> [V] Y/Δ	f <sub>r</sub> [Hz]	cos φ	η [%]	M <sub>r</sub> [Nm]	M <sub>stall</sub> [Nm]	M <sub>A</sub> [Nm]	J [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
071-13	0.18	870	0.75/1.3	3.1	400/230	50	0.71	64	1.89	4.5	4.1	0.77	6.2
071-33	0.25	920	1.0/1.7	3.2	400/230	50	0.63	66	2.6	6.4	5.7	0.94	6.4
080-13	0.37	900	1.4/2.4	2.9	400/230	50	0.67	63	4.00	7.6	8.4	1.12	9.3
080-33	0.55	900	1.9/3.3	3.1	400/230	50	0.68	65	5.90	13.6	12.4	1.50	10.2

<sup>1)</sup> The motors can be used in the voltage range specified in the "Voltages/Frequencies" table on page 8-7.

\* Star/delta start-up possible at 400 V

Values are guide values

## Technical data - Motors

Data at 87 Hz

### No. of pairs of poles 2 (4-pole)

Motor frame size	P <sub>r</sub> [kW]	n <sub>r</sub> [min <sup>-1</sup> ]	I [A]	U [V] Δ	f <sub>r</sub> [Hz]	cos φ	M <sub>r</sub> [Nm]	J [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
063C02	0.11	2535	0.42	400	87	0.55	0.40	0.33	3.9
063C22	0.16	2485	0.48	400	87	0.67	0.63	0.33	3.9
063C12	0.21	2535	0.85	400	87	0.52	0.80	0.33	4.1
063C32	0.33	2475	1.0	400	87	0.65	1.26	0.33	4.1
063C42	0.45	2480	1.4	400	87	0.63	1.74	0.37	4.4
071C32	0.66	2520	1.6	400	87	0.72	2.51	1.07	5.8
071C42	1.0	2515	2.4	400	87	0.74	3.74	1.28	6.4
080C32	1.4	2520	3.30	400	87	0.80	5.10	2.6	11
080C42	2.0	2500	4.80	400	87	0.80	7.50	2.6	11
090C32	2.7	2505	6.30	400	87	0.79	10.3	3.5	17
100C12	3.9	2550	9.20	400	87	0.71	15.0	6.1	24
100C32	5.4	2540	12.50	400	87	0.73	20.5	6.1	24
112C22	7.1	2560	16.10	400	87	0.71	26.4	10.7	31
112C32*	9.7	2555	21.70	400	87	0.75	36.6	13.5	38
132C22*	13.2	2565	29.30	400	87	0.75	49.5	33.6	66
132C32*	16.2	2560	34.10	400	87	0.79	61.0	33.6	66
160-22*	19.4	2570	36.50	400	87	0.85	71.9	61	110
160-32*	26.4	2570	48.40	400	87	0.86	98.1	75	130
180-22*	32.5	2580	57.80	400	87	0.89	120	135	165
180-32*	38.7	2575	67.40	400	87	0.89	143	155	175

\* Operation at 87 Hz is possible with motors with 50 Hz rated data voltage values of Y/Δ; 400/230 V (see page 8-4).

For frame sizes 112C32 to 180-32, please indicate the required voltage when placing your order.



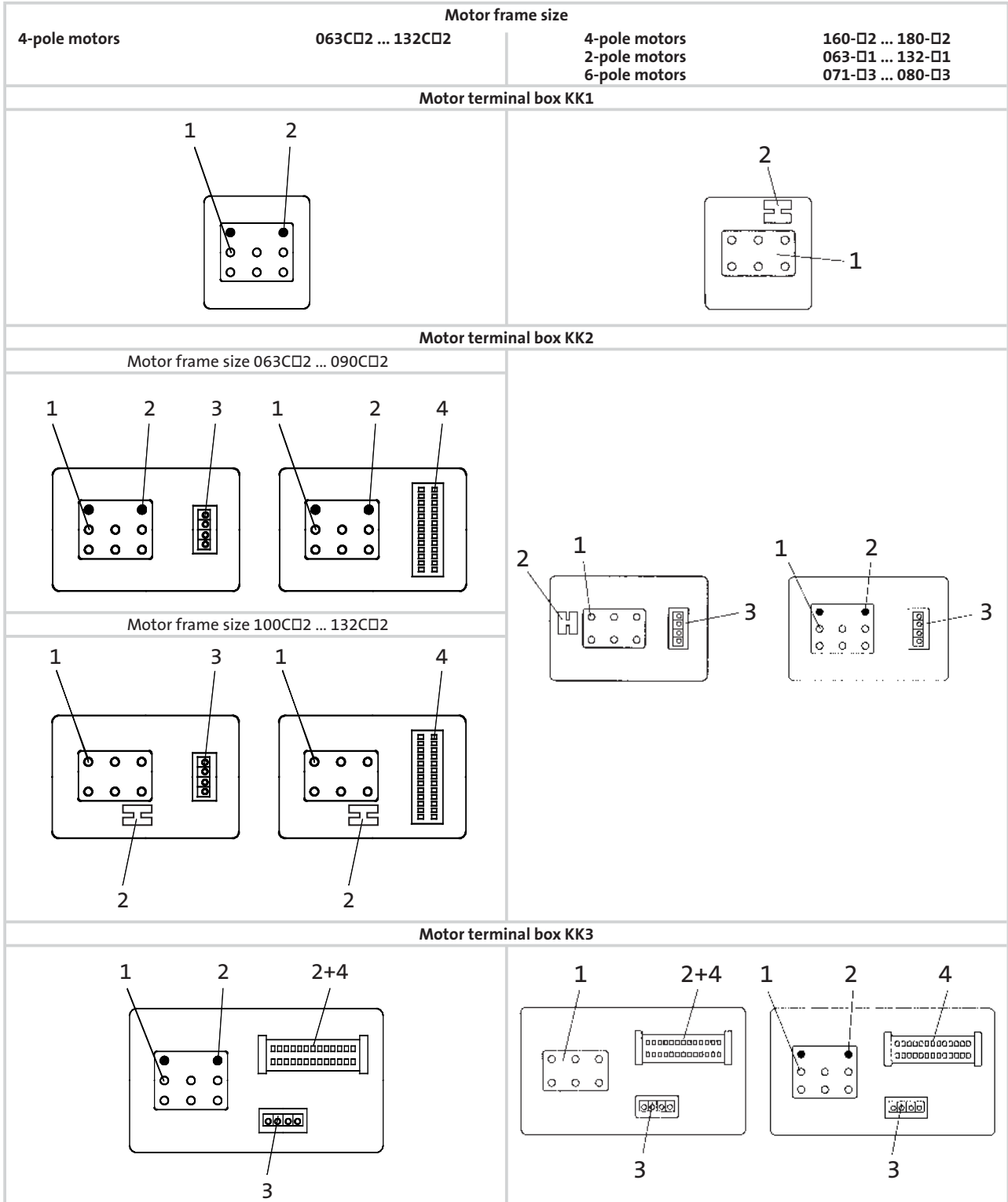
Motor frame size	Connection	Voltage	
		50 Hz	60 Hz
<b>4-pole motors</b>			
063C02 ... 112C22	Δ	230 V ± 10%	277 V ± 10%
	Y	400 V ± 10%	480 V ± 10%
112C32 ... 132C32	Δ	400 V ± 10% ** 230 V ± 10%	480 V ± 10% ** 277 V ± 10%
	Y	** 400 V ± 10%	** 480 V ± 10%
160-22 ... 180-32	Δ	380-415 V ± 5% ** 220-240 V ± 5%	380-480 V ± 5% ** 220-277 V ± 5%
	Y	** 380-415 V ± 5%	** 380-480 V ± 5%
200N32 ... 225N22	Δ	380-415 V ± 5%	380-480 V ± 5%
<b>2-pole motors</b>			
063-11 ... 100-41	Δ	220-240 V ± 5%	220-277 V ± 5%
	Y	380-415 V ± 5%	380-480 V ± 5%
112-31 ... 132-21	Δ	380-415 V ± 5%	380-480 V ± 5%
<b>6-pole motors</b>			
071-13 ... 080-33	Δ	220-240 V ± 5%	220-277 V ± 5%
	Y	380-415 V ± 5%	380-480 V ± 5%

The motors are supplied as standard with multi-range voltages.  
The percentage values (± 10 % or ± 5 %) include tolerance to EN60034.

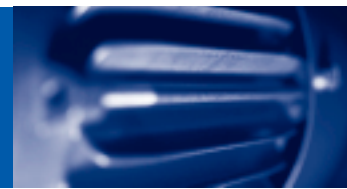
\*\* No standard voltage – only for 87 Hz frequency inverter operation

### Motor terminal box

Position	Designation
1	Motor terminal board
2	Temperature sensor connection
3	Rectifier/terminal block (24 V DC) for spring-operated brake
4	Terminal strip: Temperature sensor and speed/position encoder connection







### Motor terminal box

#### Terminal block (Position 3)

Meaning	Designation
DC-excited brake +	1
DC-excited brake –	2

#### Rectifier (Position 3)

Meaning	Designation	Option
AC-excited brake	~	Bridge rectifier/half-wave rectifier Connection to L1 mains
	~	Bridge rectifier Connection to N mains
	~	Half-wave rectifier Connection to L2 or L3 mains
	+	Connection to brake
	–	Connection to brake

#### Terminal strip (Position 4)

	Meaning	Option	Conductor size	Designation
1	Thermal contact (NC contact) TKO			S1
2	Thermal contact (NC contact) TKO			S2
1	PTC thermistor			P1
2	PTC thermistor			P2
1	KTY temperature sensor			T1
2	KTY temperature sensor			T2
3	Resolver Ref +		0.14 mm <sup>2</sup>	B1
4	Resolver Ref –		0.14 mm <sup>2</sup>	B2
5				B3
6	Resolver cos +		0.14 mm <sup>2</sup>	B4
7	Resolver cos –		0.14 mm <sup>2</sup>	B5
8	Resolver sin +		0.14 mm <sup>2</sup>	B6
9	Resolver sin –		0.14 mm <sup>2</sup>	B7
3	Incremental encoder + supply	Power supply	0.14 mm <sup>2</sup>	B1
4	Incremental encoder - supply	GND (ground)	0.14 mm <sup>2</sup>	B2
5	Incremental encoder output channel A		0.14 mm <sup>2</sup>	B3
6	Incremental encoder output channel A <sup>-</sup>	Inverse	0.14 mm <sup>2</sup>	B4
7	Incremental encoder output channel B		0.14 mm <sup>2</sup>	B5
8	Incremental encoder output channel B <sup>-</sup>	Inverse	0.14 mm <sup>2</sup>	B6
9	Incremental encoder output channel C	Zero track	0.14 mm <sup>2</sup>	B7
10	Incremental encoder output channel C <sup>-</sup>	Inverse	0.14 mm <sup>2</sup>	B8
11	Earth/Sensor –		0.14 mm <sup>2</sup>	B9
12	Shield		0.14 mm <sup>2</sup>	B10
13	Sensor +		0.14 mm <sup>2</sup>	B11

#### starttec motor starter

##### Trend towards distribution even on switchgear

The increasing relocation of control and switching components from the control cabinet to the system process and the demand for additional distributed functions to relieve central PLCs has increased the popularity of distributed drive components.

##### History

Motor starters have until now been used as electromechanical and electronic switchgear in the control cabinet for switching and protecting three-phase AC motors up to 4 kW. This generally requires star-type wiring which is extremely complex to install.

##### The current situation

Switchgear and drive components operate decentrally, i.e. they intervene directly in the process. Integrated protection features ensure the reliable operation of the motor, additional functions relieve the load on the central PLC and provide benefits by reducing the time and effort required for project planning and commissioning. The entire distributed drive system therefore provides maximum levels of flexibility, high plant availability and is extremely cost-effective.

