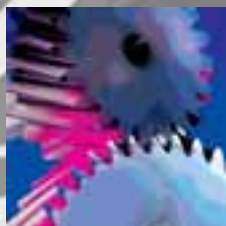




Disco variable speed drives

Compact units

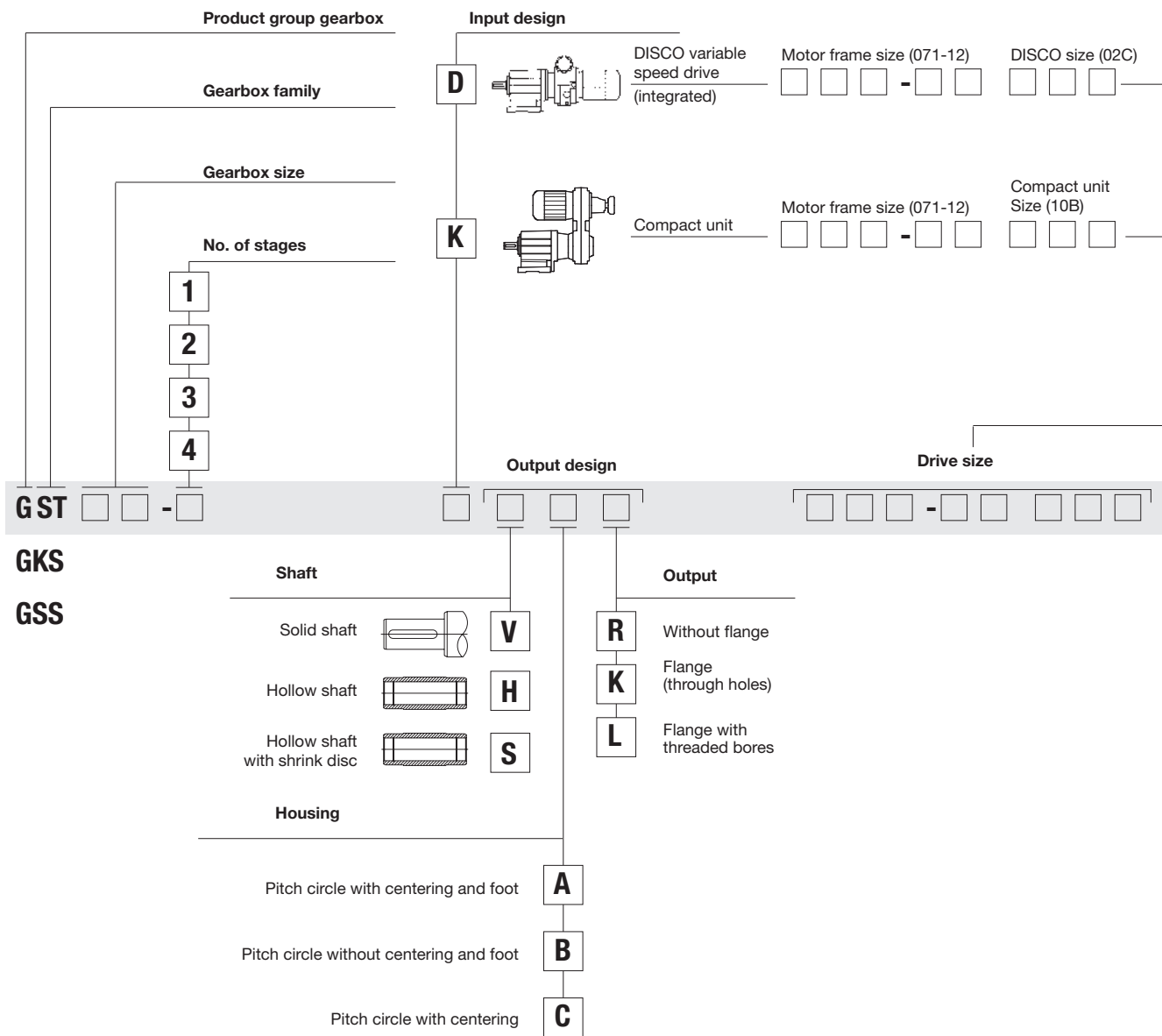
Variable speed pulleys



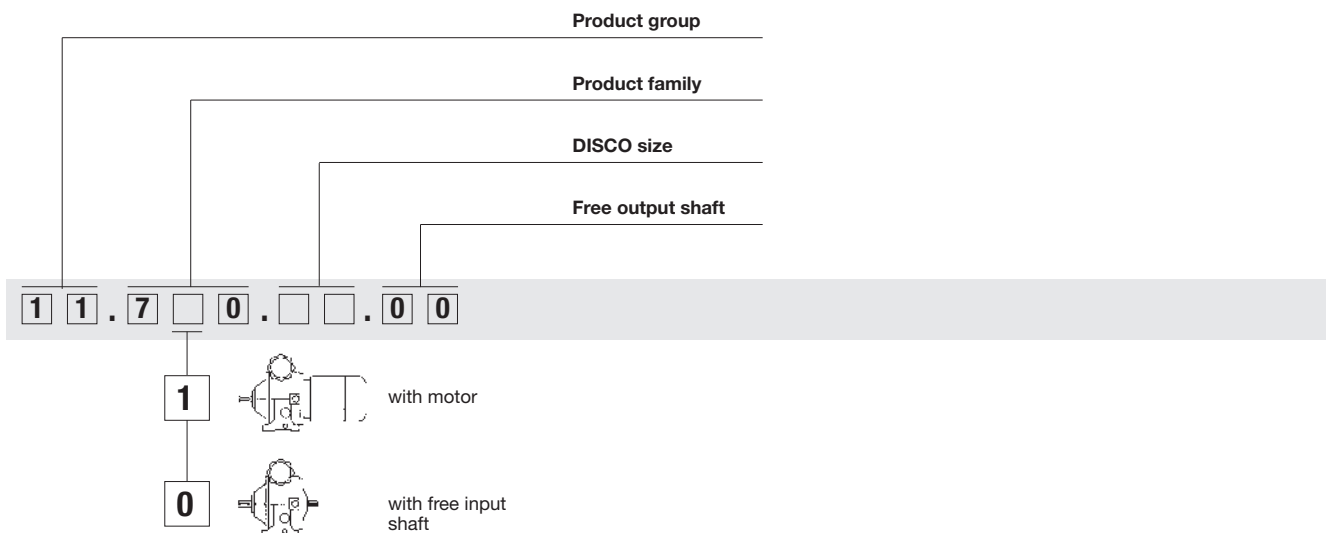
G motion
m-var

Product key

Variable speed drives with gearboxes



Disco variable speed drive without gearbox



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

DISCO variable speed drives

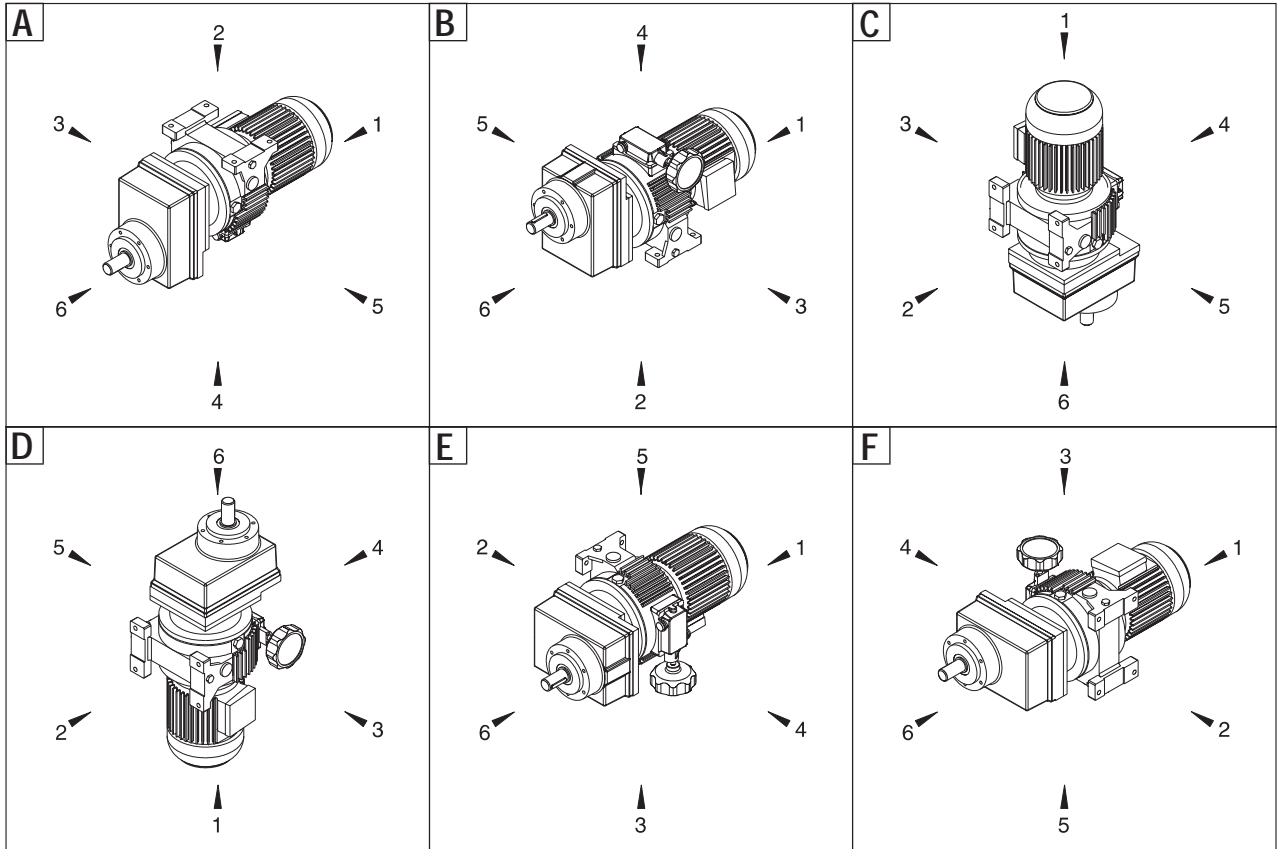
with helical gearbox

GST□□-1D VCR (foot on variable speed drive)

Terminal box: 2, 3, 4, 5

Spindle box: 2, 3, 4, 5

Handwheel/adjuster: 2, 3, 4, 5



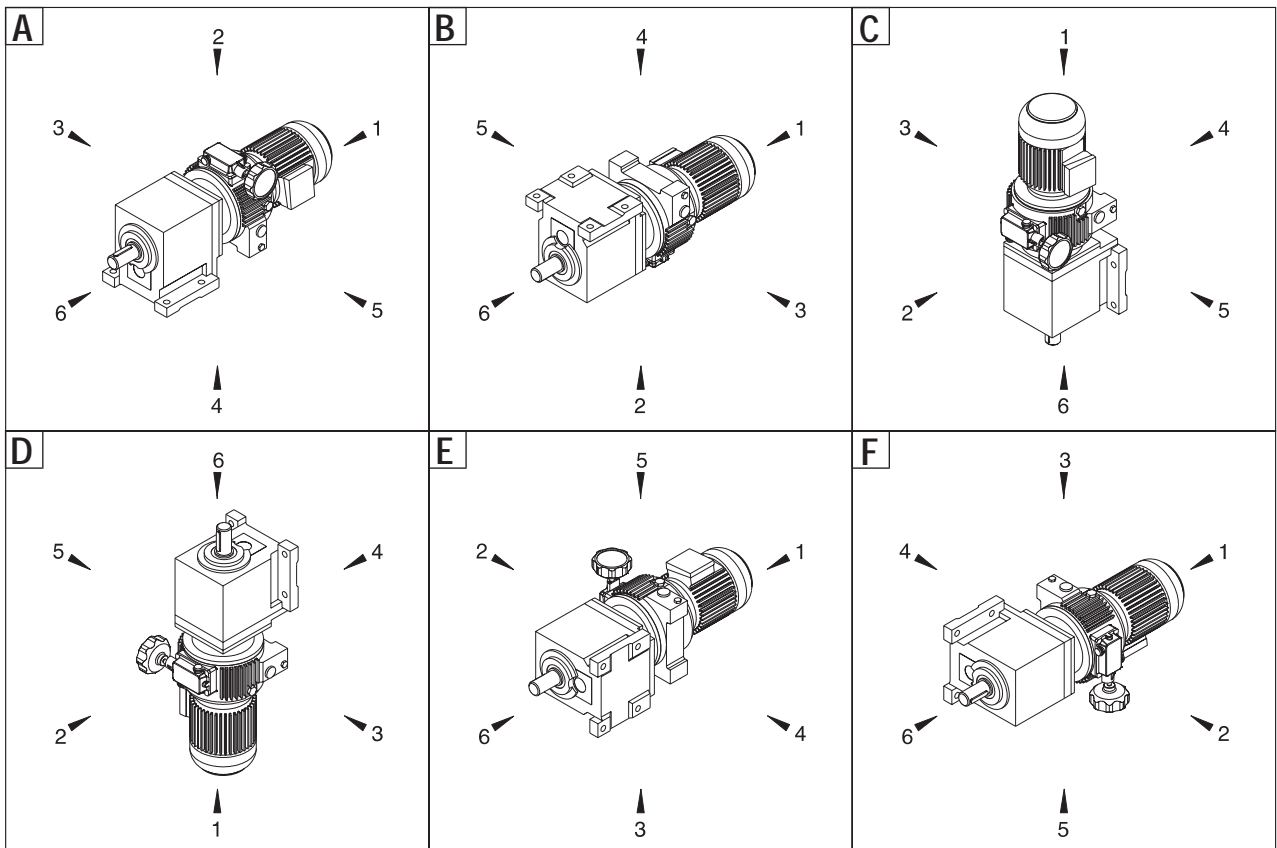
with helical gearbox

GST□□-□D

Terminal box: 2, 3, 4, 5

Spindle box: 2, 3, 4, 5

Handwheel/adjuster: 2, 3, 4, 5



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

DISCO variable speed drives

with helical-bevel gearbox and helical-worm gearbox

GKS□□-□D

Solid shaft: 3, 5, 3+5

Flange: 3, 5, 3+5

Terminal box: 2, 3, 4, 5

GSS□□-□D

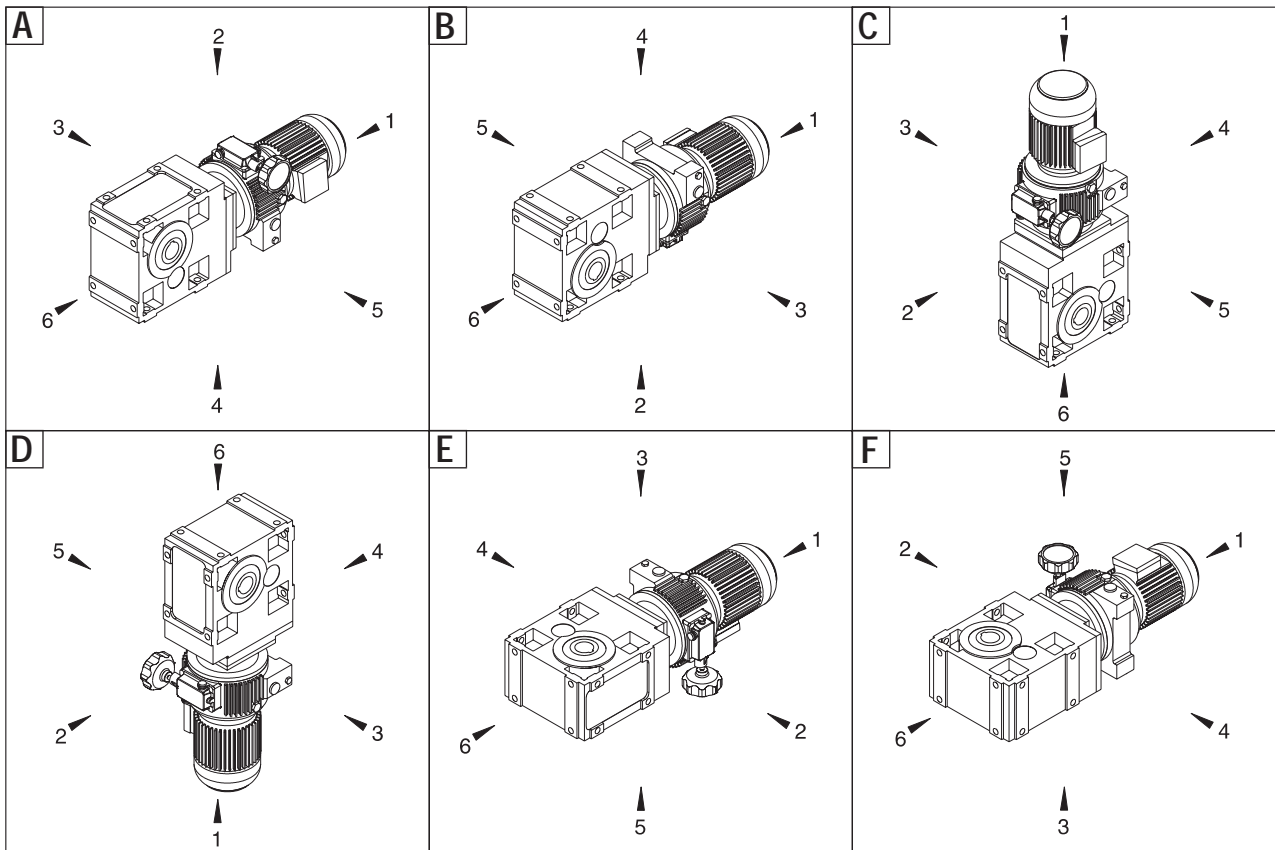
Hollow shaft: 0

without flange: 0

Spindle box: 2, 3, 4, 5

Hollow shaft with shrink disk: 3, 5

Handwheel/adjuster: 2, 3, 4, 5

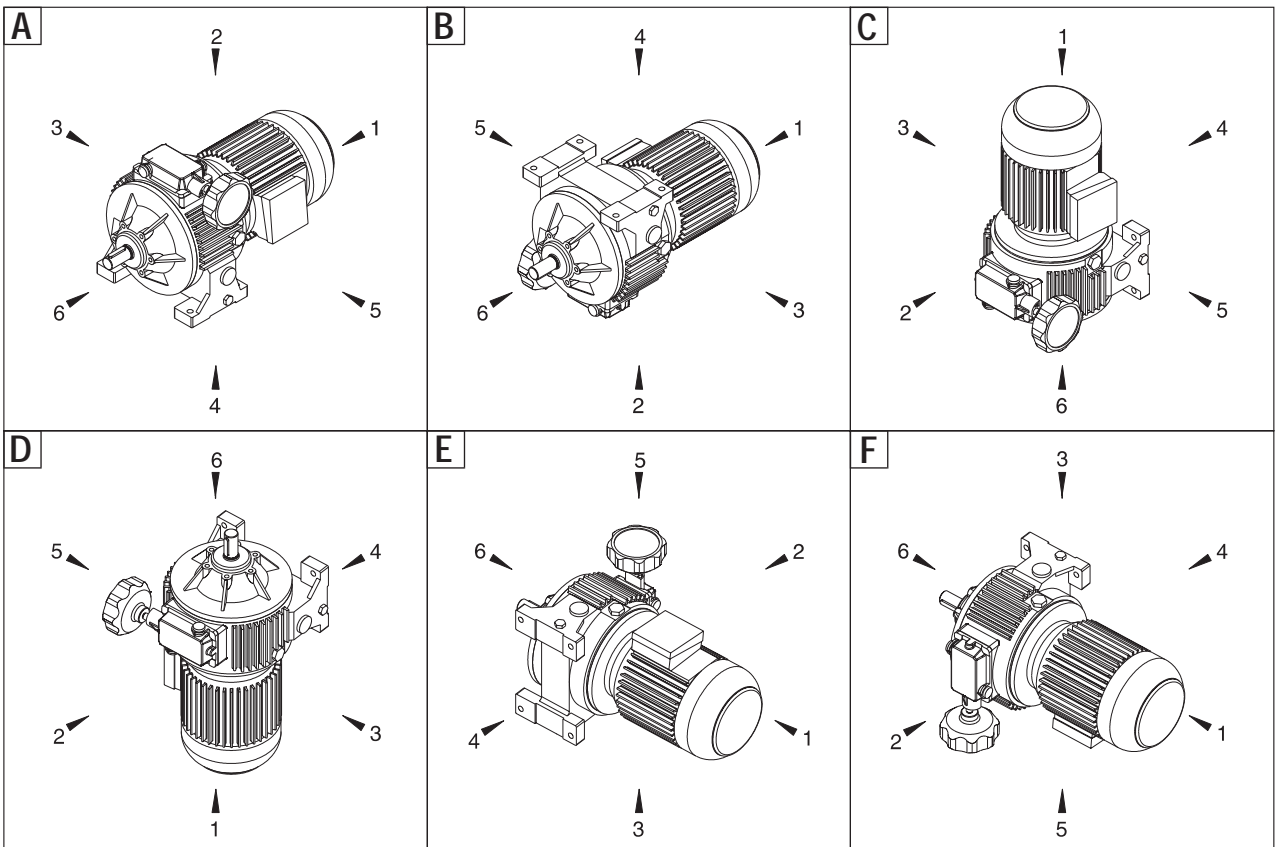


without gearbox

11.7□0

Terminal box: 2, 3, 4, 5

Handwheel/adjuster: 3, 5



G-motion:

The innovative geared motor programme with intelligent speed variation.

Lenze gearboxes of the new generation have been well established in industry for years now. The programme comprises standard industry types, such as helical, low-profile, helical-bevel, helical-worm and bevel geared motors for the power range from 0.12 to 45 kW.

All types are available as gearboxes to be mounted to IEC motors or compact geared motors. The programme also offers combinations of geared motors and directly mounted frequency inverters. These mechatronic variable speed drives enable flexible control and communication possibilities.

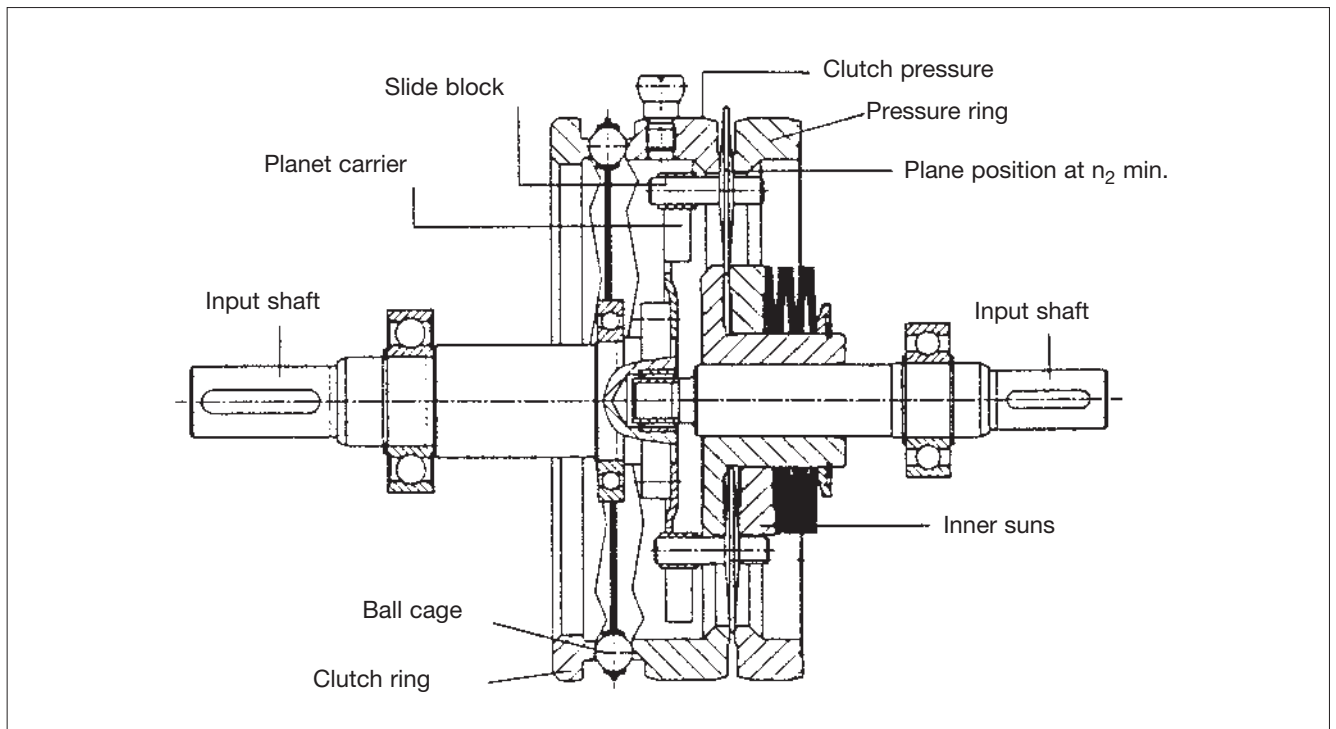
Even today many applications require a simple and rugged drive. For this, Lenze offers mechanical variable speed drive combinations with gearboxes of the new generation. Simplabelt and Disco are the well established Lenze gearboxes for this type of speed adjustment.

The catalog *G-motion, m_var* contains all selection criteria, tables and dimension information for all components required for mechanical speed adjustment. Disco planetary wheel drives, Simplabelt compact units and variable speed pulleys.

Disco planetary wheel drives – Operation principle

Disco planetary wheel drives are planetary wheel gearboxes with non-positive power and speed transmission. The planets, which are held by a planet carrier with slide blocks, rotate around the driving inner sun. Speed and force are transmitted to the inner sun and the planets from the input shaft. The planets rotating around the inner sun lean on the outer rings fixed inside the housing and drive the planet carrier which is fixed to the output shaft. The speed is adjusted through an adjustment spindle by turning the clutch pressure ring inside the housing. The planets thus move on different rotation radii, depending on the width of the air gap between clutch pressure ring and pressure ring. Therefore, the speed can be adjusted in a range of 1:6. With minimum output speeds, the speed can also be adjusted when the input shaft does not rotate, for higher speeds, the gearbox must be running. Disco planetary wheel gearboxes offer the following advantages:

- Power range $P_1 = 0.25$ to 7.5 kW
- Small dimensions, high power
- Small ratio of input speed 1:1.5 to 1:9
- Low noise, low vibration generation
- Adjustment range 1:6, seven gearbox sizes
- Enclosed full-metal housing, rotating parts in oil bath, thus protected against aggressive environmental conditions.





Symbols used in this catalog

α		Angle of radial force	M_r	[Nm]	Rated torque
c		Load capacity of gearboxes/geared motors	M_A	[Nm]	Motor starting torque
d_w	[mm]	Effective diameter of the transmission element	M_B	[Nm]	Holding torque – brake
cos φ		Power factor - motor	M_{cont}	[Nm]	Continuous torque
cos φ_N		Power factor - asynchronous motor	M_{stall}	[Nm]	Motor stalling torque
F_a	[N]	Applied axial force	M_I		Maximum torque factor
$F_{a perm}$	[N]	Permissible axial force	M_{max}	[Nm]	Max. torque
$F_{a Tab}$	[N]	Table value of axial force	M_{perm}	[Nm]	Permissible torque
f_{ch}	[kHz]	Chopper frequency	n_1	[min ⁻¹]	Input speed
f_d	[Hz]	Field frequency	n_2	[min ⁻¹]	Output speed
F_I		Mass acceleration factor	n_r	[min ⁻¹]	Rated speed
f_{max}	[Hz]	Max. frequency set	n_{max}	[min ⁻¹]	Max. speed
f_N	[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_{loss}	[kW]	Inverter power loss
f_w		Load application factor of applied radial force	R	[Ω]	Resistance
f_α		Effective direction factor of applied radial force	S_r	[kW]	Inverter output power
f_z		Additional radial force factor of the transmission element	T_{amb}	[°C]	Ambient temperature
i		Ratio	V_{DC}	[V]	DC-bus voltage
φ		Ratio step	V_r	[V]	Rated voltage
η		Mechanical efficiency	V_{mains}	[V]	Mains voltage
I_0	[A]	Continuous standstill current	IP		International protection code
I_A	[A]	Starting current	IEC		International Electrotechnical Commission
I_{max}	[A]	Max. output current	DIN		Deutsches Institut für Normung
I_N	[A]	Rated current	VDE		Verband deutscher Elektrotechniker
I_{mains}	[A]	Rated mains current	USDA		United States Department of Agriculture
J_{ext}	[kgm ²]	Moment of inertia of machine to be driven reduced to motor shaft	NEMA		National Electrical Manufacturers Association
J_{load}	[kgm ²]	Torque of load machine	AC		Alternating current/voltage
J_{mot}	[kgm ²]	Motor moment of inertia	DC		Direct current/voltage
J_A	[kgm ²]	Moment of inertia of the drive reduced to input shaft	EMC		Electromagnetic compatibility
J_B	[kgm ²]	Moment of inertia of brake	EN		European Standard
k		Operating factor (according to DIN 3990)	CE		Communauté Européene
L	[mH]	Inductance	IM		International Mounting Code
m	[kg]	Mass			
M₀	[Nm]	Continuous standstill torque			
M₁	[Nm]	Input torque			
M₂	[Nm]	Output torque			



Definitions

Basics about the data indicated in this catalog

1 Power, torque and speed

The data indicated in this catalog are rounded values and apply to

- operating time/day = 8h (100% duty time)
- load class I with 10 switchings/h
- mounting positions and designs indicated in this catalog
- standard lubricant
- $f_{\text{mains}} = 50$ Hz constant
- $T_{\text{amb}} = 20$ °C for gearboxes
40 °C for motors (to VDE 0530)
- installation height ≤ 1000 m amsl

The rated power indicated for motors and geared motors is valid for duty cycle S1 to VDE 0530 part 1 / DIN 57530 part 1.

The values indicated may change under different application conditions. In case of extreme application conditions, please contact your nearest Lenze representative.

Rated point

The rated point is the point where speed and torque provide the max. required permanent power. The drive is rated with these values.

Operating factor k (to DIN 3990)

The operating factor considers the effectively changing loads during the running time planned for gearboxes and geared motors.

k depends on

- type of load,
- intensity of load,
- temporary influences.



Selection

Disco

1. Determination of the required load capacity

Determine required torque M_2 and speed n_2 at output

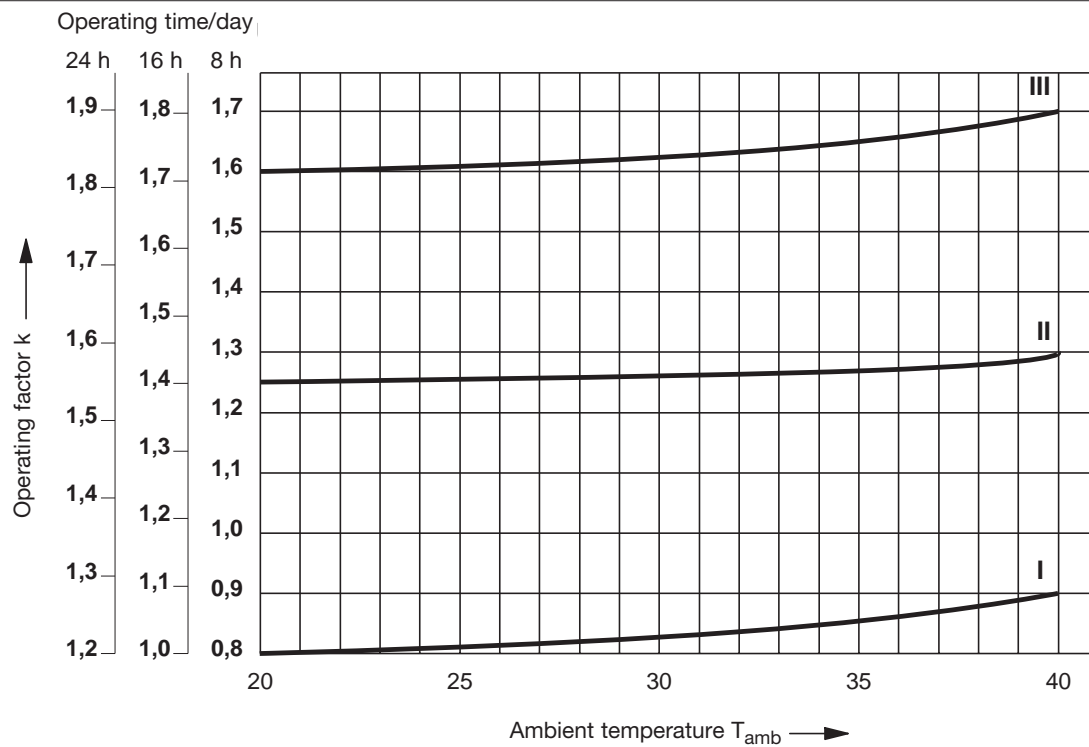
Calculate required motor power $P_1 = \frac{M_2 \cdot n_2}{9550 \cdot \eta}$

Determination of load class:

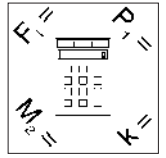
Load class	Type of load
I	Regular operation, virtually shock-free
II	Irregular operation, moderate shocks
III	Irregular operation, heavy shocks and/or changing load and/or changing load

Determination of temporary influences: – Operating time/day – ambient temperature

Determination of operating factor k of the machine by means of the diagram



Requirement for gearboxes: $M_{2 \text{ perm}} \text{ (selection table)} \geq M_2 \cdot k$



1. Determination of the required load capacity

Determine required torque M_2 and speed n_2 at output

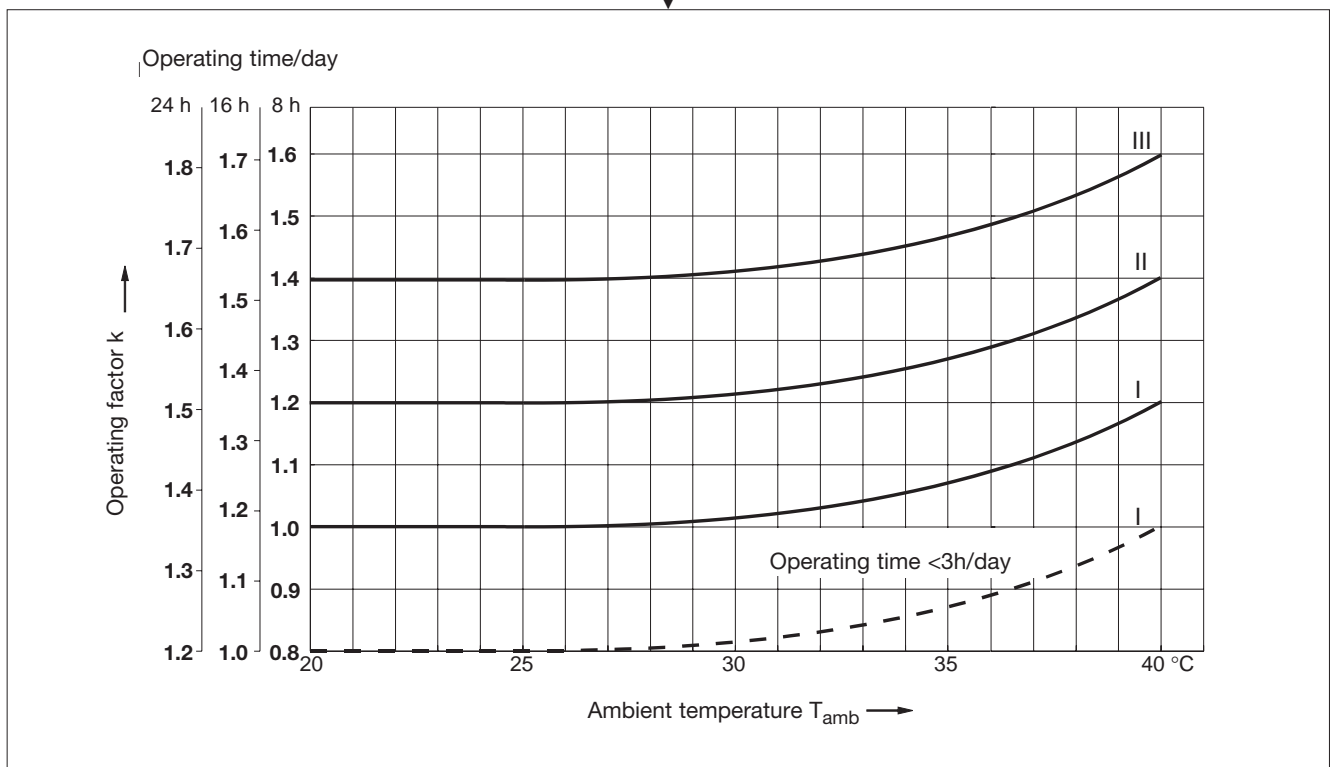
Calculate required motor power $P_1 = \frac{M_2 \cdot n_2}{9550 \cdot \eta}$

1. Determination of the required load capacity

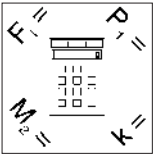
Load class	Type of load
I	Regular operation, virtually shock-free
II	Irregular operation, moderate shocks
III	Irregular operation, heavy shocks and/or changing load and/or changing load

Determination of temporary influences: – Operating time/day – ambient temperature

Determination of operating factor k of the machine by means of the diagram



Requirement for gearboxes: $M_{2 \text{ perm}} \text{ (selection table)} \geq M_2 \cdot k$



Drive selection

2. Determination of axial and radial forces acting on the gearbox shaft

Calculation of axial and radial forces available

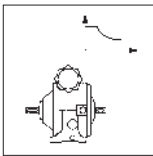
Rough calculation of radial forces:

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

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

Required:

- $F_{r \text{ perm}} \geq F_r$
($F_{r \text{ perm}}$ from helical gearbox data)
- $F_{a \text{ perm}} \geq F_a$
($F_{a \text{ perm}}$ from helical gearbox data)



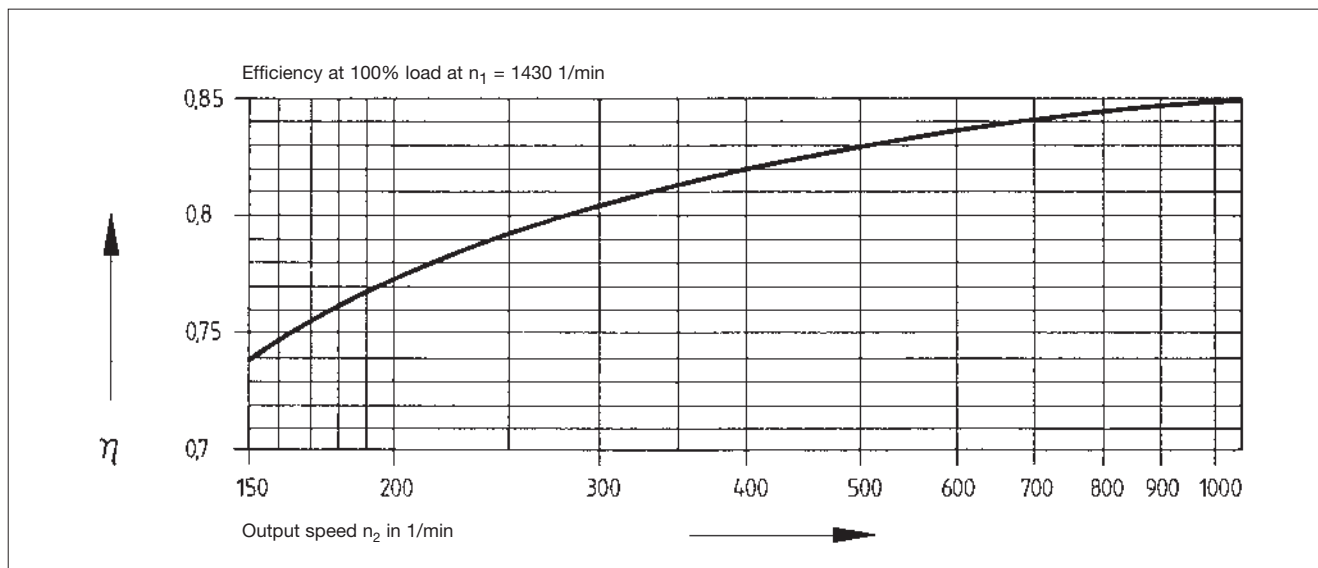
Technical data

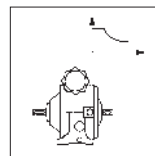
DISCO variable speed drive

General data

Housing	Design	Oil check by means of sight glass
	Material	Aluminium die cast or cast iron – depending on size
Input shaft	Design	with key to DIN 6885, sheet 1
	Tolerance	k6
	Material	Tempered steel C45
Output shaft	Design	with key to DIN 6885, sheet 1
	Tolerance	k6
	Material	Tempered steel C45
Shaft seals	Design	with additional dust protection
	Material	NB/FP
Bearing – input shaft	Design	Input: Ball bearing
		Output: Ball bearing or needle roller bearing – depending on size
Bearing – output shaft	Design	Input: Ball bearing
Friction parts	Material	Roller bearing steel 100 Cr 6 ; hardened
Lubricants	Design	DISCO – life lubrication
	Filling quantities	according to mounting position > Operating Instructions
Temperature range		-15° to +40°C ambient temperature
Noises		DISCO variable speed drives are below the emission values to VDE directive 2159

Mechanical efficiency





Rated data

Size	$n_1 = 3000$ [min ⁻¹]		$n_1 = 1500$ [min ⁻¹]		$n_1 = 1000$ [min ⁻¹]		$n_1 = 750$ [min ⁻¹]		
02	$P_1^*)$ n_2 M_2	0.37 1860-310 1.6-3.2		0.25 930-155 2-4		0.18 600-100 2-4		0.12 450-75 2-4	
03	P_1 n_2 M_2	0.55 1920-335 2.2-4.4	0.37 1920-335 1.5-4.4	0.37 950-165 3-6		0.25 630-110 3-6		0.18 460-80 3-6	
04	P_1 n_2 M_2	1.1 1920-335 4.5-9	0.75 1920-335 3-9	0.75 950-165 6-12	0.55 950-165 4.5-12	0.55 630-110 6-12	0.37 630-110 4.5-12	0.37 460-80 6-12	0.25 460-80 4.5-12
05	P_1 n_2 M_2	2.2 1920-335 9-18	1.5 1920-335 6-18	1.5 950-165 12-24	1.1 950-165 9-24	1.1 630-110 12-24	0.75 630-110 9-24	0.75 460-80 12-24	0.55 460-80 9-24
06	P_1 n_2 M_2			3 1000-175 22-44	2.2 1000-175 17.5-44	2.2 660-115 22-44	1.5 660-115 17.5-44	1.5 490-85 22-44	1.1 490-85 17.5-44
07	P_1 n_2 M_2			4 1000-175 32-64		3 660-115 32-64		2.2 490-85 32-64	
08/18*)	P_1 n_2 M_2			7.5 1000-200 58-116	5.5 1000-200 45-90	5.5 660-130 58-116	4 660-130 45-90	4 490-100 58-116	3 490-100 45-90

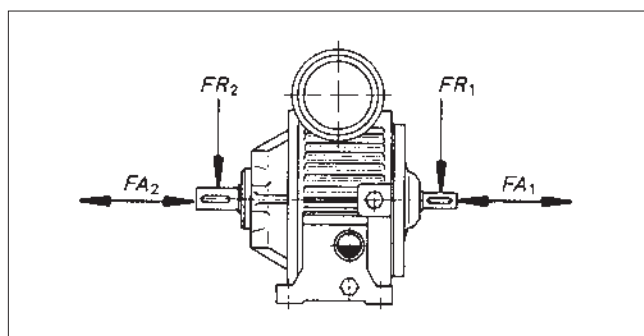
P_1 = Input power in [kW]
 n_1 = Output speed in 1/min
 n_2 = Output speed in 1/min
 M_2 = Maximum input speed Nm

Maximum input speed n_1

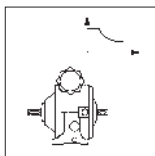
Size	02	03	04	05	06	07	08/18
n_1 max. [min ⁻¹]	3600	3600	3600	1800*	1800	1800	1800

* with free input shaft

Permissible radial and axial forces



Size	Input		Output	
	FA_1 N	FR_1 N	FA_2 N	FR_2 N
02	300	300	400	400
03	450	450	700	700
04	700	700	1200	1200
05	1000	1000	1700	1700
06/07	1500	1500	2300	2300
18/08	1800	1800	3500	3500



Technical data

DISCO variable speed drive

Attachments – Speed adjusters

Designs

Name	Handwheel adjustment (Standard)	Bevel adjustment (Option)	Electrical remote adjustment (Option)
Design	Handwheel – impact strong plastic	Handwheel – impact strong plastic	Actuating motor – three-phase AC asynchr. – technical data, see below
Layout	– parallel-axial to spindle axis	– rectangular to spindle axis	– rectangular to spindle axis

3 Technical data, actuating motor (for electrical remote adjustment)

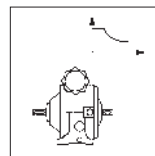
Disco Size	P ₁ [kW]	N ₁ [min ⁻¹]	Voltage / frequency [V]	Rated current [I]	Type of protec- tion	Thermal class	Ratio small gearboxes	Time [s]
02	0.012	1350	Δ 220–240 V/50 HZ Y 380–415 V/50 HZ	0.18 0.1	IP 54	F	20 60	10 30
03	0.012	1350	Δ 220–240 V/50 HZ Y 380–415 V/50 HZ	0.18 0.1	IP 54	F	20 60	13 40
04	0.060	1350	Δ 220–240 V/50 HZ Y 380–415 V/50 HZ	0.4 0.23	IP 54	F	20 55	15 40
05	0.060	1350	Δ 220–240 V/50 HZ Y 380–415 V/50 HZ	0.4 0.23	IP 54	F	20 55	17 47
06/07	0.060	1350	Δ 220–240 V/50 HZ Y 380–415 V/50 HZ	0.4 0.23	IP 54	F	20 55	19 47
08	0.18	1350	Δ 220–240 V/50 HZ Y 380–415 V/50 HZ	0.94 0.55	IP 54	F	40 80	50 100

Speed deviations for DISCO size 06 . . . 18/08 with electrical adjustment

DISCO Size	Input speed n ₁ [min ⁻¹]		
	1500	1000	750
	Output speed n ₂ [min ⁻¹]		
06/07	980–190	645–125	480–95
18/08	965–220	635–145	475–110

Position indicator in handwheel: Scaling

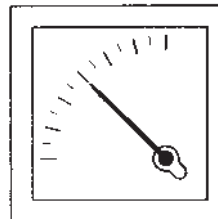
DISCO size	02	03	04/05	06/07	18/08
Scaling	12	18	24	24	36

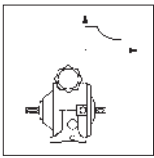


Attachments – Speed measurement instruments

Designs:

Name	Electrical remote adjustment with potentiometer
Design	– Potentiometer in the limit switch box of the electrical remote control
Connection voltage	– (Current supply through mains connection of the electrical remote adjustment)
Signal voltage	> 10 V (DC)
Speed display – Suitable for control cabinet mounting	Analog display – Mounting to the back side of the encoder input – Scaling in [V], adjustable



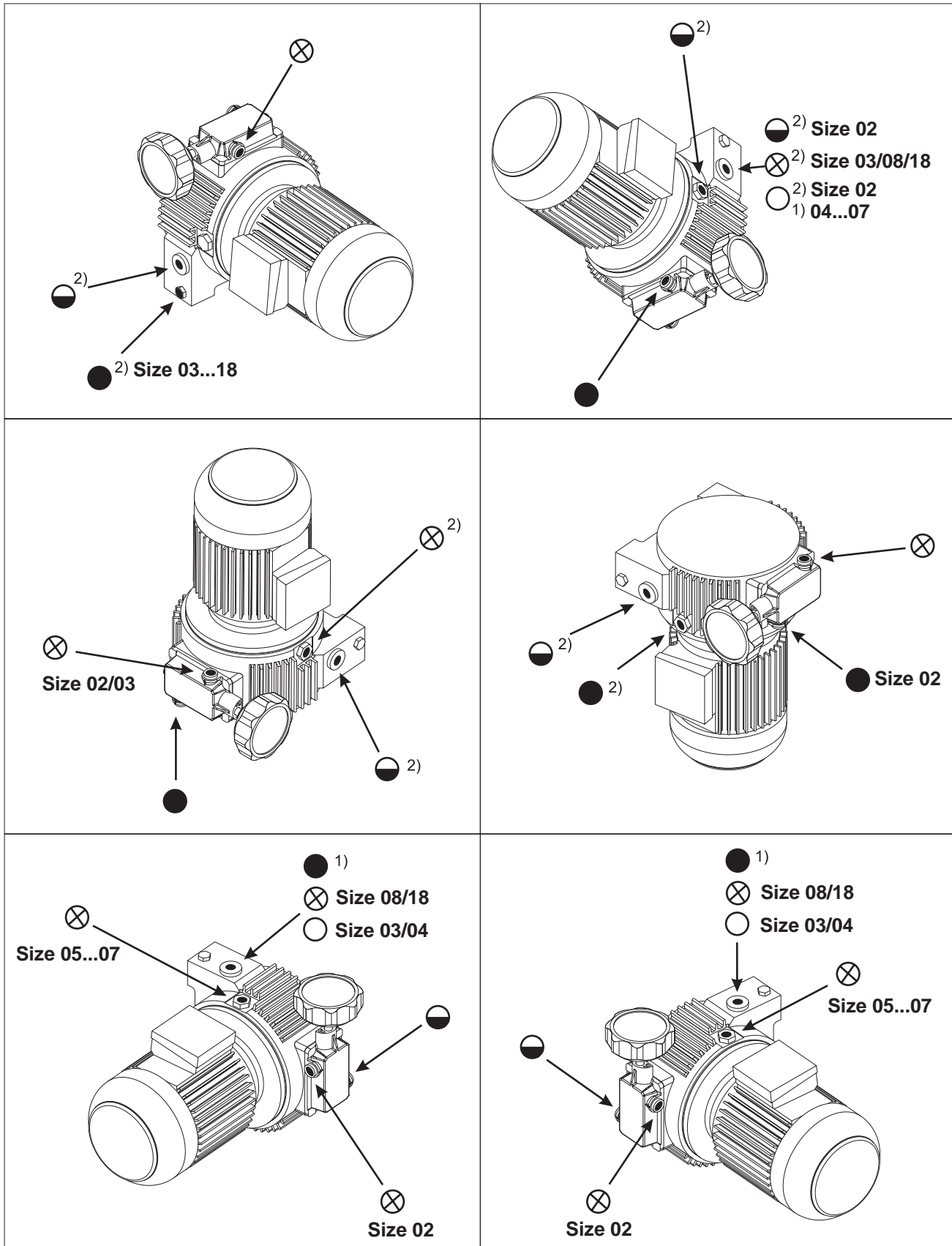


Technical data

Disco variable speed drive

Position of breather, oil filler plug and oil drain plug

3



○ Oil filling for gearbox without breather

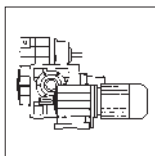
⊗ Breather/oil filler plug

● Oil drain plug

◐ Oil check

1) Opposite at the housing

2) For other handwheel positions, the positions are opposite at the housing



Technical data

Gearboxes

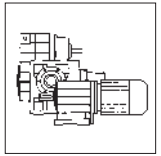
Sizes

Gearbox family	Product key	Gearbox size						
		04	05	06	07	09	11	14
Helical gearbox	GST	•	•	•	•	•	•	•
Helical-bevel gearbox	GKS	•	•	•	•	•	•	•
Helical-worm gearbox	GSS	•	•	•	•			

Basic designs

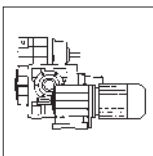
3

				GST - 1	GST - 2 GST - 3	GKS - 3 GKS - 4	GSS - 2 GSS - 3
Input design		Product key					
DISCO variable speed drive		D		0.25...7.5kW			
Compact unit		K		0.25...18.5kW	0.25...45kW		
Output design							
Shaft							
Solid shaft		V	Gearbox size	d x l [mm x mm]			
			04	16 x 32	20 x 40	25 x 50	25 x 50
			05	20 x 40	25 x 50	30 x 60	30 x 60
			06	25 x 50	30 x 60	40 x 80	40 x 80
			07	30 x 60	40 x 80	50 x 100	50 x 100
			09	40 x 80	50 x 100	60 x 120	-
			11	-	60 x 120	80 x 160	-
			14	-	80 x 160	100 x 200	-
Hollow shaft with keyway (plugs at both ends)		H	Gearbox size	d [mm]			
			04	-	-	25 30	25 30
			05	-	-	30 35	30 35
			06	-	-	40 45	40 45
			07	-	-	50 55	50 55
			09	-	-	60 70	-
			11	-	-	70 80	-
			14	-	-	100	-
Housing							
With feet and pitch circle with centering		A B		-	-	Feet in positions 2, 4 and 6 Pitch circle in position 3 and 5	
Design with feet		B		•	•	-	-
Design with pitch circle with centering		C		•	•	-	-
Output							
Without additional flange		R		•	•	•	•
Colour							
Coat		RAL 9018		•	•	•	•
Primer coat		Grey		•	•	•	•
Lubricant							
		Mineral lubricant		CLP 460	CLP 460	CLP 460	-
		Synthetic lubricant		-	-	-	PGLP 680
Breather element sizes 09 ... 14				•	•	•	-



Options

		GST - 1	GST - 2 GST - 3	GKS - 3 GKS - 4	GSS - 2 GSS - 3
Input design	Product key				
DISCO variable speed drive	D				Information page 3-2
Compact unit	K				Information page 3-6
Output design					
Shaft					
Reinforced shaft bearing	V		•	F _{max} -drive on request	F _{max} -drive on request
2nd solid shaft end	V			•	•
Hollow shaft with shrink disc	S	Gearbox size	d [mm]		
		04	-	-	25
		05	-	-	30
		06	-	-	40
		07	-	-	50
		09	-	-	60
		11	-	-	80
		14	-	-	100
Housing					
With feet and pitch circle with centering	A		•	•	-
Pitch circle without centering	B		•	•	-
Output					
With additional flange	K		•	•	in position 3 and 5
With additional flange with threaded bores	L		-	Housing design A	-
Dimensions in [mm] for gearbox size		04	120 140 160	120 140 160	160
		05	120 140 160 200	120 140 160 200	200
		06	160 200	160 200	200 250
		07	200 250	200 250	250 300
		09	250 300	250 300	350
		11	-	300 350	400 450
		14	-	350 400	450
Colour					
Special varnish	Indicate RAL number		•	•	•
Lubricant					
Synthetic lubricant	CLP HC 320		•	•	-
Food concenive	CLP H1 220		•	•	Torque reduction $M2_{\text{perm}} = M2_{\text{perm}} \cdot 0.8$
Additional options					
Rubber buffer set for torque plate			-	-	-
Torque plate at pitch circle			-	-	Gearbox size 04...07
Torque plate at housing foot incl. rubber buffer set			-	-	•
Shrink disc cover			-	-	•
Hollow shaft cover – jet-proof			-	-	•
Shaft seal rings FP (Viton)			•	•	•
Breather element gearbox sizes 05...07			•	•	•
Compensator gearbox sizes 09...14			-	•	-



Technical data

Gearboxes

Thermal limit rating

The permissible continuous gearbox power is limited by

- the mechanical power, determined by the components' material, or,
- the thermal limit power, determined by the thermal conditions

The thermal limit can be below the mechanical power indicated in the selection tables.

