

# Automation systems

# Drive solutions

Controls

Inverter

**Motors**

**Gearboxes**

Engineering Tools



**Motors:** IE1 MD three-phase AC motors, IE3 three-phase AC motors m240-P

**Gearboxes:** g500-H helical gearboxes, g500-S shaft-mounted helical gearbox, g500-B bevel gearbox



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 Selected portfolio  
 Additional portfolio

# Lenze makes many things easy for you.

With our motivated and committed approach, we work together with you to create the best possible solution and set your ideas in motion - whether you are looking to optimise an existing machine or develop a new one. We always strive to make things easy and seek perfection therein. This is anchored in our thinking, in our services and in every detail of our products. It's as easy as that!

**1**

## **Developing ideas**

Are you looking to build the best machine possible and already have some initial ideas? Then get these down on paper together with us, starting with small innovative details and stretching all the way to completely new machines. Working together, we will develop an intelligent and sustainable concept that is perfectly aligned with your specific requirements.

**2**

## **Drafting concepts**

We see welcome challenges in your machine tasks, supporting you with our comprehensive expertise and providing valuable impetus for your innovations. We take a holistic view of the individual motion and control functions here and draw up consistent, end-to-end drive and automation solutions for you - keeping everything as easy as possible and as extensive as necessary.

**3**

## **Implementing solutions**

Our easy formula for satisfied customers is to establish an active partnership with fast decision making processes and an individually tailored offer. We have been using this principle to meet the ever more specialised customer requirements in the field of machine engineering for many years.

**4**

## **Manufacturing machines**

Functional diversity in perfect harmony: as one of the few full-range providers in the market, we can provide you with precisely those products that you actually need for any machine task – no more and no less. Our L-force product portfolio, a consistent platform for implementing drive and automation tasks, is invaluable in this regard.

**5**

## **Ensuring productivity**

Productivity, reliability and new performance peaks on a daily basis – these are our key success factors for your machine. After delivery, we offer you cleverly devised service concepts to ensure continued safe operation. The primary focus here is on technical support, based on the excellent application expertise of our highly-skilled and knowledgeable after-sales team.

# A matter of principle: the right products for every application.

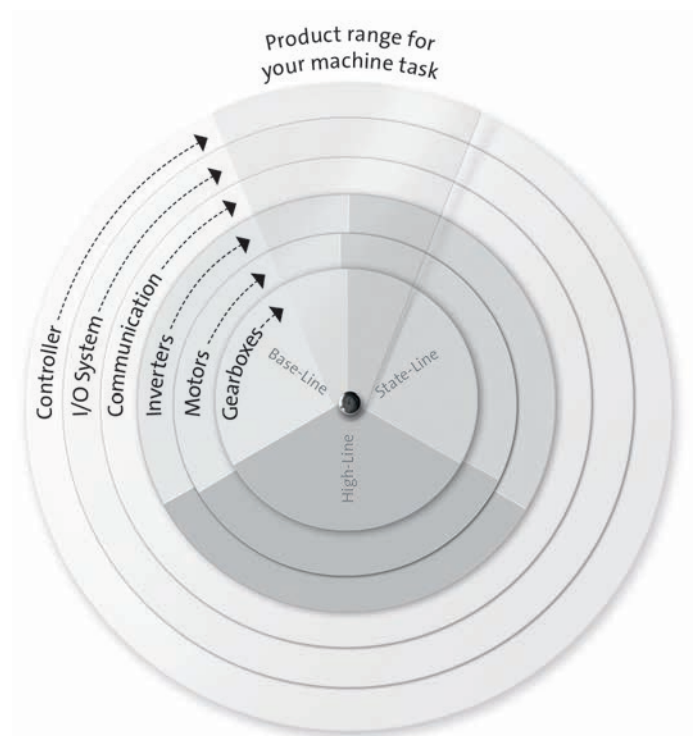
Lenze's extensive L-force product portfolio follows a very simple principle. The functions of our finely scaled products are assigned to the three lines Base-Line, State-Line or High-Line.

But what does this mean for you? It allows you to quickly recognise which products represent the best solution for your own specific requirements.

#### **Powerful products with a major impact:**

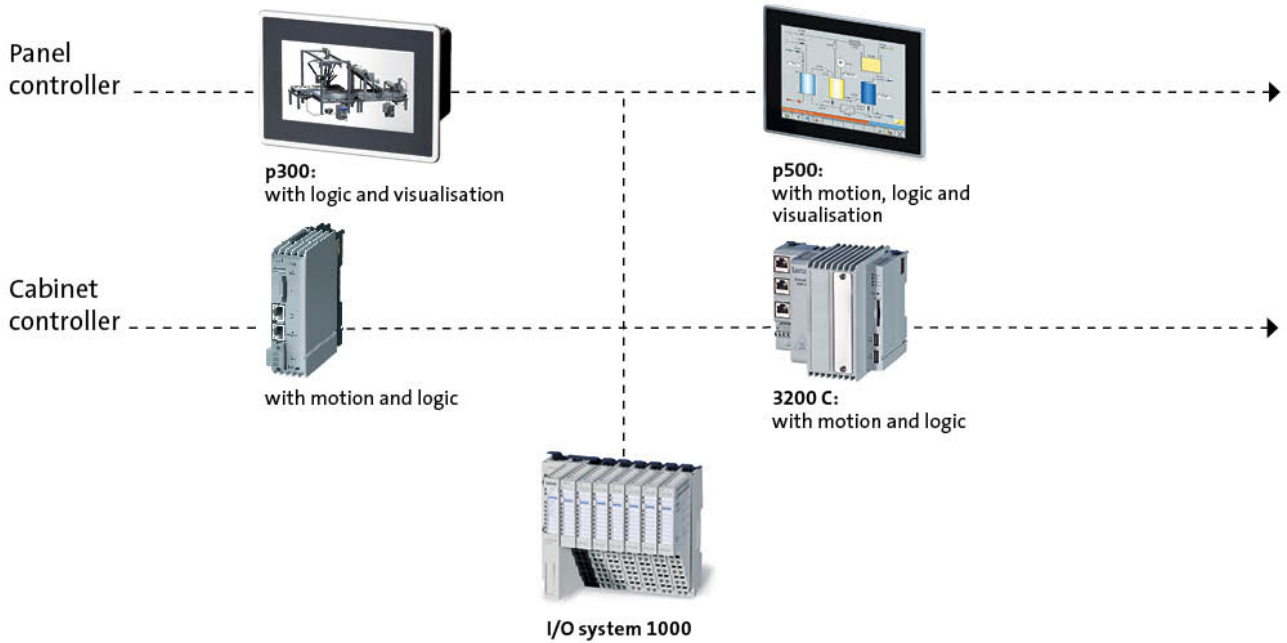
- Easy handling
- High quality and durability
- Reliable technologies in tune with the latest developments

Lenze products undergo the most stringent testing in our own laboratory. This allows us to ensure that you will receive consistently high quality and a long service life. In addition to this, five logistics centres ensure that the Lenze products you select are available for quick delivery anywhere across the globe. It's as easy as that!

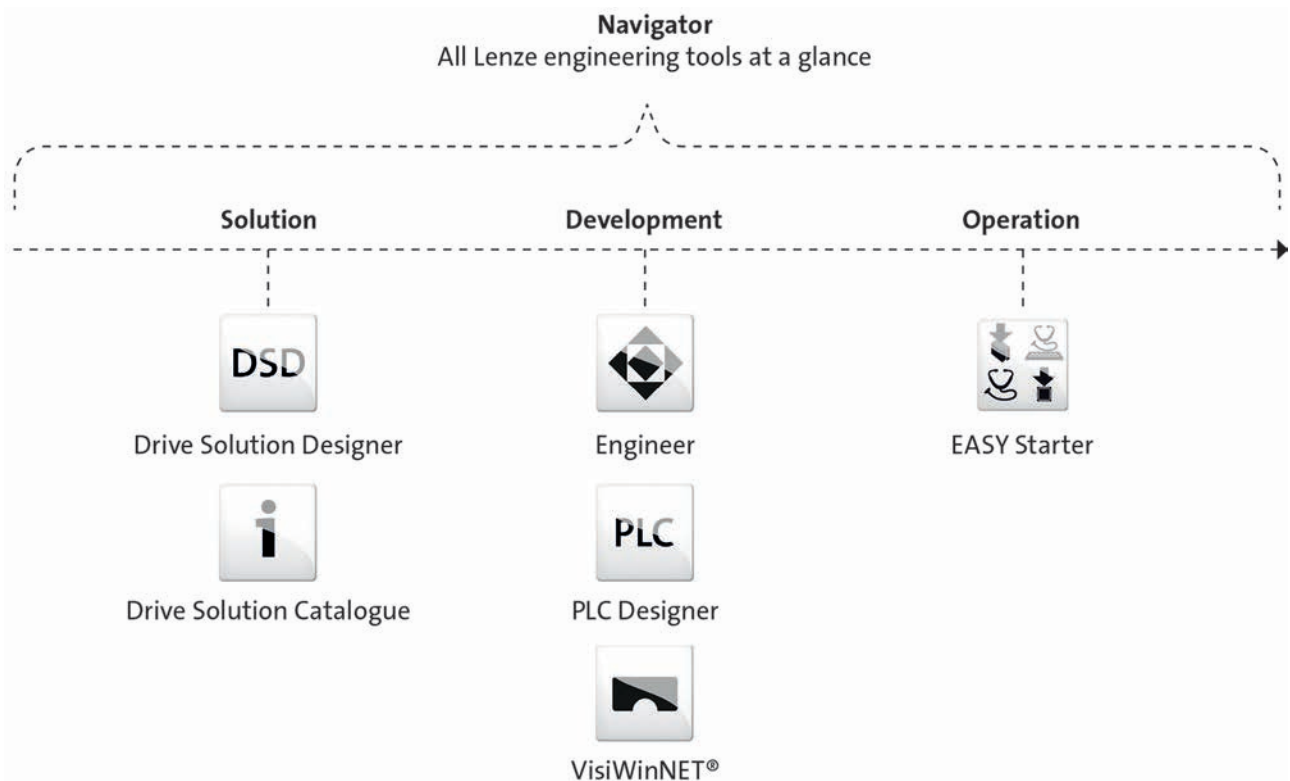


# L-force product portfolio

## Controls

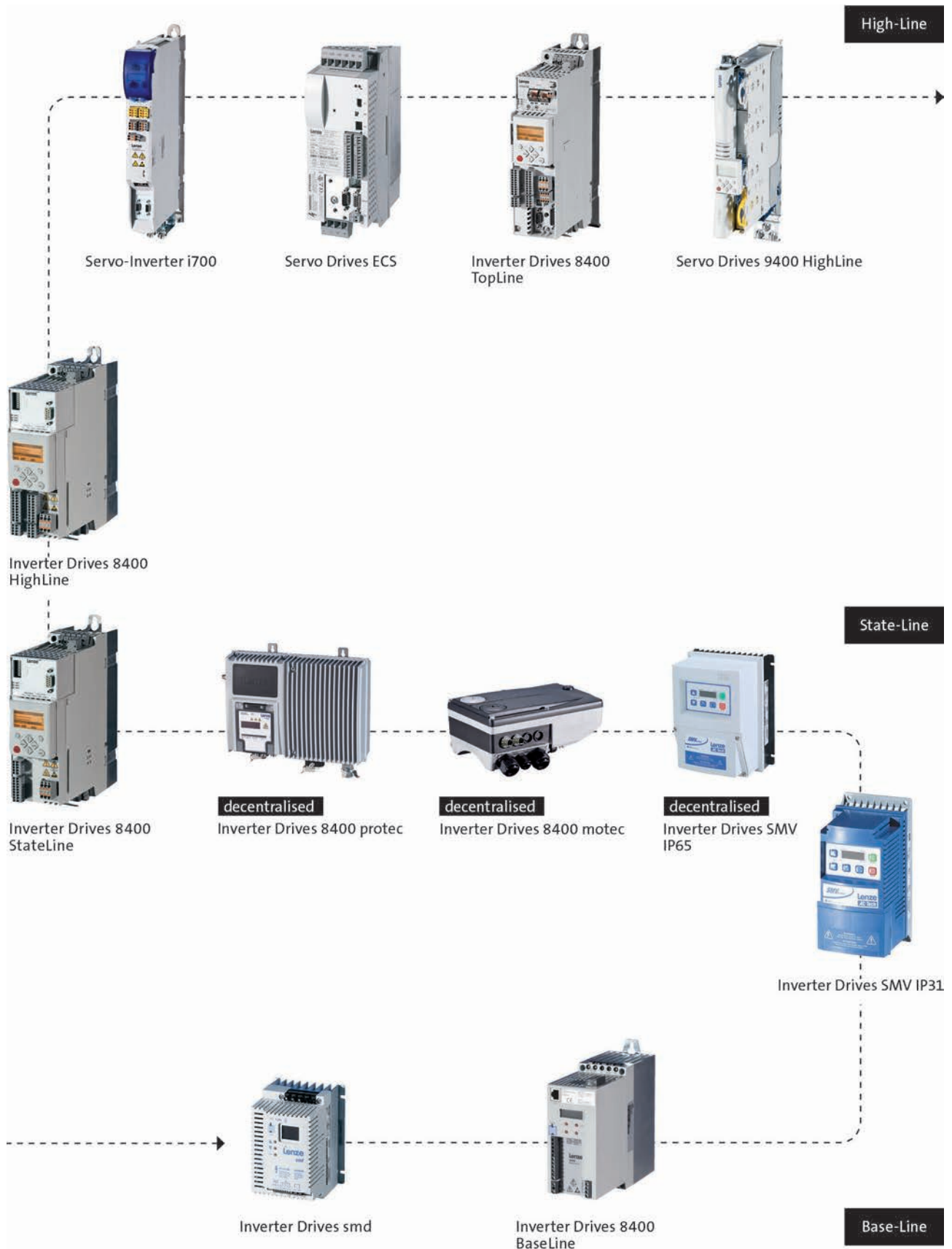


## Engineering Tools



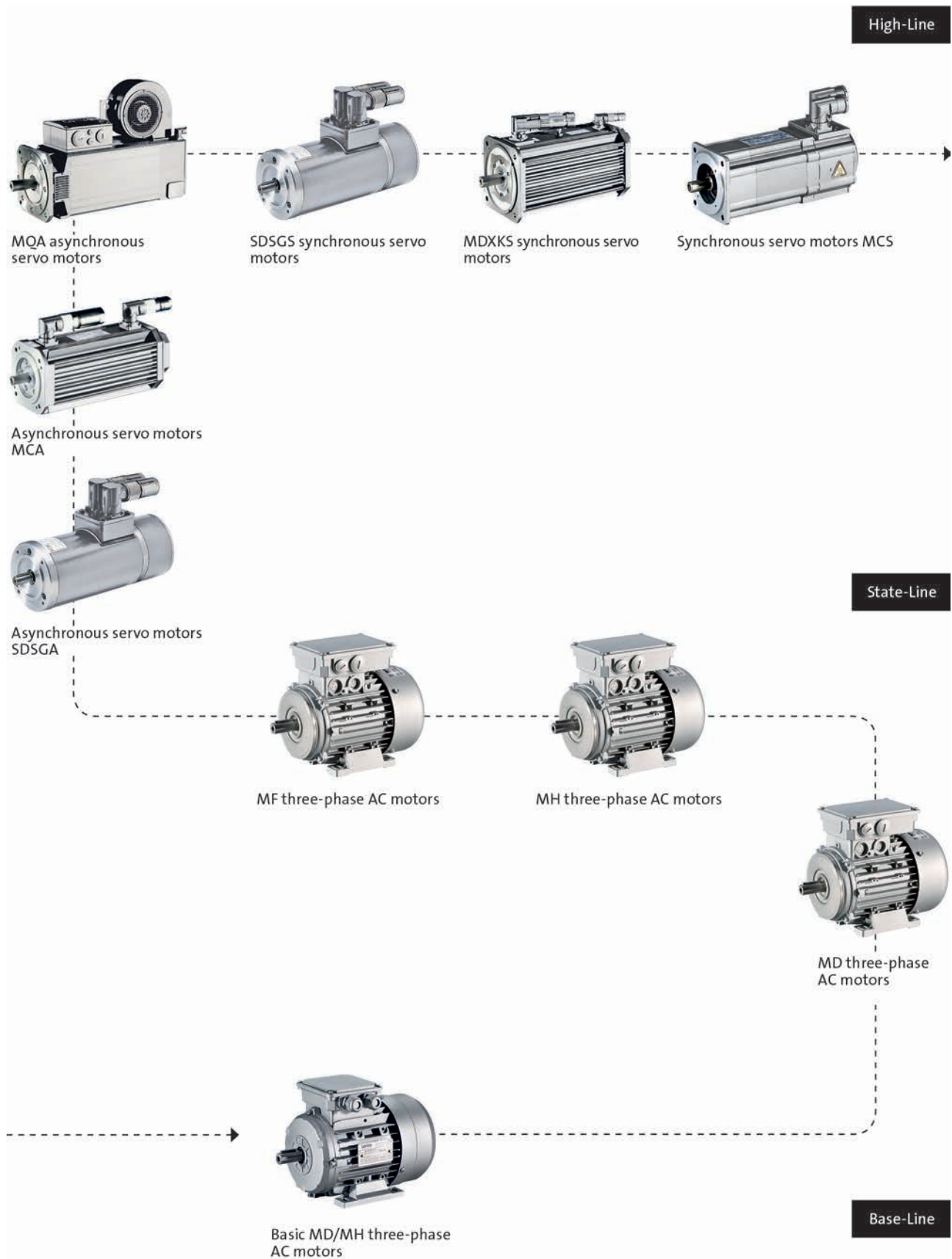
# L-force product portfolio

## Inverter



# L-force product portfolio

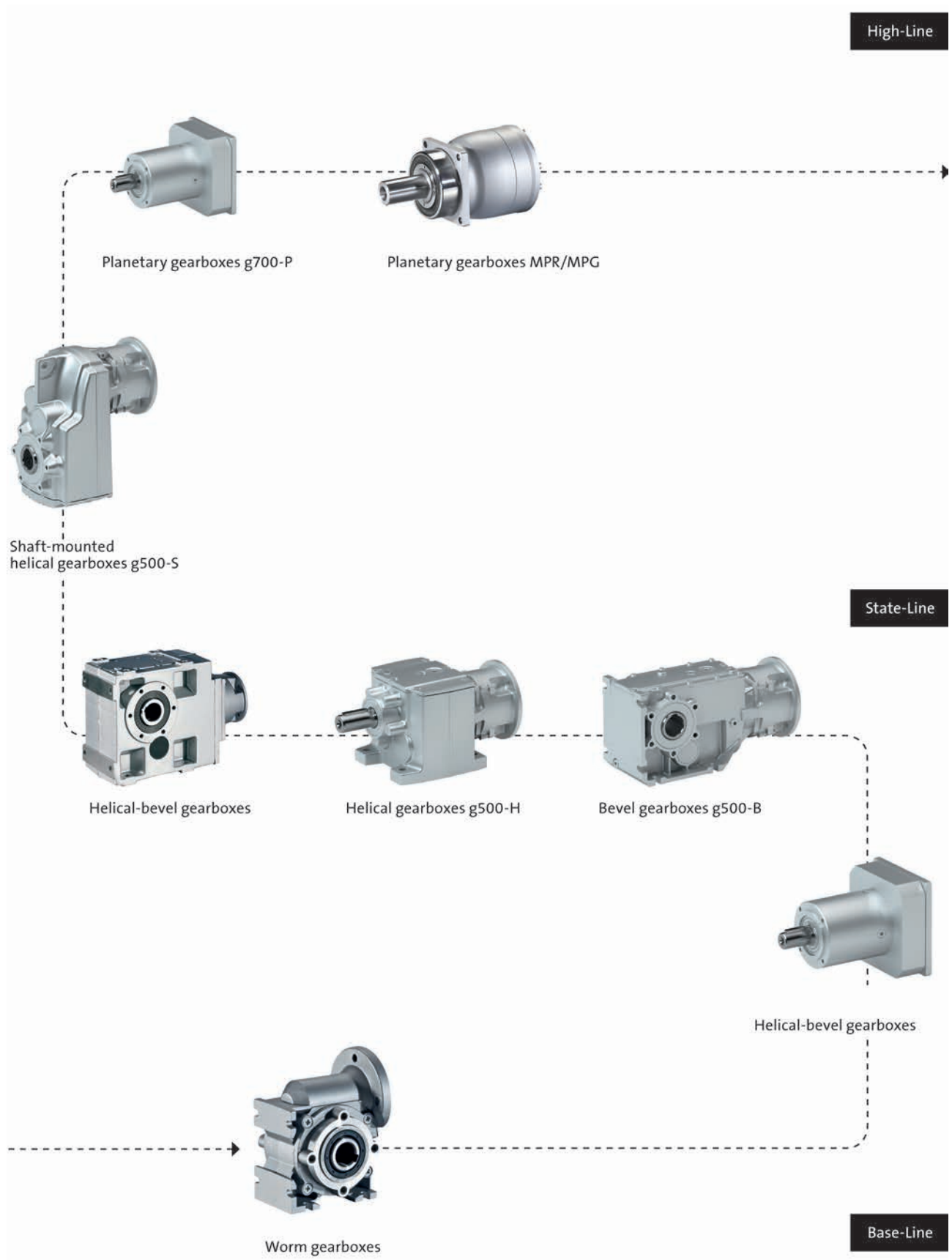
## Motors





# L-force product portfolio

## Gearboxes





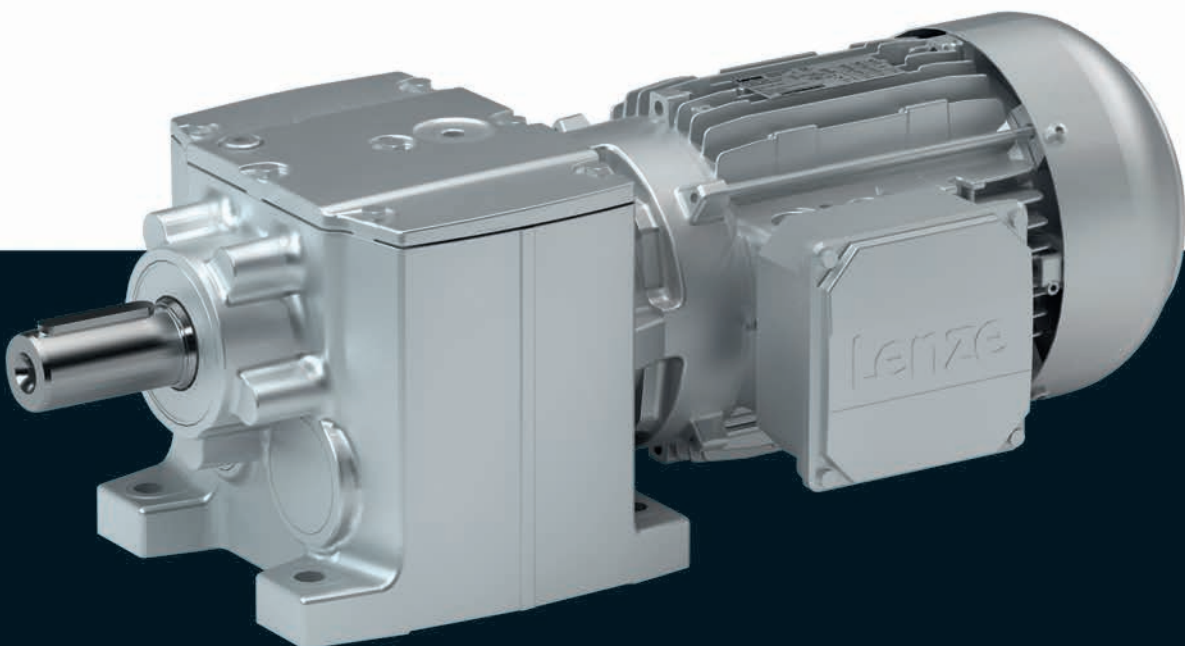
Gearboxes

# g500-H helical geared motors

**Mains operation**

**0.06 ... 0.55 kW (efficiency class IE1)**

**0.75 ... 22 kW (efficiency class IE3)**





# g500-H helical geared motors



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### List of abbreviations

$\alpha$	[rad/s <sup>2</sup> ]	Max. permissible angular acceleration
$\eta_{50\%}$	[%]	Efficiency
$\eta_{75\%}$	[%]	Efficiency
$\eta_{100\%}$	[%]	Efficiency
$\eta_a$		Efficiency
$\eta_{c=1}$		Efficiency
c		Load capacity
$\cos \phi$		Power factor
du/dt	[kV/ $\mu$ s]	Insulation resistance
$F_{ax,-}$	[N]	Min. axial force
$F_{ax,+}$	[N]	Max. axial force
$F_{ax,max}$	[N]	Max. axial force
$f_{in,max}$	[Hz]	Max. input frequency
$f_{max}$	[kHz]	Limit frequency
$f_{max}$	[kHz]	Max. switching frequency
$f_N$	[Hz]	Rated frequency
$F_{rad,max}$	[N]	Max. radial force
$f_z$		Additional radial force factor
$H_{max}$	[m]	Site altitude
$I_0$	[A]	Standstill current
i		Ratio
$I_{in,max}$	[A]	Max. input current
$I_{max}$	[A]	Max. current consumption
$I_{max}$	[A]	Max. current
$I_{max}$	[A]	Max. current consumption
$I_{max}$	[A]	Max. current
$I_{max}$	[A]	Max. short-time DC-bus current
$I_{max}$	[A]	Max. DC-bus current
$I_N$	[A]	Rated current
$I_{N,\Delta}$	[A]	Rated current
$I_{N,Y}$	[A]	Rated current
J	[kgcm <sup>2</sup> ]	Moment of inertia
$J_{MB}$	[kgcm <sup>2</sup> ]	Moment of inertia
$KE_{LL\ 150^\circ C}$	[V/(1000 r/min)]	Voltage constant
$Kt_{0\ 150^\circ C}$	[Nm/A]	Torque constant
$L_{10}$	[h]	Bearing service life
L	[mH]	Mutual inductance
$L_{1\sigma}$	[mH]	Stator leakage inductance
$L_{2\sigma}$	[mH]	Rotor leakage inductance
$L_N$	[mH]	Rated inductance
m	[kg]	Mass
$M_2$	[Nm]	Output torque
$M_{22}$	[Nm]	Output torque
$M_0$	[Nm]	Stall torque
$M_{0,max}$	[Nm]	Max. standstill torque
$M_{2,GM}$	[Nm]	Output torque
$M_{2,max}$	[Nm]	Max. output torque
$M_{2,not}$	[Nm]	Emergency off-torque

$M_a$	[Nm]	Starting torque
$M_{a,1}$	[Nm]	Starting torque
$M_{a,2}$	[Nm]	Starting torque
$M_{av}$	[Nm]	Average dynamic torque
$M_b$	[Nm]	Stalling torque
$M_B$	[Nm]	Braking torque
$M_k$	[Nm]	Rated torque
$M_{max}$	[Nm]	Max. torque
$M_N$	[Nm]	Rated torque
$n_2$	[r/min]	Output speed
$n_{21}$	[r/min]	Output speed
$n_{22}$	[r/min]	Output speed
$n_{1,max}$	[r/min]	Max. gearbox input speed
$n_{1,max\ 50\%}$	[r/min]	Max. gearbox input speed
$n_{eto}$	[r/min]	Transition speed
$n_k$	[r/min]	Speed
$n_{max}$	[r/min]	Max. speed
$n_N$	[r/min]	Rated speed
$P_{max}$	[kW]	Max. power input
$Q_{BW}$	[MJ]	Friction energy
$Q_E$	[J]	Maximum switching energy
$Q_E$	[kJ]	Maximum switching energy
$R_1$	[ $\Omega$ ]	Stator impedance
$R_2$	[ $\Omega$ ]	Rotor impedance
R	[ $\Omega$ ]	Insulation resistance
R	[ $\Omega$ ]	Min. insulation resistance
$R_{UV\ 150^\circ C}$	[ $\Omega$ ]	Stator impedance
$R_{UV\ 20^\circ C}$	[ $\Omega$ ]	Stator impedance
$S_{h\ddot{u}}$	[1/h]	Transition operating frequency
$t_1$	[ms]	Engagement time
$t_2$	[ms]	Disengagement time
$t_{11}$	[ms]	Delay time
$t_{12}$	[ms]	Rise time
T	[ $^\circ C$ ]	Max. surface temperature
T	[ $^\circ C$ ]	Min. ambient temperature for transport
T	[ $^\circ C$ ]	Max. ambient temperature for transport
T	[ $^\circ C$ ]	Max. ambient temperature of bearing
T	[ $^\circ C$ ]	Min. ambient storage temperature
T	[ $^\circ C$ ]	Ambient temperature
T	[ $^\circ C$ ]	Operating temperature
T	[ $^\circ C$ ]	Rated temperature
t	[h]	Service life
$T_{opr}$		Ambient operating temperature
$T_{opr,max}$	[ $^\circ C$ ]	Max. ambient operating temperature
$T_{opr,min}$	[ $^\circ C$ ]	Min. ambient operating temperature
$t_{re}$	[s]	Recovery time
$t_{\ddot{u}}$	[ms]	Overexcitation time
$U_{\Delta}$	[V]	Voltage range
$U_{AC}$	[V]	Mains voltage range

# g500-H helical geared motors

## General information



### List of abbreviations

$U_{AC}$	[V]	Mains voltage
$U_{in,max}$	[V]	Max. input voltage
$U_{in,min}$	[V]	Min. input voltage
$U_{max}$	[V]	Max. input voltage
$U_{max}$	[V]	Max. mains voltage
$U_{min}$	[V]	Min. mains voltage
$U_{N,\Delta}$	[V]	Rated voltage
$U_{N,AC}$	[V]	Rated voltage
$U_{N,DC}$	[V]	Rated voltage
$U_{N,Y}$	[V]	Rated voltage
$Z_g$		Number of teeth
$Z_{ro}$	[ $\Omega$ ]	Rotor impedance
$Z_{rs}$	[ $\Omega$ ]	Impedance
$Z_{so}$	[ $\Omega$ ]	Stator impedance
$Z_t$		Number of teeth

CCC	China Compulsory Certificate
CE	Communauté Européenne
CEL	China Energy Label
CSA	Canadian Standards Association
CSAULE	Energy Verified Certificate
cURus	Combined certification marks of UL for the USA and Canada
DIN	Deutsches Institut für Normung e.V.
EAC	Customs union Russia / Belarus / Kazakhstan certificate
EMC	Electromagnetic compatibility
EN	European standard
IM	International Mounting Code
IP	International Protection Code
NEMA	National Electrical Manufacturers Association
UkrSEPRO	Certificate for Ukraine
UL	Underwriters Laboratory Listed Product
UR	Underwriters Laboratory Recognized Product
VDE	Verband deutscher Elektrotechniker (Association of German Electrical Engineers)

# g500-H helical geared motors



## General information

### Product information

In combination with three-phase AC motors, our helical gearboxes form a compact and powerful drive unit. Numerous options at the input and output end provide for the drive to be exactly adapted to your application.

The robust helical gearboxes feature high permissible radial forces, closely stepped ratios and a low backlash. They are available in 2-stage and 3-stage design with a output torque up to 3000 Nm and a ratio of up to  $i = 370$ .

#### Three-phase AC motors as a basis for geared motors

In a power range of 0.06 to 22 kW, Lenze offers mains-operated three-phase AC motors for basic tasks. These drives come in different efficiency classes and can be used for the versions required for mains operation.

- IE1 motors up to a power of 0.55 kW
- IE3 motors from 0.75 kW to 22 kW

#### Versions

- Fine-scaling of size / torque - provides for an optimum machine adaptation
- Standardised shaft and flange dimensions for an easy machine integration
- High efficiency

#### Customer benefit

- Different efficiency classes for the greatest economic benefit
- Saving of space by compact direct mounting to Lenze gearboxes
- Optimum adaptation of the brake reaction by optional holding brakes and service brakes
- Optional overheat control by temperature monitoring

### The product name

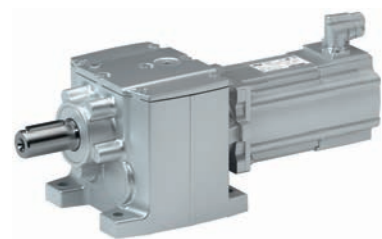
Gearbox type	Product range		Design	Rated torque [Nm]	Product
Helical gearbox	g500	-	H	45	g500-H45
				100	g500-H100
				140	g500-H140
				210	g500-H210
				320	g500-H320
				450	g500-H450
				600	g500-H600
				850	g500-H850
				1500	g500-H1500
				3000	g500-H3000



g500-H helical gearbox with m240-P three-phase AC motor



g500-H helical gearbox with m550-P three-phase AC motor and motec



g500-H helical gearbox with MCS servo motor



# g500-H helical geared motors

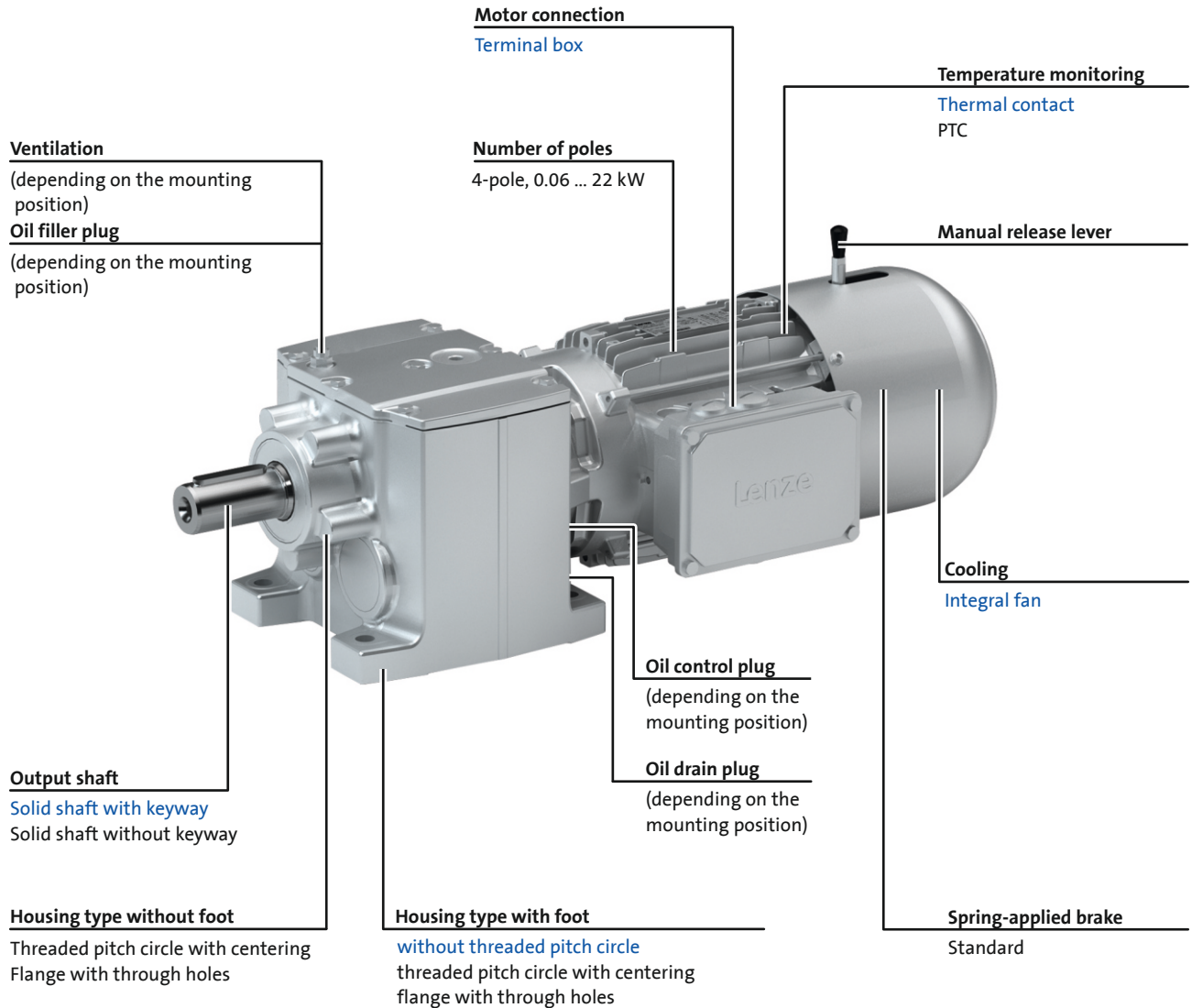
## General information



## Equipment

### Overview

The equipment includes all the options available as standard and all the built-on accessories of the product.