#### starttec – tailored to meet the requirements of materials handling applications

##### Economic

- ▶ Small number of models: one size for the power range 0.25 ... 4 kW
- ▶ Start-up ramp to protect mechanics
- ▶ Power bus makes installation easier
- ▶ Easy to retrofit, e.g. on standard motors or if the starttec has been mounted on the wall
- ▶ Integrated brake control (option) with configurable time delay, reduces the load on the PLC

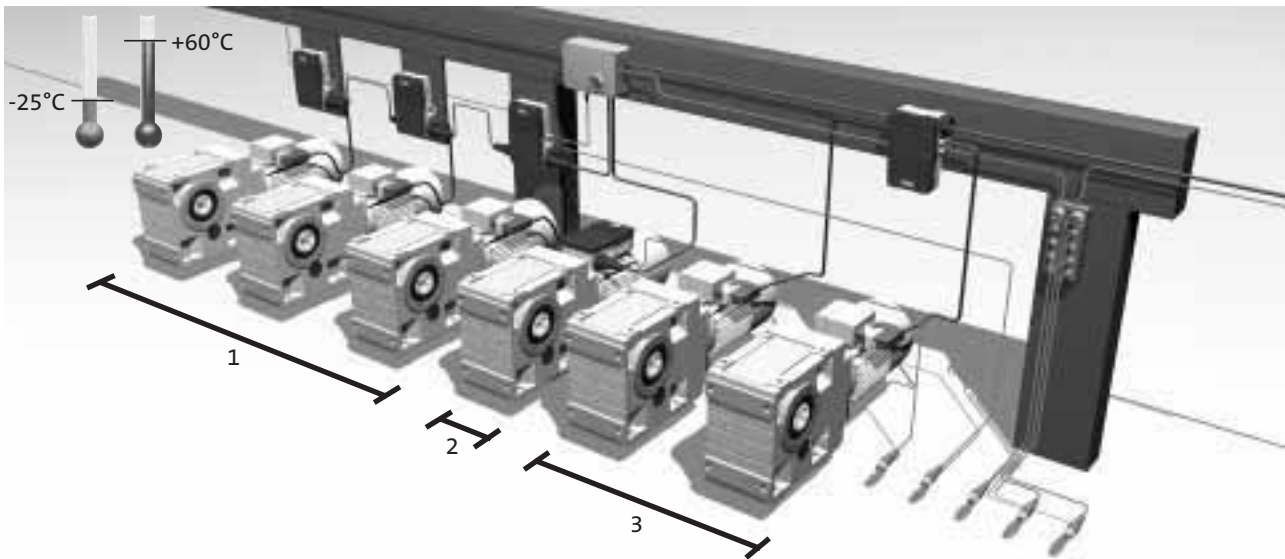
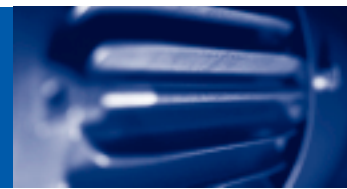
##### Safe

- ▶ Can be commissioned by non-experts
- ▶ Reduction of high start-up currents
- ▶ Integrated motor protection via overload/temperature protection (thermal contact/PTC)
- ▶ Robust due to high enclosure IP65/NEMA 4 (in preparation)
- ▶ Wear-free, even at high operating frequency
- ▶ High plant availability due to error reset option/hand-held operation
- ▶ Status display directly on the starttec

##### Versatile

- ▶ Optimum access due to mounting on the wall or on the motor
- ▶ Actuation via
  - digital I/Os
  - and/or
  - fieldbuses (INTERBUS, PROFIBUS-DP, CAN system bus, DeviceNet/CANopen, AS-Interface)
- ▶ Collection and linking of input signals for forwarding to the PLC/fieldbus
- ▶ Multi motor operation (option)
- ▶ Change of direction of rotation (option)
- ▶ Flexible due to configurable tripping characteristic





### Numerous options with a starttec

<p><b>1. Networking via power bus and fieldbus, e.g. actuated via PROFIBUS-DP:</b></p> <ul style="list-style-type: none"> <li>▶ Reduced wiring due to power loops</li> <li>▶ Optimum accessibility due to wall mounting</li> <li>▶ Operational reliability due to output of error messages, e.g. mains failure</li> </ul>	<p><b>2. Individual drive as modular complete system, (starttec + geared motor) e.g. actuated via AS-Interface:</b></p> <ul style="list-style-type: none"> <li>▶ Protection for mechanics via start-up ramp</li> <li>▶ Motor and overload protection</li> <li>▶ Counter-clockwise/clockwise rotation (option)</li> </ul>	<p><b>3. Individual drives, e.g. actuated via digital inputs with:</b></p> <ul style="list-style-type: none"> <li>▶ Integrated brake control (option)</li> <li>▶ Operation on 2 motors (option)</li> <li>▶ Local operation via keypad</li> </ul>
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### Technical data overview

Technical data	
Rated motor power	0.25...4.0 kW
Mains voltage	3-phase 400/500 V
Motor starter power supply	24V
Enclosure	IP65/NEMA 4 (in preparation)
Ambient temperature	-25...60°C
Actuation	Via control signals (digital inputs/outputs integrated as standard) Options: ▶ AS-Interface ▶ Fieldbuses (INTERBUS, PROFIBUS-DP, DeviceNet/ CANopen, CAN system bus, etc.)
Loop-through option	▶ Power 4 mm <sup>2</sup> ▶ Supply voltage 1.5 mm <sup>2</sup>
Mounting Dimensions [L x W x H] [mm]	On the wall or directly on the motor [228 x 129 x 71]
Standards	UL, cUL, CE (in preparation)

The concept of the starttec motor starter builds on our experience of the 8200 motec motor frequency inverter (see catalog: G-motion, motec) and Lenze's expert knowledge of distributed drive systems. This has given rise to an integral and seamless system for variable speed geared motors (motec) and geared motors with fixed speeds (starttec).

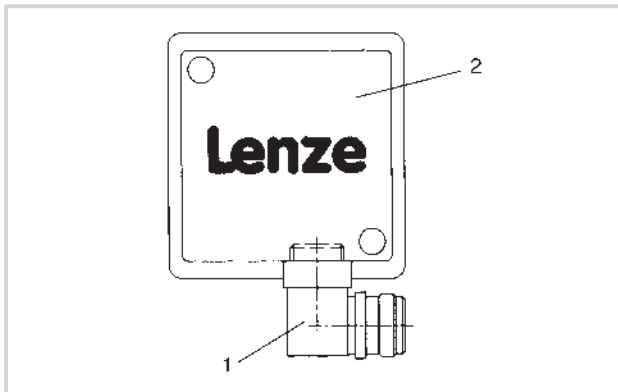
**Please contact us for copies of our extensive documentation (see Lenze in Germany and Lenze worldwide at the end of this catalog).**

**Our documentation contains detailed information about other technical features, variants and the ordering information required for the starttec motor starter.**

### ICN connector

#### General data

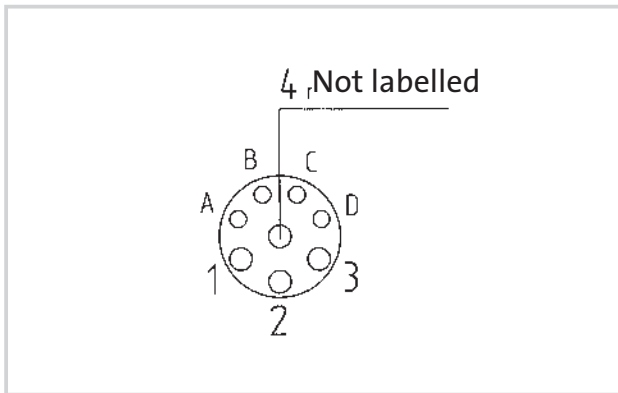
Version	Industrial standard connector with screwed connection. The motor circuit is defined in the terminal box and must be checked prior to commissioning. (The counter plug is not part of the scope of supply).	
Enclosure	IP65	
No. of contacts	Power: 3 + PE	Signal: 3 + PE
Permissible rated current	20 A	9A
Permissible rated voltage	630 V (AC)	



Position	Designation
1	Connector
2	Motor terminal box

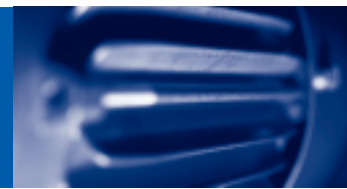
Counter plugs are not included in the scope of supply

#### Connector assignment



**Caution!** Before commissioning the motor, the motor circuit (Y or Δ) must be checked.

Pin no.	Connection	Connection designation	Recommended wire colour	Motor frame size	Recommended conductor size
1	Phase	U	Brown	063 .... 112	1.5 mm <sup>2</sup>
2	Protective earth	PE	Green/Yellow		
3	Phase	W	Black		
4	Phase	V	Blue		
A	Temperature sensor	Th	White	063 .... 112	0.75 mm <sup>2</sup>
B	Temperature sensor	Th	White		
C	Brake	Br	Blue		
D	Brake	Br	Black		



The temperature sensors are integrated into the windings. The use of an additional motor protection switch is recommended for mains operation.

### Thermal contacts

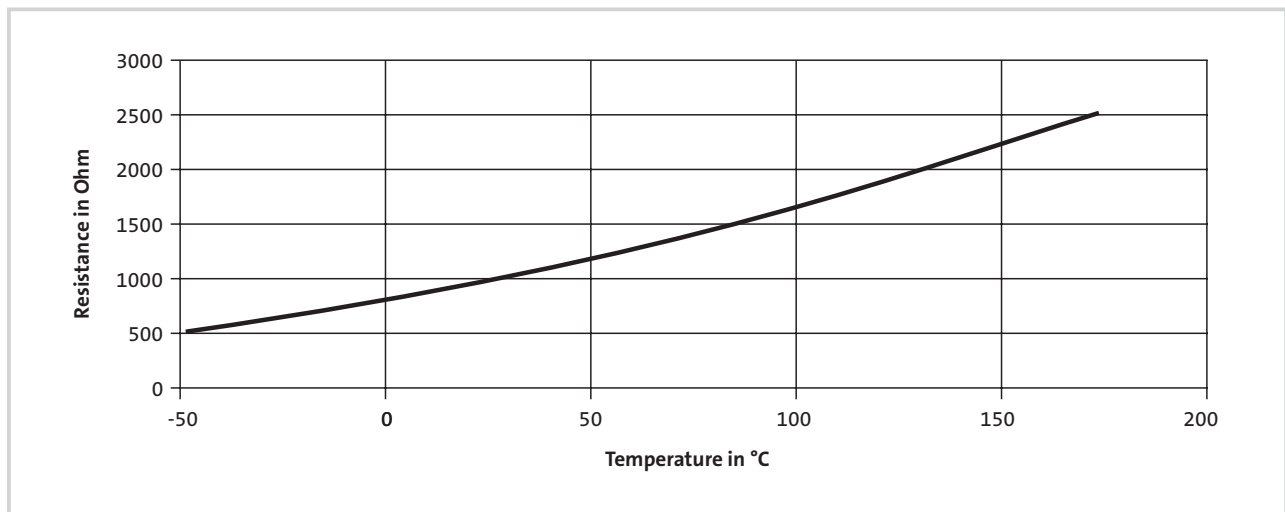
Motor frame size	Function	Operating temperature [°C]	Reset-temperature [°C]	Current capacity [A]	Permissible voltage capacity [V] AC
All	NC contact	150 ± 5	90-135	2.5	250

### PTC thermistor

Motor frame size	Function	Operating temperature [°C]	Resistance at		Standards
			155 °C [Ω]	-20...+140° [Ω]	
All	Abrupt change in resistance	150 ± 5	550	30...250	DIN 44080 VDE 0660 Part 303

### KTY continuous temperature sensor

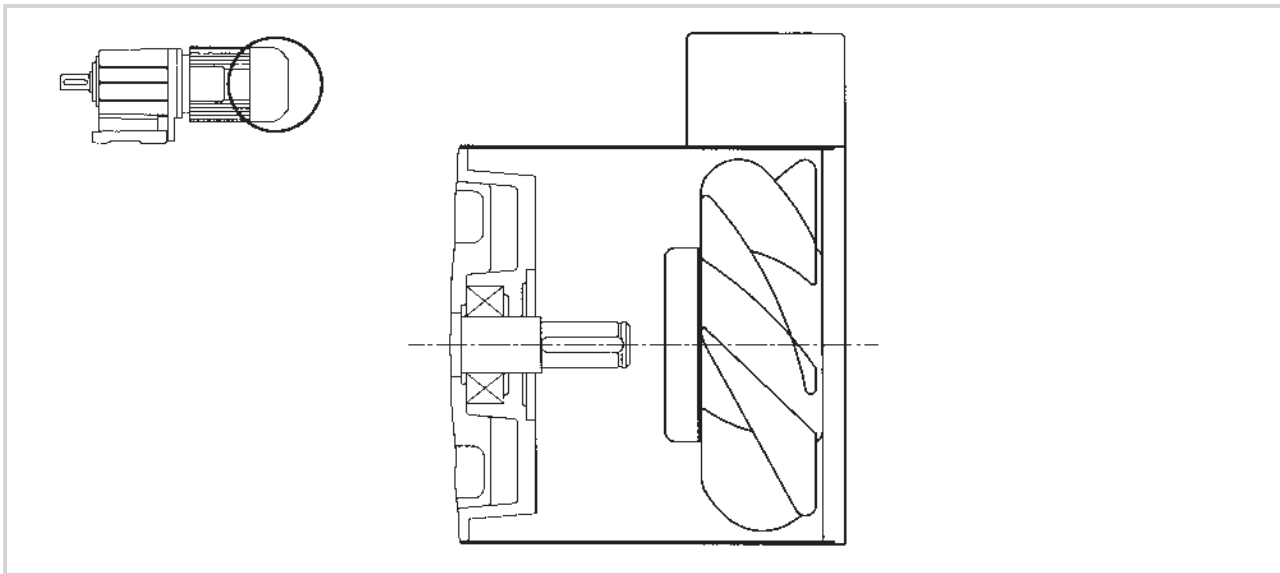
Motor frame size	Function	Resistance at (see graphic below)			Permissible current capacity at	
		175°C [Ω]	150°C [Ω]	25°C [Ω]	175°C [mA]	25°C [mA]
All	Continuous change in resistance	2535	2225	1000	2.0	10



Geared motors and geared brake motors can be fitted with a separate axial fan. The fan is assembled in an extended motor fan cover with a separate terminal box.