The thermal limit power is influenced by

- churning losses in the lubricant. They are determined by the mounting position and the circumferential speed of the gears.
- the load and speed profile
- the ambient conditions: temperature, air circulation, heat transfer at the shafts and housings

3

Please contact Lenze, if
– you use one of the following combinations of gearbox design, size and ratio:

Gearbox design	Gearbox sizes	Ratios $i \leq$	Mounting positions
Helical gearboxes GST	07, 09, 11, 14	10	C and D
Low-profile gearboxes GFL	09, 11, 14	16	C and D
Helical-bevel gearboxes GKS	09, 11, 14	25	C and D

Possible measures to extend the range of applications

Measure	to be achieved by
Increase of the permissible temperature range of the gearbox	– Synthetic lubricant (option) – Shaft seals made of FP material / Viton (option)
Reduction of the power loss	– Synthetic lubricant (option) – Reduction of the lubricant quantity
Increased heat dissipation	– Possible air convection at the machine / system – Fan ventilation (e.g. air from the driving motor) – Oil cooling

Ventilated gearboxes

Gearbox sizes 04 to 07

Gearboxes of size 04 do not require any ventilation.

When using gearbox sizes 05 to 07, it is usually not necessary to provide special ventilation.

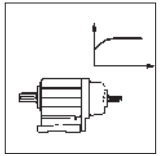
In some cases, e.g. for input speeds > 2000 1/min we recommend the use of breather elements. They are optionally available.

Gearbox sizes 09 to 14

These gearbox sizes are always equipped with breather elements.

Special measures for mounting position C (motor on top)

If you mount the gearbox sizes 09 to 14 in this mounting position, we recommend the use of an oil compensator. For figures and dimensions see page 3-23. The compensator is optionally available. The use of a compensator is not necessary when working with high ratios and low speeds. Please contact Lenze for more information.



Permissible radial and axial forces – helical gearboxes

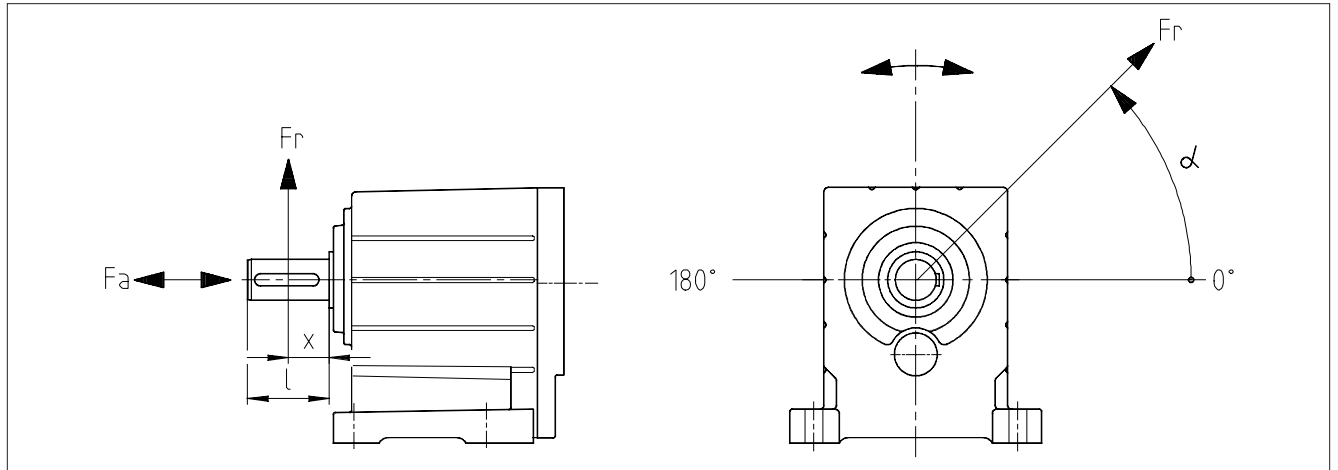
– Permissible radial force

$$F_{r \text{ perm}} = f_w \cdot f_\alpha \cdot F_{r \text{ Tab}} \leq f_w \cdot F_{r \text{ max}}$$

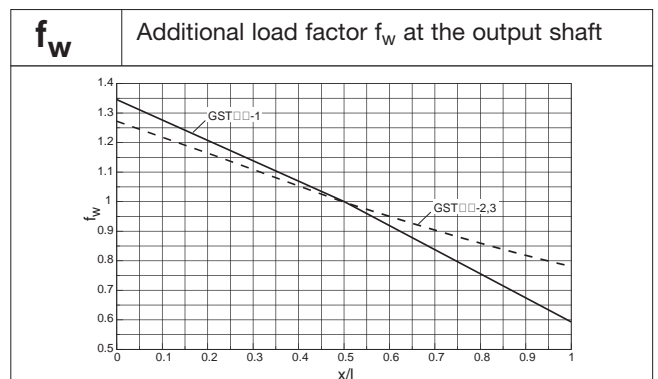
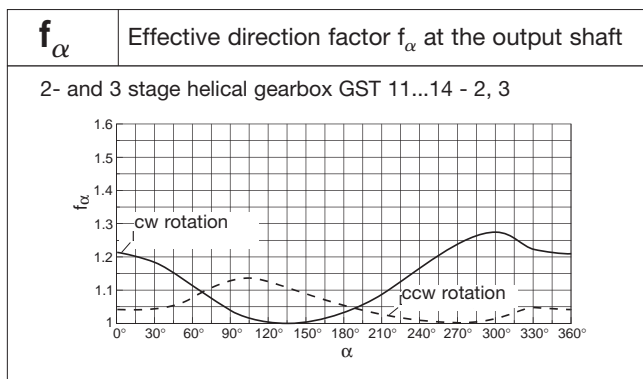
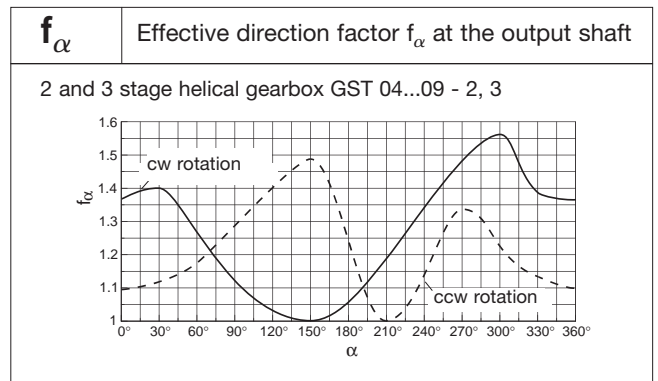
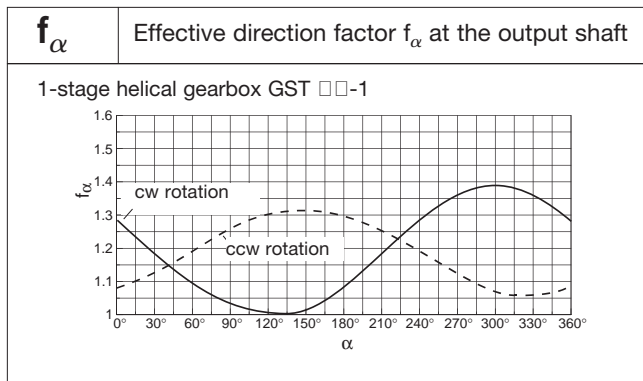
– Permissible axial force

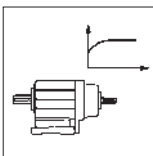
$$F_{a \text{ perm}} = F_{a \text{ Tab}} \quad \text{with } F_r = 0$$

Please contact Lenze if F_r and $F_a > 0$



3





Technical data

Gearboxes

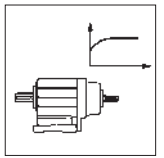
Permissible radial and axial forces – helical gearboxes

GST□□-1D (Feet on DISCO housing)

VCR	F _{r Tab} acts on the middle of the shaft (x = l/2) F _{a Tab} only valid if F _r = 0																	
	GST 04				GST 05				GST 06				GST 07					
	02C		03C		04D		03C		04D		05E		04D		05E		05E	
n ₂ [min ⁻¹]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]
1000	240	240	330	330	490	490	310	310	460	460	780	780	430	430	730	730	680	680
600	240	240	330	330	490	490	310	310	460	460	780	780	430	430	730	730	680	680
400	240	240	330	330	490	490	310	310	460	460	780	780	430	430	730	730	680	680
200	240	240	420	420	610	610	390	390	580	580	970	970	540	540	910	910	850	850
125	240	240	500	500	730	730	470	470	680	680	1170	1170	640	640	1100	1100	1020	1020
80	240	240	500	500	730	730	470	470	680	680	1170	1170	640	640	1100	1100	1020	1020
≤50	240	240	500	500	730	730	470	470	680	680	1170	1170	640	640	1100	1100	1020	1020
F _{r max.}	240	-	500	-	730	-	470	-	680	-	1170	-	640	-	1100	-	1020	-

GST □□-1

V □□	F _{r Tab} acts on the middle of the shaft (x = l/2) F _{a Tab} only valid if F _r = 0									
	GST 04		GST 05		GST 06		GST 07		GST 09	
	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [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	-



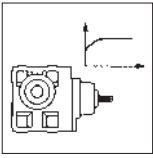
Permissible radial and axial forces – helical gearboxes

GST □□-2, 3 with standard bearing

V □□	F _{r Tab} acts on the middle of the shaft (x = l/2) F _{a Tab} only valid if F _r = 0													
	GST 04		GST 05		GST 06		GST 07		GST 09		GST 11		GST 14	
n ₂ [min ⁻¹]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]
400	1250	1100	1950	2000	2350	850	3400	1900	6800	2300	17000	9500	24000	15000
250	1450	1300	2200	2300	2600	900	3800	2200	7600	2800	19000	10000	27000	16000
160	1700	1650	2600	2650	3100	1250	4500	2900	9400	4000	21000	11000	31000	18000
100	2100	2000	3000	3100	3600	1800	5400	3900	11500	5600	21000	14000	36000	20000
63	2500	2000	3500	3600	4300	2600	6400	5300	11500	8900	21000	16000	39000	20000
40	2650	2000	3800	3600	4350	3600	7600	7000	11500	11000	21000	16000	40000	20000
25	2650	2000	3900	3600	4350	4800	9100	7000	11500	12000	21000	16000	40000	20000
<16	2650	2000	3900	3600	4350	4800	9500	7000	11500	12000	21000	16000	40000	20000
F _{r max.}	2650	–	3900	–	4350	–	9500	–	11500	–	21000	–	40000	–

GST □□-2, 3 with reinforced bearing

V □□	F _{r Tab} acts on the middle of the shaft (x = l/2) F _{a Tab} only valid if F _r = 0										GST 11	GST 14														
	GST 04		GST 05		GST 06		GST 07		GST 09																	
n ₂ [min ⁻¹]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	F _{r Tab} [N]	F _{a Tab} [N]	The standard bearing corresponds to a reinforced bearing															
400	2850	1700	4900	3600	6300	3500	8500	5500	16500	8000			The standard bearing corresponds to a reinforced bearing													
250	3150	1900	5400	3900	7000	3600	9500	6100	17000	9000					The standard bearing corresponds to a reinforced bearing											
160	3550	2200	5400	4300	7700	4200	10500	7100	17000	10500							The standard bearing corresponds to a reinforced bearing									
100	3750	2500	5400	4500	7700	4900	12500	8300	17000	12500									The standard bearing corresponds to a reinforced bearing							
63	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000											The standard bearing corresponds to a reinforced bearing					
40	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000													The standard bearing corresponds to a reinforced bearing			
25	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000															The standard bearing corresponds to a reinforced bearing	
< 16	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000																
F _{r max.}	3750	–	5400	–	7700	–	13000	–	17000	–	The standard bearing corresponds to a reinforced bearing															



Technical data

Gearboxes

Permissible radial and axial forces – helical bevel gearboxes

– Permissible radial force

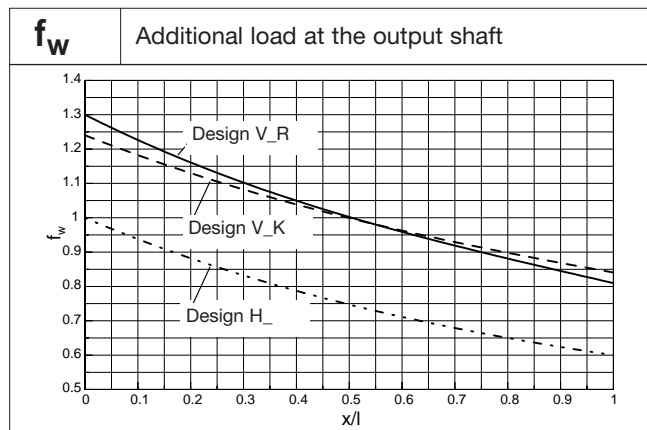
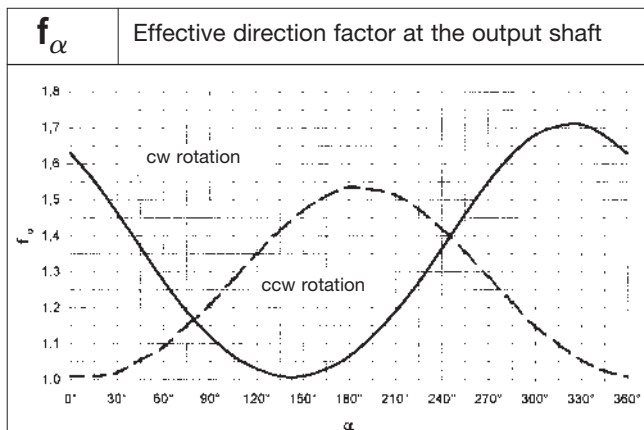
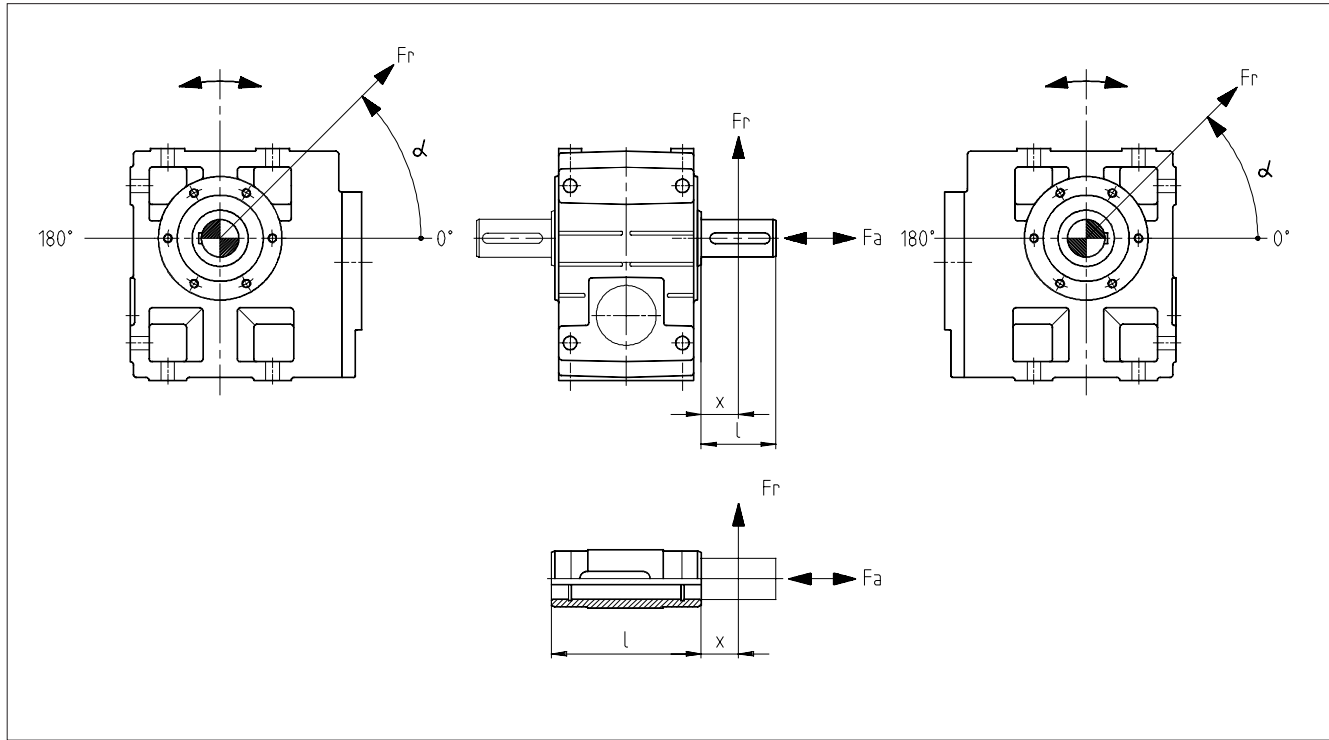
$$F_{r \text{ perm}} = f_w \cdot f_\alpha \cdot F_{r \text{ Tab}} \leq f_w \cdot F_{r \text{ max}}$$

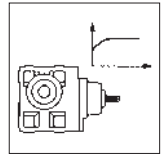
– Permissible axial force

$$F_{a \text{ perm}} = F_{a \text{ Tab}} \quad \text{with } F_r = 0$$

Please contact Lenze if F_r and $F_a < 0$

3





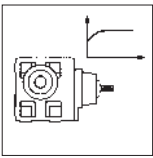
Permissible radial and axial forces – helical-bevel gearboxes

VAK	Solid shaft with flange F_r acts on the middle of the shaft ($x = l/2$) $F_{a Tab}$ only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
n_2 [min ⁻¹]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [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
$F_{r max}$	4600	-	7000	-	10000	-	14000	-	15000	-	30000	-	43000	-

V□R	Solid shaft without shaft F_r acts on the middle of the shaft ($x = l/2$) $F_{a Tab}$ only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
n_2 [min ⁻¹]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [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	9000	10000	12000	14000	18000	21000	23000	27000	65000	35000
$F_{r max}$	3600	-	5800	-	9000	-	12000	-	18000	-	23000	-	65000	-

H□□	Hollow shaft F_r acts on the middle of the shaft ($x = 0$) $F_{a Tab}$ only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
n_2 [min ⁻¹]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [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	12000	10000	16000	14000	24000	21000	30000	27000	40000	35000
$F_{r max}$	7000	-	7300	-	12000	-	16000	-	24000	-	30000	-	45000	-

For hollow shaft with shrink disc (S□□), radial and axial forces are not permissible.



Technical data

Gearboxes

Permissible radial and axial forces – helical worm gearboxes

– Permissible radial force

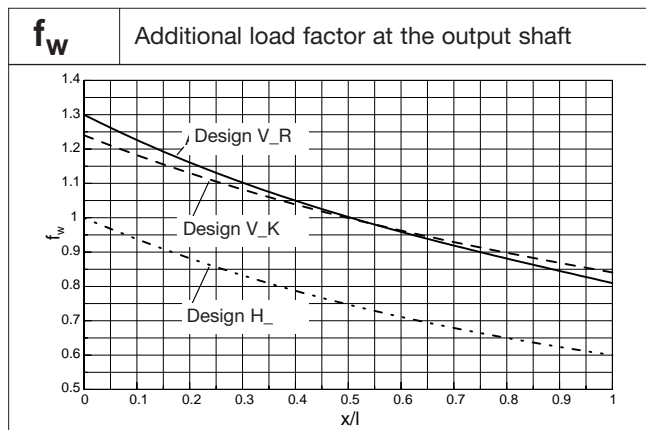
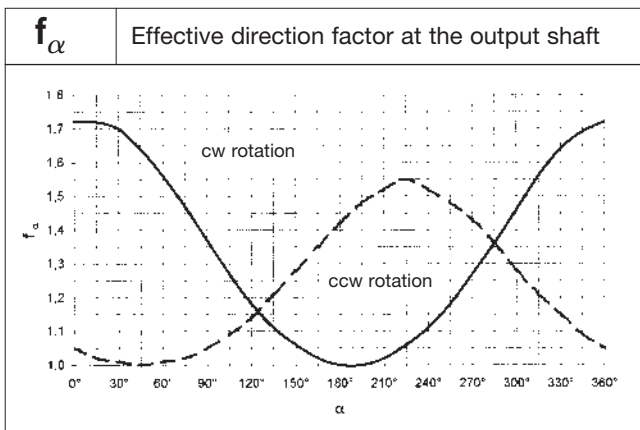
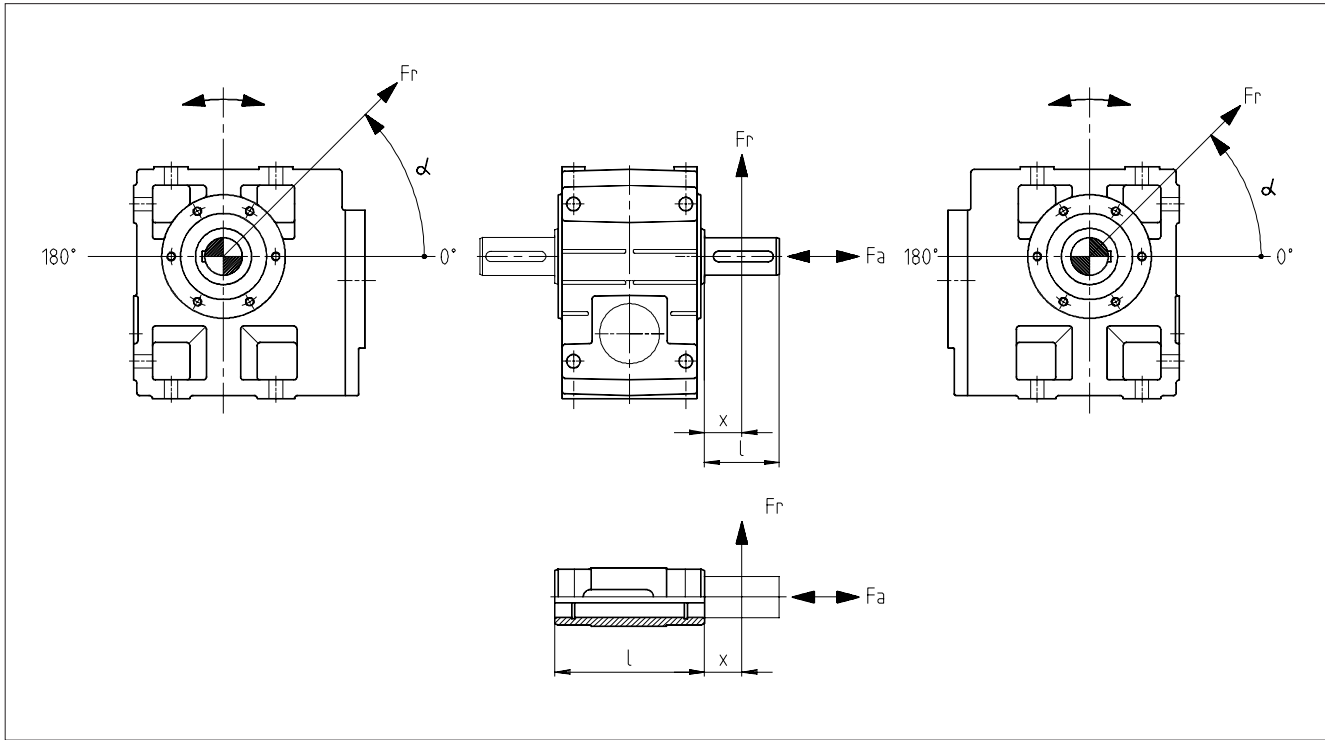
$$F_{r \text{ perm}} = f_w \cdot f_\alpha \cdot F_{r \text{ Tab}} \leq f_w \cdot F_{r \text{ max}}$$

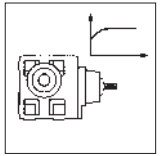
– Permissible axial force

$$F_{a \text{ perm}} = F_{a \text{ Tab}} \quad \text{with } F_r = 0$$

Please contact Lenze if F_r and $F_a < 0$

3





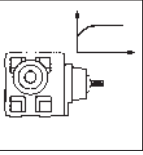
Permissible radial and axial forces – helical-worm gearboxes

VAK	Solid shaft with flange F_r : acts on the middle of the shaft ($x = l/2$) $F_{a Tab}$ only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
n_2 [min ⁻¹]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [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
1 6	4700	4200	4900	5500	9400	8800	14000	10000
$F_{r max}$	4700	–	4900	–	9400	–	14000	–

V□R	Solid shaft without flange F_r acts on the middle of the shaft ($x = l/2$) $F_{a Tab}$ only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
n_2 [min ⁻¹]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [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
1 6	4200	5500	4300	6000	8500	9000	12000	12500
$F_{r max}$	4200	–	4300	–	8500	–	12000	–

H□□	Hollow shaft F_r acts on the middle of the shaft ($x = 0$) $F_{a Tab}$ only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
n_2 [min ⁻¹]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [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
1 6	6000	5500	7500	6000	11500	9000	16000	12500
$F_{r max}$	6000	–	7500	–	11500	–	16000	–

For hollow shaft with shrink disc (S□□), radial and axial forces are not permissible.



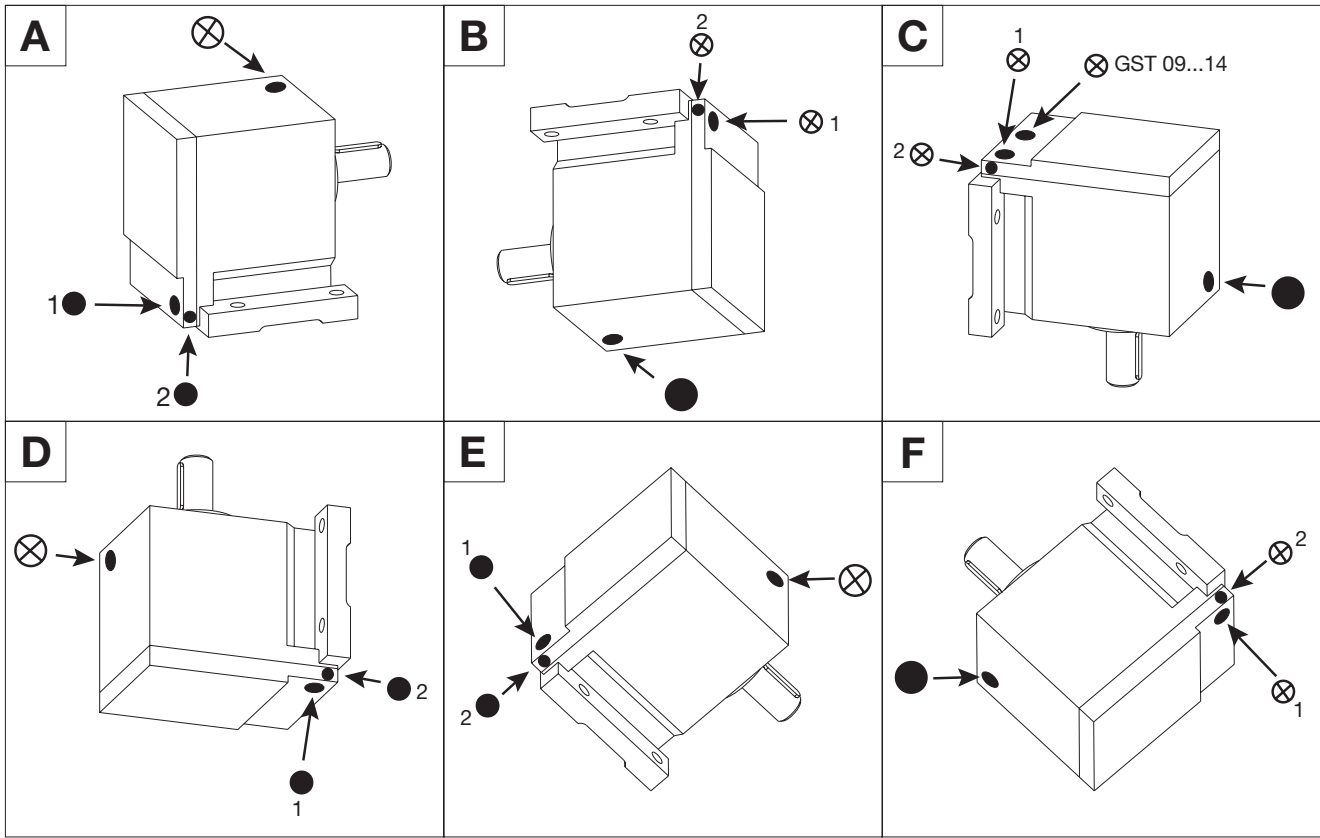
Technical data

Gearboxes

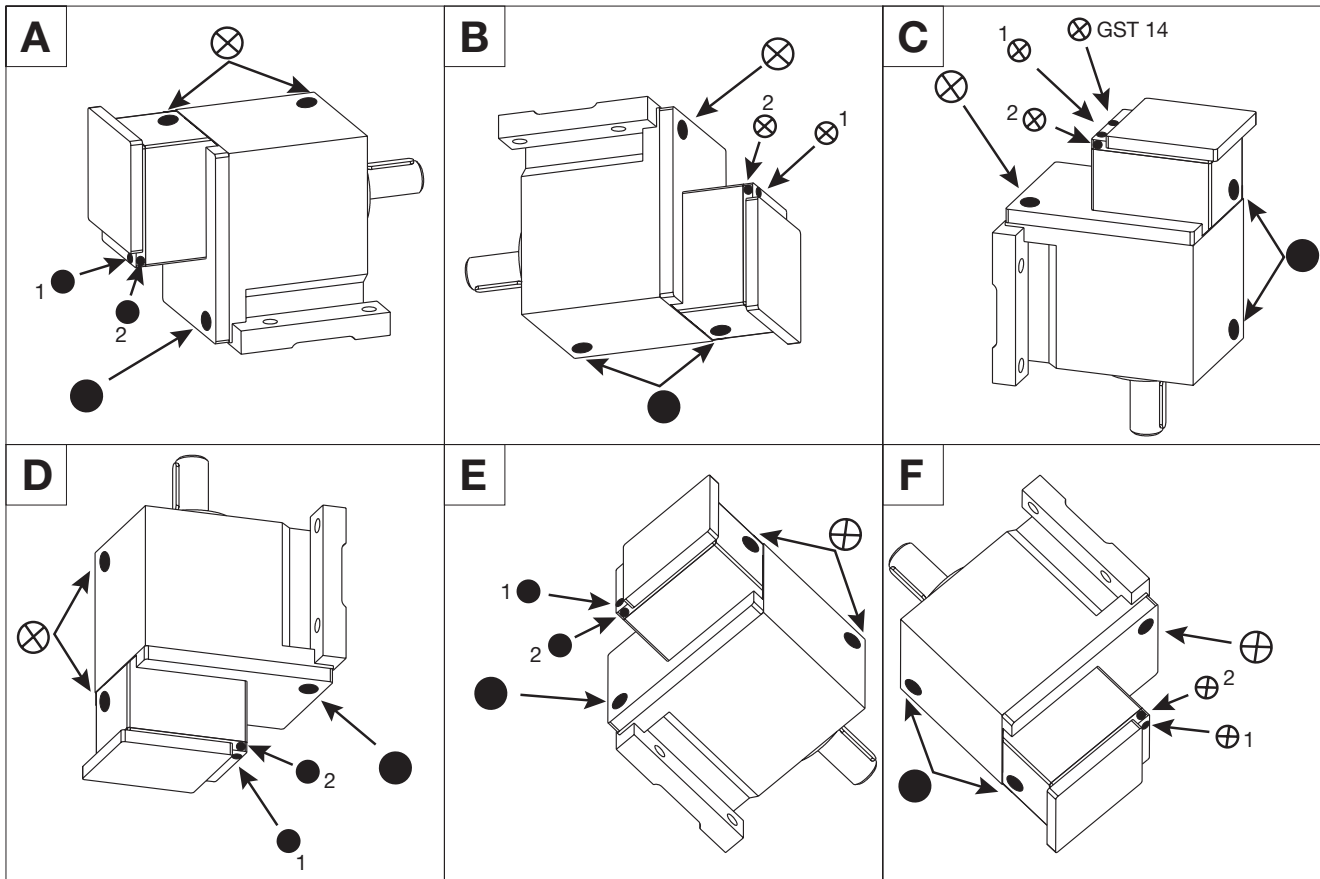
Position of breather, oil filler plug and oil drain plug

Helical gearboxes GST 05...14 - 2

3



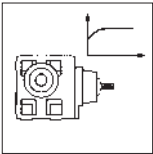
Helical gearboxes GST 05...14 - 3



Mounting position (A...F)

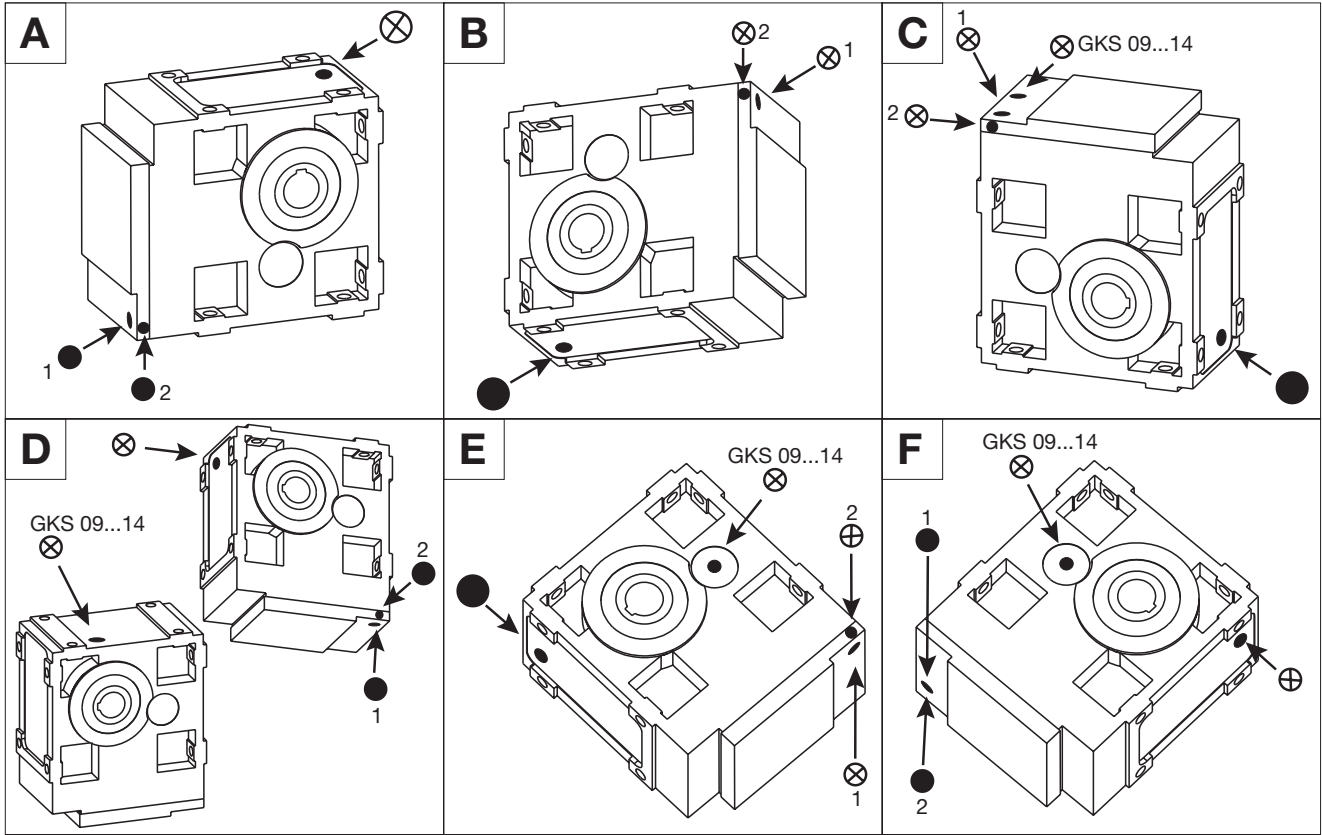
⊗ Breather/oil filler plug

● Oil drain plug



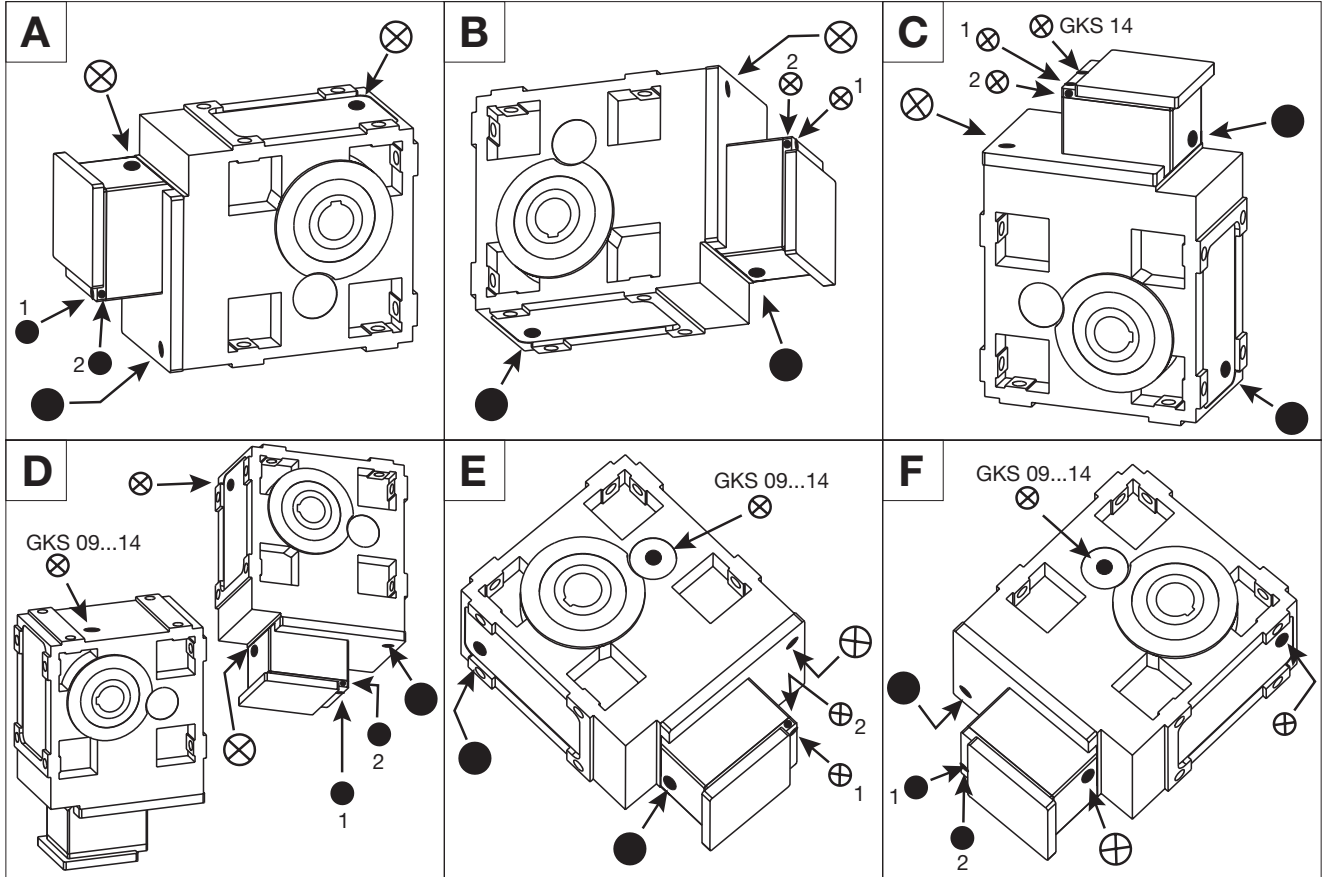
Position of breather, oil filler plug and oil drain plug

Helical-bevel gearboxes GKS 05...14 - 3



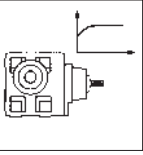
3

Helical-bevel gearboxes GKS 05...14 - 4



Mounting position (A...F) ⊗ Breather/oil filler plug ● Oil drain plug

Pos. 1 or 2 depending on the type of gearbox used (see table on page 23)



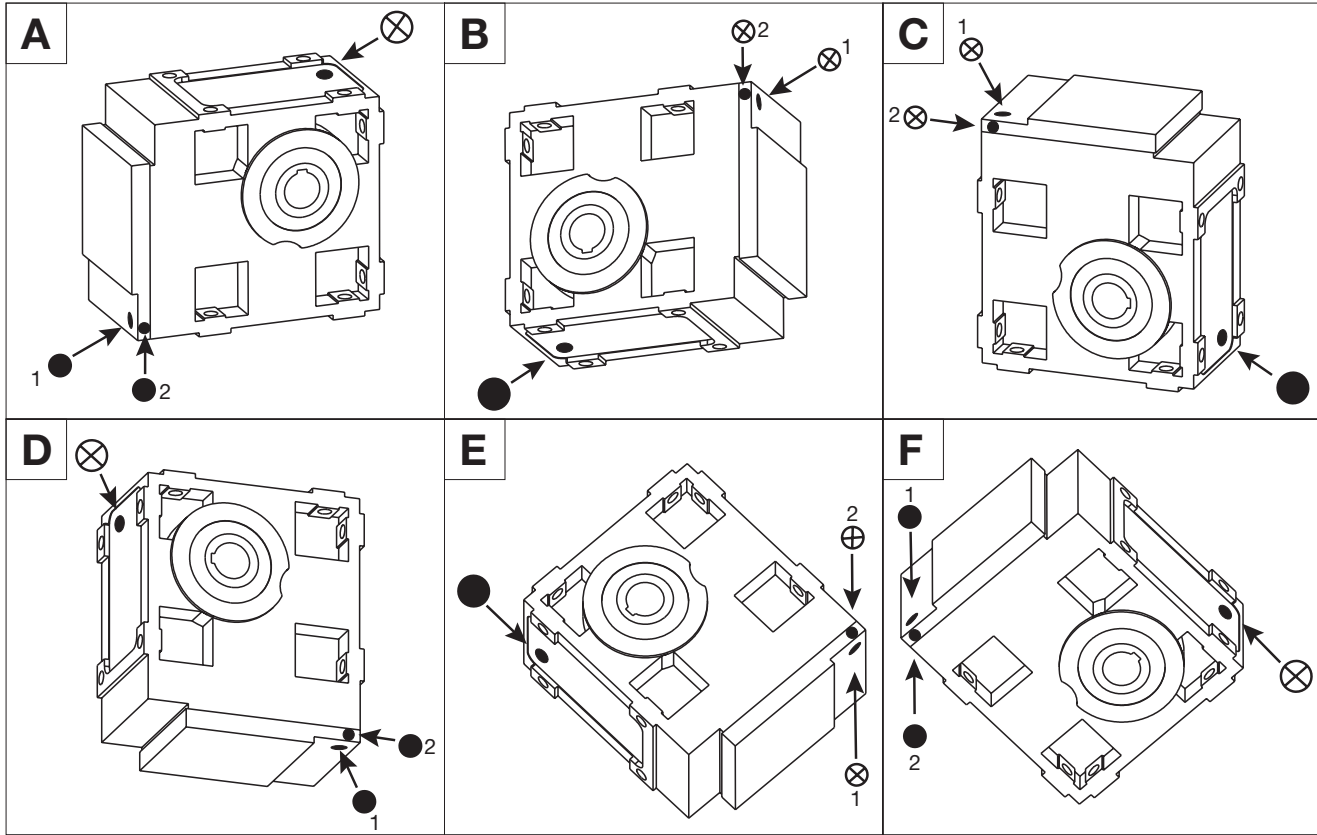
Technical data

Gearboxes

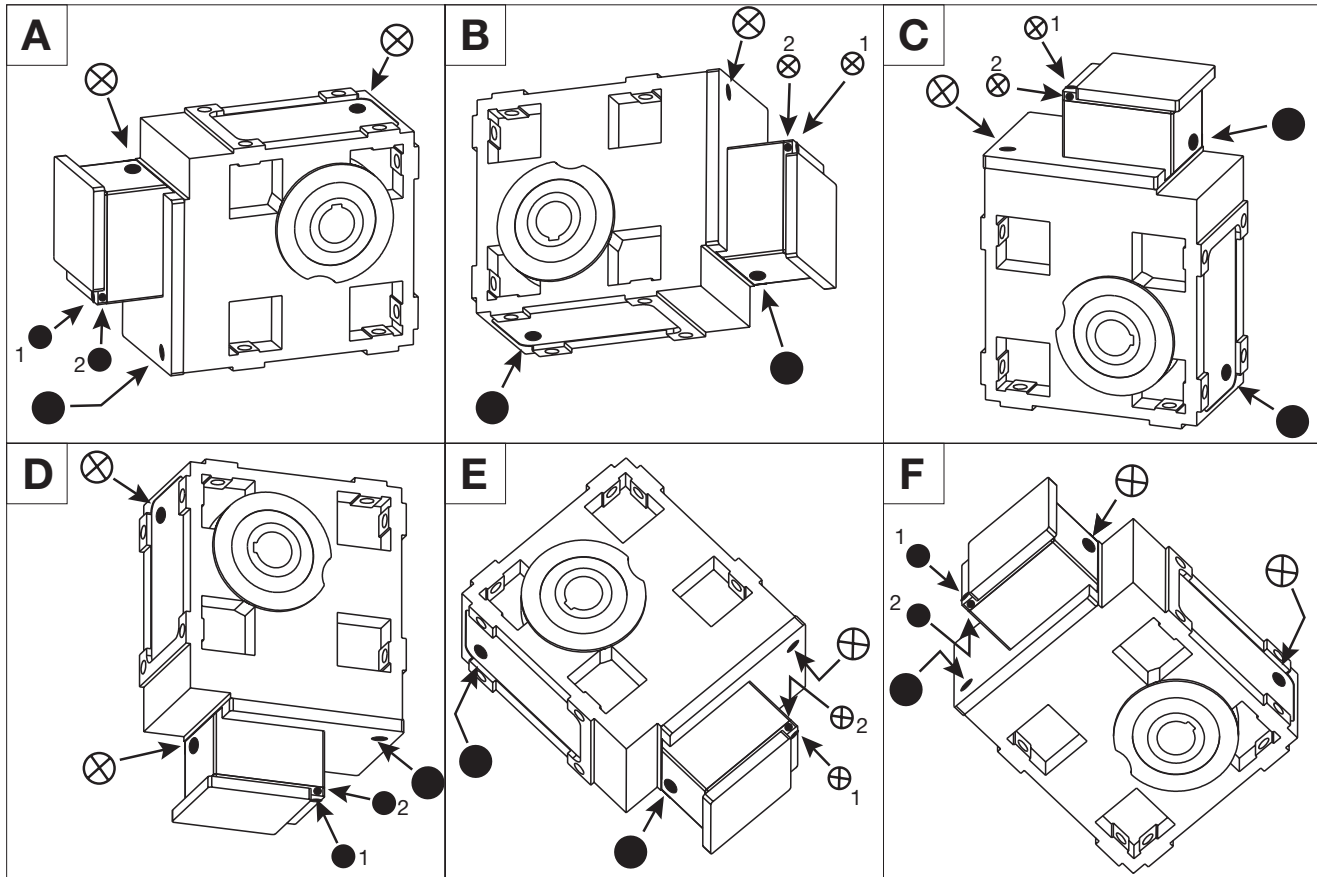
Position of breather, oil filler plug and oil drain plug

Helical-worm gearboxes GSS 05...07 - 2

3



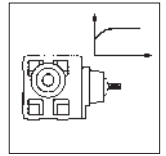
Helical-worm gearboxes GSS 05...07 - 3



Mounting position (A...F)

⊗ Breather/oil filler plug

● Oil drain plug



With the gearbox **types listed in the tables**, the breather, oil filler plug and oil drain plug are **in position 2** at the side of the cover. Position 1 is valid for **all other gearbox types**.

Helical gearboxes

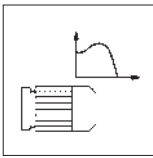
GST	05	-1	D	□□□	080-□□ 04D 090-□□ 05E
		-2	D	□□□	080-□□ 04D 090-□□ 05E
	07	-1	D	□□□	132-12 18H 132-22 08H
		-2	D	□□□	132-12 18H 132-22 08H
		-3	D	□□□	080-□□ 04D 090-□□ 05E
	09	-3	K	□□□	112-□□ 20F 132-□□ 25F 160-22 25F

Helical-bevel gearboxes

GKS	05	-3	D	□□□	080-□□ 04D 090-□□ 05E
	06	-3	K	□□□	132-□□ 26F 160-22 26F
	07	-3	D	□□□	132-12 18H 132-22 08H
		-4	D	□□□	080-□□ 04D
	09	-4	K	□□□	132-□□ 26F 160-22 26F

Helical-worm gearboxes

GSS	05	-2	D	□□□	080-□□ 04D 090-□□ 05E
	06	-2	K	□□□	112-LL 25F 132-□□ 26F 160-22 26F



Technical data

AC motors

General data

Standards	The motors comply with the corresponding DIN and IEC standards CE conformity to Low-Voltage Directive
Duty	Designed for duty type S1 (Continuous operation with constant load at rated power)
Enclosure	IP55 (self ventilated)
Thermal class (VDE 0530)	Insulation to thermal class F (utilisation to thermal class B)
Insulation resistance	max. voltage amplitude $\hat{V} = 1.5 \text{ kV}$ max. voltage rise time $dv/dt = 5 \text{ kV}/\mu\text{s}$
Temperature monitoring	Temperature sensor (normally closed contact)
Temperature range	-20 to +40 °C without power derating
Installation height	up to 1000 m amsl without power derating
Terminal box	Motor connection at terminal board, brake rectifier can be integrated into terminal box
Bearing	Deep-groove ball bearings with 2 side plates

Power derating

Influence of the installation height

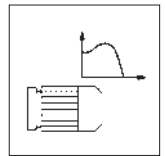
Influence of the installation height amsl on rated power				
H [m]	≤ 1000	2000	3000	4000
$\frac{P_h}{P_r}$	1	0.95	0.90	0.85

Influence of ambient operating temperature

Influence of ambient operating temperature T_{amb} on rated power					
T_{amb} [°C]	≤ 40	45	50	55	60
$\frac{P_{\hat{\theta}}}{P_r}$	1	0.95	0.90	0.85	0.80

Calculation of power derating

$$P_{red} = \frac{P_h}{P_r} \cdot \frac{P_{\hat{\theta}}}{P_r} \cdot P_r$$



Influence of operating frequency on rated data

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

Voltages / frequencies

Connection	Rated motor power	
	0.25...3 kW	4...45 kW
Δ	220-240 V / 50 Hz 220-266 V / 60 Hz	380-415 V / 50 Hz 380-460 V / 60 Hz
Y	380-415 V / 50 Hz 380-460 V / 60 Hz	

The limits of the voltage range are subject to a ±5% tolerance, see DIN EN 60034.

Influence of duty type on rated data

The duty type is very important for motor selection. For instance, a motor generates less heat in short-time duty than continuous duty. It is therefore possible to select a smaller motor for this type of duty. VDE 0530 distinguishes between duty types S1 to S8.

With increased power it is possible to operate the motor with a duty type other than S1. The increased power values P_{perm} for duty type S2, S3, S6 are listed in the following table.

Continuous duty S1

Operation at rated load of sufficient duration for thermal equilibrium to be reached. The motor is continuously driven with rated load.

Short-time duty S2

Compared with the following rest and de-energised period, operation is not long enough to reach the thermal equilibrium. The motor cools down to its initial temperature in the following longer rest period.

Intermittent periodic duty S3, S4, S5

A sequence of identical duty cycles. In general, the duty time is 10 minutes. The machine cools down during the rest period.

- S3: Duty without influence of the running up period
- S4: Duty with influence of the running up period
- S5: Duty with influence of the running up period and electrical braking

Continuous operation periodic duty S6

The motor cannot cool down to its initial temperature during the rest period

Continuous operation periodic duty with starting and electrical braking S7

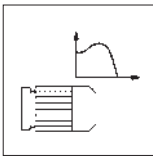
There is no rest and no de-energising period.

Continuous operation S8 with pole changes

Continuous operation under constant load with frequent speed changes.