### Standard design

10 - Detailed information on housing type.

# g500-H helical geared motors

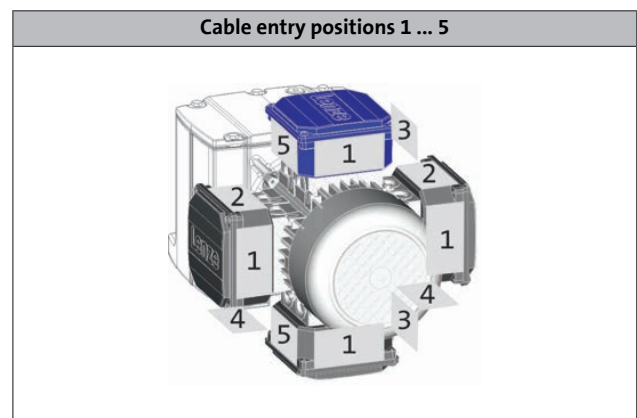
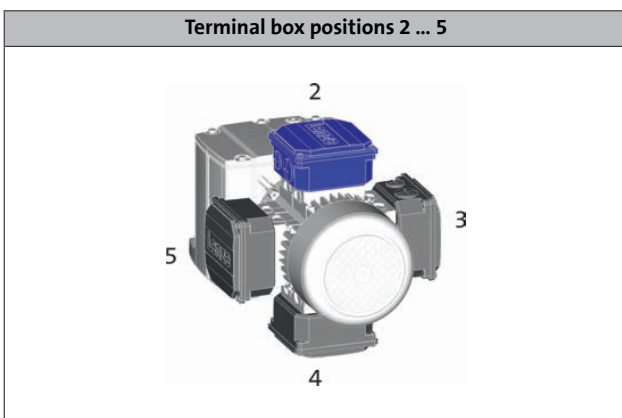
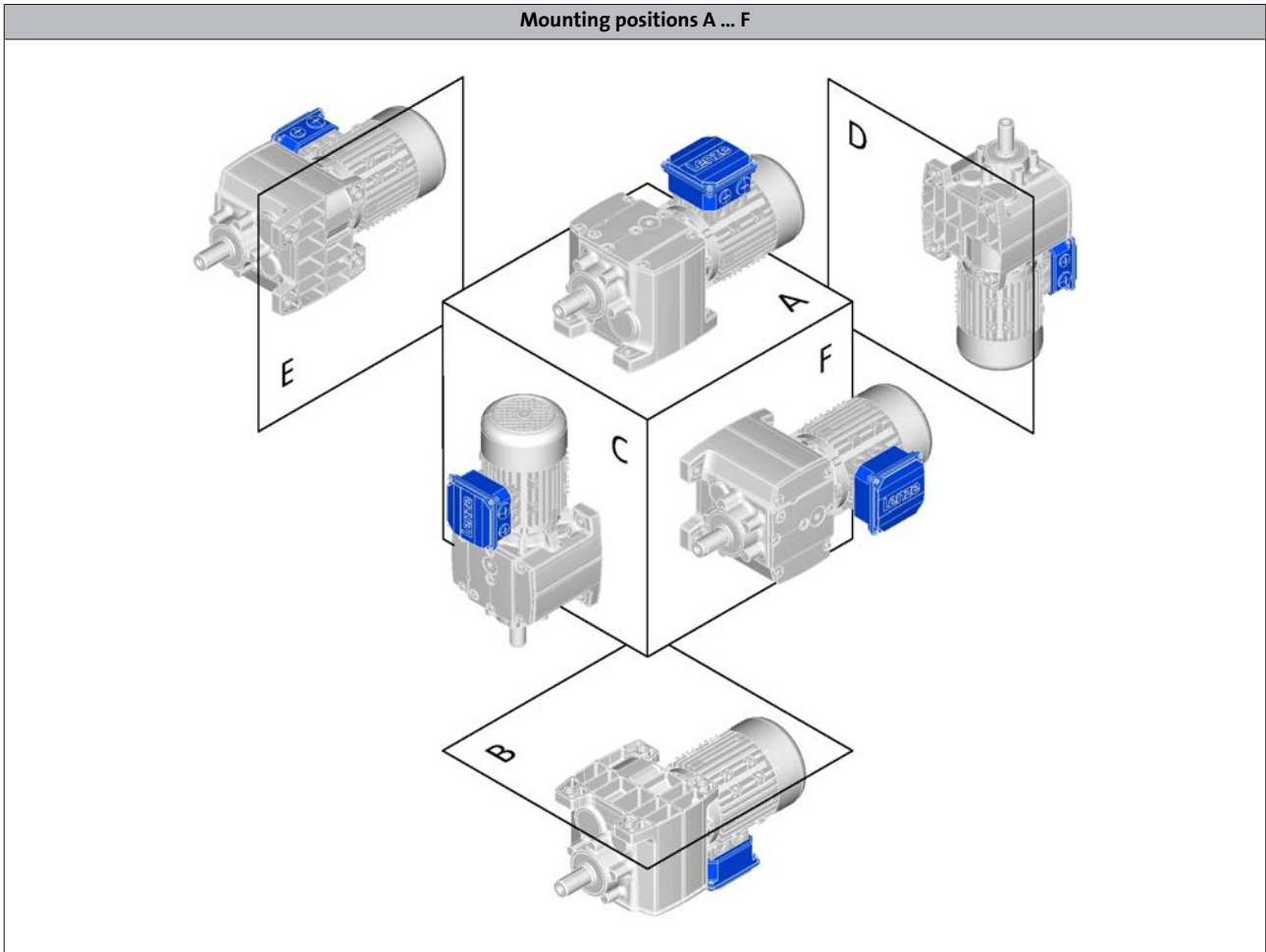
## General information



### Equipment

#### Mounting position, position of system components

- ▶ In the following graphics, the terminal box in position 2 is colour-coded. If the mounting position (A ... F) changes, the terminal box positions 2 ... 5 are rotated accordingly.
- ▶ To reduce the number of different versions, the gearboxes can also be ordered with combined mounting positions:
  - g500-H45 in mounting position ABCDEF
  - g500-H100 ... H450 in mounting position AEF



- ▶ For details regarding the cable entry see motor chapter/product extensions.

# g500-H helical geared motors

## General information



### The geared motor kit

#### g500-H45 ... H450

Product	g500-H45	g500-H100	g500-H140	g500-H210	g500-H320	g500-H450
Gearbox	g500-H45	g500-H100	g500-H140	g500-H210	g500-H320	g500-H450
Motor assignment min.	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063
Motor assignment max.	MD□MA□□-071	m240-P90	m240-P90	m240-P100	m240-P112	m240-P132
Technical data						
Output torque max.	45 Nm	100 Nm	140 Nm	210 Nm	320 Nm	450 Nm
Drive power min.	0.06 kW	0.12 kW	0.12 kW	0.12 kW	0.12 kW	0.12 kW
Drive power max.	0.55 kW	1.5 kW	1.5 kW	3.0 kW	4.0 kW	7.5 kW
Dimensions [mm]						
Solid shaft with featherkey	14 x 28 20 x 40	20 x 40	25 x 50	25 x 50	30 x 60	30 x 60 35 x 70
Solid shaft without keyway	20 x 40	20 x 40	25 x 50	25 x 50	30 x 60	35 x 70
Output flange	120/140/160	120/140/160	120/140/160	120/140/160/200	160/200	160/200/250

- ▶ The designs are only available for the gearboxes displayed above in the table.
- ▶ Values printed in bold are standard versions.  
Values not printed in bold are possible extensions, some for an additional charge.

Design	
Conformity	<b>CE</b> EAC
Approval	<b>Without</b>
Degree of protection	<b>IP55</b> IP65/IP66
Surface and corrosion protection	<b>Without</b> Different types of OKS
Colour	<b>Not coated</b> Primed/RAL colours
Solid shaft	<b>With featherkey (V□□)</b> Without keyway
Shaft material	<b>Steel</b> stainless steel
Shaft sealing ring material	<b>NBR</b> FKM (Viton)
Driven shaft bearing	<b>Normal</b> Reinforced
Paste for shaft mounting	<b>Without</b> Enclosed
Gearbox type	<b>With foot (VBR)</b> <b>With centering (VCR)</b> With output flange (VCK) With output flange (VCP) With foot and centering (VAR) With foot and output flange (VAK)
Lubricant	<b>Mineral oil</b> Synthetic oil Food-compatible oil

Design	
Mounting position	<b>A/B/C/D/E/F</b> Combined
Power connection	<b>Terminal box</b>
Spring-applied brake	<b>Without</b> Brake design: Standard brake version: Standard
Feedback	<b>Without</b>
Cooling	<b>Integral fan</b>
Temperature monitoring	<b>TKO thermal contact</b> PTC thermistor

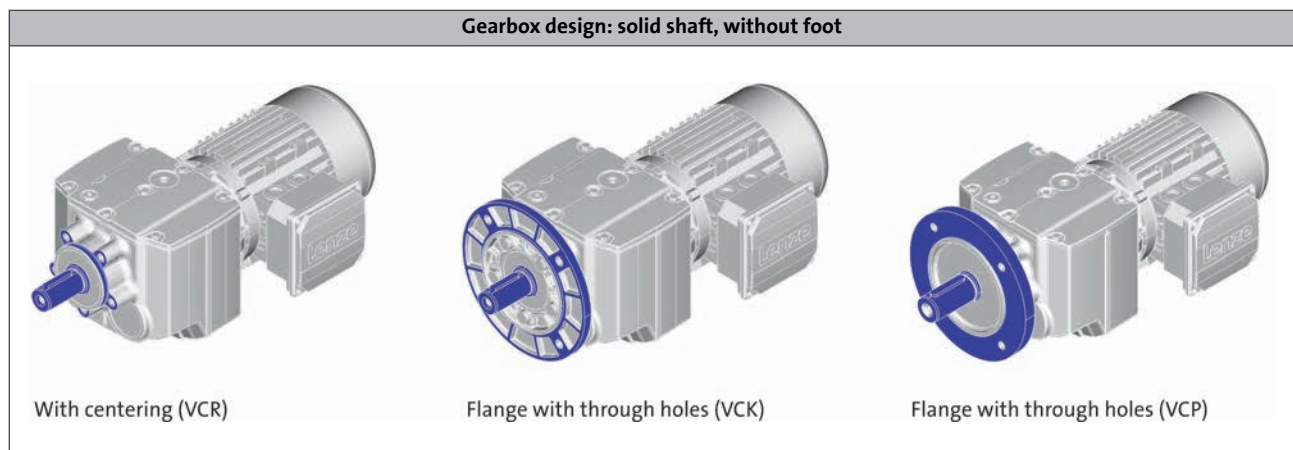
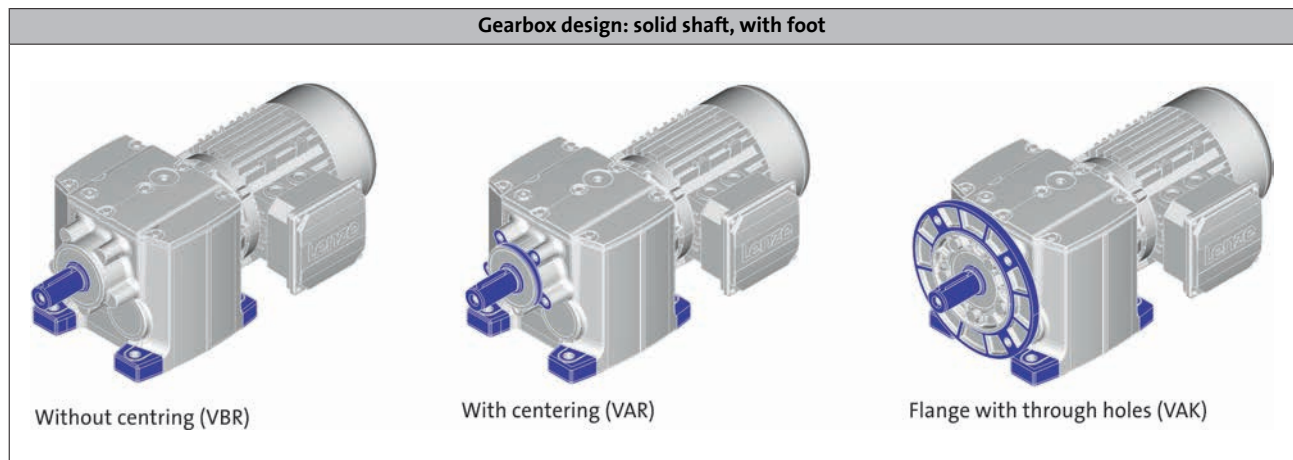
# g500-H helical geared motors

General information



## The geared motor kit

g500-H45 ... H450



- ▶ VCP (reinforced flange) for transmitting particularly high radial and axial forces.

# g500-H helical geared motors

## General information



### The geared motor kit

#### g500-H600 ... H3000

Product	g500-H600	g500-H850	g500-H1500	g500-H3000
Gearbox	g500-H600	g500-H850	g500-H1500	g500-H3000
Motor assignment min.	MD□MA□□-063	MD□MA□□-063	MD□MA□□-071	m240-P90
Motor assignment max.	m240-P132	m240-P132	m240-P180	m240-P180
<b>Technical data</b>				
Output torque max.	600 Nm	850 Nm	1500 Nm	3000 Nm
Drive power min.	0.12 kW	0.25 kW	0.55 kW	1.1 kW
Drive power max.	7.5 kW	7.5 kW	18.5 kW	22 kW
<b>Dimensions [mm]</b>				
Solid shaft with featherkey	35 x 70 40 x 80	40 x 80	50 x 100	60 x 120
Solid shaft without keyway	35 x 70	40 x 80	50 x 100	60 x 120
Output flange	200/250	250/300	250/300/350	300/350/450

- ▶ The designs are only available for the gearboxes displayed above in the table.
- ▶ Values printed in bold are standard versions.  
Values not printed in bold are possible extensions, some for an additional charge.

Design	
Conformity	<b>CE</b> EAC
Approval	<b>Without</b>
Degree of protection	<b>IP55</b> IP65/IP66
Surface and corrosion protection	<b>OKS-S</b> Different types of OKS
Colour	<b>Painted in RAL colours</b> Primed
Solid shaft	<b>With featherkey (V□□)</b> Without keyway
Shaft material	<b>Steel</b> stainless steel
Shaft sealing ring material	<b>NBR</b> FKM (Viton)
Driven shaft bearing	<b>Normal</b> Reinforced
Paste for shaft mounting	<b>Without</b> Enclosed
Gearbox type	<b>With foot (VBR)</b> <b>With centering (VCR)</b> With output flange (VCK) With foot and centering (VAR) With foot and output flange (VAK)
Lubricant	<b>Mineral oil</b> Synthetic oil Food-compatible oil

Design	
Mounting position	<b>A/B/C/D/E/F</b>
Power connection	<b>Terminal box</b>
Spring-applied brake	<b>Without</b> Brake design: Standard brake version: Standard
Feedback	<b>Without</b>
Cooling	<b>Integral fan</b>
Temperature monitoring	<b>TKO thermal contact</b> PTC thermistor

# g500-H helical geared motors

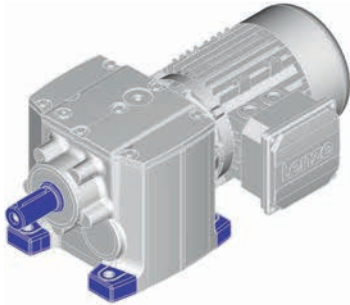
General information



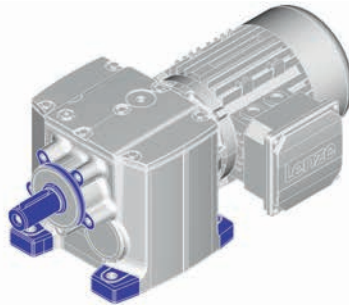
## The geared motor kit

g500-H600 ... H3000

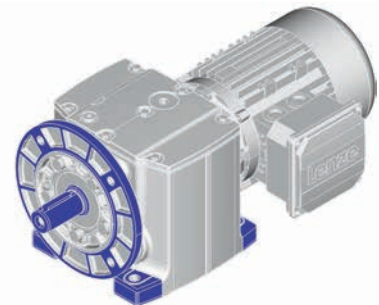
### Gearbox design: solid shaft, with foot



Without centring (VBR)

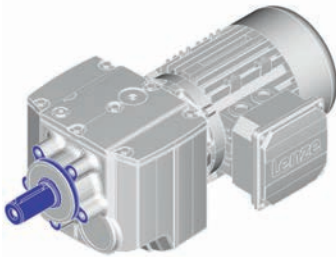


With centering (VAR)

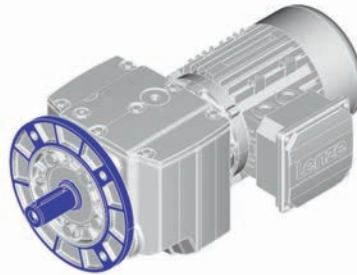


Flange with through holes (VAK)

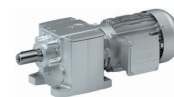
### Gearbox design: solid shaft, without foot



With centering (VCR)



Flange with through holes (VCK)



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

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

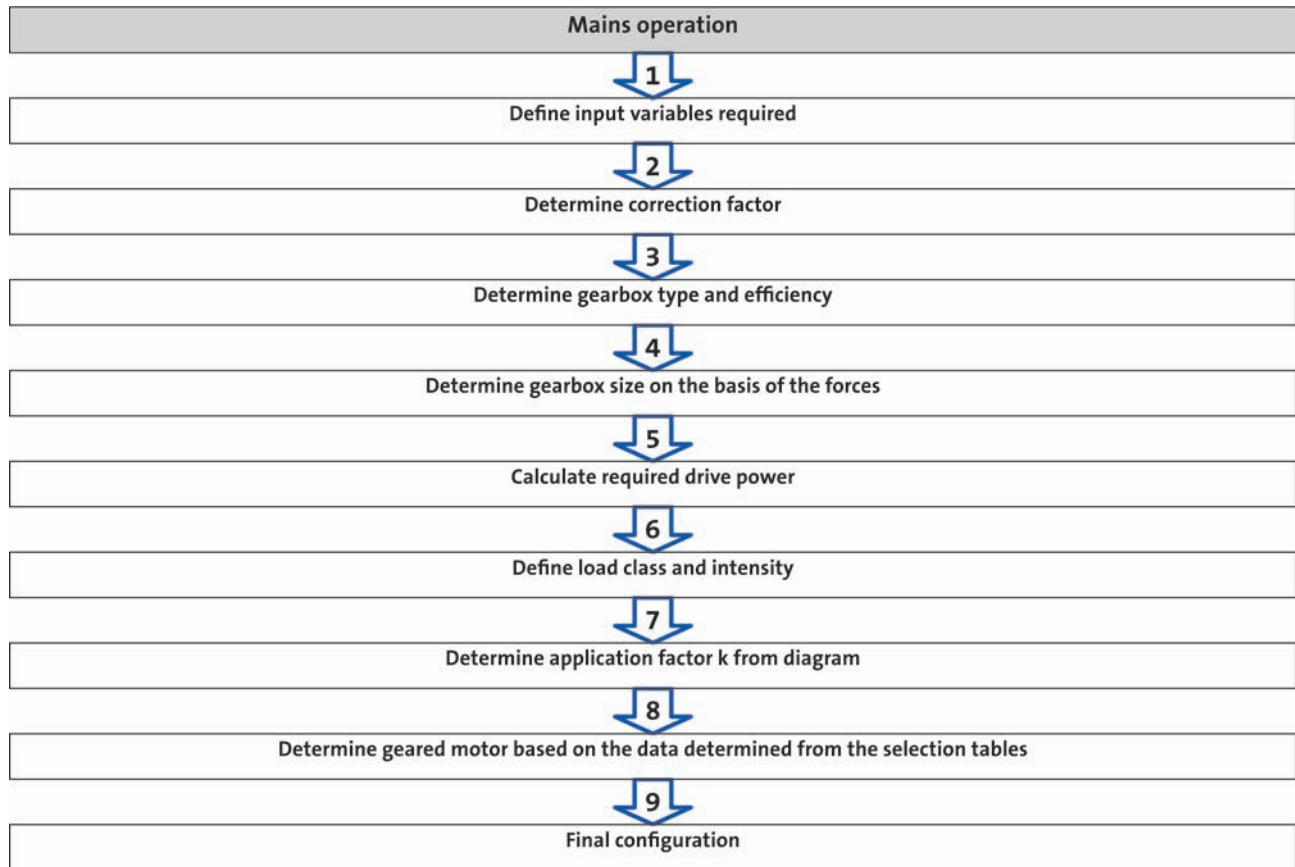
- Operating time/day = 8 h (100% OT)
- Duty class I for up to 10 switching operations/h
- Mounting positions and designs in this catalogue
- Standard lubricant
- $T_{amb} = 20\text{ °C}$  for gearboxes,  
 $T_{amb} = 40\text{ °C}$  for motors (in accordance with EN 60034)
- Site altitude  $\leq 1000\text{ m amsl}$
- The selection tables provide the permissible mechanical powers and torques. For notes on the thermal power limit, see chapter drive dimensioning.
- The rated power specified for motors and geared motors applies to operating mode S1 (in accordance with EN 60034).

Under different operating conditions, the values obtained may vary from those listed here.

In the case of extreme operating conditions, please consult your Lenze sales office.



## Procedure of a configuration process





# g500-H helical geared motors

Project planning



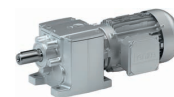
## Procedure of a configuration process

### 1 required input variables

Load torque		$M_{L,max} =$	[Nm]
Load speed		$n_{L,max} =$	[r/min]
External moments of inertia		$J_{ext} =$	[kgcm <sup>2</sup> ]
Operating time / day		BD =	[h]
Switching operations per h		$S_h =$	[1/h]

### 2 determine correction factor

Operating modes and operating time						
S1	ED	[%]	100			
	$k_L =$		1.0			
S2	ED	[%]	10	30	60	90
	$k_L =$		1.4 - 1.5	1.15 - 1.2	1.07 - 1.1	1.0 - 1.05
S3	ED	[%]	15	25	40	60
	$k_L =$		1.4 - 1.5	1.3 - 1.4	1.15 - 1.2	1.05 - 1.1
S6	ED	[%]	15	25	40	60
	$k_L =$		1.5 - 1.6	1.4 - 1.5	1.3 - 1.4	1.15 - 1.2
Site altitude						
	H	[m]	≤ 1000	≤ 2000	≤ 3000	≤ 4000
	$k_H =$		1	0.95	0.9	0.85
Ambient temperature						
	$T_U =$	[°C]	≤ 40	≤ 45	≤ 50	≤ 55
	$k_{TU} =$		1	0.95	0.9	0.8



### Procedure of a configuration process

#### 3 determine gearbox type and efficiency

Gearbox type			Axial gearboxes		Right-angle gearboxes
			Helical gearbox	Shaft-mounted	Bevel gearbox
Product			g500-H	g500-S	g500-B
Gearbox efficiency	2-stage gearboxes	$\eta_G$	0.96	0.96	0.96
	3-stage gearboxes	$\eta_G$	0.95	0.95	0.95

#### 4 determine gearbox size based on the forces on the output

Transmission element		Gear wheels	Sprockets	Toothed belt pulleys (depending on the initial stress)	Narrow V-belt (depending on the initial stress)
Additional radial force factor	$f_z =$	$\geq 17$ teeth = 1.0 $< 17$ teeth = 1.15	$\geq 20$ teeth = 1.0 $< 20$ teeth = 1.25 $< 13$ teeth = 1.4	With belt tightener = 2.0 - 2.5 Without belt tightener = 2.5 - 3.0	1.5 - 2.0
		Calculation		Check	
Radial force	[N]	$F_{rad} = 2000 \times \frac{M_{L,max} \times f_z}{d_w}$		$F_{rad} \leq f_w \times F_{rad,max}$	
Axial force	[N]			$F_{ax} \leq F_{rad,max} \times 0.5$	

$d_w$  = effective diameter [mm] transmission element

$f_w$  = additional load factor

- For permissible radial and axial forces and additional load factor see the "Technical data" chapter

#### 5 calculate drive power

		Calculation	
Drive power required	[kW]	$P_1 = \frac{M_{L,max} \times \eta_{L,max}}{9549 \times k_L \times k_H \times k_{Tu} \times \eta_g}$	

$k_L$  = Correction factor - operating mode

$k_H$  = correction factor - installation height

$k_{Tu}$  = correction factor - ambient temperature



### Procedure of a configuration process

#### 6 calculate intensity and determine duty class

Load class	Load type	Intensity
I	Smooth operation, small or light jolts	$F_I \leq 1.25$
II	Uneven operation, average jolts	$1.25 < F_I \leq 4$
III	Uneven operation, severe jolts and/or <b>alternating load</b>	$F_I > 4$

#### 21 - Duty classes

	Calculation	
Intensity	$F_I = \frac{\frac{J_L + J_M + J_B + J_Z}{i^2}}{J_M + J_B + J_Z}$	

$i$  = gearbox ratio

$J_L$  = moment of inertia of the load

$J_M$  = moment of inertia of the motor

$J_B$  = moment of inertia of the brake

$J_Z$  = additional moment of inertia (handwheel, 2nd shaft end ...)

#### 7 determine application factor $k$ from diagram

#### 23 - Load capacity and application factor

# g500-H helical geared motors

## Project planning



### Procedure of a configuration process

8 determine geared motor based on the data determined from the selection tables

Selection table		Check
Drive power $P_N$	[kW]	$P_1 \leq P_N$
Output speed $n_2$	[r/min]	$n_{L,max} \approx n_2$
Output torque $M_2$	[Nm]	$M_{L,max} \leq M_2$
Load factor $c$		$k \leq c$
Order information		Example
Number of stages		2
Ratio $i$		3.267
Product gearbox		g500-H140
Product motor		m240-P80/M4

23 - Load capacity and application factor

#### Example: structure of a selection table

50 Hz:  $P_N = 0.75$  kW ← Rated power  $P_N$

2-stage gearboxes ← Number of the gear stage

Mains operation 400 V, 50 Hz			$i$	Product		
$n_2$ [r/min]	$M_2$ [Nm]	$c$		g500	m240	
627	11	5.2	4.600	-H100	-P80/M2	
558	12	4.9	5.167	-H100	-P80/M2	

↑  
Output speed  $n_2$

↑  
Output torque  $M_2$

↑  
Load capacity  $c$

↑  
Ratio  $i$

↑  
Product  
Gearbox

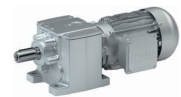
↑  
Product  
Motor



### Procedure of a configuration process

#### 9 Final configuration

More information regarding the final configuration can be found under:	
- The modular geared motor system - Product extensions for gearboxes, motors	
Check operating conditions	- Operating temperature (observe lubricant, material of shaft sealing ring) - Degree of protection - Supply voltage - Surface protection required - Approvals - Conformity
Check and define connection dimensions	- Driven shaft - Foot, output flange, centering with threaded pitch circle
Determine mounting position and position of the system blocks	- Mounting position A/B/C/D/E/F or combined - Terminal box position, shaft position, flange position
Select product extensions at the gearbox (differing depending on the gearbox type)	- Torque plate at the base, threaded pitch circle, rubber buffer - Hollow shaft cover, shrink disc cover
Select product extensions at the motor	- Connection type (terminal box, connector) - Brake



### Standards

#### Operating modes

Operating modes S1 ... S10 as specified by EN 60034-1 describe the basic stress of an electrical machine.

In continuous operation a motor reaches its permissible temperature limit if it outputs the rated power dimensioned for continuous operation. However, if the motor is only subjected to load for a short time, the power output by the motor may be greater without the motor reaching its permissible temperature limit. This behaviour is referred to as overload capacity.

Depending on the duration of the load and the resulting temperature rise, the required motor can be selected reduced by the overload capacity.

#### The most important operating modes

Continuous operation S1	Short-time operation S2
<p>Operation with a constant load until the motor reaches the thermal steady state. The motor may be actuated continuously with its rated power.</p>	<p>Operation with constant load; however, the motor does not reach the thermal steady state. During the following standstill, the motor winding cools down to the ambient temperature again. The increase in power depends on the load duration.</p>
Intermittent operation S3	Non-intermittent periodic operation S6
<p>Sequence of identical duty cycles comprising operation with a constant load and subsequent standstill. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/downtime ratio.</p>	<p>Sequence of identical duty cycles comprising operation with a constant load and subsequent no-load operation. The motor cools down during the no-load phase. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/idle time ratio.</p>

# g500-H helical geared motors

## Project planning



### Standards

#### Duty classes

Depending on the load type, the duty classes or impacts are divided as follows:

Duty class	Load type
I	Smooth operation, small or light jolts
II	Uneven operation, average jolts
III	Uneven operation, severe jolts and/or alternating load

In order to support you in classifying your driven machine regarding the right duty class, the following shows sample applications with the corresponding duty class. Depending on, for instance, the operating frequency, driven machines can also have a higher impact. In case of uncertainties, please contact your Lenze sales office.

Drive	Duty class
Construction machines	II
Chemical industry	II
Conveyors	II
Fans	II
Plastics industry	II
Wood working	III
Hoists	III
Metal working	III
Food	II
Paper industry	III
Stones	III
Textile industry	II



### Standards

#### Degrees of protection

The degree of protection indicates the suitability of a motor for specific ambient conditions with regard to humidity as well as the protection against contact and the ingress of foreign particles. The degrees of protection are classified by EN 60529.

The first code number after the code letters IP indicates the protection against the ingress of foreign particles and dust.  
The second code number refers to the protection against the ingress of humidity.

Code number	Degree of protection	Code number	Degree of protection
0	No protection	0	No protection
1	Protection against the ingress of foreign particles $d > 50$ mm. No protection in the case of deliberate access	1	Protection against vertically dripping water (dripping water).
2	Protection against medium-sized foreign particles, $d > 12$ mm, keeping away fingers or similar	2	Protection against diagonally falling water (dripping water), $15^\circ$ compared to normal service position.
3	Protection against small foreign particles $d > 2.5$ mm. Keeping away tools, wires and the like	3	Protection against spraying water, up to $60^\circ$ to the vertical
4	Protection against granular foreign particles, $d > 1$ mm, keeping away tools, wires and the like	4	Protection against spraying water from all directions.
5	Protection against dust deposits (dust-protected), complete protection against contact.	5	Protection against water jets from all directions.
6	Protection against the ingress of dust (dust-proof), complete protection against contact.	6	Protection against choppy seas or heavy water jets (flood protection).





### Load capacity and application factor

#### Load capacity $c$ of gearboxes

Rated value for the load capacity of Lenze geared motors.