### General data

No. of poles	4-pole			2-pole		6-pole
	063C□2 ... 132C□2	160-□2 ... 180-□2	200N□2 ... 225N□2	063-□1 ... 080-□1	090-□1 ... 132-□1	071-□3 ... 080-□3
Motor frame size						
Version	1~ or 3~	1~ or 3~	3~	1~	1~ or 3~	1~
Enclosure	IP 66	IP 55	IP 54	IP 55	IP 55	IP 55
Thermal class	F	F	F	F	F	F
Operating mode	S1	S1	S1	S1	S1	S1





## Rated data

Motor frame size	Version	Connection	U <sub>r</sub> [V]	f <sub>r</sub> [Hz]	I <sub>r</sub> [A]	P <sub>r</sub> [W]	Weight m [kg]
063C12 063C32 063C42	1~		230-277	50 (60)	0.10	27	2.2
	3~	Y	380-500		0.05	29	
	3~	Δ	220-290		0.10	27	
063-11 063-31	1~		210-240	50 (60)	0.12	19	1.6
			360-420		0.07	19	
071C32 071C42	1~		230-277	50 (60)	0.10	28	2.4
	3~	Y	380-500		0.05	30	
	3~	Δ	220-290		0.10	30	
071-11 071-13 071-31 071-33	1~		210-240	50 (60)	0.12	19	1.6
			360-420		0.07	19	
080C32 080C42	1~		230-277	50 (60)	0.11	29	2.3
	3~	Y	380-500		0.05	29	
	3~	Δ	220-290		0.10	29	
080-11 080-13 080-31 080-33	1~		210-240	50 (60)	0.32	46	2.3
			360-420		0.16	41	
090C32	1~		230-277	50 (60)	0.26	72	3.1
	3~	Y	380-500		0.16	82	
	3~	Δ	220-290		0.28	86	
090-11 090-31	1~		210-240	50 (60)	0.22	50	3.1
			360-530		0.08	31	
	3~	Δ	210-305		0.14	31	
100C12 100C32	1~		230-277	50 (60)	0.25	70	3.5
	3~	Y	380-500		0.16	83	
	3~	Δ	220-290		0.27	86	
100-31 100-41	1~		210-240	50 (60)	0.16	30	3.5
			360-530		0.08	34	
	3~	Δ	210-305		0.14	34	
112C22 112C32	1~		230-277	50 (60)	0.26	73	3.9
	3~	Y	380-500		0.15	82	
	3~	Δ	220-290		0.27	85	
112-31 112-41	1~		210-240	50 (60)	0.30	80	3.9
			360-530		0.14	61	
	3~	Δ	210-305		0.24	61	
132C22 132C32	1~		230-277	50 (60)	0.39	115	5.3
	3~	Y	380-500		0.24	138	
	3~	Δ	220-290		0.44	130	
132-21	1~		210-240	50 (60)	0.55	125	5.3
			360-530		0.26	132	
	3~	Δ	210-305		0.45	132	
160-22 160-32	1~		210-240	50 (60)	0.71	160	6.5
			360-530		0.40	218	
	3~	Δ	210-305		0.70	218	
180-22 180-32	1~		210-240	50 (60)	0.71	160	7.5
			360-530		0.40	218	
	3~	Δ	210-305		0.70	218	
200N32	3~	Y	360-530	50 (60)	0.40	218	10
		Δ	210-305		0.70	218	
225N12 225N22	3~	Y	360-530	50 (60)	0.40	218	12
		Δ	210-305		0.70	218	

### Spring-operated brake

Brake motors are fitted with Lenze spring-operated brakes. The rectifier required for mains operation is located in the terminal box and is included in the scope of supply. Brake coil and rectifier/brake coil are factory-connected. A basic diagram of the brake appears on page 8-17. The brakes are

active once the power supply has been disconnected (closed-circuit principle). The braking torques specified apply to quasi-static conditions with the brake operating as a holding brake in low-wear mode.

The air gap is factory-set and if required can be adjusted according to the level of wear.

#### General data

Design	Single-disc spring-operated brake
Operating principle	Braking torque at zero current
Enclosure	IP54
Thermal class	F
Friction linings	Asbestos-free
Option	<ul style="list-style-type: none"> <li>▶ Manual release</li> <li>▶ Low noise (required for inverter operation or if a resolver or incremental encoder has been fitted)</li> </ul>

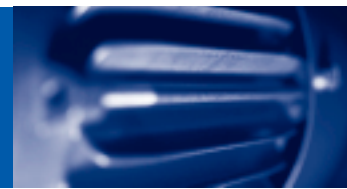
#### Rated data and combination options

Rated data	Brake size								
	06	08	10	12	14	16	18	20	25
$P_{20^{\circ}}$ [W]	20	25	30	40	50	55	85	100	110
$M_B$ [Nm]	4	8	16	32	60	80	150	240	400
$J_B$ [ $10^{-3}$ kgm <sup>2</sup> ]	0.015	0.061	0.20	0.45	0.63	1.5	2.9	7.3	20.0
$m$ [kg]	0.9	1.5	2.6	4.2	5.8	8.7	12.6	19.5	31.0
Motor frame size	Combination options								
063	▲								
071	▲								
071C42	▲	▲							
080		▲							
080C42		▲	▲						
090		▲	▲						
100			▲	▲					
112				▲	▲				
132					▲	▲			
160-22						▲	▲		
160-32							▲		
180							▲	▲	
200								▲	▲
225									▲

#### Voltages

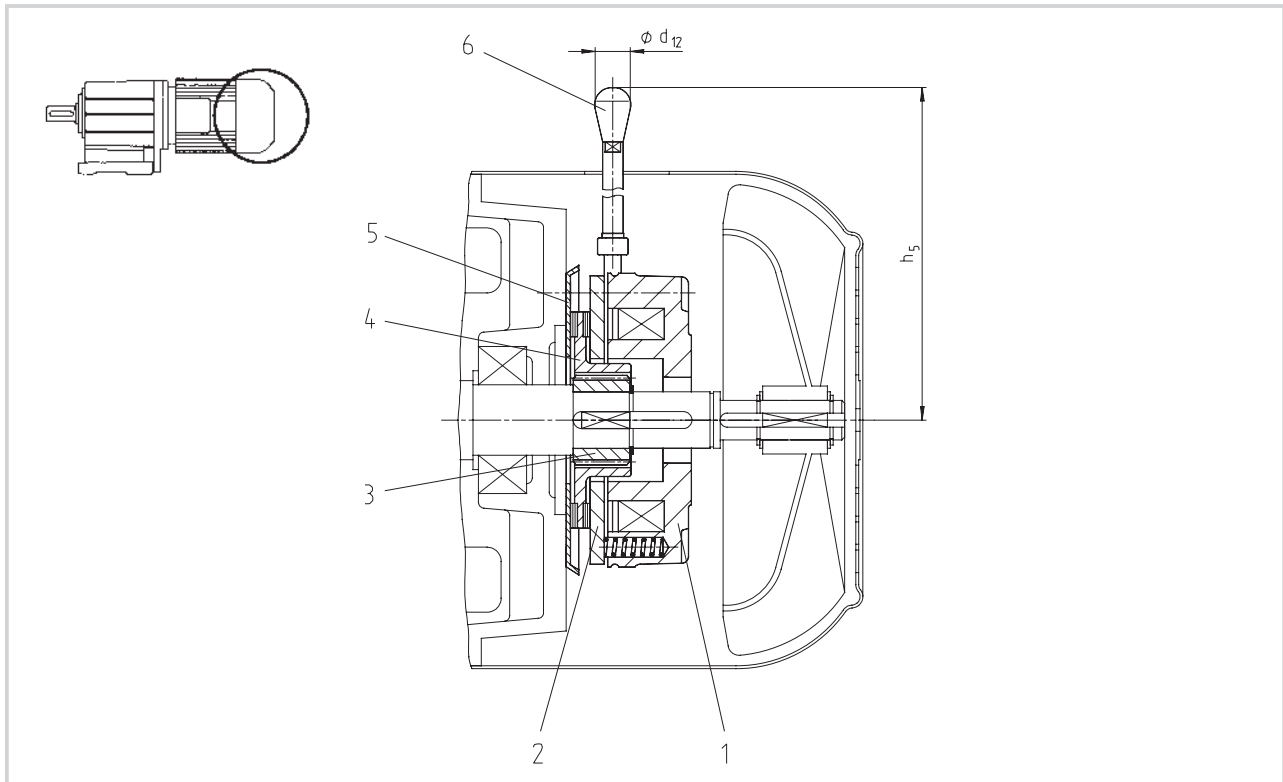
Supply voltage	Rectifier	Brake voltage	Note
DC 24 V	None (terminal strip only)	DC 24 V	- A free-wheeling diode (AC-controlled switching) - Or an external spark suppressor (DC-controlled switching) will be required to provide protection against induced voltages.
DC 180 V		DC 180 V	
DC 205 V		DC 205 V	
AC 230 V	4-pole bridge rectifier (no additional terminals in the DC circuit)	DC 205 V	For AC-controlled switching
AC 400 V	4-pole half-wave rectifier (no additional terminals in the DC circuit)	DC 180 V	
AC 230 V	6-pole bridge rectifier (with 2 additional terminals in the DC circuit)	DC 230 V	For DC-controlled switching (a built-in spark suppressor in the rectifier protects the contacts on the additional terminals)
AC 400 V	6-pole half-wave rectifier (with 2 additional terminals in the DC circuit)	DC 180 V	





### Spring-operated brake

Position	Designation
1	Stator
2	Armature plate
3	Hub
4	Rotor
5	Friction plate
6	Manual release (option)



Size of spring-operated brake	$d_{12}$	$h_5$
06	13	107
08	13	116
10	13	132
12	13	161
14	24	195
16	24	240
18	24	279
20	24	319
25	24	445

### Incremental encoder

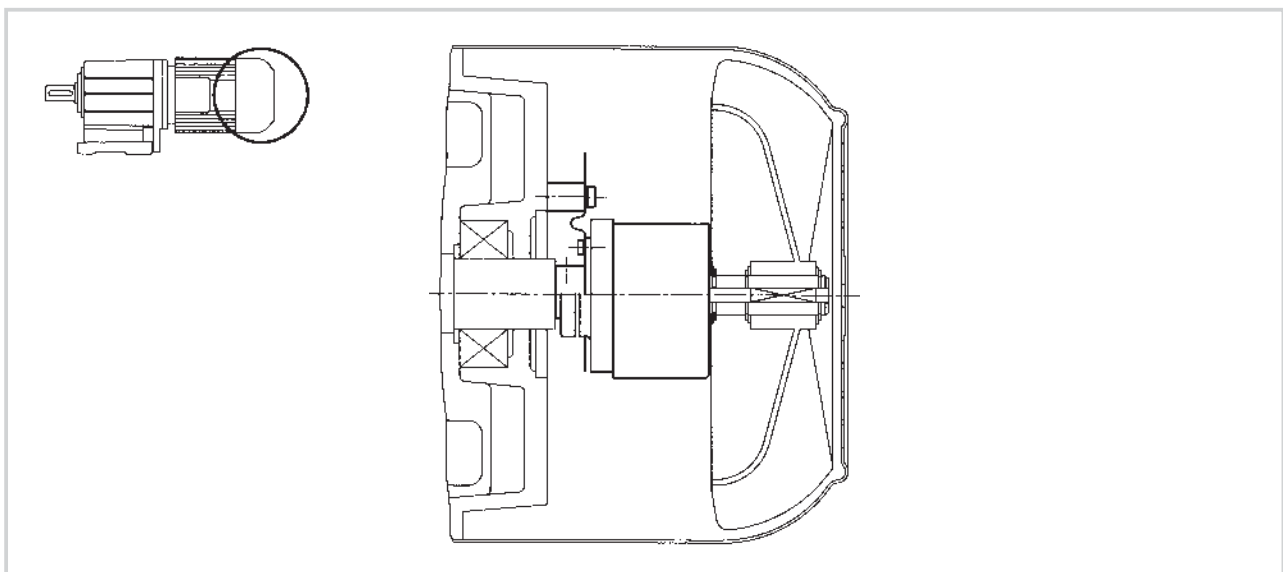
Digital actual value acquisition, can be analysed directly on the Lenze Servo inverter 9300.

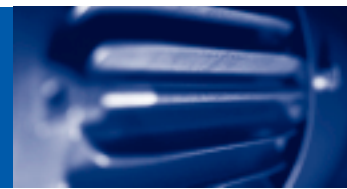
Type	ITD 21 TTL	ITD 21 HTL
Version	Hollow shaft incremental encoder	
Enclosure	IP54	
Voltage level	TTL	HTL
Pulse rate	2048 or 512 PPR	
Tracks	2 tracks, 2 tracks inverse and index pulse	
Supply voltage	5 V DC $\pm$ 5%	8 ... 30 V DC
Limit frequency	300 kHz	160 kHz
Operating temperature range	-20°C ... +70°C	

### Resolver

Stator-fed resolver with 2 stator windings offset by 90° and one rotor winding with transformer winding.