Power increase for duty types S2, S3 and S6

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



Technical data

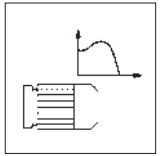
AC motors

Standard motors for DISCO variable speed drives

DISCO size	02	03	04	05	06	07	18 / 08
Motor frame size	71	71	80	90	100	112	132
Self ventilation	●	●	●	●	●	●	●
Motor mounting position	IM B14	IM B14	IM B5	IM B5	IM B5	IM B5	IM B5
Flange diameter	C105	C105	A200	A200	A250	A250	A300
Motor shaft d x l	14 x 30	14 x 30	19 x 40	24 x 50	28 x 60	28 x 60	38 x 80
Oil-proof	●	●	●	●	●	●	●
Connection type Terminal box	●	●	●	●	●	●	●
Attachments Spring-operated brake	●	●	●	●	●	●	●

Standard motors for compact units

Compact unit size	10	13	16	20	25	31	40
Motor frame size	71	80 90	90 100	112	132 160	160 180	180 200 225
Self ventilation	●	●	●	●	●	●	●
Motor mounting position	IM B14	IM B14	IM B14	IM B14	IM B5	IM B5	IM B5
Flange diameter	C105	C160	C160	C160	A300	A350	A350 A400 A450
Motor shaft d x l	14 x 30	19 x 40 24 x 50	24 x 50 28 x 60	28 x 60	38 x 80 42 x 110	42 x 110 48 x 110	48 x 110 55 x 110 60 x 140
Connection type Terminal box	●	●	●	●	●	●	●
Attachments Spring-operated brake	●	●	●	●	●	●	●



Rated data 50 Hz

No. of pole pairs 2 (4-pole)

Motor frame size	P_r [kW]	n_r [min ⁻¹]	$I_r^{1)}$ [A]	I_A / I_r [A]	V^* [V] Y / Δ	f_r [Hz]	$\cos \varphi$	η [%]	M_r [Nm]	M_{stall} [Nm]	M_A [Nm]	J [10 ⁻³ kgm ²]	m [kg]
071-12	0.25	1400	0.82	3.9	400 / 230	50	0.70	65	1.72	4.4	4.6	0.77	5.8
071-32	0.37	1400	1.2	3.9	400 / 230	50	0.71	72	2.54	5.3	5.8	0.94	6.4
080-12	0.55	1400	1.6	4.3	400 / 230	50	0.72	73	3.75	10.2	9.5	1.12	7.3
080-32	0.75	1380	2.0	4.7	400 / 230	50	0.76	77	5.14	13.2	13.3	1.50	8.3
090-12	1.1	1410	2.6	5.1	400 / 230	50	0.80	80	7.45	18.5	16.7	2.5	13
090-32	1.5	1420	3.5	6.0	400 / 230	50	0.80	83	10.1	31.0	29.1	3.5	16
100-12	2.2	1400	5.6	6.2	400 / 230	50	0.78	83	15.0	54.0	46.5	4.75	20
100-32	3	1400	7.3	6.2	400 / 230	50	0.81	83	20.2	64.6	62.6	5.88	24
112-22	4	1430	8.5	7.4	400 / 230	50	0.85	86	26.5	84.8	71.6	20.1	35
112-32 132-12 ²⁾	5.5	1440	12.5	8.0	- / 400	50	0.78	89	36.5	138.7	105.9	22.8	41
132-22	7.5	1460	16.8	7.7	- / 400	50	0.77	87	50.0	170.0	135	52.9	63
132-32	9.2	1450	19.5	6.7	- / 400	50	0.85	90	63.7	232.5	146.5	52.9	63
160-22	11	1460	23.0	6.9	- / 400	50	0.85	88	72.0	194.4	172.8	62.0	86
160-32	15	1460	30.0	6.6	- / 400	50	0.86	89	96.0	259.2	249.6	83.0	104
180-22	18.5	1440	36.4	5.5	- / 400	50	0.87	92	133.0	412.3	332.5	127.0	160
180-32	22	1465	44.1	5.5	- / 400	50	0.85	91	143.0	443.3	343.2	153.0	187
200-32	30	1455	60.0	6.3	- / 400	50	0.85	93	197.0	591.0	492.5	249.0	245
225-12	37	1460	72.0	6.4	- / 400	50	0.86	92	242.0	701.8	653.4	392.0	290
225-22	45	1475	85.5	6.9	- / 400	50	0.84	93	291.0	843.9	814.8	474.0	360

No. of pole pairs 1 (2-pole)

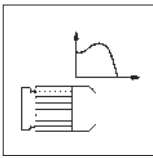
Motor frame size	P_r [kW]	n_r [min ⁻¹]	$I_r^{1)}$ [A]	I_A / I_r [A]	V^* [V] Y / Δ	f_r [Hz]	$\cos \varphi$	η [%]	M_r [Nm]	M_{stall} [Nm]	M_A [Nm]	J [10 ⁻³ kgm ²]	m [kg]
071-11 ²⁾	0.37	2840	1.2	5.6	400 / 230	50	0.78	72	1.25	3.7	3.6	0.47	6.2
071-31 ²⁾	0.55	2840	1.5	6.1	400 / 230	50	0.82	82	1.86	5.0	5.1	0.59	6.5
080-11 ²⁾	0.75	2850	1.9	6.1	400 / 230	50	0.80	80	2.52	7.8	8.8	0.68	9.2
080-31 ²⁾	1.1	2810	2.8	6.9	400 / 230	50	0.82	79	3.70	13.1	12.2	1.01	9.6
090-11 ²⁾	1.5	2840	3.2	5.9	400 / 230	50	0.85	82	5.10	13.6	11.9	1.72	14
090-31 ²⁾	2.2	2840	4.8	6.9	400 / 230	50	0.86	82	7.40	21.5	20.9	2.54	17

¹⁾ at 400 V mains voltage

²⁾ only for DISCO variable speed drive

Values are guide values

*Motors can be driven at rated torque within a voltage range to the table "Voltages / Frequencies" on page 3-27.



Technical data

AC motors

Spring-operated brakes

Brake motors are equipped with Lenze spring-operated brakes. The rectifier required for mains operation is located in the terminal box and is part of the delivery package. The brake is shown on page 3-31.

The brakes are active after the supply voltage has been switched off (fail-safe brake).

The brake torques indicated apply to quasi-static selection when the brake is operated as low-wear holding brake. The air gap is factory set and can be readjusted in the event of wear.

General data

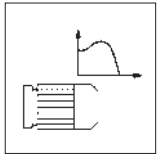
Design	Single-disc spring-operated brake
Operating principle	Brake torque when no voltage is applied
Type of protection	IP 54
Thermal class	F
Friction lining	asbestos free
Option	Hand release

Rated data

Size	P _{20°} [W]	M _B [Nm]	J _B [10 ⁻³ kgm ²]	m [kg]	Connection voltage	Assigned brake voltage
06	20	4	0.015	0.9	24 V DC t 220...240 V AC t 380...420 V AC t	24 V DC 205 V DC 180 V DC
08	25	8	0.061	1.5		
10	30	16	0.20	2.6		
12	40	32	0.45	4.2		
14	50	60	0.63	5.8		
16	55	80	1.5	8.7		
18	85	150	2.9	12.6		
20	100	260	7.3	19.5		
25	110	400	20.0	31.0		

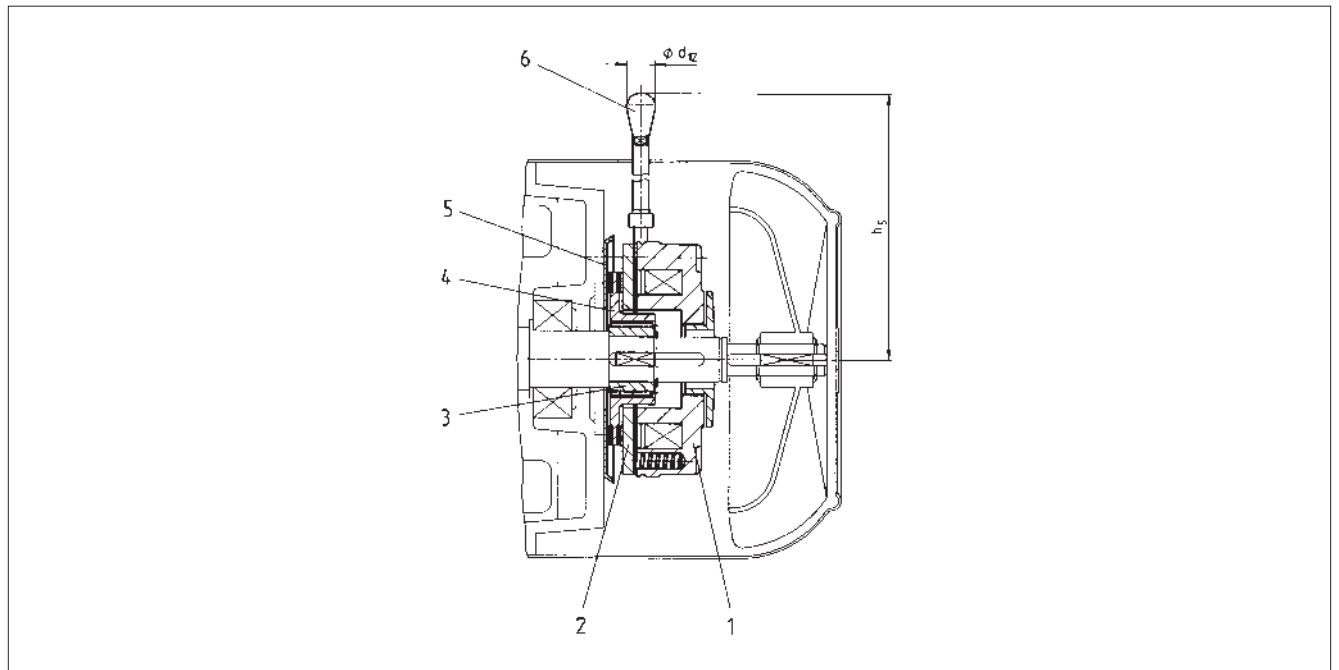
Possible combinations

Size	Brake								
	06	08	10	12	14	16	18	20	25
Motor frame size									
071	●								
080		●							
090		●	●	●					
100			●	●	●				
112				●	●	●			
132					●	●	●		
160						●	●	●	
180							●	●	
200								●	●
225									●

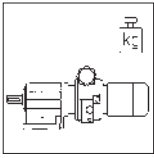


Spring-operated brake

Position	Name
1	Stator
2	Armature
3	Hub
4	Rotor
5	Friction plate
6	Hand release (option)



Spring-operated brake size	d12	h5
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



Technical data

Weights

DISCO variable speed drives with helical gearboxes

GST □□ - 1D

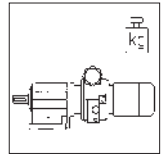
Gearbox size	DISCO variable speed drive GST □□ - 1D VBR with drive size									
	071-1□ 02	071-3□ 03	080-1□ 04	080-3□ 04	090-1□ 05	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08
GST 04	15	23	32	33						
GST 05	18	27	36	37	51	54				
GST 06			41	42	56	58				
GST 07					65	67	104	114	177	184
GST 09							119	129	192	199

Gearbox size	DISCO variable speed drive GST □□ - 1D VCR with drive size					
	071-1□ 02	071-3□ 03	080-1□ 04	080-3□ 04	090-1□ 05	090-3□ 05
GST 04	14	23	32	33		
GST 05	17	26	35	36	50	53
GST 06			39	40	54	56
GST 07					62	64

GST □□ - 2D

Gearbox size	DISCO variable speed drive GST □□ - 2D VBR with drive size									
	071-1□ 02	071-3□ 03	080-1□ 04	080-3□ 04	090-1□ 05	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08
GST 04	17	25	34	35						
GST 05	22	30	40	41	55	57				
GST 06	29	37	47	48	62	64				
GST 07			62	63	77	79	116	126	189	196
GST 09			89	90	104	107	143	154	216	223
GST 11					150	153	188	198	261	268
GST 14							277	288	350	357

Gearbox size	DISCO variable speed drive GST □□ - 2D VCR with drive size									
	071-1□ 02	071-3□ 03	080-1□ 04	080-3□ 04	090-1□ 05	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08
GST 04	16	25	34	35						
GST 05	20	29	38	39	53	56				
GST 06	26	35	44	45	59	62				
GST 07			58	59	73	75	111	122	184	191
GST 09			81	82	96	98	135	145	208	215
GST 11					135	138	173	183	246	253
GST 14							249	260	322	329



DISCO variable speed drives with helical gearboxes

GST □□ - 3D

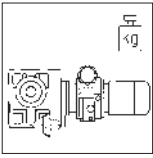
Gearbox size	DISCO variable speed drive GST □□ - 3D VBR with drive size									
	071-1□ 02	071-3□ 03	080-1□ 04	080-3□ 04	090-1□ 05	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08
GST 05	23	31								
GST 06	33	41	50	51						
GST 07	52	60	70	71	85	87				
GST 09	84	92	102	103	117	120				
GST 11			156	157	171	174	210	221		
GST 14			263	264	277	280	317	327	390	397

Gearbox size	DISCO variable speed drive GST □□ - 3D VCR with drive size									
	071-1□ 02	071-3□ 03	080-1□ 04	080-3□ 04	090-1□ 05	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08
GST 05	21	30								
GST 06	30	39	48	49						
GST 07	48	56	65	66	80	83				
GST 09	75	84	94	95	109	111				
GST 11			141	142	156	159	195	206		
GST 14			235	236	249	252	289	299	362	369

Additional weight

Gearbox size	Flange VCK/VAK
GST 04	1.0
GST 05	1.5
GST 06	3.0
GST 07	4.0
GST 09	7.0
GST 11	10.5
GST 14	15.5

Weights in [kg] with oil filling for mounting position A, all values are approximate values.



Technical data

Weights

DISCO variable speed drives with helical-bevel gearboxes

GKS □□ - 3D

Gearbox size	DISCO variable speed drive GKS □□ - 3D H□R with drive size							
	071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08
GKS 04	23	31	41					
GKS 05	32	41	51	67				
GKS 06	46	55	65	82				
GKS 07	72	81	91	107	144	154	217	224
GKS 09			140	156	193	203	266	273
GKS 11				255	290	301	364	371
GKS 14					459	470	532	539

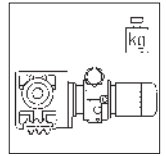
GKS □□ - 4D

Gearbox size	DISCO variable speed drive GKS □□ - 4D H□R with drive size							
	071-1□02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08
GKS 05	33							
GKS 06	50	59	69					
GKS 07	80	89	99					
GKS 09	133	142	153	169				
GKS 11	241	250	260	277	313	323		
GKS 14			446	462	499	509	572	579

Additional weights

Getriebe- größe	Solid shaft	2nd input shaft end	Hollow shaft with shrink disc	Flange	Torque plate	Torque plate
	V□□	V□□	S□□	□□K	Housing foot	Pitch circle
GKS 04	0.6	0.2	0.6	2.5	1.3	0.9
GKS 05	1	0.3	0.8	4	2.2	1.3
GKS 06	2.5	0.8	1	7	3.7	2.1
GKS 07	5	1.5	1.5	11	6.6	3.7
GKS 09	8	2.7	3	16	13.2	
GKS 11	16	6.3	5	24	22.5	
GKS 14	33	12.3	11	33	44	

Weights in [kg] with oil filling for mounting position A, all values are approximate values



DISCO variable speed drives with helical-worm gearboxes

GSS □□ - 2D

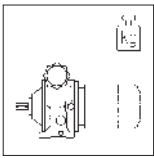
Gearbox size	DISCO variable speed drive GSS □□ - 2D H□R with drive size					
	071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07
GSS 04	23	31	41			
GSS 05	32	40	51	67		
GSS 06	44	52	63	80		
GSS 07			88	104	141	151

3

Additional weights

Gearbox size	Solid shaft	2nd input shaft end	Hollow shaft with shrink disc	Flange	Torque plate	Torque plate
	V□□	V□□	S□□	□□K	Housing foot	Pitch circle
GSS 04	0.6	0.2	0.6	2.5	1.3	0.9
GSS 05	1	0.3	0.8	4	2.2	1.3
GSS 06	2.5	0.8	1	7	3.7	2.1
GSS 07	5	1.5	1.5	11	6.6	3.7
GSS 09	8	2.7	3	16	13.2	
GSS 11	16	6.3	5	24	22.5	
GSS 14	33	12.3	11	33	44	

Weights in [kg] with oil filling for mounting position A, all values are approximate values



Technical data

Weights

DISCO variable speed drives without gearboxes

11.710.□□.00

Gearbox size	DISCO variable speed drive with motor frame size										
	071		080		090		100		112		132
	-1□	-3□	-1□	-3□	-1□	-3□	-1□	-3□	-22	-12	-22
11.710.02	10										
11.710.03		19									
11.710.04			27	28							
11.710.05					42	45					
11.710.06							74	78			
11.710.07									89		
11.710.18										151	
11.710.08											158

11.700.□□.00

11.700.02	5
11.700.03	13
11.700.04	21
11.700.05	35
11.700.06	58
11.700.07	58
11.700.18	88
11.700.08	88

Weights in [kg] with oil filling for mounting position A.
All values are approximate values



Disco variable speed drives

With helical gearboxes

Selection tables	4-2
Dimensions	
GST □□ - 1	4-18
GST □□ - 2	4-21
GST □□ - 3	4-24
Additional dimensions GST	
Output design VAR	4-27
Output design VAL	4-27

With helical-bevel gearboxes

Selection tables	4-28
Dimensions	
GKS □□ - 3	4-40
GKS □□ - 4	4-44
Additional dimensions GKS	
Torque plate at housing foot	4-48
Torque plate at pitch circle	4-49
Hollow shaft with shrink disc	4-50
Hollow shaft protection – jet-proof	4-51
with 2nd output shaft end	4-52
Mounting kit – hollow shaft retention	4-53
Design proposal for auxiliary tools	4-53

With helical-worm gearboxes

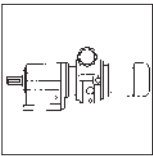
Selection tables	4-54
Dimensions	
GSS □□ - 2	4-60
Additional dimensions GSS	
Torque plate at housing foot	4-64
Torque plate at pitch circle	4-65
Hollow shaft with shrink disc	4-66
Hollow shaft protection – jet-proof	4-67
with 2nd output shaft end	4-68
Mounting kit – hollow shaft retention	4-69
Design proposal for auxiliary tools	4-69

Without gearboxes

Selection tables	
with motor	4-70
with free input shaft	4-71
Dimensions	
with motor	4-72
with free input shaft	4-74

Additional dimensions – attachments

Speed adjustment units	
Spindle box	4-76
Bevel wheel adjustment	4-77
Electrical remote adjustment	4-78
Speed measuring units	
Position indicators	4-80
Indicators for direction of rotation	4-80
Analog displays	4-80



Disco variable speed drives

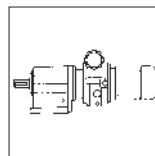
Selection tables with helical gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
0.25 kW	581 - 97	3.2 - 6.3	1.600	GST □□ - 1D GST04 - 1D □□□ 071-12 02C	4-18	
	454 - 76	4 - 8.1	2.048	GST04 - 1D □□□ 071-12 02C		
	415 - 69	4.4 - 8.8	2.240	GST04 - 1D □□□ 071-12 02C		
	326 - 54	5.6 - 11	2.857	GST04 - 1D □□□ 071-12 02C		
	266 - 44	6.9 - 14	3.500	GST04 - 1D □□□ 071-12 02C		
	211 - 35	8.7 - 17	4.400	GST04 - 1D □□□ 071-12 02C		
	164 - 27	11 - 22	5.667	GST04 - 1D □□□ 071-12 02C		
	127 - 21	14 - 29	7.333	GST05 - 1D □□□ 071-12 02C		
	104 - 17	18 - 35	8.900	GST05 - 1D □□□ 071-12 02C		
				GST □□ - 2D		4-21
	315 - 52	5.7 - 11	2.956	GST04 - 2D □□□ 071-12 02C		
	229 - 38	7.9 - 16	4.053	GST04 - 2D □□□ 071-12 02C		
	179 - 30	10 - 20	5.187	GST04 - 2D □□□ 071-12 02C		
	145 - 24	12 - 25	6.400	GST04 - 2D □□□ 071-12 02C		
	116 - 19	16 - 31	8.000	GST04 - 2D □□□ 071-12 02C		
	94 - 16	19 - 38	9.856	GST04 - 2D □□□ 071-12 02C		
	74 - 12	24 - 49	12.571	GST04 - 2D □□□ 071-12 02C		
	60 - 10	30 - 60	15.400	GST04 - 2D □□□ 071-12 02C		
	48 - 8	38 - 70	19.360	GST04 - 2D □□□ 071-12 02C		
	37 - 6.2	48 - 71	24.933	GST04 - 2D □□□ 071-12 02C		
	29 - 4.8	63 - 125	32.267	GST05 - 2D □□□ 071-12 02C		
	24 - 4	76 - 152	39.160	GST05 - 2D □□□ 071-12 02C		
	21 - 3.5	86 - 149	44.500	GST05 - 2D □□□ 071-12 02C		
	19 - 3.1	96 - 192	49.500	GST06 - 2D □□□ 071-12 02C		
	17 - 2.8	109 - 218	56.250	GST06 - 2D □□□ 071-12 02C		
				GST □□ - 3D	4-24	
	16 - 2.7	108 - 155	56.667	GST05 - 3D □□□ 071-12 02C		
	17 - 2.9	103 - 206	53.900	GST06 - 3D □□□ 071-12 02C		
	15 - 2.4	121 - 146	63.467	GST05 - 3D □□□ 071-12 02C		
	14 - 2.3	130 - 259	67.760	GST06 - 3D □□□ 071-12 02C		
	13 - 2.2	136 - 167	71.238	GST05 - 3D □□□ 071-12 02C		
	13 - 2.2	134 - 268	70.156	GST06 - 3D □□□ 071-12 02C		
	11 - 1.9	147 - 147	80.952	GST05 - 3D □□□ 071-12 02C		
	11 - 1.9	155 - 309	80.952	GST06 - 3D □□□ 071-12 02C		
	10 - 1.7	170 - 170	91.746	GST05 - 3D □□□ 071-12 02C		
	11 - 1.8	167 - 334	87.267	GST06 - 3D □□□ 071-12 02C		
	9.4 - 1.6	148 - 148	99.167	GST05 - 3D □□□ 071-12 02C		
	9.4 - 1.6	190 - 335	99.167	GST06 - 3D □□□ 071-12 02C		
	8.5 - 1.4	210 - 375	109.707	GST06 - 3D □□□ 071-12 02C		
	7.5 - 1.2	149 - 149	124.667	GST05 - 3D □□□ 071-12 02C		
	7.5 - 1.2	238 - 339	124.667	GST06 - 3D □□□ 071-12 02C		
	6.6 - 1.1	270 - 375	141.289	GST06 - 3D □□□ 071-12 02C		
5.8 - 1	307 - 342	160.556	GST06 - 3D □□□ 071-12 02C			
5.2 - 0.9	344 - 689	180.156	GST07 - 3D □□□ 071-12 02C			
4.5 - 0.8	391 - 710	204.722	GST07 - 3D □□□ 071-12 02C			

Thermal limit not considered (see note on page 3-12)

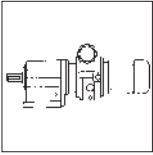
Disco variable speed drives

Selection tables with helical gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
0.25 kW				GST □□ - 3D	4-24	
	3.9 - 0.7	452 - 706	236.622	GST07 - 3D □□□ 071-12 02C		
	3.7 - 0.6	475 - 710	248.458	GST07 - 3D □□□ 071-12 02C		
	3.5 - 0.6	514 - 710	268.889	GST07 - 3D □□□ 071-12 02C		
	2.9 - 0.5	624 - 710	326.333	GST07 - 3D □□□ 071-12 02C		
	2.6 - 0.4	694 - 1388	363.000	GST09 - 3D □□□ 071-12 02C		
2.3 - 0.4	788 - 1577	412.500	GST09 - 3D □□□ 071-12 02C			
0.37 kW				GST □□ - 1D	4-18	
	1163 - 194	2.5 - 5	1.600	GST04 - 1D □□□ 071-11 02C		
	908 - 151	3.2 - 6.5	2.048	GST04 - 1D □□□ 071-11 02C		
	830 - 138	3.5 - 7.1	2.240	GST04 - 1D □□□ 071-11 02C		
	651 - 109	4.5 - 9	2.857	GST04 - 1D □□□ 071-11 02C		
	531 - 89	5.5 - 11	3.500	GST04 - 1D □□□ 071-11 02C		
	423 - 70	6.9 - 14	4.400	GST04 - 1D □□□ 071-11 02C		
	328 - 55	8.9 - 18	5.667	GST04 - 1D □□□ 071-11 02C		
	254 - 42	12 - 23	7.333	GST05 - 1D □□□ 071-11 02C		
	209 - 35	14 - 28	8.900	GST05 - 1D □□□ 071-11 02C		
				GST □□ - 2D		4-21
	629 - 105	4.6 - 9.2	2.956	GST04 - 2D □□□ 071-11 02C		
	459 - 76	6.3 - 13	4.053	GST04 - 2D □□□ 071-11 02C		
	359 - 60	8.1 - 16	5.187	GST04 - 2D □□□ 071-11 02C		
	291 - 48	9.9 - 20	6.400	GST04 - 2D □□□ 071-11 02C		
	233 - 39	12 - 25	8.000	GST04 - 2D □□□ 071-11 02C		
	189 - 31	15 - 31	9.856	GST04 - 2D □□□ 071-11 02C		
	148 - 25	20 - 39	12.571	GST04 - 2D □□□ 071-11 02C		
	121 - 20	24 - 48	15.400	GST04 - 2D □□□ 071-11 02C		
	96 - 16	30 - 60	19.360	GST04 - 2D □□□ 071-11 02C		
	75 - 12	39 - 71	24.933	GST04 - 2D □□□ 071-11 02C		
	58 - 9.6	50 - 100	32.267	GST05 - 2D □□□ 071-11 02C		
	48 - 7.9	61 - 122	39.160	GST05 - 2D □□□ 071-11 02C		
	42 - 7	69 - 138	44.500	GST05 - 2D □□□ 071-11 02C		
	38 - 6.3	77 - 154	49.500	GST06 - 2D □□□ 071-11 02C		
	33 - 5.5	87 - 175	56.250	GST06 - 2D □□□ 071-11 02C		
				GST □□ - 3D	4-24	
	33 - 5.5	87 - 155	56.667	GST05 - 3D □□□ 071-11 02C		
	35 - 5.8	82 - 165	53.900	GST06 - 3D □□□ 071-11 02C		
	29 - 4.9	97 - 146	63.467	GST05 - 3D □□□ 071-11 02C		
	27 - 4.6	104 - 207	67.760	GST06 - 3D □□□ 071-11 02C		
	26 - 4.4	109 - 167	71.238	GST05 - 3D □□□ 071-11 02C		
	27 - 4.4	107 - 215	70.156	GST06 - 3D □□□ 071-11 02C		
23 - 3.8	124 - 147	80.952	GST05 - 3D □□□ 071-11 02C			
23 - 3.8	124 - 248	80.952	GST06 - 3D □□□ 071-11 02C			
20 - 3.4	140 - 170	91.746	GST05 - 3D □□□ 071-11 02C			
21 - 3.6	133 - 267	87.267	GST06 - 3D □□□ 071-11 02C			
19 - 3.1	138 - 148	99.167	GST05 - 3D □□□ 071-11 02C			

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

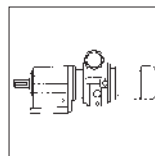
Selection tables with helical gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.37 kW	19 - 3.1	152 - 303	99.167	GST □□ - 3D	4-24
	17 - 2.8	168 - 336	109.707	GST06 - 3D □□□ 071-11 02C	
	15 - 2.5	139 - 149	124.667	GST05 - 3D □□□ 071-11 02C	
	15 - 2.5	191 - 339	124.667	GST06 - 3D □□□ 071-11 02C	
	13 - 2.2	216 - 375	141.289	GST06 - 3D □□□ 071-11 02C	
	12 - 1.9	246 - 342	160.556	GST06 - 3D □□□ 071-11 02C	
0.55 kW	1200 - 209	3.5 - 6.9	1.600	GST □□ - 1D	4-18
	938 - 164	4.4 - 8.9	2.048	GST04 - 1D □□□ 071-31 03C	
	938 - 164	4.4 - 8.9	2.048	GST04 - 1D □□□ 071-31 03C	
				GST05 - 1D □□□ 071-31 03C	
	857 - 150	4.9 - 9.7	2.240	GST04 - 1D □□□ 071-31 03C	
	857 - 150	4.9 - 9.7	2.240	GST05 - 1D □□□ 071-31 03C	
	672 - 117	6.2 - 12	2.857	GST04 - 1D □□□ 071-31 03C	
	672 - 117	6.2 - 12	2.857	GST05 - 1D □□□ 071-31 03C	
	549 - 96	7.6 - 15	3.500	GST04 - 1D □□□ 071-31 03C	
	549 - 96	7.6 - 15	3.500	GST05 - 1D □□□ 071-31 03C	
	436 - 76	9.5 - 19	4.400	GST04 - 1D □□□ 071-31 03C	
	421 - 74	9.9 - 20	4.556	GST05 - 1D □□□ 071-31 03C	
	339 - 59	12 - 25	5.667	GST04 - 1D □□□ 071-31 03C	
	339 - 59	12 - 25	5.667	GST05 - 1D □□□ 071-31 03C	
	262 - 46	16 - 32	7.333	GST05 - 1D □□□ 071-31 03C	
	216 - 38	19 - 39	8.900	GST05 - 1D □□□ 071-31 03C	
	650 - 113	6.3 - 13	2.956	GST □□ - 2D	4-21
	474 - 83	8.7 - 17	4.053	GST04 - 2D □□□ 071-31 03C	
	370 - 65	11 - 22	5.187	GST04 - 2D □□□ 071-31 03C	
	370 - 65	11 - 22	5.187	GST05 - 2D □□□ 071-31 03C	
	300 - 52	14 - 27	6.400	GST04 - 2D □□□ 071-31 03C	
	300 - 52	14 - 27	6.400	GST05 - 2D □□□ 071-31 03C	
	240 - 42	17 - 34	8.000	GST04 - 2D □□□ 071-31 03C	
	235 - 41	17 - 35	8.163	GST05 - 2D □□□ 071-31 03C	
	195 - 34	21 - 42	9.856	GST04 - 2D □□□ 071-31 03C	
	192 - 34	21 - 43	10.000	GST05 - 2D □□□ 071-31 03C	
	153 - 27	27 - 54	12.571	GST04 - 2D □□□ 071-31 03C	
	148 - 26	28 - 56	13.016	GST05 - 2D □□□ 071-31 03C	
	125 - 22	33 - 66	15.400	GST04 - 2D □□□ 071-31 03C	
	119 - 21	35 - 69	16.191	GST05 - 2D □□□ 071-31 03C	
	99 - 17	41 - 70	19.360	GST04 - 2D □□□ 071-31 03C	
	96 - 17	43 - 86	20.044	GST05 - 2D □□□ 071-31 03C	
	77 - 13	53 - 71	24.933	GST04 - 2D □□□ 071-31 03C	
77 - 13	53 - 106	24.933	GST05 - 2D □□□ 071-31 03C		
60 - 10	69 - 138	32.267	GST05 - 2D □□□ 071-31 03C		
49 - 8.6	84 - 165	39.160	GST05 - 2D □□□ 071-31 03C		
39 - 6.8	106 - 211	49.500	GST06 - 2D □□□ 071-31 03C		
34 - 6	120 - 240	56.250	GST06 - 2D □□□ 071-31 03C		

Thermal limit not considered (see note on page 3-12)

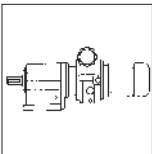
Disco variable speed drives

Selection tables with helical gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.55 kW				GST □□ - 3D	4-24
	34 - 5.9	119 - 155	56.667	GST05 - 3D □□□ 071-31 03C	
	36 - 6.2	113 - 227	53.900	GST06 - 3D □□□ 071-31 03C	
	30 - 5.3	133 - 146	63.467	GST05 - 3D □□□ 071-31 03C	
	28 - 4.9	142 - 285	67.760	GST06 - 3D □□□ 071-31 03C	
	27 - 4.7	150 - 167	71.238	GST05 - 3D □□□ 071-31 03C	
	27 - 4.8	148 - 295	70.156	GST06 - 3D □□□ 071-31 03C	
	24 - 4.1	135 - 147	80.952	GST05 - 3D □□□ 071-31 03C	
	24 - 4.1	170 - 332	80.952	GST06 - 3D □□□ 071-31 03C	
	21 - 3.7	157 - 170	91.746	GST05 - 3D □□□ 071-31 03C	
	22 - 3.8	183 - 367	87.267	GST06 - 3D □□□ 071-31 03C	
	19 - 3.4	136 - 148	99.167	GST05 - 3D □□□ 071-31 03C	
	19 - 3.4	209 - 335	99.167	GST06 - 3D □□□ 071-31 03C	
	18 - 3.1	231 - 375	109.707	GST06 - 3D □□□ 071-31 03C	
	15 - 2.7	262 - 339	124.667	GST06 - 3D □□□ 071-31 03C	
	15 - 2.6	267 - 535	127.176	GST07 - 3D □□□ 071-31 03C	
	14 - 2.4	297 - 375	141.289	GST06 - 3D □□□ 071-31 03C	
	14 - 2.4	293 - 585	139.211	GST07 - 3D □□□ 071-31 03C	
	12 - 2.1	315 - 342	160.556	GST06 - 3D □□□ 071-31 03C	
	12 - 2.1	333 - 665	158.194	GST07 - 3D □□□ 071-31 03C	
	11 - 1.9	379 - 706	180.156	GST07 - 3D □□□ 071-31 03C	
	9.4 - 1.6	430 - 710	204.722	GST07 - 3D □□□ 071-31 03C	
	8.1 - 1.4	497 - 706	236.622	GST07 - 3D □□□ 071-31 03C	
	8.1 - 1.4	497 - 995	236.622	GST09 - 3D □□□ 071-31 03C	
	7.7 - 1.3	522 - 710	248.458	GST07 - 3D □□□ 071-31 03C	
	7.6 - 1.3	530 - 1060	252.167	GST09 - 3D □□□ 071-31 03C	
	7.1 - 1.2	565 - 710	268.889	GST07 - 3D □□□ 071-31 03C	
	7.1 - 1.2	565 - 1131	268.889	GST09 - 3D □□□ 071-31 03C	
	5.9 - 1	654 - 710	326.333	GST07 - 3D □□□ 071-31 03C	
	5.9 - 1	686 - 1372	326.333	GST09 - 3D □□□ 071-31 03C	
5.3 - 0.9	763 - 1526	363.000	GST09 - 3D □□□ 071-31 03C		
4.7 - 0.8	867 - 1623	412.500	GST09 - 3D □□□ 071-31 03C		
0.75 kW				GST □□ - 1D	4-18
	594 - 103	9.5 - 19	1.600	GST04 - 1D □□□ 080-32 04D	
	594 - 103	9.5 - 19	1.600	GST05 - 1D □□□ 080-32 04D	
	464 - 81	12 - 23	2.048	GST04 - 1D □□□ 080-32 04D	
	464 - 81	12 - 24	2.048	GST05 - 1D □□□ 080-32 04D	
	464 - 81	12 - 24	2.048	GST06 - 1D □□□ 080-32 04D	
	424 - 74	13 - 25	2.240	GST04 - 1D □□□ 080-32 04D	
	424 - 74	13 - 26	2.240	GST05 - 1D □□□ 080-32 04D	
	424 - 74	13 - 26	2.240	GST06 - 1D □□□ 080-32 04D	
	333 - 58	17 - 25	2.857	GST04 - 1D □□□ 080-32 04D	
	333 - 58	17 - 34	2.857	GST05 - 1D □□□ 080-32 04D	
	333 - 58	17 - 34	2.857	GST06 - 1D □□□ 080-32 04D	
	271 - 47	21 - 25	3.500	GST04 - 1D □□□ 080-32 04D	
	271 - 47	21 - 41	3.500	GST05 - 1D □□□ 080-32 04D	
	271 - 47	21 - 41	3.500	GST06 - 1D □□□ 080-32 04D	
	209 - 36	27 - 54	4.556	GST05 - 1D □□□ 080-32 04D	
	209 - 36	27 - 54	4.556	GST06 - 1D □□□ 080-32 04D	

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

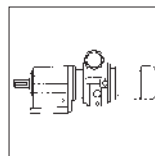
Selection tables with helical gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.75 kW	168 - 29	33 - 54	5.667	GST □□ - 1D	4-18
	168 - 29	33 - 67	5.667	GST05 - 1D □□□ 080-32 04D GST06 - 1D □□□ 080-32 04D	
	130 - 23	43 - 87	7.333	GST06 - 1D □□□ 080-32 04D	
	107 - 19	53 - 85	8.900	GST06 - 1D □□□ 080-32 04D	
				GST □□ - 2D	4-21
	321 - 56	17 - 34	2.956	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	321 - 56	17 - 34	2.956	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	234 - 41	24 - 45	4.053	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	234 - 41	24 - 47	4.053	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	183 - 32	30 - 50	5.187	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	183 - 32	30 - 60	5.187	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	148 - 26	37 - 55	6.400	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	148 - 26	37 - 75	6.400	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	119 - 21	47 - 59	8.000	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	116 - 20	48 - 95	8.163	GST05 - 2D □□□ 080-32 04D GST06 - 2D □□□ 080-32 04D	
	116 - 20	48 - 95	8.163	GST06 - 2D □□□ 080-32 04D	
	96 - 17	57 - 65	9.856	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	95 - 17	58 - 116	10.000	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	76 - 13	69 - 69	12.571	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	73 - 13	76 - 137	13.016	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	62 - 11	70 - 70	15.400	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	59 - 10	94 - 148	16.191	GST04 - 2D □□□ 080-32 04D GST05 - 2D □□□ 080-32 04D	
	47 - 8.2	117 - 159	20.044	GST05 - 2D □□□ 080-32 04D GST06 - 2D □□□ 080-32 04D	
	47 - 8.2	117 - 233	20.044	GST05 - 2D □□□ 080-32 04D GST06 - 2D □□□ 080-32 04D	
	38 - 6.6	145 - 162	24.933	GST05 - 2D □□□ 080-32 04D GST06 - 2D □□□ 080-32 04D	
	38 - 6.6	145 - 290	24.933	GST05 - 2D □□□ 080-32 04D GST06 - 2D □□□ 080-32 04D	
	29 - 5.1	188 - 363	32.267	GST06 - 2D □□□ 080-32 04D	
	24 - 4.2	228 - 368	39.160	GST06 - 2D □□□ 080-32 04D	
	24 - 4.2	228 - 456	39.160	GST07 - 2D □□□ 080-32 04D	
	21 - 3.7	259 - 325	44.500	GST06 - 2D □□□ 080-32 04D GST07 - 2D □□□ 080-32 04D	
	21 - 3.7	259 - 518	44.500	GST06 - 2D □□□ 080-32 04D GST07 - 2D □□□ 080-32 04D	
	19 - 3.3	288 - 492	49.500	GST07 - 2D □□□ 080-32 04D GST09 - 2D □□□ 080-32 04D	
	19 - 3.3	288 - 576	49.500	GST07 - 2D □□□ 080-32 04D GST09 - 2D □□□ 080-32 04D	
	17 - 2.9	327 - 559	56.250	GST07 - 2D □□□ 080-32 04D GST09 - 2D □□□ 080-32 04D	
	17 - 2.9	327 - 655	56.250	GST07 - 2D □□□ 080-32 04D GST09 - 2D □□□ 080-32 04D	
				GST □□ - 3D	4-24
	18 - 3.1	309 - 349	53.900	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	18 - 3.1	309 - 618	53.900	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	15 - 2.5	373 - 707	65.079	GST07 - 3D □□□ 080-32 04D	
	14 - 2.4	359 - 359	70.156	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	14 - 2.4	402 - 706	70.156	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	12 - 2	332 - 332	80.952	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	12 - 2.1	457 - 710	79.762	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	11 - 1.9	370 - 370	87.267	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	11 - 1.9	493 - 706	85.983	GST06 - 3D □□□ 080-32 04D GST07 - 3D □□□ 080-32 04D	
	9.7 - 1.7	560 - 710	97.708	GST07 - 3D □□□ 080-32 04D	

Thermal limit not considered (see note on page 3-12)

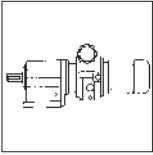
Disco variable speed drives

Selection tables with helical gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
0.75 kW	9.6 - 1.7	569 - 1137	99.167	GST □□ - 3D GST09 - 3D □□□ 080-32 04D	4-24	
	8.5 - 1.5	642 - 706	111.915	GST07 - 3D □□□ 080-32 04D		
	8.4 - 1.5	651 - 1303	113.585	GST09 - 3D □□□ 080-32 04D		
	7.5 - 1.3	710 - 710	127.176	GST07 - 3D □□□ 080-32 04D		
	7.4 - 1.3	740 - 1480	129.074	GST09 - 3D □□□ 080-32 04D		
	6.8 - 1.2	706 - 706	139.211	GST07 - 3D □□□ 080-32 04D		
	6.7 - 1.2	810 - 1613	141.289	GST09 - 3D □□□ 080-32 04D		
	6 - 1	710 - 710	158.194	GST07 - 3D □□□ 080-32 04D		
	5.9 - 1	921 - 1623	160.556	GST09 - 3D □□□ 080-32 04D		
	5.2 - 0.9	1048 - 1613	182.845	GST09 - 3D □□□ 080-32 04D		
	5.3 - 0.9	1033 - 2066	180.156	GST11 - 3D □□□ 080-32 04D		
	4.6 - 0.8	1191 - 1623	207.778	GST09 - 3D □□□ 080-32 04D		
	4.6 - 0.8	1191 - 2383	207.778	GST11 - 3D □□□ 080-32 04D		
	4 - 0.7	1357 - 1613	236.622	GST09 - 3D □□□ 080-32 04D		
	4 - 0.7	1357 - 2695	236.622	GST11 - 3D □□□ 080-32 04D		
	3.8 - 0.7	1446 - 1623	252.167	GST09 - 3D □□□ 080-32 04D		
	3.8 - 0.7	1446 - 2810	252.167	GST11 - 3D □□□ 080-32 04D		
	3.5 - 0.6	1542 - 1623	268.889	GST09 - 3D □□□ 080-32 04D		
	3.5 - 0.6	1542 - 2848	268.889	GST11 - 3D □□□ 080-32 04D		
	2.9 - 0.5	1623 - 1623	326.333	GST09 - 3D □□□ 080-32 04D		
	2.9 - 0.5	1871 - 2848	326.333	GST11 - 3D □□□ 080-32 04D		
	2.6 - 0.5	2081 - 2695	363.000	GST11 - 3D □□□ 080-32 04D		
	2.6 - 0.5	2081 - 4163	363.000	GST14 - 3D □□□ 080-32 04D		
	2.3 - 0.4	2365 - 2848	412.500	GST11 - 3D □□□ 080-32 04D		
	2.3 - 0.4	2365 - 4731	412.500	GST14 - 3D □□□ 080-32 04D		
	1.1 kW	1200 - 209	7.1 - 14	1.600		GST □□ - 1D GST04 - 1D □□□ 080-31 04D
1200 - 209		7.1 - 14	1.600	GST05 - 1D □□□ 080-31 04D		
938 - 164		9.1 - 18	2.048	GST04 - 1D □□□ 080-31 04D		
938 - 164		9.1 - 18	2.048	GST05 - 1D □□□ 080-31 04D		
938 - 164		9.1 - 18	2.048	GST06 - 1D □□□ 080-31 04D		
857 - 150		9.9 - 20	2.240	GST04 - 1D □□□ 080-31 04D		
857 - 150		9.9 - 20	2.240	GST05 - 1D □□□ 080-31 04D		
857 - 150		9.9 - 20	2.240	GST06 - 1D □□□ 080-31 04D		
672 - 117		13 - 25	2.857	GST04 - 1D □□□ 080-31 04D		
672 - 117		13 - 25	2.857	GST05 - 1D □□□ 080-31 04D		
672 - 117		13 - 25	2.857	GST06 - 1D □□□ 080-31 04D		
549 - 96		16 - 25	3.500	GST04 - 1D □□□ 080-31 04D		
549 - 96		16 - 31	3.500	GST05 - 1D □□□ 080-31 04D		
549 - 96		16 - 31	3.500	GST06 - 1D □□□ 080-31 04D		
421 - 74		20 - 40	4.556	GST05 - 1D □□□ 080-31 04D		
421 - 74		20 - 40	4.556	GST06 - 1D □□□ 080-31 04D		
339 - 59		25 - 50	5.667	GST05 - 1D □□□ 080-31 04D		
339 - 59		25 - 50	5.667	GST06 - 1D □□□ 080-31 04D		
262 - 46		33 - 65	7.333	GST06 - 1D □□□ 080-31 04D		
216 - 38		39 - 79	8.900	GST06 - 1D □□□ 080-31 04D		
650 - 113		13 - 26	2.956	GST □□ - 2D GST04 - 2D □□□ 080-31 04D	4-21	
650 - 113		13 - 26	2.956	GST05 - 2D □□□ 080-31 04D		

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

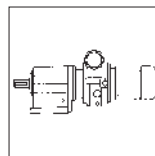
Selection tables with helical gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
1.1 kW				GST □□ - 2D	4-21
	474 - 83	18 - 35	4.053	GST04 - 2D □□□ 080-31 04D	
	474 - 83	18 - 35	4.053	GST05 - 2D □□□ 080-31 04D	
	370 - 65	23 - 45	5.187	GST04 - 2D □□□ 080-31 04D	
	370 - 65	23 - 45	5.187	GST05 - 2D □□□ 080-31 04D	
	300 - 52	28 - 55	6.400	GST04 - 2D □□□ 080-31 04D	
	300 - 52	28 - 56	6.400	GST05 - 2D □□□ 080-31 04D	
	240 - 42	35 - 59	8.000	GST04 - 2D □□□ 080-31 04D	
	235 - 41	36 - 71	8.163	GST05 - 2D □□□ 080-31 04D	
	195 - 34	43 - 65	9.856	GST04 - 2D □□□ 080-31 04D	
	192 - 34	44 - 87	10.000	GST05 - 2D □□□ 080-31 04D	
	153 - 27	55 - 69	12.571	GST04 - 2D □□□ 080-31 04D	
	148 - 26	57 - 114	13.016	GST05 - 2D □□□ 080-31 04D	
	125 - 22	64 - 70	15.400	GST04 - 2D □□□ 080-31 04D	
	119 - 21	71 - 141	16.191	GST05 - 2D □□□ 080-31 04D	
	96 - 17	88 - 159	20.044	GST05 - 2D □□□ 080-31 04D	
	96 - 17	88 - 175	20.044	GST06 - 2D □□□ 080-31 04D	
	77 - 13	109 - 162	24.933	GST05 - 2D □□□ 080-31 04D	
	77 - 13	109 - 218	24.933	GST06 - 2D □□□ 080-31 04D	
	60 - 10	141 - 282	32.267	GST06 - 2D □□□ 080-31 04D	
	49 - 8.6	171 - 342	39.160	GST06 - 2D □□□ 080-31 04D	
	39 - 6.8	216 - 432	49.500	GST07 - 2D □□□ 080-31 04D	
	34 - 6	246 - 491	56.250	GST07 - 2D □□□ 080-31 04D	
				GST □□ - 3D	4-24
	36 - 6.2	232 - 349	53.900	GST06 - 3D □□□ 080-31 04D	
	36 - 6.2	232 - 464	53.900	GST07 - 3D □□□ 080-31 04D	
	30 - 5.1	280 - 560	65.079	GST07 - 3D □□□ 080-31 04D	
	27 - 4.8	302 - 359	70.156	GST06 - 3D □□□ 080-31 04D	
	27 - 4.8	302 - 603	70.156	GST07 - 3D □□□ 080-31 04D	
	24 - 4.1	306 - 332	80.952	GST06 - 3D □□□ 080-31 04D	
	24 - 4.2	343 - 686	79.762	GST07 - 3D □□□ 080-31 04D	
	22 - 3.8	340 - 370	87.267	GST06 - 3D □□□ 080-31 04D	
	22 - 3.9	370 - 706	85.983	GST07 - 3D □□□ 080-31 04D	
	19 - 3.4	309 - 335	99.167	GST06 - 3D □□□ 080-31 04D	
	20 - 3.4	420 - 710	97.708	GST07 - 3D □□□ 080-31 04D	
	17 - 3	481 - 706	111.915	GST07 - 3D □□□ 080-31 04D	
	17 - 2.9	488 - 977	113.585	GST09 - 3D □□□ 080-31 04D	
	15 - 2.6	547 - 710	127.176	GST07 - 3D □□□ 080-31 04D	
	15 - 2.6	555 - 1110	129.074	GST09 - 3D □□□ 080-31 04D	
	14 - 2.4	599 - 706	139.211	GST07 - 3D □□□ 080-31 04D	
	14 - 2.4	608 - 1215	141.289	GST09 - 3D □□□ 080-31 04D	
	12 - 2.1	654 - 710	158.194	GST07 - 3D □□□ 080-31 04D	
12 - 2.1	690 - 1381	160.556	GST09 - 3D □□□ 080-31 04D		
11 - 1.8	786 - 1573	182.845	GST09 - 3D □□□ 080-31 04D		
11 - 1.9	775 - 1550	180.156	GST11 - 3D □□□ 080-31 04D		
9.2 - 1.6	894 - 1623	207.778	GST09 - 3D □□□ 080-31 04D		
9.2 - 1.6	894 - 1787	207.778	GST11 - 3D □□□ 080-31 04D		
8.1 - 1.4	1018 - 1613	236.622	GST09 - 3D □□□ 080-31 04D		
8.1 - 1.4	1018 - 2035	236.622	GST11 - 3D □□□ 080-31 04D		

Thermal limit not considered (see note on page 3-12)

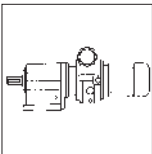
Disco variable speed drives

Selection tables with helical gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page		
	n ₂ [min ⁻¹]	M ₂ [Nm]					
1.1 kW				GST □□ - 3D	4-24		
	7.6 - 1.3	1084 - 1623	252.167	GST09 - 3D □□□ 080-31 04D			
	7.6 - 1.3	1084 - 2169	252.167	GST11 - 3D □□□ 080-31 04D			
	7.1 - 1.2	1156 - 1623	268.889	GST09 - 3D □□□ 080-31 04D			
	7.1 - 1.2	1156 - 2313	268.889	GST11 - 3D □□□ 080-31 04D			
	5.9 - 1	1403 - 1623	326.333	GST09 - 3D □□□ 080-31 04D			
	5.9 - 1	1403 - 2807	326.333	GST11 - 3D □□□ 080-31 04D			
	5.3 - 0.9	1561 - 2695	363.000	GST11 - 3D □□□ 080-31 04D			
	5.3 - 0.9	1561 - 3122	363.000	GST14 - 3D □□□ 080-31 04D			
	4.7 - 0.8	1774 - 2848	412.500	GST11 - 3D □□□ 080-31 04D			
	4.7 - 0.8	1774 - 3548	412.500	GST14 - 3D □□□ 080-31 04D			
	1.5 kW					GST □□ - 1D	4-18
		594 - 103	19 - 38	1.600		GST05 - 1D □□□ 090-32 05E	
		594 - 103	19 - 38	1.600		GST06 - 1D □□□ 090-32 05E	
464 - 81		24 - 48	2.048	GST05 - 1D □□□ 090-32 05E			
464 - 81		24 - 48	2.048	GST06 - 1D □□□ 090-32 05E			
475 - 83		24 - 47	2.000	GST07 - 1D □□□ 090-32 05E			
424 - 74		26 - 53	2.240	GST05 - 1D □□□ 090-32 05E			
424 - 74		26 - 53	2.240	GST06 - 1D □□□ 090-32 05E			
424 - 74		26 - 53	2.240	GST07 - 1D □□□ 090-32 05E			
333 - 58		34 - 53	2.857	GST05 - 1D □□□ 090-32 05E			
333 - 58		34 - 68	2.857	GST06 - 1D □□□ 090-32 05E			
333 - 58		34 - 68	2.857	GST07 - 1D □□□ 090-32 05E			
271 - 47		41 - 54	3.500	GST05 - 1D □□□ 090-32 05E			
271 - 47		41 - 83	3.500	GST06 - 1D □□□ 090-32 05E			
209 - 36		54 - 105	4.556	GST06 - 1D □□□ 090-32 05E			
209 - 36		54 - 108	4.556	GST07 - 1D □□□ 090-32 05E			
168 - 29		67 - 105	5.667	GST06 - 1D □□□ 090-32 05E			
170 - 30		66 - 132	5.583	GST07 - 1D □□□ 090-32 05E			
130 - 23		87 - 173	7.333	GST07 - 1D □□□ 090-32 05E			
107 - 19		105 - 183	8.900	GST07 - 1D □□□ 090-32 05E			
				GST □□ - 2D	4-21		
321 - 56		34 - 63	2.956	GST05 - 2D □□□ 090-32 05E			
313 - 54		35 - 71	3.033	GST06 - 2D □□□ 090-32 05E			
234 - 41		47 - 81	4.053	GST05 - 2D □□□ 090-32 05E			
228 - 40		48 - 97	4.160	GST06 - 2D □□□ 090-32 05E			
183 - 32		60 - 90	5.187	GST05 - 2D □□□ 090-32 05E			
178 - 31		62 - 124	5.324	GST06 - 2D □□□ 090-32 05E			
148 - 26		75 - 105	6.400	GST05 - 2D □□□ 090-32 05E			
148 - 26		75 - 149	6.400	GST06 - 2D □□□ 090-32 05E			
116 - 20		95 - 115	8.163	GST05 - 2D □□□ 090-32 05E			
116 - 20		95 - 190	8.163	GST06 - 2D □□□ 090-32 05E			
95 - 17		116 - 124	10.000	GST05 - 2D □□□ 090-32 05E			
95 - 17		116 - 233	10.000	GST06 - 2D □□□ 090-32 05E			
76 - 13		146 - 293	12.571	GST06 - 2D □□□ 090-32 05E			
62 - 11	179 - 318	15.400	GST06 - 2D □□□ 090-32 05E				
47 - 8.2	233 - 350	20.044	GST06 - 2D □□□ 090-32 05E				
47 - 8.2	233 - 467	20.044	GST07 - 2D □□□ 090-32 05E				
38 - 6.6	290 - 360	24.933	GST06 - 2D □□□ 090-32 05E				