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

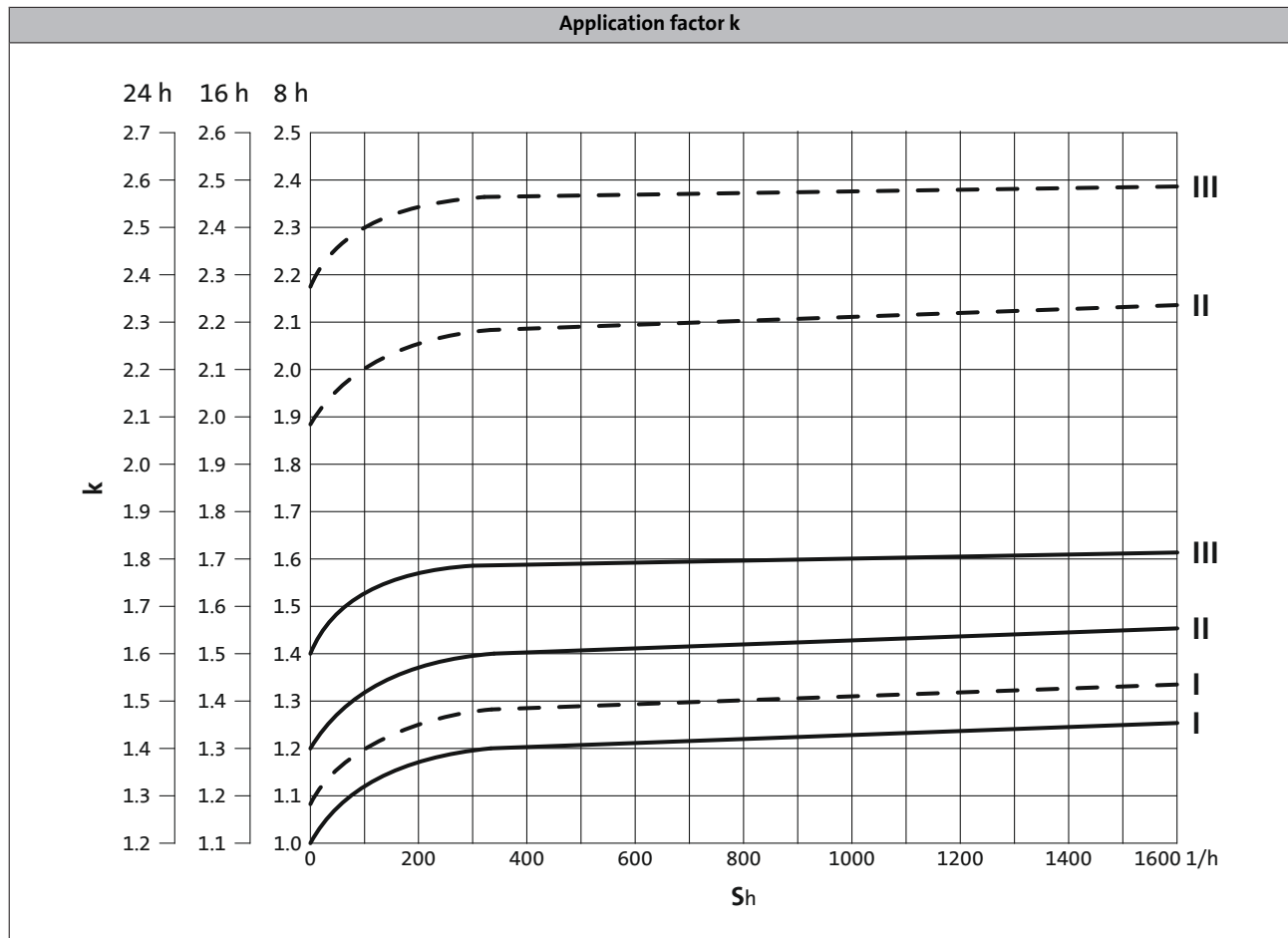
Required:  $c \geq k$

#### Application factor $k$ (according to DIN 3990)

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

$k$  is determined by:

- the type of load
- the load intensity
- temporal influences



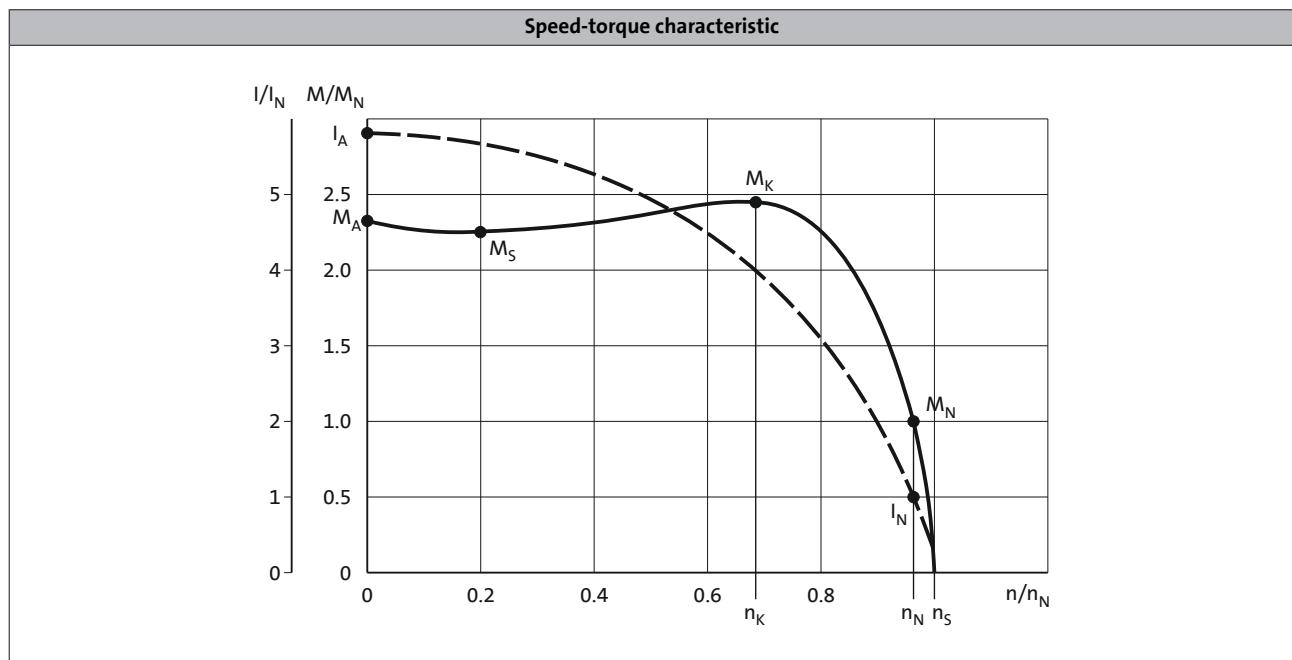
- ▶  $S_h$  = switchings/h
- ▶ — Three-phase AC motors MD□MA
- ▶ - - - Three-phase AC motors m240/m540/m550



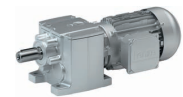
### Operational performance of three-phase AC geared motors

#### Mains operation

During mains operation, when switched on, the three-phase AC motor starts up according to the speed-torque characteristic. It passes through this characteristic until it reaches its stable operating point. This operating point has been reached if the load torque or rated torque ( $M_{\text{rated}}$ ) is lower than the starting torque ( $M_A$ ) and pull-up torque ( $M_S$ ). The rated speed ( $n_{\text{rated}}$ ) of the drive is always lower than the calculated synchronous speed ( $n_S$ ). The difference between rated speed and synchronous speed relating to the synchronous speed is referred to as the "slip".



# g500-H helical geared motors



## Project planning

### Technical data at a glance

The following tables contain the most important data of the gearbox with the motors that can be attached for an approximate dimensioning process of a geared motor. Detailed information can be found in the following chapters.

The data given in the tables apply to

- input speed  $n_1 = 1400$  r/min
- application factor  $c = 1.0$

In order to calculate the exact ratio, the number of teeth  $z_g$  (driven) can be divided by the number of teeth  $z_t$  (driving). These are rounded values.

The data for the max. radial force refer to

- foot mounting (VBR)
- normal storage
- application factor  $c = 1.3$

For further designs see the "Technical data" chapter.

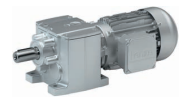
- The rated torque can be gathered from the last digits of the product name e.g. g500-H45 (45 Nm).

### g500-H45, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$		$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	$\pm 20\%$	[kW]	[kW]
541	18	1.05	2.597	345	896	470	41	0.18	0.55
412	19	0.84	3.413	75	256	620	39	0.18	0.55
322	21	0.73	4.368	315	1376	670	39	0.18	0.55
264	27	0.77	5.312	253	1344	700	29	0.18	0.55
236	29	0.74	5.965	115	686	720	28	0.18	0.55
201	30	0.65	6.982	55	384	760	28	0.12	0.55
179	32	0.62	7.840	25	196	780	27	0.12	0.55
157	33	0.56	8.935	77	688	810	27	0.12	0.55
140	35	0.53	10.033	30	301	840	27	0.09	0.55
123	35	0.46	11.429	7	80	870	27	0.09	0.55
110	38	0.45	12.833	6	77	900	26	0.09	0.55
95.0	39	0.40	14.836	55	816	950	26	0.09	0.37
85.0	41	0.37	16.660	50	833	1000	26	0.09	0.37
74.0	42	0.34	19.013	77	1464	1050	26	0.06	0.37
66.0	44	0.31	21.350	20	427	1090	26	0.06	0.37
56.0	45	0.27	24.595	121	2976	1170	26	0.06	0.25
50.0	45	0.24	27.618	55	1519	1250	25	0.06	0.25
43.0	45	0.21	32.000	1	32	1340	26	0.06	0.25
38.0	45	0.18	35.933	15	539	1400	25	0.06	0.18
33.0	45	0.16	41.455	11	456	1450	26	0.06	0.18
31.0	45	0.15	46.550	20	931	1470	25	0.06	0.12
27.0	45	0.13	52.909	11	582	1500	26	0.06	0.12
24.0	45	0.12	59.413	80	4753	1500	25	0.06	0.12

# g500-H helical geared motors

Project planning



## Technical data at a glance

### g500-H100, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
430	62	2.88	3.354	48	161	1180	29	0.25	1.50
314	72	2.44	4.600	5	23	1340	28	0.25	1.50
279	75	2.26	5.167	6	31	1410	25	0.25	1.50
245	81	2.14	5.887	168	989	1480	27	0.25	1.50
224	83	2.01	6.440	25	161	1540	27	0.18	1.50
204	86	1.89	7.086	35	248	1600	24	0.25	1.50
176	92	1.74	8.214	14	115	1700	27	0.18	1.50
159	96	1.65	9.068	147	1333	1770	24	0.25	1.50
143	99	1.53	10.063	16	161	1850	27	0.25	1.50
127	100	1.37	11.360	25	284	1940	22	0.18	1.50
114	100	1.23	12.653	49	620	2030	24	0.18	1.50
100	100	1.08	14.490	49	710	2150	22	0.18	1.10
93.0	100	1.01	15.500	2	31	2210	23	0.25	1.10
82.0	100	0.88	17.750	4	71	2330	22	0.25	0.75
74.0	100	0.80	19.486	35	682	2430	23	0.12	0.75
65.0	100	0.70	22.314	35	781	2560	22	0.12	0.75
58.0	100	0.62	25.095	21	527	2590	23	0.12	0.75
49.0	100	0.53	28.738	42	1207	2620	22	0.12	0.55
44.0	100	0.48	31.805	77	2449	2640	22	0.12	0.37
39.0	100	0.42	36.422	154	5609	2650	21	0.12	0.37
35.0	100	0.38	39.857	7	279	2650	22	0.12	0.37
31.0	100	0.33	45.643	14	639	2650	21	0.12	0.37
26.0	70	0.20	52.510	49	2573	2650	22	0.12	0.18
23.0	80	0.20	60.133	98	5893	2650	21	0.12	0.18

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H140, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
441	82	3.91	3.267	15	49	1750	25	0.25	1.50
322	94	3.27	4.480	25	112	2000	24	0.25	1.50
252	103	2.80	5.733	15	86	2180	24	0.25	1.50
230	105	2.61	6.272	125	784	2260	23	0.18	1.50
198	106	2.27	7.269	26	189	2370	18	0.25	1.50
180	117	2.28	8.000	1	8	2430	24	0.18	1.50
160	117	2.02	9.029	35	316	2540	19	0.25	1.50
147	125	1.98	9.800	5	49	2630	23	0.25	1.50
125	128	1.72	11.554	294	3397	2800	18	0.25	1.50
114	132	1.63	12.640	25	316	2880	18	0.18	1.50
103	136	1.52	13.957	325	4536	2950	17	0.18	1.50
89.0	140	1.35	16.122	49	790	3050	18	0.18	1.50
81.0	140	1.22	17.802	91	1620	3150	18	0.18	1.50
73.0	140	1.10	19.750	4	79	3210	18	0.25	1.10
66.0	140	1.00	21.808	26	567	3300	17	0.25	1.10
58.0	140	0.88	24.829	35	869	3400	18	0.12	0.75
53.0	140	0.80	27.415	65	1782	3520	17	0.12	0.75
45.0	140	0.68	31.976	42	1343	3630	18	0.12	0.75
41.0	140	0.62	35.308	13	459	3700	17	0.12	0.75
35.0	140	0.53	40.526	154	6241	3850	17	0.12	0.37
32.0	140	0.48	44.748	143	6399	3920	17	0.12	0.37
28.0	129	0.39	50.786	14	711	4000	17	0.12	0.37
25.0	140	0.38	56.077	13	729	4050	17	0.12	0.37
20.0	89	0.20	66.908	98	6557	4100	17	0.12	0.18
18.0	98	0.20	73.879	91	6723	4150	17	0.12	0.18

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H210, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
428	126	5.82	3.389	18	61	1980	23	0.55	3.00
312	143	4.81	4.648	105	488	2250	23	1.10	3.00
260	159	4.45	5.583	12	67	2400	19	0.55	3.00
232	158	3.95	6.250	4	25	2500	18	0.55	3.00
189	172	3.51	7.657	35	268	2680	19	1.10	3.00
169	171	3.12	8.571	7	60	2780	18	1.10	3.00
148	182	2.91	9.799	294	2881	2960	18	0.55	3.00
135	189	2.76	10.720	25	268	3030	18	0.25	3.00
121	186	2.43	12.000	1	12	3200	17	0.25	3.00
106	201	2.30	13.673	49	670	3350	18	0.25	2.20
95.0	200	2.05	15.306	49	750	3470	17	0.25	2.20
87.0	210	1.97	16.750	4	67	3590	18	0.55	2.20
77.0	210	1.74	18.750	4	75	3720	17	0.55	1.50
66.0	210	1.50	21.802	126	2747	3870	18	0.25	1.50
59.0	210	1.34	24.405	42	1025	3900	17	0.25	1.50
53.0	210	1.21	27.119	42	1139	3900	17	0.25	1.50
48.0	210	1.08	30.357	14	425	3900	17	0.25	1.10
41.0	210	0.94	35.095	21	737	3900	17	0.12	0.75
37.0	210	0.84	39.286	7	275	4020	16	0.12	0.75
33.0	183	0.65	42.593	140	5963	4100	17	0.12	0.55
30.0	206	0.66	47.679	28	1335	4220	16	0.12	0.55
26.0	137	0.38	54.438	16	871	4350	17	0.12	0.37
23.0	155	0.39	60.938	16	975	4450	16	0.12	0.37

# g500-H helical geared motors

Project planning



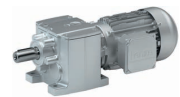
## Technical data at a glance

g500-H210, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
33.0	210	0.77	43.390	105	4556	4120	17	0.18	0.75
30.0	210	0.69	48.571	7	340	4240	16	0.12	0.75
26.0	210	0.60	55.529	882	48977	4350	17	0.12	0.75
23.0	210	0.52	62.160	294	18275	4470	16	0.12	0.55
20.0	210	0.46	71.026	882	62645	4620	17	0.12	0.55
18.0	210	0.41	79.507	294	23375	4740	16	0.12	0.37
15.0	210	0.35	92.205	210	19363	4800	17	0.12	0.37
14.0	210	0.32	103.214	14	1445	4800	16	0.12	0.37
12.0	210	0.27	118.162	588	69479	4800	17	0.12	0.25
10.0	210	0.24	132.270	196	25925	4800	16	0.12	0.25
9.00	210	0.21	152.853	231	35309	4800	17	0.12	0.25
8.00	210	0.18	171.104	77	13175	4800	16	0.12	0.18
7.00	210	0.16	198.873	63	12529	4800	17	0.12	0.18
6.00	210	0.15	222.619	21	4675	4800	16	0.12	0.12
6.00	210	0.13	257.631	84	21641	4800	17	0.12	0.12
5.00	210	0.11	288.393	28	8075	4800	16	0.12	0.12

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H320, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$			Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$	Standard	$P_{N, \min}$	$P_{N, \max}$
							$\pm 20\%$		
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
429	165	7.65	3.389	18	61	2180	20	0.55	4.00
313	189	6.38	4.648	105	488	2460	20	1.10	4.00
239	227	5.86	6.083	12	73	2670	16	0.55	4.00
210	218	4.95	6.910	78	539	2800	15	0.55	4.00
174	249	4.69	8.343	35	292	2950	16	1.10	4.00
153	238	3.94	9.477	65	616	3100	15	1.10	4.00
136	265	3.89	10.677	294	3139	3250	16	0.55	4.00
124	271	3.64	11.680	25	292	3330	16	0.25	4.00
120	254	3.28	12.128	39	473	3360	15	0.55	4.00
109	262	3.09	13.268	325	4312	3440	15	0.25	3.00
97.0	294	3.08	14.898	49	730	3600	15	0.25	3.00
86.0	281	2.60	16.923	13	220	3760	15	0.25	3.00
79.0	313	2.68	18.250	4	73	3870	15	0.55	3.00
70.0	299	2.26	20.731	26	539	4020	15	0.55	2.20
61.0	320	2.10	23.754	126	2993	4210	15	0.25	1.50
53.0	320	1.84	26.983	117	3157	4420	15	0.25	1.50
49.0	320	1.69	29.548	42	1241	4540	15	0.25	1.50
43.0	320	1.49	33.564	39	1309	4750	15	0.25	1.50
38.0	251	1.03	38.238	21	803	4970	15	0.12	0.75
33.0	285	1.03	43.436	39	1694	5190	14	0.12	0.75
30.0	218	0.71	46.407	140	6497	5310	15	0.12	0.55
27.0	248	0.71	52.715	130	6853	5550	14	0.12	0.55



# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H320, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
31.0	320	1.08	47.276	105	4964	5350	15	0.18	0.75
27.0	320	0.95	53.703	195	10472	5570	15	0.18	0.75
24.0	320	0.84	60.502	882	53363	5600	15	0.18	0.75
21.0	320	0.74	68.726	117	8041	5670	15	0.18	0.75
19.0	320	0.66	77.387	882	68255	5680	15	0.12	0.75
16.0	320	0.56	87.906	117	10285	5700	15	0.12	0.55
14.0	320	0.49	100.462	210	21097	5700	15	0.12	0.55
12.0	320	0.43	114.118	195	22253	5700	15	0.12	0.37
11.0	320	0.39	128.743	588	75701	5700	15	0.12	0.37
10.0	320	0.34	146.244	78	11407	5700	15	0.12	0.37
8.00	320	0.30	166.541	231	38471	5700	15	0.12	0.37
6.00	315	0.22	216.683	63	13651	5700	15	0.12	0.25
6.00	320	0.19	246.137	117	28798	5700	14	0.12	0.18
5.00	269	0.15	280.702	84	23579	5700	15	0.12	0.12
4.00	305	0.15	318.859	78	24871	5700	14	0.12	0.12

# g500-H helical geared motors

Project planning



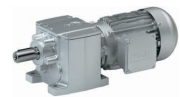
## Technical data at a glance

g500-H450, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
429	256	11.8	3.444	9	31	2550	19	2.20	7.50
313	293	9.89	4.724	105	496	2850	18	2.20	7.50
260	315	8.85	5.678	90	511	3010	15	2.20	7.50
244	323	8.52	6.045	441	2666	3070	17	1.10	7.50
223	334	8.05	6.613	75	496	3160	17	1.10	7.50
190	354	7.25	7.787	75	584	3350	14	2.20	7.50
168	370	6.69	8.800	5	44	3470	14	2.20	7.50
148	385	6.15	9.965	315	3139	3650	14	1.10	7.50
130	400	5.59	11.262	42	473	3800	14	1.10	5.50
118	411	5.26	12.320	25	308	3900	13	1.10	5.50
105	426	4.83	13.905	21	292	4030	14	0.55	5.50
93.0	441	4.42	15.714	7	110	4240	13	0.55	5.50
85.0	450	4.14	17.033	30	511	4360	14	1.10	4.00
76.0	448	3.65	19.250	4	77	4520	13	1.10	4.00
65.0	450	3.18	22.170	135	2993	4720	14	0.55	3.00
58.0	450	2.81	25.056	18	451	4920	13	0.55	3.00
52.0	450	2.55	27.578	45	1241	5090	13	0.55	3.00
47.0	450	2.26	31.167	6	187	5280	13	0.55	2.20
40.0	450	1.96	35.689	45	1606	5490	13	0.25	1.50
36.0	450	1.74	40.333	3	121	5880	13	0.25	1.50
33.0	322	1.16	43.313	150	6497	6000	13	0.25	1.10
30.0	366	1.16	48.950	20	979	6300	13	0.25	1.10
26.0	270	0.75	54.750	4	219	6500	13	0.25	0.55
23.0	305	0.75	61.875	8	495	6700	13	0.25	0.55

# g500-H helical geared motors

Project planning



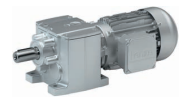
## Technical data at a glance

g500-H450, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
33.0	450	1.61	44.124	225	9928	6050	14	0.25	1.50
29.0	450	1.43	49.867	15	748	6320	13	0.25	1.50
26.0	450	1.26	56.469	945	53363	6550	14	0.25	1.50
23.0	450	1.15	61.774	1125	69496	6700	14	0.18	1.10
21.0	450	1.02	69.813	75	5236	6860	13	0.18	1.10
18.0	450	0.90	78.794	63	4964	7000	14	0.18	1.10
16.0	450	0.80	89.048	21	1870	7100	13	0.18	0.75
15.0	450	0.74	96.522	90	8687	7100	14	0.25	0.75
13.0	450	0.66	109.083	12	1309	7100	13	0.25	0.75
12.0	450	0.57	121.342	225	27302	7100	14	0.12	0.55
10.0	450	0.50	137.133	15	2057	7100	13	0.12	0.55
9.00	450	0.44	156.274	135	21097	7100	14	0.12	0.55
8.00	450	0.39	176.611	18	3179	7100	13	0.12	0.37
7.00	450	0.35	198.059	495	98039	7100	14	0.12	0.37
6.00	450	0.31	223.833	6	1343	7100	13	0.12	0.37
6.00	450	0.27	248.200	5	1241	7100	14	0.12	0.25
5.00	450	0.24	280.500	2	561	7100	13	0.12	0.25
4.00	428	0.20	326.994	315	103003	7100	14	0.12	0.18
4.00	450	0.18	369.548	42	15521	7100	13	0.12	0.18

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H600, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
452	240	11.7	3.267	15	49	4680	17	2.20	7.50
330	297	10.6	4.480	25	112	5080	15	2.20	7.50
258	339	9.42	5.733	15	86	5420	15	1.10	7.50
229	404	9.97	6.456	90	581	5600	14	2.20	7.50
204	435	9.56	7.250	4	29	5770	13	2.20	7.50
167	487	8.77	8.853	75	664	6080	13	2.20	7.50
148	510	8.17	9.943	35	348	6270	12	2.20	7.50
130	537	7.55	11.330	315	3569	6490	13	1.10	7.50
119	553	7.12	12.395	375	4648	6640	12	1.10	7.50
106	578	6.62	13.920	25	348	6850	12	1.10	7.50
93.0	600	6.05	15.810	21	332	7080	12	0.55	7.50
82.0	600	5.32	17.755	49	870	7300	12	0.55	5.50
75.0	600	4.88	19.367	30	581	7470	12	1.10	5.50
67.0	600	4.33	21.750	4	87	7700	12	1.10	4.00
58.0	600	3.73	25.207	135	3403	8000	12	0.55	4.00
51.0	600	3.32	28.310	42	1189	8260	12	0.55	4.00
46.0	600	2.99	31.356	45	1411	8480	12	0.55	3.00
41.0	600	2.66	35.214	14	493	8500	12	0.55	3.00
36.0	558	2.14	40.578	45	1826	8500	12	0.25	1.50
32.0	600	2.05	45.571	7	319	8500	12	0.25	1.50
29.0	456	1.44	49.247	150	7387	8500	12	0.25	1.10
26.0	513	1.44	55.307	140	7743	8500	12	0.25	1.10
23.0	307	0.75	62.250	4	249	8500	12	0.25	0.55
20.0	345	0.75	69.911	56	3915	8500	11	0.25	0.55

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H600, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
46.0	600	3.05	31.197	1575	49136	8470	13	1.10	3.00
41.0	600	2.72	35.037	245	8584	8500	13	1.10	3.00
36.0	600	2.39	39.925	6615	264106	8500	13	0.55	2.20
33.0	600	2.18	43.676	1125	49136	8500	13	0.25	2.20
30.0	600	1.95	49.051	175	8584	8500	12	0.25	2.20
26.0	600	1.70	55.710	441	24568	8500	13	0.25	1.50
23.0	600	1.51	62.566	343	21460	8500	12	0.25	1.50
21.0	600	1.39	68.244	45	3071	8500	13	0.55	1.50
19.0	600	1.24	76.643	14	1073	8500	12	0.55	1.50
16.0	600	1.07	88.826	2835	251822	8500	13	0.25	1.10
14.0	600	0.95	99.757	441	43993	8500	12	0.25	1.10
13.0	600	0.86	110.491	945	104414	8500	13	0.25	0.75
12.0	600	0.77	124.088	147	18241	8500	12	0.25	0.75
10.0	600	0.66	142.988	945	135124	8500	13	0.12	0.75
9.00	600	0.57	160.585	147	23606	8500	12	0.12	0.55
8.00	600	0.53	173.536	1575	273319	8500	13	0.12	0.55
7.00	600	0.47	194.892	490	95497	8500	12	0.12	0.55
6.00	600	0.42	221.794	180	39923	8500	13	0.12	0.37
6.00	600	0.37	249.089	56	13949	8500	12	0.12	0.37

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H850, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
469	306	15.5	3.147	551	1734	5070	16	4.00	7.50
339	379	13.8	4.362	152	663	5610	15	4.00	7.50
275	430	12.8	5.368	19	102	5980	14	2.20	7.50
248	551	14.8	5.946	203	1207	6170	13	4.00	7.50
222	578	13.9	6.644	87	578	6390	13	4.00	7.50
179	615	11.9	8.241	112	923	6830	13	4.00	7.50
160	649	11.2	9.208	24	221	7070	12	4.00	7.50
146	667	10.5	10.143	7	71	7280	12	2.20	7.50
130	696	9.77	11.360	25	284	7550	12	2.20	7.50
116	725	9.10	12.693	75	952	7810	12	2.20	7.50
102	758	8.34	14.490	49	710	8140	12	1.10	7.50
91.0	792	7.79	16.190	21	340	8420	12	1.10	7.50
83.0	814	7.31	17.750	4	71	8660	12	2.20	7.50
74.0	833	6.70	19.833	6	119	8970	12	2.20	7.50
63.0	850	5.80	23.103	126	2911	9400	12	1.10	5.50
57.0	850	5.19	25.815	27	697	9730	11	1.10	5.50
51.0	850	4.71	28.315	168	4757	10000	11	1.10	4.00
46.0	850	4.21	31.639	36	1139	10400	11	1.10	4.00
39.0	850	3.58	37.190	21	781	10900	11	0.55	3.00
35.0	850	3.20	41.556	9	374	11000	11	0.55	3.00
32.0	850	2.95	45.136	140	6319	11000	11	0.55	2.20
29.0	850	2.64	50.433	30	1513	11000	11	0.55	2.20

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H850, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
49.0	850	4.60	29.536	125	3692	10100	13	2.20	5.50
44.0	850	4.10	33.003	375	12376	10500	12	2.20	4.00
38.0	850	3.58	37.799	1050	39689	10900	13	1.10	4.00
35.0	850	3.27	41.350	625	25844	11000	13	1.10	4.00
31.0	850	2.92	46.204	1875	86632	11000	12	1.10	3.00
28.0	850	2.56	52.743	35	1846	11000	13	0.55	3.00
25.0	850	2.29	58.933	15	884	11000	12	0.55	2.20
22.0	850	2.10	64.610	100	6461	11000	13	1.10	2.20
20.0	850	1.87	72.193	150	10829	11000	12	1.10	2.20
17.0	850	1.59	84.096	450	37843	11000	13	0.55	1.50
15.0	850	1.43	93.966	675	63427	11000	12	0.55	1.50
14.0	850	1.29	104.607	150	15691	11000	12	0.55	1.50
12.0	850	1.15	116.884	225	26299	11000	12	0.55	1.10
11.0	850	1.00	135.373	75	10153	11000	12	0.25	1.10
10.0	850	0.88	151.262	225	34034	11000	12	0.25	1.10
9.00	850	0.82	164.294	500	82147	11000	12	0.25	0.75
8.00	850	0.74	183.577	750	137683	11000	12	0.25	0.75
7.00	850	0.63	207.675	40	8307	11000	12	0.25	0.55
6.00	850	0.57	232.050	20	4641	11000	12	0.25	0.55

# g500-H helical geared motors

Project planning



## Technical data at a glance

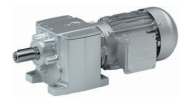
g500-H1500, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
395	775	33.0	3.743	440	1647	8500	14	5.50	30.00
311	924	31.0	4.758	500	2379	8900	13	5.50	30.00
274	1021	30.2	5.400	5	27	9200	11	5.50	30.00
237	1098	28.1	6.245	420	2623	9440	13	4.00	30.00
215	1157	26.9	6.864	125	858	9690	11	5.50	30.00
195	1217	25.6	7.592	125	949	9970	10	5.50	30.00
164	1320	23.4	9.010	105	946	10500	10	4.00	22.00
144	1380	21.5	10.267	15	154	10900	10	4.00	22.00
130	1400	19.7	11.356	45	511	11200	10	4.00	22.00
120	1420	18.4	12.362	105	1298	11400	10	2.20	22.00
108	1430	16.8	13.673	315	4307	11800	10	2.20	18.50
98.0	1440	15.2	15.156	45	682	12100	10	4.00	18.50
88.0	1450	13.7	16.763	135	2263	12500	10	4.00	15.00
72.0	1500	11.6	20.533	15	308	13200	10	2.20	7.50
65.0	1500	10.5	22.711	45	1022	13600	10	2.20	7.50
59.0	1500	9.58	24.933	15	374	13900	10	2.20	7.50
54.0	1500	8.68	27.578	45	1241	14300	9	2.20	7.50
45.0	1440	7.00	32.267	15	484	15000	10	1.10	4.00
41.0	1500	6.59	35.689	45	1606	15400	9	1.10	4.00
37.0	1463	5.86	39.160	25	979	15800	10	1.10	4.00
34.0	1500	5.42	43.313	150	6497	16300	9	1.10	4.00
29.0	1250	3.95	49.500	2	99	16900	10	1.10	2.20
26.0	1382	3.95	54.750	4	219	17000	9	1.10	2.20



# g500-H helical geared motors

Project planning



## Technical data at a glance

### g500-H1500, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$			Standard	Motor
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$		$P_{N, \min}$	$P_{N, \max}$
							$\pm 20\%$		
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
36.0	1500	5.92	40.517	60	2431	16000	11	4.00	5.50
33.0	1500	5.36	44.814	360	16133	16400	10	4.00	5.50
29.0	1500	4.82	49.867	15	748	17000	10	2.20	5.50
26.0	1500	4.27	55.851	375	20944	17000	10	2.20	4.00
24.0	1500	3.86	61.774	1125	69496	17000	10	2.20	4.00
20.0	1500	3.35	71.238	21	1496	17000	10	1.10	4.00
18.0	1500	3.02	78.794	63	4964	17000	10	1.10	3.00
17.0	1500	2.73	87.267	15	1309	17000	10	2.20	3.00
15.0	1500	2.47	96.522	90	8687	17000	10	2.20	3.00
13.0	1500	2.10	113.585	135	15334	17000	10	1.10	2.20
12.0	1500	1.91	125.632	405	50881	17000	10	1.10	2.20
10.0	1500	1.71	139.211	90	12529	17000	10	1.10	1.50
9.00	1500	1.55	153.976	540	83147	17000	10	1.10	1.50
8.00	1500	1.30	182.844	45	8228	17000	10	0.55	1.50
7.00	1500	1.17	202.237	135	27302	17000	10	0.55	1.10
6.00	1500	1.07	221.907	75	16643	17000	10	0.55	1.10
6.00	1500	0.97	245.442	450	110449	17000	10	0.55	1.10
5.00	1500	0.85	280.500	2	561	17000	10	0.55	0.75
5.00	1500	0.77	310.250	4	1241	17000	10	0.55	0.75

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H3000, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
329	1360	48.3	4.496	425	1911	9600	12	11.00	30.00
250	1610	43.5	5.902	51	301	10200	12	11.00	30.00
233	1910	48.0	6.344	125	793	10500	10	11.00	30.00
212	2025	46.4	6.968	125	871	11000	9	11.00	30.00
178	2155	41.3	8.327	315	2623	11400	9	11.00	30.00
162	2225	38.8	9.146	315	2881	11600	9	11.00	30.00
148	2300	36.7	10.005	375	3752	12000	9	7.50	30.00
127	2400	33.0	11.619	21	244	12600	9	4.00	30.00
116	2475	30.9	12.762	21	268	13000	9	4.00	30.00
104	2530	28.4	14.233	30	427	13400	9	5.50	22.00
95.0	2610	26.7	15.633	30	469	13800	9	5.50	22.00
79.0	2750	23.4	18.752	270	5063	14600	9	4.00	22.00
72.0	2815	21.9	20.596	270	5561	15100	9	4.00	22.00
64.0	2900	20.1	23.044	45	1037	15600	9	4.00	22.00
58.0	2965	18.7	25.311	45	1139	16000	8	4.00	22.00
50.0	3000	16.0	29.822	45	1342	16900	9	2.20	7.50
45.0	3000	14.6	32.756	45	1474	17400	8	2.20	7.50
41.0	3000	13.2	36.193	150	5429	17900	9	2.20	7.50
37.0	3000	12.1	39.753	150	5963	18500	8	2.20	7.50
32.0	1712	5.88	45.750	4	183	19300	9	2.20	4.00
29.0	1880	5.87	50.250	4	201	19800	8	2.20	4.00

# g500-H helical geared motors

Project planning



## Technical data at a glance

g500-H3000, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
31.0	2830	9.71	47.186	945	44591	19500	9	4.00	11.00
28.0	2910	9.09	51.828	945	48977	20000	9	4.00	11.00
28.0	2950	8.89	53.770	135	7259	20000	9	4.00	11.00
25.0	3000	8.22	59.059	135	7973	20000	9	4.00	7.50
23.0	3000	7.50	64.744	945	61183	20000	9	2.20	7.50
21.0	3000	6.84	71.112	945	67201	20000	9	2.20	7.50
19.0	3000	6.11	79.375	405	32147	20000	9	4.00	7.50
17.0	3000	5.49	87.183	405	35309	20000	9	4.00	5.50
14.0	3000	4.47	107.541	135	14518	20000	9	2.20	5.50
12.0	3000	4.04	118.119	135	15946	20000	9	2.20	4.00
11.0	3000	3.65	130.585	135	17629	20000	9	2.20	4.00
10.0	3000	3.32	143.430	135	19363	20000	9	2.20	4.00
9.00	3000	2.83	168.993	135	22814	20000	9	1.10	3.00
8.00	3000	2.56	185.615	135	25058	20000	9	1.10	3.00
7.00	3000	2.33	205.096	450	92293	20000	9	1.10	2.20
6.00	3000	2.10	225.269	450	101371	20000	9	1.10	2.20
6.00	3000	1.84	259.250	4	1037	20000	9	1.10	2.20
5.00	3000	1.68	284.750	4	1139	20000	9	1.10	1.50

# g500-H helical geared motors

## Project planning



### Surface and corrosion protection

For optimum protection of geared motors against ambient conditions, the surface and corrosion protection system (OKS) offers tailor-made solutions.

Various surface coatings combined with other protective measures ensure that the geared motors operate reliably even at high air humidity, in outdoor installations or in the presence of atmospheric impurities. Any colour from the RAL Classic collection can be chosen for the top coat. The geared motors are also available unpainted (no surface and corrosion protection).

Surface and corrosion protection	Applications	Product	
		g500-H45 ... H450 g500-S130 ... S660 g500-B45 ... B450	g500-H600 ... H3000 g500-S950 ... S4500 g500-B600 ... B4300
Without OKS(uncoated) <sup>1)</sup>	<ul style="list-style-type: none"> <li>Interior installation, no special corrosion protection required</li> <li>Paint provided by the customer</li> </ul>	Standard	
OKS-G (primed)	<ul style="list-style-type: none"> <li>Dependent on subsequent top coat applied</li> </ul>	Optional	Optional
OKS-S (small)	<ul style="list-style-type: none"> <li>Standard applications</li> <li>Internal installation in heated buildings</li> <li>Air humidity up to 90%</li> </ul>		Standard
OKS-M (medium)	<ul style="list-style-type: none"> <li>Internal installation in non-heated buildings</li> <li>Covered, protected external installation</li> <li>Air humidity up to 95%</li> </ul>		Optional
OKS-L (large)	<ul style="list-style-type: none"> <li>External installation</li> <li>Air humidity above 95%</li> <li>Chemical industry plants</li> <li>Food industry</li> </ul>		Optional
OKS-XL (extra Large) <sup>2)</sup>	<ul style="list-style-type: none"> <li>External installation</li> <li>Air humidity above 95 %</li> <li>Chemical industry plants</li> <li>Food industry</li> <li>Coastal areas with moderate salinity</li> </ul>		Optional

<sup>1)</sup> Aluminium parts are uncoated, fan covers are zinc-coated or primed in grey, cast iron parts primed in grey.  
Light colour deviations of the components are possible.