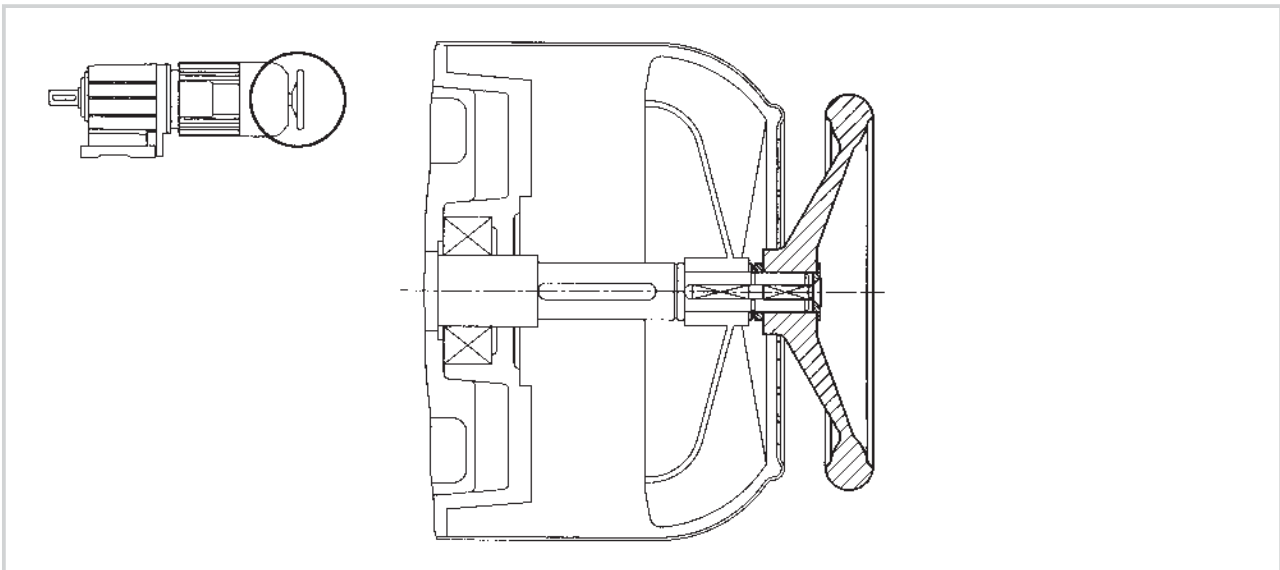
Type	TS 2651
Version	Brushless hollow shaft resolver with internal bearing
Enclosure	IP54
Input voltage	10 V amplitude
Input frequency	4 kHz
Stator/rotor ratio	0.3 $\pm$ 5%
Rotor impedance $Z_{ro}$	51 $\Omega$ + j90 $\Omega$
Stator impedance $Z_{s0}$	102 $\Omega$ + j150 $\Omega$
Impedance $Z_{rs}$	44 $\Omega$ + j76 $\Omega$
Insulation resistance	> 10 M $\Omega$ at 500 V DC
No. of pairs of poles	1
Maximum phase-angle error	$\pm$ 10 angular minutes
Operating temperature range	-10°C ... +150°C





Version	Handwheel made from light metal, smooth wheel surface
Function	Manual operation: <ul style="list-style-type: none"> <li>▶ Emergency operation</li> <li>▶ Setting-up operation for machines/systems</li> </ul>
Technical note	The increased mass moment of inertia should be taken into account during configuration. For frequent switching operations, in particular if the direction of rotation changes: Please contact Lenze.

Motor frame size	Diameter d [mm]	Handwheel Additional mass moment of inertia [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
071	160	1.6	0.6
080	160	1.6	0.6
090	160	1.6	0.6
100	160	1.6	0.6
112	160	1.6	0.6
132	250	13.9	1.8

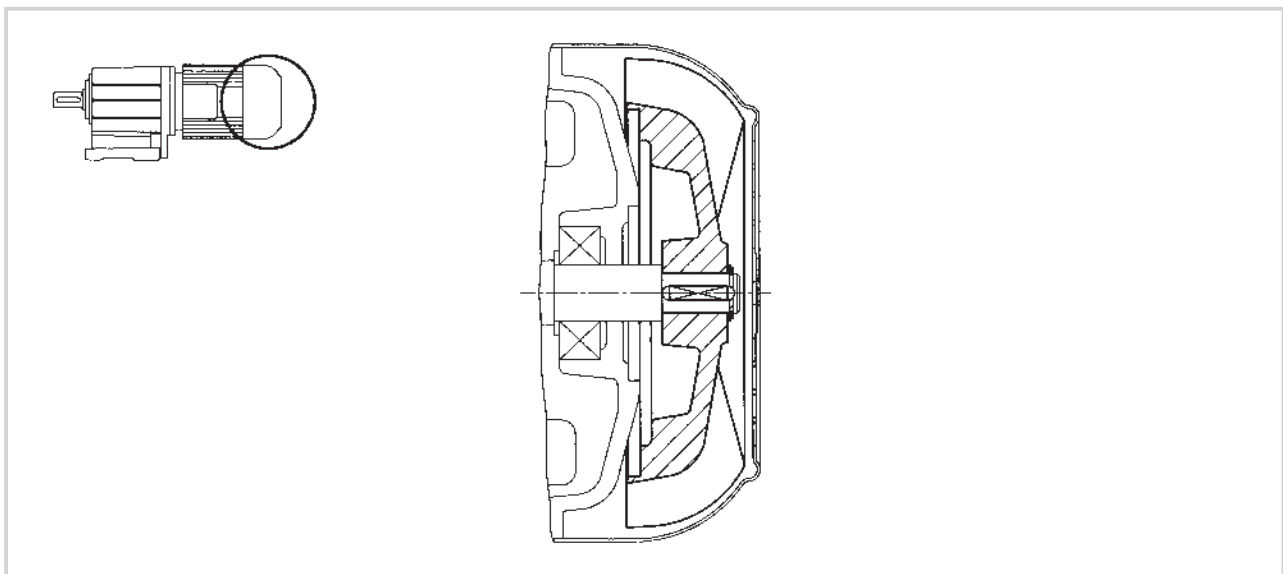


## Technical data - Motors

### Increased centrifugal mass

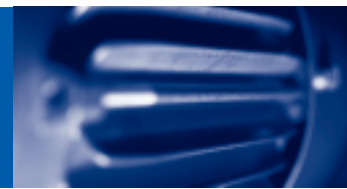
Version	Integral cast iron fan
Operating principle	Increased motor centrifugal mass for soft starting/braking
Technical note	The increased mass moment of inertia should be taken into account during configuration! For frequent switching operations, in particular if the direction of rotation changes: Please contact Lenze.

Motor frame size	Additional mass moment of inertia [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
071	1.8	0.9
080	2.4	1.4
090	5.5	1.9
100	7.7	2.5
112	15.3	3.8
132	35.6	6.0



# Dimensions - Motors

## Motor terminal box assignment



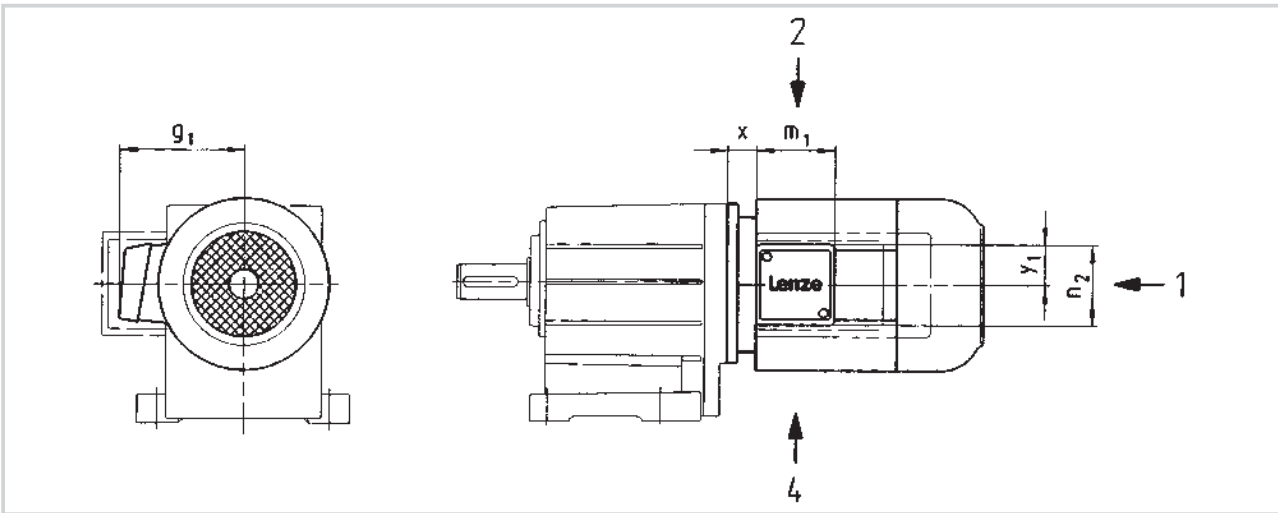
Geared motor 4-pole	Motor frame size									
	063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22 112C32	132C22 132C32	160-22 160-32	180-22 180-32
<b>Options</b>										
Without fan	KK1	–	–			–		–	–	–
Fan	–	KK1	KK1			KK1		KK1	KK3	KK3
Fan + handwheel	–	–	KK2			KK2		KK3	–	–
Fan + 2nd shaft end	–	–	KK2			KK2		KK3	–	–
Cast iron fan	–	–	KK1	KK1	KK1	KK2	KK1	KK1	–	–
Cast iron fan + handwheel	–	–	KK2			KK2		KK3	–	–
Cast iron fan + 2nd shaft end	–	–	KK2			KK2		KK3	–	–
Brake without fan	KK2	–	–			–		–	–	–
Brake + fan	–	KK2	KK2			KK2		KK3	KK3	KK3
Brake + fan + handwheel	–	–	KK2			KK2		KK3	–	–
Brake + fan + 2nd shaft end	–	–	KK2			KK2		KK3	–	–
Brake + cast iron fan	–	–	KK2			KK2		KK3	–	–
Brake + S/P encoder	KK3	–	–			–		–	–	–
Brake + S/P encoder + fan	–	KK3	KK3			–		–	–	–
S/P encoder without fan	KK2	–	–			–		–	–	–
S/P encoder + fan	–	KK2	KK2			KK2		KK3	KK3	–
Separate fan	–	KK1	KK1			KK1		KK1	KK3	KK3
S/P encoder + separate fan	–	KK2	KK2			KK2		KK3	KK3	KK3
Brake + separate fan	–	KK2	KK2			KK2		KK3	KK3	KK3
Brake + S/P encoder + separate fan	–	KK3	KK3			KK3		KK3	KK3	KK3

Geared motor 2-pole and 6-pole	Motor frame size						
	063-11 063-31	071-11 071-13 071-31 071-33	080-11 080-31 080-13 080-33	090-11 090-31	100-31 100-41	112-31 112-41	132-21 *
<b>Options</b>							
Fan	KK1				KK1		
Fan + handwheel	–				KK2		
Fan + 2nd shaft end	–				KK2		
Cast iron fan	–	KK1	KK1	KK1	KK2	KK1	KK1
Cast iron fan + handwheel	–				KK2		
Cast iron fan + 2nd shaft end	–				KK2		
Brake + fan	KK2				KK2		
Brake + fan + handwheel	–				KK2		
Brake + fan + 2nd shaft end	–				KK2		
Brake + cast iron fan	–				KK2		
S/P encoder + fan	KK3				KK3		
Separate fan	KK1				KK1		
S/P encoder + separate fan	KK3				KK3		
Brake + separate fan	KK2				KK2		
Brake + S/P encoder + separate fan	KK3				KK3		

\* KK3 terminal box generally used for Y/Δ; 400/230V (87 Hz operation).

# Dimensions - Motors

## Motor terminal box



Geared motor 4-pole		Motor frame size								
		063C02 063C12 063C22 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22 112C32	132C22 132C32	160-22 160-32	180-22 180-32
Terminal box KK1	$g_1$	100	109	141	146	157	167	195		
	$m_1$	75		115			122			
	$n_2$	75		115			122			
	$x$	21	24	14	19	20	22	33		
	$y_1$	37.5		57.5			61.0			
Cable glands	Position 4 <sup>1)</sup>	1x M16x1.5 1x M20x1.5		1x M20x1.5 1x M25x1.5			2x M32x1.5			
Terminal box KK2	$g_1$	107	116	130	135	146	156			
	$m_1$	136		153						
	$n_2$	94		117						
	$x$	13	15	17	22	23	25			
	$y_1$	47		58.5						
Cable glands	Position 2	1x M16x1.5 1x M20x1.5		1x M20x1.5 1x M25x1.5						
	Position 4	1x M16x1.5 1x M20x1.5		1x M20x1.5 1x M25x1.5						
Terminal box KK3	$g_1$	148	157	142	147	158	168	187	207	226
	$m_1$	200		195			195		226	
	$n_2$	121		124			124		127	
	$x$	20	23	15	20	21	23	38	36	73
	$y_1$	60.5		62			62		63.5	
Cable glands	Position 2	1x M16x1.5 2x M20x1.5 1x M25x1.5		1x M20x1.5 2x M25x1.5 1x M32x1.5			1x M20x1.5 2x M25x1.5 1x M32x1.5		2x M16x1.5 1x M20x1.5 1x M50x1.5	
	Position 4	1x M16x1.5 2x M20x1.5 1x M25x1.5		1x M20x1.5 2x M25x1.5 1x M32x1.5			1x M20x1.5 2x M25x1.5 1x M32x1.5		2x M16x1.5 1x M20x1.5 1x M50x1.5	

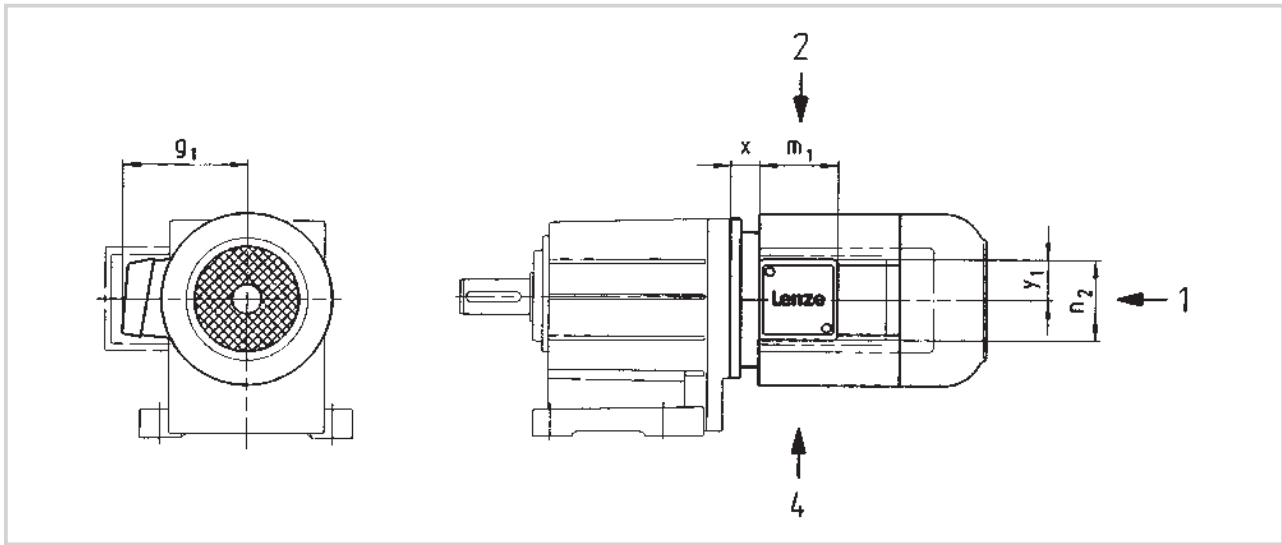
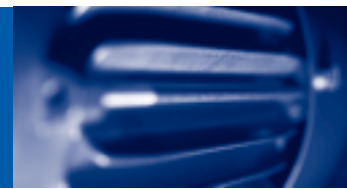
Dimensions in [mm]