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

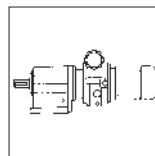
Selection tables with helical gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
1.5 kW	39 - 6.7	286 - 572	24.567	GST □□ - 2D GST07 - 2D □□□ 090-32 05E	4-21	
	29 - 5.1	376 - 706	32.267	GST07 - 2D □□□ 090-32 05E		
	24 - 4.2	456 - 706	39.160	GST07 - 2D □□□ 090-32 05E		
	24 - 4.2	456 - 912	39.160	GST09 - 2D □□□ 090-32 05E		
	21 - 3.7	518 - 707	44.500	GST07 - 2D □□□ 090-32 05E		
	21 - 3.7	518 - 1036	44.500	GST09 - 2D □□□ 090-32 05E		
	19 - 3.3	576 - 1002	49.500	GST09 - 2D □□□ 090-32 05E		
	19 - 3.3	576 - 1153	49.500	GST11 - 2D □□□ 090-32 05E		
	17 - 2.9	655 - 1138	56.250	GST09 - 2D □□□ 090-32 05E		
	17 - 2.9	655 - 1310	56.250	GST11 - 2D □□□ 090-32 05E		
	18 - 3.1	618 - 706	53.900	GST □□ - 3D GST07 - 3D □□□ 090-32 05E		4-24
	18 - 3.1	608 - 1217	53.044	GST09 - 3D □□□ 090-32 05E		
	16 - 2.8	665 - 1330	57.968	GST11 - 3D □□□ 090-32 05E		
	16 - 2.7	691 - 1383	60.278	GST09 - 3D □□□ 090-32 05E		
	16 - 2.7	702 - 1405	61.250	GST11 - 3D □□□ 090-32 05E		
	14 - 2.4	706 - 706	70.156	GST07 - 3D □□□ 090-32 05E		
	13 - 2.3	824 - 1477	71.867	GST09 - 3D □□□ 090-32 05E		
	13 - 2.3	814 - 1629	71.011	GST11 - 3D □□□ 090-32 05E		
	12 - 2.1	710 - 710	79.762	GST07 - 3D □□□ 090-32 05E		
	12 - 2	937 - 1584	81.667	GST09 - 3D □□□ 090-32 05E		
	12 - 2	925 - 1851	80.694	GST11 - 3D □□□ 090-32 05E		
	11 - 1.9	706 - 706	85.983	GST07 - 3D □□□ 090-32 05E		
	10 - 1.8	1073 - 1613	93.541	GST09 - 3D □□□ 090-32 05E		
	11 - 1.9	1001 - 2002	87.267	GST11 - 3D □□□ 090-32 05E		
	9.7 - 1.7	710 - 710	97.708	GST07 - 3D □□□ 090-32 05E		
	9.6 - 1.7	1137 - 1596	99.167	GST09 - 3D □□□ 090-32 05E		
	9.6 - 1.7	1137 - 2275	99.167	GST11 - 3D □□□ 090-32 05E		
	8.4 - 1.5	1303 - 1613	113.585	GST09 - 3D □□□ 090-32 05E		
	8.4 - 1.5	1295 - 2590	112.933	GST11 - 3D □□□ 090-32 05E		
	7.4 - 1.3	1480 - 1612	129.074	GST09 - 3D □□□ 090-32 05E		
	7.4 - 1.3	1480 - 2810	129.074	GST11 - 3D □□□ 090-32 05E		
	6.7 - 1.2	1613 - 1613	141.289	GST09 - 3D □□□ 090-32 05E		
	6.5 - 1.1	1686 - 2695	146.993	GST11 - 3D □□□ 090-32 05E		
	6.8 - 1.2	1596 - 3193	139.211	GST14 - 3D □□□ 090-32 05E		
	5.9 - 1	1623 - 1623	160.556	GST09 - 3D □□□ 090-32 05E		
	6 - 1	1814 - 2810	158.194	GST11 - 3D □□□ 090-32 05E		
	6 - 1	1814 - 3628	158.194	GST14 - 3D □□□ 090-32 05E		
	5.3 - 0.9	2066 - 2695	180.156	GST11 - 3D □□□ 090-32 05E		
	5.6 - 1	1962 - 3925	171.111	GST14 - 3D □□□ 090-32 05E		
	4.6 - 0.8	2383 - 2810	207.778	GST11 - 3D □□□ 090-32 05E		
	4.6 - 0.8	2348 - 4696	204.722	GST14 - 3D □□□ 090-32 05E		
	4 - 0.7	2695 - 2695	236.622	GST11 - 3D □□□ 090-32 05E		
4 - 0.7	2714 - 5427	236.622	GST14 - 3D □□□ 090-32 05E			
3.8 - 0.7	2810 - 2810	252.167	GST11 - 3D □□□ 090-32 05E			
3.8 - 0.7	2849 - 5699	248.458	GST14 - 3D □□□ 090-32 05E			
3.5 - 0.6	2848 - 2848	268.889	GST11 - 3D □□□ 090-32 05E			
3.5 - 0.6	3084 - 5920	268.889	GST14 - 3D □□□ 090-32 05E			
2.9 - 0.5	2848 - 2848	326.333	GST11 - 3D □□□ 090-32 05E			
2.9 - 0.5	3742 - 5920	326.333	GST14 - 3D □□□ 090-32 05E			

Thermal limit not considered (see note on page 3-12)

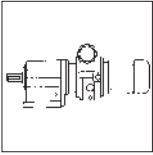
Disco variable speed drives

Selection tables with helical gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
1.5 kW				GST □□ - 3D	4-24
	2.6 - 0.5	4163 - 5779	363.000	GST14 - 3D □□□ 090-32 05E	
	2.3 - 0.4	4731 - 5920	412.500	GST14 - 3D □□□ 090-32 05E	
2.2 kW				GST □□ - 1D	4-18
	1200 - 209	14 - 28	1.600	GST05 - 1D □□□ 090-31 05E	
	1200 - 209	14 - 28	1.600	GST06 - 1D □□□ 090-31 05E	
	938 - 164	18 - 36	2.048	GST05 - 1D □□□ 090-31 05E	
	938 - 164	18 - 36	2.048	GST06 - 1D □□□ 090-31 05E	
	960 - 168	18 - 35	2.000	GST07 - 1D □□□ 090-31 05E	
	857 - 150	20 - 40	2.240	GST05 - 1D □□□ 090-31 05E	
	857 - 150	20 - 40	2.240	GST06 - 1D □□□ 090-31 05E	
	857 - 150	20 - 40	2.240	GST07 - 1D □□□ 090-31 05E	
	672 - 117	25 - 51	2.857	GST05 - 1D □□□ 090-31 05E	
	672 - 117	25 - 51	2.857	GST06 - 1D □□□ 090-31 05E	
	672 - 117	25 - 51	2.857	GST07 - 1D □□□ 090-31 05E	
	549 - 96	31 - 54	3.500	GST05 - 1D □□□ 090-31 05E	
	549 - 96	31 - 62	3.500	GST06 - 1D □□□ 090-31 05E	
	549 - 96	31 - 62	3.500	GST07 - 1D □□□ 090-31 05E	
	421 - 74	40 - 81	4.556	GST06 - 1D □□□ 090-31 05E	
	421 - 74	40 - 81	4.556	GST07 - 1D □□□ 090-31 05E	
	339 - 59	50 - 100	5.667	GST06 - 1D □□□ 090-31 05E	
	344 - 60	50 - 99	5.583	GST07 - 1D □□□ 090-31 05E	
	262 - 46	65 - 130	7.333	GST07 - 1D □□□ 090-31 05E	
	216 - 38	79 - 158	8.900	GST07 - 1D □□□ 090-31 05E	
				GST □□ - 2D	4-21
	650 - 113	26 - 52	2.956	GST05 - 2D □□□ 090-31 05E	
	633 - 110	26 - 53	3.033	GST06 - 2D □□□ 090-31 05E	
	474 - 83	35 - 71	4.053	GST05 - 2D □□□ 090-31 05E	
	462 - 81	36 - 73	4.160	GST06 - 2D □□□ 090-31 05E	
	370 - 65	45 - 90	5.187	GST05 - 2D □□□ 090-31 05E	
	361 - 63	46 - 93	5.324	GST06 - 2D □□□ 090-31 05E	
	300 - 52	56 - 105	6.400	GST05 - 2D □□□ 090-31 05E	
	300 - 52	56 - 112	6.400	GST06 - 2D □□□ 090-31 05E	
	235 - 41	71 - 115	8.163	GST05 - 2D □□□ 090-31 05E	
	235 - 41	71 - 143	8.163	GST06 - 2D □□□ 090-31 05E	
	192 - 34	87 - 124	10.000	GST05 - 2D □□□ 090-31 05E	
	192 - 34	87 - 175	10.000	GST06 - 2D □□□ 090-31 05E	
	153 - 27	110 - 220	12.571	GST06 - 2D □□□ 090-31 05E	
	125 - 22	134 - 269	15.400	GST06 - 2D □□□ 090-31 05E	
	96 - 17	175 - 350	20.044	GST06 - 2D □□□ 090-31 05E	
	96 - 17	175 - 350	20.044	GST07 - 2D □□□ 090-31 05E	
	77 - 13	218 - 360	24.933	GST06 - 2D □□□ 090-31 05E	
	78 - 14	215 - 429	24.567	GST07 - 2D □□□ 090-31 05E	
	60 - 10	282 - 564	32.267	GST07 - 2D □□□ 090-31 05E	
	49 - 8.6	342 - 684	39.160	GST07 - 2D □□□ 090-31 05E	
39 - 6.8	432 - 864	49.500	GST09 - 2D □□□ 090-31 05E		
34 - 6	491 - 982	56.250	GST09 - 2D □□□ 090-31 05E		

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

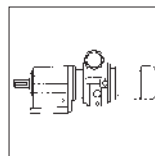
Selection tables with helical gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
2.2 kW				GST □□ - 3D	4-24	
	36 - 6.2	464 - 706	53.900	GST07 - 3D □□□ 090-31 05E		
	36 - 6.3	456 - 912	53.044	GST09 - 3D □□□ 090-31 05E		
	32 - 5.6	518 - 1037	60.278	GST09 - 3D □□□ 090-31 05E		
	27 - 4.8	603 - 706	70.156	GST07 - 3D □□□ 090-31 05E		
	27 - 4.7	618 - 1236	71.867	GST09 - 3D □□□ 090-31 05E		
	24 - 4.2	654 - 710	79.762	GST07 - 3D □□□ 090-31 05E		
	24 - 4.1	702 - 1405	81.667	GST09 - 3D □□□ 090-31 05E		
	22 - 3.9	650 - 706	85.983	GST07 - 3D □□□ 090-31 05E		
	21 - 3.6	805 - 1609	93.541	GST09 - 3D □□□ 090-31 05E		
	20 - 3.4	654 - 710	97.708	GST07 - 3D □□□ 090-31 05E		
	19 - 3.4	853 - 1596	99.167	GST09 - 3D □□□ 090-31 05E		
	17 - 2.9	977 - 1613	113.585	GST09 - 3D □□□ 090-31 05E		
	17 - 3	971 - 1943	112.933	GST11 - 3D □□□ 090-31 05E		
	15 - 2.6	1110 - 1612	129.074	GST09 - 3D □□□ 090-31 05E		
	15 - 2.6	1110 - 2220	129.074	GST11 - 3D □□□ 090-31 05E		
	14 - 2.4	1215 - 1613	141.289	GST09 - 3D □□□ 090-31 05E		
	13 - 2.3	1264 - 2529	146.993	GST11 - 3D □□□ 090-31 05E		
	12 - 2.1	1381 - 1623	160.556	GST09 - 3D □□□ 090-31 05E		
	12 - 2.1	1361 - 2721	158.194	GST11 - 3D □□□ 090-31 05E		
	11 - 1.9	1550 - 2695	180.156	GST11 - 3D □□□ 090-31 05E		
	11 - 2	1472 - 2943	171.111	GST14 - 3D □□□ 090-31 05E		
	9.2 - 1.6	1787 - 2810	207.778	GST11 - 3D □□□ 090-31 05E		
	9.4 - 1.6	1761 - 3522	204.722	GST14 - 3D □□□ 090-31 05E		
	8.1 - 1.4	2035 - 2695	236.622	GST11 - 3D □□□ 090-31 05E		
	8.1 - 1.4	2035 - 4070	236.622	GST14 - 3D □□□ 090-31 05E		
	7.6 - 1.3	2169 - 2810	252.167	GST11 - 3D □□□ 090-31 05E		
	7.7 - 1.3	2137 - 4274	248.458	GST14 - 3D □□□ 090-31 05E		
	7.1 - 1.2	2313 - 2848	268.889	GST11 - 3D □□□ 090-31 05E		
	7.1 - 1.2	2313 - 4625	268.889	GST14 - 3D □□□ 090-31 05E		
	5.9 - 1	2623 - 2848	326.333	GST11 - 3D □□□ 090-31 05E		
	5.9 - 1	2807 - 5614	326.333	GST14 - 3D □□□ 090-31 05E		
5.3 - 0.9	3122 - 5779	363.000	GST14 - 3D □□□ 090-31 05E			
4.7 - 0.8	3548 - 5920	412.500	GST14 - 3D □□□ 090-31 05E			
3 kW				GST □□ - 1D	4-18	
	615 - 108	35 - 70	1.625	GST07 - 1D □□□ 100-32 06G		
	500 - 88	43 - 87	2.000	GST07 - 1D □□□ 100-32 06G		
	446 - 78	49 - 97	2.240	GST07 - 1D □□□ 100-32 06G		
	350 - 61	62 - 124	2.857	GST07 - 1D □□□ 100-32 06G		
	286 - 50	76 - 152	3.500	GST07 - 1D □□□ 100-32 06G		
	214 - 38	101 - 202	4.667	GST09 - 1D □□□ 100-32 06G		
	176 - 31	123 - 246	5.667	GST09 - 1D □□□ 100-32 06G		
				GST □□ - 2D		4-21
	328 - 57	65 - 130	3.048	GST07 - 2D □□□ 100-32 06G		
	237 - 41	90 - 180	4.225	GST07 - 2D □□□ 100-32 06G		
	192 - 34	111 - 222	5.200	GST07 - 2D □□□ 100-32 06G		
	156 - 27	137 - 273	6.400	GST07 - 2D □□□ 100-32 06G		

Thermal limit not considered (see note on page 3-12)

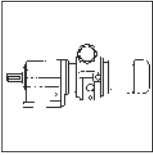
Disco variable speed drives

Selection tables with helical gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
3 kW	123 - 22	173 - 347	8.125	GST □□ - 2D GST07 - 2D □□□ 100-32 06G	4-21	
	101 - 18	210 - 421	9.856	GST07 - 2D □□□ 100-32 06G		
	80 - 14	268 - 537	12.571	GST07 - 2D □□□ 100-32 06G		
	65 - 11	329 - 644	15.400	GST07 - 2D □□□ 100-32 06G		
	49 - 8.5	438 - 877	20.533	GST09 - 2D □□□ 100-32 06G		
	40 - 7	532 - 1064	24.933	GST09 - 2D □□□ 100-32 06G		
	31 - 5.4	689 - 1377	32.267	GST11 - 2D □□□ 100-32 06G		
	26 - 4.5	836 - 1672	39.160	GST11 - 2D □□□ 100-32 06G		
	22 - 3.9	950 - 1900	44.500	GST11 - 2D □□□ 100-32 06G		
	20 - 3.5	1057 - 2113	49.500	GST14 - 2D □□□ 100-32 06G		
	18 - 3.1	1201 - 2401	56.250	GST14 - 2D □□□ 100-32 06G		
	17 - 3	1219 - 2438	57.968	GST □□ - 3D GST11 - 3D □□□ 100-32 06G		4-24
	16 - 2.9	1288 - 2576	61.250	GST11 - 3D □□□ 100-32 06G		
	14 - 2.5	1493 - 2637	71.011	GST11 - 3D □□□ 100-32 06G		
	12 - 2.2	1697 - 2787	80.694	GST11 - 3D □□□ 100-32 06G		
	11 - 2	1835 - 2656	87.267	GST11 - 3D □□□ 100-32 06G		
	11 - 1.9	1967 - 3933	93.541	GST14 - 3D □□□ 100-32 06G		
	10 - 1.8	2085 - 2810	99.167	GST11 - 3D □□□ 100-32 06G		
	10 - 1.8	2022 - 4043	96.157	GST14 - 3D □□□ 100-32 06G		
	8.9 - 1.6	2374 - 2695	112.933	GST11 - 3D □□□ 100-32 06G		
	9.4 - 1.6	2235 - 4470	106.296	GST14 - 3D □□□ 100-32 06G		
	7.7 - 1.3	2739 - 5478	130.278	GST14 - 3D □□□ 100-32 06G		
	7.2 - 1.3	2927 - 5736	139.211	GST14 - 3D □□□ 100-32 06G		
	6.3 - 1.1	3326 - 5920	158.194	GST14 - 3D □□□ 100-32 06G		
	5.8 - 1	3598 - 5920	171.111	GST14 - 3D □□□ 100-32 06G		
	4 kW	615 - 108	51 - 102	1.625	GST □□ - 1D GST07 - 1D □□□ 112-22 07G	
		500 - 88	63 - 124	2.000	GST07 - 1D □□□ 112-22 07G	
		446 - 78	71 - 135	2.240	GST07 - 1D □□□ 112-22 07G	
		350 - 61	90 - 159	2.857	GST07 - 1D □□□ 112-22 07G	
		286 - 50	110 - 172	3.500	GST07 - 1D □□□ 112-22 07G	
214 - 38		147 - 294	4.667	GST09 - 1D □□□ 112-22 07G		
176 - 31		179 - 357	5.667	GST09 - 1D □□□ 112-22 07G		
328 - 57		95 - 189	3.048	GST □□ - 2D GST07 - 2D □□□ 112-22 07G	4-21	
237 - 41		131 - 262	4.225	GST07 - 2D □□□ 112-22 07G		
192 - 34		161 - 323	5.200	GST07 - 2D □□□ 112-22 07G		
156 - 27		199 - 397	6.400	GST07 - 2D □□□ 112-22 07G		
123 - 22		252 - 505	8.125	GST07 - 2D □□□ 112-22 07G		
101 - 18		306 - 549	9.856	GST07 - 2D □□□ 112-22 07G		
80 - 14		390 - 600	12.571	GST07 - 2D □□□ 112-22 07G		
65 - 11		478 - 644	15.400	GST07 - 2D □□□ 112-22 07G		

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

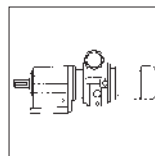
Selection tables with helical gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
4 kW	66 - 12	471 - 941	15.156	GST □□ - 2D GST09 - 2D □□□ 112-22 07G	4-21	
	49 - 8.5	638 - 1275	20.533	GST09 - 2D □□□ 112-22 07G		
	40 - 7	774 - 1548	24.933	GST09 - 2D □□□ 112-22 07G		
	31 - 5.4	1002 - 2004	32.267	GST11 - 2D □□□ 112-22 07G		
	26 - 4.5	1216 - 2352	39.160	GST11 - 2D □□□ 112-22 07G		
	20 - 3.5	1537 - 2888	49.500	GST14 - 2D □□□ 112-22 07G		
	18 - 3.1	1746 - 3282	56.250	GST14 - 2D □□□ 112-22 07G		
	17 - 3	1773 - 2577	57.968	GST □□ - 3D GST11 - 3D □□□ 112-22 07G		4-24
	19 - 3.3	1625 - 3251	53.148	GST14 - 3D □□□ 112-22 07G		
	16 - 2.9	1873 - 2725	61.250	GST11 - 3D □□□ 112-22 07G		
	17 - 3	1814 - 3628	59.321	GST14 - 3D □□□ 112-22 07G		
	14 - 2.5	2172 - 2637	71.011	GST11 - 3D □□□ 112-22 07G		
	14 - 2.5	2111 - 4223	69.042	GST14 - 3D □□□ 112-22 07G		
	12 - 2.2	2468 - 2787	80.694	GST11 - 3D □□□ 112-22 07G		
	13 - 2.2	2399 - 4799	78.457	GST14 - 3D □□□ 112-22 07G		
	11 - 2	2656 - 2656	87.267	GST11 - 3D □□□ 112-22 07G		
	11 - 1.9	2861 - 5524	93.541	GST14 - 3D □□□ 112-22 07G		
	10 - 1.8	2810 - 2810	99.167	GST11 - 3D □□□ 112-22 07G		
	10 - 1.8	2941 - 5881	96.157	GST14 - 3D □□□ 112-22 07G		
	8.9 - 1.6	2695 - 2695	112.933	GST11 - 3D □□□ 112-22 07G		
	9.4 - 1.6	3251 - 5920	106.296	GST14 - 3D □□□ 112-22 07G		
	7.7 - 1.3	3984 - 5920	130.278	GST14 - 3D □□□ 112-22 07G		
	7.2 - 1.3	4257 - 5736	139.211	GST14 - 3D □□□ 112-22 07G		
	6.3 - 1.1	4838 - 5920	158.194	GST14 - 3D □□□ 112-22 07G		
	5.8 - 1	5233 - 5920	171.111	GST14 - 3D □□□ 112-22 07G		
	5.5 kW	615 - 123	72 - 106	1.625	GST □□ - 1D GST07 - 1D □□□ 132-12 18H	
		641 - 128	69 - 138	1.560	GST09 - 1D □□□ 132-12 18H	
		500 - 100	89 - 124	2.000	GST07 - 1D □□□ 132-12 18H	
		488 - 98	91 - 182	2.048	GST09 - 1D □□□ 132-12 18H	
		446 - 89	99 - 135	2.240	GST07 - 1D □□□ 132-12 18H	
429 - 86		103 - 207	2.333	GST09 - 1D □□□ 132-12 18H		
356 - 71		125 - 249	2.810	GST09 - 1D □□□ 132-12 18H		
290 - 58		153 - 305	3.444	GST09 - 1D □□□ 132-12 18H		
328 - 66		133 - 266	3.048	GST □□ - 2D GST07 - 2D □□□ 132-12 18H	4-21	
299 - 60		146 - 293	3.350	GST07 - 2D □□□ 132-12 18H		
237 - 47		184 - 369	4.225	GST07 - 2D □□□ 132-12 18H		
247 - 49		177 - 354	4.056	GST09 - 2D □□□ 132-12 18H		
192 - 38		227 - 427	5.200	GST07 - 2D □□□ 132-12 18H		
188 - 38		232 - 465	5.324	GST09 - 2D □□□ 132-12 18H		
156 - 31		279 - 463	6.400	GST07 - 2D □□□ 132-12 18H		
150 - 30		291 - 582	6.667	GST09 - 2D □□□ 132-12 18H		
123 - 25		355 - 539	8.125	GST07 - 2D □□□ 132-12 18H		

Thermal limit not considered (see note on page 3-12)

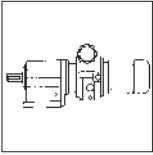
Disco variable speed drives

Selection tables with helical gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
5.5 kW	125 - 25	350 - 701	8.027	GST □□ - 2D GST09 - 2D □□□ 132-12 18H	4-21	
	101 - 20	430 - 549	9.856	GST07 - 2D □□□ 132-12 18H		
	97 - 19	448 - 896	10.267	GST09 - 2D □□□ 132-12 18H		
	81 - 16	540 - 1079	12.362	GST09 - 2D □□□ 132-12 18H		
	66 - 13	662 - 1323	15.156	GST09 - 2D □□□ 132-12 18H		
	49 - 9.9	886 - 1772	20.289	GST11 - 2D □□□ 132-12 18H		
	40 - 8	1089 - 2177	24.933	GST11 - 2D □□□ 132-12 18H		
	31 - 6.2	1409 - 2818	32.267	GST14 - 2D □□□ 132-12 18H		
	26 - 5.1	1710 - 3419	39.160	GST14 - 2D □□□ 132-12 18H		
	23 - 4.7	1831 - 3662	42.580	GST14 - 3D □□□ 132-12 18H		
	21 - 4.1	2081 - 4162	48.386	GST14 - 3D □□□ 132-12 18H		
	19 - 3.8	2286 - 4571	53.148	GST14 - 3D □□□ 132-12 18H		
	17 - 3.4	2551 - 5102	59.321	GST14 - 3D □□□ 132-12 18H		
	14 - 2.9	2969 - 4917	69.042	GST14 - 3D □□□ 132-12 18H		
	13 - 2.5	3374 - 5587	78.457	GST14 - 3D □□□ 132-12 18H		
	10 - 2.1	4135 - 5882	96.157	GST14 - 3D □□□ 132-12 18H		
7.5 kW	615 - 123	93 - 106	1.625	GST □□ - 1D GST07 - 1D □□□ 132-22 08H	4-18	
	641 - 128	89 - 178	1.560	GST09 - 1D □□□ 132-22 08H		
	500 - 100	114 - 124	2.000	GST07 - 1D □□□ 132-22 08H		
	488 - 98	117 - 234	2.048	GST09 - 1D □□□ 132-22 08H		
	446 - 89	128 - 135	2.240	GST07 - 1D □□□ 132-22 08H		
	429 - 86	133 - 267	2.333	GST09 - 1D □□□ 132-22 08H		
	356 - 71	161 - 321	2.810	GST09 - 1D □□□ 132-22 08H		
	290 - 58	197 - 394	3.444	GST09 - 1D □□□ 132-22 08H		
	328 - 66	172 - 343	3.048	GST □□ - 2D GST07 - 2D □□□ 132-22 08H		4-21
	237 - 47	238 - 398	4.225	GST07 - 2D □□□ 132-22 08H		
	247 - 49	228 - 456	4.056	GST09 - 2D □□□ 132-22 08H		
	192 - 38	293 - 427	5.200	GST07 - 2D □□□ 132-22 08H		
	188 - 38	300 - 599	5.324	GST09 - 2D □□□ 132-22 08H		
	156 - 31	360 - 463	6.400	GST07 - 2D □□□ 132-22 08H		
	150 - 30	375 - 750	6.667	GST09 - 2D □□□ 132-22 08H		
	123 - 25	457 - 539	8.125	GST07 - 2D □□□ 132-22 08H		
	125 - 25	452 - 903	8.027	GST09 - 2D □□□ 132-22 08H		
	101 - 20	549 - 549	9.856	GST07 - 2D □□□ 132-22 08H		
	97 - 19	578 - 1155	10.267	GST09 - 2D □□□ 132-22 08H		
	81 - 16	696 - 1253	12.362	GST09 - 2D □□□ 132-22 08H		
	80 - 16	707 - 1415	12.571	GST11 - 2D □□□ 132-22 08H		
	66 - 13	853 - 1340	15.156	GST09 - 2D □□□ 132-22 08H		
	65 - 13	867 - 1733	15.400	GST11 - 2D □□□ 132-22 08H		
	49 - 9.9	1142 - 2283	20.289	GST11 - 2D □□□ 132-22 08H		
	40 - 8	1403 - 2777	24.933	GST11 - 2D □□□ 132-22 08H		
	41 - 8.1	1382 - 2765	24.567	GST14 - 2D □□□ 132-22 08H		
31 - 6.2	1816 - 3631	32.267	GST14 - 2D □□□ 132-22 08H			

Thermal limit not considered (see note on page 3-12)

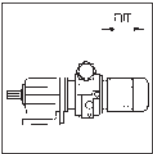


Disco variable speed drives

Selection tables with helical gearboxes

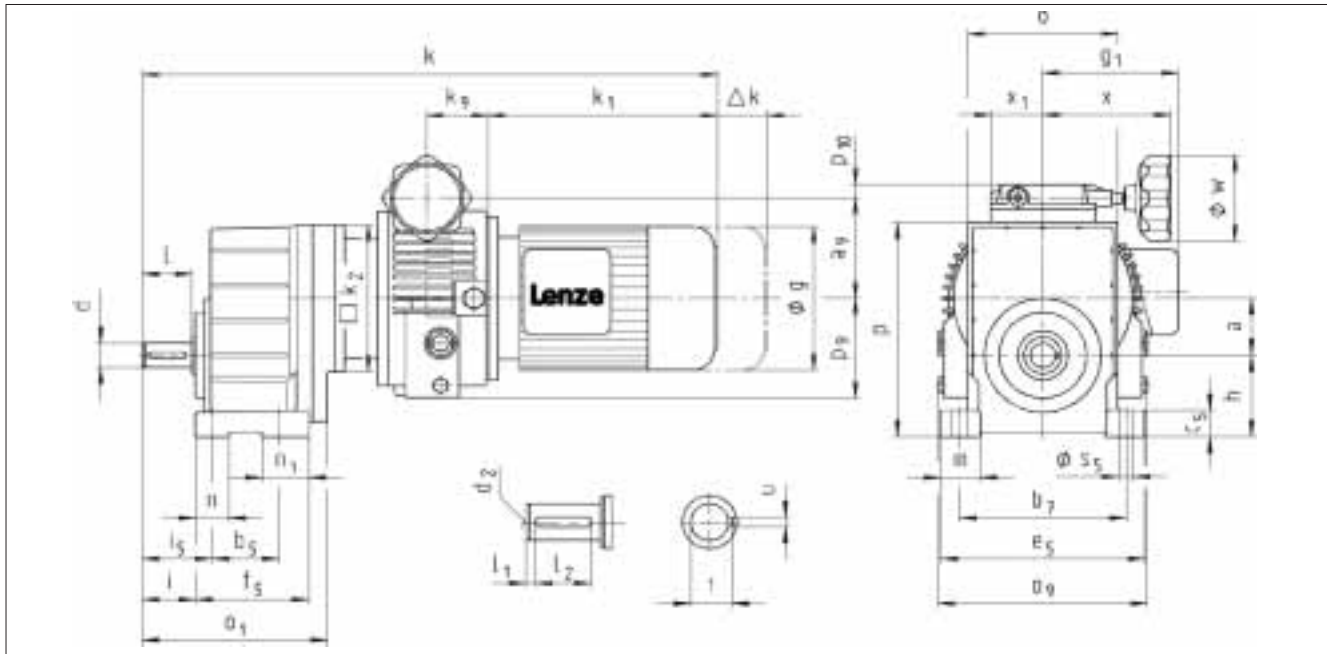
P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
7.5 kW	26 - 5.1	2204 - 4407	39.160	GST □□ - 1D GST14 - 2D □□□ 132-22 08H GST14 - 2D □□□ 132-22 08H	4-21
	22 - 4.5	2504 - 5008	44.500		
	21 - 4.1	2682 - 4843	48.386	GST □□ - 3D GST14 - 3D □□□ 132-22 08H GST14 - 3D □□□ 132-22 08H GST14 - 3D □□□ 132-22 08H GST14 - 3D □□□ 132-22 08H GST14 - 3D □□□ 132-22 08H GST14 - 3D □□□ 132-22 08H GST14 - 3D □□□ 132-22 08H	4-24
	19 - 3.8	2946 - 4779	53.148		
	17 - 3.4	3288 - 5267	59.321		
	14 - 2.9	3827 - 4917	69.042		
	13 - 2.5	4349 - 5587	78.457		
	10 - 2.1	5330 - 5882	96.157		

Thermal limit not considered (see note on page 3-12)



DISCO variable speed drives

Dimensions with helical gearboxes



4

DISCO variable speed drives		Drive size												
GST □□ - 1 D VBR		071-1□ 02	071-3□ 03	080-11 04 080-3□ 04	090-11 05 090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08					
Motor	g	143	143	160	180	206	222	274	274					
	g₁ Without options	128	128	137	147	140	174	196	196					
	Brake motor	131	131	142	154	151	174	212	212					
	k₁	237	237	267	350	316	379	450	450					
	Δk Brake	54	54	36	48	111	80	63	63					
DISCO	a₉	83	86	103	123	149		190						
	k₂	145	145	180	180	265		300						
	k₉	42	50	58	74	82		104						
	o₉	150	175	215	253	305		379						
	p₉	65	83	98	122	145		176						
	p₁₀	14	14	17	17	17		26						
	w	70	70	105	105	105		160						
	x	105	105	152	152	152		195 1)						
	x₁	43	43	63	63	63		111						
Gearbox size	Gearbox					Total length								
	o*	o₁	p*	h**	a	k								
GST 04	100	134	138	50	36	508	521	581	714					
GST 05	115	165	168	63	45	529	542	602	737					
GST 06	145	191	211	80	56			625	737					
GST 07	180	223	264	100	70					766	763	826	933	933
GST 09	222	271	329	125	89					806	806	869	976	976

Gearbox size	Solid shaft							Foot										
	d k6	l	l₁	l₂	d₂	u	t	b₅	b₇	c₅	e₅	f₅	i	i₅	m	n	n₁	s₅
GST 04	16	32	6	20	M5	5	18	55	105	17	128	80	35	45	24	20	25	9
GST 05	20	40	6	28	M6	6	22.5	70	125	22	154	99	43	56	32	26	29	11
GST 06	25	50	4	40	M10	8	28	72	160	27	194	115	53	68	37	30	43	13.5
GST 07	30	60	7.5	45	M10	8	33	80	200	35	245	137	64	84	47.5	40	57	18
GST 09	40	80	8.5	63	M16	12	43	105	245	43	296	161	84	107	50.5	45	56	18

Dimensions in [mm]

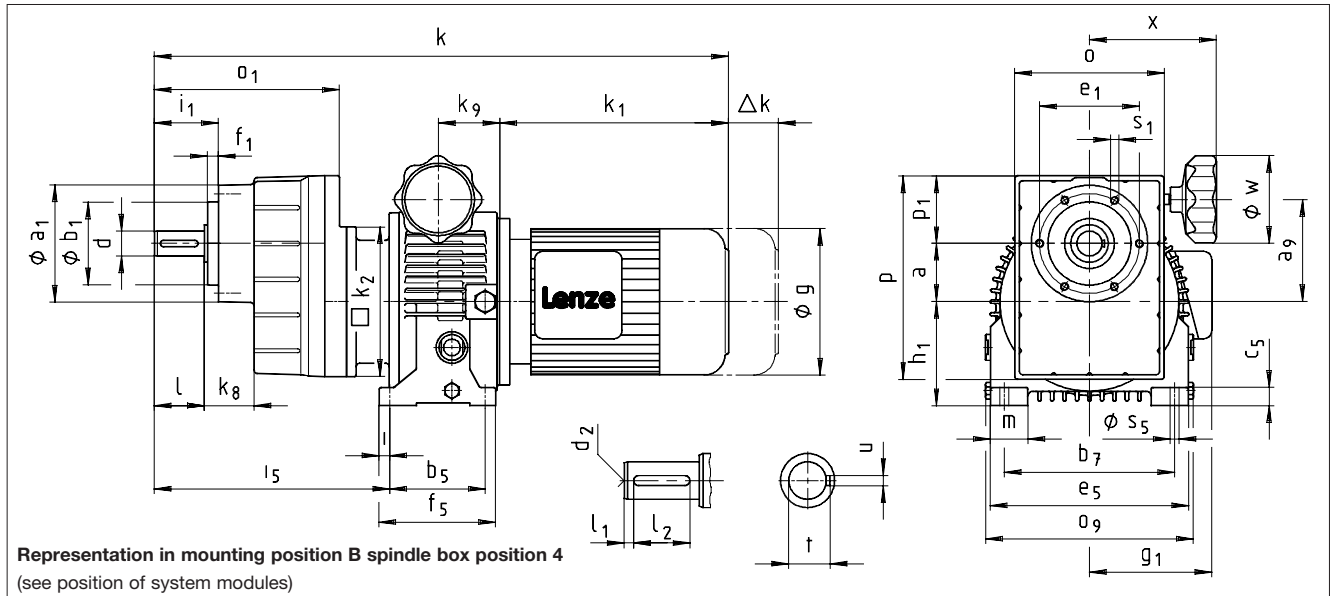
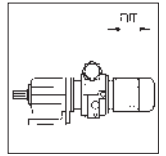
1) Plus 80 mm handle

* Observe dimension k₂

** Observe dimension p₉

DISCO variable speed drives

Dimensions with helical gearboxes



Representation in mounting position B spindle box position 4
(see position of system modules)

DISCO variable speed drives GST □□ - 1 D VCR		Drive size									
		071-1□ 02	071-3□ 03	080-11 04 080-3□ 04	090-11 05 090-3□ 05						
Motor	g	143	143	160	180						
	g ₁ Without options	128	128	137	147						
	Brake motor	131	131	142	154						
	k ₁	237	237	267	350						
	Δk Brake	54	54	36	48						
DISCO	a ₉	83	86	103	123						
	k ₂	145	145	180	180						
	k ₉	42	50	58	74						
	o ₉	150	175	215	253						
	w	70	70	105	105						
	x	105	105	152	152						
Fuß	b ₅	90	90	100	115						
	b ₇	110	120	150	205						
	c ₅	3.5	14	17	22						
	e ₅	140	160	200	238						
	f ₅	110	125	134	140						
	m	25	32	40	45						
	s ₅	10	10	11	11						
	h ₁	67 2)	80	102	125						
	i	10	17.5	17.5	12.5						
	i ₅ GST 04	183	189	206							
	GST 05		210	227	232						
	GST 06			250	255						
	GST 07				284						
Gearbox size	Gearbox						Total length				
	o*	o ₁	p*	p ₁	a	k ₈	k				
GST 04	100	134	129	41	36	35	508	521	581		
GST 05	115	165	156	51	45	43		542	602		714
GST 06	145	191	194	63	56	48			625		737
GST 07	180	223	245	82	70	60					766

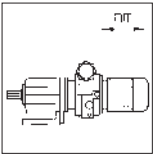
Gearbox size	Solid shaft							Pitch circle					
	d k6	l	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ h7	e ₁	f ₁	i ₁	s ₁ 6 x 60°
GST 04	16	32	6	20	M5	5	18	72	48	61	8	43	M5x10
GST 05	20	40	6	28	M6	6	22.5	88	58	74	9	52	M6x12
GST 06	25	50	7	36	M10	8	28	109	70	90	11	64	M8x14
GST 07	30	60	7.5	45	M10	8	33	140	100	120	13	77	M10x18

Dimensions in [mm]

1) Plus 80 mm handle

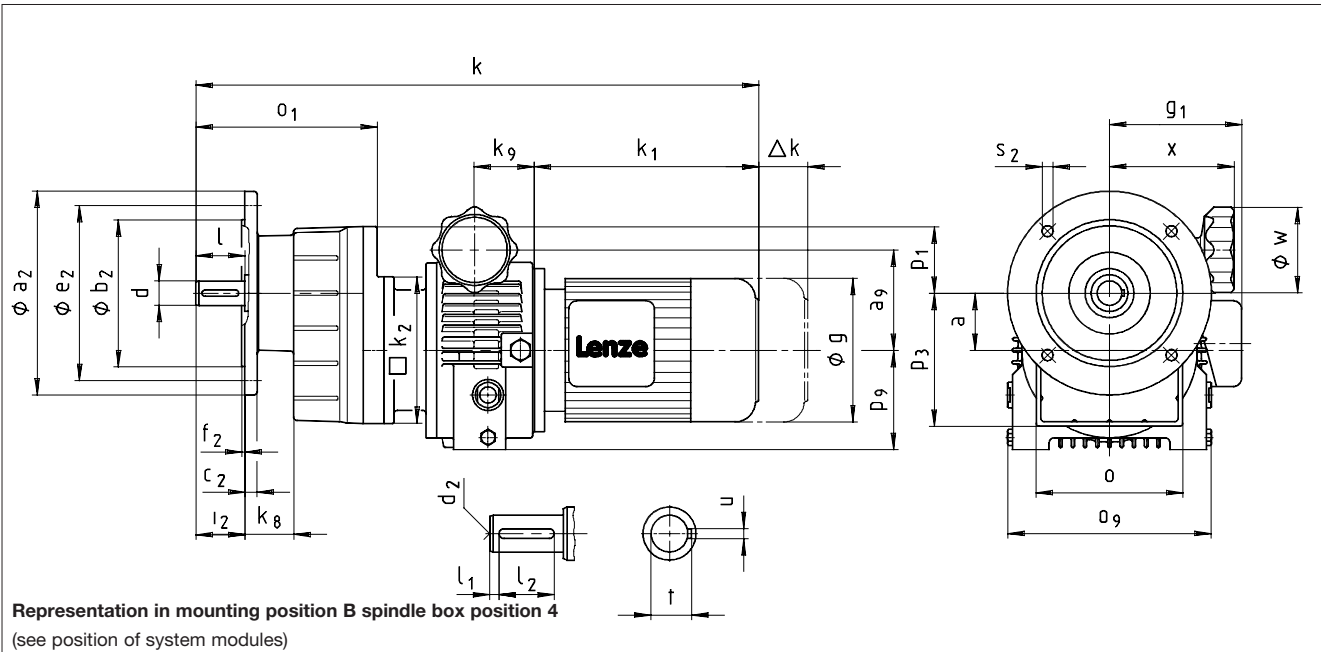
* Observe dimension k₂

2) h₁ < g/2 < k₂/2



DISCO variable speed drives

Dimensions with helical gearboxes



4

DISCO variable speed drives		Drive size												
GST □□ - 1 D VCK		071-1□ 02	071-3□ 03	080-11 04 080-3□ 04	090-11 05 090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08					
Motor	g	143	143	160	180	206	222	274	274					
	g₁ Without options	128	128	137	147	140	174	196	196					
	Brake motor	131	131	142	154	151	174	212	212					
	k₁	237	237	267	350	316	379	450	450					
	Δk Brake	54	54	36	48	111	80	63	63					
DISCO	a₉	83	86	103	123	149		190						
	k₂	145	145	180	180	265		300						
	k₉	42	50	58	74	82		104						
	o₉	150	175	215	253	305		379						
	p₉	65	83	98	122	145		176						
	w	70	70	105	105	105		160						
	x	105	105	152	152	152		195 1)						
Gearbox size	Gearbox						Total length							
	o*	o₁	p₁	p₃*	a	k₈	k							
GST 04	100	134	41	88	36	35	508	521	581					
GST 05	115	165	51	105	45	43	529	542	602	714				
GST 06	145	191	63	131	56	48			625	737				
GST 07	180	223	82	164	70	60			766		763	826	933	933
GST 09	222	271	101	204	89	74					806	869	976	976

Gearbox size	Solid shaft							Output flange						
	d k6	l	l₁	l₂	d₂	u	t	a₂	b₂ j7	c₂	e₂	f₂	i₂	s₂ 4x90°
GST 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
GST 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
GST 06	25	50	7	36	M10	8	28	160	110	12	130	3.5	50	9
								200	130		165	3.5		11
GST 07	30	60	7.5	45	M10	8	33	200	130	14	165	3.5	60	11
								250	180		15	215		4
GST 09	40	80	8.5	63	M16	12	43	250	180	16	215	4	80	13.5
								300	230		18	265		

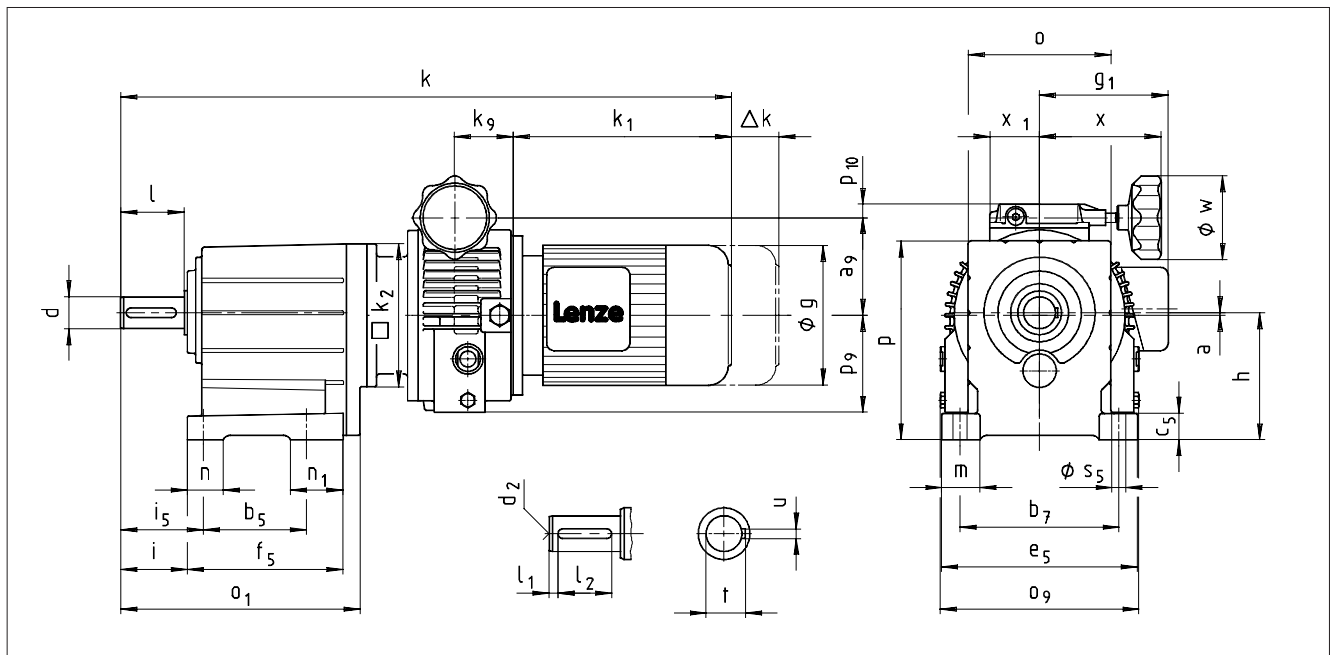
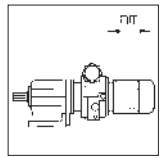
Dimensions in [mm]

1) Plus 80 mm handle

* Observe dimension k₂

DISCO variable speed drives

Dimensions with helical gearboxes

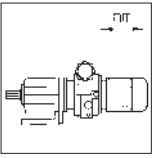


4

DISCO variable speed drives		Drive size																
GST □□ - 2 D VBR		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08									
Motor	g	143	143	160	180	206	222	274	274									
	g₁	Without options	128	128	137	147	140	174	196	196								
		Brake motor	131	131	142	154	151	174	212	212								
	k₁	237	237	267	350	316	379	450	450									
	Δk Brake	54	54	36	48	111	80	63	63									
DISCO	a₉	83	86	103	123	149		190										
	k₂	145	145	180	180	265		300										
	k₉	42	50	58	74	82		104										
	o₉	150	175	215	253	305		379										
	p₉	65	83	98	122	145		176										
	p₁₀	14	14	17	17	17		26										
	w	70	70	105	105	105		160										
	x	105	105	152	152	152		195 1)										
	x₁	43	43	63	63	63		111										
Gearbox size	Gearbox					Total length												
	o*	o₁	p*	h**	a	k												
GST 04	100	174	132	80	0	548	561	621										
GST 05	115	214	159	100	1	578	591	651	763									
GST 06	145	243	198	125	2	604	617	677	789									
GST 07	180	302	251	160	3			733	845	842	905	1012	1012					
GST 09	222	370	311	200	4			796	908	905	968	1075	1075					
GST 11	270	433	385	250	4				965	962	1025	1132	1132					
GST 14	328	533	479	315	6					1052	1115	1222	1222					

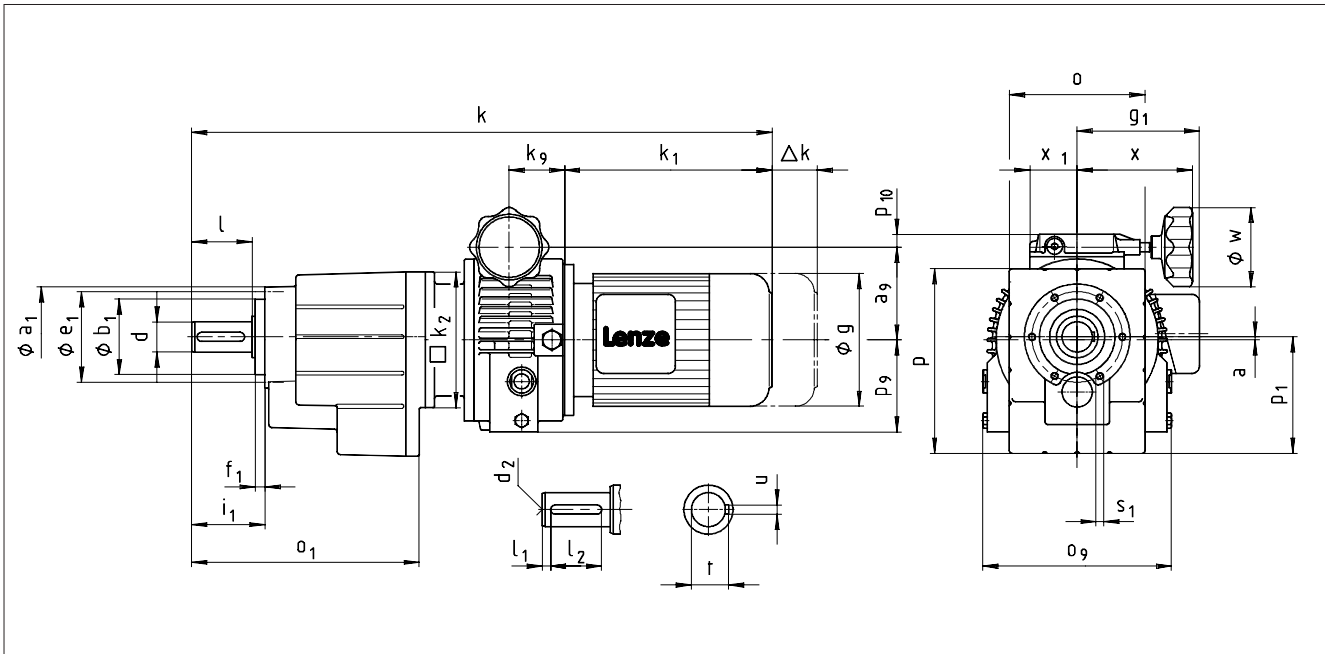
Gearbox size	Solid shaft								Foot									
	d	l	l₁	l₂	d₂	u	t	b₅	b₇	c₅	e₅	f₅	i	i₅	m	n	n₁	s₅
GST 04	20	40	5	28	M6	6	22.5	76	105	18	129	112	43	53	25	20	36	9
GST 05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	33	26	49	11
GST 06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5
GST 07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	49	45	66	18
GST 09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
GST 11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
GST 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: k6 * Observe dimension k₂ 1) Plus 80 mm handle
d > 50 mm: m6 ** Observe dimension p₉



DISCO variable speed drives

Dimensions with helical gearboxes



4

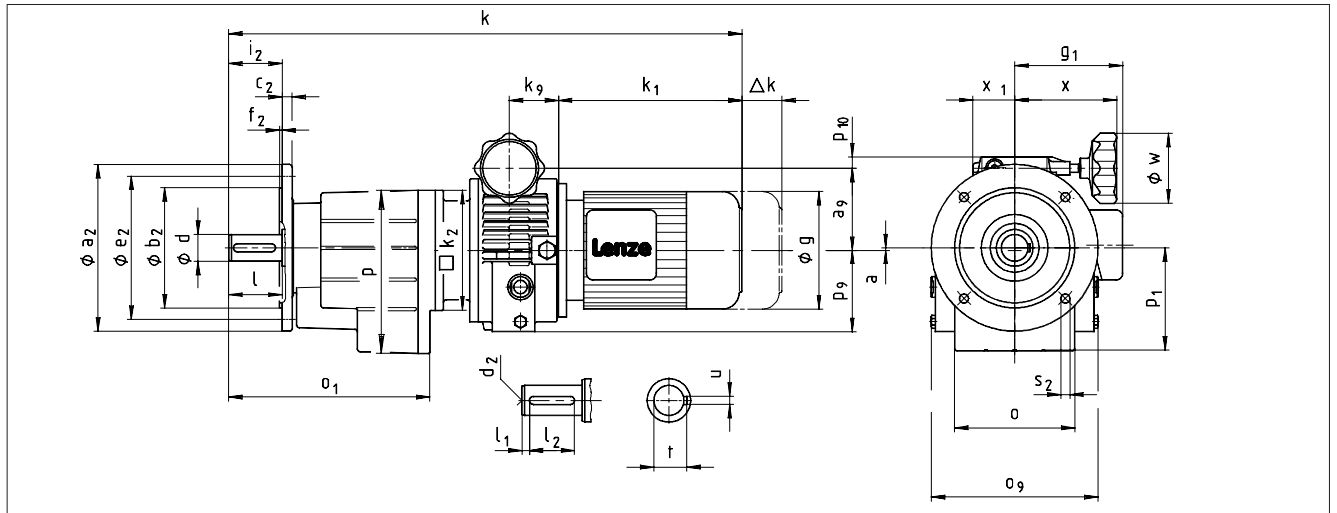
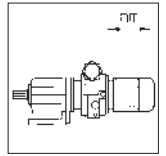
DISCO variable speed drives GST □□ - 2 D VCR		Drive size													
		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08						
Motor	g	143	143	160	180	206	222	274	274						
	g₁	Without options	128	128	137	147	140	174	196	196					
		Brake motor	131	131	142	154	151	174	212	212					
	k₁	237	237	267	350	316	379	450	450						
	Δk Brake	54	54	36	48	111	80	63	63						
DISCO	a₉	83	86	103	123	149		190							
	k₂	145	145	180	180	265		300							
	k₉	42	50	58	74	82		104							
	o₉	150	175	215	253	305		379							
	p₉	65	83	98	122	145		176							
	p₁₀	14	14	17	17	17		26							
	w	70	70	105	105	105		160							
	x	105	105	152	152	152		195 1)							
x₁	43	43	63	63	63		111								
Gearbox size	Gearbox					Total length									
	o*	o ₁	p*	p ₁	a	k									
GST 04	100	174	129	77	0	548	561	621							
GST 05	115	214	156	98	1	578	591	651	763						
GST 06	145	243	194	121	2	604	617	677	789						
GST 07	180	302	245	155	3			733	845	842	905	1012	1012		
GST 09	222	370	304	194	4			796	908	905	968	1075	1075		
GST 11	270	433	378	243	4				965	962	1025	1132	1132		
GST 14	328	533	470	306	6					1052	1115	1222	1222		

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 6 x 60°
GST 04	20	40	5	28	M6	6	22.5	72	48	61	8	51	M5x10
GST 05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12
GST 06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14
GST 07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18
GST 09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20
GST 11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26
GST 14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34

Dimensions in [mm] d ≤ 50 mm: k6 * Observe dimension k₂
d > 50 mm: m6 1) Plus 80 mm handle

DISCO variable speed drives

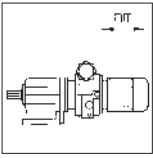
Dimensions with helical gearboxes



DISCO variable speed drives		Drive size											
GST □□ - 2 D VCK		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08				
Motor	g	143	143	160	180	206	222	274	274				
	g₁	Without options	128	128	137	147	140	174	196	196			
		Brake motor	131	131	142	154	151	174	212	212			
	k₁	237	237	267	350	316	379	450	450				
	Δk Brake	54	54	36	48	111	80	63	63				
DISCO	a₉	83	86	103	123	149		190					
	k₂	145	145	180	180	265		300					
	k₉	42	50	58	74	82		104					
	o₉	150	175	215	253	305		379					
	p₉	65	83	98	122	145		176					
	p₁₀	14	14	17	17	17		26					
	w	70	70	105	105	105		160					
	x	105	105	152	152	152		195 1)					
	x₁	43	43	63	63	63		111					
	Gearbox size	Gearbox					Total length						
o*		o₁	p*	p₁	a	k							
GST 04	100	174	129	77	0	548	561	621					
GST 05	115	214	156	98	1	578	591	651	763				
GST 06	145	243	194	121	2	604	617	677	789				
GST 07	180	302	245	155	3			733	845	842	905	1012	1012
GST 09	222	370	304	194	4			796	908	905	968	1075	1075
GST 11	270	433	378	243	4			965		962	1025	1132	1132
GST 14	328	533	470	306	6					1052	1115	1222	1222