<sup>2)</sup> On request



## Surface and corrosion protection

### Structure of surface coating

Surface and corrosion protection	Corrosivity category	Surface coating	Colour	Coating thickness
	DIN EN ISO 12944-2	Structure		
Without OKS(uncoated)		<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> </ul>		30 ... 50 µm
OKS-G (primed)		<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> <li>2K PUR priming coat</li> </ul>		60 ... 90 µm
OKS-S (small)	Comparable to C1	<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> <li>2K-PUR top coat</li> </ul>	<ul style="list-style-type: none"> <li>Standard: RAL 7012</li> <li>Optional: RAL Classic</li> </ul>	80 ... 120 µm
OKS-M (medium)	Comparable to C2	<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> </ul>		110 ... 160 µm
OKS-L (large)	Comparable to C3	<ul style="list-style-type: none"> <li>2K PUR priming coat</li> <li>2K-PUR top coat</li> </ul>		140 ... 200 µm
OKS-XL (extra Large) <sup>1)</sup>	Comparable to C4	<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> <li>2K-EP priming coat (two times)</li> <li>2K-PUR top coat</li> </ul>		160 ... 240 µm

<sup>1)</sup> On request

# g500-H helical geared motors



## Project planning

### Lubricants

Lenze gearboxes and geared motors are ready for operation on delivery and are filled with lubricants specific to both the drive and the design. The mounting position and design specified in the order are key factors in choosing the volume of lubricant.

The amount and type of lubricant contained in the gearbox are given on the nameplate.

The following gearboxes are lubricated for life:

- Helical gearbox g500-H45 ... 140
- Shaft-mounted helical gearbox g500-S130
- Bevel gearbox g500-B45 ... 240

### Lubricant table

The following lubricants are recommended:

Mode	CLP 220	CLP 460	CLP HC 220
Ambient temperature [°C]	0 ... +40		-25 ... +50
Specification	Mineral oil with EP additives		Synthetic oil (polyalphaolefins basis)
Changing interval	16000 operating hours After 3 years at the latest Oil temperature 70 °C		25000 operating hours After 4 years at the latest Oil temperature 70 °C
Fuchs	Renolin CLP 220 CLP Plus 220	Renolin CLP 460 CLP Plus 460	Renolin Unisyn CLP 220 XT220
Klüber	Klüberoil GEM 1-220 N	Klüberoil GEM 1-460 N	Klübersynth GEM 4-220 N
Shell	Shell Omala S2 G 220 S2 GX 220	Shell Omala S2 G 460 S2 GX 460	Shell Omala S4 GX HD 220

Mode	CLP HC 320	CLP HC 220 USDA H1	CLP PG 460 USDA H1
Ambient temperature [°C]	-25 ... +50	-20 ... +40	
Specification	Synthetic oil (polyalphaolefins basis)		Synthetic oil (polyglycol basis)
Changing interval	25000 operating hours After 4 years at the latest Oil temperature 70 °C	16000 operating hours After 3 years at the latest Oil temperature 70 °C	
Fuchs	Renolin Unisyn CLP 320 XT 320	Cassida Fluid GL 220	Cassida Fluid WG 460
Klüber	Klübersynth GEM 4-320 N	Klüberoil 4 UH1-220 N	Klüberoil UH1 6-460
Shell	Shell Omala S4 GX HD 320		

- Please contact your Lenze sales office if you are operating at ambient temperatures in areas up to < -20 °C bzw. > or up to +40°C.

## 6.3

### Shaft sealing rings

By default, the gearboxes come with NBR shaft sealing rings at the output end. At high speed and unfavourable ambient conditions such as high temperature, reduced circulation of air etc., Lenze recommends the use of FKM (Viton) shaft sealing rings.

Please consider this in your order.

# g500-H helical geared motors

## Project planning

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### Ventilation

#### Non-ventilated gearboxes

No ventilation is required for the gearboxes g500-H45 ...H210.

#### Ventilated gearboxes

From g500-H320 onwards, the gearboxes are supplied with a breather element as standard.

#### Gearbox in combined mounting position

For reducing the number of versions, the gearboxes can also be ordered in a combined mounting position:

- g500-H45 in mounting position ABCDEF
- g500-H100 ... H450 in mounting position AEF

In these gearboxes, the lubricant amount has been optimised for the use in different mounting positions. If required, the breather elements are loosely enclosed and have to be mounted before commissioning depending on the mounting position.

A gearbox can be used for several mounting positions.

# g500-H helical geared motors

## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-H210 ... H450

Mounting position A	Mounting position B	Mounting position C
Filling	Drain	
Breathing	Control	



# g500-H helical geared motors





## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-H210 ... H450

Mounting position D	Mounting position E	Mounting position F
 Filling	 Drain	
 Breathing	 Control	

# g500-H helical geared motors





## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-H600 ... H3000

Mounting position A	Mounting position B	Mounting position C	
 Filling		 Drain	
 Breathing		 Control	

6.3

# g500-H helical geared motors

## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

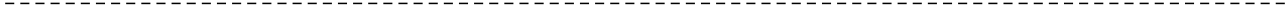
g500-H600 ... H3000

Mounting position D		Mounting position E		Mounting position F	
	Filling		Drain		
	Breathing		Control		

6.3

# g500-H helical geared motors

Project planning



# g500-H helical geared motors

Technical data



## Standards and operating conditions

### Geared motor data

Product			MD□MA□□	m240
Motor				
Degree of protection			IP55 <sup>1)</sup> IP65 <sup>1, 3)</sup> IP66 <sup>1, 3)</sup>	
EN 60529				
Energy efficiency class			IE1	IE3
IEC 60034-30			Methodology for measuring efficiency	
IEC 60034-2-1				
Conformity			Low-Voltage Directive	
CE			2006/95/EC	2014/35/EU
EAC			TP TC 004/2011 (TR CU 004/2011)	
Approval			GB Standard 12350-2009	
CCC			CSA 22.2 No. 100	
CSA			UL 1004-1 UL 1004-8 File-No. E210321	
cURus				
Temperature class			B	
IEC/EN 60034-1; utilisation			F	
IEC/EN 60034-1; insulation system (enamel-insulated wire)				
Min. ambient operating temperature			-20	
	$T_{opr,min}$	[°C]		
Max. ambient temperature for operation			40	
	$T_{opr,max}$	[°C]		
With power reduction			60 <sup>2)</sup>	
	$T_{opr,max}$	[°C]		
Site altitude			5.00	
Current derating at over 1000 m			[%/1000 m]	
Amsl			4000	
	$H_{max}$	[m]		

<sup>1)</sup> Types with deviating degrees of protection:  
IP55 with brake (IP54 with manual release lever).

<sup>2)</sup> In case of cURus max. 40 °C are permissible.

<sup>3)</sup> m240 on request.

- In the European Union, the ErP Directive stipulates minimum efficiency levels for three-phase AC motors. Geared three-phase AC motors that do not conform with this Directive do not meet CE requirements and must not be marketed in the European Economic Area. For further information about the ErP Directive, the efficiency regulations in other countries and the Lenze products concerned, please refer to the brochure "International efficiency directives for three-phase AC motors".



### Permissible radial and axial forces at output

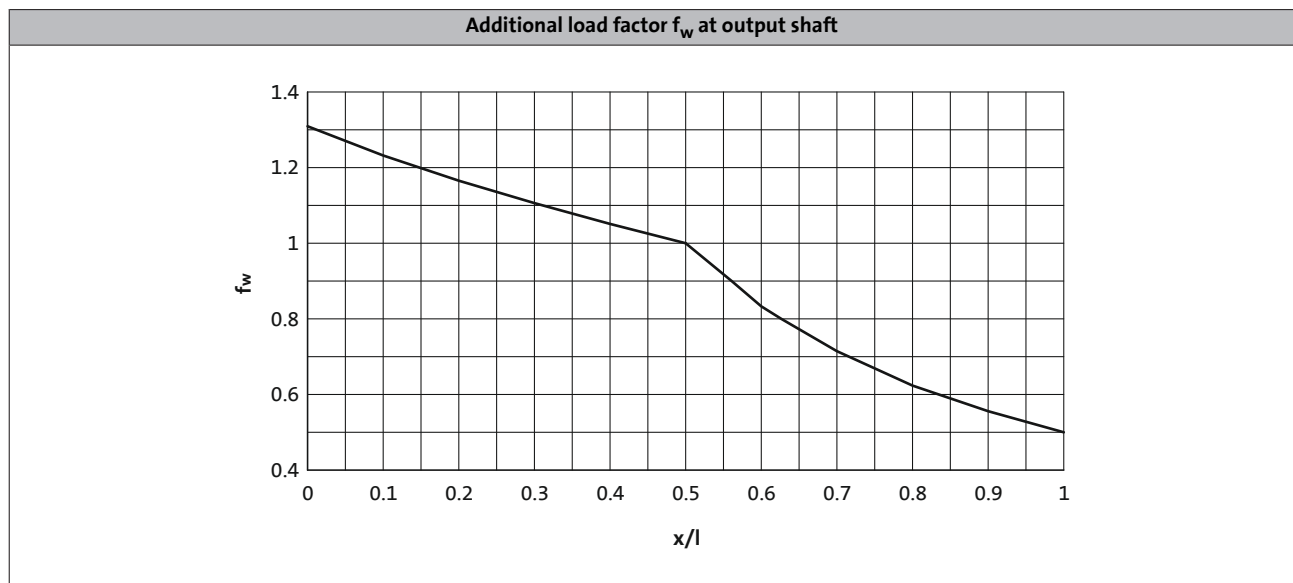
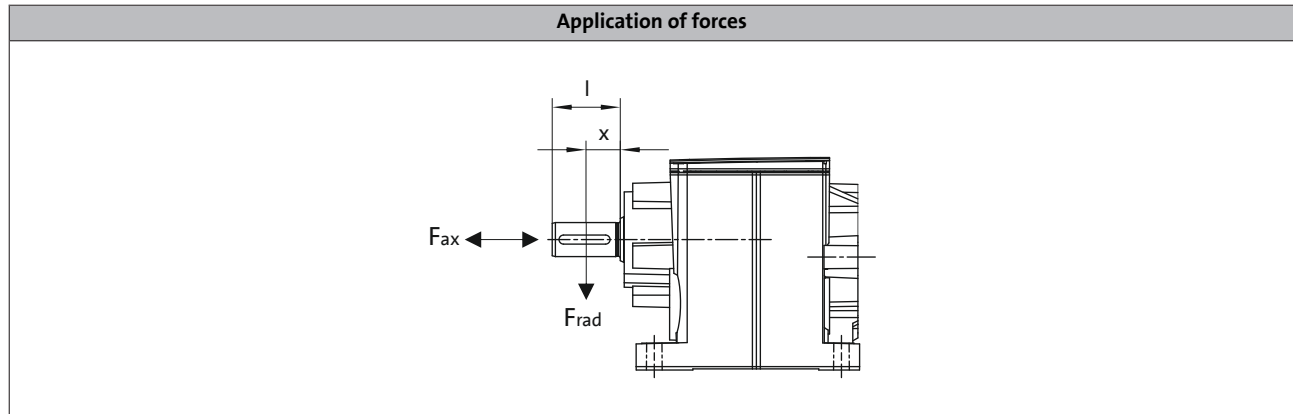
#### Permissible radial force

$$F_{rad,perm} = f_w \times F_{rad,max}$$

► If  $F_{rad}$  and  $F_{ax} \neq 0$ , please contact Lenze.

#### Permissible axial force

If there is no radial force, the maximum permissible axial force is 50 % of the table value  $F_{rad,max}$



# g500-H helical geared motors



## Technical data

### Permissible radial and axial forces at output

The values given in the table refer to the center shaft end force application point and are minimum values calculated according to the most unfavourable conditions (force application angle, mounting position, direction of rotation). The values were calculated for the motor/gearbox combination with a load capacity of  $c= 1.3$  and an input speed of 1400 rpm.

In case of different operating conditions, considerably higher forces can be transmitted. Please contact Lenze.

#### Gearbox with foot with threaded pitch circle (VBR)

Product	$n_2$ [r/min]						
	250	160	100	63	40	25	≤16
	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]
g500-H45	700	800	900	1100	1400	1500	1500
g500-H100	1500	1800	2100	2600	2700	2700	2700
g500-H140	2200	2500	3000	3300	3700	4100	4200
g500-H210	2400	2800	3400	3900	3900	4400	4800
g500-H320	2600	3000	3500	4100	4800	5600	5700
g500-H450	3000	3500	4100	4700	5500	6600	7100
g500-H600	5400	6090	6920	7850	8500	8500	8500
g500-H850	6500	7500	8500	9500	10700	11000	11000
g500-H1500	9200	10400	12000	13700	15600	17000	17000
g500-H3000	10000	11500	13500	15600	18000	20000	20000

#### Reinforced bearings

	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]
g500-H100	1800	2200	2700	3200	3300	3300	3300
g500-H140	2700	3100	3700	4100	4600	5100	5300
g500-H210	3000	3500	4200	4900	4900	5500	6000
g500-H320	3300	3800	4400	5100	6000	7000	7100
g500-H450	3800	4300	5100	5900	6900	8300	8900
g500-H600	8900	9700	10400	10900	11300	11700	12000
g500-H850	11500	12600	13500	14200	14800	15200	15600
g500-H1500	13000	17000	18200	19100	19800	20500	21000
g500-H3000	15000	21000	22100	23200	24000	25000	25000

# g500-H helical geared motors

Technical data



## Permissible radial and axial forces at output

Gearbox with/without foot with threaded pitch circle (VAR/VCR)

Gearbox with/without foot with flange (VAK/VCK)

Product	$n_2$ [r/min]						
	250	160	100	63	40	25	≤16
	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]
g500-H45	700	800	900	1100	1400	1500	1500
g500-H100	1500	1700	1700	1700	1700	1700	1700
g500-H140	2200	2500	2600	2600	2600	2600	2600
g500-H210	2400	2800	3000	3000	3000	3000	3000
g500-H320	2600	3000	3500	3600	3600	3600	3600
g500-H450	3000	3500	4100	4400	4400	4400	4400
g500-H600	5400	6000	6000	6000	6000	6000	6000
g500-H850	6050	6950	7800	7800	7800	7800	7800
g500-H1500	9200	10400	10500	10500	10500	10500	10500
g500-H3000	10000	11500	12500	12500	12500	12500	12500

## Reinforced bearings

	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]
g500-H100	1700	1700	1700	1700	1700	1700	1700
g500-H140	2600	2600	2600	2600	2600	2600	2600
g500-H210	3000	3000	3000	3000	3000	3000	3000
g500-H320	3300	3600	3600	3600	3600	3600	3600
g500-H450	3800	4300	4400	4400	4400	4400	4400
g500-H600	6000	6000	6000	6000	6000	6000	6000
g500-H850	7800	7800	7800	7800	7800	7800	7800
g500-H1500	10500	10500	10500	10500	10500	10500	10500
g500-H3000	12500	12500	12500	12500	12500	12500	12500



# g500-H helical geared motors

Technical data



## Permissible radial and axial forces at output

Gearbox without foot with reinforced flange (VCP)

For transmitting particularly high radial and axial forces

Product	$n_2$ [r/min]						
	250	160	100	63	40	25	$\leq 16$
	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]	$F_{rad,max}$ [N]
g500-H100	3330	3650	3890	4060	4160	4240	4280
g500-H140	5510	5950	6270	6480	6620	6710	6770
g500-H210	6170	6670	7060	7330	7500	7620	7700
g500-H320	7040	7690	8210	8570	8810	8970	9080
g500-H450	7810	8550	9160	9590	9880	10100	10200

# g500-H helical geared motors



## Technical data

### Selection tables, notes

The selection tables show the available combinations of gearbox type, number of stages, ratio and motor. They are used only to provide basic orientation.  
The following legend indicates the structure of the selection tables.

Rated power  $P_{rated}$  of the drive motor depending on the rated frequency

↓

50 Hz:  $P_N = 0.75 \text{ kW}$

2-stage gearboxes ← Number of the gear stage of the gearbox

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
442	16	4.3	3.267	-H140	40-P80/M4	
430	16	3.8	3.354	-H100	40-P80/M4	

↑ ↑ ↑ ↑ ↑

Mains operation  
Output speed  $n_2$   
Output torque  $M_2$

Ratio i

Product Gearbox

Product Motor

Page number for dimensions

**Load capacity c of the gearbox**  
c is the ratio between the permissible rated torque of the gearbox and the rated torque of the three-phase AC motor (converted to the driven shaft).  
c must be always higher than the service factor k determined for the application k.

$$c = \frac{M_{2,zul}}{M_{1N} \cdot i \cdot \eta_{Getr}} > k$$

### Motor voltages

At 50 Hz, the power and torque values indicated in the selection tables relate to the following motor voltages:

- Up to 3 kW:  $\Delta$  230 V / Y 400 V
- FROM 4 kW:  $\Delta$  400 V

# g500-H helical geared motors

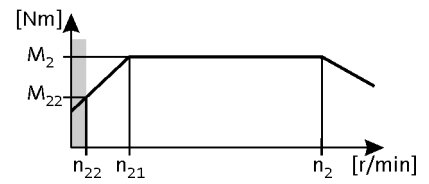


Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.06$  kW  
 87 Hz:  $P_N = 0.11$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c				
75	7.0	5.7	7.6	7.4	32	7.0	75	7.0	5.7	133	8.0	5.2	19.013	-H45	063-02	
67	8.0	5.3	6.8	8.3	28	8.0	67	8.0	5.3	119	9.0	4.9	21.350	-H45	063-02	
58	10	4.7	5.9	9.6	24	10	58	10	4.7	103	10	4.3	24.595	-H45	063-02	
52	11	4.2	5.3	11	22	11	52	11	4.2	92	11	3.9	27.618	-H45	063-02	
45	12	3.6	4.5	13	19	12	45	12	3.6	79	13	3.3	32.000	-H45	063-02	
40	14	3.2	4.0	14	17	14	40	14	3.2	71	14	3.0	35.933	-H45	063-02	
34	16	2.8	3.5	16	15	16	34	16	2.8	61	17	2.6	41.455	-H45	063-02	
31	18	2.5	3.1	18	13	18	31	18	2.5	55	19	2.4	46.550	-H45	063-02	
27	21	2.2	2.7	21	11	21	27	21	2.2	48	21	2.1	52.909	-H45	063-02	
24	23	1.9	2.4	23	10	23	24	23	1.9	43	24	1.9	59.413	-H45	063-02	

# g500-H helical geared motors

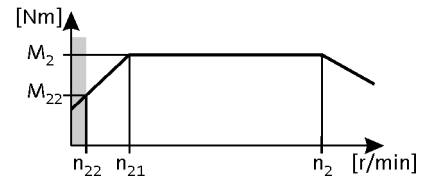


Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.09$  kW  
 87 Hz:  $P_N = 0.16$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c					
137	6.0	5.8	15	6.0	60	6.0	137	6.0	5.8	248	6.0	4.9	10.033	-H45	063-22		
120	7.0	5.1	13	6.8	53	7.0	120	7.0	5.1	217	7.0	4.3	11.429	-H45	063-22		
107	8.0	4.9	11	7.7	47	8.0	107	8.0	4.9	194	8.0	4.2	12.833	-H45	063-22		
93	9.0	4.3	9.8	8.9	40	9.0	93	9.0	4.3	168	9.0	3.7	14.836	-H45	063-22		
83	10	4.1	8.7	10	36	10	83	10	4.1	149	10	4.0	16.660	-H45	063-22		
72	12	3.6	7.6	11	32	11	72	12	3.6	131	11	3.6	19.013	-H45	063-22		
64	13	3.4	6.8	13	28	13	64	13	3.4	116	13	3.3	21.350	-H45	063-22		
56	15	3.0	5.9	15	24	15	56	15	3.0	101	15	3.0	24.595	-H45	063-22		
50	17	2.7	5.3	17	22	16	50	17	2.7	90	16	2.6	27.618	-H45	063-22		
43	19	2.3	4.5	19	19	19	43	19	2.3	78	19	2.3	32.000	-H45	063-22		
38	22	2.1	4.0	21	17	21	38	22	2.1	69	21	2.0	35.933	-H45	063-22		
33	25	1.8	3.5	25	15	25	33	25	1.8	60	25	1.8	41.455	-H45	063-22		
30	28	1.6	3.1	28	13	28	30	28	1.6	53	28	1.6	46.550	-H45	063-22		
26	32	1.4	2.7	32	11	32	26	32	1.4	47	32	1.4	52.909	-H45	063-22		
23	36	1.3	2.4	35	10	35	23	36	1.3	42	35	1.3	59.413	-H45	063-22		

# g500-H helical geared motors

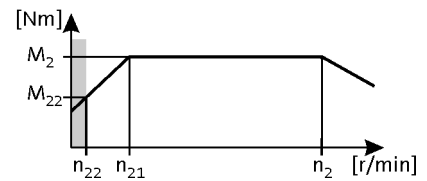


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.12$  kW  
 87 Hz:  $P_N = 0.21$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
204	5.0	5.5	21	4.2	86	5.0	204	5.0	5.5	363	5.0	4.7	6.982	-H45	063-12	
182	6.0	5.2	19	4.7	77	6.0	182	6.0	5.2	323	6.0	4.5	7.840	-H45	063-12	
160	7.0	4.7	16	5.4	67	7.0	160	7.0	4.7	284	7.0	4.0	8.935	-H45	063-12	
142	8.0	4.5	15	6.0	60	8.0	142	8.0	4.5	253	8.0	3.8	10.033	-H45	063-12	
125	9.0	3.9	13	6.9	53	9.0	125	9.0	3.9	222	9.0	3.4	11.429	-H45	063-12	
111	10	3.8	11	7.7	47	10	111	10	3.8	198	10	3.2	12.833	-H45	063-12	
96	12	3.4	9.8	8.9	40	11	96	12	3.4	171	11	2.9	14.836	-H45	063-12	
86	13	3.2	8.7	10	36	13	86	13	3.2	152	13	3.1	16.660	-H45	063-12	
75	15	2.8	7.6	11	32	15	75	15	2.8	133	15	2.8	19.013	-H45	063-12	
73	15	5.5	7.4	12	31	15	73	15	5.5	130	15	4.7	19.486	-H100	063-12	
67	17	2.6	6.8	13	28	16	67	17	2.6	119	16	2.6	21.350	-H45	063-12	
64	17	5.5	6.5	13	27	17	64	17	5.5	114	17	4.7	22.314	-H100	063-12	
58	19	2.4	5.9	15	24	19	58	19	2.4	103	19	2.3	24.595	-H45	063-12	
57	19	5.5	5.8	15	24	19	57	19	5.5	102	19	4.7	24.829	-H140	063-12	
57	20	4.6	5.8	15	24	19	57	20	4.6	101	19	3.9	25.095	-H100	063-12	
52	21	5.5	5.3	17	22	21	52	21	5.5	93	21	5.3	27.415	-H140	063-12	
52	22	2.1	5.3	17	22	21	52	22	2.1	92	21	2.0	27.618	-H45	063-12	
50	22	4.5	5.0	17	21	22	50	22	4.5	88	22	4.3	28.738	-H100	063-12	
45	25	4.0	4.6	19	19	24	45	25	4.0	80	24	3.9	31.805	-H100	063-12	
45	25	4.6	4.5	19	19	25	45	25	4.6	79	25	4.5	31.976	-H140	063-12	
45	25	1.8	4.5	19	19	25	45	25	1.8	79	25	1.8	32.000	-H45	063-12	
41	27	4.6	4.1	21	17	27	41	27	4.6	72	27	4.5	35.095	-H210	063-12	
40	28	4.6	4.1	21	17	27	40	28	4.6	72	27	4.5	35.308	-H140	063-12	
40	28	1.6	4.0	22	17	28	40	28	1.6	71	28	1.6	35.933	-H45	063-12	
39	28	3.5	4.0	22	17	28	39	28	3.5	70	28	3.4	36.422	-H100	063-12	
37	30	4.6	3.8	23	16	29	37	30	4.6	66	29	4.5	38.238	-H320	063-12	
36	31	4.6	3.7	24	15	30	36	31	4.6	65	30	4.5	39.286	-H210	063-12	
36	31	3.2	3.6	24	15	31	36	31	3.2	64	31	3.1	39.857	-H100	063-12	
35	32	4.0	3.6	24	15	31	35	32	4.0	63	31	4.1	40.526	-H140	063-12	
34	32	1.4	3.5	25	15	32	34	32	1.4	61	32	1.4	41.455	-H45	063-12	
34	33	4.0	3.4	26	14	33	34	33	4.0	60	33	4.1	42.593	-H210	063-12	
33	34	4.6	3.3	26	14	33	33	34	4.6	58	33	4.7	43.436	-H320	063-12	
32	35	4.0	3.2	27	13	34	32	35	4.0	57	34	4.1	44.748	-H140	063-12	
31	36	2.8	3.2	27	13	35	31	36	2.8	56	35	2.9	45.643	-H100	063-12	
31	36	4.0	3.1	28	13	36	31	36	4.0	55	36	4.1	46.407	-H320	063-12	

# g500-H helical geared motors

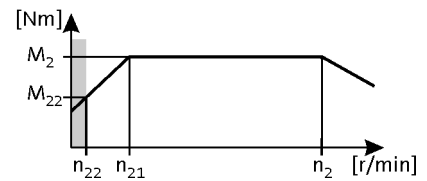


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.12$  kW  
 87 Hz:  $P_N = 0.21$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c				
31	36	1.2	3.1	28	13	36	31	36	1.2	55	36	1.3	46.550	-H45	063-12	
30	37	4.0	3.0	29	13	37	30	37	4.0	53	37	4.1	47.679	-H210	063-12	
28	40	3.3	2.9	31	12	39	28	40	3.3	50	39	3.3	50.786	-H140	063-12	
27	41	1.7	2.8	32	11	40	27	41	1.7	48	40	1.7	52.510	-H100	063-12	
27	41	4.0	2.8	32	11	40	27	41	4.0	48	40	4.1	52.715	-H320	063-12	
27	41	1.1	2.7	32	11	41	27	41	1.1	48	41	1.1	52.909	-H45	063-12	
26	42	3.1	2.7	33	11	42	26	42	3.1	47	42	3.2	54.438	-H210	063-12	
25	44	3.2	2.6	34	11	43	25	44	3.2	45	43	3.3	56.077	-H140	063-12	
24	46	1.0	2.4	36	10	46	24	46	1.0	43	46	1.0	59.413	-H45	063-12	
24	47	1.7	2.4	36	10	46	24	47	1.7	42	46	1.7	60.133	-H100	063-12	
23	48	3.1	2.4	37	9.8	47	23	48	3.1	42	47	3.2	60.938	-H210	063-12	
21	52	1.7	2.2	40	9.0	51	21	52	1.7	38	51	1.7	66.908	-H140	063-12	
19	58	1.7	2.0	44	8.1	57	19	58	1.7	34	57	1.7	73.879	-H140	063-12	

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c				
29	37	5.6	3.0	29	12	37	29	37	5.6	52	37	5.5	48.571	-H210	063-12	
26	43	4.9	2.6	33	11	42	26	43	4.9	46	42	4.8	55.529	-H210	063-12	
23	48	4.4	2.3	37	9.7	47	23	48	4.4	41	47	4.3	62.160	-H210	063-12	
20	55	3.9	2.0	42	8.4	54	20	55	3.9	36	54	3.7	71.026	-H210	063-12	
18	59	5.4	1.9	46	7.8	59	18	59	5.4	33	59	5.2	77.387	-H320	063-12	
18	61	3.4	1.8	47	7.5	60	18	61	3.4	32	60	3.3	79.507	-H210	063-12	
16	68	4.7	1.6	52	6.8	66	16	68	4.7	29	66	4.8	87.906	-H320	063-12	
16	71	3.0	1.6	55	6.5	70	16	71	3.0	28	70	3.0	92.205	-H210	063-12	
14	77	4.1	1.4	59	6.0	76	14	77	4.1	25	76	4.2	100.462	-H320	063-12	
14	79	2.7	1.4	61	5.8	78	14	79	2.7	25	78	2.7	103.214	-H210	063-12	
13	88	3.7	1.3	68	5.3	86	13	88	3.7	22	86	3.7	114.118	-H320	063-12	
12	91	2.3	1.2	70	5.1	89	12	91	2.3	22	89	2.4	118.162	-H210	063-12	
12	93	4.8	1.2	72	4.9	92	12	93	4.8	21	92	4.9	121.342	-H450	063-12	
11	99	3.2	1.1	76	4.7	97	11	99	3.2	20	97	3.3	128.743	-H320	063-12	
11	102	2.1	1.1	78	4.5	100	11	102	2.1	19	100	2.1	132.270	-H210	063-12	
10	105	4.3	1.1	81	4.4	104	10	105	4.3	19	104	4.3	137.133	-H450	063-12	
10	110	4.6	1.0	85	4.2	108	10	110	4.6	18	108	4.7	142.988	-H600	063-12	
9.7	112	2.9	1.0	87	4.1	111	9.7	112	2.9	17	111	2.9	146.244	-H320	063-12	
9.3	117	1.8	0.9	91	3.9	116	9.3	117	1.8	17	116	1.8	152.853	-H210	063-12	
9.1	120	3.8	0.9	93	3.8	118	9.1	120	3.8	16	118	3.8	156.274	-H450	063-12	
8.9	123	4.6	0.9	95	3.7	121	8.9	123	4.6	16	121	4.7	160.585	-H600	063-12	
8.6	128	2.5	0.9	99	3.6	126	8.6	128	2.5	15	126	2.5	166.541	-H320	063-12	

# g500-H helical geared motors

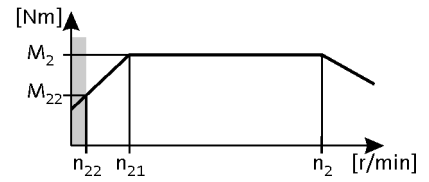


Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.12$  kW  
 87 Hz:  $P_N = 0.21$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
8.3	131	1.6	0.8	101	3.5	129	8.3	131	1.6	15	129	1.6	171.104	-H210	063-12	
8.2	133	4.0	0.8	103	3.5	131	8.2	133	4.0	15	131	4.1	173.536	-H600	063-12	
8.1	136	3.3	0.8	105	3.4	134	8.1	136	3.3	14	134	3.4	176.611	-H450	063-12	
7.5	145	2.2	0.8	112	3.2	143	7.5	145	2.2	13	143	2.2	189.179	-H320	063-12	
7.3	150	4.0	0.7	115	3.1	147	7.3	150	4.0	13	147	4.1	194.892	-H600	063-12	
7.2	152	3.0	0.7	117	3.0	150	7.2	152	3.0	13	150	3.0	198.059	-H450	063-12	
7.2	153	1.4	0.7	118	3.0	150	7.2	153	1.4	13	150	1.4	198.873	-H210	063-12	
6.6	167	1.9	0.7	128	2.8	164	6.6	167	1.9	12	164	1.9	216.683	-H320	063-12	
6.4	170	3.1	0.7	131	2.7	168	6.4	170	3.1	11	168	3.2	221.794	-H600	063-12	
6.4	171	1.2	0.7	132	2.7	168	6.4	171	1.2	11	168	1.3	222.619	-H210	063-12	
6.4	172	2.6	0.6	133	2.7	169	6.4	172	2.6	11	169	2.7	223.833	-H450	063-12	
5.8	189	1.7	0.6	146	2.4	186	5.8	189	1.7	10	186	1.7	246.137	-H320	063-12	
5.7	191	2.4	0.6	147	2.4	188	5.7	191	2.4	10	188	2.4	248.200	-H450	063-12	
5.7	191	3.1	0.6	147	2.4	188	5.7	191	3.1	10	188	3.2	249.089	-H600	063-12	
5.5	198	1.1	0.6	153	2.3	195	5.5	198	1.1	9.8	195	1.1	257.631	-H210	063-12	
5.1	216	2.1	0.5	166	2.1	212	5.1	216	2.1	9.0	212	2.1	280.500	-H450	063-12	
5.1	216	1.3	0.5	166	2.1	212	5.1	216	1.3	9.0	212	1.3	280.702	-H320	063-12	
4.9	222	1.0	0.5	171	2.1	218	4.9	222	1.0	8.8	218	1.0	288.393	-H210	063-12	
4.5	245	1.3	0.5	189	1.9	241	4.5	245	1.3	8.0	241	1.3	318.859	-H320	063-12	
4.4	251	1.7	0.4	194	1.8	247	4.4	251	1.7	7.8	247	1.7	326.994	-H450	063-12	
3.9	284	1.6	0.4	219	1.6	279	3.9	284	1.6	6.9	279	1.6	369.548	-H450	063-12	