Position of cable glands based on terminal box in position 5

<sup>1)</sup> Observe page 8-24

# Dimensions - Motors

## Motor terminal box



Geared motor 2-pole and 6-pole		Motor frame size						
		063-11 063-31	071-11 071-13 071-31 071-33	080-11 080-13 080-31 080-33	090-11 090-32	100-31 100-41	112-31 112-41	132-21 *
Terminal box KK1	$g_1$	105	131		141	158	165	197
	$m_1$	97	88			88		118
	$n_2$	97	96			92		124
	$x$	32	27		32	30	39	41
	$y_1$	48.5	52			48		64
Cable glands	Position 4 <sup>1)</sup>	1x M20x1.5 1x M25x1.5	2x M20x1.5			2x M20x1.5		2x M25x1.5
Terminal box KK2	$g_1$	105	131		140	159	165	197
	$m_1$	97	144			144		118
	$n_2$	97	98			96		123
	$x$	32	18		23	21	30	42
	$y_1$	48.5	58			48.0		64
Cable glands	Position 4	1x M20x1.5 1x M25x1.5	1x M16x1.5 2x M20x1.5			1x M16x1.5 2x M20x1.5		2x M25x1.5
Terminal box KK3	$g_1$	120	136		144	163	169	191
	$m_1$	200	200			200		200
	$n_2$	120	121			120		120
	$x$	27	16		21	19	29	46
	$y_1$	60	71			60		67
Cable glands	Position 2	1x M16x1.5 2x M20x1.5 1x M25x1.5	1x M16x1.5 2x M20x1.5 1x M25x1.5			1x M16x1.5 2x M20x1.5 1x M25x1.5		1x M16x1.5 2x M20x1.5 1x M25x1.5 *
	Position 4	1x M16x1.5 2x M20x1.5 1x M25x1.5	1x M16x1.5 2x M20x1.5 1x M25x1.5			1x M16x1.5 2x M20x1.5 1x M25x1.5		1x M16x1.5 2x M20x1.5 1x M25x1.5 *

Dimensions in [mm]

Position of cable glands based on terminal box in position 5

\* For  $\Delta$ ; 400/230V (87 Hz operation) in Positions 2 and 4: 1x M32x1.5

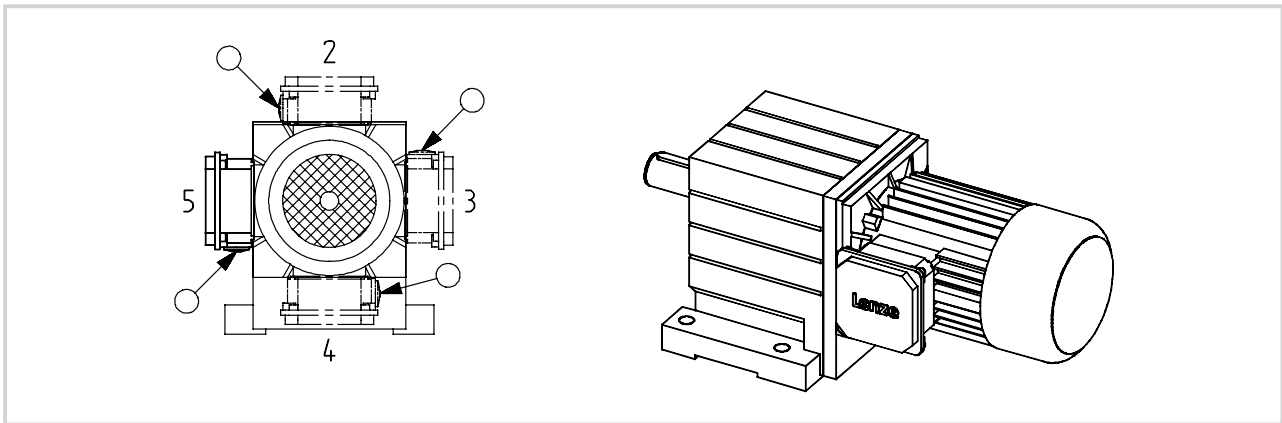
<sup>1)</sup> Observe page 8-24

### Position of the cable gland on terminal box KK1

On motors with KK1 motor terminal boxes, the position of the cable gland can be selected on the basis of the position of the terminal box.

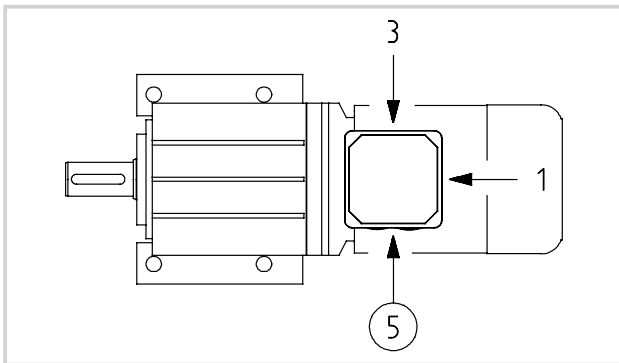
Unless the position of the cable gland is specified, it will be supplied in the position indicated with a circle.

Terminal box positions 2, 3, 4, 5 (example mounting position A)



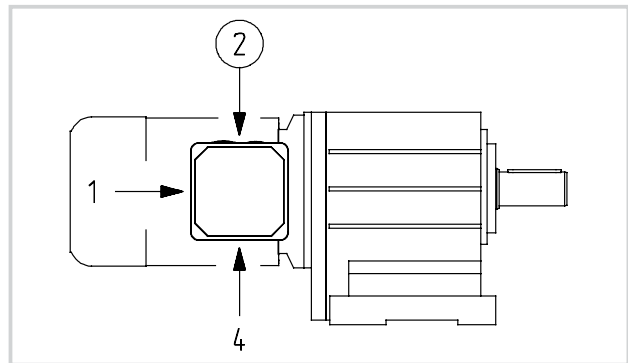
#### Terminal box position 2

Position of cable glands: 1, 3, 5



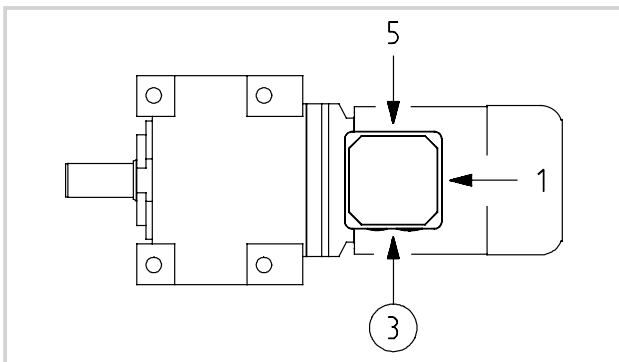
#### Terminal box position 3

Position of cable glands: 1, 2, 4



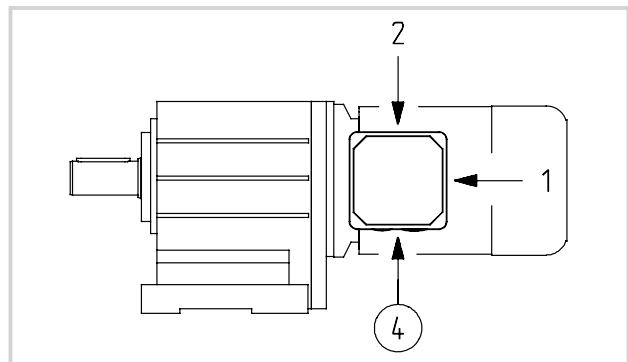
#### Terminal box position 4

Position of cable glands: 1, 3, 5



#### Terminal box position 5

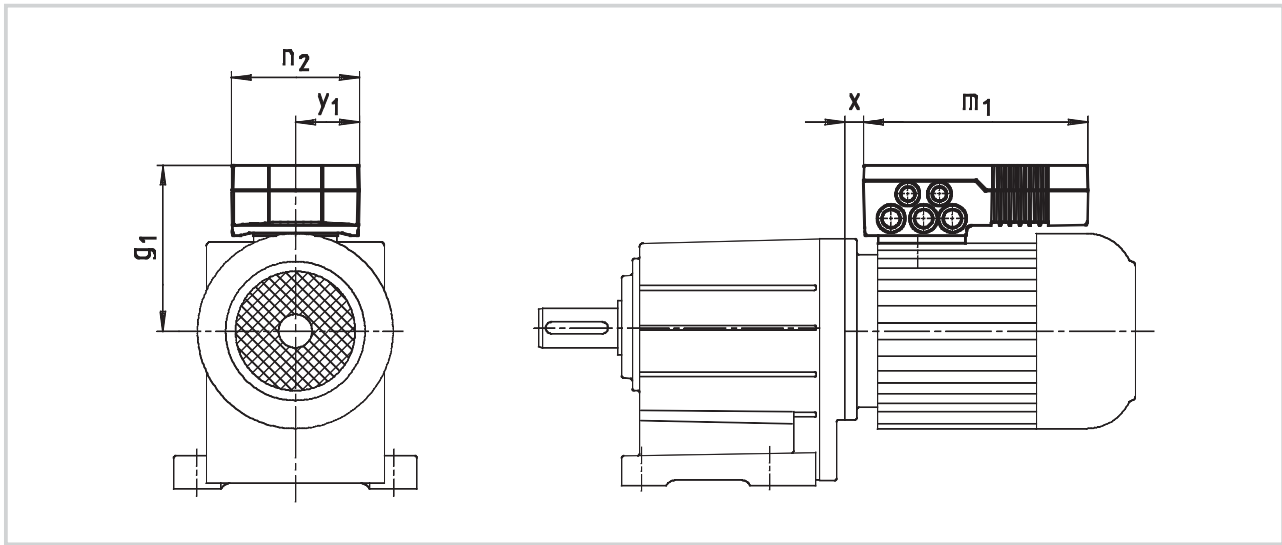
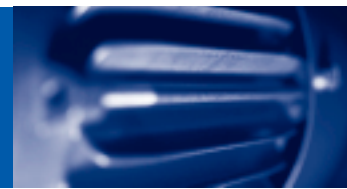
Position of cable glands: 1, 2, 4





## Dimensions - Motors

Geared motor with starttec



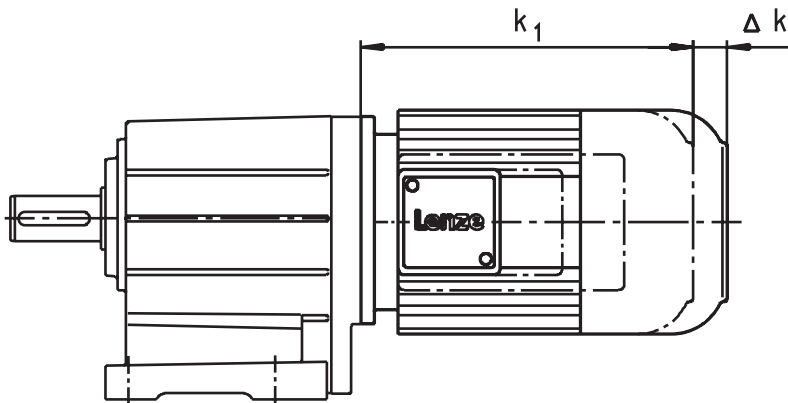
Geared motor 4-pole	Motor frame size					
	063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22
$g_1$	153	162	157	162	173	183
$m_1$	228	228	228	228	228	228
$n_2$	129	129	129	129	129	129
$x$	20	23	16	21	22	24
$y_1$	64.5	64.5	64.5	64.5	64.5	64.5

Geared motor 2-pole and 6-pole	Motor frame size				
	063-31	071-11 071-13 071-31 071-33	080-11 080-13 080-31 080-33	090-11 090-31	100-31 100-41
$g_1$	143	157	157	165	178
$m_1$	228	228	228	228	228
$n_2$	129	135	135	129	129
$x$	26	16	16	21	19
$y_1$	64.5	78	78	64.5	64.5

Dimensions in [mm]