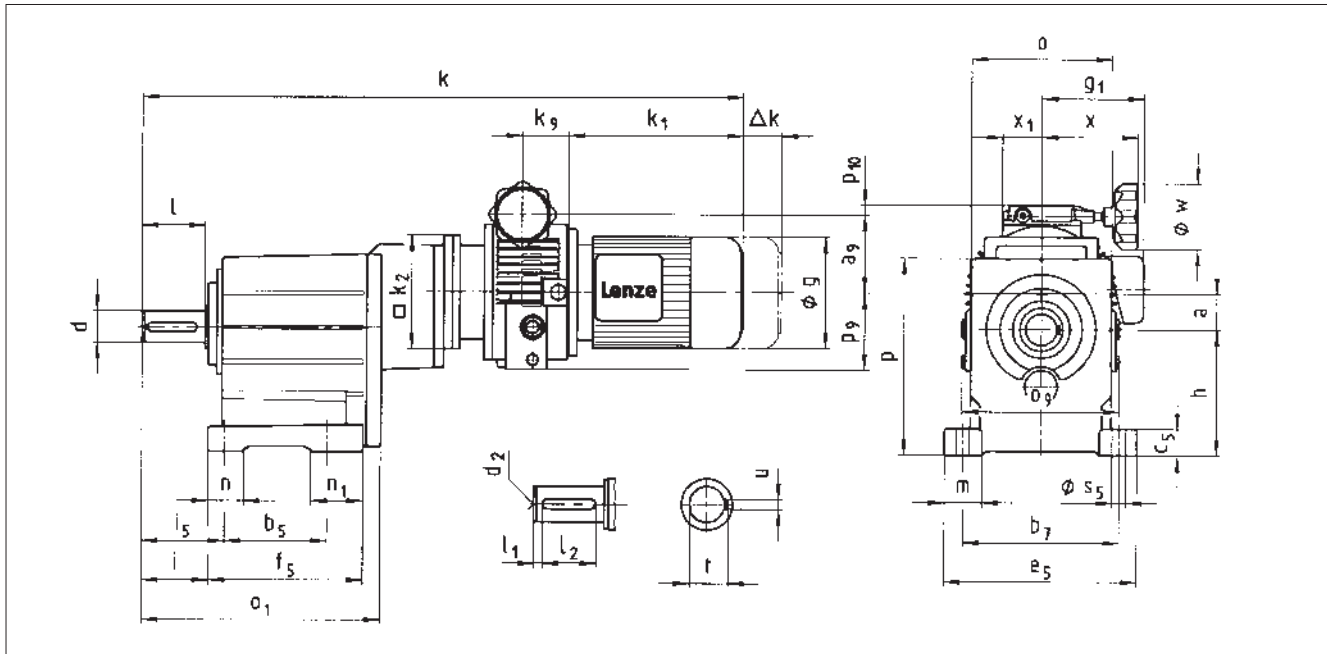
Gearbox size	d	l	l ₁	Solid shaft				Output flange						
				l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂ 4x90°
GST 04	20	40	5	28	M6	6	22.5	120	80	10	100	3	40	7
								140	95		115	3		9
								160	110		130	3.5		9
GST 05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7
								140	95		110	3		9
								160	110	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

Dimensions in [mm] d ≤ 50 mm: k6
 d > 50 mm: m6 * Observe dimension k₂
 1) Plus 80 mm handle



DISCO variable speed drives

Dimensions with helical gearboxes



4

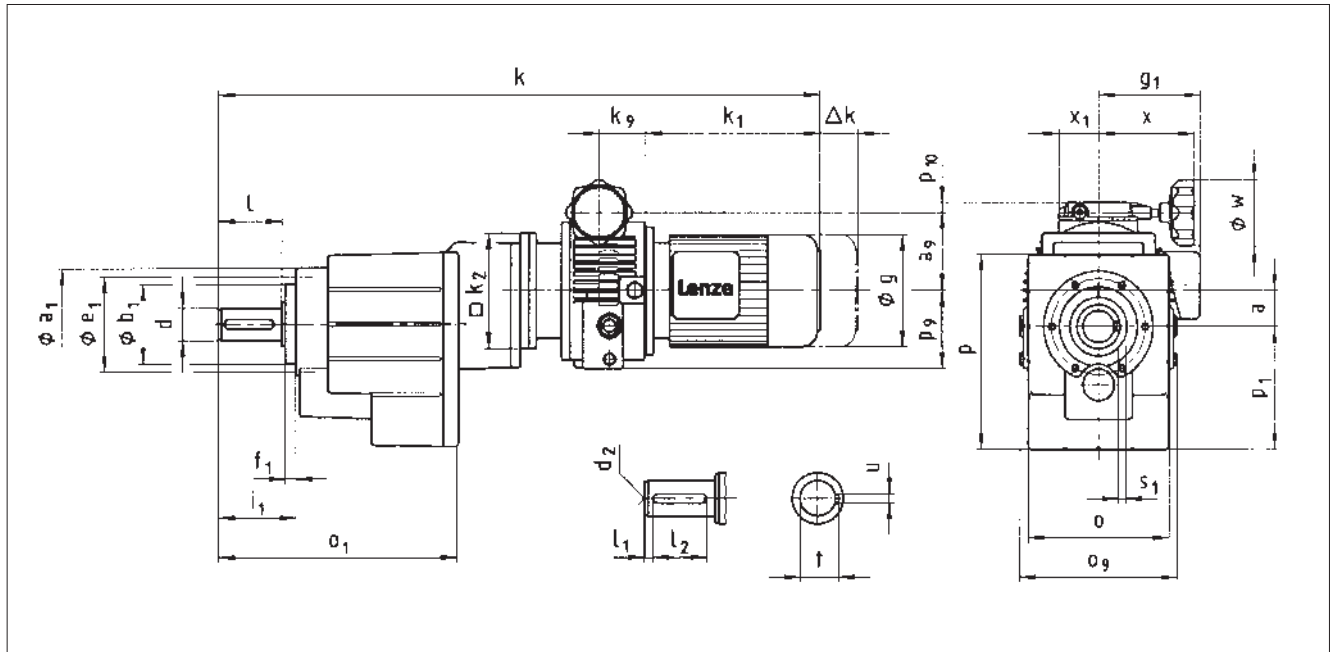
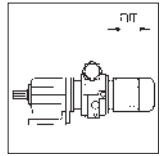
DISCO variable speed drives		Drive size																
GST □□ - 3 D VBR		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08									
Motor	g	143	143	160	180	206	222	274	274									
	g₁ Without options	128	128	137	147	140	174	196	196									
	Brake motor	131	131	142	154	151	174	212	212									
	k₁	237	237	267	350	316	379	450	450									
	Δk Brake	54	54	36	48	111	80	63	63									
DISCO	a₉	83	86	103	123	149		190										
	k₂	145	145	180	180	265		300										
	k₉	42	50	58	74	82		104										
	o₉	150	175	215	253	305		379										
	p₉	65	83	98	122	145		176										
	p₁₀	14	14	17	17	17		26										
	w	70	70	105	105	105		160										
	x	105	105	152	152	152		195 1)										
x₁	43	43	63	63	63		111											
Gearbox size	Gearbox					Total length												
	o*	o₁	p*	h	a	k												
GST 05	115	208	159	100	35	654	668											
GST 06	145	240	198	125	34	697	711	771										
GST 07	180	302	251	160	42	764	778	838	950									
GST 09	222	370	311	200	52	845	859	919	1031									
GST 11	270	433	385	250	66			995	1107	1104	1167							
GST 14	328	533	479	315	83			1119	1231	1228	1291	1398	1398					

Gearbox size	Solid shaft								Foot									
	d	l	l₁	l₂	d₂	u	t	b₅	b₇	c₅	e₅	f₅	i	i₅	m	n	n₁	s₅
GST 05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11
GST 06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5
GST 07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18
GST 09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
GST 11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
GST 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: k6 * Observe dimension k₂
d > 50 mm: m6 1) Plus 80 mm handle

DISCO variable speed drives

Dimensions with helical gearboxes

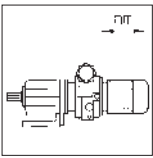


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DISCO variable speed drives		Drive size											
GST □□ - 3 D VCR		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08				
Motor	g	143	143	160	180	206	222	274	274				
	g₁ Without options	128	128	137	147	140	174	196	196				
	Brake motor	131	131	142	154	151	174	212	212				
	k₁	237	237	267	350	316	379	450	450				
	Δk Brake	54	54	36	48	111	80	63	63				
DISCO	a₉	83	86	103	123	149		190					
	k₂	145	145	180	180	265		300					
	k₉	42	50	58	74	82		104					
	o₉	150	175	215	253	305		379					
	p₉	65	83	98	122	145		176					
	p₁₀	14	14	17	17	17		26					
	w	70	70	105	105	105		160					
	x	105	105	152	152	152		195 1)					
	x₁	43	43	63	63	63		111					
Gearbox size	Gearbox					Total length							
	o*	o ₁	p*	p ₁	a	k							
GST 05	115	208	156	98	35	654	668						
GST 06	145	240	194	121	34	697	711	771					
GST 07	180	302	245	155	42	764	778	838	950				
GST 09	222	370	304	194	52	845	859	919	1031				
GST 11	270	433	378	243	66			995	1107	1104	1167		
GST 14	328	533	470	306	83			1119	1231	1228	1291	1398	1398

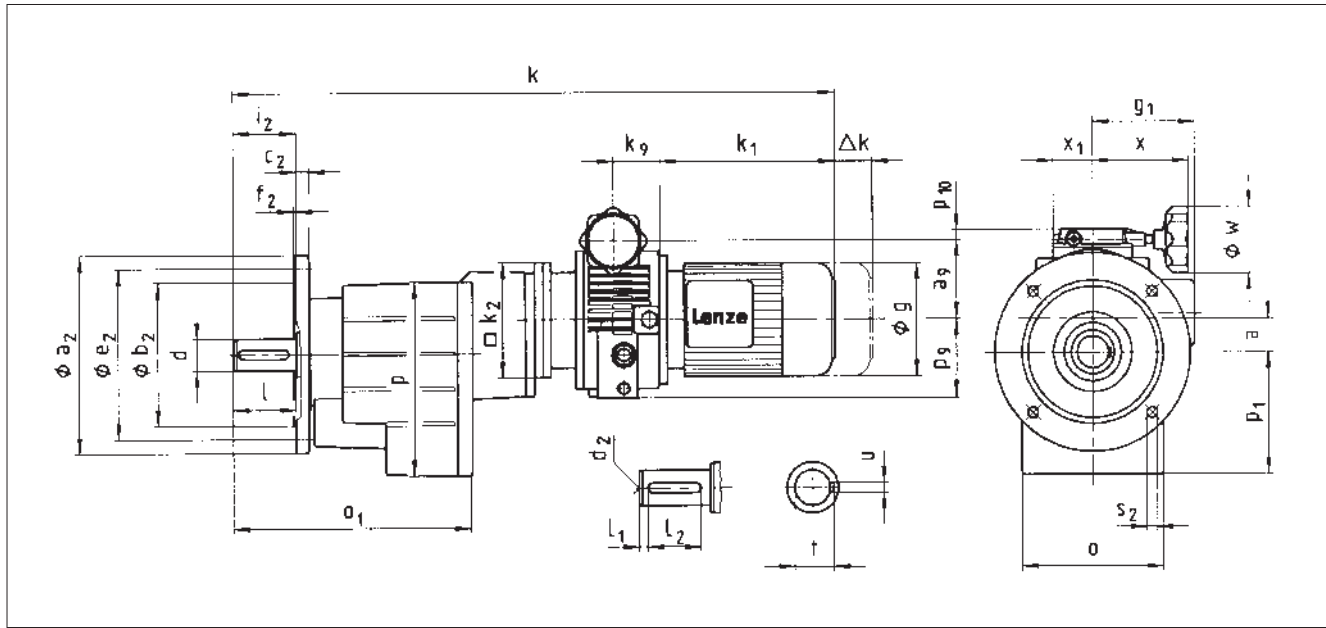
Gearbox size	Solid shaft							Pitch circle					
	d	l	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ h7	e ₁	f ₁	i ₁	s ₁ 6 x 60°
GST 05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12
GST 06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14
GST 07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18
GST 09	50	100	8	80	M16	14	53.5	174	120	145	15	120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

Dimensions in [mm] d ≤ 50 mm: k6 * Observe dimension k₂
 d > 50 mm: m6 1) Plus 80 mm handle



DISCO variable speed drives

Dimensions with helical gearboxes

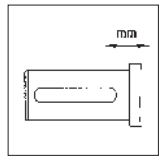


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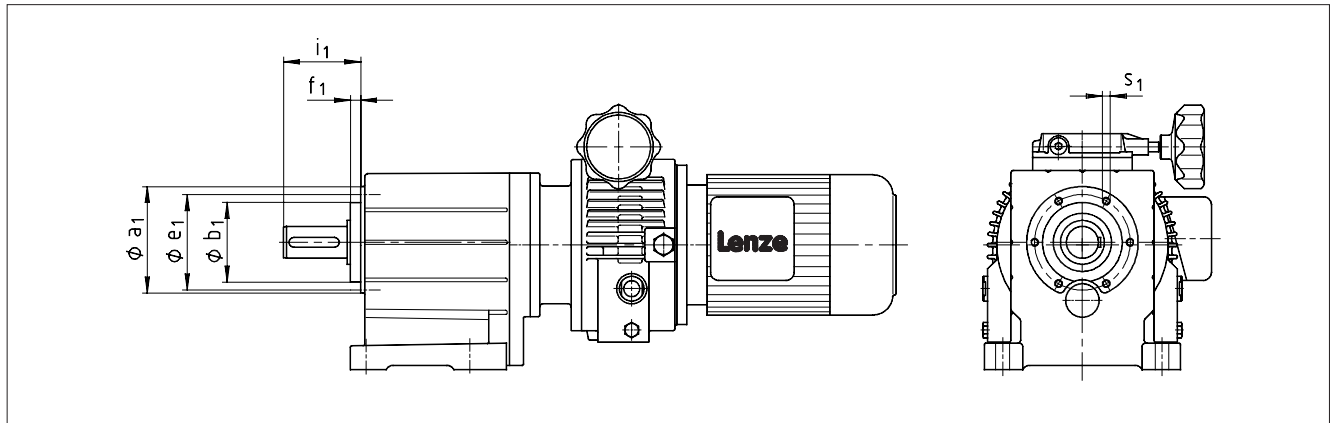
DISCO variable speed drives		Drive size												
GST □□ - 3 D VCK		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08					
Motor	g	143	143	160	180	206	222	274	274					
	g₁	Without options	128	128	137	147	140	174	196	196				
		Brake motor	131	131	142	154	151	174	212	212				
	k₁	237	237	267	350	316	379	450	450					
	Δk Brake	54	54	36	48	111	80	63	63					
DISCO	a₉	83	86	103	123	149		190						
	k₂	145	145	180	180	265		300						
	k₉	42	50	58	74	82		104						
	o₉	150	175	215	253	305		379						
	p₉	65	83	98	122	145		176						
	p₁₀	14	14	17	17	17		26						
	w	70	70	105	105	105		160						
	x	105	105	152	152	152		195 1)						
	x₁	43	43	63	63	63		111						
Gearbox size	Gearbox					Total length								
	o*	o₁	p*	p₁	a	k								
GST 05	115	208	156	98	35	654	668							
GST 06	145	240	194	121	34	697	711	771						
GST 07	180	302	245	155	42	764	778	838	950					
GST 09	222	370	304	194	52	845	859	919	1031					
GST 11	270	433	378	243	66			995	1107	1104	1167			
GST 14	328	533	470	306	83			1119	1231	1228	1291	1398	1398	

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

Dimensions in [mm] d ≤ 50 mm: k6 * Observe dimension k₂
d > 50 mm: m6 1) Plus 80 mm handle



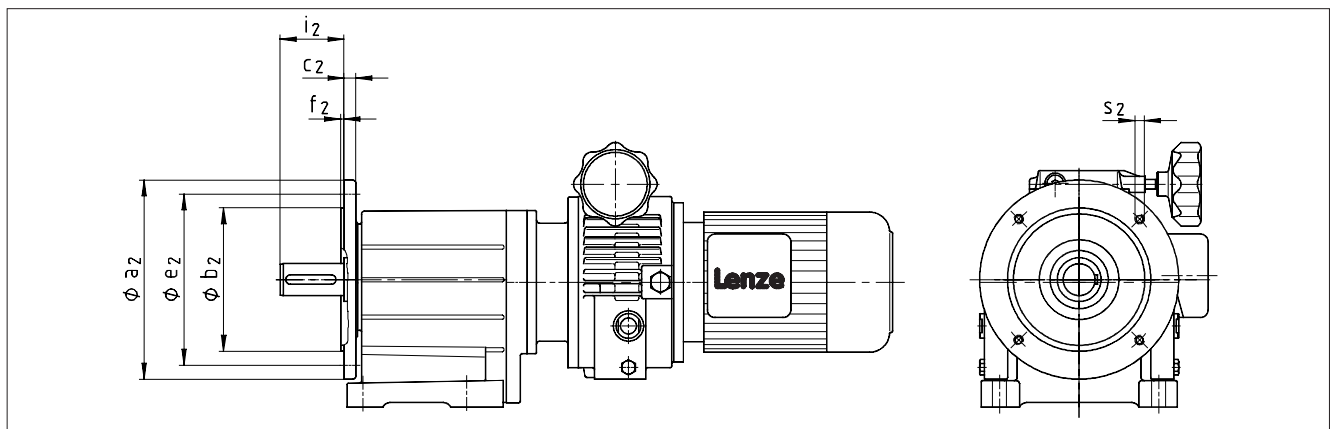
Output design VAR



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

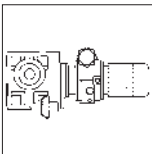
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Output design VAL



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

Dimensions in [mm]



Disco variable speed drives

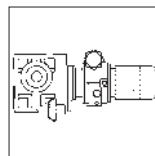
Selection tables with helical-bevel gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
0.25 kW	182 - 30	9.7 - 20	5.123	GKS □□ - 3D GKS04 - 3D □□□ 071-12 02C	4-40	
	132 - 22	13 - 27	7.025	GKS04 - 3D □□□ 071-12 02C		
	114 - 19	16 - 31	8.167	GKS04 - 3D □□□ 071-12 02C		
	95 - 16	19 - 37	9.836	GKS04 - 3D □□□ 071-12 02C		
	71 - 12	25 - 50	13.067	GKS04 - 3D □□□ 071-12 02C		
	58 - 9.6	31 - 61	16.087	GKS04 - 3D □□□ 071-12 02C		
	45 - 7.5	39 - 78	20.588	GKS04 - 3D □□□ 071-12 02C		
	37 - 6.2	48 - 95	25.088	GKS04 - 3D □□□ 071-12 02C		
	29 - 4.8	61 - 122	32.000	GKS04 - 3D □□□ 071-12 02C		
	24 - 4.0	75 - 149	39.200	GKS04 - 3D □□□ 071-12 02C		
	18 - 3.0	97 - 182	50.943	GKS04 - 3D □□□ 071-12 02C		
	14 - 2.4	123 - 183	64.978	GKS04 - 3D □□□ 071-12 02C		
	14 - 2.3	127 - 253	66.592	GKS05 - 3D □□□ 071-12 02C		
	12 - 2.0	151 - 183	79.598	GKS04 - 3D □□□ 071-12 02C		
	11 - 1.9	157 - 315	82.833	GKS05 - 3D □□□ 071-12 02C		
	9.3 - 1.6	185 - 185	100.067	GKS04 - 3D □□□ 071-12 02C		
	8.7 - 1.5	204 - 331	107.196	GKS05 - 3D □□□ 071-12 02C		
	8.9 - 1.5	199 - 399	104.967	GKS06 - 3D □□□ 071-12 02C		
	7.2 - 1.2	247 - 331	130.097	GKS05 - 3D □□□ 071-12 02C		
	7.3 - 1.2	242 - 484	127.392	GKS06 - 3D □□□ 071-12 02C		
	5.8 - 1.0	306 - 612	161.029	GKS06 - 3D □□□ 071-12 02C		
	4.3 - 0.7	407 - 635	214.133	GKS06 - 3D □□□ 071-12 02C		
	4.5 - 0.8	395 - 790	208.000	GKS07 - 3D □□□ 071-12 02C		
	3.6 - 0.6	494 - 635	259.880	GKS06 - 3D □□□ 071-12 02C		
	3.7 - 0.6	480 - 959	252.436	GKS07 - 3D □□□ 071-12 02C		
	2.8 - 0.5	624 - 635	328.500	GKS06 - 3D □□□ 071-12 02C		
	2.9 - 0.5	606 - 1212	319.091	GKS07 - 3D □□□ 071-12 02C		
	2.3 - 0.4	746 - 1320	399.353	GKS07 - 4D □□□ 071-12 02C		
	2.3 - 0.4	751 - 1502	402.234	GKS09 - 4D □□□ 071-12 02C		
	1.8 - 0.3	965 - 1320	516.810	GKS07 - 4D □□□ 071-12 02C		
	1.8 - 0.3	972 - 1944	520.538	GKS09 - 4D □□□ 071-12 02C		
				GKS □□ - 4D		4-44
	1.5 - 0.2	1189 - 1330	636.581	GKS07 - 4D □□□ 071-12 02C		
1.5 - 0.3	1180 - 2360	631.744	GKS09 - 4D □□□ 071-12 02C			
1.1 - 0.2	1527 - 3031	817.551	GKS09 - 4D □□□ 071-12 02C			
0.9 - 0.2	1853 - 3031	992.209	GKS09 - 4D □□□ 071-12 02C			
0.9 - 0.2	1850 - 3701	990.879	GKS11 - 4D □□□ 071-12 02C			
0.7 - 0.1	2342 - 3031	1254.197	GKS09 - 4D □□□ 071-12 02C			
0.7 - 0.1	2339 - 4678	1252.516	GKS11 - 4D □□□ 071-12 02C			
0.7 - 0.1	2640 - 3080	1413.461	GKS09 - 4D □□□ 071-12 02C			
0.7 - 0.1	2636 - 5271	1411.286	GKS11 - 4D □□□ 071-12 02C			
0.37 kW	363 - 61	7.8 - 16	5.123	GKS □□ - 3D GKS04 - 3D □□□ 071-11 02C	4-40	
	265 - 44	11 - 21	7.025	GKS04 - 3D □□□ 071-11 02C		
	228 - 38	12 - 25	8.167	GKS04 - 3D □□□ 071-11 02C		

Thermal limit not considered (see note on page 3-12)

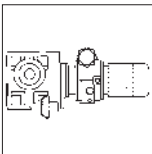
Disco variable speed drives

Selection tables with helical-bevel gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.37 kW				GKS □□ - 3D	4-40
	189 - 32	15 - 30	9.836	GKS04 - 3D □□□ 071-11 02C	
	142 - 24	20 - 40	13.067	GKS04 - 3D □□□ 071-11 02C	
	116 - 19	24 - 49	16.087	GKS04 - 3D □□□ 071-11 02C	
	90 - 15	31 - 63	20.588	GKS04 - 3D □□□ 071-11 02C	
	74 - 12	38 - 76	25.088	GKS04 - 3D □□□ 071-11 02C	
	58 - 9.7	49 - 97	32.000	GKS04 - 3D □□□ 071-11 02C	
	47 - 7.9	60 - 119	39.200	GKS04 - 3D □□□ 071-11 02C	
	37 - 6.1	77 - 155	50.943	GKS04 - 3D □□□ 071-11 02C	
	29 - 4.8	99 - 183	64.978	GKS04 - 3D □□□ 071-11 02C	
	23 - 3.9	121 - 183	79.598	GKS04 - 3D □□□ 071-11 02C	
	23 - 3.7	126 - 252	82.833	GKS05 - 3D □□□ 071-11 02C	
	19 - 3.1	152 - 185	100.067	GKS04 - 3D □□□ 071-11 02C	
	17 - 2.9	163 - 326	107.196	GKS05 - 3D □□□ 071-11 02C	
	14 - 2.4	198 - 331	130.097	GKS05 - 3D □□□ 071-11 02C	
	15 - 2.4	194 - 387	127.392	GKS06 - 3D □□□ 071-11 02C	
	12 - 1.9	245 - 490	161.029	GKS06 - 3D □□□ 071-11 02C	
	8.7 - 1.5	325 - 635	214.133	GKS06 - 3D □□□ 071-11 02C	
	7.2 - 1.2	395 - 635	259.880	GKS06 - 3D □□□ 071-11 02C	
	7.4 - 1.2	384 - 767	252.436	GKS07 - 3D □□□ 071-11 02C	
	5.7 - 0.9	499 - 635	328.500	GKS06 - 3D □□□ 071-11 02C	
	5.8 - 1.0	485 - 970	319.091	GKS07 - 3D □□□ 071-11 02C	
				GKS □□ - 4D	4-44
	4.6 - 0.8	610 - 702	408.000	GKS06 - 4D □□□ 071-11 02C	
	4.7 - 0.8	597 - 1193	399.353	GKS07 - 4D □□□ 071-11 02C	
	3.6 - 0.6	772 - 1320	516.810	GKS07 - 4D □□□ 071-11 02C	
	3.6 - 0.6	778 - 1555	520.538	GKS09 - 4D □□□ 071-11 02C	
	2.9 - 0.5	951 - 1330	636.581	GKS07 - 4D □□□ 071-11 02C	
	2.9 - 0.5	944 - 1888	631.744	GKS09 - 4D □□□ 071-11 02C	
	2.3 - 0.4	1231 - 1330	823.810	GKS07 - 4D □□□ 071-11 02C	
2.3 - 0.4	1221 - 2443	817.551	GKS09 - 4D □□□ 071-11 02C		
1.9 - 0.3	1482 - 2965	992.209	GKS09 - 4D □□□ 071-11 02C		
1.5 - 0.3	1874 - 3031	1254.197	GKS09 - 4D □□□ 071-11 02C		
1.5 - 0.3	1871 - 3742	1252.516	GKS11 - 4D □□□ 071-11 02C		
1.3 - 0.2	2112 - 3080	1413.461	GKS09 - 4D □□□ 071-11 02C		
1.3 - 0.2	2108 - 4217	1411.286	GKS11 - 4D □□□ 071-11 02C		
0.55 kW				GKS □□ - 3D	4-40
	375 - 65	11 - 21	5.123	GKS04 - 3D □□□ 071-31 03C	
	273 - 48	15 - 29	7.025	GKS04 - 3D □□□ 071-31 03C	
	235 - 41	17 - 34	8.167	GKS04 - 3D □□□ 071-31 03C	
	195 - 34	21 - 41	9.836	GKS04 - 3D □□□ 071-31 03C	
	147 - 26	27 - 55	13.067	GKS04 - 3D □□□ 071-31 03C	
	119 - 21	34 - 67	16.087	GKS04 - 3D □□□ 071-31 03C	
	93 - 16	43 - 86	20.588	GKS04 - 3D □□□ 071-31 03C	
	77 - 13	52 - 105	25.088	GKS04 - 3D □□□ 071-31 03C	
	60 - 11	67 - 134	32.000	GKS04 - 3D □□□ 071-31 03C	
	49 - 8.6	82 - 164	39.200	GKS04 - 3D □□□ 071-31 03C	

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

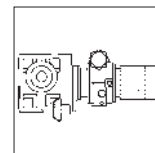
Selection tables with helical-bevel gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.55 kW				GKS □□ - 3D	4-40
	38 - 6.6	107 - 182	50.943	GKS04 - 3D □□□ 071-31 03C	
	30 - 5.2	136 - 183	64.978	GKS04 - 3D □□□ 071-31 03C	
	29 - 5.0	139 - 278	66.592	GKS05 - 3D □□□ 071-31 03C	
	24 - 4.2	166 - 183	79.598	GKS04 - 3D □□□ 071-31 03C	
	23 - 4.0	173 - 331	82.833	GKS05 - 3D □□□ 071-31 03C	
	18 - 3.1	224 - 331	107.196	GKS05 - 3D □□□ 071-31 03C	
	18 - 3.2	219 - 439	104.967	GKS06 - 3D □□□ 071-31 03C	
	15 - 2.6	272 - 331	130.097	GKS05 - 3D □□□ 071-31 03C	
	15 - 2.6	266 - 532	127.392	GKS06 - 3D □□□ 071-31 03C	
	12 - 2.1	337 - 635	161.029	GKS06 - 3D □□□ 071-31 03C	
	9.0 - 1.6	448 - 635	214.133	GKS06 - 3D □□□ 071-31 03C	
	9.2 - 1.6	435 - 869	208.000	GKS07 - 3D □□□ 071-31 03C	
	7.4 - 1.3	543 - 635	259.880	GKS06 - 3D □□□ 071-31 03C	
	7.6 - 1.3	528 - 1055	252.436	GKS07 - 3D □□□ 071-31 03C	
	6.0 - 1.1	667 - 1215	319.091	GKS07 - 3D □□□ 071-31 03C	
				GKS □□ - 4D	4-44
	4.8 - 0.8	820 - 1320	399.353	GKS07 - 4D □□□ 071-31 03C	
	4.8 - 0.8	826 - 1653	402.234	GKS09 - 4D □□□ 071-31 03C	
	3.7 - 0.7	1062 - 1320	516.810	GKS07 - 4D □□□ 071-31 03C	
	3.7 - 0.6	1069 - 2139	520.538	GKS09 - 4D □□□ 071-31 03C	
	3.0 - 0.5	1298 - 2595	631.744	GKS09 - 4D □□□ 071-31 03C	
	2.4 - 0.4	1679 - 3031	817.551	GKS09 - 4D □□□ 071-31 03C	
	2.4 - 0.4	1677 - 3354	816.455	GKS11 - 4D □□□ 071-31 03C	
	1.9 - 0.3	2038 - 3031	992.209	GKS09 - 4D □□□ 071-31 03C	
	1.9 - 0.3	2035 - 4071	990.879	GKS11 - 4D □□□ 071-31 03C	
	1.5 - 0.3	2576 - 3031	1254.197	GKS09 - 4D □□□ 071-31 03C	
	1.5 - 0.3	2573 - 5146	1252.516	GKS11 - 4D □□□ 071-31 03C	
	1.4 - 0.2	2837 - 3080	1413.461	GKS09 - 4D □□□ 071-31 03C	
	1.4 - 0.2	2899 - 5798	1411.286	GKS11 - 4D □□□ 071-31 03C	
0.75 kW				GKS □□ - 3D	
	185 - 32	29 - 58	5.123	GKS04 - 3D □□□ 080-32 04D	
	135 - 24	40 - 80	7.025	GKS04 - 3D □□□ 080-32 04D	
	116 - 20	47 - 93	8.167	GKS04 - 3D □□□ 080-32 04D	
	97 - 17	56 - 106	9.836	GKS04 - 3D □□□ 080-32 04D	
	90 - 16	60 - 121	10.569	GKS05 - 3D □□□ 080-32 04D	
	73 - 13	75 - 149	13.067	GKS04 - 3D □□□ 080-32 04D	
	59 - 10	92 - 181	16.087	GKS04 - 3D □□□ 080-32 04D	
	46 - 8.0	117 - 182	20.588	GKS04 - 3D □□□ 080-32 04D	
	49 - 8.6	110 - 219	19.216	GKS05 - 3D □□□ 080-32 04D	
	36 - 6.3	150 - 298	26.353	GKS05 - 3D □□□ 080-32 04D	

Thermal limit not considered (see note on page 3-12)

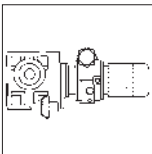
Disco variable speed drives

Selection tables with helical-bevel gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.75 kW	29 - 5.0	187 - 331	32.744	GKS □□ - 3D GKS05 - 3D □□□ 080-32 04D GKS06 - 3D □□□ 080-32 04D	4-40
	30 - 5.2	183 - 366	32.063		
	23 - 4.0	238 - 331	41.765	GKS05 - 3D □□□ 080-32 04D	
	19 - 3.2	292 - 331	51.162	GKS05 - 3D □□□ 080-32 04D	
	18 - 3.1	303 - 605	53.074	GKS06 - 3D □□□ 080-32 04D	
	15 - 2.5	372 - 624	65.207	GKS06 - 3D □□□ 080-32 04D	
	15 - 2.6	369 - 739	64.790	GKS07 - 3D □□□ 080-32 04D	
	12 - 2.0	462 - 630	81.111	GKS06 - 3D □□□ 080-32 04D	
	12 - 2.1	453 - 905	79.407	GKS07 - 3D □□□ 080-32 04D	
	9.1 - 1.6	598 - 635	104.967	GKS06 - 3D □□□ 080-32 04D	
	9.1 - 1.6	594 - 1189	104.296	GKS07 - 3D □□□ 080-32 04D	
	7.5 - 1.3	721 - 1215	126.578	GKS07 - 3D □□□ 080-32 04D	
	7.6 - 1.3	716 - 1432	125.641	GKS09 - 3D □□□ 080-32 04D	
	6.0 - 1.0	903 - 1215	158.364	GKS07 - 3D □□□ 080-32 04D	
	6.0 - 1.0	905 - 1810	158.816	GKS09 - 3D □□□ 080-32 04D	
	4.6 - 0.8	1185 - 1215	208.000	GKS07 - 3D □□□ 080-32 04D	
	4.6 - 0.8	1169 - 2338	205.111	GKS09 - 3D □□□ 080-32 04D	
	3.8 - 0.7	1419 - 2837	248.930	GKS09 - 3D □□□ 080-32 04D	
	3.4 - 0.6	1591 - 3031	279.205	GKS09 - 3D □□□ 080-32 04D	
	3.0 - 0.5	1793 - 3080	314.659	GKS09 - 3D □□□ 080-32 04D	
				GKS □□ - 4D	4-44
	2.4 - 0.4	2253 - 3031	402.234	GKS09 - 4D □□□ 080-32 04D	
	2.4 - 0.4	2217 - 4435	395.787	GKS11 - 4D □□□ 080-32 04D	
	1.8 - 0.3	2916 - 3031	520.538	GKS09 - 4D □□□ 080-32 04D	
1.9 - 0.3	2870 - 5739	512.195	GKS11 - 4D □□□ 080-32 04D		
1.5 - 0.3	3483 - 5975	621.619	GKS11 - 4D □□□ 080-32 04D		
1.2 - 0.2	4574 - 5975	816.455	GKS11 - 4D □□□ 080-32 04D		
1.2 - 0.2	4515 - 9030	805.901	GKS14 - 4D □□□ 080-32 04D		
1.0 - 0.2	5551 - 5975	990.879	GKS11 - 4D □□□ 080-32 04D		
1.0 - 0.2	5479 - 10959	978.071	GKS14 - 4D □□□ 080-32 04D		
0.8 - 0.1	6926 - 11488	1236.326	GKS14 - 4D □□□ 080-32 04D		
0.7 - 0.1	7804 - 11639	1393.043	GKS14 - 4D □□□ 080-32 04D		
1.1 kW	375 - 65	22 - 44	5.123	GKS □□ - 3D GKS04 - 3D □□□ 080-31 04D	4-40
	273 - 48	30 - 60	7.025	GKS04 - 3D □□□ 080-31 04D	
	235 - 41	35 - 70	8.167	GKS04 - 3D □□□ 080-31 04D	
	195 - 34	42 - 84	9.836	GKS04 - 3D □□□ 080-31 04D	

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

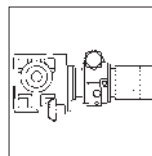
Selection tables with helical-bevel gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page	
	n ₂ [min ⁻¹]	M ₂ [Nm]				
1.1 kW				GKS □□ - 3D	4-40	
	147 - 26	56 - 112	13.067	GKS04 - 3D □□□ 080-31 04D		
	119 - 21	69 - 138	16.087	GKS04 - 3D □□□ 080-31 04D		
	93 - 16	88 - 176	20.588	GKS04 - 3D □□□ 080-31 04D		
	73 - 13	113 - 225	26.353	GKS05 - 3D □□□ 080-31 04D		
	60 - 11	137 - 167	32.000	GKS04 - 3D □□□ 080-31 04D		
	59 - 10	140 - 280	32.744	GKS05 - 3D □□□ 080-31 04D		
	46 - 8.0	179 - 331	41.765	GKS05 - 3D □□□ 080-31 04D		
	38 - 6.6	219 - 331	51.162	GKS05 - 3D □□□ 080-31 04D		
	36 - 6.3	227 - 454	53.074	GKS06 - 3D □□□ 080-31 04D		
	29 - 5.0	285 - 331	66.592	GKS05 - 3D □□□ 080-31 04D		
	29 - 5.1	279 - 557	65.207	GKS06 - 3D □□□ 080-31 04D		
	24 - 4.1	347 - 630	81.111	GKS06 - 3D □□□ 080-31 04D		
	18 - 3.2	449 - 635	104.967	GKS06 - 3D □□□ 080-31 04D		
	18 - 3.2	446 - 892	104.296	GKS07 - 3D □□□ 080-31 04D		
	15 - 2.6	545 - 635	127.392	GKS06 - 3D □□□ 080-31 04D		
	15 - 2.7	541 - 1082	126.578	GKS07 - 3D □□□ 080-31 04D		
	12 - 2.1	677 - 1215	158.364	GKS07 - 3D □□□ 080-31 04D		
	12 - 2.1	679 - 1358	158.816	GKS09 - 3D □□□ 080-31 04D		
	9.2 - 1.6	889 - 1215	208.000	GKS07 - 3D □□□ 080-31 04D		
	9.4 - 1.6	877 - 1753	205.111	GKS09 - 3D □□□ 080-31 04D		
	7.6 - 1.3	1079 - 1215	252.436	GKS07 - 3D □□□ 080-31 04D		
	7.7 - 1.4	1064 - 2128	248.930	GKS09 - 3D □□□ 080-31 04D		
	6.9 - 1.2	1193 - 2387	279.205	GKS09 - 3D □□□ 080-31 04D		
	6.1 - 1.1	1345 - 2690	314.659	GKS09 - 3D □□□ 080-31 04D		
				GKS □□ - 4D		4-44
	4.8 - 0.8	1690 - 3031	402.234	GKS09 - 4D □□□ 080-31 04D		
	4.9 - 0.9	1663 - 3326	395.787	GKS11 - 4D □□□ 080-31 04D		
	3.7 - 0.6	2187 - 3031	520.538	GKS09 - 4D □□□ 080-31 04D		
	3.8 - 0.7	2152 - 4304	512.195	GKS11 - 4D □□□ 080-31 04D		
	3.0 - 0.5	2654 - 3031	631.744	GKS09 - 4D □□□ 080-31 04D		
	3.1 - 0.5	2612 - 5224	621.619	GKS11 - 4D □□□ 080-31 04D		
2.4 - 0.4	3431 - 5975	816.455	GKS11 - 4D □□□ 080-31 04D			
2.4 - 0.4	3386 - 6772	805.901	GKS14 - 4D □□□ 080-31 04D			
1.9 - 0.3	4163 - 5975	990.879	GKS11 - 4D □□□ 080-31 04D			
2.0 - 0.3	4110 - 8219	978.071	GKS14 - 4D □□□ 080-31 04D			
1.5 - 0.3	5263 - 5975	1252.516	GKS11 - 4D □□□ 080-31 04D			
1.6 - 0.3	5195 - 10389	1236.326	GKS14 - 4D □□□ 080-31 04D			
1.4 - 0.2	5853 - 11639	1393.043	GKS14 - 4D □□□ 080-31 04D			

Thermal limit not considered (see note on page 3-12)

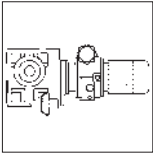
Disco variable speed drives

Selection tables with helical-bevel gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
1.5 kW				GKS □□ - 3D	4-40
	147 - 25	74 - 148	6.485	GKS06 - 3D □□□ 090-32 05E	
	138 - 24	78 - 147	6.863	GKS05 - 3D □□□ 090-32 05E	
	101 - 18	107 - 165	9.412	GKS05 - 3D □□□ 090-32 05E	
	103 - 18	105 - 210	9.196	GKS06 - 3D □□□ 090-32 05E	
	90 - 16	121 - 227	10.569	GKS05 - 3D □□□ 090-32 05E	
	72 - 13	150 - 165	13.176	GKS05 - 3D □□□ 090-32 05E	
	75 - 13	144 - 288	12.612	GKS06 - 3D □□□ 090-32 05E	
	59 - 10	182 - 280	16.000	GKS05 - 3D □□□ 090-32 05E	
	57 - 9.9	190 - 381	16.699	GKS06 - 3D □□□ 090-32 05E	
	49 - 8.6	219 - 297	19.216	GKS05 - 3D □□□ 090-32 05E	
	47 - 8.1	232 - 463	20.329	GKS06 - 3D □□□ 090-32 05E	
	36 - 6.3	298 - 298	26.353	GKS05 - 3D □□□ 090-32 05E	
	37 - 6.3	297 - 593	26.017	GKS06 - 3D □□□ 090-32 05E	
	30 - 5.2	366 - 610	32.063	GKS06 - 3D □□□ 090-32 05E	
	30 - 5.2	363 - 726	31.858	GKS07 - 3D □□□ 090-32 05E	
	23 - 4.0	473 - 689	41.472	GKS06 - 3D □□□ 090-32 05E	
	24 - 4.2	452 - 904	39.662	GKS09 - 3D □□□ 090-32 05E	
	18 - 3.1	605 - 695	53.074	GKS06 - 3D □□□ 090-32 05E	
	19 - 3.3	574 - 1148	50.345	GKS07 - 3D □□□ 090-32 05E	
	15 - 2.6	739 - 1195	64.790	GKS07 - 3D □□□ 090-32 05E	
	14 - 2.5	751 - 1502	65.879	GKS09 - 3D □□□ 090-32 05E	
	12 - 2.1	905 - 1205	79.407	GKS07 - 3D □□□ 090-32 05E	
	12 - 2.1	912 - 1824	79.996	GKS09 - 3D □□□ 090-32 05E	
	9.1 - 1.6	1189 - 1215	104.296	GKS07 - 3D □□□ 090-32 05E	
	9.2 - 1.6	1180 - 2360	103.524	GKS09 - 3D □□□ 090-32 05E	
	7.6 - 1.3	1432 - 2864	125.641	GKS09 - 3D □□□ 090-32 05E	
	6.0 - 1.0	1810 - 3080	158.816	GKS09 - 3D □□□ 090-32 05E	
	6.0 - 1.0	1808 - 3615	158.571	GKS11 - 3D □□□ 090-32 05E	
	4.6 - 0.8	2338 - 3080	205.111	GKS09 - 3D □□□ 090-32 05E	
	4.5 - 0.8	2396 - 4792	210.222	GKS11 - 3D □□□ 090-32 05E	
	3.8 - 0.7	2837 - 3080	248.930	GKS09 - 3D □□□ 090-32 05E	
3.7 - 0.7	2908 - 5816	255.133	GKS11 - 3D □□□ 090-32 05E		
3.4 - 0.6	3031 - 3031	279.205	GKS09 - 3D □□□ 090-32 05E		
3.3 - 0.6	3262 - 5975	286.219	GKS11 - 3D □□□ 090-32 05E		
3.0 - 0.5	3676 - 5892	322.500	GKS11 - 3D □□□ 090-32 05E		
			GKS □□ - 4D	4-44	
2.4 - 0.4	4435 - 5973	395.787	GKS11 - 4D □□□ 090-32 05E		
2.4 - 0.4	4377 - 8755	390.672	GKS14 - 4D □□□ 090-32 05E		

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

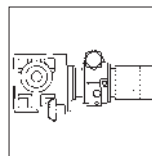
Selection tables with helical-bevel gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
1.5 kW				GKS □□ - 4D	4-44
	1.9 - 0.3	5739 - 5975	512.195	GKS11 - 4D □□□ 090-32 05E	
	1.9 - 0.3	5749 - 11488	513.121	GKS14 - 4D □□□ 090-32 05E	
	1.5 - 0.3	6978 - 11488	622.742	GKS14 - 4D □□□ 090-32 05E	
	1.2 - 0.2	9030 - 11488	805.901	GKS14 - 4D □□□ 090-32 05E	
	1.1 - 0.2	10174 - 11639	908.058	GKS14 - 4D □□□ 090-32 05E	
	1.0 - 0.2	10959 - 11488	978.071	GKS14 - 4D □□□ 090-32 05E	
2.2 kW				GKS □□ - 3D	4-40
	296 - 52	55 - 111	6.485	GKS06 - 3D □□□ 090-31 05E	
	280 - 49	59 - 117	6.863	GKS05 - 3D □□□ 090-31 05E	
	204 - 36	81 - 161	9.412	GKS05 - 3D □□□ 090-31 05E	
	182 - 32	90 - 181	10.569	GKS05 - 3D □□□ 090-31 05E	
	146 - 25	113 - 165	13.176	GKS05 - 3D □□□ 090-31 05E	
	152 - 27	108 - 216	12.612	GKS06 - 3D □□□ 090-31 05E	
	120 - 21	137 - 274	16.000	GKS05 - 3D □□□ 090-31 05E	
	115 - 20	143 - 286	16.699	GKS06 - 3D □□□ 090-31 05E	
	100 - 17	164 - 297	19.216	GKS05 - 3D □□□ 090-31 05E	
	94 - 17	174 - 348	20.329	GKS06 - 3D □□□ 090-31 05E	
	73 - 13	225 - 298	26.353	GKS05 - 3D □□□ 090-31 05E	
	74 - 13	222 - 445	26.017	GKS06 - 3D □□□ 090-31 05E	
	59 - 10	280 - 331	32.744	GKS05 - 3D □□□ 090-31 05E	
	60 - 10	274 - 548	32.063	GKS06 - 3D □□□ 090-31 05E	
	46 - 8.1	355 - 689	41.472	GKS06 - 3D □□□ 090-31 05E	
	36 - 6.3	454 - 695	53.074	GKS06 - 3D □□□ 090-31 05E	
	38 - 6.7	430 - 861	50.345	GKS07 - 3D □□□ 090-31 05E	
	29 - 5.1	557 - 624	65.207	GKS06 - 3D □□□ 090-31 05E	
	30 - 5.2	554 - 1108	64.790	GKS07 - 3D □□□ 090-31 05E	
	24 - 4.2	679 - 1205	79.407	GKS07 - 3D □□□ 090-31 05E	
	24 - 4.2	684 - 1368	79.996	GKS09 - 3D □□□ 090-31 05E	
	18 - 3.2	892 - 1215	104.296	GKS07 - 3D □□□ 090-31 05E	
	19 - 3.2	885 - 1770	103.524	GKS09 - 3D □□□ 090-31 05E	
	15 - 2.7	1082 - 1215	126.578	GKS07 - 3D □□□ 090-31 05E	
	15 - 2.7	1074 - 2148	125.641	GKS09 - 3D □□□ 090-31 05E	
	12 - 2.1	1358 - 2715	158.816	GKS09 - 3D □□□ 090-31 05E	
	9.4 - 1.6	1753 - 3080	205.111	GKS09 - 3D □□□ 090-31 05E	
	9.1 - 1.6	1797 - 3594	210.222	GKS11 - 3D □□□ 090-31 05E	
	7.7 - 1.4	2128 - 3080	248.930	GKS09 - 3D □□□ 090-31 05E	
7.5 - 1.3	2181 - 4362	255.133	GKS11 - 3D □□□ 090-31 05E		

Thermal limit not considered (see note on page 3-12)

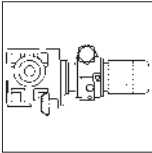
Disco variable speed drives

Selection tables with helical-bevel gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
2.2 kW				GKS □□ - 3D	4-40
	6.9 - 1.2	2387 - 3031	279.205	GKS09 - 3D □□□ 090-31 05E	
	6.7 - 1.2	2447 - 4894	286.219	GKS11 - 3D □□□ 090-31 05E	
	6.1 - 1.1	2690 - 3080	314.659	GKS09 - 3D □□□ 090-31 05E	4-44
	6.0 - 1.0	2757 - 5514	322.500	GKS11 - 3D □□□ 090-31 05E	
				GKS □□ - 4D	
	4.9 - 0.9	3326 - 5973	395.787	GKS11 - 4D □□□ 090-31 05E	
	4.9 - 0.9	3283 - 6566	390.672	GKS14 - 4D □□□ 090-31 05E	
	3.8 - 0.7	4304 - 5975	512.195	GKS11 - 4D □□□ 090-31 05E	
	3.7 - 0.7	4312 - 8624	513.121	GKS14 - 4D □□□ 090-31 05E	
	3.1 - 0.5	5224 - 5975	621.619	GKS11 - 4D □□□ 090-31 05E	
	3.1 - 0.5	5233 - 10466	622.742	GKS14 - 4D □□□ 090-31 05E	
	2.4 - 0.4	6772 - 11488	805.901	GKS14 - 4D □□□ 090-31 05E	
2.0 - 0.3	8219 - 11488	978.071	GKS14 - 4D □□□ 090-31 05E		
1.6 - 0.3	10389 - 11488	1236.326	GKS14 - 4D □□□ 090-31 05E		
3 kW				GKS □□ - 3D	4-40
	168 - 29	124 - 249	5.955	GKS07 - 3D □□□ 100-32 06G	
	121 - 21	173 - 345	8.254	GKS07 - 3D □□□ 100-32 06G	
	99 - 17	212 - 423	10.124	GKS07 - 3D □□□ 100-32 06G	
	79 - 14	266 - 531	12.711	GKS07 - 3D □□□ 100-32 06G	
	60 - 11	348 - 697	16.674	GKS07 - 3D □□□ 100-32 06G	
	49 - 8.5	429 - 857	20.511	GKS07 - 3D □□□ 100-32 06G	
	40 - 6.9	528 - 1055	25.244	GKS07 - 3D □□□ 100-32 06G	
	31 - 5.5	666 - 1172	31.858	GKS07 - 3D □□□ 100-32 06G	
	30 - 5.3	688 - 1377	32.940	GKS09 - 3D □□□ 100-32 06G	
	24 - 4.3	855 - 1290	40.906	GKS07 - 3D □□□ 100-32 06G	
	25 - 4.4	829 - 1658	39.662	GKS09 - 3D □□□ 100-32 06G	
	20 - 3.5	1052 - 1300	50.345	GKS07 - 3D □□□ 100-32 06G	
	21 - 3.6	1016 - 2032	48.625	GKS09 - 3D □□□ 100-32 06G	
	15 - 2.7	1377 - 2753	65.879	GKS09 - 3D □□□ 100-32 06G	
	13 - 2.2	1672 - 3071	79.996	GKS09 - 3D □□□ 100-32 06G	
	13 - 2.2	1669 - 3338	79.873	GKS11 - 3D □□□ 100-32 06G	
	9.7 - 1.7	2160 - 4320	103.365	GKS11 - 3D □□□ 100-32 06G	
	8.0 - 1.4	2622 - 5243	125.448	GKS11 - 3D □□□ 100-32 06G	
	6.4 - 1.1	3271 - 6542	156.522	GKS14 - 3D □□□ 100-32 06G	

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

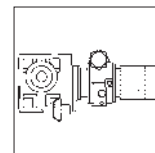
Selection tables with helical-bevel gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
3 kW			GKS □□ - 3D		4-40
	4.8 - 0.8	4393 - 5892	210.222	GKS11 - 3D □□□ 100-32 06G	
	4.8 - 0.8	4393 - 8786	210.222	GKS14 - 3D □□□ 100-32 06G	
	3.9 - 0.7	5332 - 5892	255.133	GKS11 - 3D □□□ 100-32 06G	
	3.9 - 0.7	5332 - 10663	255.133	GKS14 - 3D □□□ 100-32 06G	
	3.5 - 0.6	5981 - 11609	286.219	GKS14 - 3D □□□ 100-32 06G	
	3.1 - 0.5	6739 - 11555	322.500	GKS14 - 3D □□□ 100-32 06G	
			GKS □□ - 4D		
	2.6 - 0.5	8025 - 11454	390.672	GKS14 - 4D □□□ 100-32 06G	
	2.0 - 0.3	10540 - 11488	513.121	GKS14 - 4D □□□ 100-32 06G	
1.7 - 0.3	11639 - 11639	578.164	GKS14 - 4D □□□ 100-32 06G		
4 kW			GKS □□ - 3D		4-40
	168 - 29	181 - 362	5.955	GKS07 - 3D □□□ 112-22 07G	
	121 - 21	251 - 502	8.254	GKS07 - 3D □□□ 112-22 07G	
	99 - 17	308 - 615	10.124	GKS07 - 3D □□□ 112-22 07G	
	79 - 14	386 - 773	12.711	GKS07 - 3D □□□ 112-22 07G	
	60 - 11	507 - 1014	16.674	GKS07 - 3D □□□ 112-22 07G	
	49 - 8.5	623 - 1110	20.511	GKS07 - 3D □□□ 112-22 07G	
	40 - 6.9	767 - 1177	25.244	GKS07 - 3D □□□ 112-22 07G	
	39 - 6.8	780 - 1559	25.649	GKS09 - 3D □□□ 112-22 07G	
	31 - 5.5	968 - 1172	31.858	GKS07 - 3D □□□ 112-22 07G	
	30 - 5.3	1001 - 2002	32.940	GKS09 - 3D □□□ 112-22 07G	
	24 - 4.3	1243 - 1290	40.906	GKS07 - 3D □□□ 112-22 07G	
	25 - 4.4	1206 - 2411	39.662	GKS09 - 3D □□□ 112-22 07G	
	21 - 3.6	1478 - 2956	48.625	GKS09 - 3D □□□ 112-22 07G	
	15 - 2.7	2002 - 3048	65.879	GKS09 - 3D □□□ 112-22 07G	
	15 - 2.7	1976 - 3951	64.995	GKS11 - 3D □□□ 112-22 07G	
	13 - 2.2	2432 - 3071	79.996	GKS09 - 3D □□□ 112-22 07G	
	13 - 2.2	2428 - 4856	79.873	GKS11 - 3D □□□ 112-22 07G	
	9.7 - 1.7	3142 - 6072	103.365	GKS11 - 3D □□□ 112-22 07G	
	9.8 - 1.7	3101 - 6203	102.029	GKS14 - 3D □□□ 112-22 07G	
	8.0 - 1.4	3813 - 6072	125.448	GKS11 - 3D □□□ 112-22 07G	
	8.1 - 1.4	3764 - 7528	123.826	GKS14 - 3D □□□ 112-22 07G	
	6.4 - 1.1	4758 - 8940	156.522	GKS14 - 3D □□□ 112-22 07G	
	4.8 - 0.8	6390 - 11555	210.222	GKS14 - 3D □□□ 112-22 07G	
3.9 - 0.7	7755 - 11555	255.133	GKS14 - 3D □□□ 112-22 07G		

Thermal limit not considered (see note on page 3-12)