# g500-H helical geared motors

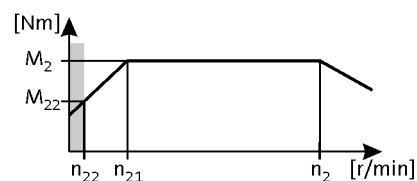


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
526	3.0	4.7	56	2.4	231	3.0	526	3.0	4.7	953	3.0	3.9	2.597	-H45	063-32	
400	4.0	4.5	43	3.2	176	4.0	400	4.0	4.5	725	4.0	3.7	3.413	-H45	063-32	
313	5.0	3.9	33	4.1	137	5.0	313	5.0	3.9	567	5.0	3.3	4.368	-H45	063-32	
257	6.0	4.2	27	5.0	113	6.0	257	6.0	4.2	466	7.0	3.5	5.312	-H45	063-32	
229	7.0	4.0	24	5.6	101	7.0	229	7.0	4.0	415	7.0	3.3	5.965	-H45	063-32	
218	8.0	4.5	23	5.9	96	8.0	218	8.0	4.5	395	8.0	3.7	6.272	-H140	063-32	
212	8.0	4.5	23	6.1	93	8.0	212	8.0	4.5	384	8.0	3.7	6.440	-H100	063-32	
196	9.0	3.5	21	6.6	86	9.0	196	9.0	3.5	355	9.0	2.9	6.982	-H45	063-32	
174	10	3.3	19	7.4	77	10	174	10	3.3	316	10	2.8	7.840	-H45	063-32	
171	10	4.1	18	7.5	75	10	171	10	4.1	309	10	3.5	8.000	-H140	063-32	
166	10	4.1	18	7.7	73	10	166	10	4.1	301	10	3.5	8.214	-H100	063-32	
153	11	3.0	16	8.4	67	11	153	11	3.0	277	11	2.5	8.935	-H45	063-32	
136	12	2.9	15	9.4	60	12	136	12	2.9	247	12	2.4	10.033	-H45	063-32	
120	14	4.5	13	11	53	14	120	14	4.5	218	14	3.7	11.360	-H100	063-32	
119	14	2.5	13	11	53	14	119	14	2.5	217	14	2.1	11.429	-H45	063-32	
108	15	4.5	12	12	48	15	108	15	4.5	196	16	3.7	12.640	-H140	063-32	
108	15	4.1	12	12	47	15	108	15	4.1	196	16	3.5	12.653	-H100	063-32	
106	16	2.4	11	12	47	16	106	16	2.4	193	16	2.0	12.833	-H45	063-32	
98	17	4.5	10	13	43	17	98	17	4.5	177	17	3.7	13.957	-H140	063-32	
94	18	4.1	10	14	41	18	94	18	4.1	171	18	3.5	14.490	-H100	063-32	
92	18	2.2	9.8	14	40	18	92	18	2.2	167	18	1.8	14.836	-H45	063-32	
85	20	4.1	9.0	15	37	20	85	20	4.1	154	20	3.5	16.122	-H140	063-32	
82	20	2.0	8.7	16	36	20	82	20	2.0	149	21	1.9	16.660	-H45	063-32	
77	22	4.1	8.1	17	34	22	77	22	4.1	139	22	3.5	17.802	-H140	063-32	
72	23	1.8	7.6	18	32	23	72	23	1.8	130	23	1.7	19.013	-H45	063-32	
70	24	3.5	7.4	18	31	24	70	24	3.5	127	24	2.9	19.486	-H100	063-32	
64	26	1.7	6.8	20	28	26	64	26	1.7	116	26	1.6	21.350	-H45	063-32	
61	27	3.5	6.5	21	27	27	61	27	3.5	111	28	2.9	22.314	-H100	063-32	
56	30	1.5	5.9	23	24	30	56	30	1.5	101	30	1.4	24.595	-H45	063-32	
55	30	3.5	5.8	23	24	30	55	30	3.5	100	31	2.9	24.829	-H140	063-32	
54	31	2.9	5.8	24	24	31	54	31	2.9	99	31	2.5	25.095	-H100	063-32	
50	33	3.5	5.3	26	22	33	50	33	3.5	90	34	3.3	27.415	-H140	063-32	
49	34	1.3	5.3	26	22	34	49	34	1.3	90	34	1.3	27.618	-H45	063-32	
48	35	2.9	5.0	27	21	35	48	35	2.9	86	36	2.7	28.738	-H100	063-32	
43	39	2.6	4.6	30	19	39	43	39	2.6	78	39	2.4	31.805	-H100	063-32	



# g500-H helical geared motors

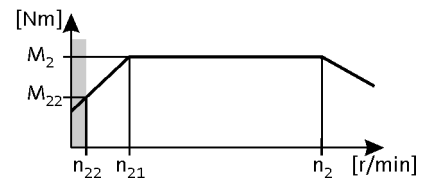


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
43	39	2.9	4.5	30	19	39	43	39	2.9	77	40	2.8	31.976	-H140	063-32	
43	39	1.2	4.5	30	19	39	43	39	1.2	77	40	1.1	32.000	-H45	063-32	
39	43	2.9	4.1	33	17	43	39	43	2.9	71	43	2.8	35.095	-H210	063-32	
39	43	2.9	4.1	33	17	43	39	43	2.9	70	44	2.8	35.308	-H140	063-32	
38	44	1.0	4.0	34	17	44	38	44	1.0	69	44	1.0	35.933	-H45	063-32	
38	44	2.3	4.0	34	17	44	38	44	2.3	68	45	2.1	36.422	-H100	063-32	
36	47	2.9	3.8	36	16	47	36	47	2.9	65	47	2.8	38.238	-H320	063-32	
35	48	2.9	3.7	37	15	48	35	48	2.9	63	49	2.8	39.286	-H210	063-32	
34	49	2.1	3.6	38	15	49	34	49	2.1	62	49	2.0	39.857	-H100	063-32	
34	50	2.6	3.6	38	15	50	34	50	2.6	61	50	2.5	40.526	-H140	063-32	
33	51	0.9	3.5	39	15	51	33	51	0.9	60	51	0.8	41.455	-H45	063-32	
32	52	2.6	3.4	40	14	52	32	52	2.6	58	53	2.5	42.593	-H210	063-32	
31	53	2.9	3.3	41	14	53	31	53	2.9	57	54	2.9	43.436	-H320	063-32	
31	55	2.6	3.2	42	13	55	31	55	2.6	55	55	2.5	44.748	-H140	063-32	
30	56	1.8	3.2	43	13	56	30	56	1.8	54	56	1.8	45.643	-H100	063-32	
29	57	2.6	3.1	44	13	57	29	57	2.6	53	57	2.5	46.407	-H320	063-32	
29	58	2.6	3.0	45	13	58	29	58	2.6	52	59	2.5	47.679	-H210	063-32	
27	62	2.1	2.9	48	12	62	27	62	2.1	49	63	2.1	50.786	-H140	063-32	
26	64	1.1	2.8	49	11	64	26	64	1.1	47	65	1.1	52.510	-H100	063-32	
26	64	2.6	2.8	50	11	64	26	64	2.6	47	65	2.5	52.715	-H320	063-32	
25	67	2.0	2.7	51	11	67	25	67	2.0	46	67	2.0	54.438	-H210	063-32	
24	69	2.0	2.6	53	11	69	24	69	2.0	44	69	2.0	56.077	-H140	063-32	
23	73	1.1	2.4	57	10	73	23	73	1.1	41	74	1.1	60.133	-H100	063-32	
22	74	2.0	2.4	57	9.8	74	22	74	2.0	41	75	2.0	60.938	-H210	063-32	
20	82	1.1	2.2	63	9.0	82	20	82	1.1	37	83	1.1	66.908	-H140	063-32	
19	90	1.1	2.0	70	8.1	90	19	90	1.1	34	91	1.1	73.879	-H140	063-32	

### 3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
32	52	4.0	3.3	40	14	52	32	52	4.0	57	53	3.4	43.390	-H210	063-32	
29	57	4.5	3.1	44	13	57	29	57	4.5	52	58	4.2	47.276	-H320	063-32	
28	58	3.6	3.0	45	12	58	28	58	3.6	51	59	3.4	48.571	-H210	063-32	
25	65	4.5	2.7	50	11	65	25	65	4.5	46	65	4.2	53.703	-H320	063-32	
25	67	3.1	2.6	52	11	67	25	67	3.1	45	68	3.0	55.529	-H210	063-32	
23	73	4.1	2.4	56	9.9	73	23	73	4.1	41	74	3.9	60.502	-H320	063-32	
22	74	4.5	2.3	57	9.7	74	22	74	4.5	40	75	4.2	61.774	-H450	063-32	
22	75	2.8	2.3	58	9.7	75	22	75	2.8	40	76	2.7	62.160	-H210	063-32	
20	83	3.9	2.1	64	8.7	83	20	83	3.9	36	84	3.7	68.726	-H320	063-32	

# g500-H helical geared motors

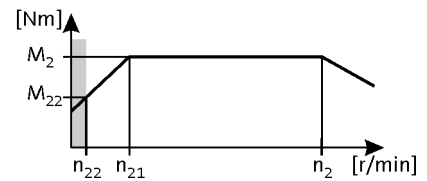


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
20	84	4.5	2.1	65	8.6	84	20	84	4.5	36	85	4.2	69.813	-H450	063-32	
19	85	2.5	2.0	66	8.4	85	19	85	2.5	35	86	2.3	71.026	-H210	063-32	
18	93	3.4	1.9	72	7.8	93	18	93	3.4	32	94	3.3	77.387	-H320	063-32	
17	95	4.1	1.8	73	7.6	95	17	95	4.1	31	96	3.9	78.794	-H450	063-32	
17	96	2.2	1.8	74	7.5	96	17	96	2.2	31	97	2.1	79.507	-H210	063-32	
16	106	3.0	1.6	82	6.8	106	16	106	3.0	28	107	3.0	87.906	-H320	063-32	
15	107	4.1	1.6	83	6.7	107	15	107	4.1	28	108	4.1	89.048	-H450	063-32	
15	111	1.9	1.6	85	6.5	111	15	111	1.9	27	112	1.9	92.205	-H210	063-32	
14	121	2.7	1.4	93	6.0	121	14	121	2.7	25	122	2.6	100.462	-H320	063-32	
13	124	1.7	1.4	96	5.8	124	13	124	1.7	24	126	1.7	103.214	-H210	063-32	
12	137	2.3	1.3	106	5.3	137	12	137	2.3	22	139	2.3	114.118	-H320	063-32	
12	142	1.5	1.2	110	5.1	142	12	142	1.5	21	144	1.5	118.162	-H210	063-32	
11	146	3.1	1.2	112	4.9	146	11	146	3.1	20	148	3.1	121.342	-H450	063-32	
11	155	2.1	1.1	119	4.7	155	11	155	2.1	19	157	2.0	128.743	-H320	063-32	
10	159	1.3	1.1	123	4.5	159	10	159	1.3	19	161	1.3	132.270	-H210	063-32	
10	165	2.7	1.1	127	4.4	165	10	165	2.7	18	167	2.7	137.133	-H450	063-32	
9.5	172	2.9	1.0	133	4.2	172	9.5	172	2.9	17	174	2.9	142.988	-H600	063-32	
9.3	176	1.8	1.0	136	4.1	176	9.3	176	1.8	17	178	1.8	146.244	-H320	063-32	
8.9	184	1.1	0.9	142	3.9	184	8.9	184	1.1	16	186	1.1	152.853	-H210	063-32	
8.7	188	2.4	0.9	145	3.8	188	8.7	188	2.4	16	190	2.4	156.274	-H450	063-32	
8.5	193	2.9	0.9	149	3.7	193	8.5	193	2.9	15	195	2.9	160.585	-H600	063-32	
8.2	200	1.6	0.9	154	3.6	200	8.2	200	1.6	15	203	1.6	166.541	-H320	063-32	
8.0	206	1.0	0.8	159	3.5	206	8.0	206	1.0	15	208	1.0	171.104	-H210	063-32	
7.9	209	2.6	0.8	161	3.5	209	7.9	209	2.6	14	211	2.5	173.536	-H600	063-32	
7.7	213	2.1	0.8	164	3.4	213	7.7	213	2.1	14	215	2.1	176.611	-H450	063-32	
7.2	228	1.4	0.8	175	3.2	228	7.2	228	1.4	13	230	1.4	189.179	-H320	063-32	
7.0	235	2.6	0.7	181	3.1	235	7.0	235	2.6	13	237	2.5	194.892	-H600	063-32	
6.9	238	1.9	0.7	184	3.0	238	6.9	238	1.9	13	241	1.9	198.059	-H450	063-32	
6.9	239	0.9	0.7	184	3.0	239	6.9	239	0.9	12	242	0.9	198.873	-H210	063-32	
6.3	261	1.2	0.7	201	2.8	261	6.3	261	1.2	11	264	1.2	216.683	-H320	063-32	
6.2	267	2.0	0.7	206	2.7	267	6.2	267	2.0	11	270	2.0	221.794	-H600	063-32	
6.1	269	1.7	0.6	207	2.7	269	6.1	269	1.7	11	272	1.7	223.833	-H450	063-32	
5.5	296	1.1	0.6	228	2.4	296	5.5	296	1.1	10	299	1.1	246.137	-H320	063-32	
5.5	299	1.5	0.6	230	2.4	299	5.5	299	1.5	10	302	1.5	248.200	-H450	063-32	
5.5	300	2.0	0.6	231	2.4	300	5.5	300	2.0	9.9	303	2.0	249.089	-H600	063-32	

# g500-H helical geared motors

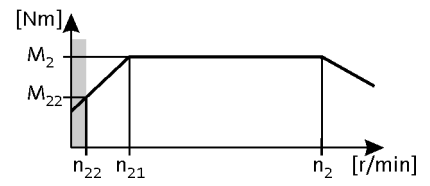
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c				
4.9	338	1.3	0.5	260	2.1	338	4.9	338	1.3	8.8	341	1.3	280.500	-H450	063-32	
4.2	394	1.1	0.4	303	1.8	394	4.2	394	1.1	7.6	398	1.1	326.994	-H450	063-32	
3.7	445	1.0	0.4	342	1.6	445	3.7	445	1.0	6.7	450	1.0	369.548	-H450	063-32	

# g500-H helical geared motors

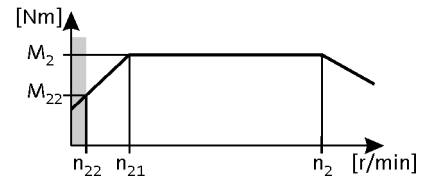


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c					
528	4.0	4.1	56	3.4	231	4.0	528	4.0	4.1	955	4.0	3.5	2.597	-H45	063-42		
419	6.0	5.6	44	4.3	184	5.0	419	6.0	5.6	759	5.0	4.8	3.267	-H140	063-42		
408	6.0	5.6	43	4.4	179	6.0	408	6.0	5.6	739	6.0	4.8	3.354	-H100	063-42		
401	6.0	3.3	43	4.4	176	6.0	401	6.0	3.3	727	6.0	2.8	3.413	-H45	063-42		
314	7.0	2.8	33	5.7	137	7.0	314	7.0	2.8	568	7.0	2.4	4.368	-H45	063-42		
306	8.0	5.6	32	5.8	134	8.0	306	8.0	5.6	554	8.0	4.8	4.480	-H140	063-42		
298	8.0	5.6	32	6.0	130	8.0	298	8.0	5.6	539	8.0	4.8	4.600	-H100	063-42		
265	9.0	5.6	28	6.7	116	9.0	265	9.0	5.6	480	9.0	4.8	5.167	-H100	063-42		
258	9.0	3.0	27	6.9	113	9.0	258	9.0	3.0	467	9.0	2.6	5.312	-H45	063-42		
239	10	5.2	25	7.5	105	10	239	10	5.2	433	10	4.4	5.733	-H140	063-42		
233	10	5.2	25	7.7	102	10	233	10	5.2	421	10	4.4	5.887	-H100	063-42		
230	10	2.9	24	7.8	101	10	230	10	2.9	416	10	2.5	5.965	-H45	063-42		
218	11	5.2	23	8.2	96	11	218	11	5.2	395	11	4.4	6.272	-H140	063-42		
213	11	5.2	23	8.4	93	11	213	11	5.2	385	11	4.4	6.440	-H100	063-42		
196	12	2.5	21	9.1	86	12	196	12	2.5	355	12	2.2	6.982	-H45	063-42		
193	12	5.6	21	9.2	85	12	193	12	5.6	350	12	4.8	7.086	-H100	063-42		
189	12	5.6	20	9.5	83	12	189	12	5.6	341	12	4.8	7.269	-H140	063-42		
175	13	2.4	19	10	77	13	175	13	2.4	316	13	2.1	7.840	-H45	063-42		
171	14	4.8	18	10	75	13	171	14	4.8	310	13	4.1	8.000	-H140	063-42		
167	14	4.8	18	11	73	14	167	14	4.8	302	14	4.1	8.214	-H100	063-42		
153	15	2.2	16	12	67	15	153	15	2.2	278	15	1.9	8.935	-H45	063-42		
152	15	5.6	16	12	67	15	152	15	5.6	275	15	4.8	9.029	-H140	063-42		
151	15	5.2	16	12	66	15	151	15	5.2	274	15	4.4	9.068	-H100	063-42		
140	17	4.3	15	13	61	16	140	17	4.3	253	16	3.7	9.800	-H140	063-42		
137	17	2.1	15	13	60	17	137	17	2.1	247	17	1.8	10.033	-H45	063-42		
136	17	4.3	14	13	60	17	136	17	4.3	247	17	3.7	10.063	-H100	063-42		
128	18	5.6	14	14	56	18	128	18	5.6	231	18	4.8	10.720	-H210	063-42		
121	19	5.2	13	15	53	19	121	19	5.2	218	19	4.4	11.360	-H100	063-42		
120	19	1.8	13	15	53	19	120	19	1.8	217	19	1.5	11.429	-H45	063-42		
119	20	5.2	13	15	52	19	119	20	5.2	215	19	4.4	11.554	-H140	063-42		
117	20	5.6	12	15	51	20	117	20	5.6	212	20	4.8	11.680	-H320	063-42		
114	20	5.6	12	16	50	20	114	20	5.6	207	20	4.8	12.000	-H210	063-42		
108	21	5.2	12	17	48	21	108	21	5.2	196	21	4.4	12.640	-H140	063-42		
108	21	4.7	12	17	47	21	108	21	4.7	196	21	4.0	12.653	-H100	063-42		
107	22	1.8	11	17	47	22	107	22	1.8	193	22	1.5	12.833	-H45	063-42		

# g500-H helical geared motors

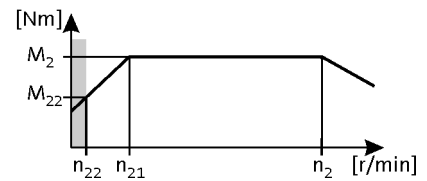


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]		n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c		
103	22	5.6	11	17	45	22	103	22	5.6	187	22	4.8	13.268	-H320	063-42		
100	23	5.2	11	18	44	23	100	23	5.2	181	23	4.4	13.673	-H210	063-42		
98	24	5.2	10	18	43	23	98	24	5.2	178	23	4.4	13.957	-H140	063-42		
95	24	4.1	10	19	41	24	95	24	4.1	171	24	3.5	14.490	-H100	063-42		
92	25	1.6	9.8	19	40	25	92	25	1.6	167	25	1.3	14.836	-H45	063-42		
92	25	5.2	9.7	19	40	25	92	25	5.2	167	25	4.4	14.898	-H320	063-42		
90	26	5.2	9.5	20	39	26	90	26	5.2	162	26	4.4	15.306	-H210	063-42		
88	26	3.8	9.4	20	39	26	88	26	3.8	160	26	3.3	15.500	-H100	063-42		
85	27	4.8	9.0	21	37	27	85	27	4.8	154	27	4.1	16.122	-H140	063-42		
82	28	1.5	8.7	22	36	28	82	28	1.5	149	28	1.4	16.660	-H45	063-42		
81	29	5.2	8.6	22	36	28	81	29	5.2	147	28	4.4	16.923	-H320	063-42		
77	30	3.3	8.2	23	34	30	77	30	3.3	140	30	2.8	17.750	-H100	063-42		
77	30	4.7	8.1	23	34	30	77	30	4.7	139	30	4.0	17.802	-H140	063-42		
72	32	1.3	7.6	25	32	32	72	32	1.3	130	32	1.3	19.013	-H45	063-42		
70	33	3.0	7.4	25	31	33	70	33	3.0	127	33	2.6	19.486	-H100	063-42		
69	33	4.2	7.3	26	30	33	69	33	4.2	126	33	3.6	19.750	-H140	063-42		
64	36	1.2	6.8	28	28	36	64	36	1.2	116	36	1.2	21.350	-H45	063-42		
63	37	4.3	6.7	28	28	37	63	37	4.3	114	37	3.7	21.802	-H210	063-42		
63	37	3.8	6.6	28	28	37	63	37	3.8	114	37	3.2	21.808	-H140	063-42		
61	38	2.7	6.5	29	27	38	61	38	2.7	111	38	2.3	22.314	-H100	063-42		
58	40	4.3	6.1	31	25	40	58	40	4.3	104	40	3.7	23.754	-H320	063-42		
56	41	4.3	5.9	32	25	41	56	41	4.3	102	41	3.7	24.405	-H210	063-42		
56	42	1.1	5.9	32	24	41	56	42	1.1	101	41	1.1	24.595	-H45	063-42		
55	42	3.3	5.8	32	24	42	55	42	3.3	100	42	2.8	24.829	-H140	063-42		
55	42	2.4	5.8	33	24	42	55	42	2.4	99	42	2.0	25.095	-H100	063-42		
51	46	4.3	5.4	35	22	45	51	46	4.3	92	45	4.2	26.983	-H320	063-42		
51	46	3.7	5.3	35	22	46	51	46	3.7	91	46	3.5	27.119	-H210	063-42		
50	46	3.0	5.3	36	22	46	50	46	3.0	91	46	2.9	27.415	-H140	063-42		
50	47	1.0	5.3	36	22	46	50	47	1.0	90	46	0.9	27.618	-H45	063-42		
48	49	2.1	5.0	37	21	48	48	49	2.1	86	48	2.0	28.738	-H100	063-42		
46	50	3.7	4.9	39	20	50	46	50	3.7	84	50	3.5	29.548	-H320	063-42		
45	51	3.7	4.8	40	20	51	45	51	3.7	82	51	3.5	30.357	-H210	063-42		
43	54	1.9	4.6	41	19	53	43	54	1.9	78	53	1.8	31.805	-H100	063-42		
43	54	2.6	4.5	42	19	54	43	54	2.6	78	54	2.5	31.976	-H140	063-42		
43	54	0.8	4.5	42	19	54	43	54	0.8				32.000	-H45	063-42		

# g500-H helical geared motors

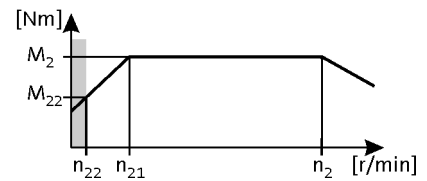


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
41	57	3.7	4.3	44	18	56	41	57	3.7	74	56	3.5	33.564	-H320	063-42	
39	59	3.3	4.1	46	17	59	39	59	3.3	71	59	3.2	35.095	-H210	063-42	
39	60	2.4	4.1	46	17	59	39	60	2.4	70	59	2.3	35.308	-H140	063-42	
38	60	3.7	4.1	47	17	60	38	60	3.7	70	60	3.5	35.689	-H450	063-42	
38	62	1.6	4.0	47	17	61	38	62	1.6	68	61	1.6	36.422	-H100	063-42	
36	65	3.3	3.8	50	16	64	36	65	3.3	65	64	3.2	38.238	-H320	063-42	
35	66	3.2	3.7	51	15	66	35	66	3.2	63	66	3.1	39.286	-H210	063-42	
34	67	1.2	3.6	52	15	67	34	67	1.2	62	67	1.2	39.857	-H100	063-42	
34	68	3.7	3.6	53	15	68	34	68	3.7	62	68	3.7	40.333	-H450	063-42	
34	69	2.0	3.6	53	15	68	34	69	2.0	61	68	2.1	40.526	-H140	063-42	
34	69	3.7	3.6	53	15	68	34	69	3.7	61	68	3.7	40.578	-H600	063-42	
32	72	2.5	3.4	55	14	72	32	72	2.5	58	72	2.6	42.593	-H210	063-42	
32	73	3.2	3.3	56	14	73	32	73	3.2	57	73	3.2	43.313	-H450	063-42	
32	73	3.3	3.3	57	14	73	32	73	3.3	57	73	3.3	43.436	-H320	063-42	
31	76	1.9	3.2	58	13	75	31	76	1.9	55	75	1.9	44.748	-H140	063-42	
30	77	3.7	3.2	59	13	77	30	77	3.7	54	77	3.7	45.571	-H600	063-42	
30	77	1.2	3.2	59	13	77	30	77	1.2	54	77	1.2	45.643	-H100	063-42	
30	78	2.8	3.1	60	13	78	30	78	2.8	53	78	2.8	46.407	-H320	063-42	
29	81	2.6	3.0	62	13	80	29	81	2.6	52	80	2.6	47.679	-H210	063-42	
28	83	3.2	3.0	64	12	82	28	83	3.2	51	82	3.2	48.950	-H450	063-42	
28	83	3.2	2.9	64	12	83	28	83	3.2	50	83	3.2	49.247	-H600	063-42	
27	86	1.2	2.9	66	12	85	27	86	1.2	49	85	1.2	50.786	-H140	063-42	
26	89	2.8	2.8	69	11	89	26	89	2.8	47	89	2.8	52.715	-H320	063-42	
25	92	1.4	2.7	71	11	92	25	92	1.4	46	92	1.4	54.438	-H210	063-42	
25	93	2.6	2.6	71	11	92	25	93	2.6	45	92	2.6	54.750	-H450	063-42	
25	94	3.2	2.6	72	11	93	25	94	3.2	45	93	3.2	55.307	-H600	063-42	
24	95	1.2	2.6	73	11	94	24	95	1.2	44	94	1.2	56.077	-H140	063-42	
23	103	1.4	2.4	79	9.8	102	23	103	1.4	41	102	1.4	60.938	-H210	063-42	
22	105	2.6	2.3	81	9.7	104	22	105	2.6	40	104	2.6	61.875	-H450	063-42	
22	105	2.6	2.3	81	9.6	105	22	105	2.6	40	105	2.6	62.250	-H600	063-42	
20	118	2.6	2.1	91	8.6	118	20	118	2.6	36	118	2.6	69.911	-H600	063-42	

# g500-H helical geared motors

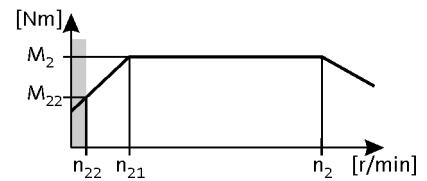


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]		n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c		
32	72	2.9	3.3	56	14	72	32	72	2.9	57	72	2.5	43.390	-H210	063-42		
31	73	5.6	3.3	56	14	72	31	73	5.6	57	72	4.8	43.676	-H600	063-42		
31	73	5.6	3.3	57	14	73	31	73	5.6	56	73	4.8	44.124	-H450	063-42		
29	79	4.1	3.1	61	13	78	29	79	4.1	53	78	3.9	47.276	-H320	063-42		
28	81	2.6	3.0	62	12	80	28	81	2.6	51	80	2.5	48.571	-H210	063-42		
28	82	5.6	3.0	63	12	81	28	82	5.6	51	81	5.4	49.051	-H600	063-42		
28	83	5.4	2.9	64	12	83	28	83	5.4	50	83	5.2	49.867	-H450	063-42		
26	89	3.6	2.7	69	11	89	26	89	3.6	46	89	3.5	53.703	-H320	063-42		
25	92	2.3	2.6	71	11	92	25	92	2.3	45	92	2.2	55.529	-H210	063-42		
25	93	5.2	2.6	71	11	92	25	93	5.2	45	92	5.1	55.710	-H600	063-42		
24	94	4.8	2.6	72	11	94	24	94	4.8	44	94	4.6	56.469	-H450	063-42		
23	101	3.2	2.4	78	9.9	100	23	101	3.2	41	100	3.1	60.502	-H320	063-42		
22	103	4.4	2.3	79	9.7	102	22	103	4.4	40	102	4.2	61.774	-H450	063-42		
22	104	2.0	2.3	80	9.7	103	22	104	2.0	40	103	2.0	62.160	-H210	063-42		
22	104	5.2	2.3	80	9.6	104	22	104	5.2	40	104	5.1	62.566	-H600	063-42		
20	114	2.8	2.1	88	8.7	114	20	114	2.8	36	114	2.7	68.726	-H320	063-42		
20	116	3.9	2.1	90	8.6	116	20	116	3.9	36	116	3.7	69.813	-H450	063-42		
19	118	1.8	2.0	91	8.4	118	19	118	1.8	35	118	1.7	71.026	-H210	063-42		
18	129	2.5	1.9	99	7.8	128	18	129	2.5	32	128	2.4	77.387	-H320	063-42		
17	131	3.4	1.8	101	7.6	130	17	131	3.4	32	130	3.3	78.794	-H450	063-42		
17	132	1.6	1.8	102	7.5	132	17	132	1.6	31	132	1.5	79.507	-H210	063-42		
16	146	2.2	1.6	113	6.8	146	16	146	2.2	28	146	2.2	87.906	-H320	063-42		
15	148	4.1	1.6	114	6.8	147	15	148	4.1	28	147	4.1	88.826	-H600	063-42		
15	148	3.0	1.6	114	6.7	147	15	148	3.0	28	147	3.1	89.048	-H450	063-42		
15	154	1.4	1.6	118	6.5	153	15	154	1.4	27	153	1.4	92.205	-H210	063-42		
14	161	2.8	1.5	124	6.2	160	14	161	2.8	26	160	2.8	96.522	-H450	063-42		
14	166	3.6	1.5	128	6.0	165	14	166	3.6	25	165	3.6	99.757	-H600	063-42		
14	167	1.9	1.4	129	6.0	166	14	167	1.9	25	166	1.9	100.462	-H320	063-42		
13	172	1.2	1.4	132	5.8	171	13	172	1.2	24	171	1.2	103.214	-H210	063-42		
13	182	2.5	1.3	140	5.5	181	13	182	2.5	23	181	2.5	109.083	-H450	063-42		
12	184	3.3	1.3	142	5.4	183	12	184	3.3	22	183	3.3	110.491	-H600	063-42		
12	190	1.7	1.3	146	5.3	189	12	190	1.7	22	189	1.7	114.118	-H320	063-42		
12	197	1.1	1.2	152	5.1	196	12	197	1.1	21	196	1.1	118.162	-H210	063-42		
11	202	2.2	1.2	156	4.9	201	11	202	2.2	20	201	2.2	121.342	-H450	063-42		
11	207	2.9	1.2	159	4.8	205	11	207	2.9	20	205	2.9	124.088	-H600	063-42		

# g500-H helical geared motors

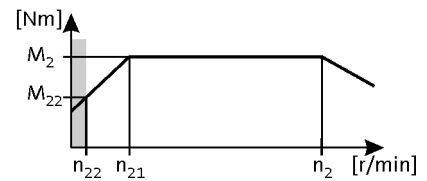


Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
87 Hz:  $P_N = 0.45$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
11	214	1.5	1.1	165	4.7	213	11	214	1.5	19	213	1.5	128.743	-H320	063-42	
10	220	1.0	1.1	170	4.5	219	10	220	1.0	19	219	1.0	132.270	-H210	063-42	
10	225	3.7	1.1	174	4.4	224	10	225	3.7	18	224	3.7	135.373	-H850	063-42	
10	228	2.0	1.1	176	4.4	227	10	228	2.0	18	227	2.0	137.133	-H450	063-42	
9.6	238	2.5	1.0	183	4.2	237	9.6	238	2.5	17	237	2.5	142.988	-H600	063-42	
9.4	244	1.3	1.0	188	4.1	242	9.4	244	1.3	17	242	1.3	146.244	-H320	063-42	
9.1	252	3.4	1.0	194	4.0	250	9.1	252	3.4	16	250	3.4	151.262	-H850	063-42	
9.0	255	0.8	0.9	196	3.9	253	9.0	255	0.8	16	253	0.8	152.853	-H210	063-42	
8.8	260	1.7	0.9	200	3.8	259	8.8	260	1.7	16	259	1.7	156.274	-H450	063-42	
8.5	267	2.2	0.9	206	3.7	266	8.5	267	2.2	15	266	2.3	160.585	-H600	063-42	
8.3	274	3.1	0.9	211	3.7	272	8.3	274	3.1	15	272	3.1	164.294	-H850	063-42	
8.2	277	1.2	0.9	214	3.6	276	8.2	277	1.2	15	276	1.2	166.541	-H320	063-42	
7.9	289	2.1	0.8	223	3.5	287	7.9	289	2.1	14	287	2.1	173.536	-H600	063-42	
7.8	294	1.5	0.8	227	3.4	292	7.8	294	1.5	14	292	1.5	176.611	-H450	063-42	
7.5	306	2.8	0.8	235	3.3	304	7.5	306	2.8	14	304	2.8	183.577	-H850	063-42	
7.2	315	1.0	0.8	243	3.2	313	7.2	315	1.0	13	313	1.0	189.179	-H320	063-42	
7.0	325	1.9	0.7	250	3.1	323	7.0	325	1.9	13	323	1.9	194.892	-H600	063-42	
6.9	330	1.4	0.7	254	3.0	328	6.9	330	1.4	13	328	1.4	198.059	-H450	063-42	
6.6	346	2.5	0.7	266	2.9	344	6.6	346	2.5	12	344	2.5	207.675	-H850	063-42	
6.3	361	0.9	0.7	278	2.8	359	6.3	361	0.9	11	359	0.9	216.683	-H320	063-42	
6.2	369	1.4	0.7	284	2.7	367	6.2	369	1.4	11	367	1.4	221.794	-H600	063-42	
6.1	373	1.2	0.6	287	2.7	371	6.1	373	1.2	11	371	1.2	223.833	-H450	063-42	
5.9	386	2.2	0.6	298	2.6	384	5.9	386	2.2	11	384	2.2	232.050	-H850	063-42	
5.5	413	1.1	0.6	318	2.4	411	5.5	413	1.1	10	411	1.1	248.200	-H450	063-42	
5.5	415	1.4	0.6	319	2.4	412	5.5	415	1.4	10	412	1.4	249.089	-H600	063-42	
4.9	467	1.0	0.5	360	2.1	464	4.9	467	1.0	8.8	464	1.0	280.500	-H450	063-42	



# g500-H helical geared motors

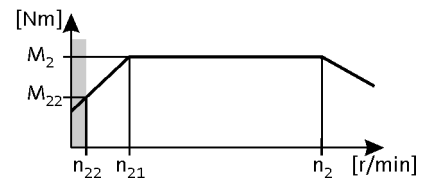


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
543	6.0	2.9	56	4.9	231	6.0	543	6.0	2.9	970	6.0	2.4	2.597	-H45	071-32	
432	8.0	4.9	44	6.1	184	8.0	432	8.0	4.9	771	8.0	4.1	3.267	-H140	071-32	
420	8.0	4.9	43	6.3	179	8.0	420	8.0	4.9	751	8.0	4.1	3.354	-H100	071-32	
413	8.0	2.3	43	6.4	176	8.0	413	8.0	2.3	738	8.0	1.9	3.413	-H45	071-32	
323	11	2.0	33	8.2	137	11	323	11	2.0	577	11	1.7	4.368	-H45	071-32	
315	11	4.9	32	8.4	134	11	315	11	4.9	563	11	4.1	4.480	-H140	071-32	
307	11	4.9	32	8.6	130	11	307	11	4.9	548	11	4.1	4.600	-H100	071-32	
273	13	4.9	28	9.7	116	13	273	13	4.9	488	13	4.1	5.167	-H100	071-32	
265	13	2.1	27	9.9	113	13	265	13	2.1	474	13	1.8	5.312	-H45	071-32	
246	14	4.5	25	11	105	14	246	14	4.5	440	14	3.8	5.733	-H140	071-32	
240	14	4.5	25	11	102	14	240	14	4.5	428	14	3.8	5.887	-H100	071-32	
236	15	2.0	24	11	101	14	236	15	2.0	422	14	1.7	5.965	-H45	071-32	
225	15	4.5	23	12	96	15	225	15	4.5	402	15	3.8	6.272	-H140	071-32	
219	16	4.5	23	12	93	16	219	16	4.5	391	16	3.8	6.440	-H100	071-32	
202	17	1.8	21	13	86	17	202	17	1.8	361	17	1.5	6.982	-H45	071-32	
199	17	4.9	21	13	85	17	199	17	4.9	356	17	4.1	7.086	-H100	071-32	
194	18	4.9	20	14	83	18	194	18	4.9	347	18	4.1	7.269	-H140	071-32	
180	19	1.7	19	15	77	19	180	19	1.7	321	19	1.4	7.840	-H45	071-32	
176	19	4.2	18	15	75	19	176	19	4.2	315	19	3.5	8.000	-H140	071-32	
172	20	4.2	18	15	73	20	172	20	4.2	307	20	3.5	8.214	-H100	071-32	
158	22	1.5	16	17	67	22	158	22	1.5	282	22	1.3	8.935	-H45	071-32	
156	22	4.9	16	17	67	22	156	22	4.9	279	22	4.1	9.029	-H140	071-32	
156	22	4.4	16	17	66	22	156	22	4.4	278	22	3.7	9.068	-H100	071-32	
144	24	3.7	15	18	61	24	144	24	3.7	257	24	3.2	9.800	-H140	071-32	
141	24	1.4	15	19	60	24	141	24	1.4	251	24	1.2	10.033	-H45	071-32	
140	24	3.7	14	19	60	24	140	24	3.7	250	24	3.2	10.063	-H100	071-32	
132	26	4.9	14	20	56	26	132	26	4.9	235	26	4.1	10.720	-H210	071-32	
124	28	3.6	13	21	53	28	124	28	3.6	222	28	3.1	11.360	-H100	071-32	
123	28	1.3	13	21	53	28	123	28	1.3	221	28	1.1	11.429	-H45	071-32	
122	28	4.5	13	22	52	28	122	28	4.5	218	28	3.8	11.554	-H140	071-32	
121	28	4.9	12	22	51	28	121	28	4.9	216	28	4.1	11.680	-H320	071-32	
118	29	4.9	12	23	50	29	118	29	4.9	210	29	4.1	12.000	-H210	071-32	
112	31	4.3	12	24	48	31	112	31	4.3	199	31	3.6	12.640	-H140	071-32	
111	31	3.3	12	24	47	31	111	31	3.3	199	31	2.7	12.653	-H100	071-32	
110	31	1.2	11	24	47	31	110	31	1.2	196	31	1.0	12.833	-H45	071-32	