## Dimensions - Motors

### Geared motor with integral fan



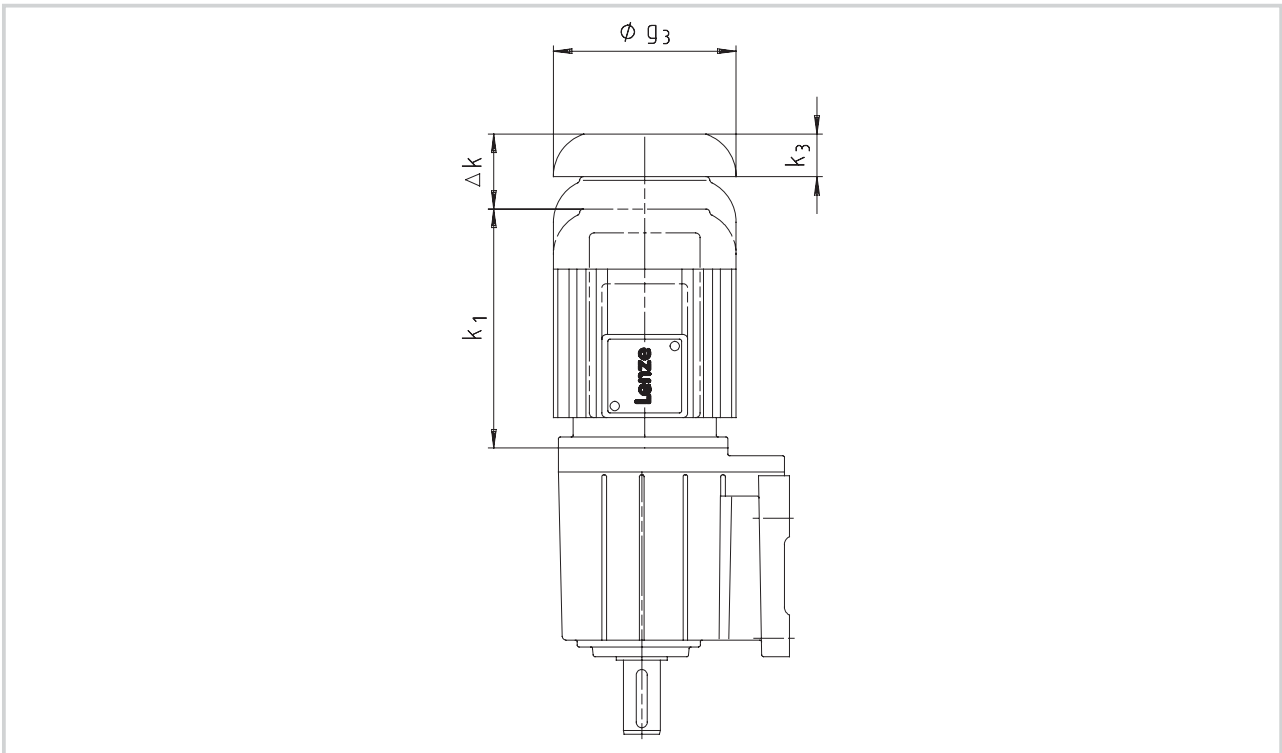
Geared motor 4-pole		Motor frame size											
		063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32	180-22 180-32
Motor length without options	$k_1$	156	188	207	225	276	309	319	363	404	475	519	592
<b>Options</b>		$\Delta k$											
Without fan		0	-	-	-	-	-	-	-	-	-	-	-
Fan		-	0	0	0	0	0	0	0	0	0	0	0
Cast iron fan		-	-	0	5	0	79	0	0	0	-	-	-
Brake without fan		71	-	-	-	-	-	-	-	-	-	-	-
Brake + fan		-	40	52	73	70	79	90	109	96	96	83	83
Brake + cast iron fan		-	-	52	73	70	79	90	109	-	-	-	-
Brake + S/P encoder		135	-	-	-	-	-	-	-	-	-	-	-
Brake + S/P encoder + fan		-	103	96	-	-	-	-	-	-	-	-	-
S/P encoder without fan		71	-	-	-	-	-	-	-	-	-	-	-
S/P encoder + fan		-	56	52	97	86	81	80	102	88	88	-	-

Geared motor 2-pole and 6-pole		Motor frame size								
		063-11	063-31	071-□1 071-□3	080-□1 080-□3	090-11 090-31	100-31	100-41	112-31 112-41	132-31
Motor length without options	$k_1$	193	204	176	225	242	280	310	323	409
<b>Options</b>		$\Delta k$								
Fan		0	0	0	0	0	0	0	0	0
Cast iron fan		-	-	0	0	0	94	0	0	0
Brake + fan		56	56	66	68	74	94	101	101	127
Brake + cast iron fan		-	-	66	68	74	94	101	101	127
S/P encoder + fan		56	56	66	68	87	100	99	99	108

Dimensions in [mm]

# Dimensions - Motors

Geared motor with integral fan and protective cover



Geared motor 4-pole		Motor frame size								
		071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32
Motor	$g_3$	138	156	176	194	222		257	310	
	$k_1^{1)}$	207	225	276	309	319	363	404	475	519
	$k_3$	13	17	16	18	18		21	25	
Options		$\Delta k$								
Fan		13	17	16	18	18		21	25	
Cast iron fan		13	22	16	97	18		21	-	
Brake + fan		65	90	86	97	108		130	121	
Brake + cast iron fan		65	90	86	97	108		130	-	
Brake + S/P encoder + fan		109	-	-	-	-		-	-	
S/P encoder + fan		65	114	102	99	98		123	113	

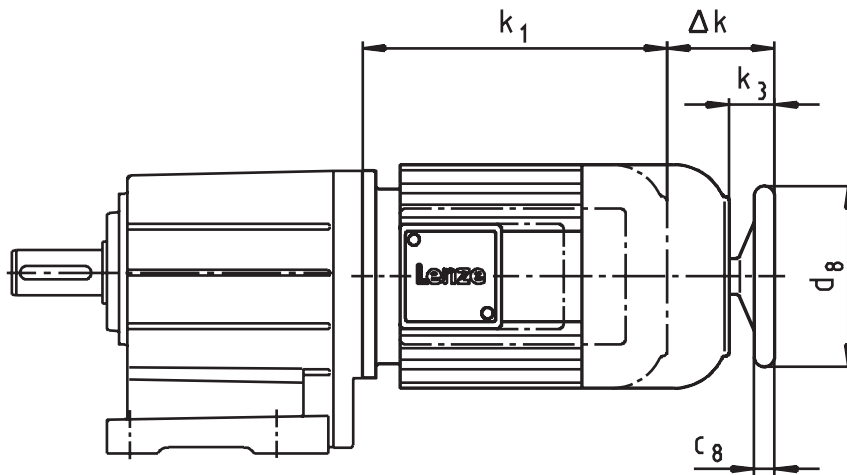
Geared motor 2-pole and 6-pole		Motor frame size						
		071-□1 071-□3	080-□1 080-□3	090-11 090-31	100-31	100-41	112-31 112-41	132-21
Motor	$g_3$	138	156	176	194		218	257
	$k_1^{1)}$	176	225	242	280	310	323	409
	$k_3$	13	17	16	18		18	21
Options		$\Delta k$						
Fan		13	17	16	18		18	21
Cast iron fan		13	17	16	112		18	21
Brake + fan		79	85	90	112		119	148
Brake + cast iron fan		79	85	90	112		119	148
S/P encoder + fan		79	85	103	118		117	129

Dimensions in [mm]

1) Dimensions without options

## Dimensions - Motors

Geared motor with integral fan and handwheel



Geared motor 4-pole		Motor frame size						
		071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32
Motor	$k_1$ <sup>1)</sup>	207	225	276	309	319	374	404
	$k_3$	34	32	32	42	39		50
Handwheel	$d_8$	160	160	160	160	160		250
	$c_8$	18	18	18	18	18		26
<b>Options</b>		$\Delta k$						
Integral fan		70	91	80	94	107		126
Cast iron fan								
Brake + integral fan								

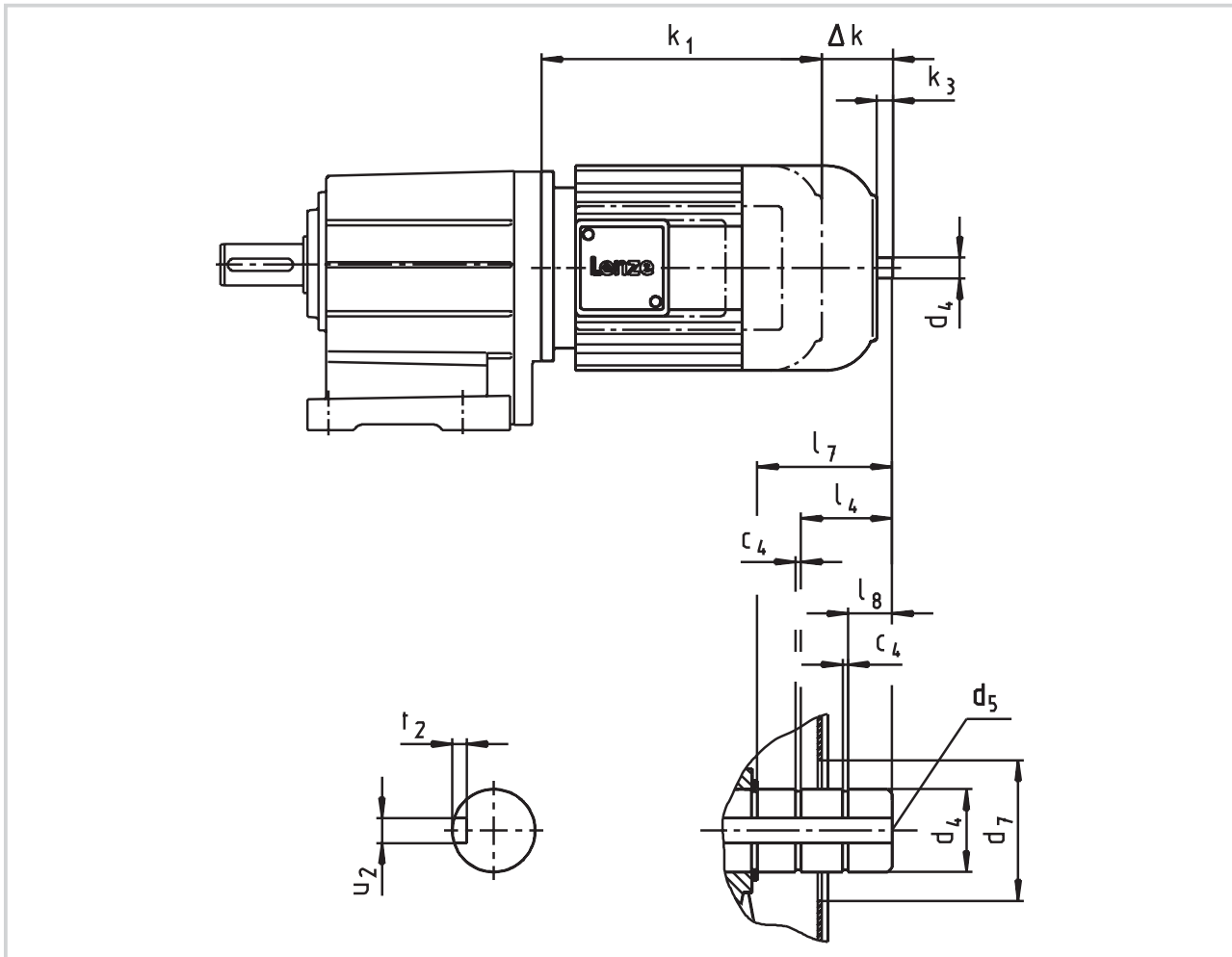
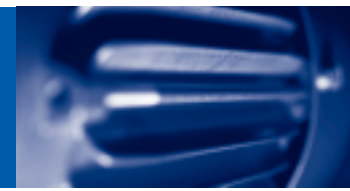
Geared motor 2-pole and 6-pole		Motor frame size						
		071-□1 071-□3	080-□1 080-□3	090-11 090-31	100-31	100-41	112-31 112-41	132-21
Motor	$k_1$ <sup>1)</sup>	176	225	242	280	310	323	409
	$k_3$	35	33	32	40		39	50
Handwheel	$d_8$	160	160	160	160	160	160	250
	$c_8$	18	18	18	18	18	18	26
<b>Options</b>		$\Delta k$						
Integral fan		85	86	87	108		116	144
Cast iron fan								
Brake + integral fan								

Dimensions in [mm]

<sup>1)</sup> Motor length without options

# Dimensions - Motors

## Geared motor with integral fan and 2nd shaft



Geared motor 4-pole		Motor frame size						
		071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32
Motor	$k_1$ <sup>1)</sup>	207	225	276	309	319	363	404
	$k_3$	11	9	9	19		16	25
Shaft end	$c_4$	1.1	1.1	1.1	1.3		1.3	1.6
	$d_4$	14 h6	14 h6	14 h6	20 j6		20 j6	30 j6
	$d_5$	M5	M5	M5	M6		M6	M10
	$d_7$ <sup>2)</sup>	34	34	34	34		34	46
	$l_4$	-	-	-	17		17	24.5
	$l_7$	19	19	19	32.5		28.5	42
	$l_8$	3	4.5	5	10.5		7	8.5
	$u_2$	5	5	5	6		6	8
	$t_2$	3	3	3	3.5		3.5	4
<b>Options</b>		$\Delta k$						
Integral fan								
Cast iron fan		47	68	57	71		84	101
Brake + integral fan								