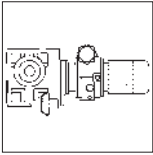
Disco variable speed drives

Selection tables with helical-bevel gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
4 kW	3.5 - 0.6	8700 - 11609	286.219	GKS □□ - 3D GKS14 - 3D □□□ 112-22 07G	4-40
	3.1 - 0.5	9803 - 11555	322.500	GKS14 - 3D □□□ 112-22 07G	4-44
	2.6 - 0.5	11454 - 11454	390.672	GKS □□ - 4D GKS14 - 4D □□□ 112-22 07G	
5.5 kW	168 - 34	255 - 471	5.955	GKS □□ - 3D GKS07 - 3D □□□ 132-12 18H	4-40
	121 - 24	353 - 541	8.254	GKS07 - 3D □□□ 132-12 18H	
	99 - 20	433 - 800	10.124	GKS07 - 3D □□□ 132-12 18H	
	79 - 16	543 - 832	12.711	GKS07 - 3D □□□ 132-12 18H	
	81 - 16	525 - 1050	12.283	GKS09 - 3D □□□ 132-12 18H	
	60 - 12	713 - 1071	16.674	GKS07 - 3D □□□ 132-12 18H	
	62 - 12	689 - 1378	16.122	GKS09 - 3D □□□ 132-12 18H	
	49 - 9.8	877 - 1110	20.511	GKS07 - 3D □□□ 132-12 18H	
	51 - 10	835 - 1671	19.541	GKS09 - 3D □□□ 132-12 18H	
	40 - 7.9	1079 - 1177	25.244	GKS07 - 3D □□□ 132-12 18H	
	39 - 7.8	1096 - 2193	25.649	GKS09 - 3D □□□ 132-12 18H	
	25 - 5.0	1695 - 3002	39.662	GKS09 - 3D □□□ 132-12 18H	
	25 - 5.0	1721 - 3443	40.272	GKS11 - 3D □□□ 132-12 18H	
	21 - 4.1	2078 - 3017	48.625	GKS09 - 3D □□□ 132-12 18H	
	20 - 4.1	2109 - 4217	49.333	GKS11 - 3D □□□ 132-12 18H	
	15 - 3.1	2778 - 5556	64.995	GKS11 - 3D □□□ 132-12 18H	
	13 - 2.5	3414 - 6032	79.873	GKS11 - 3D □□□ 132-12 18H	
	13 - 2.6	3320 - 6641	77.681	GKS14 - 3D □□□ 132-12 18H	
	9.8 - 2.0	4361 - 8722	102.029	GKS14 - 3D □□□ 132-12 18H	
	8.1 - 1.6	5293 - 10586	123.826	GKS14 - 3D □□□ 132-12 18H	
4.8 - 1.0	8986 - 11555	210.222	GKS14 - 3D □□□ 132-12 18H		
3.9 - 0.8	10905 - 11555	255.133	GKS14 - 3D □□□ 132-12 18H		
3.7 - 0.8	11243 - 11520	267.568	GKS □□ - 4D GKS14 - 4D □□□ 132-12 18H	4-44	
7.5 kW	168 - 34	328 - 471	5.955	GKS □□ - 3D GKS07 - 3D □□□ 132-22 08H	4-40
	121 - 24	455 - 541	8.254	GKS07 - 3D □□□ 132-22 08H	
	99 - 20	558 - 800	10.124	GKS07 - 3D □□□ 132-22 08H	
	79 - 16	700 - 832	12.711	GKS07 - 3D □□□ 132-22 08H	
	81 - 16	677 - 1353	12.283	GKS09 - 3D □□□ 132-22 08H	

Thermal limit not considered (see note on page 3-12)

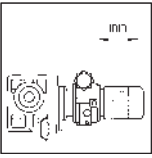


Disco variable speed drives

Selection tables with helical-bevel gearboxes

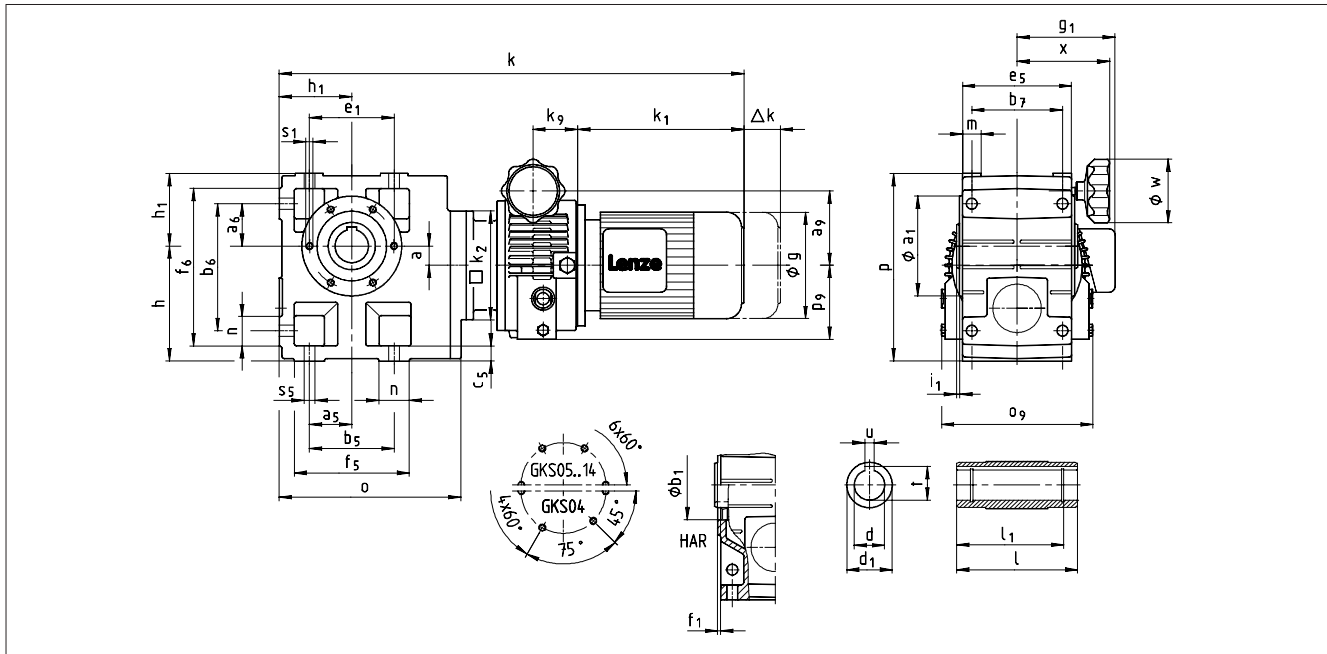
P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
7.5 kW	60 - 12	919 - 1071	16.674	GKS □□ - 3D GKS07 - 3D □□□ 132-22 08H GKS09 - 3D □□□ 132-22 08H	4-40
	62 - 12	888 - 1776	16.122		
	49 - 9.8	1110 - 1110	20.511	GKS07 - 3D □□□ 132-22 08H GKS09 - 3D □□□ 132-22 08H	
	51 - 10	1077 - 2153	19.541		
	39 - 7.8	1413 - 2826	25.649	GKS09 - 3D □□□ 132-22 08H	
	30 - 6.1	1815 - 2984	32.940	GKS09 - 3D □□□ 132-22 08H GKS11 - 3D □□□ 132-22 08H	
	32 - 6.3	1739 - 3479	31.573		
	25 - 5.0	2185 - 3002	39.662	GKS09 - 3D □□□ 132-22 08H GKS11 - 3D □□□ 132-22 08H	
	25 - 5.0	2219 - 4437	40.272		
	21 - 4.1	2679 - 3017	48.625	GKS09 - 3D □□□ 132-22 08H GKS11 - 3D □□□ 132-22 08H	
	20 - 4.1	2718 - 5436	49.333		
	15 - 3.1	3581 - 5992	64.995	GKS11 - 3D □□□ 132-22 08H GKS14 - 3D □□□ 132-22 08H	
	16 - 3.2	3492 - 6984	63.382		
	13 - 2.5	4400 - 6032	79.873	GKS11 - 3D □□□ 132-22 08H GKS14 - 3D □□□ 132-22 08H	
	13 - 2.6	4280 - 8559	77.681		
	9.8 - 2.0	5621 - 11242	102.029	GKS14 - 3D □□□ 132-22 08H	
	8.1 - 1.6	6822 - 11639	123.826	GKS14 - 3D □□□ 132-22 08H	
	4.8 - 1.0	11555 - 11555	210.222	GKS14 - 3D □□□ 132-22 08H	
	4.6 - 0.9	11477 - 11477	218.315	GKS □□ - 4D GKS14 - 4D □□□ 132-22 08H	4-44

Thermal limit not considered (see note on page 3-12)



DISCO variable speed drives

Dimensions with helical-bevel gearboxes



4

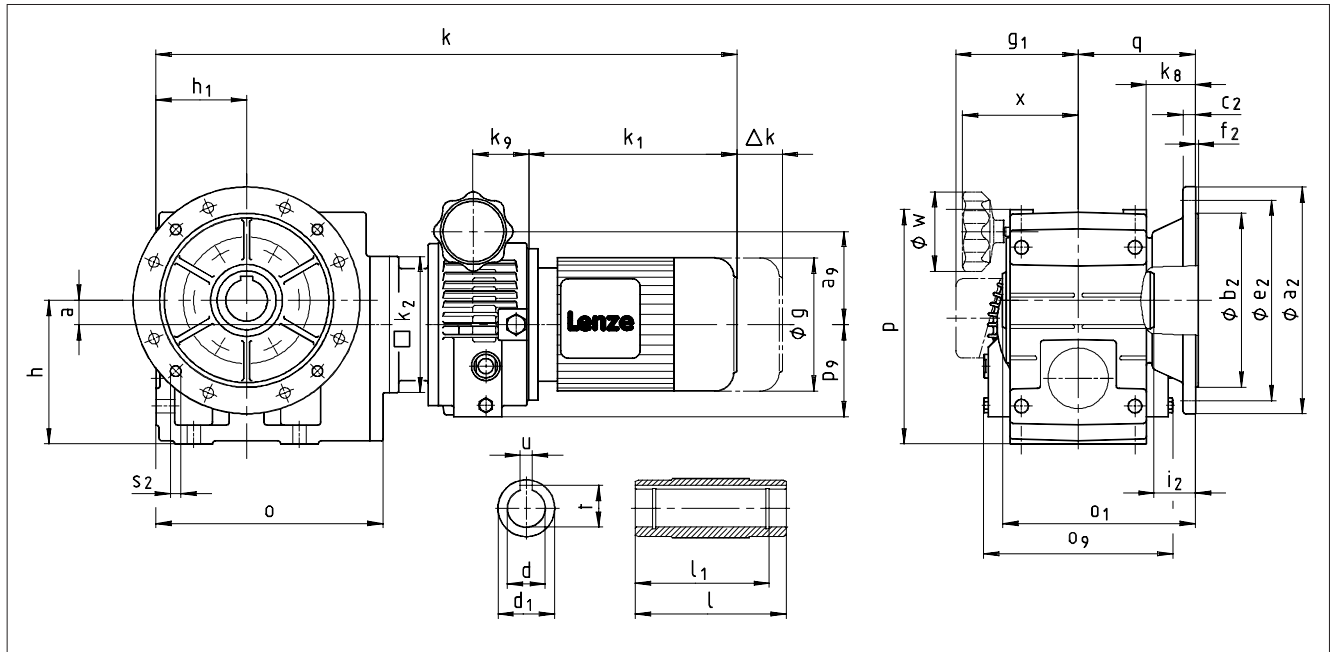
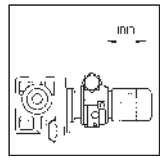
Disco variable speed drives GKS □□ - 3 D H □ R		Drive size																					
		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08														
Motor	g	143	143	160	180	206	222	274	274														
	g₁ Without options	128	128	137	147	140	174	196	196														
	Brake motor	131	131	142	154	151	174	212	212														
	k₁	237	237	267	350	316	379	450	450														
	Δk Brake	54	54	36	48	111	80	63	63														
DISCO	a₉	83	86	103	123	149	190																
	k₂	145	145	180	180	265	300																
	k₉	42	50	58	74	82	104																
	o₉	150	175	215	253	305	379																
	p₉	65	83	98	122	145	176																
	w	70	70	105	105	105	160																
	x	105	105	152	152	152	195 1)																
Gearbox size	Gearbox						Total length																
	o	l*	p*	h**	h₁	a	k																
GKS 04	203	115	171	100	71	20	576	589	649														
GKS 05	232	140	205	125	80	23	596	609	669	781													
GKS 06	291	160	250	150	100	28	652	665	725	837													
GKS 07	354	200	310	190	120	34	708	721	781	893	890	953	1060	1060									
GKS 09	429	240	386	236	150	41		852	964	961	1024	1131	1131										
GKS 11	527	290	485	300	185	54			1055	1052	1115	1222	1222										
GKS 14	636	350	605	375	230	67					1151	1214	1321	1321									

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	a ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	m	s ₅
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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 k₂ ** Observe dimension p₉ 1) Plus 80 mm for handle

Disco variable speed drives

Dimensions with helical-bevel gearboxes

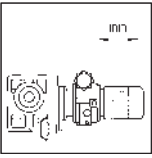


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Disco variable speed drives GKS □□ - 3 D HAK		Drive size																
		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08									
Motor	g	143	143	160	180	206	222	274	274									
	g₁ Without options	128	128	137	147	140	174	196	196									
	Brake motor	131	131	142	154	151	174	212	212									
	k₁	237	237	267	350	316	379	450	450									
	Δk Brake	54	54	36	48	111	80	63	63									
DISCO	a₉	83	86	103	123	149		190										
	k₂	145	145	180	180	265		300										
	k₉	42	50	58	74	82		104										
	o₉	150	175	215	253	305		379										
	p₉	65	83	98	122	145		176										
	w	70	70	105	105	105		160										
	x	105	105	152	152	152		195 1)										
Gearbox size	Gearbox								Total length									
	o	o ₁ *	p*	h	h ₁	a	k ₈	q	k									
GKS 04	203	148	171	100	71	20	38	90.5	576	589	649							
GKS 05	232	173	205	125	80	23	40	103	596	609	669	781						
GKS 06	291	201	250	150	100	28	49	121	652	665	725	837						
GKS 07	354	255	310	190	120	34	65	155	708	721	781	893	890	953	1060	1060		
GKS 09	429	300	386	236	150	41	69	180			852	964	961	1024	1131	1131		
GKS 11	527	350	485	300	185	54	70	205			1055	1052	1115	1222	1222	1222		
GKS 14	636	410	605	375	230	67	71	235				1151	1214	1321	1321	1321		

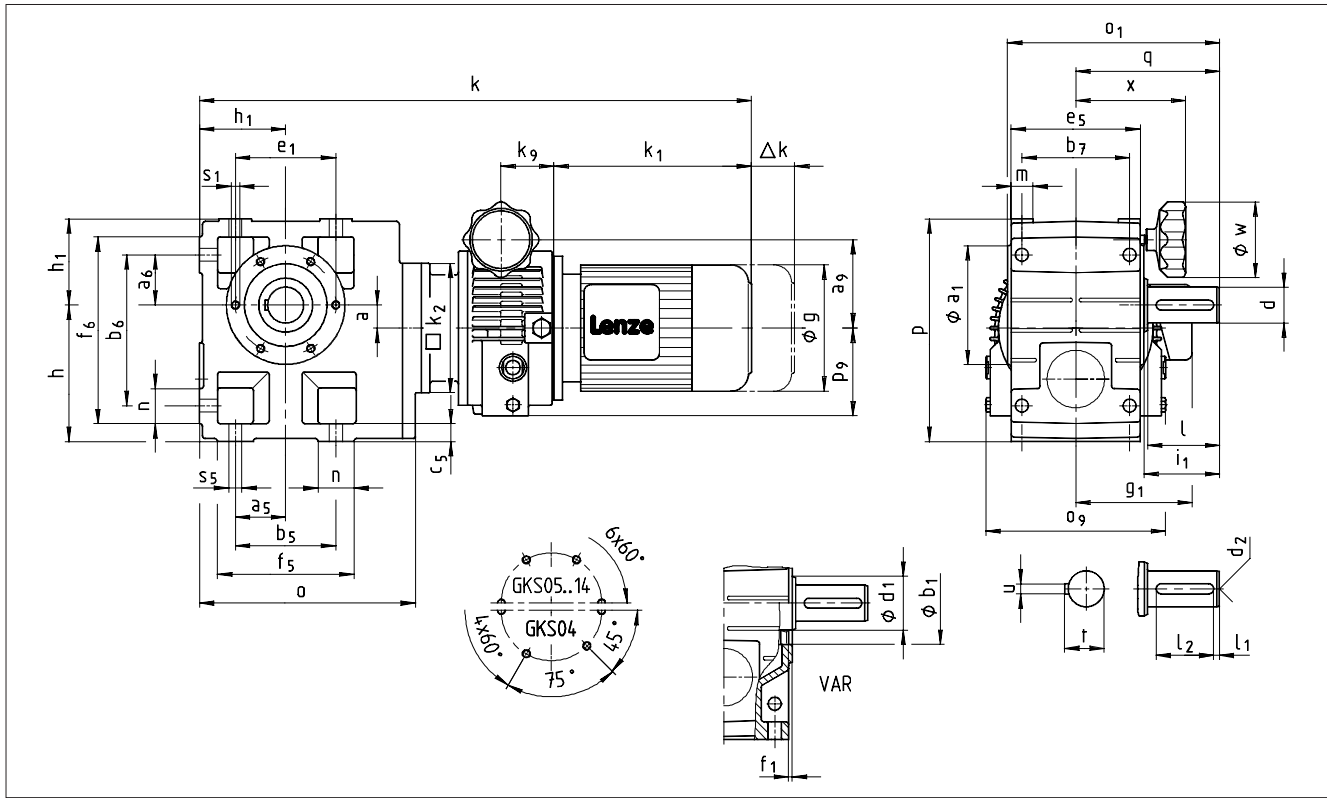
Gearbox size	d H7	l	Hollow shaft				Output flange							
			d ₁	l ₁	u JS9	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂	
GKS 04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9	
GKS 05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
GKS 06	40 45	160	65	140	12 14	43.3 48.8	200 250	130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

Dimensions in [mm] * Observe dimension k₂ ** Observe dimension p₉ 1) Plus 80 mm for handle



Disco variable speed drives

Dimensions with helical-bevel gearboxes



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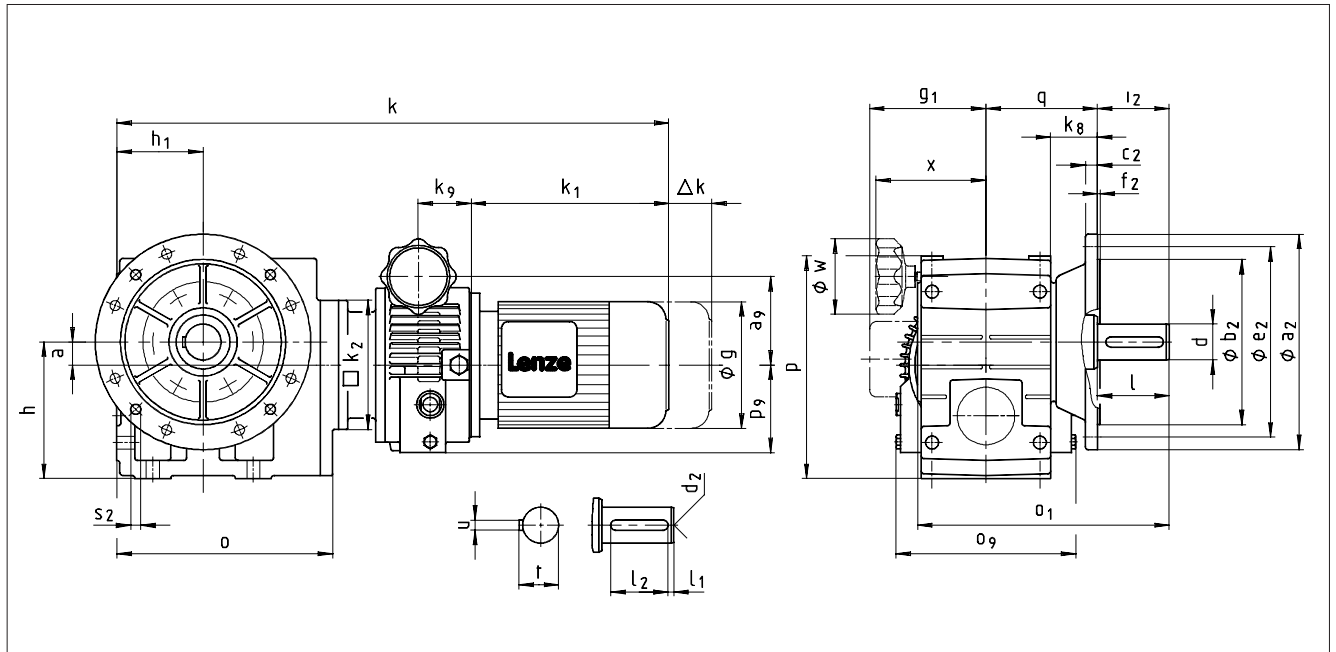
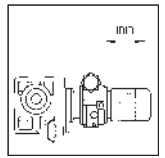
Disco variable speed drives		Drive size																							
GKS □□ - 3 D V □ R		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08																
Motor	g	143	143	160	180	206	222	274	274																
	g₁ Without options	128	128	137	147	140	174	196	196																
	Brake motor	131	131	142	154	151	174	212	212																
	k₁	237	237	267	350	316	379	450	450																
	Δk Brake	54	54	36	48	111	80	63	63																
DISCO	a₉	83	86	103	123	149		190																	
	k₂	145	145	180	180	265		300																	
	k₉	42	50	58	74	82		104																	
	o₉	150	175	215	253	305		379																	
	p₉	65	83	98	122	145		176																	
	w	70	70	105	105	105		160																	
	x	105	105	152	152	152		195 1)																	
Gearbox size	Gearbox							Total length																	
	o	o ₁ *	p*	h**	h ₁	a	q	k																	
GKS 04	203	163	171	100	71	20	1075	576	589	649															
GKS 05	232	197	205	125	80	23	130	596	609	669	781														
GKS 06	291	236	250	150	100	28	160	652	665	725	837														
GKS 07	354	296	310	190	120	34	200	708	721	781	893	890	953	1060	1060										
GKS 09	429	356	386	236	150	41	240			852	964	961	1024	1131	1131										
GKS 11	527	445	485	300	185	54	305				1055	1052	1115	1222	1222										
GKS 14	636	544	605	375	230	67	375					1151	1214	1321	1321										

Gearbox size	Solid shaft								Pitch circle						Foot											
	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 ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	m	s ₅
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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 * Observe dimension k₂ 1) Plus 80 mm for handle
d > 50 mm: m6 ** Observe dimension p₉

Disco variable speed drives

Dimensions with helical-bevel gearboxes

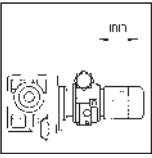


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Disco variable speed drives GKS □□ - 3 D VAK		Drive size																
		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08									
Motor	g	143	143	160	180	206	222	274	274									
	g₁ Without options	128	128	137	147	140	174	196	196									
	Brake motor	131	131	142	154	151	174	212	212									
	k₁	237	237	267	350	316	379	450	450									
	Δk Brake	54	54	36	48	111	80	63	63									
DISCO	a₉	83	86	103	123	149		190										
	k₂	145	145	180	180	265		300										
	k₉	42	50	58	74	82		104										
	o₉	150	175	215	253	305		379										
	p₉	65	83	98	122	145		176										
	w	70	70	105	105	105		160										
	x	105	105	152	152	152		195 1)										
Gearbox size	Gearbox								Total length									
	o	o ₁ *	p*	h**	h ₁	a	k ₈	q	k									
GKS 04	203	196	171	100	71	20	38	90.5	576	589	649							
GKS 05	232	230	205	125	80	23	40	103	596	609	669	781						
GKS 06	291	277	250	150	100	28	49	121	652	665	725	837						
GKS 07	354	351	310	190	120	34	65	155	708	721	781	893	890	953	1060	1060		
GKS 09	429	416	386	236	150	41	69	180	852		964	961	1024	1131	1131			
GKS 11	527	505	485	300	185	54	70	205	1055		1052	1052	1115	1222	1222			
GKS 14	636	604	605	375	230	67	71	235			1151	1151	1214	1321	1321			

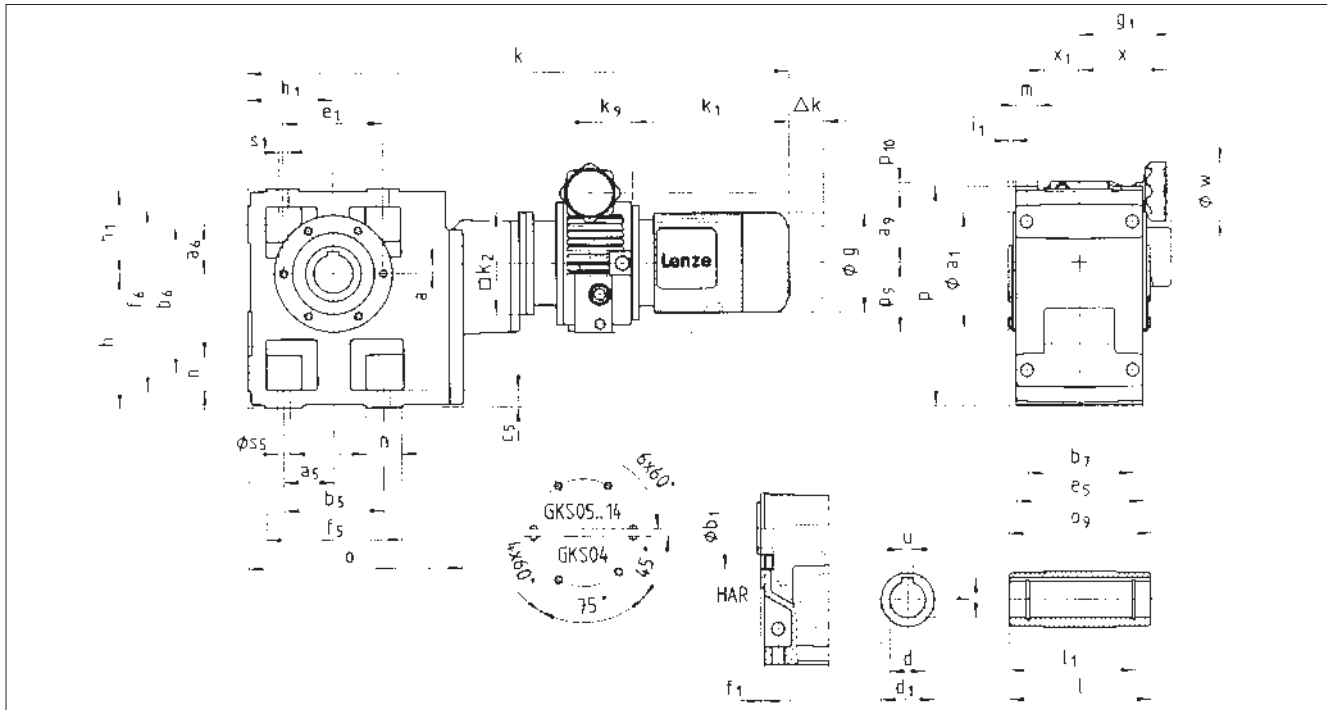
Gearbox size	Solid shaft								Output flange						
	d	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂	
GKS 04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
GKS 05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
GKS 06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
GKS 07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
GKS 09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
GKS 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	
GKS 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 * Observe dimension k₂ 1) Plus 80 mm for handle
d > 50 mm: m6 ** Observe dimension p₉



Disco variable speed drives

Dimensions with helical-bevel gearboxes



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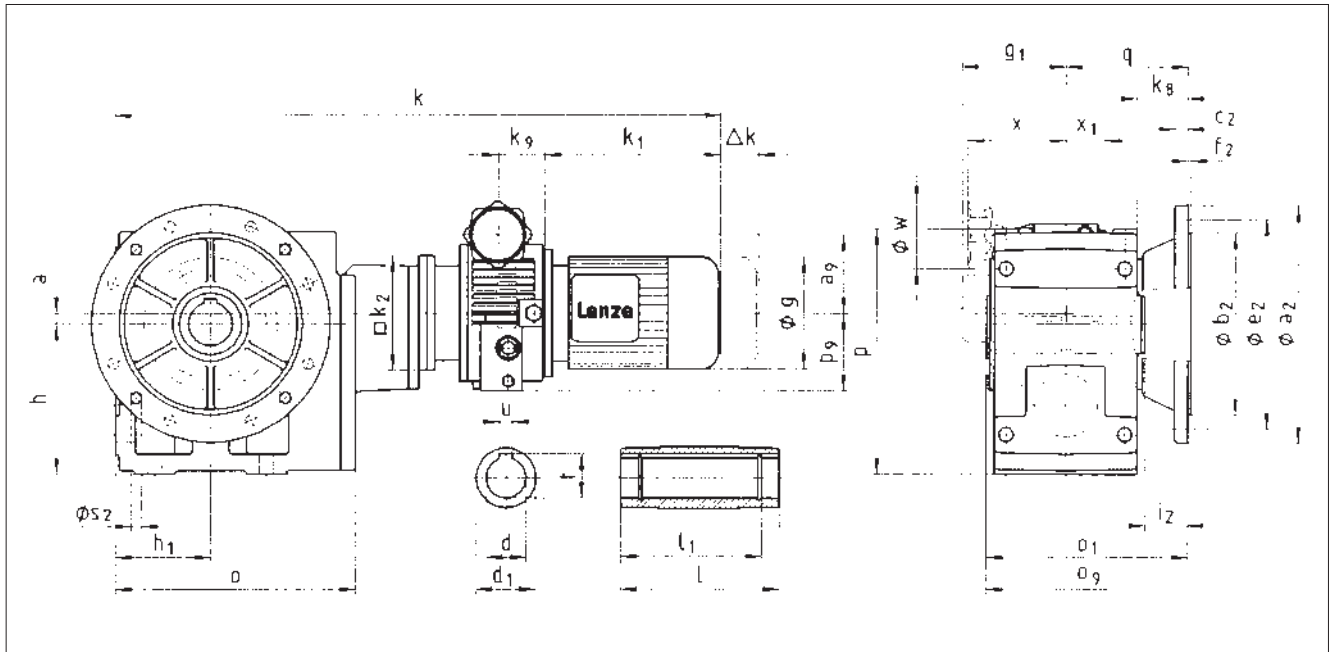
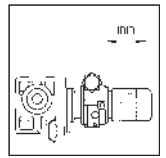
Disco variable speed drives		Drive size																			
GKS □□ - 4 D H □ R		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08												
Motor	g	143	143	160	180	206	222	274	274												
	g₁ Without options	128	128	137	147	140	174	196	196												
	Brake motor	131	131	142	154	151	174	212	212												
	k₁	237	237	267	350	316	379	450	450												
	Δk Brake	54	54	36	48	111	80	63	63												
DISCO	a₉	83	86	103	123	149		190													
	k₂	145	145	180	180	265		300													
	k₉	42	50	58	74	82		104													
	o₉	150	175	215	253	305		379													
	p₉	65	83	98	122	145		176													
	p₁₀	14	14	17	17	17		26													
	w	70	70	105	105	105		160													
	x	105	105	152	152	152		195 1)		111											
	x₁	43	43	63	63	63		111													
Gearbox size	Gearbox						Total length														
	o	l*	p*	h	h ₁	a	k														
GKS 05	226	140	205	125	80	13	672														
GKS 06	288	160	250	150	100	8	745	759	819												
GKS 07	351	200	310	190	120	11	812	826	886												
GKS 09	426	240	386	236	150	15	901	915	975	1087											
GKS 11	523	290	485	300	185	16	995	1025	1085	1197	1194	1257									
GKS 14	632	350	605	375	230	22			1218	1330	1327	1390	1497	1497							

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
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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 k₂ 1) Plus 80 mm for handle

Disco variable speed drives

Dimensions with helical-bevel gearboxes

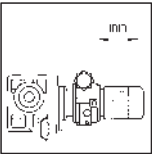


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Disco variable speed drives GKS □□ - 4 D HAK		Drive size																
		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08									
Motor	g	143	143	160	180	206	222	274	274									
	g ₁	Without options	128	128	137	147	140	174	196	196								
		Brake motor	131	131	142	154	151	174	212	212								
	k ₁	237	237	267	350	316	379	450	450									
Δk	Brake	54	54	36	48	111	80	63	63									
DISCO	a ₉	83	86	103	123	149		190										
	k ₂	145	145	180	180	265		300										
	k ₃	42	50	58	74	82		104										
	o ₉	150	175	215	253	305		379										
	p ₉	65	83	98	122	145		176										
	w	70	70	105	105	105		160										
	x	105	105	152	152	152		195 1)										
x ₁	43	43	63	63	63		111											
Gearbox size	Gearbox								Total length									
	o	o ₁ *	p*	h	h ₁	a	k ₃	q	k									
GKS 05	226	173	205	125	80	13	40	103	672									
GKS 06	288	201	250	150	100	8	49	121	745	759	819							
GKS 07	351	255	310	190	120	11	65	155	812	826	886							
GKS 09	426	300	386	236	150	15	69	180	901	915	975	1087						
GKS 11	523	350	485	300	185	16	70	205	995	1025	1085	1197	1194	1257				
GKS 14	632	410	605	375	230	22	71	235			1218	1330	1327	1390	1497	1497		

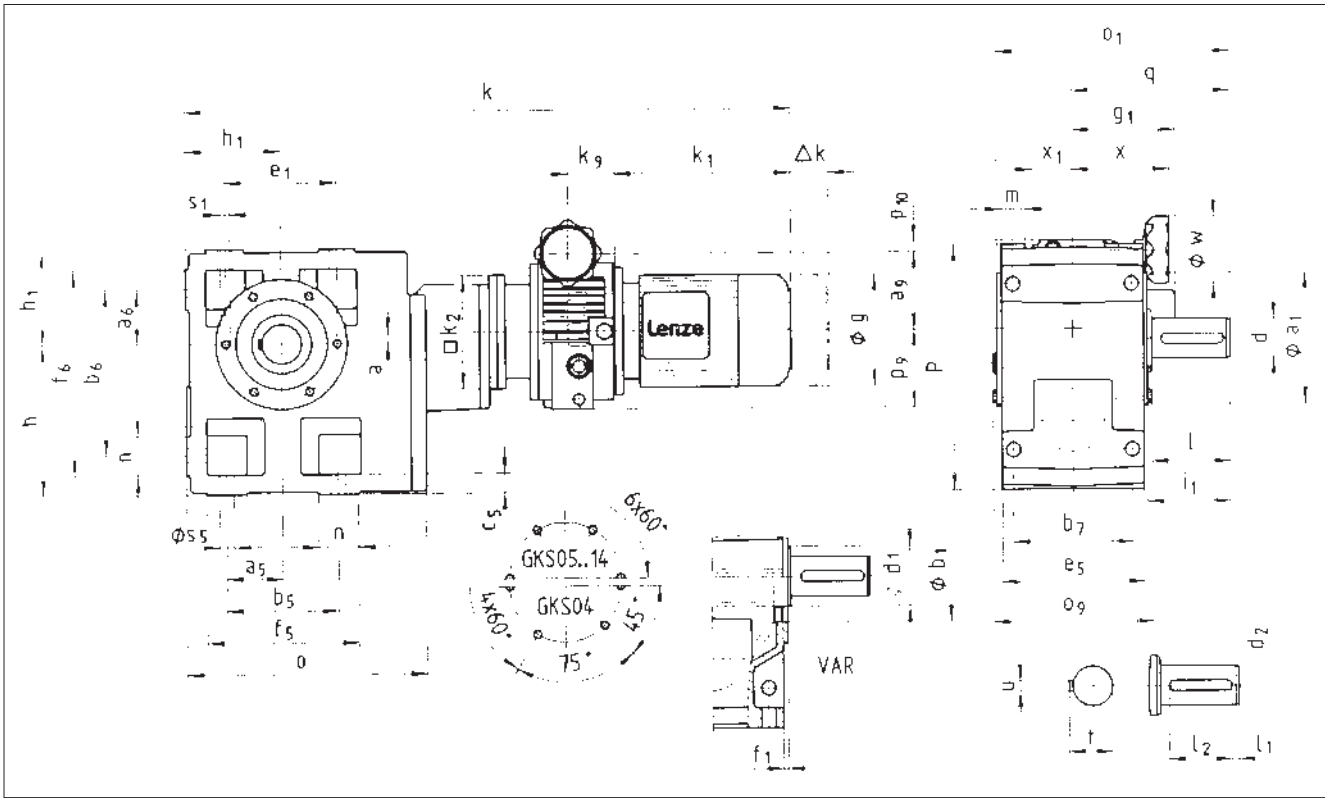
Gearbox size	Hollow shaft						Output flange							
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂	
GKS 05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
GKS 06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14	
GKS 07	50 55	200	75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

Dimensions in [mm] * Observe dimension k₂ 1) Plus 80 mm for handle



Disco variable speed drives

Dimensions with helical-bevel gearboxes



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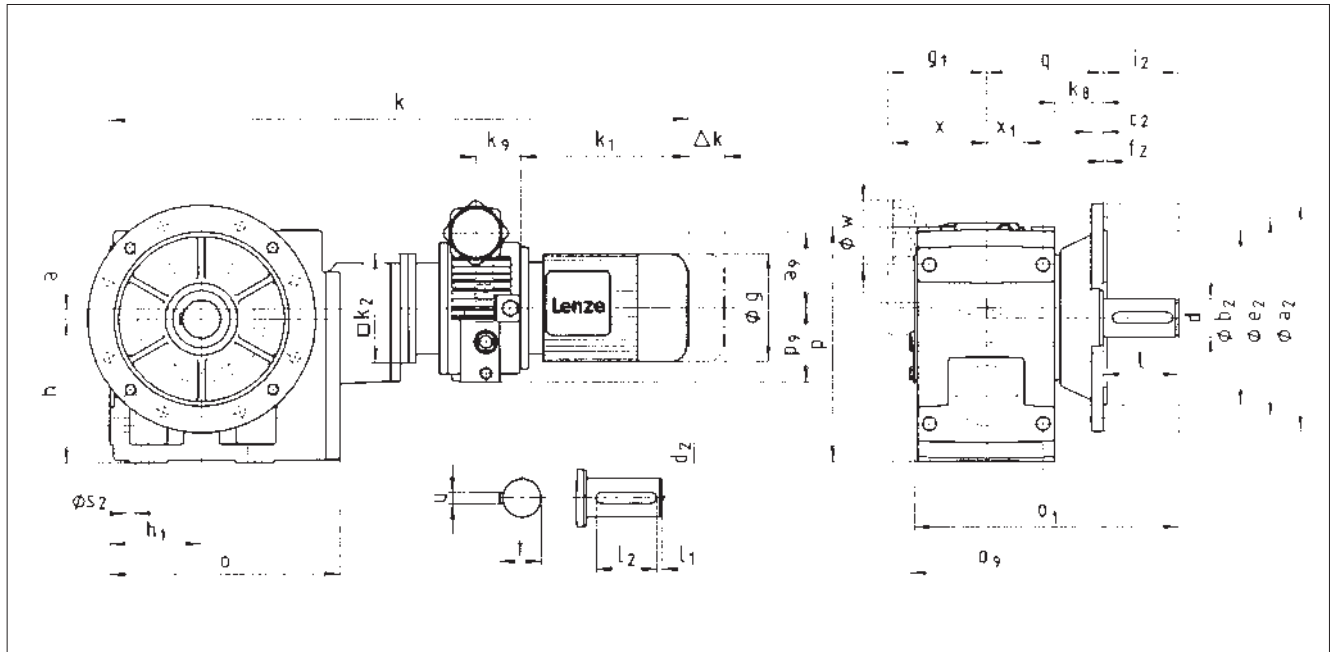
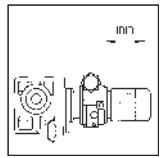
Disco variable speed drives		Drive size																					
GKS □□ - 4 D V □ R		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08														
Motor	g	143	143	160	180	206	222	274	274														
	g₁	Without options	128	128	137	147	140	174	196	196													
		Brake motor	131	131	142	154	151	174	212	212													
	k₁	237	237	267	350	316	379	450	450														
Δk	Brake	54	54	36	48	111	80	63	63														
DISCO	a₉	83	86	103	123	149	190																
	k₂	145	145	180	180	265	300																
	k₉	42	50	58	74	82	104																
	o₉	150	175	215	253	305	379																
	p₉	65	83	98	122	145	176																
	p₁₀	14	14	17	17	12	26																
	w	70	70	105	105	105	160																
	x	105	105	152	152	152	195 1)																
x₁	43	43	63	63	63	111																	
Gearbox size	Gearbox							Total length															
	o	o ₁ *	p*	h	h ₁	a	q	k															
GKS 05	226	197	205	125	80	13	130	672															
GKS 06	288	236	250	150	100	8	160	745	759	819													
GKS 07	351	296	310	190	120	11	200	812	826	886													
GKS 09	426	356	386	236	150	15	240	901	915	975	1087												
GKS 11	523	445	485	300	185	16	305	995	1025	1085	1197	1194	1257										
GKS 14	632	544	605	375	230	22	375			1218	1330	1327	1390	1497	1497								

Gearbox size	Solid shaft								Pitch circle					Foot												
	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 ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	m	s ₅
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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
GKS 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 * Observe dimension k₂
d > 50 mm: m6 1) Plus 80 mm for handle

Disco variable speed drives

Dimensions with helical-bevel gearboxes

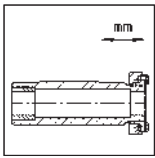


4

Disco variable speed drives		Drive size																	
GKS □□ - 4 D VAK		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07	132-12 18	132-22 08										
Motor	g	143	143	160	180	206	222	274	274										
	g₁ Without options	128	128	137	147	140	174	196	196										
	Brake motor	131	131	142	154	151	174	212	212										
	k₁	237	237	267	350	316	379	450	450										
	Δk Brake	54	54	36	48	111	80	63	63										
DISCO	a₉	83	86	103	123	149		190											
	k₂	145	145	180	180	265		300											
	k₉	42	50	58	74	82		104											
	o₉	150	175	215	253	305		379											
	p₉	65	83	98	122	145		176											
	w	70	70	105	105	105		160											
	x	105	105	152	152	152		195 1)											
	x₁	43	43	63	63	63	63	111	111										
Gearbox size	Gearbox								Total length										
	o	o ₁ *	p*	h	h ₁	a	k ₈	q	k										
GKS 05	226	230	205	125	80	13	40	103	672										
GKS 06	288	277	250	150	100	8	49	121	745	759	819								
GKS 07	351	351	310	190	120	11	65	155	812	826	886								
GKS 09	426	416	386	236	150	15	69	180	901	915	975	1087							
GKS 11	523	505	485	300	185	16	70	205	995	1025	1085	1197	1194	1257					
GKS 14	632	604	605	375	230	22	71	235			1218	1330	1327	1390	1497	1497			

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	
GKS 05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
GKS 06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
GKS 07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
GKS 09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
GKS 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	
GKS 14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

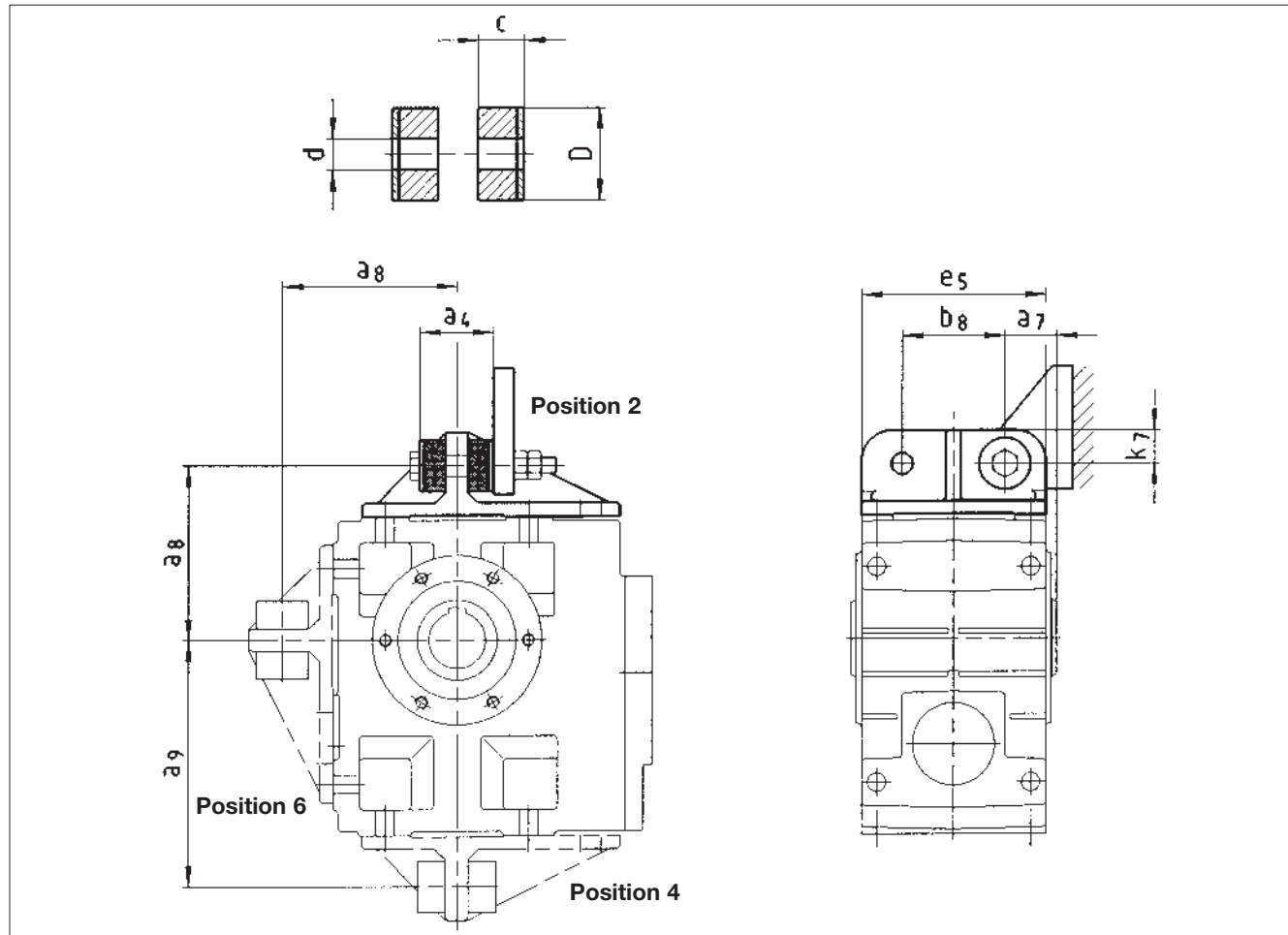
Dimensions in [mm] d ≤ 50 mm: k6 * Observe dimension k₂
d > 50 mm: m6 1) Plus 80 mm for handle



Disco variable speed drives

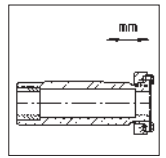
Additional dimensions GKS □ □

Torque plate at housing foot

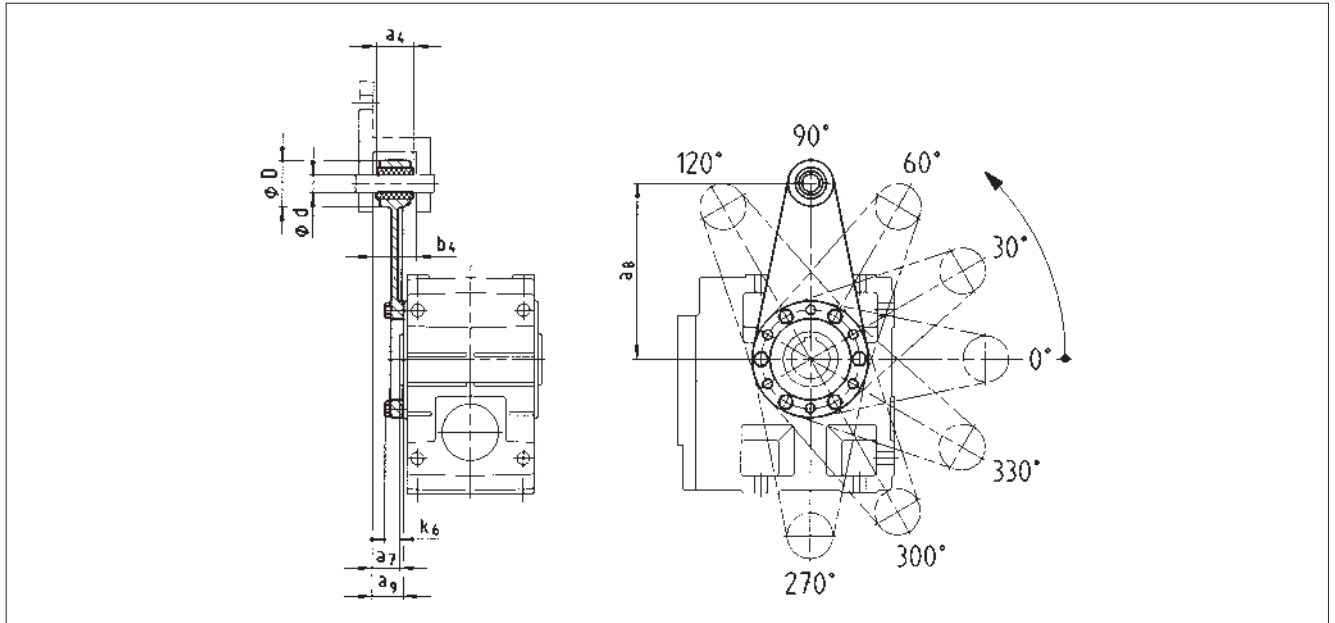


Gearbox size	a_4	a_7	a_8	a_9	b_8	c	d	D	e_5	k_7
GKS 04	41	27.5	106	135	60	14.5	11	30	100	20
GKS 05	45	35	115	160	70	15	13	40	127	25
GKS 06	72	40	145	195	80	27	17	50	145	30
GKS 07	78	50	170	240	100	28	21	60	180	35
GKS 09	86	60	214	300	120	29	26	72	222	46
GKS 11	94	72.5	260	375	145	30	33	92	270	55
GKS 14	100	85	320	465	180	30	39	110	328	70

Dimensions in [mm]

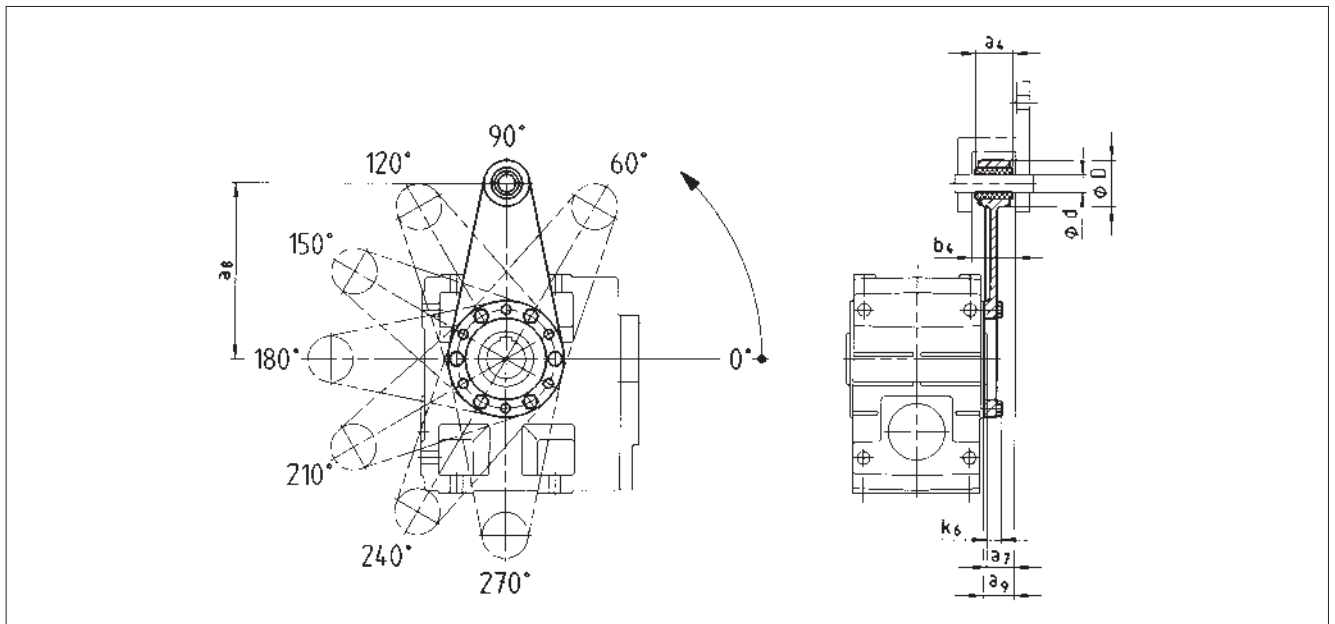


Torque plate at pitch circle in position 3



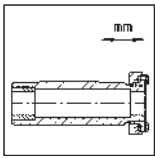
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Torque plate at pitch circle in position 5



Gearbox size	Mounting space		Torque plate					
	a ₇	b ₄	a ₄	a ₈	a ₉	d	D	k ₆
GKS 04	24	34.5	30	130	26.5	12	35	16
GKS 05	23.5	38.5	34	160	27.5	16	45	15
GKS 06	28	44.5	40	200	33	20	50	18
GKS 07	32.5	50.5	46	250	37.5	25	65	21

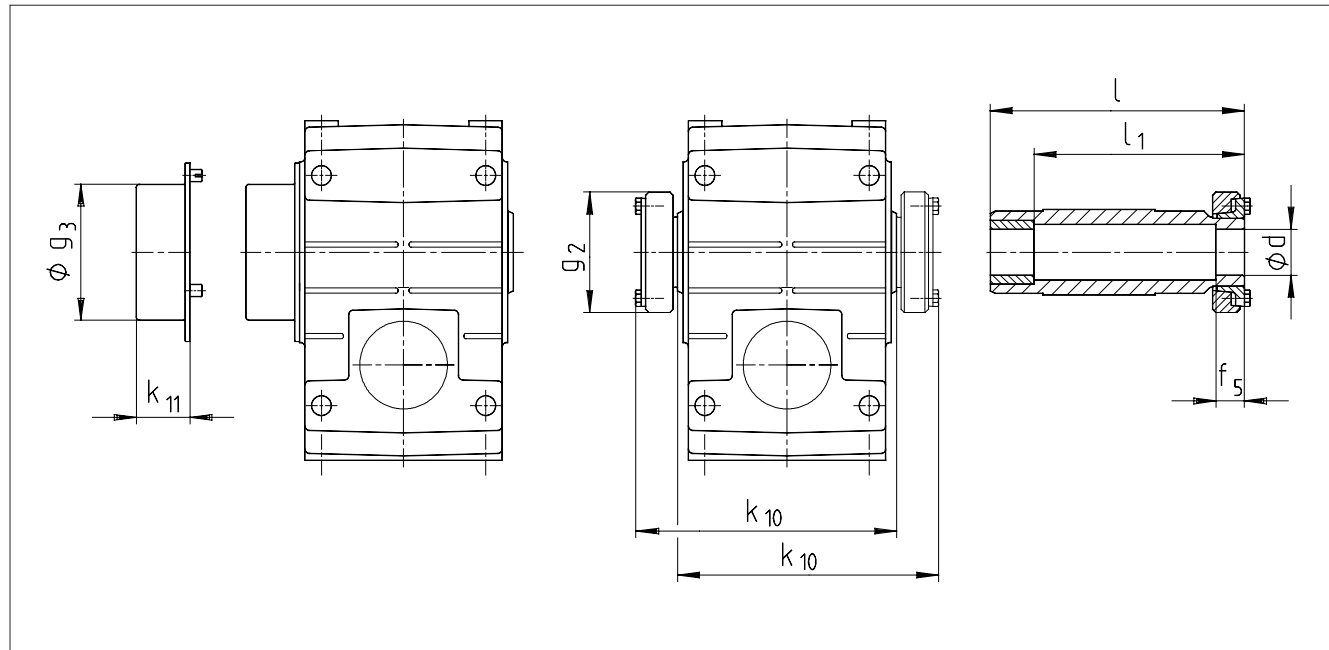
Dimensions in [mm]



Disco variable speed drives

Additional dimensions GKS □ □

Hollow shaft with shrink disc



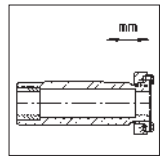
4

Gearbox size	Machine shaft*		Hollow shaft			Gearbox		Cover	
	d	Fit	l	l ₁	f ₅	g ₂	k ₁₀	g ₃	k ₁₁
GKS 04	25 30	h6	142	122	26	72	146	79	41
GKS 05	35	h6	168	148	28	80	171	90	43
GKS 06	40	h6	194	164	30	90	197	100	49
GKS 07	50	h6	232	192	26	110	234	124	49
GKS 09	65	h6	278	228	30	141	281	159	52
GKS 11	80	h6	338	238	42	170	344	191	65
GKS 14	100	h6	407	307	55	215	415	253	78

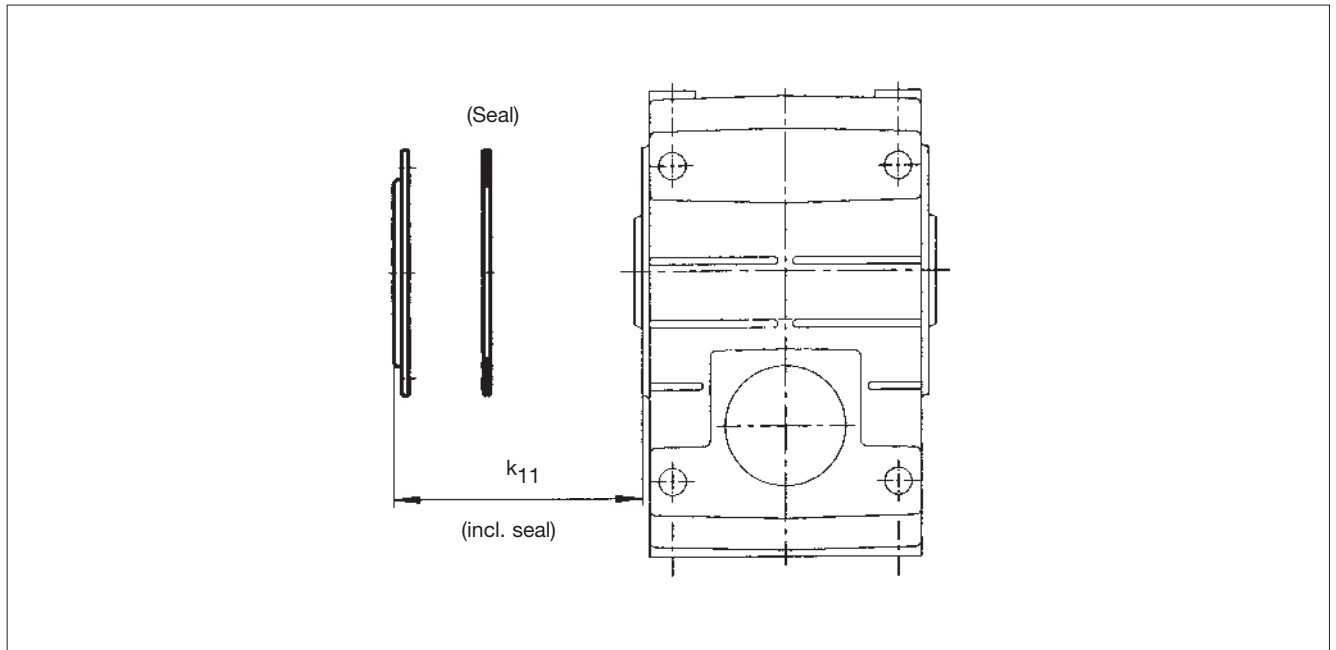
* Ensure sufficient strength of shaft material for shrink disc designs. When using customary steel (e.g. C45, 42CrMo4), the torques indicated in the selection tables can be transferred without any reservation. When using materials of a lower strength, please contact Lenze.