# g500-H helical geared motors

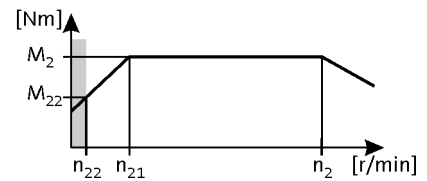


## Technical data

### Selection tables, 4-pole motors

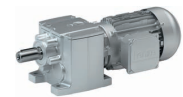
50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
106	32	4.9	11	25	45	32	106	32	4.9	190	32	4.1	13.268	-H320	071-32	
103	33	4.5	11	26	44	33	103	33	4.5	184	33	3.8	13.673	-H210	071-32	
101	34	4.0	10	26	43	34	101	34	4.0	181	34	3.4	13.957	-H140	071-32	
97	35	2.8	10	27	41	35	97	35	2.8	174	35	2.4	14.490	-H100	071-32	
95	36	1.1	9.8	28	40	36	95	36	1.1	170	36	0.9	14.836	-H45	071-32	
95	36	4.5	9.7	28	40	36	95	36	4.5	169	36	3.8	14.898	-H320	071-32	
92	37	4.5	9.5	29	39	37	92	37	4.5	165	37	3.8	15.306	-H210	071-32	
91	38	2.7	9.4	29	39	38	91	38	2.7	163	38	2.2	15.500	-H100	071-32	
88	39	3.6	9.0	30	37	39	88	39	3.6	156	39	3.0	16.122	-H140	071-32	
85	41	1.0	8.7	31	36	40	85	41	1.0	151	40	1.0	16.660	-H45	071-32	
83	41	4.5	8.6	32	36	41	83	41	4.5	149	41	3.8	16.923	-H320	071-32	
79	43	2.3	8.2	33	34	43	79	43	2.3	142	43	2.0	17.750	-H100	071-32	
79	43	3.2	8.1	33	34	43	79	43	3.2	142	43	2.7	17.802	-H140	071-32	
74	46	0.9	7.6	36	32	46	74	46	0.9	133	46	0.9	19.013	-H45	071-32	
72	47	2.1	7.4	37	31	47	72	47	2.1	129	47	1.8	19.486	-H100	071-32	
71	48	2.9	7.3	37	30	48	71	48	2.9	128	48	2.5	19.750	-H140	071-32	
66	52	0.9	6.8	40	28	52	66	52	0.9	118	52	0.8	21.350	-H45	071-32	
65	53	3.7	6.7	41	28	53	65	53	3.7	116	53	3.2	21.802	-H210	071-32	
65	53	2.6	6.6	41	28	53	65	53	2.6	116	53	2.2	21.808	-H140	071-32	
63	54	1.8	6.5	42	27	54	63	54	1.8	113	54	1.6	22.314	-H100	071-32	
59	58	3.7	6.1	45	25	58	59	58	3.7	106	58	3.2	23.754	-H320	071-32	
58	59	3.5	5.9	46	25	59	58	59	3.5	103	59	3.0	24.405	-H210	071-32	
57	60	2.3	5.8	47	24	60	57	60	2.3	102	60	2.0	24.829	-H140	071-32	
56	61	1.6	5.8	47	24	61	56	61	1.6	100	61	1.4	25.095	-H100	071-32	
52	66	3.7	5.4	51	22	65	52	66	3.7	93	65	3.6	26.983	-H320	071-32	
52	66	3.2	5.3	51	22	66	52	66	3.2	93	66	3.0	27.119	-H210	071-32	
51	67	2.1	5.3	51	22	67	51	67	2.1	92	67	2.0	27.415	-H140	071-32	
49	70	1.4	5.0	54	21	70	49	70	1.4	88	70	1.4	28.738	-H100	071-32	
48	72	3.2	4.9	55	20	72	48	72	3.2	85	72	3.0	29.548	-H320	071-32	
46	74	2.9	4.8	57	20	74	46	74	2.9	83	74	2.7	30.357	-H210	071-32	
44	77	1.3	4.6	60	19	77	44	77	1.3	79	77	1.2	31.805	-H100	071-32	
44	78	1.8	4.5	60	19	78	44	78	1.8	79	78	1.7	31.976	-H140	071-32	
42	82	3.2	4.3	63	18	81	42	82	3.2	75	81	3.0	33.564	-H320	071-32	
40	85	2.5	4.1	66	17	85	40	85	2.5	72	85	2.4	35.095	-H210	071-32	
40	86	1.6	4.1	66	17	86	40	86	1.6	71	86	1.6	35.308	-H140	071-32	

# g500-H helical geared motors

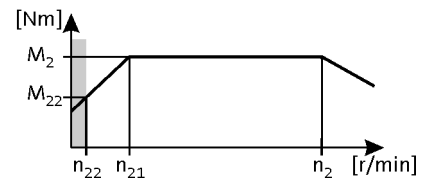


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]		n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c		
40	87	3.2	4.1	67	17	87	40	87	3.2	71	87	3.0	35.689	-H450	071-32		
39	89	1.1	4.0	68	17	88	39	89	1.1	69	88	1.1	36.422	-H100	071-32		
37	93	2.7	3.8	72	16	93	37	93	2.7	66	93	2.6	38.238	-H320	071-32		
36	96	2.2	3.7	74	15	95	36	96	2.2	64	95	2.1	39.286	-H210	071-32		
35	97	1.0	3.6	75	15	97	35	97	1.0	63	97	1.0	39.857	-H100	071-32		
35	98	3.2	3.6	76	15	98	35	98	3.2	63	98	3.2	40.333	-H450	071-32		
35	99	1.4	3.6	76	15	98	35	99	1.4	62	98	1.4	40.526	-H140	071-32		
35	99	3.2	3.6	76	15	98	35	99	3.2	62	98	3.2	40.578	-H600	071-32		
33	104	1.8	3.4	80	14	103	33	104	1.8	59	103	1.8	42.593	-H210	071-32		
33	105	2.8	3.3	81	14	105	33	105	2.8	58	105	2.8	43.313	-H450	071-32		
33	106	2.7	3.3	81	14	105	33	106	2.7	58	105	2.7	43.436	-H320	071-32		
32	109	1.3	3.2	84	13	109	32	109	1.3	56	109	1.3	44.748	-H140	071-32		
31	111	3.2	3.2	85	13	111	31	111	3.2	55	111	3.2	45.571	-H600	071-32		
31	111	0.9	3.2	85	13	111	31	111	0.9	55	111	0.9	45.643	-H100	071-32		
30	113	1.9	3.1	87	13	113	30	113	1.9	54	113	1.9	46.407	-H320	071-32		
30	116	1.8	3.0	89	13	116	30	116	1.8	53	116	1.8	47.679	-H210	071-32		
29	119	2.8	3.0	92	12	119	29	119	2.8	52	119	2.8	48.950	-H450	071-32		
29	120	2.8	2.9	92	12	119	29	120	2.8	51	119	2.8	49.247	-H600	071-32		
28	123	1.1	2.9	95	12	123	28	123	1.1	50	123	1.1	50.786	-H140	071-32		
27	128	1.9	2.8	99	11	128	27	128	1.9	48	128	1.9	52.715	-H320	071-32		
26	132	1.0	2.7	102	11	132	26	132	1.0	46	132	1.0	54.438	-H210	071-32		
26	133	2.1	2.6	103	11	133	26	133	2.1	46	133	2.1	54.750	-H450	071-32		
26	134	2.8	2.6	104	11	134	26	134	2.8	46	134	2.8	55.307	-H600	071-32		
25	136	1.0	2.6	105	11	136	25	136	1.0	45	136	1.0	56.077	-H140	071-32		
23	148	1.1	2.4	114	9.8	148	23	148	1.1	41	148	1.1	60.938	-H210	071-32		
23	150	2.0	2.3	116	9.7	150	23	150	2.0	41	150	2.0	61.875	-H450	071-32		
23	151	2.2	2.3	117	9.6	151	23	151	2.2	41	151	2.3	62.250	-H600	071-32		
20	170	2.2	2.1	131	8.6	170	20	170	2.2	36	170	2.3	69.911	-H600	071-32		

### 3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]		n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c		
33	104	2.0	3.3	80	14	104	33	104	2.0	58	104	1.7	43.390	-H210	071-32		
32	105	4.9	3.3	81	14	104	32	105	4.9	58	104	4.1	43.676	-H600	071-32		
32	106	4.3	3.3	81	14	105	32	106	4.3	57	105	3.6	44.124	-H450	071-32		
30	113	2.8	3.1	87	13	113	30	113	2.8	53	113	2.7	47.276	-H320	071-32		
29	116	1.8	3.0	90	12	116	29	116	1.8	52	116	1.7	48.571	-H210	071-32		
29	117	4.9	3.0	90	12	117	29	117	4.9	51	117	4.7	49.051	-H600	071-32		
28	119	3.8	2.9	92	12	119	28	119	3.8	51	119	3.6	49.867	-H450	071-32		

# g500-H helical geared motors

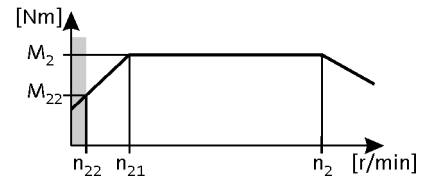


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
26	129	2.5	2.7	99	11	128	26	129	2.5	47	128	2.4	53.703	-H320	071-32	
25	133	1.6	2.6	102	11	133	25	133	1.6	45	133	1.5	55.529	-H210	071-32	
25	133	4.5	2.6	103	11	133	25	133	4.5	45	133	4.3	55.710	-H600	071-32	
25	135	3.3	2.6	104	11	135	25	135	3.3	45	135	3.2	56.469	-H450	071-32	
23	145	2.2	2.4	112	9.9	145	23	145	2.2	42	145	2.1	60.502	-H320	071-32	
23	148	3.0	2.3	114	9.7	148	23	148	3.0	41	148	2.9	61.774	-H450	071-32	
23	149	1.4	2.3	115	9.7	149	23	149	1.4	41	149	1.4	62.160	-H210	071-32	
23	150	4.0	2.3	115	9.6	150	23	150	4.0	40	150	3.8	62.566	-H600	071-32	
21	165	1.9	2.1	127	8.7	164	21	165	1.9	37	164	1.9	68.726	-H320	071-32	
20	167	2.7	2.1	129	8.6	167	20	167	2.7	36	167	2.6	69.813	-H450	071-32	
20	170	1.2	2.0	131	8.4	170	20	170	1.2	36	170	1.2	71.026	-H210	071-32	
18	185	1.7	1.9	143	7.8	185	18	185	1.7	33	185	1.7	77.387	-H320	071-32	
18	189	2.4	1.8	145	7.6	188	18	189	2.4	32	188	2.3	78.794	-H450	071-32	
18	190	1.1	1.8	147	7.5	190	18	190	1.1	32	190	1.1	79.507	-H210	071-32	
16	211	1.5	1.6	162	6.8	210	16	211	1.5	29	210	1.5	87.906	-H320	071-32	
16	213	2.8	1.6	164	6.8	212	16	213	2.8	28	212	2.8	88.826	-H600	071-32	
16	213	2.1	1.6	164	6.7	213	16	213	2.1	28	213	2.1	89.048	-H450	071-32	
15	221	1.0	1.6	170	6.5	220	15	221	1.0	27	220	1.0	92.205	-H210	071-32	
15	231	2.0	1.5	178	6.2	231	15	231	2.0	26	231	2.0	96.522	-H450	071-32	
14	239	2.5	1.5	184	6.0	238	14	239	2.5	25	238	2.5	99.757	-H600	071-32	
14	241	1.3	1.4	185	6.0	240	14	241	1.3	25	240	1.3	100.462	-H320	071-32	
14	247	0.9	1.4	190	5.8	247	14	247	0.9	24	247	0.9	103.214	-H210	071-32	
13	261	1.7	1.3	201	5.5	261	13	261	1.7	23	261	1.7	109.083	-H450	071-32	
13	265	2.3	1.3	204	5.4	264	13	265	2.3	23	264	2.3	110.491	-H600	071-32	
12	273	1.2	1.3	210	5.3	273	12	273	1.2	22	273	1.2	114.118	-H320	071-32	
12	291	1.6	1.2	224	4.9	290	12	291	1.6	21	290	1.6	121.342	-H450	071-32	
11	297	2.0	1.2	229	4.8	297	11	297	2.0	20	297	2.0	124.088	-H600	071-32	
11	308	1.0	1.1	237	4.7	308	11	308	1.0	20	308	1.0	128.743	-H320	071-32	
10	324	2.6	1.1	250	4.4	324	10	324	2.6	19	324	2.6	135.373	-H850	071-32	
10	328	1.4	1.1	253	4.4	328	10	328	1.4	18	328	1.4	137.133	-H450	071-32	
9.9	342	1.8	1.0	264	4.2	342	9.9	342	1.8	18	342	1.8	142.988	-H600	071-32	
9.6	350	0.9	1.0	270	4.1	350	9.6	350	0.9	17	350	0.9	146.244	-H320	071-32	
9.3	362	2.4	1.0	279	4.0	362	9.3	362	2.4	17	362	2.4	151.262	-H850	071-32	
9.0	374	1.2	0.9	288	3.8	374	9.0	374	1.2	16	374	1.2	156.274	-H450	071-32	
8.8	385	1.6	0.9	296	3.7	384	8.8	385	1.6	16	384	1.6	160.585	-H600	071-32	

# g500-H helical geared motors

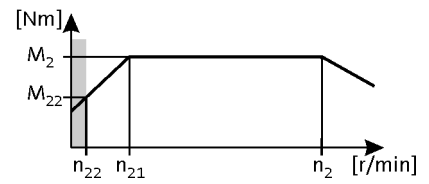
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
87 Hz:  $P_N = 0.66$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c				
8.6	393	2.2	0.9	303	3.7	393	8.6	393	2.2	15	393	2.2	164.294	-H850	071-32	
8.1	416	1.4	0.8	320	3.5	415	8.1	416	1.4	15	415	1.5	173.536	-H600	071-32	
8.0	423	1.1	0.8	326	3.4	422	8.0	423	1.1	14	422	1.1	176.611	-H450	071-32	
7.7	440	1.9	0.8	339	3.3	439	7.7	440	1.9	14	439	1.9	183.577	-H850	071-32	
7.2	467	1.3	0.7	359	3.1	466	7.2	467	1.3	13	466	1.3	194.892	-H600	071-32	
7.1	474	1.0	0.7	365	3.0	473	7.1	474	1.0	13	473	1.0	198.059	-H450	071-32	
6.8	497	1.7	0.7	383	2.9	496	6.8	497	1.7	12	496	1.7	207.675	-H850	071-32	
6.4	531	1.1	0.7	409	2.7	530	6.4	531	1.1	11	530	1.1	221.794	-H600	071-32	
6.3	536	0.8	0.6	413	2.7	535	6.3	536	0.8	11	535	0.8	223.833	-H450	071-32	
6.1	556	1.5	0.6	428	2.6	555	6.1	556	1.5	11	555	1.5	232.050	-H850	071-32	
5.7	597	1.0	0.6	459	2.4	595	5.7	597	1.0	10	595	1.0	249.089	-H600	071-32	

# g500-H helical geared motors

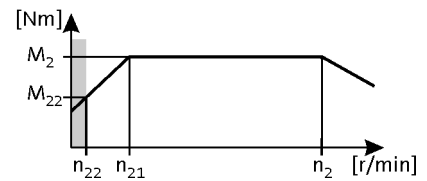


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
541	9.0	1.9	56	7.3	231	10	541	9.0	1.9	968	10	1.6	2.597	-H45	071-42	
430	12	4.5	44	9.1	184	12	430	12	4.5	770	12	3.8	3.267	-H140	071-42	
419	12	4.5	43	9.4	179	12	419	12	4.5	750	12	3.8	3.354	-H100	071-42	
415	12	5.1	43	9.5	177	12	415	12	5.1	742	12	4.3	3.389	-H210	071-42	
415	12	5.1	43	9.5	177	12	415	12	5.1	742	12	4.3	3.389	-H320	071-42	
412	12	1.5	43	9.5	176	12	412	12	1.5	737	13	1.3	3.413	-H45	071-42	
322	16	1.3	33	12	137	16	322	16	1.3	576	16	1.1	4.368	-H45	071-42	
314	16	4.5	32	13	134	16	314	16	4.5	561	17	3.8	4.480	-H140	071-42	
305	17	4.3	32	13	130	17	305	17	4.3	547	17	3.6	4.600	-H100	071-42	
272	19	4.0	28	14	116	19	272	19	4.0	487	19	3.3	5.167	-H100	071-42	
265	19	1.4	27	15	113	19	265	19	1.4	473	20	1.2	5.312	-H45	071-42	
252	20	5.1	26	16	108	20	252	20	5.1	450	21	4.3	5.583	-H210	071-42	
245	21	4.2	25	16	105	21	245	21	4.2	439	21	3.5	5.733	-H140	071-42	
239	21	3.8	25	16	102	21	239	21	3.8	427	22	3.1	5.887	-H100	071-42	
236	22	1.3	24	17	101	22	236	22	1.3	422	22	1.1	5.965	-H45	071-42	
231	22	5.1	24	17	99	22	231	22	5.1	413	22	4.3	6.083	-H320	071-42	
225	23	5.1	23	18	96	23	225	23	5.1	402	23	4.3	6.250	-H210	071-42	
224	23	4.2	23	18	96	23	224	23	4.2	401	23	3.5	6.272	-H140	071-42	
218	23	3.6	23	18	93	23	218	23	3.6	391	24	2.9	6.440	-H100	071-42	
203	25	5.1	21	19	87	25	203	25	5.1	364	25	4.3	6.910	-H320	071-42	
201	25	1.2	21	20	86	25	201	25	1.2	360	26	1.0	6.982	-H45	071-42	
198	26	3.4	21	20	85	26	198	26	3.4	355	26	2.8	7.086	-H100	071-42	
193	26	4.0	20	20	83	26	193	26	4.0	346	27	3.3	7.269	-H140	071-42	
179	28	1.1	19	22	77	28	179	28	1.1	321	29	0.9	7.840	-H45	071-42	
176	29	3.8	18	22	75	29	176	29	3.8	314	29	3.2	8.000	-H140	071-42	
171	30	3.1	18	23	73	30	171	30	3.1	306	30	2.6	8.214	-H100	071-42	
157	32	1.0	16	25	67	32	157	32	1.0	282	33	0.8	8.935	-H45	071-42	
156	33	3.6	16	25	67	33	156	33	3.6	279	33	3.0	9.029	-H140	071-42	
155	33	2.9	16	25	66	33	155	33	2.9	277	33	2.4	9.068	-H100	071-42	
143	36	4.5	15	27	61	36	143	36	4.5	257	36	3.7	9.799	-H210	071-42	
143	36	3.4	15	27	61	36	143	36	3.4	257	36	2.8	9.800	-H140	071-42	
140	36	1.0	15	28	60	36	140	36	1.0				10.033	-H45	071-42	
140	36	2.7	14	28	60	36	140	36	2.7	250	37	2.3	10.063	-H100	071-42	
132	39	4.5	14	30	56	39	132	39	4.5	236	39	3.7	10.677	-H320	071-42	
131	39	4.5	14	30	56	39	131	39	4.5	235	39	3.8	10.720	-H210	071-42	

# g500-H helical geared motors

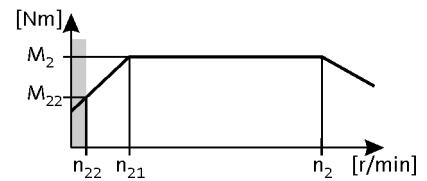


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
124	41	2.4	13	32	53	41	124	41	2.4	221	42	2.0	11.360	-H100	071-42	
123	41	0.8	13	32	53	41	123	41	0.8				11.429	-H45	071-42	
122	42	3.1	13	32	52	42	122	42	3.1	218	43	2.5	11.554	-H140	071-42	
120	42	4.5	12	33	51	42	120	42	4.5	215	43	3.8	11.680	-H320	071-42	
117	44	4.3	12	34	50	44	117	44	4.3	210	44	3.5	12.000	-H210	071-42	
116	44	4.5	12	34	50	44	116	44	4.5	207	45	3.7	12.128	-H320	071-42	
111	46	2.9	12	35	48	46	111	46	2.9	199	47	2.4	12.640	-H140	071-42	
111	46	2.2	12	35	47	46	111	46	2.2	199	47	1.8	12.653	-H100	071-42	
110	47	0.8	11	36	47	47	110	47	0.8				12.833	-H45	071-42	
106	48	4.5	11	37	45	48	106	48	4.5	190	49	3.8	13.268	-H320	071-42	
103	50	4.1	11	38	44	50	103	50	4.1	184	50	3.4	13.673	-H210	071-42	
101	50	4.5	10	39	43	50	101	50	4.5	181	51	3.7	13.905	-H450	071-42	
101	51	2.7	10	39	43	51	101	51	2.7	180	51	2.2	13.957	-H140	071-42	
97	53	1.9	10	41	41	53	97	53	1.9	174	53	1.6	14.490	-H100	071-42	
94	54	4.2	9.7	42	40	54	94	54	4.2	169	55	3.5	14.898	-H320	071-42	
92	56	3.6	9.5	43	39	56	92	56	3.6	164	56	3.0	15.306	-H210	071-42	
91	56	1.8	9.4	43	39	56	91	56	1.8	162	57	1.5	15.500	-H100	071-42	
89	57	4.5	9.2	44	38	57	89	57	4.5	160	58	3.7	15.714	-H450	071-42	
89	57	4.5	9.2	44	38	57	89	57	4.5	159	58	3.7	15.810	-H600	071-42	
87	58	2.4	9.0	45	37	58	87	58	2.4	156	59	2.0	16.122	-H140	071-42	
84	61	3.5	8.7	47	36	61	84	61	3.5	150	62	2.9	16.750	-H210	071-42	
83	61	4.2	8.6	47	36	61	83	61	4.2	149	62	3.5	16.923	-H320	071-42	
79	64	1.6	8.2	50	34	64	79	64	1.6	142	65	1.3	17.750	-H100	071-42	
79	64	4.5	8.2	50	34	64	79	64	4.5	142	65	3.7	17.755	-H600	071-42	
79	65	2.2	8.1	50	34	65	79	65	2.2	141	66	1.8	17.802	-H140	071-42	
77	66	3.7	7.9	51	33	66	77	66	3.7	138	67	3.1	18.250	-H320	071-42	
75	68	3.1	7.7	52	32	68	75	68	3.1	134	69	2.6	18.750	-H210	071-42	
72	71	1.4	7.4	54	31	71	72	71	1.4	129	72	1.2	19.486	-H100	071-42	
71	72	2.0	7.3	55	30	72	71	72	2.0	127	73	1.6	19.750	-H140	071-42	
68	75	3.7	7.0	58	29	75	68	75	3.7	121	76	3.1	20.731	-H320	071-42	
64	79	2.7	6.7	61	28	79	64	79	2.7	115	80	2.2	21.802	-H210	071-42	
64	79	1.8	6.6	61	28	79	64	79	1.8	115	80	1.5	21.808	-H140	071-42	
63	80	3.7	6.5	62	27	80	63	80	3.7	113	82	3.1	22.170	-H450	071-42	
63	81	1.2	6.5	62	27	81	63	81	1.2	113	82	1.0	22.314	-H100	071-42	
59	86	3.4	6.1	66	25	86	59	86	3.4	106	88	2.8	23.754	-H320	071-42	

# g500-H helical geared motors

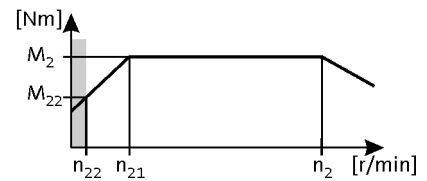


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
58	89	2.4	5.9	68	25	89	58	89	2.4	103	90	2.0	24.405	-H210	071-42	
57	90	1.6	5.8	69	24	90	57	90	1.6	101	91	1.3	24.829	-H140	071-42	
56	91	3.7	5.8	70	24	91	56	91	3.7	100	92	3.1	25.056	-H450	071-42	
56	91	1.1	5.8	70	24	91	56	91	1.1	100	92	0.9	25.095	-H100	071-42	
56	91	3.7	5.8	70	24	91	56	91	3.7	100	93	3.1	25.207	-H600	071-42	
52	98	3.3	5.4	75	22	98	52	98	3.3	93	99	3.1	26.983	-H320	071-42	
52	98	2.1	5.3	76	22	100	52	98	2.1	93	100	2.0	27.119	-H210	071-42	
51	99	1.4	5.3	77	22	101	51	99	1.4	92	101	1.3	27.415	-H140	071-42	
51	100	3.2	5.3	77	22	100	51	100	3.2	91	102	3.0	27.578	-H450	071-42	
50	103	3.7	5.1	79	21	103	50	103	3.7	89	104	3.5	28.310	-H600	071-42	
49	104	1.0	5.0	80	21	104	49	104	1.0	88	106	0.9	28.738	-H100	071-42	
48	107	2.9	4.9	83	20	107	48	107	2.9	85	109	2.7	29.548	-H320	071-42	
46	110	1.9	4.8	85	20	110	46	110	1.9	83	112	1.8	30.357	-H210	071-42	
45	113	3.2	4.7	87	19	113	45	113	3.2	81	115	3.0	31.167	-H450	071-42	
45	114	3.2	4.6	88	19	114	45	114	3.2	80	116	3.0	31.356	-H600	071-42	
44	116	1.2	4.5	89	19	116	44	116	1.2	79	118	1.1	31.976	-H140	071-42	
42	122	2.6	4.3	94	18	122	42	122	2.6	75	124	2.5	33.564	-H320	071-42	
40	127	1.7	4.1	98	17	127	40	127	1.7	72	129	1.6	35.095	-H210	071-42	
40	128	3.2	4.1	98	17	128	40	128	3.2	71	130	3.0	35.214	-H600	071-42	
40	128	1.1	4.1	99	17	128	40	128	1.1	71	130	1.0	35.308	-H140	071-42	
39	129	2.9	4.1	100	17	129	39	129	2.9	71	131	2.7	35.689	-H450	071-42	
38	135	3.2	3.9	104	16	135	38	135	3.2	68	137	3.0	37.190	-H850	071-42	
37	139	1.8	3.8	107	16	139	37	139	1.8	66	141	1.7	38.238	-H320	071-42	
36	142	1.5	3.7	110	15	142	36	142	1.5	64	145	1.4	39.286	-H210	071-42	
35	146	2.9	3.6	113	15	146	35	146	2.9	62	149	2.8	40.333	-H450	071-42	
35	147	2.9	3.6	113	15	147	35	147	2.9	62	149	2.8	40.578	-H600	071-42	
34	151	3.2	3.5	116	14	151	34	151	3.2	61	153	3.1	41.556	-H850	071-42	
33	154	1.2	3.4	119	14	154	33	154	1.2	59	157	1.2	42.593	-H210	071-42	
32	157	2.1	3.3	121	14	157	32	157	2.1	58	160	2.0	43.313	-H450	071-42	
32	158	1.8	3.3	121	14	158	32	158	1.8	58	160	1.8	43.436	-H320	071-42	
31	164	2.8	3.2	126	13	164	31	164	2.8	56	166	2.7	45.136	-H850	071-42	
31	165	2.9	3.2	127	13	165	31	165	2.9	55	168	2.8	45.571	-H600	071-42	
30	168	1.3	3.1	130	13	168	30	168	1.3	54	171	1.3	46.407	-H320	071-42	
30	173	1.2	3.0	133	13	173	30	173	1.2	53	176	1.2	47.679	-H210	071-42	
29	178	2.1	3.0	137	12	178	29	178	2.1	51	180	2.0	48.950	-H450	071-42	



# g500-H helical geared motors

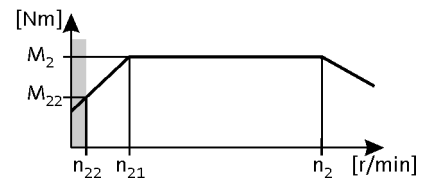


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
29	179	2.4	2.9	138	12	179	29	179	2.4	51	181	2.4	49.247	-H600	071-42	
28	183	2.8	2.9	141	12	183	28	183	2.8	50	186	2.7	50.433	-H850	071-42	
27	191	1.3	2.8	147	11	191	27	191	1.3	48	194	1.3	52.715	-H320	071-42	
26	199	1.4	2.6	153	11	199	26	199	1.4	46	202	1.3	54.750	-H450	071-42	
25	201	2.4	2.6	155	11	201	25	201	2.4	46	204	2.4	55.307	-H600	071-42	
23	224	1.4	2.3	173	9.7	224	23	224	1.4	41	228	1.3	61.875	-H450	071-42	
23	226	1.4	2.3	174	9.6	226	23	226	1.4	40	229	1.3	62.250	-H600	071-42	
20	254	1.4	2.1	195	8.6	254	20	254	1.4	36	258	1.3	69.911	-H600	071-42	

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
35	143	4.2	3.6	110	15	143	35	143	4.2	63	145	3.5	39.925	-H600	071-42	
32	155	1.4	3.3	119	14	155	32	155	1.4	58	157	1.1	43.390	-H210	071-42	
32	156	3.9	3.3	120	14	156	32	156	3.9	58	158	3.2	43.676	-H600	071-42	
32	158	2.9	3.3	121	14	158	32	158	2.9	57	160	2.4	44.124	-H450	071-42	
30	169	1.9	3.1	130	13	169	30	169	1.9	53	172	1.8	47.276	-H320	071-42	
29	174	1.2	3.0	134	12	174	29	174	1.2	52	176	1.1	48.571	-H210	071-42	
29	175	3.4	3.0	135	12	175	29	175	3.4	51	178	3.2	49.051	-H600	071-42	
28	178	2.5	2.9	137	12	178	28	178	2.5	50	181	2.4	49.867	-H450	071-42	
27	188	4.5	2.7	145	11	188	27	188	4.5	48	191	4.2	52.743	-H850	071-42	
26	192	1.7	2.7	148	11	192	26	192	1.7	47	195	1.6	53.703	-H320	071-42	
25	198	1.1	2.6	153	11	198	25	198	1.1	45	201	1.0	55.529	-H210	071-42	
25	199	3.0	2.6	153	11	199	25	199	3.0	45	202	2.8	55.710	-H600	071-42	
25	202	2.2	2.6	155	11	202	25	202	2.2	45	205	2.1	56.469	-H450	071-42	
24	211	4.0	2.5	162	10	211	24	211	4.0	43	214	3.8	58.933	-H850	071-42	
23	216	1.5	2.4	166	9.9	216	23	216	1.5	42	220	1.4	60.502	-H320	071-42	
23	221	2.0	2.3	170	9.7	221	23	221	2.0	41	224	1.9	61.774	-H450	071-42	
23	222	1.0	2.3	171	9.7	222	23	222	1.0	41	226	0.9	62.160	-H210	071-42	
23	224	2.7	2.3	172	9.6	224	23	224	2.7	40	227	2.5	62.566	-H600	071-42	
21	244	2.5	2.1	188	8.8	244	21	244	2.5	37	248	2.3	68.244	-H600	071-42	
20	246	1.3	2.1	189	8.7	246	20	246	1.3	37	249	1.2	68.726	-H320	071-42	
20	249	1.8	2.1	192	8.6	249	20	249	1.8	36	253	1.7	69.813	-H450	071-42	
20	254	0.8	2.0	195	8.4	254	20	254	0.8				71.026	-H210	071-42	
18	274	2.2	1.9	211	7.8	274	18	274	2.2	33	278	2.1	76.643	-H600	071-42	
18	276	1.2	1.9	213	7.8	276	18	276	1.2	33	281	1.1	77.387	-H320	071-42	
18	281	1.6	1.8	217	7.6	281	18	281	1.6	32	286	1.5	78.794	-H450	071-42	
17	300	2.8	1.7	231	7.1	300	17	300	2.8	30	305	2.8	84.096	-H850	071-42	
16	314	1.0	1.6	242	6.8	314	16	314	1.0	29	319	1.0	87.906	-H320	071-42	