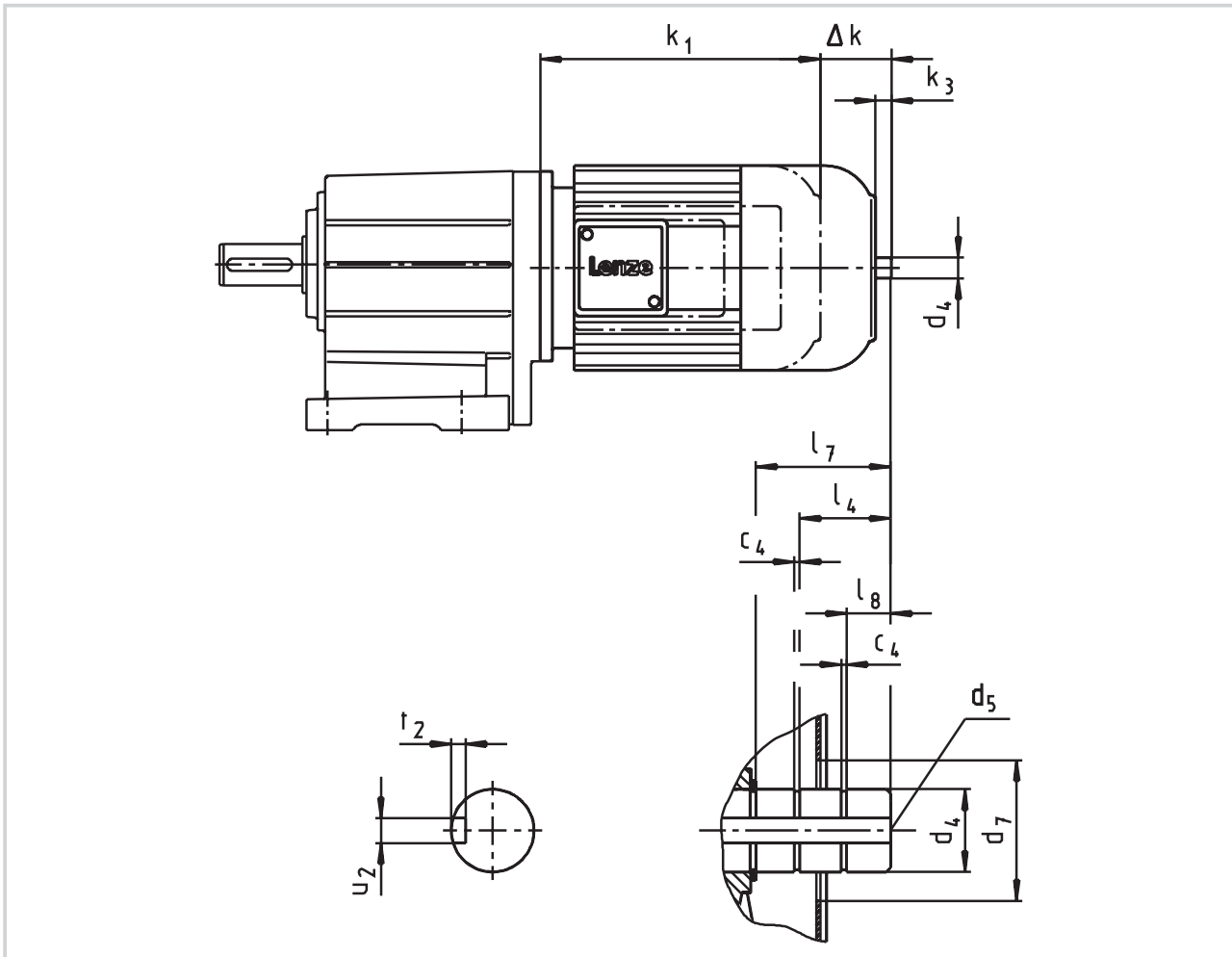
Dimensions in [mm]

<sup>1)</sup> Motor length without options

<sup>2)</sup> During operation, appropriate means should be used to guard the fan cover opening.

## Dimensions - Motors

Geared motor with integral fan and 2nd shaft



Geared motor 2-pole and 6-pole		Motor frame size						
		071-□1 071-□3	080-□1 080-□3	090-11 090-31	100-31	100-41	112-31 112-41	132-21
Motor	$k_1$ <sup>1)</sup>	176	225	242	280	310	323	409
	$k_3$	12	10	9	17		16	24
Shaft end	$c_4$	1.1	1.1	1.1	1.3		1.3	1.6
	$d_4$	14 h6	14 h6	14 h6	20 j6		20 j6	30 j6
	$d_5$	M5	M5	M5	M6		M6	M10
	$d_7$ <sup>2)</sup>	34	34	34	34		34	46
	$l_4$	–	–	–	17		17	24
	$l_7$	19	19	19	32.5		30.5	46
	$l_8$	3	4.5	5	10.5		7.6	12.5
	$u_2$	5	5	5	6		6	8
	$t_2$	3	3	3	3.5		3.5	4
<b>Options</b>		$\Delta k$						
Integral fan		62	63	64	85		93	118
Cast iron fan								
Brake + integral fan								

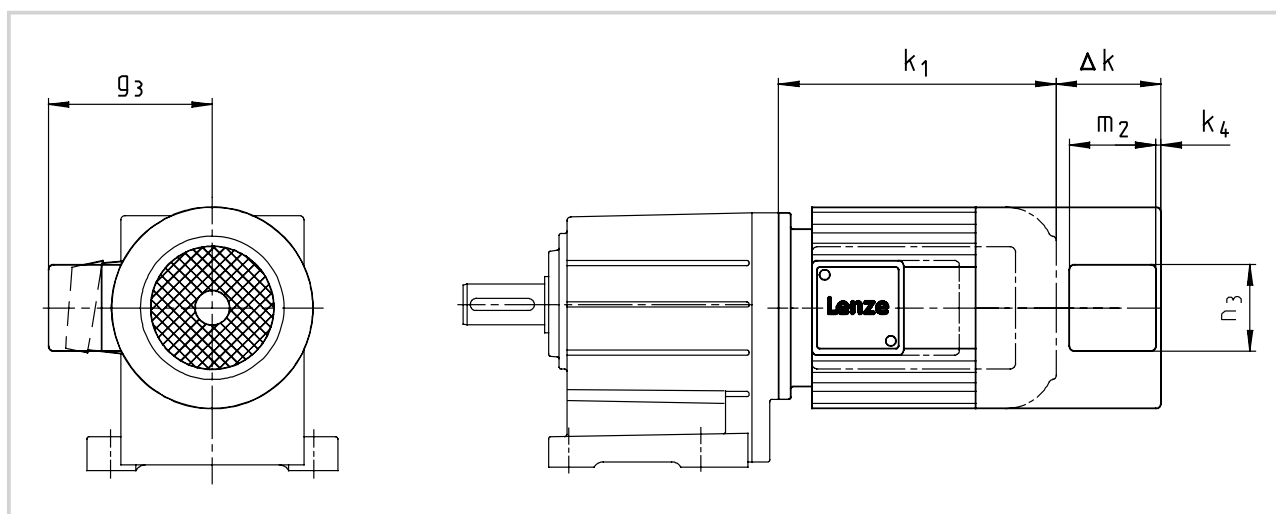
Dimensions in [mm]

<sup>1)</sup> Motor length without options

<sup>2)</sup> During operation, appropriate means should be used to guard the fan cover opening.

# Dimensions - Motors

## Geared motor with separate fan



Geared motor 4-pole		Motor frame size									
		063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32
Separate fan	$g_3$	115	122	131	141	150	162	182	217	217	
	$k_4$	12	12	12	22	22	22	32	3	3	
	$m_2$	96	96	96	96	96	96	96	91	91	
	$n_3$	106	106	106	106	106	106	106	91	91	
Cable glands	Position 4	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5
Motor length without options	$k_1$	188	207	225	276	309	319	363	475	519	592
<b>Options</b>		$\Delta k$									
Separate fan		130	128	128	127	109	102	115	96	83	
S/P encoder + separate fan		130	128	128	127	109	183	201	208	198	
Brake + separate fan		170	165	184	180	170	183	201	208	198	
Brake + S/P encoder+ separate fan		170	165	184	180	170	183	201	208	198	

Geared motor 2-pole and 6-pole		Motor frame size								
		063-11	063-31	071-□1 071-□3	080-□1 080-□3	090-11 090-31	100-31	100-41	112-31 112-41	132-21
Separate fan	$g_3$	110	120	127	151	159	173	193		
	$k_4$	5	5	5	3	3	3	3		
	$m_2$	70	70	70	91	91	91	91		
	$n_3$	70	70	70	91	91	91	91		
Cable glands	Position 4	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	
Motor length without options	$k_1$	193	204	176	225	242	280	310	323	409
<b>Options</b>		$\Delta k$								
Separate fan		71	80	94	101	97	95	104		
S/P encoder + separate fan		118*	134*	94	101	97	183	218		
Brake + separate fan		118	134	150	164	169	183	218		
Brake + S/P encoder+ separate fan		118*	134*	150	164	169	183	218		

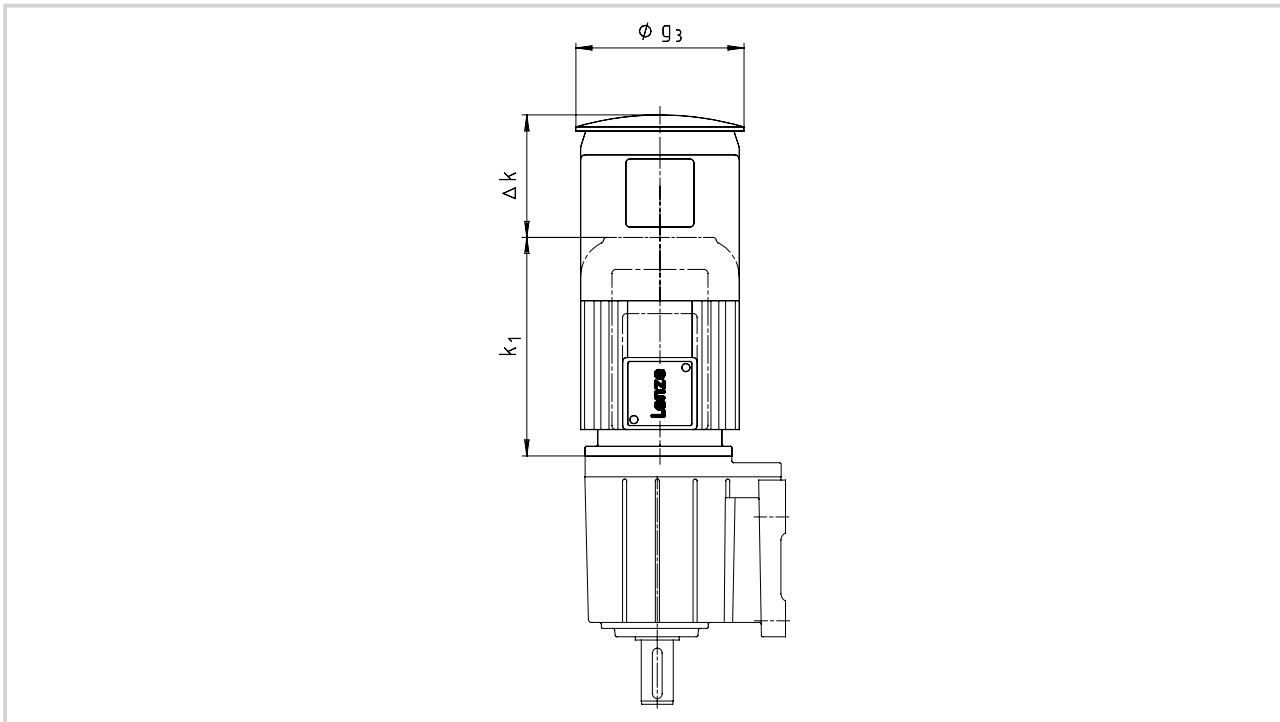
Dimensions in [mm]

Position of cable glands based on terminal box in Position 5.

**Caution!** On versions with starttec or motor terminal box (options marked \*), the starttec/motor terminal box and separate fan terminal box cannot be located in the same position.

## Dimensions - Motors

Geared motor with separate fan and protective cover



Geared motor 4-pole		Motor frame size									
		063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32
<b>Motor</b>	$g_3$	133	150	170	188	210	249		300	338	
	$k_1$ <sup>1)</sup>	188	207	225	276	309	319	363	404	475	519
<b>Options</b>		$\Delta k$									
Separate fan		169	165	168	157	137	135		140	157	
S/P encoder+ separate fan		169	165	168	157	137	216		226	269	
Brake + separate fan		209	202	224	210	198	216		226	269	
Brake + S/P encoder+ separate fan		209	202	224	210	198	216		226	269	

Geared motor 2-pole and 6-pole		Motor frame size								
		063-11	063-31	071-□1 071-□3	080-□1 080-□3	090-11 090-31	100-31	100-41	112-31 112-41	132-21
<b>Motor</b>	$g_3$	133		150	170	188	210		249	300
	$k_1$ <sup>1)</sup>	193	204	176	225	242	280	310	323	409
<b>Options</b>		$\Delta k$								
Separate fan		120		127	144	152	147		149	158
S/P encoder+ separate fan		167 *		181 *	144	152	147		237	272
Brake + separate fan		167		181	200	215	219		237	272
Brake + S/P encoder+ separate fan		167 *		181 *	200	215	219		237	272

Dimensions in [mm]

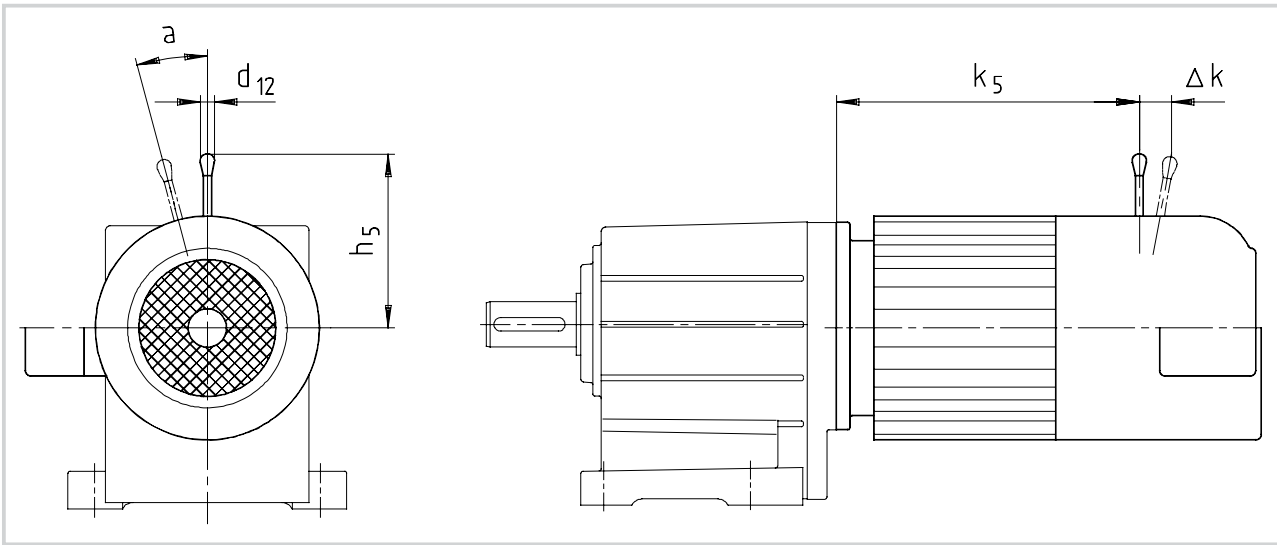
<sup>1)</sup> Dimensions without options

**Caution!** On versions with starttec or motor terminal box (options marked \*), the starttec/motor terminal box and separate fan terminal box cannot be located in the same position.