The average peak-to-valley height R_z should not exceed 15 μm . (Turning operation is sufficient).

Dimensions in [mm]

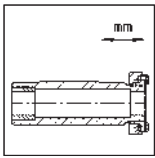


Hollow shaft cover – jet-proof



Gearbox size	Cover k ₁₁
GKS 04	9
GKS 05	10
GKS 06	11
GKS 07	11
GKS 09	54
GKS 11	67
GKS 14	80

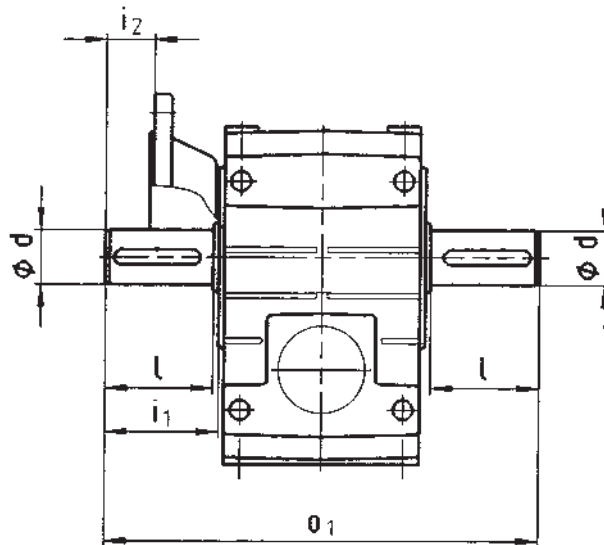
Dimensions in [mm]



Disco variable speed drives

Additional dimensions GKS □ □

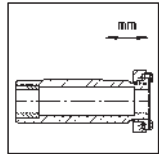
Gearboxes with 2nd output shaft end



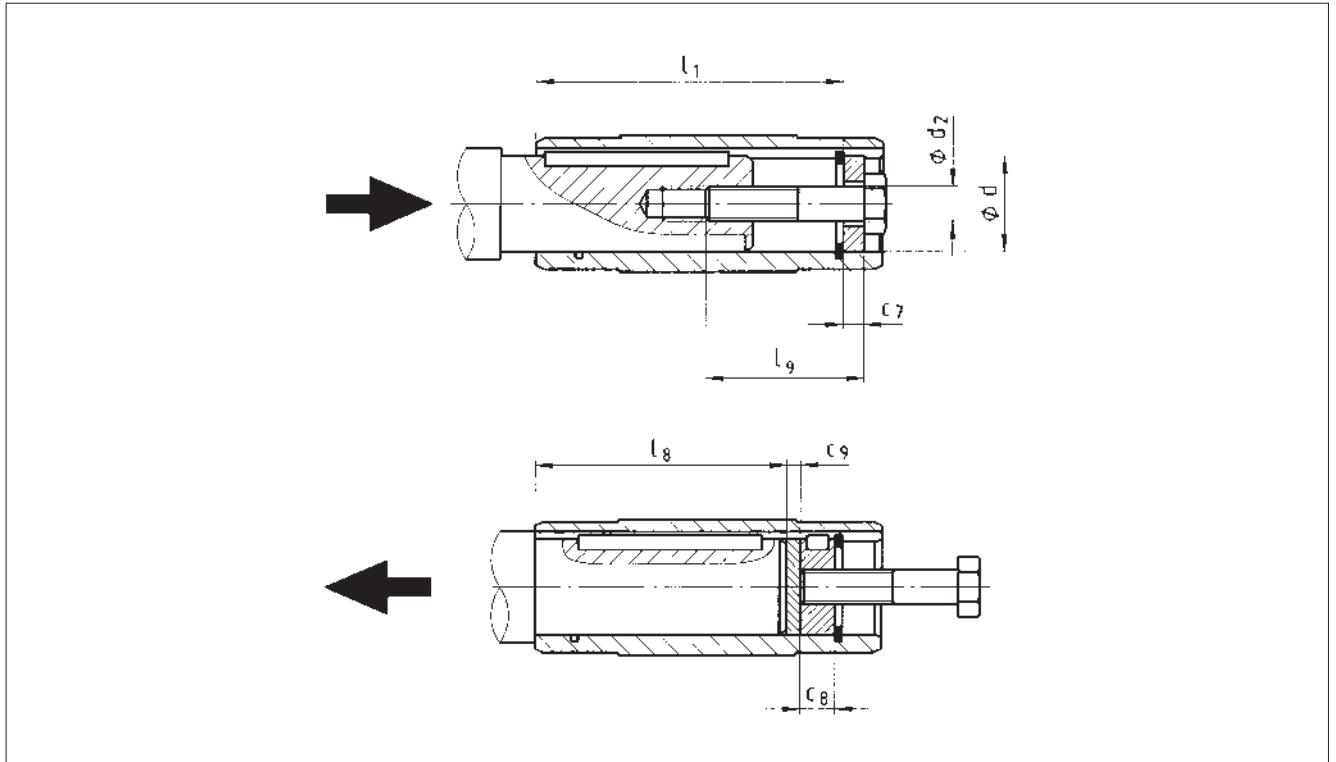
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Gearbox size	d	l	i ₁	i ₂	o ₁
GKS 04	25	50	52.5	17	215
GKS 05	30	60	64	27	260
GKS 06	40	80	85	39	320
GKS 07	50	100	105	45	400
GKS 09	60	120	125	60	480
GKS 11	80	160	166	100	610
GKS 14	100	200	207	140	750

Dimensions in [mm]



Mounting kit – hollow shaft retention · Design proposal auxiliary tools



Gearbox size	Hollow shaft (design H)			Mounting kit – hollow shaft retention (Auxiliary tool – mounting)			Auxiliary tool Disassembly		Machine shaft max l_8
	l	l_1	d H7	d_2	l_9	c_7	c_8	c_9	
GKS 04	115	100	25 30	M10 M10	40	5 6	10	3	85
GKS 05	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
GKS 06	160	140	40 45	M16	60	8 9	16	4	118
GKS 07	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148
GKS 09	240	210	60 70	M20	80	13 14	20	5	182
GKS 11	290	250	70 80	M20	80	14 16	20	6	221
GKS 14	350	305	100	M24	100	20	24	8	270

Dimensions in [mm]



Disco variable speed drives

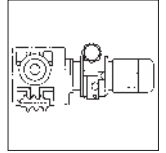
Selection tables with helical-worm gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.25 kW	165 - 28	9.3 - 19	5.639	GSS □□ - 2D GSS04 - 2D □□□ 071-12 02C	4-60
	120 - 20	13 - 26	7.733	GSS04 - 2D □□□ 071-12 02C	
	94 - 16	17 - 33	9.897	GSS04 - 2D □□□ 071-12 02C	
	75 - 13	20 - 40	12.400	GSS04 - 2D □□□ 071-12 02C	
	59 - 9.8	26 - 51	15.869	GSS04 - 2D □□□ 071-12 02C	
	46 - 7.6	31 - 60	20.417	GSS04 - 2D □□□ 071-12 02C	
	38 - 6.3	39 - 73	24.800	GSS04 - 2D □□□ 071-12 02C	
	29 - 4.9	51 - 91	31.738	GSS04 - 2D □□□ 071-12 02C	
	24 - 4.0	62 - 108	39.200	GSS04 - 2D □□□ 071-12 02C	
	19 - 3.1	79 - 133	50.000	GSS04 - 2D □□□ 071-12 02C	
	15 - 2.5	96 - 158	61.250	GSS04 - 2D □□□ 071-12 02C	
	12 - 2.0	120 - 180	77.000	GSS04 - 2D □□□ 071-12 02C	
	12 - 1.9	125 - 206	79.722	GSS05 - 2D □□□ 071-12 02C	
	9.4 - 1.6	152 - 180	99.167	GSS04 - 2D □□□ 071-12 02C	
	9.4 - 1.6	155 - 249	99.167	GSS05 - 2D □□□ 071-12 02C	
	7.3 - 1.2	197 - 318	128.333	GSS05 - 2D □□□ 071-12 02C	
	6.0 - 1.0	235 - 360	155.750	GSS05 - 2D □□□ 071-12 02C	
	6.0 - 1.0	240 - 401	155.750	GSS06 - 2D □□□ 071-12 02C	
	4.7 - 0.8	298 - 507	196.875	GSS06 - 2D □□□ 071-12 02C	
	0.37 kW	330 - 55	7.1 - 16	5.639	
241 - 40		9.8 - 21	7.733	GSS04 - 2D □□□ 071-11 02C	
188 - 31		13 - 27	9.897	GSS04 - 2D □□□ 071-11 02C	
150 - 25		16 - 33	12.400	GSS04 - 2D □□□ 071-11 02C	
117 - 20		21 - 42	15.869	GSS04 - 2D □□□ 071-11 02C	
91 - 15		24 - 50	20.417	GSS04 - 2D □□□ 071-11 02C	
75 - 13		31 - 61	24.800	GSS04 - 2D □□□ 071-11 02C	
59 - 9.8		40 - 78	31.738	GSS04 - 2D □□□ 071-11 02C	
47 - 7.9		49 - 93	39.200	GSS04 - 2D □□□ 071-11 02C	
37 - 6.2		63 - 117	50.000	GSS04 - 2D □□□ 071-11 02C	
30 - 5.1		78 - 140	61.250	GSS04 - 2D □□□ 071-11 02C	
24 - 4.0		98 - 171	77.000	GSS04 - 2D □□□ 071-11 02C	
19 - 3.1		126 - 180	99.167	GSS04 - 2D □□□ 071-11 02C	
19 - 3.1		127 - 220	99.167	GSS05 - 2D □□□ 071-11 02C	
15 - 2.4		164 - 275	128.333	GSS05 - 2D □□□ 071-11 02C	
12 - 2.0		198 - 325	155.750	GSS05 - 2D □□□ 071-11 02C	
9.5 - 1.6		251 - 418	196.875	GSS06 - 2D □□□ 071-11 02C	
0.55 kW	341 - 59	10 - 22	5.639	GSS □□ - 2D GSS04 - 2D □□□ 071-31 03C	4-60
	248 - 43	14 - 30	7.733	GSS04 - 2D □□□ 071-31 03C	

Thermal limit not considered (see note on page 3-12)

Disco variable speed drives

Selection tables with helical-worm gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
0.55 kW				GSS □□ - 2D	4-60
	194 - 34	18 - 38	9.897	GSS04 - 2D □□□ 071-31 03C	
	155 - 27	22 - 46	12.400	GSS04 - 2D □□□ 071-31 03C	
	121 - 21	29 - 59	15.869	GSS04 - 2D □□□ 071-31 03C	
	94 - 16	34 - 70	20.417	GSS04 - 2D □□□ 071-31 03C	
	77 - 14	43 - 86	24.800	GSS04 - 2D □□□ 071-31 03C	
	61 - 11	56 - 109	31.738	GSS04 - 2D □□□ 071-31 03C	
	49 - 8.6	68 - 131	39.200	GSS04 - 2D □□□ 071-31 03C	
	38 - 6.7	87 - 163	50.000	GSS04 - 2D □□□ 071-31 03C	
	31 - 5.5	108 - 180	61.250	GSS04 - 2D □□□ 071-31 03C	
	31 - 5.5	108 - 201	61.250	GSS05 - 2D □□□ 071-31 03C	
	25 - 4.4	136 - 180	77.000	GSS04 - 2D □□□ 071-31 03C	
	24 - 4.2	141 - 254	79.722	GSS05 - 2D □□□ 071-31 03C	
	19 - 3.4	174 - 180	99.167	GSS04 - 2D □□□ 071-31 03C	
	19 - 3.4	176 - 308	99.167	GSS05 - 2D □□□ 071-31 03C	
	15 - 2.6	227 - 360	128.333	GSS05 - 2D □□□ 071-31 03C	
	15 - 2.6	228 - 401	128.333	GSS06 - 2D □□□ 071-31 03C	
	12 - 2.2	274 - 360	155.750	GSS05 - 2D □□□ 071-31 03C	
	12 - 2.2	277 - 477	155.750	GSS06 - 2D □□□ 071-31 03C	
	9.8 - 1.7	349 - 585	196.875	GSS06 - 2D □□□ 071-31 03C	
0.75 kW				GSS □□ - 2D	4-60
	169 - 29	30 - 60	5.639	GSS04 - 2D □□□ 080-32 04D	
	123 - 21	41 - 81	7.733	GSS04 - 2D □□□ 080-32 04D	
	96 - 17	53 - 103	9.897	GSS04 - 2D □□□ 080-32 04D	
	77 - 13	65 - 125	12.400	GSS04 - 2D □□□ 080-32 04D	
	60 - 10	83 - 157	15.869	GSS04 - 2D □□□ 080-32 04D	
	47 - 8.1	98 - 180	20.417	GSS04 - 2D □□□ 080-32 04D	
	38 - 6.7	122 - 180	24.800	GSS04 - 2D □□□ 080-32 04D	
	38 - 6.7	122 - 230	24.800	GSS05 - 2D □□□ 080-32 04D	
	30 - 5.2	156 - 180	31.738	GSS04 - 2D □□□ 080-32 04D	
	30 - 5.2	156 - 287	31.738	GSS05 - 2D □□□ 080-32 04D	
	24 - 4.2	180 - 180	39.200	GSS04 - 2D □□□ 080-32 04D	
	24 - 4.2	191 - 342	39.200	GSS05 - 2D □□□ 080-32 04D	
	19 - 3.3	244 - 355	50.000	GSS05 - 2D □□□ 080-32 04D	
	19 - 3.3	245 - 442	50.000	GSS06 - 2D □□□ 080-32 04D	
	16 - 2.7	298 - 354	61.250	GSS05 - 2D □□□ 080-32 04D	
	16 - 2.7	300 - 528	61.250	GSS06 - 2D □□□ 080-32 04D	
	12 - 2.1	390 - 667	79.722	GSS06 - 2D □□□ 080-32 04D	
	9.6 - 1.7	483 - 720	99.167	GSS06 - 2D □□□ 080-32 04D	
	9.7 - 1.7	484 - 843	97.708	GSS07 - 2D □□□ 080-32 04D	
	7.4 - 1.3	616 - 720	128.333	GSS06 - 2D □□□ 080-32 04D	
	7.4 - 1.3	632 - 1076	128.333	GSS07 - 2D □□□ 080-32 04D	
	6.1 - 1.1	720 - 720	155.750	GSS06 - 2D □□□ 080-32 04D	
	6.1 - 1.1	762 - 1250	155.750	GSS07 - 2D □□□ 080-32 04D	
	4.8 - 0.8	951 - 1250	196.875	GSS07 - 2D □□□ 080-32 04D	

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

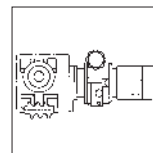
Selection tables with helical-worm gearboxes

P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
1.1 kW				GSS □□ - 2D	4-60
	341 - 59	22 - 45	5.639	GSS04 - 2D □□□ 080-31 04D	
	248 - 43	30 - 62	7.733	GSS04 - 2D □□□ 080-31 04D	
	194 - 34	39 - 79	9.897	GSS04 - 2D □□□ 080-31 04D	
	155 - 27	48 - 96	12.400	GSS04 - 2D □□□ 080-31 04D	
	121 - 21	62 - 123	15.869	GSS04 - 2D □□□ 080-31 04D	
	94 - 16	71 - 145	20.417	GSS04 - 2D □□□ 080-31 04D	
	77 - 14	90 - 178	24.800	GSS04 - 2D □□□ 080-31 04D	
	61 - 11	116 - 180	31.738	GSS04 - 2D □□□ 080-31 04D	
	61 - 11	116 - 229	31.738	GSS05 - 2D □□□ 080-31 04D	
	49 - 8.6	141 - 180	39.200	GSS04 - 2D □□□ 080-31 04D	
	49 - 8.6	142 - 276	39.200	GSS05 - 2D □□□ 080-31 04D	
	38 - 6.7	180 - 180	50.000	GSS04 - 2D □□□ 080-31 04D	
	38 - 6.7	183 - 345	50.000	GSS05 - 2D □□□ 080-31 04D	
	31 - 5.5	225 - 360	61.250	GSS05 - 2D □□□ 080-31 04D	
	31 - 5.5	225 - 429	61.250	GSS06 - 2D □□□ 080-31 04D	
	24 - 4.2	294 - 360	79.722	GSS05 - 2D □□□ 080-31 04D	
	24 - 4.2	295 - 544	79.722	GSS06 - 2D □□□ 080-31 04D	
	19 - 3.4	360 - 360	99.167	GSS05 - 2D □□□ 080-31 04D	
	19 - 3.4	368 - 664	99.167	GSS06 - 2D □□□ 080-31 04D	
	15 - 2.6	476 - 720	128.333	GSS06 - 2D □□□ 080-31 04D	
	15 - 2.6	481 - 874	128.333	GSS07 - 2D □□□ 080-31 04D	
12 - 2.2	576 - 720	155.750	GSS06 - 2D □□□ 080-31 04D		
12 - 2.2	585 - 1042	155.750	GSS07 - 2D □□□ 080-31 04D		
9.8 - 1.7	738 - 1250	196.875	GSS07 - 2D □□□ 080-31 04D		
1.5 kW				GSS □□ - 2D	4-60
	169 - 29	60 - 121	5.639	GSS05 - 2D □□□ 090-32 05E	
	123 - 21	83 - 165	7.733	GSS05 - 2D □□□ 090-32 05E	
	96 - 17	107 - 209	9.897	GSS05 - 2D □□□ 090-32 05E	
	77 - 13	131 - 254	12.400	GSS05 - 2D □□□ 090-32 05E	
	60 - 10	168 - 321	15.869	GSS05 - 2D □□□ 090-32 05E	
	47 - 8.1	200 - 359	20.417	GSS05 - 2D □□□ 090-32 05E	
	47 - 8.1	200 - 392	20.417	GSS06 - 2D □□□ 090-32 05E	
	38 - 6.7	247 - 357	24.800	GSS05 - 2D □□□ 090-32 05E	
	38 - 6.7	245 - 470	24.800	GSS06 - 2D □□□ 090-32 05E	
	30 - 5.2	317 - 355	31.738	GSS05 - 2D □□□ 090-32 05E	
	30 - 5.2	314 - 590	31.738	GSS06 - 2D □□□ 090-32 05E	
	24 - 4.2	390 - 718	39.200	GSS06 - 2D □□□ 090-32 05E	
	19 - 3.3	498 - 720	50.000	GSS06 - 2D □□□ 090-32 05E	
	19 - 3.3	503 - 935	50.000	GSS07 - 2D □□□ 090-32 05E	
	16 - 2.7	609 - 720	61.250	GSS06 - 2D □□□ 090-32 05E	
	16 - 2.7	618 - 1122	61.250	GSS07 - 2D □□□ 090-32 05E	
	12 - 2.1	720 - 720	79.722	GSS06 - 2D □□□ 090-32 05E	
	12 - 2.1	804 - 1250	79.722	GSS07 - 2D □□□ 090-32 05E	
	9.7 - 1.7	983 - 1250	97.708	GSS07 - 2D □□□ 090-32 05E	
	7.4 - 1.3	1250 - 1250	128.333	GSS07 - 2D □□□ 090-32 05E	

Thermal limit not considered (see note on page 3-12)

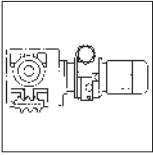
Disco variable speed drives

Selection tables with helical-worm gearboxes



P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
1.5 kW				GSS □□ - 2D	4-60
	6.9 - 1.2	1250 - 1250	137.950	GSS07 - 2D □□□ 090-32 05E	
2.2 kW				GSS □□ - 2D	4-60
	341 - 59	44 - 92	5.639	GSS05 - 2D □□□ 090-31 05E	
	248 - 43	61 - 125	7.733	GSS05 - 2D □□□ 090-31 05E	
	194 - 34	79 - 160	9.897	GSS05 - 2D □□□ 090-31 05E	
	155 - 27	97 - 195	12.400	GSS05 - 2D □□□ 090-31 05E	
	121 - 21	125 - 249	15.869	GSS05 - 2D □□□ 090-31 05E	
	94 - 16	147 - 298	20.417	GSS05 - 2D □□□ 090-31 05E	
	77 - 14	183 - 360	24.800	GSS05 - 2D □□□ 090-31 05E	
	61 - 11	236 - 360	31.738	GSS05 - 2D □□□ 090-31 05E	
	61 - 11	233 - 464	31.738	GSS06 - 2D □□□ 090-31 05E	
	49 - 8.6	289 - 360	39.200	GSS05 - 2D □□□ 090-31 05E	
	49 - 8.6	290 - 570	39.200	GSS06 - 2D □□□ 090-31 05E	
	38 - 6.7	360 - 360	50.000	GSS05 - 2D □□□ 090-31 05E	
	38 - 6.7	373 - 716	50.000	GSS06 - 2D □□□ 090-31 05E	
	31 - 5.5	459 - 720	61.250	GSS06 - 2D □□□ 090-31 05E	
	31 - 5.5	462 - 897	61.250	GSS07 - 2D □□□ 090-31 05E	
	24 - 4.2	599 - 720	79.722	GSS06 - 2D □□□ 090-31 05E	
	24 - 4.2	605 - 1145	79.722	GSS07 - 2D □□□ 090-31 05E	
	19 - 3.4	720 - 720	99.167	GSS06 - 2D □□□ 090-31 05E	
	20 - 3.4	744 - 1250	97.708	GSS07 - 2D □□□ 090-31 05E	
15 - 2.6	978 - 1250	128.333	GSS07 - 2D □□□ 090-31 05E		
12 - 2.2	1185 - 1250	155.750	GSS07 - 2D □□□ 090-31 05E		
3 kW				GSS □□ - 2D	4-60
	171 - 30	113 - 232	5.862	GSS07 - 2D □□□ 100-32 06G	
	123 - 22	158 - 321	8.125	GSS07 - 2D □□□ 100-32 06G	
	100 - 18	196 - 395	10.000	GSS07 - 2D □□□ 100-32 06G	
	79 - 14	243 - 486	12.594	GSS07 - 2D □□□ 100-32 06G	
	65 - 11	300 - 596	15.500	GSS07 - 2D □□□ 100-32 06G	
	49 - 8.5	378 - 750	20.517	GSS07 - 2D □□□ 100-32 06G	
	40 - 7.0	466 - 913	25.188	GSS07 - 2D □□□ 100-32 06G	
	32 - 5.7	576 - 1112	31.000	GSS07 - 2D □□□ 100-32 06G	
	26 - 4.5	731 - 1250	39.200	GSS07 - 2D □□□ 100-32 06G	
	20 - 3.5	935 - 1250	50.000	GSS07 - 2D □□□ 100-32 06G	
	16 - 2.9	1146 - 1250	61.250	GSS07 - 2D □□□ 100-32 06G	
4 kW				GSS □□ - 2D	4-60
	171 - 30	168 - 342	5.862	GSS07 - 2D □□□ 112-22 07G	
	123 - 22	235 - 472	8.125	GSS07 - 2D □□□ 112-22 07G	
	100 - 18	290 - 580	10.000	GSS07 - 2D □□□ 112-22 07G	
	79 - 14	359 - 713	12.594	GSS07 - 2D □□□ 112-22 07G	
	65 - 11	442 - 874	15.500	GSS07 - 2D □□□ 112-22 07G	

Thermal limit not considered (see note on page 3-12)

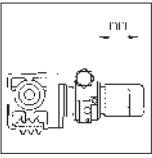


Disco variable speed drives

Selection tables with helical-worm gearboxes

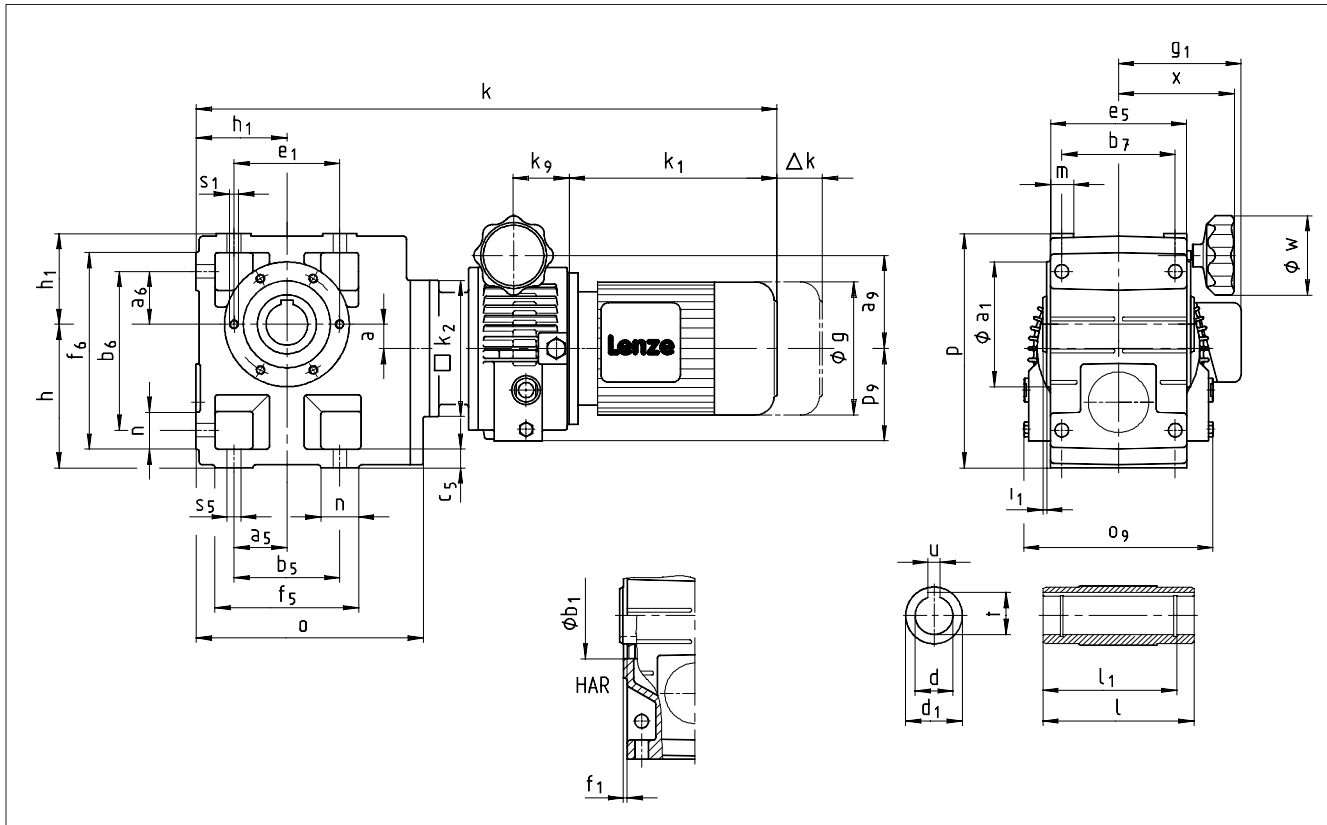
P ₁	50 Hz		i	Disco variable speed drives	Dim. Page
	n ₂ [min ⁻¹]	M ₂ [Nm]			
4 kW	49 - 8.5	555 - 1097	20.517	GSS □□ - 2D GSS07 - 2D □□□ 112-22 07G	4-60
	40 - 7.0	683 - 1250	25.188	GSS07 - 2D □□□ 112-22 07G	
	32 - 5.7	844 - 1250	31.000	GSS07 - 2D □□□ 112-22 07G	
	26 - 4.5	1070 - 1250	39.200	GSS07 - 2D □□□ 112-22 07G	

Thermal limit not considered (see note on page 3-12)



Disco variable speed drives

Dimensions with helical-worm gearboxes



4

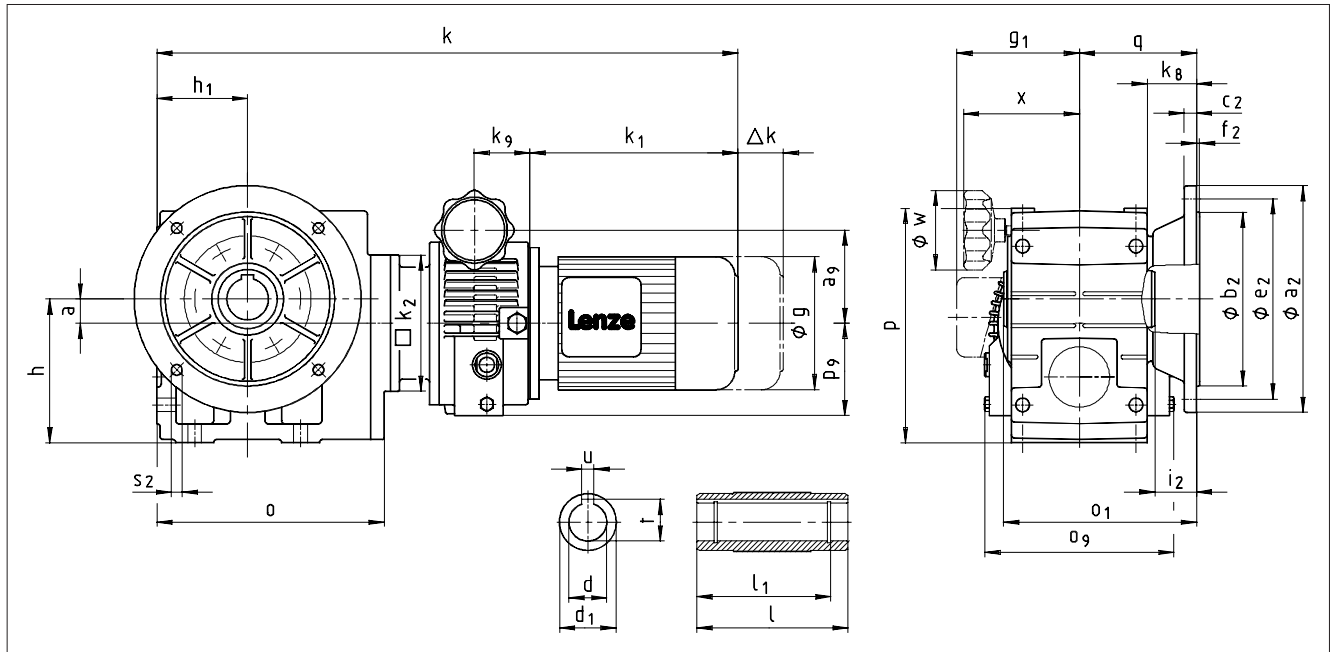
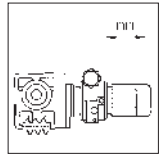
Disco variable speed drives		Drive size											
GSS □□ - 2 D H □ R		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07						
Motor	g	143	143	160	180	206	222						
	g₁	Without options	128	128	137	147	140	174					
		Brake motor	131	131	142	154	151	174					
	k₁	237	237	267	350	316	379						
	Δk	Brake	54	54	36	48	111	80					
DISCO	a₉	83	86	103	123		149						
	k₂	145	145	180	180		265						
	k₉	42	50	58	74		82						
	o₉	150	175	215	253		305						
	p₉	65	83	98	122		145						
	p₁₀	14	14	17	17		17						
	w	70	70	105	105		105						
	x	105	105	152	152		152						
Gearbox size	Gearbox						Total length						
	o	l*	p*	h**	h ₁	a	k						
GSS 04	181	115	171	100	71	20	554	568	628				
GSS 05	212	140	205	125	80	23	576	589	649	761			
GSS 06	255	160	250	150	100	26	616	629	689	801			
GSS 07	305	200	310	190	120	33			732	844	841	904	

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
GSS 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
GSS 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
GSS 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
GSS 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 k₂ ** Observe dimension p₉ 1) Plus 80 mm for handle

Disco variable speed drives

Dimensions with helical-worm gearboxes



4

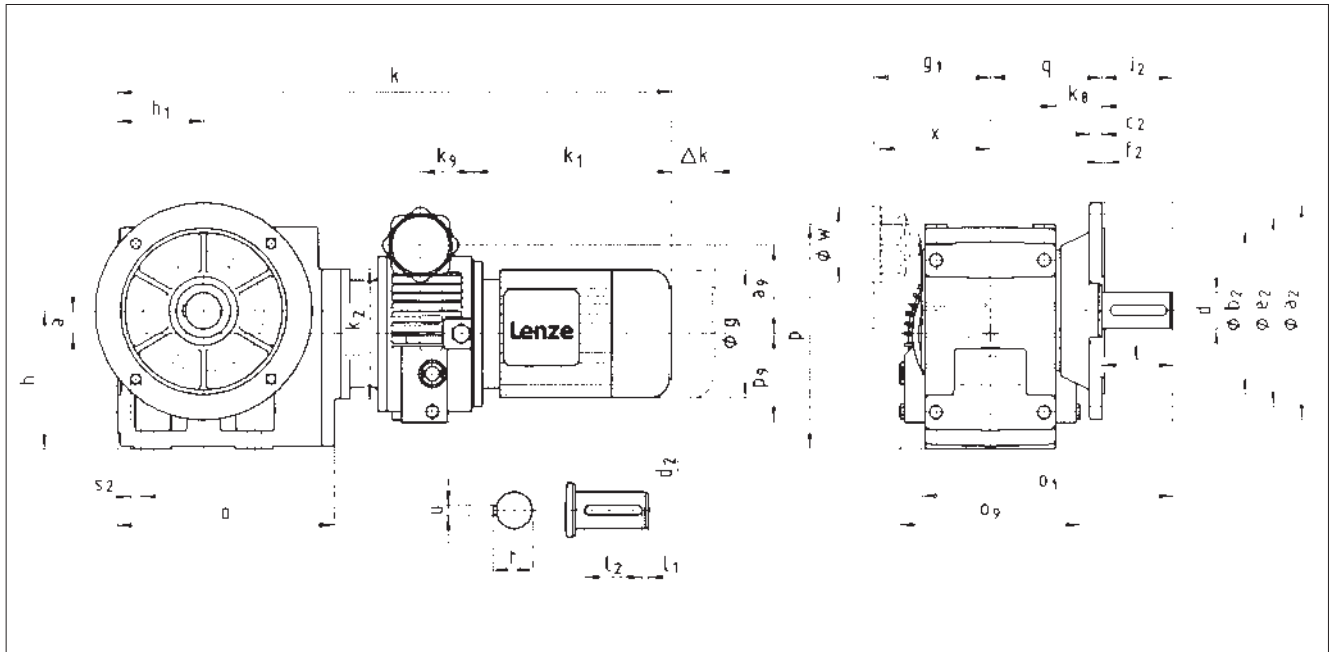
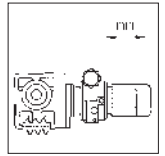
Disco variable speed drives		Drive size												
GSS □□ - 2 D HAK		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07							
Motor	g	143	143	160	180	206	222							
	g₁	Without options	128	128	137	147	140	174						
		Brake motor	131	131	142	154	151	174						
	k₁	237	237	267	350	316	379							
	Δk Brake	54	54	36	48	111	80							
DISCO	a₉	83	86	103	123		149							
	k₂	145	145	180	180		265							
	k₉	42	50	58	74		82							
	o₉	150	175	215	253		305							
	p₉	65	83	98	122		145							
	w	70	70	105	105		105							
	x	105	105	152	152		152							
Gearbox size	Gearbox							Total length						
	o	o ₁ *	p*	h**	h ₁	a	k ₈	q	k					
GSS 04	181	148	171	100	71	20	38	90.5	554	568	628			
GSS 05	212	173	205	125	80	23	40	103	576	589	649	761		
GSS 06	255	201	250	150	100	26	49	121	616	629	689	801		
GSS 07	305	255	310	190	120	33	65	155			732	844	841	904

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	
GSS 04	25	115	45	100	8	28.3	160	110	10	130	3.5	33	4 x 9	
	8				33.3									
GSS 05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11	
	10				38.3									
GSS 06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11	
	14				48.8	250								180
GSS 07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14	
	16				59.3	300								230

Dimensions in [mm] * Observe dimension k₂ ** Observe dimension p₉ 1) Plus 80 mm for handle

Disco variable speed drives

Dimensions with helical-worm gearboxes

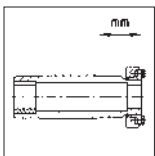


4

Disco variable speed drives		Drive size												
GSS □□ - 2 D VAK		071-1□ 02	071-3□ 03	080-3□ 04	090-3□ 05	100-32 06	112-22 07							
Motor	g	143	143	160	180	206	222							
	g₁	Without options	128	128	137	147	140	174						
		Brake motor	131	131	142	154	151	174						
	k₁	237	237	267	350	316	379							
Δk Brake	54	54	36	48	111	80								
DISCO	a₉	83	86	103	123	149								
	k₂	145	145	180	180	265								
	k₉	42	50	58	74	82								
	o₉	150	175	215	253	305								
	p₉	65	83	98	122	145								
	w	70	70	105	105	105								
x	105	105	152	152	152									
Gearbox size	Gearbox								Total length					
	o	o ₁ *	p*	h**	h ₁	a	k ₈	q	k					
GSS 04	181	196	171	100	71	20	38	90.5	554	568	628			
GSS 05	212	230	205	125	80	23	40	103	576	589	649	761		
GSS 06	255	277	250	150	100	26	49	121	616	629	689	801		
GSS 07	305	351	310	190	120	33	65	155			732	844	841	904

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
GSS 04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9
GSS 05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11
GSS 06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14
GSS 07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14

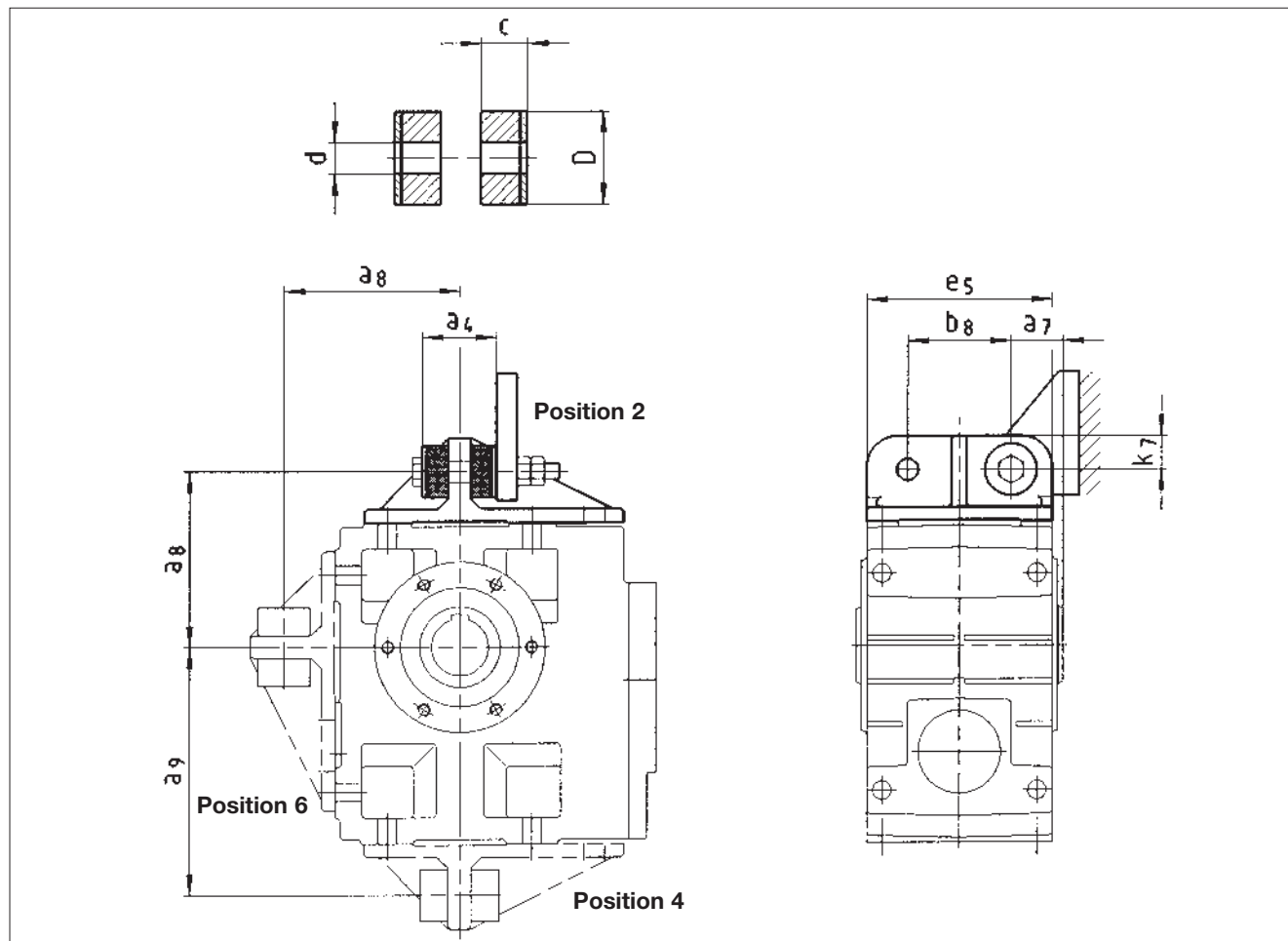
Dimensions in [mm] d ≤ 50 mm: k6 * Observe dimension k₂ 1) Plus 80 mm for handle
 d > 50 mm: m6 ** Observe dimension p₉



Disco variable speed drives

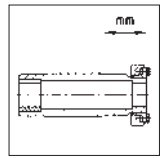
Additional dimensions GSS

Torque plate at housing foot

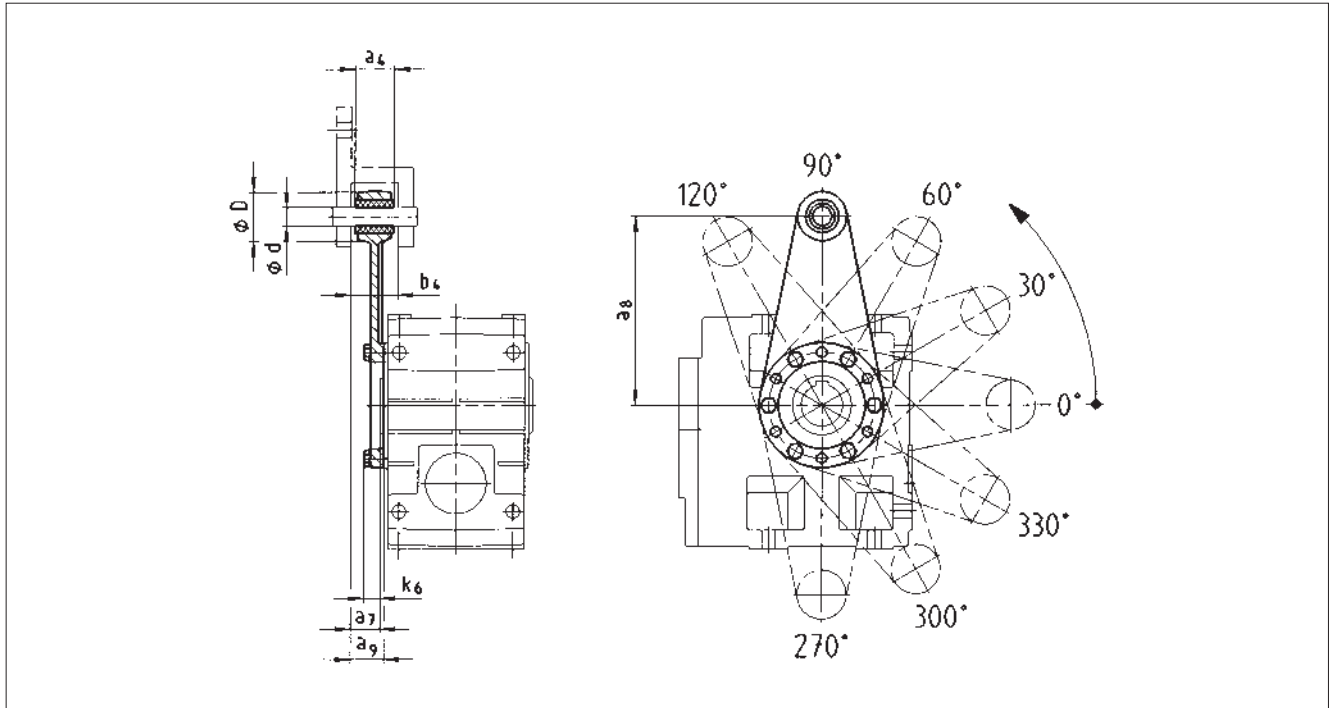


Gearbox size	a_4	a_7	a_8	a_9	b_8	c	d	D	e_5	k_7
GSS 04	41	27.5	106	135	60	14.5	11	30	100	20
GSS 05	45	35	115	160	70	15	13	40	127	25
GSS 06	72	40	145	195	80	27	17	50	145	30
GSS 07	78	50	170	240	100	28	21	60	180	35

Dimensions in [mm]

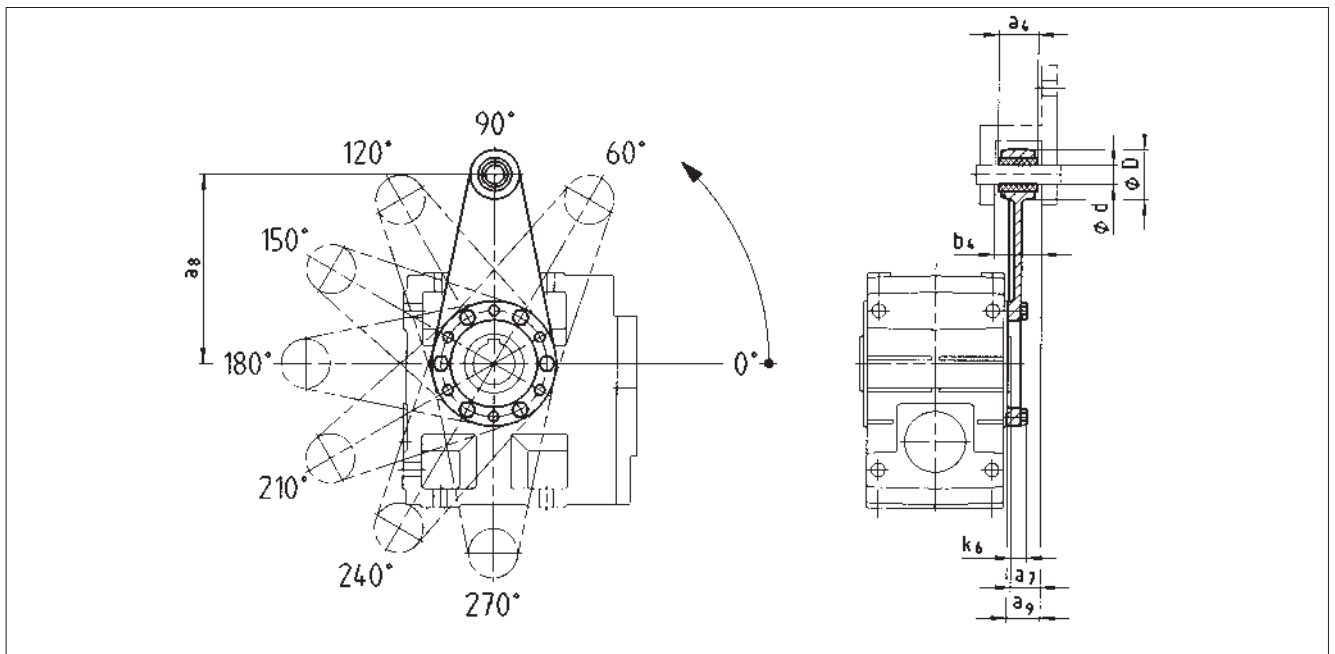


Torque plate at pitch circle in position 3



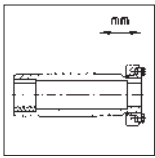
4

Torque plate at pitch circle in position 5



Gearbox size	Assembly space		Torque plate					
	a ₇	b ₄	a ₄	a ₈	a ₉	d	D	k ₆
GSS 04	24	34.5	30	130	26.5	12	35	16
GSS 05	23.5	38.5	34	160	27.5	16	45	15
GSS 06	28	44.5	40	200	33	20	50	18
GSS 07	32.5	50.5	46	250	37.5	25	65	21

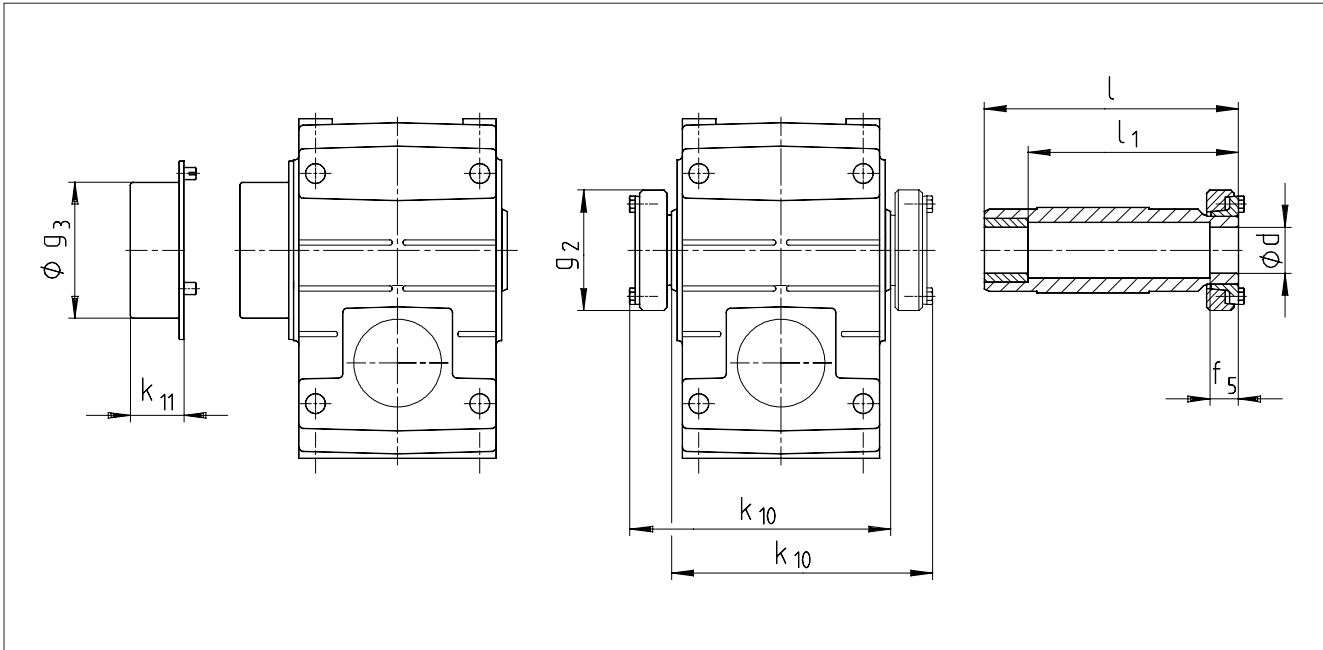
Dimensions in [mm]



Disco variable speed drives

Additional dimensions GSS

Hollow shaft with shrink disc



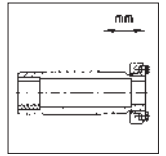
4

Gearbox size	Machine shaft		Hollow shaft			Gearbox*		Protection cover	
	d	Fit	l	l ₁	f ₅	g ₂	k ₁₀	g ₃	k ₁₁
GSS 04	25 30	h6	142	122	26	72	146	79	41
GSS 05	30 35	h6	168	148	28	80	171	90	43
GSS 06	40	h6	194	164	30	90	197	100	49
GSS 07	50	h6	232	192	26	110	234	124	49

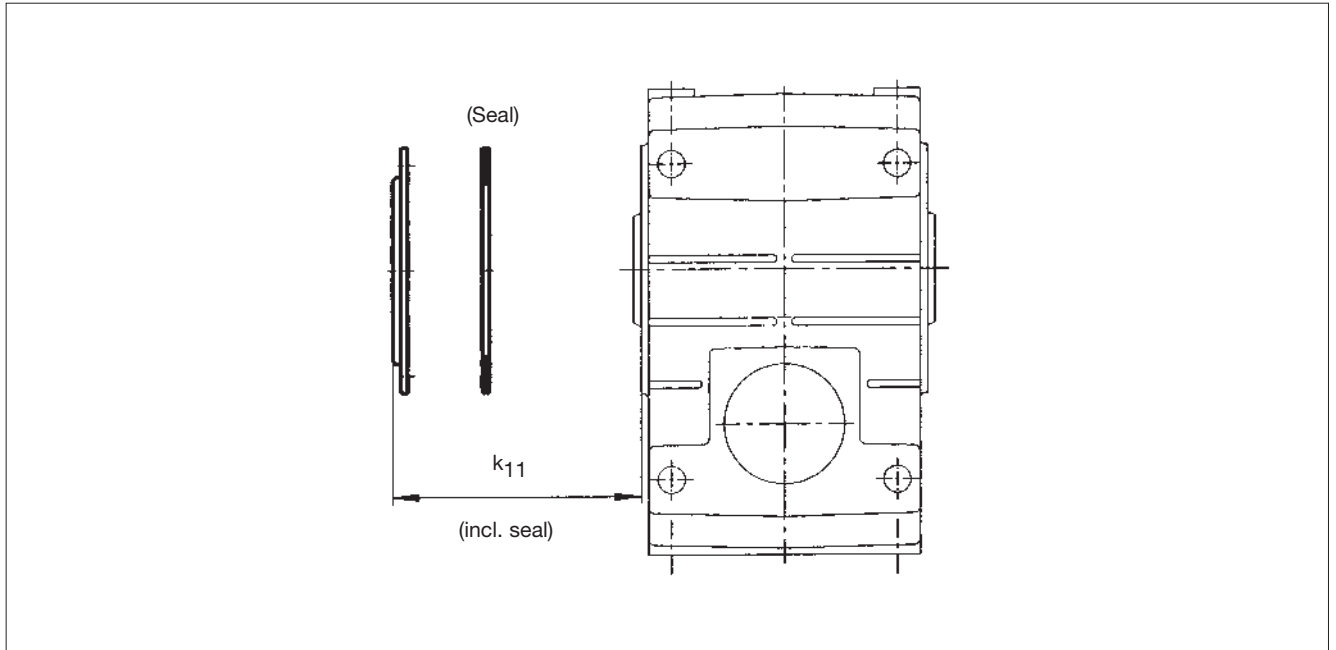
* Ensure sufficient strength of shaft material for shrink disc designs. When using customary steel (e.g. C45, 42CrMo4), the torques indicated in the selection tables can be transferred without any reservation. When using materials of a lower strength, please contact Lenze.