# Dimensions - Motors

## Geared brake motor with manual release lever



Geared motor 4-pole				Motor frame size												
				063C02 063C22	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22 132C32	160-22	160-32	180-22 180-32	
a				0°	0°	15°	15°	0°	0°	0°	0°	0°	0°	0°	0°	
Brake size	d <sub>12</sub>	h <sub>5</sub>	Δ k	k <sub>5</sub>												
06	13	107	23	185	173	186										
08	13	116	21				207	245								
10	13	132	21				218	256	279							
12	13	161	29						281	292	336					
14	24	195	31								340	373				
16	24	240	42									377	420			
18	24	279	55										423	467	539	
20	24	319	74												546	
Motor terminal box/starttec				Manual release lever and motor terminal box/starttec in same position												
KK2				▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
KK3				-	-	-	-	-	▲	▲	▲	▲	▲	▲	▲	
starttec				-	-	-	-	-	▲	▲	-	-	-	-	-	

Geared motor 2-pole and 6-pole				Motor frame size									
				063-11	063-31	071-□1 071-□3	080-□1 080-□3	090-11 090-31	100-31	100-41	112-31 112-41	132-21	
a				0°	0°	0°	0°	0°	0°	0°	0°	0°	
Brake size	d <sub>12</sub>	h <sub>5</sub>	Δ k	k <sub>5</sub>									
06	13	107	23	169	181	170							
08	13	116	21				212	224					
10	13	132	21					235	268	298			
12	13	161	29						270	300	303		
14	24	195	31								307	393	
16	24	240	42									396	
Motor terminal box/starttec				Manual release lever and motor terminal box/starttec in same position									
KK2				▲	▲	-	▲	▲	▲	▲	▲	▲	▲
KK3				-	-	-	-	-	▲	▲	▲	▲	
starttec				-	-	-	-	-	-	-	-	-	

Dimensions in [mm]



To the Lenze sales office

Page \_\_ of \_\_

Order

Quotation

Fax no. \_\_\_\_\_

From

Customer no.

Company

--	--	--	--	--	--	--	--	--	--

Street/PO box

Order no.

Town/Postcode

Name

Department

Date      Signature

Tel. no.

Delivery address (if different)

Street:

Town/Postcode

Invoice to (if different)

Street/PO box

Town/Postcode

Requested delivery date \_\_\_\_\_

Despatch information \_\_\_\_\_

\_\_\_\_\_



Customer no.

--	--	--	--	--	--	--	--	--	--

Order no.

Quantity  i =

Unit price

GST  -   1  M  
 2  N  V  A  R  
 3  W  B  K  C  L

Motor frame size/Drive size

**Additional ordering data**

Dimensions

V (only on GST03)  K  L

Solid shaft d =  mm Flange a2 =  mm

Mounting position

A B C D E F

Position of system elements  
(mark non-fixed positions with 0)

Terminal box  
 0 2 3 4 5

Colour

Standard  
 GST 03  Not painted (aluminium housing)

GST 04...14  RAL 9018 paint (papyrus white)  Grey primer

**Options**

Special lubricant  CLP-HC 320 (synthetic)  CLP-HC 220 (Food-compatible oil)

Special paint finish GST 03 RAL   Grey primer

GST 04...14 RAL

Output shaft bearing  Reinforced bearing (size 04 ... 14)

Shaft sealing rings  Viton

Version N: Mounting flange  Clamping hub  Clamping ring hub

Ventilation  Ventilation units for size 05...07  Reservoir mounting position C for size 09...14

See page 9-8 for ordering data for motor options

Σ



# Fax order form

Shaft-mounted helical geared motors/Shaft-mounted helical gearboxes

Customer no.

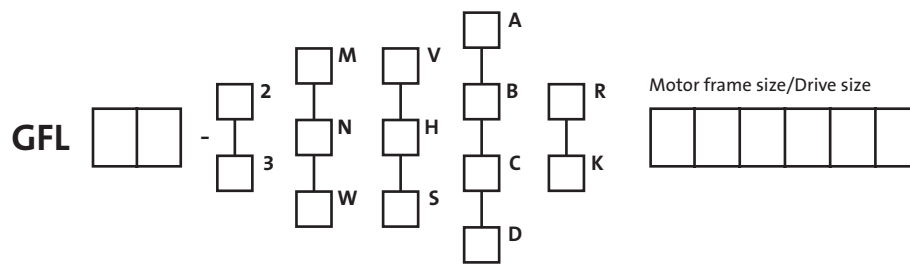
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Order no.

	Quantity
--	----------

i =

Unit price



## Additional ordering data

Dimensions

<input type="checkbox"/> <b>H</b>	<input type="checkbox"/> <b>S</b>	Hollow shaft dH7 = <table border="1" style="display: inline-table; width: 60px; height: 25px;"></table> mm	<input type="checkbox"/> <b>K</b>	Flange a2 = <table border="1" style="display: inline-table; width: 60px; height: 25px;"></table> mm
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Mounting position

<input type="checkbox"/> <b>A</b>	<input type="checkbox"/> <b>B</b>	<input type="checkbox"/> <b>C</b>	<input type="checkbox"/> <b>D</b>	<input type="checkbox"/> <b>E</b>	<input type="checkbox"/> <b>F</b>
-----------------------------------	-----------------------------------	-----------------------------------	-----------------------------------	-----------------------------------	-----------------------------------

Position of system elements  
(mark non-fixed positions with 0)

Shaft	Foot	Terminal box
<input type="checkbox"/> 0 <input type="checkbox"/> 6 <input type="checkbox"/> 1	<input type="checkbox"/> 0 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<input type="checkbox"/> 0 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5

Colour

<input type="checkbox"/> RAL 9018 paint (papyrus white)	<input type="checkbox"/> Grey primer
---	--------------------------------------

## Options

Special lubricant

<input type="checkbox"/> CLP-HC 320 (synthetic)	<input type="checkbox"/> CLP-HC 220 (Food-compatible oil)
---	---

Special paint finish

RAL

Shaft sealing rings

Viton

Version N: Mounting flange

<input type="checkbox"/> Clamping hub	<input type="checkbox"/> Clamping ring hub
---------------------------------------	--

Accessories

Rubber buffer set for torque plate

Shrink disc cover

Assembly kit for hollow shaft retention

Ventilation

<input type="checkbox"/> Ventilation units for size 05...07	<input type="checkbox"/> Reservoir mounting position C for size 09...14
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See page 9-8 for ordering data for motor options

Σ \_\_\_\_\_



Customer no.

--	--	--	--	--	--	--	--	--	--

Order no.

Quantity  i =

Unit price

GKR   -2  M  N  V  H  S  A  B  R  K

Motor frame size/Drive size

Additional ordering data

Dimensions

H  S Hollow shaft dH7 =  mm  K Flange a2 =  mm

Mounting position

A  B  C  D  E  F

Position of system elements  
(mark non-fixed positions with 0)

Shaft  0  3  5  8 Flange  0  3  5  8 Terminal box  0  2  3  4  5

Colour

Geared motor

Standard paint finishes  
 Not painted (aluminium housing)

Gearbox with mounting flange GKR 03

Not painted (aluminium housing)

GKR 04...06

RAL 9018 paint (papyrus white)  Grey primer

Options

Special lubricant

CLP-HC 320 (synthetic)  CLP-HC 220 (Food-compatible oil)

Special paint finish

RAL   Grey primer (geared motor)

Shaft sealing rings

Viton

Version N: Mounting flange

Clamping hub  Clamping ring hub

Accessories

Rubber buffer for torque plate (GKR 03/04 only)

Torque plate pitch circle  Torque plate housing foot (GKR 05/06 only)

2nd output shaft  Jet-proof hollow shaft cover

Cover for shrink disc  Assembly kit for hollow shaft retention

See page 9-8 for ordering data for motor options

Σ



# Fax order form

Helical-bevel geared motors/Helical-bevel gearboxes

Customer no.

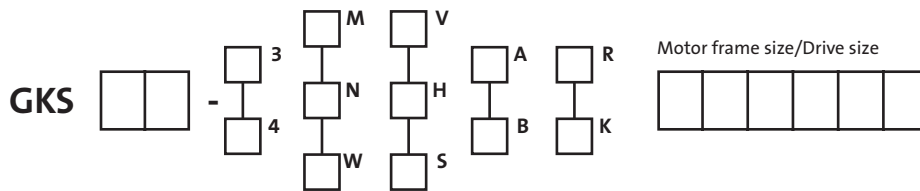
--	--	--	--	--	--	--	--	--	--

Order no.

Quantity

i =

Unit price



## Additional ordering data

Dimensions

**H**  **S**  
Hollow shaft dH7 =  mm

**K**  
Flange a2 =  mm

Mounting position

**A**  **B**  **C**  **D**  **E**  **F**

Position of system elements  
(mark non-fixed positions with 0)

Shaft  
0  3  5  8

Flange  
0  3  5  8

Terminal box  
0  2  3  4  5

Colour

RAL 9018 paint (papyrus white)

Grey primer

## Options

Special lubricant

CLP-HC 320 (synthetic)

CLP-HC 220 (Food-compatible oil)

Special paint finish

RAL

Shaft sealing rings

Viton

Version N: Mounting flange

Clamping hub

Clamping ring hub

Accessories

Torque plate at housing foot

Torque plate at pitch circle

2nd output shaft

Shrink disc cover

Jet-proof hollow shaft cover

Assembly kit for hollow shaft retention

Ventilation

Ventilation units for size 05...07

Reservoir mounting position C for size 09...14

See page 9-8 for ordering data for motor options

Σ



Customer no.

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Order no.

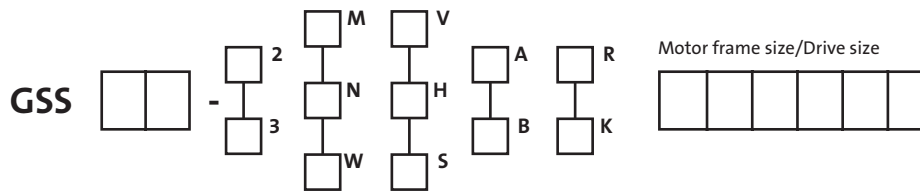
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Quantity

i = 

--

Unit price



**Additional ordering data**

Dimensions

**H**  **S**  
Hollow shaft dH7 = 

--

 mm

**K**  
Flange a2 = 

--

 mm

Mounting position

**A**  **B**  **C**  **D**  **E**  **F**

Position of system elements  
(mark non-fixed positions with 0)

Shaft  
 0  3  5  8

Flange  
 0  3  5  8

Terminal box  
 0  2  3  4  5

Colour

RAL 9018 paint (papyrus white)  Grey primer

**Options**

Special lubricant

CLP-HC 220 (Food-compatible oil)

Special paint finish

RAL 

--

Shaft sealing rings

Viton

Version N: Mounting flange

Clamping hub

Clamping ring hub

Accessories

Torque plate at housing foot

Torque plate at pitch circle

2nd output shaft

Shrink disc cover

Jet-proof hollow shaft cover

Assembly kit for hollow shaft retention

Ventilation

Ventilation units for size 05...07

See page 9-8 for ordering data for motor options

Σ \_\_\_\_\_



# Fax order form

## Motor options

Customer no.

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Order no.

### Cable glands

(only for terminal box KK1)

in position

1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### starttec motor starter

### Separate fan

 1~ 3~

Terminal box for separate fan in position

2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Spring-operated brake

Brake size

Supply voltage

V (AC/DC)

Brake options

 Manual release with lever in position

2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

 Low noise version (Standard for brake with speed/position encoder) Rectifier 4-pole Rectifier 6-pole

### Speed/position encoder

 Resolver Incremental encoder HTL 512 pulses 2048 pulses Incremental encoder TTL 512 pulses 2048 pulses

### Motor protection

 PTC KTY

### Additional options

 Y/Δ; 400/230 V (only complete for motor frame sizes 112C32 to 180-32 in operation at 87 Hz) Condensation drain hole Protective cover 2nd shaft Handwheel Increased centrifugal mass (cast iron fan) Plug connector

Observe possible combinations of the attachments (see page 2-19, 2-21)