The average peak-to-valley height R_z should not exceed 15 μm . (Turning operation is sufficient).

Dimensions in [mm]



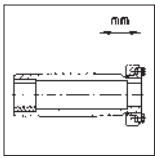
Hollow shaft protection – jet-proof



4

Gearbox size	Protection cover k ₁₁
GSS 04	9
GSS 05	10
GSS 06	11
GSS 07	11

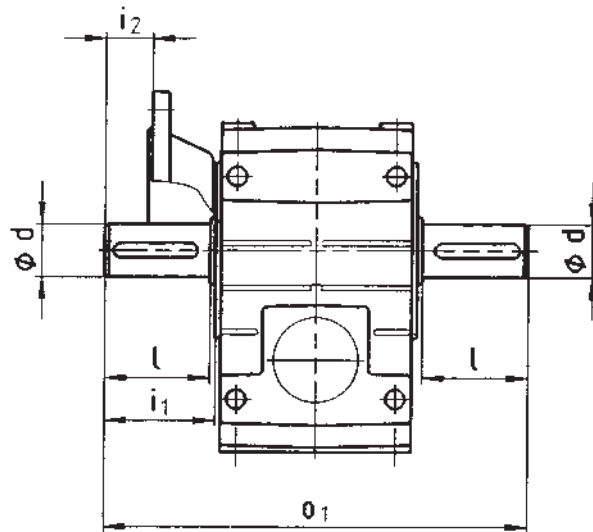
Dimensions in [mm]



Disco variable speed drives

Additional dimensions GSS

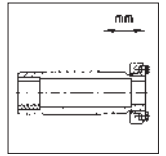
Gearboxes with 2nd output shaft end



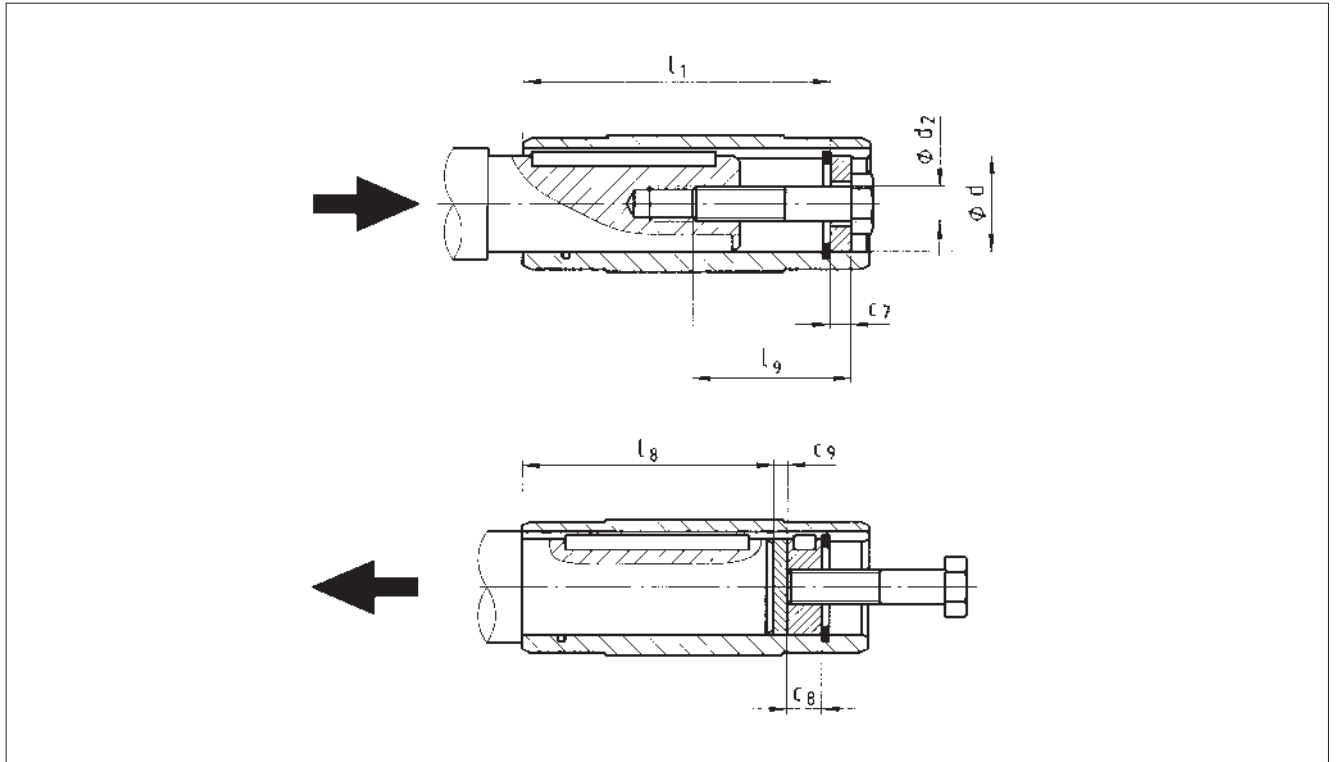
4

Gearbox size	d	l	i ₁	i ₂	o ₁
GSS 04	25	50	52.5	17	215
GSS 05	30	60	64	27	260
GSS 06	40	80	85	39	320
GSS 07	50	100	105	45	400

Dimensions in [mm]



Mounting kit – hollow shaft retention · Design proposal for auxiliary tools



Gearbox size	Hollow shaft (design H)			Mounting kit – hollow shaft retention (Auxiliary tool – mounting)			Auxiliary tool Disassembly		Machine shaft max l_8
	l	l_1	d H7	d_2	l_9	c_7	c_8	c_9	
GSS 04	115	100	25 30	M10 M10	40	5 6	10	3	85
GSS 05	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
GSS 06	160	140	40 45	M16	60	8 9	16	4	118
GSS 07	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148

Dimensions in [mm]



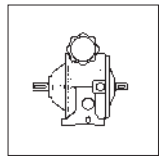
Disco variable speed drives

Selection tables with motor

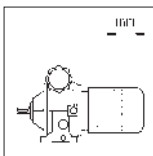
P ₁	50 Hz		DISCO	Motor	Dim. Page
	n ₂ [min-1]	M ₂ [Nm]			
0.25 kW					
n ₁ =1380	930-155	2-4	11.710.02.00	071-12	4-72
0.37 kW					
n ₁ =2840	1860-310	1.6-3.2	11.710.02.00	071-11	4-72
n ₁ =1390	950-165	3-6	11.710.03.00	071-32	4-72
0.55 kW					
n ₁ =2840	1920-335	2.2-4.4	11.710.03.00	071-31	4-72
n ₁ =1410	950-165	4.5-12	11.710.04.00	080-12	4-72
0.75 kW					
n ₁ =2810	1920-335	3-9	11.710.04.00	080-11	4-72
n ₁ =1380	950-165	6-12	11.710.04.00	080-32	4-72
1.1 kW					
n ₁ =2810	1920-335	4.5-9	11.710.04.00	080-31	4-72
n ₁ =1420	950-165	9-24	11.710.05.00	090-12	4-72
1.5 kW					
n ₁ =2800	1920-335	6-18	11.710.05.00	090-11	4-72
n ₁ =1420	950-165	12-24	11.710.05.00	090-32	4-72
2.2 kW					
n ₁ =2800	1920-335	9-18	11.710.05.00	090-31	4-72
n ₁ =1400	1000-175	17-44	11.710.06.00	100-12	4-72
3 kW					
n ₁ =1400	1000-175	22-44	11.710.06.00	100-32	4-72
4 kW					
n ₁ =1430	1000-175	32-64	11.710.07.00	112-22	4-72
5.5 kW					
n ₁ =1450	1000-200	45-90	11.710.18.00	132-12	4-72
7.5 kW					
n ₁ =1450	1000-200	58-116	11.710.08.00	132-22	4-72

Disco variable speed drives

Selection tables with free input shaft

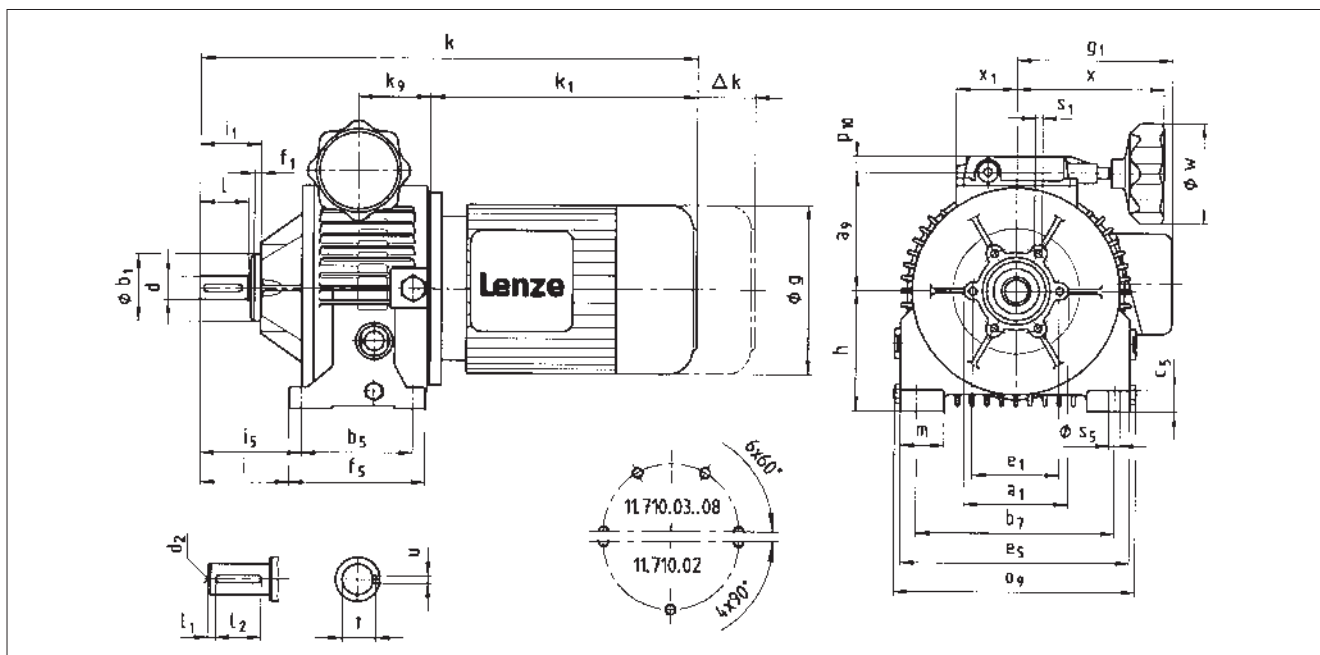


DISCO Dim. page 4-74	P _{1 perm} [kW] M _{2 perm} [Nm] n ₂ [min ⁻¹]	n1			
		3000 min ⁻¹	1500 min ⁻¹	1000 min ⁻¹	750 min ⁻¹
11.700.02.00	P ₁ M ₂ n ₂	0.37 1.6-3.2 1860-310	0.25 2-4 930-155	0.18 2-4 600-100	0.12 2-4 450-75
11.700.03.00	P ₁ M ₂ n ₂	0.55 2.2-4.4 1920-335	0.37 3-6 950-165	0.25 3-6 630-110	0.18 3-6 460-80
11.700.04.00	P ₁ M ₂ n ₂	1.1 4.5-9 1920-335	0.75 6-12 950-165	0.55 6-12 630-110	0.37 6-12 460-80
11.700.05.00	P ₁ M ₂ n ₂	2.2 9-18 1920-335	1.5 12-24 950-165	1.1 12-24 630-110	0.75 12-24 460-80
11.700.06.00	P ₁ M ₂ n ₂		3 22-44 1000-175	2.2 22-44 660-115	1.5 22-44 490-85
11.700.07.00	P ₁ M ₂ n ₂		4 32-64 1000-175	3 32-64 660-115	2.2 32-64 490-85
11.700.18.00	P ₁ M ₂ n ₂		5.5 45-90 1000-200	4 45-90 660-130	3 45-90 490-100
11.700.08.00	P ₁ M ₂ n ₂		7.5 58-116 1000-200	5.5 58-116 660-130	4 58-116 490-100



DISCO variable speed drives

Dimensions with motor



4

DISCO variable speed drives		Motor frame size																			
11.710. □□.00 Foot design		071-1□ 071-3□	080-1□ 080-3□	090-1□ 090-3□	100-1□ 100-3□	112-22	132-12	132-22													
Motor	g	143	160	180	206	222	274	274													
	g ₁	128	137	147	140	174	196	196													
	Brake motor	131	142	154	151	174	212	212													
	k ₁	237	267	350	316	379	450	450													
	Δk Brake	54	36	48	111	80	63	63													
Gearbox size	Gearboxes								Total length												
	a ₉	h	k ₉	o ₉	p ₁₀	w	x	x ₁	k												
11.710.02	83	67*	42	150	14	70	105	43	368												
11.710.03	86	80	50	175	14	70	105	43	395												
11.710.04	103	102	58	215	17	105	152	63		465											
11.710.05	123	125	74	253	17	105	152	63			589										
11.710.06	149	150	82	305	17	105	152	63			596										
11.710.07	149	150	82	305	17	105	152	63			659										
11.710.18	190	180	104	379	26	160	195 ¹⁾	111				774									
11.710.08	190	180	104	379	26	160	195 ¹⁾	111					774								

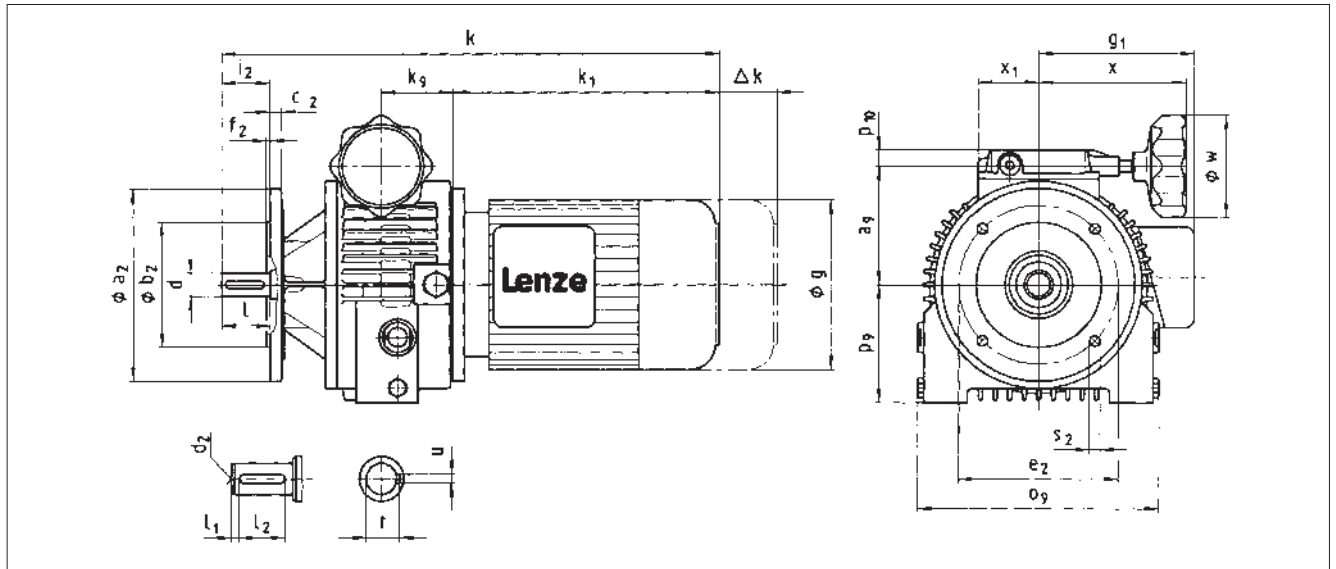
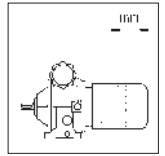
Gearbox size	Solid shaft							Pitch circle						Foot								
	d k6	l	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ h ₇	e ₁	f ₁	i ₁	s ₁	b ₅	b ₇	c ₅	e ₅	f ₅	i	i ₅	m	s ₅
11.710.02	11	23	3	16	M4	4	12.5	86	58	74	5	35	M6x14	90	110	3.5	140	110	33	43	25	10
11.710.03	14	30	4	20	M5	5	16	90	58	74	5	42	M6x10	90	120	14	160	125	44	62	32	10
11.710.04	19	40	5	28	M6	6	21.5	108	70	90	5	54	M8x16	100	150	17	200	134	71	89	40	11
11.710.05	24	50	4	40	M8	8	27	108	70	90	5	64	M8x16	115	205	22	238	140	95	107	45	11
11.710.06	28	60	6	40	M10	8	31	140	100	120	7	77	M10x20	220	255	26	290	252	76	92	55	13.5
11.710.07	28	60	6	40	M10	8	31	140	100	120	7	77	M10x20	220	255	26	290	252	76	92	55	13.5
11.710.18	38	80	10	56	M12	10	41	165	120	145	11	100	M12x24	255	320	30	364	305	86	110	60	17.5
11.710.08	38	80	10	56	M12	10	41	165	120	145	11	100	M12x24	255	320	30	364	305	86	110	60	17.5

Dimensions in [mm] * g/2 > h

1) Plus 80 mm for handle

DISCO variable speed drives

Dimensions with motor



DISCO variable speed drives		Motor frame size																
11.710. □ □ .00 Flange design		071-1□ 071-3□	080-1□ 080-3□	090-1□ 090-3□	100-1□ 100-3□	112-22	132-12	132-22										
Motor	g	143	160	180	206	222	274	274										
	g ₁	128	137	147	140	174	196	196										
	Brake motor	131	142	154	151	174	212	212										
	k ₁	237	267	350	316	379	450	450										
	Δk Brake	54	36	48	111	80	63	63										
Gearbox size	Gearboxes								Total length									
	a ₉	k ₉	o ₉	p ₉ *	p ₁₀	w	x	x ₁	k									
11.710.02	83	42	150	65	14	70	105	43	368									
11.710.03	86	50	175	83	14	70	105	43	395									
11.710.04	103	58	215	98	17	105	152	63		465								
11.710.05	123	74	253	122	17	105	152	63			589							
11.710.06	149	82	305	145	17	105	152	63				596						
11.710.07	149	82	305	145	17	105	152	63					659					
11.710.18	190	104	379	176	26	160	195 ¹⁾	111						774				
11.710.08	190	104	379	176	26	160	195 ¹⁾	111										774

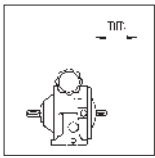
Gearbox size	Solid shaft								Output flange						
	d k6	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂	
11.710.02	11	23	3	16	M4	4	12,5	120	80	12	100	3	23	7	
								140	95	10	115	3		9	
								160	110	10	130	3,5		9	
11.710.03	14	30	4	20	M5	5	16	140	95	10	115	3	30	9	
								160	110	10	130	3,5		9	
								200	130	12	165	3,5		11	
11.710.04	19	40	5	28	M6	6	21,5	160	110	12	130	3,5	40	9	
								200	130	12	165	3,5		11	
								250	180	14	215	4		14	
11.710.05	24	50	4	40	M8	8	27	160	110	12	130	3,5	50	9	
								200	130	12	165	3,5		11	
								250	180	14	215	4		14	
11.710.06	28	60	6	40	M10	8	31	200	130	14	165	3,5	60	11	
								250	180	15	215	4		14	
								300	230	17	265	4		14	
11.710.07	28	60	6	40	M10	8	31	200	130	14	165	3,5	60	11	
								250	180	15	215	4		14	
								300	230	17	265	4		14	
11.710.18	38	80	10	56	M12	10	41	250	180	16	215	4	80	14	
								300	230	18	265	4		14	
								350	250	20	300	5		18	
11.710.08	38	80	10	56	M12	10	41	250	180	16	215	4	80	14	
								300	230	18	265	4		14	
								350	250	20	300	5		18	

Dimensions in [mm]

* g/2 > h

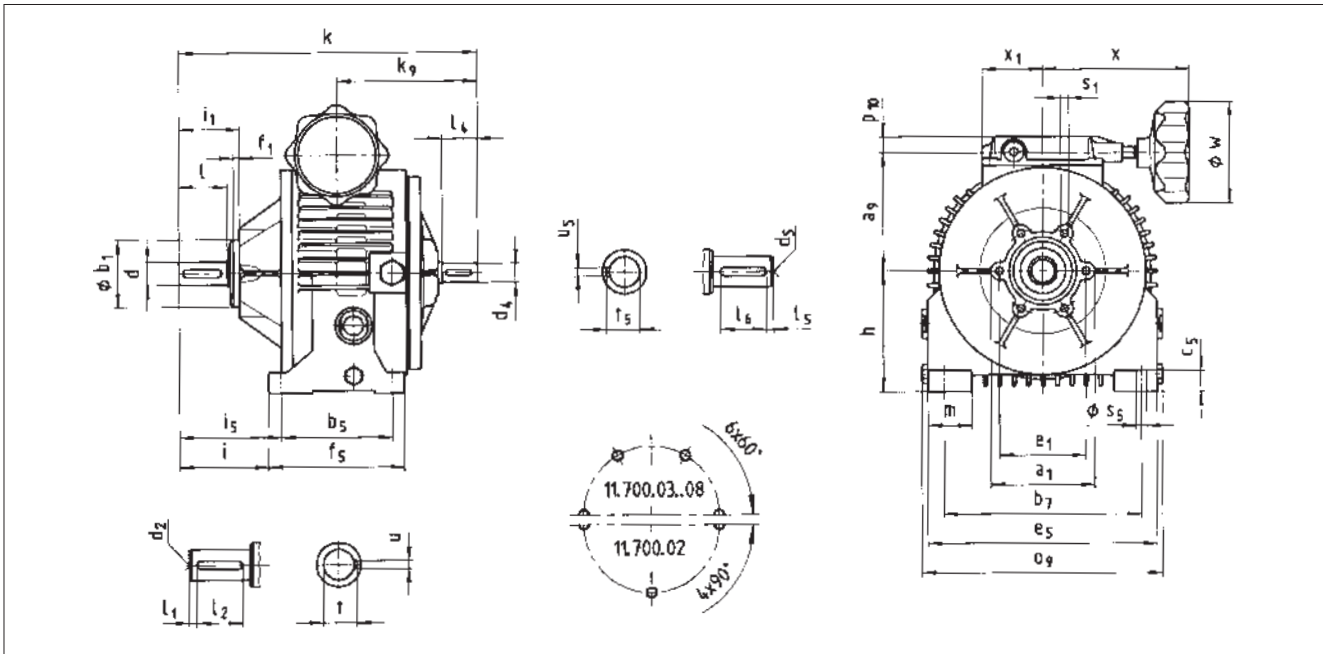
1) Plus 80 mm for handle

11.710.02: Mounting to machine wall: Provide stud bolts



DISCO variable speed drives

Dimensions with free input shaft



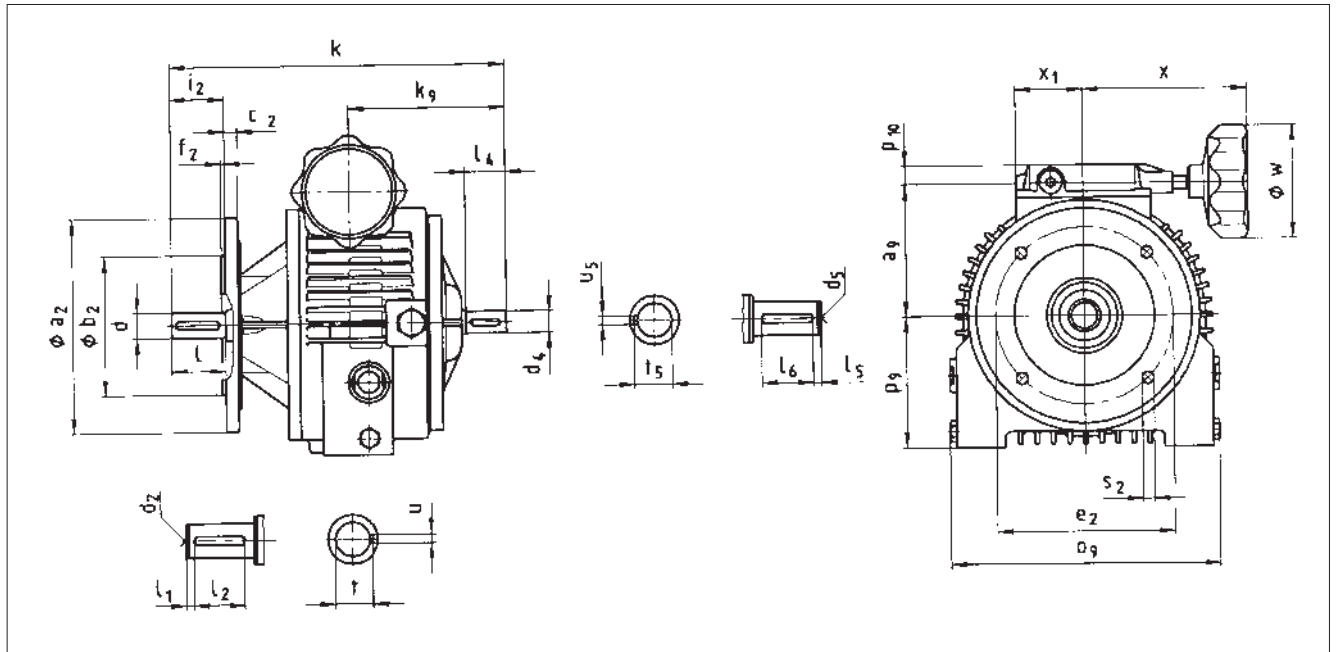
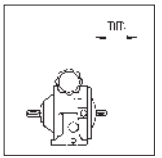
4

DISCO variable speed drives
11.700. □□.00 Foot design

Gearbox size	Gearboxes								Input shaft						Total length k	
	a ₉	h	k ₉	o ₉	p ₁₀	w	x	x ₁	d ₄ k ₆	l ₄	l ₅	l ₆	d ₅	u ₅		t ₅ +0.2
11.700.02	83	67	94	150	14	70	105	43	11	23	3	16	M4	4	12.5	183
11.700.03	86	80	112	175	14	70	105	43	14	30	4	20	M5	5	16	219
11.700.04	103	102	112	215	17	105	152	63	15	30	5	20	M5	5	17	251
11.700.05	123	125	147	253	17	105	152	63	20	40	6	28	M6	6	22.5	312
11.700.06	149	150	186	305	17	105	152	63	25	50	5	40	M10	8	28	383
11.700.07	149	150	186	305	17	105	152	63	25	50	5	40	M10	8	28	383
11.700.18	190	180	256	379	26	160	195 ¹⁾	111	30	60	3	50	M10	8	33	476
11.700.08	190	180	256	379	26	160	195 ¹⁾	111	30	60	3	50	M10	8	33	476

Gearbox size	Solid shaft							Pitch circle					Foot									
	d k6	l	l ₁	l ₂	d ₂	u	t +0.2	a ₁	b ₁ h ₇	e ₁	f ₁	i ₁	s ₁	b ₅	b ₇	c ₅	e ₅	f ₅	i	i ₅	m	s ₅
11.700.02	11	23	3	16	M4	4	12.5	86	58	74	5	35	M6x14	90	110	3.5	140	110	33	43	25	10
11.700.03	14	30	4	20	M5	5	16	90	58	74	5	42	M6x10	90	120	14	160	125	44	62	32	10
11.700.04	19	40	5	28	M6	6	21.5	108	70	90	5	54	M8x16	100	150	17	200	134	71	89	40	11
11.700.05	24	50	4	40	M8	8	27	108	70	90	5	64	M8x16	115	205	22	238	140	95	107	45	11
11.700.06	28	60	6	40	M10	8	31	140	100	120	7	77	M10x20	220	255	26	290	252	76	92	55	13.5
11.700.07	28	60	6	40	M10	8	31	140	100	120	7	77	M10x20	220	255	26	290	252	76	92	55	13.5
11.700.18	38	80	10	56	M12	10	41	165	120	145	11	100	M12x24	255	320	30	364	305	86	110	60	17.5
11.700.08	38	80	10	56	M12	10	41	165	120	145	11	100	M12x24	255	320	30	364	305	86	110	60	17.5

Dimensions in [mm] 1) Plus 80 mm for handle



DISCO variable speed drives

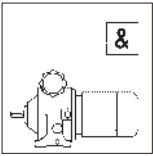
11.700. □ □ .00 Flange design

Gearbox size	Gearboxes							Input shaft							Total length k	
	a ₉	k ₉	o ₉	p ₉ *	p ₁₀	w	x	x ₁	d ₄ k ₆	l ₄	l ₅	l ₆	d ₅	u ₅		t ₅ +0.2
11.700.02	83	94	150	65	14	70	105	43	11	23	3	16	M4	4	12.5	183
11.700.03	86	112	175	83	14	70	105	43	14	30	4	20	M5	5	16	219
11.700.04	103	112	215	98	17	105	152	63	15	30	5	20	M5	5	17	251
11.700.05	123	147	253	122	17	105	152	63	20	40	6	28	M6	6	22.5	312
11.700.06	149	186	305	145	17	105	152	63	25	50	5	40	M10	8	28	383
11.700.07	149	186	305	145	17	105	152	63	25	50	5	40	M10	8	28	383
11.700.18	190	256	379	176	26	160	195 ¹⁾	111	30	60	3	50	M10	8	33	476
11.700.08	190	256	379	176	26	160	195 ¹⁾	111	30	60	3	50	M10	8	33	476

Gearbox size	Solid shaft							Flange						
	d k6	l	l ₁	l ₂	d ₂	u	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
11.700.02	11	23	3	16	M4	4	12.5	120	80	12	100	3	23	7
								140	95	10	115	3		
								160	110	10	130	3.5		
11.700.03	14	30	4	20	M5	5	16	140	95	10	115	3	30	9
								160	110	10	130	3.5		
								200	130	12	165	3.5		
11.700.04	19	40	5	28	M6	6	21.5	160	110	12	130	3.5	40	9
								200	130	12	165	3.5		
								250	180	14	215	4		
11.700.05	24	50	4	40	M8	8	27	160	110	12	130	3.5	50	9
								200	130	12	165	3.5		
								250	180	14	215	4		
11.700.06	28	60	6	40	M10	8	31	200	130	14	165	3.5	60	11
								250	180	15	215	4		
								300	230	17	265	4		
11.700.07	28	60	6	40	M10	8	31	200	130	14	165	3.5	60	11
								250	180	15	215	4		
								300	230	17	265	4		
11.700.18	38	80	10	56	M12	10	41	250	180	16	215	4	80	14
								300	230	18	265	4		
								350	250	20	300	5		
11.700.08	38	80	10	56	M12	10	41	250	180	16	215	4	80	14
								300	230	18	265	4		
								350	250	20	300	5		

Dimensions in [mm] 1) Plus 80 mm for handle

11.700.02: Mounting to machine wall: Provide stud bolts



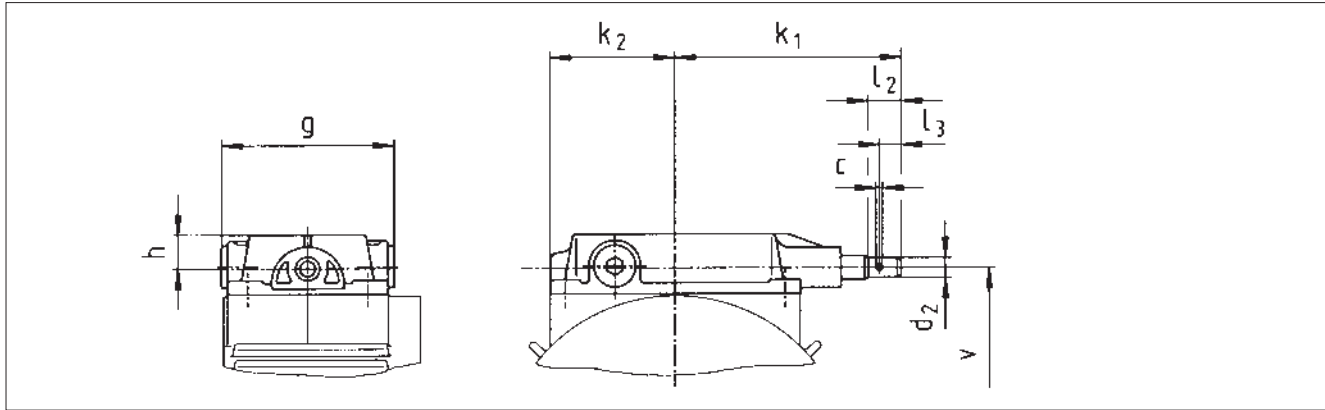
DISCO variable speed drives

Additional dimensions – attachments

Speed adjustment units

Spindle box

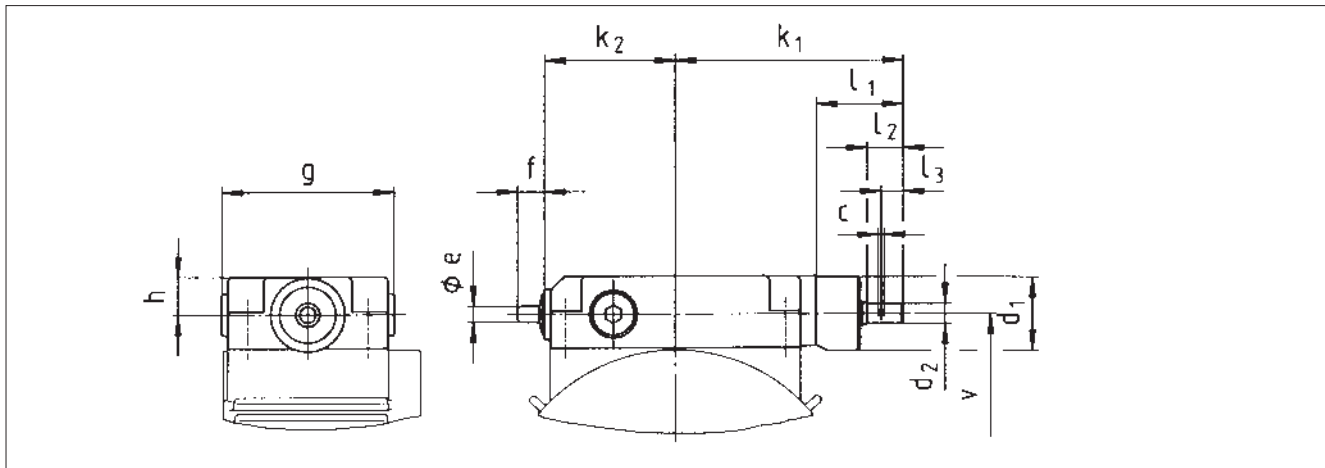
Standard design for handwheel adjustment



DISCO-size	c + 0.1	d ₂ h9	g	h	k ₁	k ₂	l ₂	l ₃	v
02	3.2	8	64	14	74	43	12.5	7	83
03	3.2	8	64	14	74	43	12.5	7	86
04	3.2	10	86	17	114	63	16.5	11	103
05	3.2	10	86	17	114	63	16.5	11	123
06/07	3.2	10	86	17	114	63	16.5	11	149

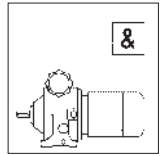
Options

Universal design suitable for handwheel adjustment, bevel gear adjustment and electrical remote control



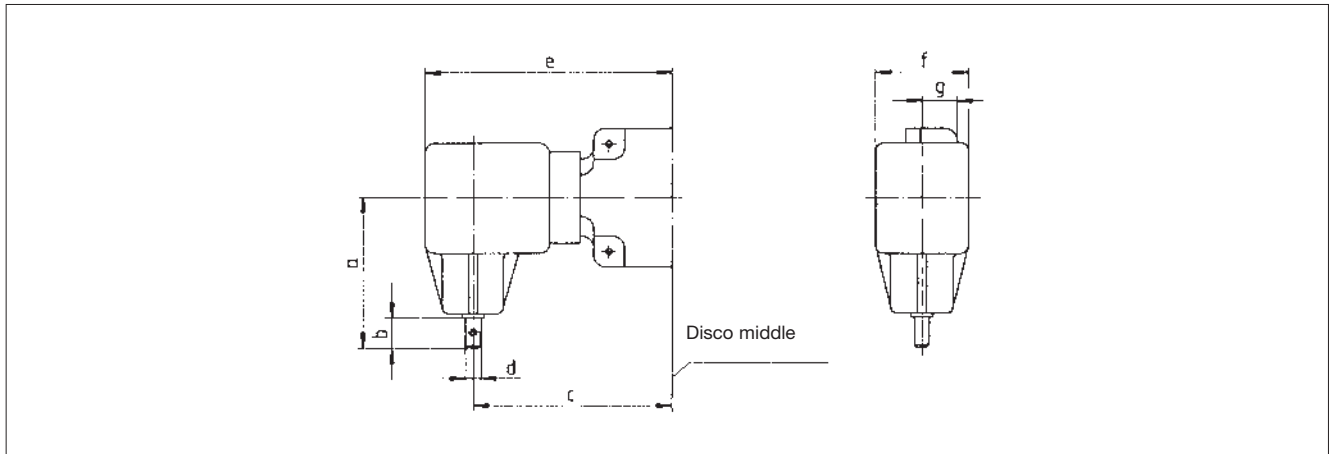
DISCO-size	c + 0.1	d ₁ h9	d ₂ j7	e	f	g	h	k ₁	k ₂	l ₁	l ₂	l ₃	v
02	3.0	30	8	8	13	64	16	84	46	31	14	7	86
03	3.0	30	8	8	13	64	16	84	46	31	14	7	89
04	3.0	37	10	8	13	86	19	114	66	42	18	11	107
05	3.0	37	10	8	13	86	19	114	66	42	18	11	125
06/07	3.0	37	10	8	13	86	19	114	66	42	18	11	153
18/08*	4.0	52	15	8	13	106	26	161	98	55	21	14	190

* With size 18/08 standard design
Dimensions in [mm]



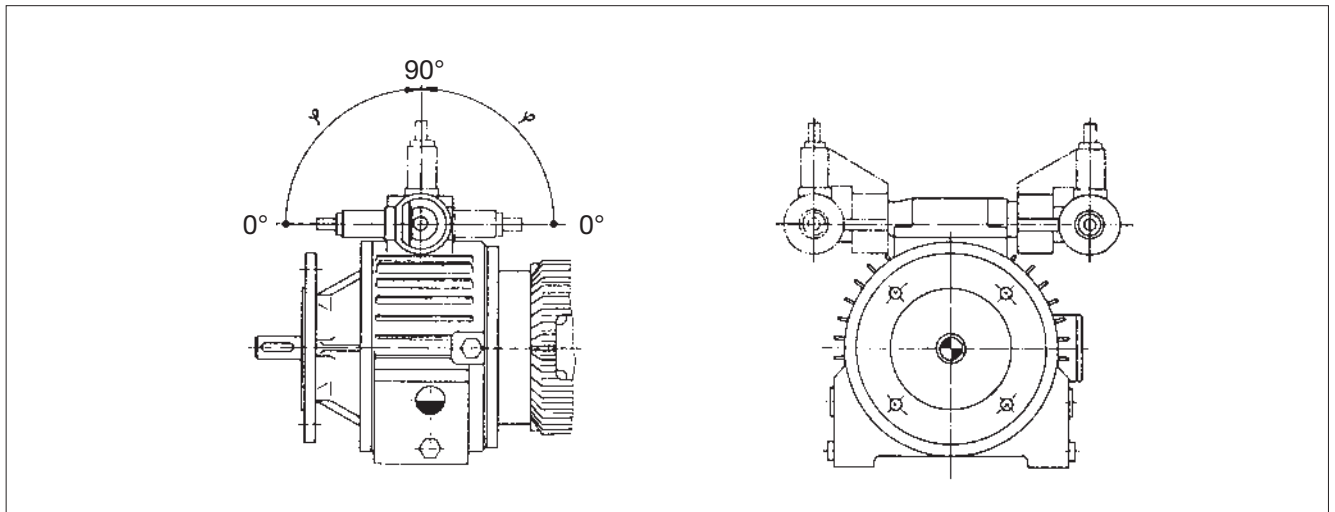
Speed adjustment units

Bevel gear adjustment (optionally)



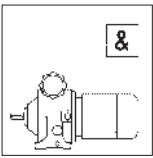
DISCO-size	a	b	c	d h8	e	f	g
02/03	75	22	94	8	116	46	16
04/05/06/07	93	18	127	10	157	56	19
18/08	107	21	173	15	203	73	26

Dimensions in [mm]



DISCO-size	Swivel range φ	
	Handwheel	Handwheel with position indicator 0° $\hat{=}$ horizontal layout
02/03/04	90°	0 – 45°
05/06/07	90°	0 – 45°
18/08	20 – 90°	20 – 45°

Dimensions in [mm]



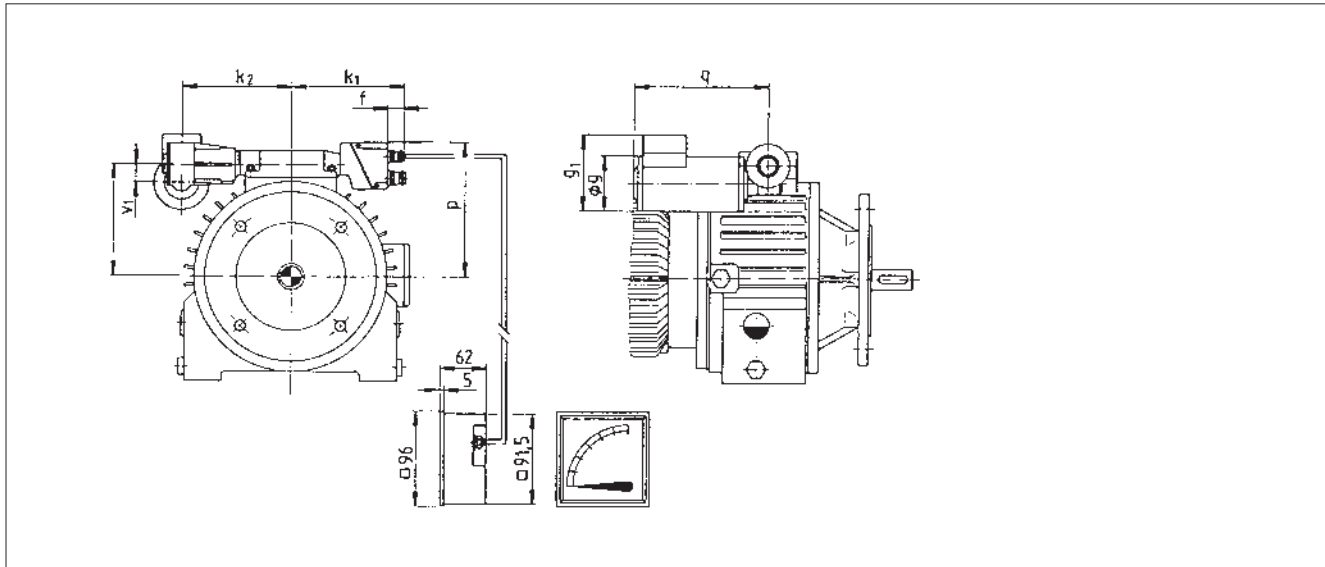
DISCO variable speed drives

Additional dimensions – attachments

Speed adjustment units

Electrical remote control (optionally)

Position Spindle box	Position adjustment unit			
	2	3	4	5
	Permissible terminal box position for main motor			
2		2-4-5	2-3-4	
3			2-3-4	
4				2-3-4
5	3-4-5			

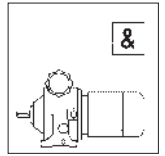


DISCO-size	f	g	g ₁	k ₁	k ₂	p	q	v	v ₁
02	19	65	123	137	119	118	170	86	25
03						121		89	
04	19	85	144	152	153	139	199	107	31
05						159		127	
06	19	85	144	152	153	185	199	153	31
07									
18/08	19	118	164	190	243 ¹⁾	222	221	190	40

¹⁾ With slip clutch
Dimensions in [mm]

DISCO variable speed drives

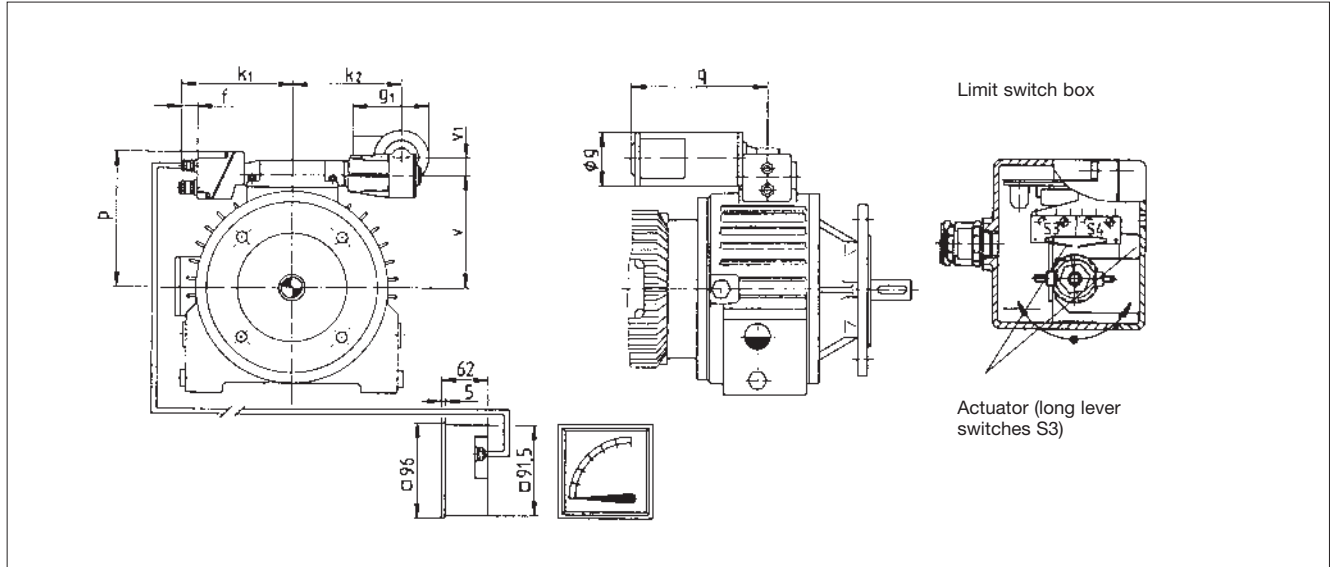
Additional dimensions – attachments



Speed adjustment units

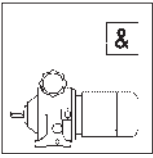
Electrical remote control (optionally)

Position Spindle box	Position adjustment unit			
	2	3	4	5
	Permissible terminal box position for main motors			
2				3-4-5
3	2-4-5			
4		2-3-5		
5			2-3-4	



DISCO-size	f	g	g ₁	k ₁	k ₂	p	q	v	v ₁
02	19	65	123	137	119	118	170	86	25
03						121		89	
04	19	85	144	152	153	139	199	107	31
05						159		127	
06	19	85	144	152	153	185	199	153	31
07									
18/08	19	118	164	190	243 ¹⁾	222	221	190	40

¹⁾ With slip clutch
Dimensions in [mm]

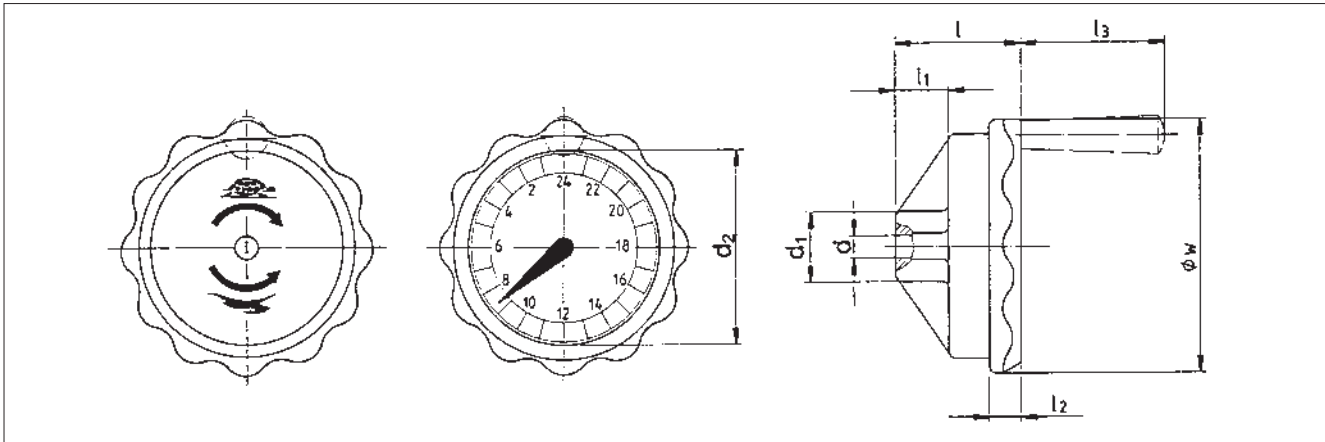


DISCO variable speed drives

Additional dimensions – attachments

Speed measuring units

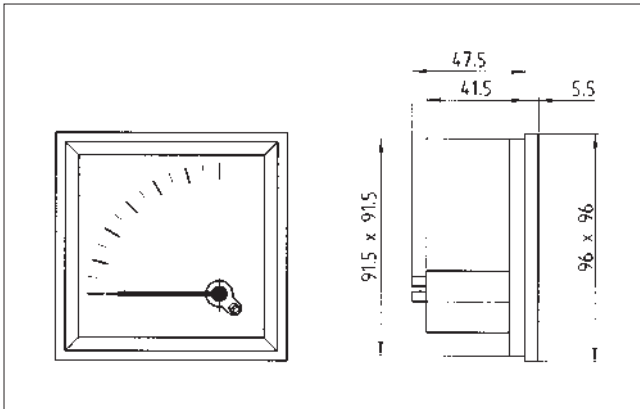
Position indicator*/Indicator for direction of rotation



DISCO-size	d H ₉	d ₁	d ₂	l	l ₁	l ₂	l ₃	w
02/03	8	20	52	43	15	10	–	70
04/05 06/07	10	30	85	55	23	14	–	105
18/08	15	25	85	55	23	15	80	160

** Display only with horizontal layout $\pm 45^\circ$

Analog display



Dimensions in [mm]