# g500-H helical geared motors

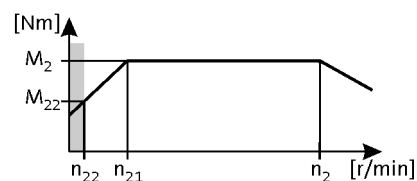


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55$  kW  
 87 Hz:  $P_N = 1.0$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
16	317	1.9	1.6	244	6.8	317	16	317	1.9	28	322	1.9	88.826	-H600	071-42	
16	318	1.4	1.6	245	6.7	318	16	318	1.4	28	323	1.4	89.048	-H450	071-42	
15	336	2.5	1.5	259	6.4	336	15	336	2.5	27	341	2.5	93.966	-H850	071-42	
15	345	1.3	1.5	266	6.2	345	15	345	1.3	26	350	1.3	96.522	-H450	071-42	
14	356	1.7	1.5	274	6.0	356	14	356	1.7	25	362	1.7	99.757	-H600	071-42	
14	359	0.9	1.4	276	6.0	359	14	359	0.9	25	365	0.9	100.462	-H320	071-42	
13	374	2.3	1.4	288	5.7	374	13	374	2.3	24	380	2.2	104.607	-H850	071-42	
13	390	1.2	1.3	300	5.5	390	13	390	1.2	23	396	1.1	109.083	-H450	071-42	
13	395	1.5	1.3	304	5.4	395	13	395	1.5	23	401	1.5	110.491	-H600	071-42	
12	418	2.0	1.2	322	5.1	418	12	418	2.0	22	424	2.0	116.884	-H850	071-42	
12	433	1.0	1.2	334	4.9	433	12	433	1.0	21	440	1.0	121.342	-H450	071-42	
11	443	1.4	1.2	341	4.8	443	11	443	1.4	20	450	1.3	124.088	-H600	071-42	
10	484	1.8	1.1	372	4.4	484	10	484	1.8	19	491	1.7	135.373	-H850	071-42	
10	490	0.9	1.1	377	4.4	490	10	490	0.9	18	498	0.9	137.133	-H450	071-42	
9.8	511	1.2	1.0	393	4.2	511	9.8	511	1.2	18	519	1.2	142.988	-H600	071-42	
9.3	540	1.6	1.0	416	4.0	540	9.3	540	1.6	17	549	1.6	151.262	-H850	071-42	
9.0	558	0.8	0.9	430	3.8	558	9.0	558	0.8				156.274	-H450	071-42	
8.7	574	1.1	0.9	442	3.7	574	8.7	574	1.1	16	583	1.0	160.585	-H600	071-42	
8.6	587	1.5	0.9	452	3.7	587	8.6	587	1.5	15	596	1.4	164.294	-H850	071-42	
8.1	620	1.0	0.8	477	3.5	620	8.1	620	1.0	15	630	1.0	173.536	-H600	071-42	
7.7	653	2.3	0.8	503	3.3	653	7.7	653	2.3	14	663	2.3	182.844	-H1500	071-42	
7.7	656	1.3	0.8	505	3.3	656	7.7	656	1.3	14	666	1.3	183.577	-H850	071-42	
7.2	696	0.9	0.7	536	3.1	696	7.2	696	0.9	13	707	0.9	194.892	-H600	071-42	
6.9	722	2.1	0.7	556	3.0	722	6.9	722	2.1	12	734	2.0	202.237	-H1500	071-42	
6.8	742	1.2	0.7	571	2.9	742	6.8	742	1.2	12	754	1.1	207.675	-H850	071-42	
6.3	793	1.9	0.7	610	2.7	793	6.3	793	1.9	11	805	1.9	221.907	-H1500	071-42	
6.1	829	1.0	0.6	638	2.6	829	6.1	829	1.0	11	842	1.0	232.050	-H850	071-42	
5.7	877	1.7	0.6	675	2.4	877	5.7	877	1.7	10	891	1.7	245.442	-H1500	071-42	
5.0	1002	1.5	0.5	772	2.1	1002	5.0	1002	1.5	9.0	1018	1.5	280.500	-H1500	071-42	
4.5	1108	1.4	0.5	853	1.9	1108	4.5	1108	1.4	8.1	1126	1.3	310.250	-H1500	071-42	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
442	16	4.3	3.267	-H140	40-P80/M4	
430	16	3.8	3.354	-H100	40-P80/M4	
426	16	4.8	3.389	-H320	40-P80/M4	
426	16	4.8	3.389	-H210	40-P80/M4	
322	22	4.3	4.480	-H140	40-P80/M4	
314	22	3.3	4.600	-H100	40-P80/M4	
279	25	3.0	5.167	-H100	40-P80/M4	
258	27	4.8	5.583	-H210	40-P80/M4	
252	28	3.7	5.733	-H140	40-P80/M4	
245	28	2.9	5.887	-H100	40-P80/M4	
237	29	4.8	6.083	-H320	40-P80/M4	
231	30	4.8	6.250	-H210	40-P80/M4	
230	30	3.5	6.272	-H140	40-P80/M4	
224	31	2.7	6.440	-H100	40-P80/M4	
209	33	4.8	6.910	-H320	40-P80/M4	
204	34	2.5	7.086	-H100	40-P80/M4	
199	35	3.0	7.269	-H140	40-P80/M4	
180	39	3.0	8.000	-H140	40-P80/M4	
176	40	2.3	8.214	-H100	40-P80/M4	
160	43	2.7	9.029	-H140	40-P80/M4	
159	44	2.2	9.068	-H100	40-P80/M4	
147	47	3.9	9.799	-H210	40-P80/M4	
147	47	2.7	9.800	-H140	40-P80/M4	
143	48	2.0	10.063	-H100	40-P80/M4	
135	51	4.2	10.677	-H320	40-P80/M4	
135	52	3.7	10.720	-H210	40-P80/M4	
127	55	1.8	11.360	-H100	40-P80/M4	
125	56	2.3	11.554	-H140	40-P80/M4	
124	56	4.3	11.680	-H320	40-P80/M4	
120	58	3.2	12.000	-H210	40-P80/M4	
119	58	4.2	12.128	-H320	40-P80/M4	
114	61	2.2	12.640	-H140	40-P80/M4	
114	61	1.6	12.653	-H100	40-P80/M4	
109	64	4.1	13.268	-H320	40-P80/M4	
106	66	3.1	13.673	-H210	40-P80/M4	
104	67	4.2	13.905	-H450	40-P80/M4	
103	67	2.0	13.957	-H140	40-P80/M4	

6.3

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
100	70	1.4	14.490	-H100	40-P80/M4	
97	72	4.0	14.898	-H320	40-P80/M4	
94	74	2.7	15.306	-H210	40-P80/M4	
93	75	1.3	15.500	-H100	40-P80/M4	
92	76	4.2	15.714	-H450	40-P80/M4	
91	76	4.2	15.810	-H600	40-P80/M4	
90	78	1.8	16.122	-H140	40-P80/M4	
86	81	2.6	16.750	-H210	40-P80/M4	
85	81	3.5	16.923	-H320	40-P80/M4	
81	85	1.2	17.750	-H100	40-P80/M4	
81	85	4.2	17.755	-H600	40-P80/M4	
81	86	1.6	17.802	-H140	40-P80/M4	
79	88	3.5	18.250	-H320	40-P80/M4	
77	90	2.3	18.750	-H210	40-P80/M4	
74	94	1.1	19.486	-H100	40-P80/M4	
73	95	1.5	19.750	-H140	40-P80/M4	
70	100	3.0	20.731	-H320	40-P80/M4	
66	105	2.0	21.802	-H210	40-P80/M4	
66	105	1.3	21.808	-H140	40-P80/M4	
65	107	3.5	22.170	-H450	40-P80/M4	
65	107	0.9	22.314	-H100	40-P80/M4	
61	114	2.8	23.754	-H320	40-P80/M4	
59	118	1.8	24.405	-H210	40-P80/M4	
58	120	1.2	24.829	-H140	40-P80/M4	
58	121	3.5	25.056	-H450	40-P80/M4	
58	121	0.8	25.095	-H100	40-P80/M4	
57	121	3.5	25.207	-H600	40-P80/M4	
54	130	2.5	26.983	-H320	40-P80/M4	
53	131	1.6	27.119	-H210	40-P80/M4	
53	132	1.1	27.415	-H140	40-P80/M4	
52	133	3.0	27.578	-H450	40-P80/M4	
51	136	3.5	28.310	-H600	40-P80/M4	
49	142	2.3	29.548	-H320	40-P80/M4	
48	146	1.4	30.357	-H210	40-P80/M4	
46	150	3.0	31.167	-H450	40-P80/M4	
46	151	3.0	31.356	-H600	40-P80/M4	
45	154	0.9	31.976	-H140	40-P80/M4	

6.3

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
43	162	2.0	33.564	-H320	40-P80/M4	
41	169	1.2	35.095	-H210	40-P80/M4	
41	170	3.0	35.214	-H600	40-P80/M4	
41	170	0.8	35.308	-H140	40-P80/M4	
40	172	2.6	35.689	-H450	40-P80/M4	
39	179	3.0	37.190	-H850	40-P80/M4	
38	184	1.4	38.238	-H320	40-P80/M4	
37	189	1.1	39.286	-H210	40-P80/M4	
36	194	2.3	40.333	-H450	40-P80/M4	
36	195	2.7	40.578	-H600	40-P80/M4	
35	200	3.0	41.556	-H850	40-P80/M4	
34	205	0.9	42.593	-H210	40-P80/M4	
33	209	1.5	43.313	-H450	40-P80/M4	
33	209	1.4	43.436	-H320	40-P80/M4	
32	217	2.6	45.136	-H850	40-P80/M4	
32	219	2.7	45.571	-H600	40-P80/M4	
31	223	1.0	46.407	-H320	40-P80/M4	
30	230	0.9	47.679	-H210	40-P80/M4	
30	236	1.6	48.950	-H450	40-P80/M4	
29	237	1.9	49.247	-H600	40-P80/M4	
29	243	2.6	50.433	-H850	40-P80/M4	
27	254	1.0	52.715	-H320	40-P80/M4	
26	264	1.0	54.750	-H450	40-P80/M4	
26	266	1.9	55.307	-H600	40-P80/M4	
23	298	1.0	61.875	-H450	40-P80/M4	
23	300	1.2	62.250	-H600	40-P80/M4	
21	337	1.2	69.911	-H600	40-P80/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
36	189	3.2	39.925	-H600	40-P80/M4	
33	206	1.0	43.390	-H210	40-P80/M4	
33	207	2.9	43.676	-H600	40-P80/M4	
33	209	2.2	44.124	-H450	40-P80/M4	
31	224	1.4	47.276	-H320	40-P80/M4	
30	230	0.9	48.571	-H210	40-P80/M4	
29	233	2.6	49.051	-H600	40-P80/M4	
29	237	1.9	49.867	-H450	40-P80/M4	
27	250	3.4	52.743	-H850	40-P80/M4	
27	255	1.3	53.703	-H320	40-P80/M4	

# g500-H helical geared motors

Technical data



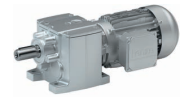
## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
26	264	2.3	55.710	-H600	40-P80/M4	
26	268	1.7	56.469	-H450	40-P80/M4	
25	280	3.0	58.933	-H850	40-P80/M4	
24	287	1.1	60.502	-H320	40-P80/M4	
23	293	1.5	61.774	-H450	40-P80/M4	
23	297	2.0	62.566	-H600	40-P80/M4	
21	324	1.9	68.244	-H600	40-P80/M4	
21	326	1.0	68.726	-H320	40-P80/M4	
21	331	1.4	69.813	-H450	40-P80/M4	
19	364	1.7	76.643	-H600	40-P80/M4	
19	367	0.9	77.387	-H320	40-P80/M4	
18	374	1.2	78.794	-H450	40-P80/M4	
17	399	2.1	84.096	-H850	40-P80/M4	
16	421	1.4	88.826	-H600	40-P80/M4	
16	422	1.1	89.048	-H450	40-P80/M4	
15	446	1.9	93.966	-H850	40-P80/M4	
15	458	1.0	96.522	-H450	40-P80/M4	
15	473	1.3	99.757	-H600	40-P80/M4	
14	496	1.7	104.607	-H850	40-P80/M4	
13	517	0.9	109.083	-H450	40-P80/M4	
13	524	1.1	110.491	-H600	40-P80/M4	
12	554	1.5	116.884	-H850	40-P80/M4	
12	589	1.0	124.088	-H600	40-P80/M4	
11	642	1.3	135.373	-H850	40-P80/M4	
10	678	0.9	142.988	-H600	40-P80/M4	
9.5	717	1.2	151.262	-H850	40-P80/M4	
8.8	779	1.1	164.294	-H850	40-P80/M4	
7.9	867	1.7	182.844	-H1500	40-P80/M4	
7.9	871	1.0	183.577	-H850	40-P80/M4	
7.1	959	1.6	202.237	-H1500	40-P80/M4	
6.9	985	0.9	207.675	-H850	40-P80/M4	
6.5	1053	1.4	221.907	-H1500	40-P80/M4	
5.9	1164	1.3	245.442	-H1500	40-P80/M4	
5.1	1330	1.1	280.500	-H1500	40-P80/M4	
4.7	1472	1.0	310.250	-H1500	40-P80/M4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
442	23	3.6	3.267	-H140	40-P90/M4	
431	24	2.6	3.354	-H100	40-P90/M4	
426	24	5.9	3.389	-H320	40-P90/M4	
426	24	5.3	3.389	-H210	40-P90/M4	
323	32	3.0	4.480	-H140	40-P90/M4	
314	32	2.2	4.600	-H100	40-P90/M4	
311	33	5.8	4.648	-H320	40-P90/M4	
311	33	4.4	4.648	-H210	40-P90/M4	
280	36	2.1	5.167	-H100	40-P90/M4	
259	39	4.0	5.583	-H210	40-P90/M4	
252	40	2.6	5.733	-H140	40-P90/M4	
252	40	5.8	5.733	-H600	40-P90/M4	
246	42	2.0	5.887	-H100	40-P90/M4	
239	43	5.8	6.045	-H450	40-P90/M4	
238	43	5.3	6.083	-H320	40-P90/M4	
231	44	3.6	6.250	-H210	40-P90/M4	
230	44	2.4	6.272	-H140	40-P90/M4	
224	45	1.8	6.440	-H100	40-P90/M4	
219	47	5.9	6.613	-H450	40-P90/M4	
209	49	4.5	6.910	-H320	40-P90/M4	
204	50	1.7	7.086	-H100	40-P90/M4	
199	51	2.1	7.269	-H140	40-P90/M4	
189	54	3.2	7.657	-H210	40-P90/M4	
181	56	2.1	8.000	-H140	40-P90/M4	
176	58	1.6	8.214	-H100	40-P90/M4	
173	59	4.2	8.343	-H320	40-P90/M4	
169	60	2.8	8.571	-H210	40-P90/M4	
160	64	1.8	9.029	-H140	40-P90/M4	
159	64	1.5	9.068	-H100	40-P90/M4	
153	67	3.6	9.477	-H320	40-P90/M4	
148	69	2.6	9.799	-H210	40-P90/M4	
147	69	1.8	9.800	-H140	40-P90/M4	
145	70	5.5	9.965	-H450	40-P90/M4	
144	71	1.4	10.063	-H100	40-P90/M4	
135	75	3.5	10.677	-H320	40-P90/M4	
135	76	2.5	10.720	-H210	40-P90/M4	
128	79	5.0	11.262	-H450	40-P90/M4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
128	80	5.8	11.330	-H600	40-P90/M4	
127	80	1.3	11.360	-H100	40-P90/M4	
125	81	1.6	11.554	-H140	40-P90/M4	
124	82	3.3	11.680	-H320	40-P90/M4	
120	85	2.2	12.000	-H210	40-P90/M4	
119	86	3.0	12.128	-H320	40-P90/M4	
117	87	4.7	12.320	-H450	40-P90/M4	
117	87	5.9	12.395	-H600	40-P90/M4	
114	89	1.5	12.640	-H140	40-P90/M4	
114	89	1.1	12.653	-H100	40-P90/M4	
109	94	2.8	13.268	-H320	40-P90/M4	
106	96	2.1	13.673	-H210	40-P90/M4	
104	98	4.3	13.905	-H450	40-P90/M4	
104	98	5.9	13.920	-H600	40-P90/M4	
104	98	1.4	13.957	-H140	40-P90/M4	
100	102	5.8	14.490	-H850	40-P90/M4	
100	102	1.0	14.490	-H100	40-P90/M4	
97	105	2.8	14.898	-H320	40-P90/M4	
94	108	1.9	15.306	-H210	40-P90/M4	
93	109	0.9	15.500	-H100	40-P90/M4	
92	111	4.0	15.714	-H450	40-P90/M4	
91	112	5.4	15.810	-H600	40-P90/M4	
90	114	1.2	16.122	-H140	40-P90/M4	
89	114	5.8	16.190	-H850	40-P90/M4	
86	118	1.8	16.750	-H210	40-P90/M4	
85	119	2.4	16.923	-H320	40-P90/M4	
85	120	3.8	17.033	-H450	40-P90/M4	
81	125	4.8	17.755	-H600	40-P90/M4	
81	126	1.1	17.802	-H140	40-P90/M4	
79	129	2.4	18.250	-H320	40-P90/M4	
77	132	1.6	18.750	-H210	40-P90/M4	
75	136	3.3	19.250	-H450	40-P90/M4	
75	137	4.4	19.367	-H600	40-P90/M4	
73	139	1.0	19.750	-H140	40-P90/M4	
70	146	2.1	20.731	-H320	40-P90/M4	
66	153	3.9	21.750	-H600	40-P90/M4	
66	154	1.4	21.802	-H210	40-P90/M4	



# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
66	154	0.9	21.808	-H140	40-P90/M4	
65	156	2.9	22.170	-H450	40-P90/M4	
63	163	4.8	23.103	-H850	40-P90/M4	
61	168	1.9	23.754	-H320	40-P90/M4	
59	172	1.2	24.405	-H210	40-P90/M4	
58	177	2.6	25.056	-H450	40-P90/M4	
57	178	3.4	25.207	-H600	40-P90/M4	
56	182	4.7	25.815	-H850	40-P90/M4	
54	190	1.7	26.983	-H320	40-P90/M4	
53	191	1.1	27.119	-H210	40-P90/M4	
52	195	2.3	27.578	-H450	40-P90/M4	
51	200	3.0	28.310	-H600	40-P90/M4	
51	200	4.0	28.315	-H850	40-P90/M4	
49	208	1.5	29.548	-H320	40-P90/M4	
48	214	1.0	30.357	-H210	40-P90/M4	
46	220	2.1	31.167	-H450	40-P90/M4	
46	221	2.7	31.356	-H600	40-P90/M4	
46	223	3.8	31.639	-H850	40-P90/M4	
45	228	4.0	32.267	-H1500	40-P90/M4	
43	237	1.4	33.564	-H320	40-P90/M4	
41	248	2.4	35.214	-H600	40-P90/M4	
41	252	4.0	35.689	-H1500	40-P90/M4	
41	252	1.8	35.689	-H450	40-P90/M4	
39	262	3.2	37.190	-H850	40-P90/M4	
37	276	3.5	39.160	-H1500	40-P90/M4	
36	284	1.6	40.333	-H450	40-P90/M4	
36	286	2.0	40.578	-H600	40-P90/M4	
35	293	2.9	41.556	-H850	40-P90/M4	
33	305	3.5	43.313	-H1500	40-P90/M4	
33	305	1.1	43.313	-H450	40-P90/M4	
32	318	2.7	45.136	-H850	40-P90/M4	
32	321	1.9	45.571	-H600	40-P90/M4	
30	345	1.1	48.950	-H450	40-P90/M4	
29	347	1.3	49.247	-H600	40-P90/M4	
29	349	2.7	49.500	-H1500	40-P90/M4	
29	356	2.4	50.433	-H850	40-P90/M4	
26	386	2.7	54.750	-H1500	40-P90/M4	

6.3

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
26	390	1.3	55.307	-H600	40-P90/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
46	217	2.8	31.197	-H600	40-P90/M4	
41	243	2.5	35.037	-H600	40-P90/M4	
38	263	3.2	37.799	-H850	40-P90/M4	
36	277	2.2	39.925	-H600	40-P90/M4	
35	287	3.0	41.350	-H850	40-P90/M4	
33	303	2.0	43.676	-H600	40-P90/M4	
33	307	1.5	44.124	-H450	40-P90/M4	
31	321	2.7	46.204	-H850	40-P90/M4	
30	341	1.8	49.051	-H600	40-P90/M4	
29	346	1.3	49.867	-H450	40-P90/M4	
27	366	2.3	52.743	-H850	40-P90/M4	
26	387	1.6	55.710	-H600	40-P90/M4	
26	392	1.2	56.469	-H450	40-P90/M4	
25	409	2.1	58.933	-H850	40-P90/M4	
23	429	1.1	61.774	-H450	40-P90/M4	
23	435	1.4	62.566	-H600	40-P90/M4	
22	449	1.9	64.610	-H850	40-P90/M4	
21	474	1.3	68.244	-H600	40-P90/M4	
21	485	0.9	69.813	-H450	40-P90/M4	
20	495	3.0	71.238	-H1500	40-P90/M4	
20	502	1.7	72.193	-H850	40-P90/M4	
19	532	1.1	76.643	-H600	40-P90/M4	
18	547	2.7	78.794	-H1500	40-P90/M4	
18	547	0.8	78.794	-H450	40-P90/M4	
17	584	1.5	84.096	-H850	40-P90/M4	
16	617	1.0	88.826	-H600	40-P90/M4	
15	653	1.3	93.966	-H850	40-P90/M4	
15	693	0.9	99.757	-H600	40-P90/M4	
14	727	1.2	104.607	-H850	40-P90/M4	
13	789	1.9	113.585	-H1500	40-P90/M4	
12	812	1.1	116.884	-H850	40-P90/M4	
12	873	1.7	125.632	-H1500	40-P90/M4	
11	940	0.9	135.373	-H850	40-P90/M4	
10	967	1.6	139.211	-H1500	40-P90/M4	
9.6	1051	0.8	151.262	-H850	40-P90/M4	
9.4	1070	1.4	153.976	-H1500	40-P90/M4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
8.6	1174	2.6	168.993	-H3000	40-P90/M4	
7.9	1270	1.2	182.844	-H1500	40-P90/M4	
7.8	1289	2.3	185.615	-H3000	40-P90/M4	
7.1	1405	1.1	202.237	-H1500	40-P90/M4	
7.0	1425	2.1	205.096	-H3000	40-P90/M4	
6.5	1542	1.0	221.907	-H1500	40-P90/M4	
6.4	1565	1.9	225.269	-H3000	40-P90/M4	
5.9	1705	0.9	245.442	-H1500	40-P90/M4	
5.6	1801	1.7	259.250	-H3000	40-P90/M4	
5.1	1978	1.5	284.750	-H3000	40-P90/M4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
439	32	2.6	3.267	-H140	40-P90/L4	
428	32	1.9	3.354	-H100	40-P90/L4	
423	33	4.3	3.389	-H320	40-P90/L4	
423	33	3.8	3.389	-H210	40-P90/L4	
320	43	2.2	4.480	-H140	40-P90/L4	
312	45	1.6	4.600	-H100	40-P90/L4	
309	45	4.2	4.648	-H320	40-P90/L4	
309	45	3.2	4.648	-H210	40-P90/L4	
278	50	1.5	5.167	-H100	40-P90/L4	
257	54	2.9	5.583	-H210	40-P90/L4	
250	56	1.9	5.733	-H140	40-P90/L4	
250	56	4.2	5.733	-H600	40-P90/L4	
244	57	1.4	5.887	-H100	40-P90/L4	
237	59	4.2	6.045	-H450	40-P90/L4	
236	59	3.9	6.083	-H320	40-P90/L4	
230	61	2.6	6.250	-H210	40-P90/L4	
229	61	1.7	6.272	-H140	40-P90/L4	
223	62	1.3	6.440	-H100	40-P90/L4	
217	64	4.3	6.613	-H450	40-P90/L4	
208	67	3.3	6.910	-H320	40-P90/L4	
203	69	1.3	7.086	-H100	40-P90/L4	
197	70	1.5	7.269	-H140	40-P90/L4	
187	74	2.3	7.657	-H210	40-P90/L4	
179	77	1.5	8.000	-H140	40-P90/L4	
175	80	1.2	8.214	-H100	40-P90/L4	
172	81	3.1	8.343	-H320	40-P90/L4	
167	83	2.1	8.571	-H210	40-P90/L4	
159	87	1.3	9.029	-H140	40-P90/L4	
158	88	1.1	9.068	-H100	40-P90/L4	
151	92	2.6	9.477	-H320	40-P90/L4	
146	95	1.9	9.799	-H210	40-P90/L4	
146	95	1.3	9.800	-H140	40-P90/L4	
144	97	4.0	9.965	-H450	40-P90/L4	
143	97	1.0	10.063	-H100	40-P90/L4	
134	103	2.6	10.677	-H320	40-P90/L4	
134	104	1.8	10.720	-H210	40-P90/L4	
127	109	3.7	11.262	-H450	40-P90/L4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
127	110	4.2	11.330	-H600	40-P90/L4	
126	110	0.9	11.360	-H100	40-P90/L4	
124	112	1.1	11.554	-H140	40-P90/L4	
123	113	2.4	11.680	-H320	40-P90/L4	
120	116	1.6	12.000	-H210	40-P90/L4	
118	117	2.2	12.128	-H320	40-P90/L4	
117	119	3.4	12.320	-H450	40-P90/L4	
116	120	4.3	12.395	-H600	40-P90/L4	
114	122	1.1	12.640	-H140	40-P90/L4	
113	123	0.8	12.653	-H100	40-P90/L4	
108	128	2.0	13.268	-H320	40-P90/L4	
105	132	1.5	13.673	-H210	40-P90/L4	
103	135	3.2	13.905	-H450	40-P90/L4	
103	135	4.3	13.920	-H600	40-P90/L4	
103	135	1.0	13.957	-H140	40-P90/L4	
99	140	4.2	14.490	-H850	40-P90/L4	
96	144	2.0	14.898	-H320	40-P90/L4	
94	148	1.4	15.306	-H210	40-P90/L4	
91	152	2.9	15.714	-H450	40-P90/L4	
91	153	3.9	15.810	-H600	40-P90/L4	
89	156	0.9	16.122	-H140	40-P90/L4	
89	157	4.2	16.190	-H850	40-P90/L4	
86	162	1.3	16.750	-H210	40-P90/L4	
85	164	1.7	16.923	-H320	40-P90/L4	
84	165	2.7	17.033	-H450	40-P90/L4	
81	172	3.5	17.755	-H600	40-P90/L4	
81	172	0.8	17.802	-H140	40-P90/L4	
79	177	1.8	18.250	-H320	40-P90/L4	
77	182	1.2	18.750	-H210	40-P90/L4	
75	186	2.4	19.250	-H450	40-P90/L4	
74	188	3.2	19.367	-H600	40-P90/L4	
69	201	1.5	20.731	-H320	40-P90/L4	
66	211	2.9	21.750	-H600	40-P90/L4	
66	211	1.0	21.802	-H210	40-P90/L4	
65	215	2.1	22.170	-H450	40-P90/L4	
62	224	3.5	23.103	-H850	40-P90/L4	
60	230	1.4	23.754	-H320	40-P90/L4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
59	236	0.9	24.405	-H210	40-P90/L4	
57	243	1.9	25.056	-H450	40-P90/L4	
57	244	2.5	25.207	-H600	40-P90/L4	
56	250	3.4	25.815	-H850	40-P90/L4	
53	261	1.2	26.983	-H320	40-P90/L4	
52	267	1.7	27.578	-H450	40-P90/L4	
51	274	2.2	28.310	-H600	40-P90/L4	
51	274	2.9	28.315	-H850	40-P90/L4	
49	286	1.1	29.548	-H320	40-P90/L4	
46	302	1.5	31.167	-H450	40-P90/L4	
46	304	2.0	31.356	-H600	40-P90/L4	
45	306	2.8	31.639	-H850	40-P90/L4	
45	312	2.9	32.267	-H1500	40-P90/L4	
43	325	1.0	33.564	-H320	40-P90/L4	
41	341	1.8	35.214	-H600	40-P90/L4	
40	346	2.9	35.689	-H1500	40-P90/L4	
40	346	1.3	35.689	-H450	40-P90/L4	
39	360	2.4	37.190	-H850	40-P90/L4	
37	379	2.6	39.160	-H1500	40-P90/L4	
36	391	1.2	40.333	-H450	40-P90/L4	
35	393	1.4	40.578	-H600	40-P90/L4	
35	402	2.1	41.556	-H850	40-P90/L4	
33	419	2.6	43.313	-H1500	40-P90/L4	
32	437	1.9	45.136	-H850	40-P90/L4	
32	441	1.4	45.571	-H600	40-P90/L4	
29	477	1.0	49.247	-H600	40-P90/L4	
29	479	2.0	49.500	-H1500	40-P90/L4	
29	488	1.7	50.433	-H850	40-P90/L4	
26	530	2.0	54.750	-H1500	40-P90/L4	
26	536	1.0	55.307	-H600	40-P90/L4	

6.3

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
46	298	2.0	31.197	-H600	40-P90/L4	
41	334	1.8	35.037	-H600	40-P90/L4	
38	361	2.4	37.799	-H850	40-P90/L4	
36	381	1.6	39.925	-H600	40-P90/L4	
35	394	2.2	41.350	-H850	40-P90/L4	
33	417	1.4	43.676	-H600	40-P90/L4	
33	421	1.1	44.124	-H450	40-P90/L4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
31	441	1.9	46.204	-H850	40-P90/L4	
29	468	1.3	49.051	-H600	40-P90/L4	
29	476	1.0	49.867	-H450	40-P90/L4	
27	503	1.7	52.743	-H850	40-P90/L4	
26	531	1.1	55.710	-H600	40-P90/L4	
25	539	0.8	56.469	-H450	40-P90/L4	
24	562	1.5	58.933	-H850	40-P90/L4	
23	597	1.0	62.566	-H600	40-P90/L4	
22	616	1.4	64.610	-H850	40-P90/L4	
21	651	0.9	68.244	-H600	40-P90/L4	
20	680	2.2	71.238	-H1500	40-P90/L4	
20	689	1.2	72.193	-H850	40-P90/L4	
19	731	0.8	76.643	-H600	40-P90/L4	
18	752	2.0	78.794	-H1500	40-P90/L4	
17	802	1.1	84.096	-H850	40-P90/L4	
15	896	1.0	93.966	-H850	40-P90/L4	
14	998	0.9	104.607	-H850	40-P90/L4	
13	1084	1.4	113.585	-H1500	40-P90/L4	
11	1198	1.3	125.632	-H1500	40-P90/L4	
10	1328	1.1	139.211	-H1500	40-P90/L4	
9.3	1469	1.0	153.976	-H1500	40-P90/L4	
8.5	1612	1.9	168.993	-H3000	40-P90/L4	
7.8	1744	0.9	182.844	-H1500	40-P90/L4	
7.7	1771	1.7	185.615	-H3000	40-P90/L4	
7.0	1956	1.5	205.096	-H3000	40-P90/L4	
6.4	2149	1.4	225.269	-H3000	40-P90/L4	
5.5	2473	1.2	259.250	-H3000	40-P90/L4	
5.0	2716	1.1	284.750	-H3000	40-P90/L4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
443	46	5.2	3.267	-H600	40-P100/M4	
427	48	2.6	3.389	-H210	40-P100/M4	
427	48	3.5	3.389	-H320	40-P100/M4	
420	49	5.3	3.444	-H450	40-P100/M4	
323	63	4.7	4.480	-H600	40-P100/M4	
311	66	2.2	4.648	-H210	40-P100/M4	
311	66	2.9	4.648	-H320	40-P100/M4	
306	67	4.4	4.724	-H450	40-P100/M4	
269	76	5.7	5.368	-H850	40-P100/M4	
259	79	2.0	5.583	-H210	40-P100/M4	
255	80	3.9	5.678	-H450	40-P100/M4	
252	81	4.2	5.733	-H600	40-P100/M4	
239	85	3.8	6.045	-H450	40-P100/M4	
238	86	2.7	6.083	-H320	40-P100/M4	
231	88	1.8	6.250	-H210	40-P100/M4	
224	91	4.4	6.456	-H600	40-P100/M4	
219	93	3.6	6.613	-H450	40-P100/M4	
209	97	2.2	6.910	-H320	40-P100/M4	
199	102	4.3	7.250	-H600	40-P100/M4	
189	108	1.6	7.657	-H210	40-P100/M4	
186	110	3.2	7.787	-H450	40-P100/M4	
173	118	2.1	8.343	-H320	40-P100/M4	
169	121	1.4	8.571	-H210	40-P100/M4	
164	124	3.0	8.800	-H450	40-P100/M4	
163	125	3.9	8.853	-H600	40-P100/M4	
153	134	1.8	9.477	-H320	40-P100/M4	
148	138	1.3	9.799	-H210	40-P100/M4	
145	140	3.6	9.943	-H600	40-P100/M4	
145	140	2.7	9.965	-H450	40-P100/M4	
143	143	4.7	10.143	-H850	40-P100/M4	
135	151	1.8	10.677	-H320	40-P100/M4	
135	151	1.3	10.720	-H210	40-P100/M4	
128	159	2.5	11.262	-H450	40-P100/M4	
128	160	3.4	11.330	-H600	40-P100/M4	
127	160	4.4	11.360	-H850	40-P100/M4	
124	165	1.7	11.680	-H320	40-P100/M4	
121	169	1.1	12.000	-H210	40-P100/M4	



# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
119	171	1.5	12.128	-H320	40-P100/M4	
117	174	2.4	12.320	-H450	40-P100/M4	
117	174	5.7	12.362	-H1500	40-P100/M4	
117	175	3.2	12.395	-H600	40-P100/M4	
114	179	4.1	12.693	-H850	40-P100/M4	
109	187	1.4	13.268	-H320	40-P100/M4	
106	193	1.0	13.673	-H210	40-P100/M4	
106	193	5.7	13.673	-H1500	40-P100/M4	
104	196	2.2	13.905	-H450	40-P100/M4	
104	196	3.0	13.920	-H600	40-P100/M4	
100	204	3.7	14.490	-H850	40-P100/M4	
97	210	1.4	14.898	-H320	40-P100/M4	
95	216	0.9	15.306	-H210	40-P100/M4	
92	222	2.0	15.714	-H450	40-P100/M4	
92	223	2.7	15.810	-H600	40-P100/M4	
89	228	3.5	16.190	-H850	40-P100/M4	
86	236	0.9	16.750	-H210	40-P100/M4	
85	239	1.2	16.923	-H320	40-P100/M4	
85	240	1.9	17.033	-H450	40-P100/M4	
82	250	3.3	17.750	-H850	40-P100/M4	
81	250	2.4	17.755	-H600	40-P100/M4	
79	257	1.2	18.250	-H320	40-P100/M4	
75	271	1.7	19.250	-H450	40-P100/M4	
75	273	2.2	19.367	-H600	40-P100/M4	
73	280	3.0	19.833	-H850	40-P100/M4	
70	289	4.1	20.533	-H1500	40-P100/M4	
70	292	1.0	20.731	-H320	40-P100/M4	
67	307	2.0	21.750	-H600	40-P100/M4	
65	313	1.4	22.170	-H450	40-P100/M4	
64	320	4.1	22.711	-H1500	40-P100/M4	
63	326	2.6	23.103	-H850	40-P100/M4	
58	351	3.5	24.933	-H1500	40-P100/M4	
58	353	1.3	25.056	-H450	40-P100/M4	
57	355	1.7	25.207	-H600	40-P100/M4	
56	364	2.3	25.815	-H850	40-P100/M4	
52	389	1.2	27.578	-H450	40-P100/M4	
52	389	3.5	27.578	-H1500	40-P100/M4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
51	399	1.5	28.310	-H600	40-P100/M4	
51	399	2.1	28.315	-H850	40-P100/M4	
49	420	3.5	29.822	-H3000	40-P100/M4	
46	439	1.0	31.167	-H450	40-P100/M4	
46	442	1.4	31.356	-H600	40-P100/M4	
46	446	1.9	31.639	-H850	40-P100/M4	
45	455	2.8	32.267	-H1500	40-P100/M4	
44	462	3.5	32.756	-H3000	40-P100/M4	
41	496	1.2	35.214	-H600	40-P100/M4	
41	503	2.8	35.689	-H1500	40-P100/M4	
40	510	2.9	36.193	-H3000	40-P100/M4	
39	524	1.6	37.190	-H850	40-P100/M4	
37	552	2.3	39.160	-H1500	40-P100/M4	
36	560	2.9	39.753	-H3000	40-P100/M4	
35	586	1.5	41.556	-H850	40-P100/M4	
33	611	2.3	43.313	-H1500	40-P100/M4	
32	636	1.3	45.136	-H850	40-P100/M4	
32	645	2.3	45.750	-H3000	40-P100/M4	
29	698	1.8	49.500	-H1500	40-P100/M4	
29	708	2.3	50.250	-H3000	40-P100/M4	
29	711	1.2	50.433	-H850	40-P100/M4	
26	772	1.8	54.750	-H1500	40-P100/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
49	410	2.1	29.536	-H850	40-P100/M4	
46	433	1.4	31.197	-H600	40-P100/M4	
44	458	1.9	33.003	-H850	40-P100/M4	
41	486	1.2	35.037	-H600	40-P100/M4	
38	525	1.6	37.799	-H850	40-P100/M4	
36	554	1.1	39.925	-H600	40-P100/M4	
35	574	1.5	41.350	-H850	40-P100/M4	
33	606	1.0	43.676	-H600	40-P100/M4	
31	642	1.3	46.204	-H850	40-P100/M4	
30	681	0.9	49.051	-H600	40-P100/M4	
29	692	2.2	49.867	-H1500	40-P100/M4	
27	732	1.2	52.743	-H850	40-P100/M4	
26	775	1.9	55.851	-H1500	40-P100/M4	
25	818	1.0	58.933	-H850	40-P100/M4	
23	858	1.8	61.774	-H1500	40-P100/M4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
22	897	1.0	64.610	-H850	40-P100/M4	
22	899	3.3	64.744	-H3000	40-P100/M4	
20	987	3.0	71.112	-H3000	40-P100/M4	
20	989	1.5	71.238	-H1500	40-P100/M4	
20	1002	0.9	72.193	-H850	40-P100/M4	
18	1094	1.4	78.794	-H1500	40-P100/M4	
17	1212	1.2	87.267	-H1500	40-P100/M4	
15	1340	1.1	96.522	-H1500	40-P100/M4	
13	1493	2.0	107.541	-H3000	40-P100/M4	
13	1577	1.0	113.585	-H1500	40-P100/M4	
12	1640	1.8	118.119	-H3000	40-P100/M4	
12	1744	0.9	125.632	-H1500	40-P100/M4	
11	1813	1.7	130.585	-H3000	40-P100/M4	
10	1991	1.5	143.430	-H3000	40-P100/M4	
8.6	2346	1.3	168.993	-H3000	40-P100/M4	
7.8	2577	1.2	185.615	-H3000	40-P100/M4	
7.1	2848	1.1	205.096	-H3000	40-P100/M4	
6.4	3128	1.0	225.269	-H3000	40-P100/M4	
5.6	3600	0.8	259.250	-H3000	40-P100/M4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
445	62	3.8	3.267	-H600	40-P100/L4	
429	65	2.6	3.389	-H320	40-P100/L4	
429	65	1.9	3.389	-H210	40-P100/L4	
422	66	3.9	3.444	-H450	40-P100/L4	
324	86	3.5	4.480	-H600	40-P100/L4	
313	89	2.1	4.648	-H320	40-P100/L4	
313	89	1.6	4.648	-H210	40-P100/L4	
308	90	3.2	4.724	-H450	40-P100/L4	
271	103	4.2	5.368	-H850	40-P100/L4	
260	107	1.5	5.583	-H210	40-P100/L4	
256	109	2.9	5.678	-H450	40-P100/L4	
253	110	3.1	5.733	-H600	40-P100/L4	
240	116	2.8	6.045	-H450	40-P100/L4	
239	116	2.0	6.083	-H320	40-P100/L4	
233	120	1.3	6.250	-H210	40-P100/L4	
225	123	3.3	6.456	-H600	40-P100/L4	
220	127	2.6	6.613	-H450	40-P100/L4	
210	132	1.7	6.910	-H320	40-P100/L4	
200	139	3.1	7.250	-H600	40-P100/L4	
190	146	1.2	7.657	-H210	40-P100/L4	
187	149	2.4	7.787	-H450	40-P100/L4	
174	160	1.6	8.343	-H320	40-P100/L4	
170	164	1.0	8.571	-H210	40-P100/L4	
165	168	2.2	8.800	-H450	40-P100/L4	
164	169	2.9	8.853	-H600	40-P100/L4	
153	181	1.3	9.477	-H320	40-P100/L4	
148	187	1.0	9.799	-H210	40-P100/L4	
146	190	2.7	9.943	-H600	40-P100/L4	
146	191	2.0	9.965	-H450	40-P100/L4	
143	194	3.4	10.143	-H850	40-P100/L4	
136	204	1.3	10.677	-H320	40-P100/L4	
136	205	0.9	10.720	-H210	40-P100/L4	
129	215	1.9	11.262	-H450	40-P100/L4	
128	217	2.5	11.330	-H600	40-P100/L4	
128	217	3.2	11.360	-H850	40-P100/L4	
124	223	1.2	11.680	-H320	40-P100/L4	
121	230	0.8	12.000	-H210	40-P100/L4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
120	232	1.1	12.128	-H320	40-P100/L4	
118	236	1.7	12.320	-H450	40-P100/L4	
118	236	4.2	12.362	-H1500	40-P100/L4	
117	237	2.3	12.395	-H600	40-P100/L4	
115	243	3.0	12.693	-H850	40-P100/L4	
110	254	1.0	13.268	-H320	40-P100/L4	
106	262	4.2	13.673	-H1500	40-P100/L4	
105	266	1.6	13.905	-H450	40-P100/L4	
104	266	2.2	13.920	-H600	40-P100/L4	
100	277	2.7	14.490	-H850	40-P100/L4	
98	285	1.0	14.898	-H320	40-P100/L4	
93	301	1.5	15.714	-H450	40-P100/L4	
92	302	2.0	15.810	-H600	40-P100/L4	
90	310	2.6	16.190	-H850	40-P100/L4	
86	324	0.9	16.923	-H320	40-P100/L4	
85	326	1.4	17.033	-H450	40-P100/L4	
82	340	2.4	17.750	-H850	40-P100/L4	
82	340	1.8	17.755	-H600	40-P100/L4	
80	349	0.9	18.250	-H320	40-P100/L4	
76	368	1.2	19.250	-H450	40-P100/L4	
75	370	1.6	19.367	-H600	40-P100/L4	
73	379	2.2	19.833	-H850	40-P100/L4	
71	393	3.0	20.533	-H1500	40-P100/L4	
67	416	1.4	21.750	-H600	40-P100/L4	
66	424	1.1	22.170	-H450	40-P100/L4	
64	434	3.0	22.711	-H1500	40-P100/L4	
63	442	1.9	23.103	-H850	40-P100/L4	
58	477	2.6	24.933	-H1500	40-P100/L4	
58	479	0.9	25.056	-H450	40-P100/L4	
58	482	1.2	25.207	-H600	40-P100/L4	
56	494	1.7	25.815	-H850	40-P100/L4	
53	528	0.9	27.578	-H450	40-P100/L4	
53	528	2.6	27.578	-H1500	40-P100/L4	
51	542	1.1	28.310	-H600	40-P100/L4	
51	542	1.6	28.315	-H850	40-P100/L4	
49	570	2.6	29.822	-H3000	40-P100/L4	
46	600	1.0	31.356	-H600	40-P100/L4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
46	605	1.4	31.639	-H850	40-P100/L4	
45	617	2.1	32.267	-H1500	40-P100/L4	
44	627	2.6	32.756	-H3000	40-P100/L4	
41	674	0.9	35.214	-H600	40-P100/L4	
41	683	2.1	35.689	-H1500	40-P100/L4	
40	692	2.1	36.193	-H3000	40-P100/L4	
39	711	1.2	37.190	-H850	40-P100/L4	
37	749	1.7	39.160	-H1500	40-P100/L4	
37	760	2.1	39.753	-H3000	40-P100/L4	
35	795	1.1	41.556	-H850	40-P100/L4	
34	829	1.7	43.313	-H1500	40-P100/L4	
32	863	1.0	45.136	-H850	40-P100/L4	
32	875	1.7	45.750	-H3000	40-P100/L4	
29	947	1.3	49.500	-H1500	40-P100/L4	
29	961	1.7	50.250	-H3000	40-P100/L4	
29	965	0.9	50.433	-H850	40-P100/L4	
27	1047	1.3	54.750	-H1500	40-P100/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
49	557	1.5	29.536	-H850	40-P100/L4	
47	588	1.0	31.197	-H600	40-P100/L4	
44	622	1.4	33.003	-H850	40-P100/L4	
42	660	0.9	35.037	-H600	40-P100/L4	
38	712	1.2	37.799	-H850	40-P100/L4	
35	779	1.1	41.350	-H850	40-P100/L4	
31	871	1.0	46.204	-H850	40-P100/L4	
29	940	1.6	49.867	-H1500	40-P100/L4	
28	994	0.9	52.743	-H850	40-P100/L4	
26	1052	1.4	55.851	-H1500	40-P100/L4	
24	1164	1.3	61.774	-H1500	40-P100/L4	
22	1220	2.5	64.744	-H3000	40-P100/L4	
20	1340	2.2	71.112	-H3000	40-P100/L4	
20	1342	1.1	71.238	-H1500	40-P100/L4	
18	1485	1.0	78.794	-H1500	40-P100/L4	
17	1644	0.9	87.267	-H1500	40-P100/L4	
15	1819	0.8	96.522	-H1500	40-P100/L4	
14	2026	1.5	107.541	-H3000	40-P100/L4	
12	2226	1.4	118.119	-H3000	40-P100/L4	
11	2461	1.2	130.585	-H3000	40-P100/L4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
10	2703	1.1	143.430	-H3000	40-P100/L4	
8.6	3184	0.9	168.993	-H3000	40-P100/L4	
7.8	3497	0.9	185.615	-H3000	40-P100/L4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
456	81	3.8	3.147	-H850	40-P112/M4	
439	84	2.8	3.267	-H600	40-P112/M4	
423	88	1.9	3.389	-H320	40-P112/M4	
417	89	2.9	3.444	-H450	40-P112/M4	
329	113	3.4	4.362	-H850	40-P112/M4	
320	116	2.6	4.480	-H600	40-P112/M4	
309	120	1.6	4.648	-H320	40-P112/M4	
304	122	2.4	4.724	-H450	40-P112/M4	
267	139	3.1	5.368	-H850	40-P112/M4	
253	147	2.2	5.678	-H450	40-P112/M4	
250	148	2.3	5.733	-H600	40-P112/M4	
241	154	3.6	5.946	-H850	40-P112/M4	
237	156	2.1	6.045	-H450	40-P112/M4	
236	157	1.5	6.083	-H320	40-P112/M4	
230	161	4.7	6.245	-H1500	40-P112/M4	
222	167	2.4	6.456	-H600	40-P112/M4	
217	171	2.0	6.613	-H450	40-P112/M4	
216	172	3.4	6.644	-H850	40-P112/M4	
208	178	1.2	6.910	-H320	40-P112/M4	
198	187	2.3	7.250	-H600	40-P112/M4	
184	201	1.8	7.787	-H450	40-P112/M4	
174	213	2.9	8.241	-H850	40-P112/M4	
172	215	1.2	8.343	-H320	40-P112/M4	
163	227	1.6	8.800	-H450	40-P112/M4	
162	229	2.1	8.853	-H600	40-P112/M4	
159	233	4.7	9.010	-H1500	40-P112/M4	
156	238	2.7	9.208	-H850	40-P112/M4	
151	245	1.0	9.477	-H320	40-P112/M4	
144	257	2.0	9.943	-H600	40-P112/M4	
144	257	1.5	9.965	-H450	40-P112/M4	
142	262	2.6	10.143	-H850	40-P112/M4	
140	265	4.3	10.267	-H1500	40-P112/M4	
134	276	1.0	10.677	-H320	40-P112/M4	
127	291	1.4	11.262	-H450	40-P112/M4	
127	293	1.8	11.330	-H600	40-P112/M4	
126	293	4.3	11.356	-H1500	40-P112/M4	
126	293	2.4	11.360	-H850	40-P112/M4	



# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
124	300	4.7	11.619	-H3000	40-P112/M4	
123	302	0.9	11.680	-H320	40-P112/M4	
118	313	0.8	12.128	-H320	40-P112/M4	
117	318	1.3	12.320	-H450	40-P112/M4	
116	319	3.8	12.362	-H1500	40-P112/M4	
116	320	1.7	12.395	-H600	40-P112/M4	
113	328	2.2	12.693	-H850	40-P112/M4	
112	330	4.7	12.762	-H3000	40-P112/M4	
105	353	3.8	13.673	-H1500	40-P112/M4	
103	359	1.2	13.905	-H450	40-P112/M4	
103	359	1.6	13.920	-H600	40-P112/M4	
99	374	2.0	14.490	-H850	40-P112/M4	
95	391	3.2	15.156	-H1500	40-P112/M4	
91	406	1.1	15.714	-H450	40-P112/M4	
91	408	1.5	15.810	-H600	40-P112/M4	
89	418	1.9	16.190	-H850	40-P112/M4	
86	433	3.2	16.763	-H1500	40-P112/M4	
84	440	1.0	17.033	-H450	40-P112/M4	
81	458	1.8	17.750	-H850	40-P112/M4	
81	459	1.3	17.755	-H600	40-P112/M4	
77	484	3.2	18.752	-H3000	40-P112/M4	
75	497	0.9	19.250	-H450	40-P112/M4	
74	500	1.2	19.367	-H600	40-P112/M4	
72	512	1.6	19.833	-H850	40-P112/M4	
70	530	2.5	20.533	-H1500	40-P112/M4	
70	532	3.2	20.596	-H3000	40-P112/M4	
66	562	1.1	21.750	-H600	40-P112/M4	
63	587	2.5	22.711	-H1500	40-P112/M4	
62	595	2.7	23.044	-H3000	40-P112/M4	
62	597	1.4	23.103	-H850	40-P112/M4	
58	644	2.2	24.933	-H1500	40-P112/M4	
57	651	0.9	25.207	-H600	40-P112/M4	
57	654	2.7	25.311	-H3000	40-P112/M4	
56	667	1.3	25.815	-H850	40-P112/M4	
52	712	2.1	27.578	-H1500	40-P112/M4	
51	731	0.8	28.310	-H600	40-P112/M4	
51	731	1.2	28.315	-H850	40-P112/M4	

# g500-H helical geared motors


Technical data




## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
48	770	2.2	29.822	-H3000	40-P112/M4	
45	817	1.0	31.639	-H850	40-P112/M4	
45	833	1.7	32.267	-H1500	40-P112/M4	
44	846	2.2	32.756	-H3000	40-P112/M4	
40	922	1.6	35.689	-H1500	40-P112/M4	
40	935	1.8	36.193	-H3000	40-P112/M4	
37	1011	1.5	39.160	-H1500	40-P112/M4	
36	1027	1.8	39.753	-H3000	40-P112/M4	
33	1119	1.3	43.313	-H1500	40-P112/M4	
31	1182	1.5	45.750	-H3000	40-P112/M4	
29	1298	1.5	50.250	-H3000	40-P112/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
49	751	1.1	29.536	-H850	40-P112/M4	
44	840	1.0	33.003	-H850	40-P112/M4	
38	962	0.9	37.799	-H850	40-P112/M4	
35	1031	1.5	40.517	-H1500	40-P112/M4	
35	1052	0.8	41.350	-H850	40-P112/M4	
32	1140	1.3	44.814	-H1500	40-P112/M4	
30	1200	2.4	47.186	-H3000	40-P112/M4	
29	1269	1.2	49.867	-H1500	40-P112/M4	
28	1318	2.2	51.828	-H3000	40-P112/M4	
27	1368	2.2	53.770	-H3000	40-P112/M4	
26	1421	1.1	55.851	-H1500	40-P112/M4	
24	1502	2.0	59.059	-H3000	40-P112/M4	
23	1571	1.0	61.774	-H1500	40-P112/M4	
22	1647	1.8	64.744	-H3000	40-P112/M4	
20	1809	1.7	71.112	-H3000	40-P112/M4	
20	1812	0.8	71.238	-H1500	40-P112/M4	
18	2019	1.5	79.375	-H3000	40-P112/M4	
17	2218	1.4	87.183	-H3000	40-P112/M4	
13	2736	1.1	107.541	-H3000	40-P112/M4	
12	3005	1.0	118.119	-H3000	40-P112/M4	
11	3322	0.9	130.585	-H3000	40-P112/M4	
10	3649	0.8	143.430	-H3000	40-P112/M4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 5.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
466	109	2.8	3.147	-H850	40-P132/M4	
449	114	2.1	3.267	-H600	40-P132/M4	
425	120	2.1	3.444	-H450	40-P132/M4	
391	130	6.0	3.743	-H1500	40-P132/M4	
336	152	2.5	4.362	-H850	40-P132/M4	
327	156	1.9	4.480	-H600	40-P132/M4	
310	164	1.8	4.724	-H450	40-P132/M4	
308	165	5.6	4.758	-H1500	40-P132/M4	
273	187	2.3	5.368	-H850	40-P132/M4	
271	188	5.4	5.400	-H1500	40-P132/M4	
258	197	1.6	5.678	-H450	40-P132/M4	
256	199	1.7	5.733	-H600	40-P132/M4	
246	207	2.7	5.946	-H850	40-P132/M4	
242	210	1.5	6.045	-H450	40-P132/M4	
235	217	5.1	6.245	-H1500	40-P132/M4	
227	225	1.8	6.456	-H600	40-P132/M4	
222	230	1.5	6.613	-H450	40-P132/M4	
221	231	2.5	6.644	-H850	40-P132/M4	
213	239	4.9	6.864	-H1500	40-P132/M4	
202	252	1.7	7.250	-H600	40-P132/M4	
193	264	4.6	7.592	-H1500	40-P132/M4	
188	271	1.3	7.787	-H450	40-P132/M4	
178	287	2.2	8.241	-H850	40-P132/M4	
167	306	1.2	8.800	-H450	40-P132/M4	
166	308	1.6	8.853	-H600	40-P132/M4	
163	313	4.2	9.010	-H1500	40-P132/M4	
159	320	2.0	9.208	-H850	40-P132/M4	
147	346	1.5	9.943	-H600	40-P132/M4	
147	347	1.1	9.965	-H450	40-P132/M4	
144	353	1.9	10.143	-H850	40-P132/M4	
143	357	3.9	10.267	-H1500	40-P132/M4	
130	392	1.0	11.262	-H450	40-P132/M4	
129	394	1.4	11.330	-H600	40-P132/M4	
129	395	3.5	11.356	-H1500	40-P132/M4	
129	395	1.8	11.360	-H850	40-P132/M4	
126	404	5.9	11.619	-H3000	40-P132/M4	
119	429	1.0	12.320	-H450	40-P132/M4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 5.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
119	430	3.3	12.362	-H1500	40-P132/M4	
118	431	1.3	12.395	-H600	40-P132/M4	
115	442	1.6	12.693	-H850	40-P132/M4	
115	444	5.6	12.762	-H3000	40-P132/M4	
107	476	3.0	13.673	-H1500	40-P132/M4	
105	484	0.9	13.905	-H450	40-P132/M4	
105	484	1.2	13.920	-H600	40-P132/M4	
103	495	5.1	14.233	-H3000	40-P132/M4	
101	504	1.5	14.490	-H850	40-P132/M4	
97	527	2.7	15.156	-H1500	40-P132/M4	
94	544	4.8	15.633	-H3000	40-P132/M4	
93	547	0.8	15.714	-H450	40-P132/M4	
93	550	1.1	15.810	-H600	40-P132/M4	
91	563	1.4	16.190	-H850	40-P132/M4	
87	583	2.5	16.763	-H1500	40-P132/M4	
83	617	1.3	17.750	-H850	40-P132/M4	
83	618	1.0	17.755	-H600	40-P132/M4	
78	652	4.2	18.752	-H3000	40-P132/M4	
76	674	0.9	19.367	-H600	40-P132/M4	
74	690	1.2	19.833	-H850	40-P132/M4	
71	714	2.1	20.533	-H1500	40-P132/M4	
71	716	3.9	20.596	-H3000	40-P132/M4	
65	790	1.9	22.711	-H1500	40-P132/M4	
64	802	3.6	23.044	-H3000	40-P132/M4	
63	804	1.1	23.103	-H850	40-P132/M4	
59	867	1.7	24.933	-H1500	40-P132/M4	
58	880	3.4	25.311	-H3000	40-P132/M4	
57	898	1.0	25.815	-H850	40-P132/M4	
53	959	1.6	27.578	-H1500	40-P132/M4	
49	1037	2.9	29.822	-H3000	40-P132/M4	
45	1139	2.6	32.756	-H3000	40-P132/M4	
41	1259	2.4	36.193	-H3000	40-P132/M4	
37	1383	2.2	39.753	-H3000	40-P132/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
50	1012	0.8	29.536	-H850	40-P132/M4	
36	1388	1.1	40.517	-H1500	40-P132/M4	
33	1535	1.0	44.814	-H1500	40-P132/M4	
31	1617	1.8	47.186	-H3000	40-P132/M4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 5.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
29	1709	0.9	49.867	-H1500	40-P132/M4	
28	1776	1.6	51.828	-H3000	40-P132/M4	
27	1842	1.6	53.770	-H3000	40-P132/M4	
25	2023	1.5	59.059	-H3000	40-P132/M4	
23	2218	1.4	64.744	-H3000	40-P132/M4	
21	2436	1.2	71.112	-H3000	40-P132/M4	
19	2720	1.1	79.375	-H3000	40-P132/M4	
17	2987	1.0	87.183	-H3000	40-P132/M4	
14	3684	0.8	107.541	-H3000	40-P132/M4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 7.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
464	150	2.0	3.147	-H850	40-P132/L4	
447	155	1.5	3.267	-H600	40-P132/L4	
424	164	1.6	3.444	-H450	40-P132/L4	
390	178	4.4	3.743	-H1500	40-P132/L4	
335	208	1.8	4.362	-H850	40-P132/L4	
326	213	1.4	4.480	-H600	40-P132/L4	
309	225	1.3	4.724	-H450	40-P132/L4	
307	226	4.1	4.758	-H1500	40-P132/L4	
272	256	1.7	5.368	-H850	40-P132/L4	
270	257	4.0	5.400	-H1500	40-P132/L4	
257	270	1.2	5.678	-H450	40-P132/L4	
255	273	1.2	5.733	-H600	40-P132/L4	
246	283	2.0	5.946	-H850	40-P132/L4	
242	288	1.1	6.045	-H450	40-P132/L4	
234	297	3.7	6.245	-H1500	40-P132/L4	
226	307	1.3	6.456	-H600	40-P132/L4	
221	315	1.1	6.613	-H450	40-P132/L4	
220	316	1.8	6.644	-H850	40-P132/L4	
213	327	3.5	6.864	-H1500	40-P132/L4	
201	345	1.3	7.250	-H600	40-P132/L4	
192	361	3.4	7.592	-H1500	40-P132/L4	
188	371	1.0	7.787	-H450	40-P132/L4	
177	392	1.6	8.241	-H850	40-P132/L4	
166	419	0.9	8.800	-H450	40-P132/L4	
165	421	1.2	8.853	-H600	40-P132/L4	
162	429	3.1	9.010	-H1500	40-P132/L4	
159	438	1.5	9.208	-H850	40-P132/L4	
147	473	1.1	9.943	-H600	40-P132/L4	
147	474	0.8	9.965	-H450	40-P132/L4	
146	476	4.8	10.005	-H3000	40-P132/L4	
144	483	1.4	10.143	-H850	40-P132/L4	
142	489	2.8	10.267	-H1500	40-P132/L4	
129	539	1.0	11.330	-H600	40-P132/L4	
129	540	2.6	11.356	-H1500	40-P132/L4	
129	541	1.3	11.360	-H850	40-P132/L4	
126	553	4.3	11.619	-H3000	40-P132/L4	
118	588	2.4	12.362	-H1500	40-P132/L4	

# g500-H helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 7.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
118	590	0.9	12.395	-H600	40-P132/L4	
115	604	1.2	12.693	-H850	40-P132/L4	
114	607	4.1	12.762	-H3000	40-P132/L4	
107	651	2.2	13.673	-H1500	40-P132/L4	
105	663	0.9	13.920	-H600	40-P132/L4	
103	677	3.7	14.233	-H3000	40-P132/L4	
101	690	1.1	14.490	-H850	40-P132/L4	
96	721	2.0	15.156	-H1500	40-P132/L4	
93	744	3.5	15.633	-H3000	40-P132/L4	
90	771	1.0	16.190	-H850	40-P132/L4	
87	798	1.8	16.763	-H1500	40-P132/L4	
82	845	1.0	17.750	-H850	40-P132/L4	
78	892	3.1	18.752	-H3000	40-P132/L4	
74	944	0.9	19.833	-H850	40-P132/L4	
71	977	1.5	20.533	-H1500	40-P132/L4	
71	980	2.9	20.596	-H3000	40-P132/L4	
64	1081	1.4	22.711	-H1500	40-P132/L4	
63	1097	2.6	23.044	-H3000	40-P132/L4	
59	1187	1.3	24.933	-H1500	40-P132/L4	
58	1205	2.5	25.311	-H3000	40-P132/L4	
53	1313	1.1	27.578	-H1500	40-P132/L4	
49	1419	2.1	29.822	-H3000	40-P132/L4	
45	1559	1.9	32.756	-H3000	40-P132/L4	
40	1723	1.7	36.193	-H3000	40-P132/L4	
37	1892	1.6	39.753	-H3000	40-P132/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
31	2212	1.3	47.186	-H3000	40-P132/L4	
28	2430	1.2	51.828	-H3000	40-P132/L4	
27	2521	1.2	53.770	-H3000	40-P132/L4	
25	2769	1.1	59.059	-H3000	40-P132/L4	
23	3035	1.0	64.744	-H3000	40-P132/L4	
21	3334	0.9	71.112	-H3000	40-P132/L4	
18	3721	0.8	79.375	-H3000	40-P132/L4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 11.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
393	260	3.0	3.743	-H1500	40-P160/M4	
327	312	4.4	4.496	-H3000	40-P160/M4	
309	330	2.8	4.758	-H1500	40-P160/M4	
272	374	2.7	5.400	-H1500	40-P160/M4	
249	409	3.9	5.902	-H3000	40-P160/M4	
235	433	2.5	6.245	-H1500	40-P160/M4	
232	440	4.3	6.344	-H3000	40-P160/M4	
214	476	2.4	6.864	-H1500	40-P160/M4	
211	483	4.2	6.968	-H3000	40-P160/M4	
194	526	2.3	7.592	-H1500	40-P160/M4	
177	577	3.7	8.327	-H3000	40-P160/M4	
163	625	2.1	9.010	-H1500	40-P160/M4	
161	634	3.5	9.146	-H3000	40-P160/M4	
147	694	3.3	10.005	-H3000	40-P160/M4	
143	712	1.9	10.267	-H1500	40-P160/M4	
130	787	1.8	11.356	-H1500	40-P160/M4	
127	806	3.0	11.619	-H3000	40-P160/M4	
119	857	1.7	12.362	-H1500	40-P160/M4	
115	885	2.8	12.762	-H3000	40-P160/M4	
108	948	1.5	13.673	-H1500	40-P160/M4	
103	987	2.6	14.233	-H3000	40-P160/M4	
97	1051	1.4	15.156	-H1500	40-P160/M4	
94	1084	2.4	15.633	-H3000	40-P160/M4	
88	1162	1.3	16.763	-H1500	40-P160/M4	
78	1300	2.1	18.752	-H3000	40-P160/M4	
71	1428	2.0	20.596	-H3000	40-P160/M4	
64	1598	1.8	23.044	-H3000	40-P160/M4	
58	1755	1.7	25.311	-H3000	40-P160/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
31	3222	0.9	47.186	-H3000	40-P160/M4	

6.3



# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 15.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
393	354	2.2	3.743	-H1500	40-P160/L4	
327	425	3.2	4.496	-H3000	40-P160/L4	
309	450	2.1	4.758	-H1500	40-P160/L4	
249	558	2.9	5.902	-H3000	40-P160/L4	
235	590	1.9	6.245	-H1500	40-P160/L4	
232	600	3.2	6.344	-H3000	40-P160/L4	
214	649	1.8	6.864	-H1500	40-P160/L4	
211	659	3.1	6.968	-H3000	40-P160/L4	
194	718	1.7	7.592	-H1500	40-P160/L4	
177	787	2.7	8.327	-H3000	40-P160/L4	
163	852	1.6	9.010	-H1500	40-P160/L4	
161	865	2.6	9.146	-H3000	40-P160/L4	
147	946	2.4	10.005	-H3000	40-P160/L4	
143	971	1.4	10.267	-H1500	40-P160/L4	
130	1074	1.3	11.356	-H1500	40-P160/L4	
127	1098	2.2	11.619	-H3000	40-P160/L4	
119	1169	1.2	12.362	-H1500	40-P160/L4	
115	1207	2.1	12.762	-H3000	40-P160/L4	
108	1293	1.1	13.673	-H1500	40-P160/L4	
103	1346	1.9	14.233	-H3000	40-P160/L4	
97	1433	1.0	15.156	-H1500	40-P160/L4	
94	1478	1.8	15.633	-H3000	40-P160/L4	
88	1585	0.9	16.763	-H1500	40-P160/L4	
78	1773	1.6	18.752	-H3000	40-P160/L4	
71	1947	1.5	20.596	-H3000	40-P160/L4	
64	2179	1.3	23.044	-H3000	40-P160/L4	
58	2393	1.2	25.311	-H3000	40-P160/L4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 18.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
307	559	1.7	4.758	-H1500	40-P180/M4	
247	693	2.3	5.902	-H3000	40-P180/M4	
234	733	1.5	6.245	-H1500	40-P180/M4	
175	978	2.2	8.327	-H3000	40-P180/M4	
160	1074	2.1	9.146	-H3000	40-P180/M4	
146	1175	2.0	10.005	-H3000	40-P180/M4	
142	1205	1.1	10.267	-H1500	40-P180/M4	
126	1364	1.8	11.619	-H3000	40-P180/M4	
118	1451	1.0	12.362	-H1500	40-P180/M4	
114	1498	1.7	12.762	-H3000	40-P180/M4	
103	1671	1.5	14.233	-H3000	40-P180/M4	
96	1779	0.8	15.156	-H1500	40-P180/M4	
93	1835	1.4	15.633	-H3000	40-P180/M4	
78	2201	1.3	18.752	-H3000	40-P180/M4	
71	2418	1.2	20.596	-H3000	40-P180/M4	
63	2705	1.1	23.044	-H3000	40-P180/M4	
58	2971	1.0	25.311	-H3000	40-P180/M4	

# g500-H helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 22.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
248	821	2.0	5.902	-H3000	40-P180/L4	
176	1159	1.9	8.327	-H3000	40-P180/L4	
146	1392	1.7	10.005	-H3000	40-P180/L4	
126	1617	1.5	11.619	-H3000	40-P180/L4	
115	1776	1.4	12.762	-H3000	40-P180/L4	
103	1980	1.3	14.233	-H3000	40-P180/L4	
94	2175	1.2	15.633	-H3000	40-P180/L4	
78	2609	1.1	18.752	-H3000	40-P180/L4	
71	2866	1.0	20.596	-H3000	40-P180/L4	
64	3206	0.9	23.044	-H3000	40-P180/L4	
58	3522	0.8	25.311	-H3000	40-P180/L4	

# g500-H helical geared motors

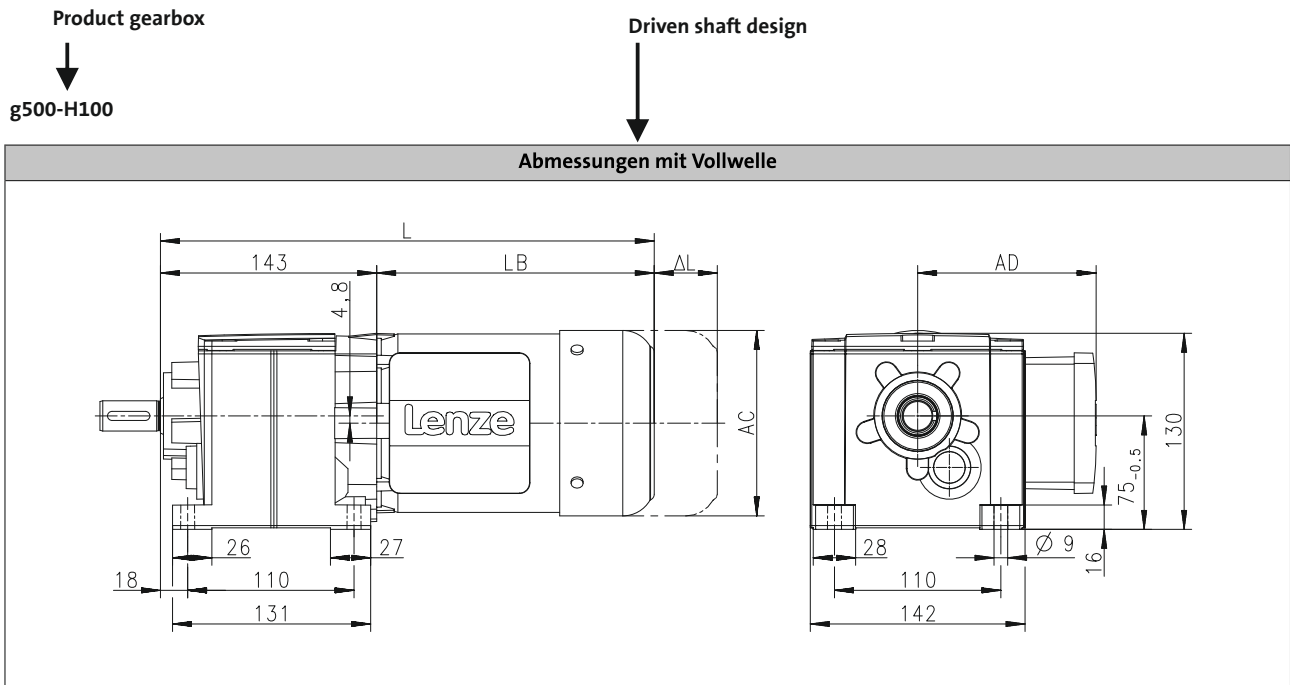


## Technical data

### Dimensions, notes

#### Notes on the dimensions

The following legend shows the layout of the dimension sheets.



#### Product Motor

			MD□MA□□				
			063-12	063-32	063-42	071-32	071-42
Gesamtlänge	L	[mm]	←	326			346
Länge Motor	LB	[mm]	←	183			203
Länge Motoranbauten	ΔL	[mm]	←	170			165
Motordurchmesser	AC	[mm]	←	123			139
Abstand Motor/Anschluss	AD	[mm]	←	100			109

Distance of motor centre to the end of terminal box

Total length of the drive without built-on accessories

Motor diameter

Motor length without built-on accessories

Additional length of the built-on accessories (longest version)

- If the mounting area (foot support) towards the motor is longer than the gearbox foot, some motors collide with the mounting area!

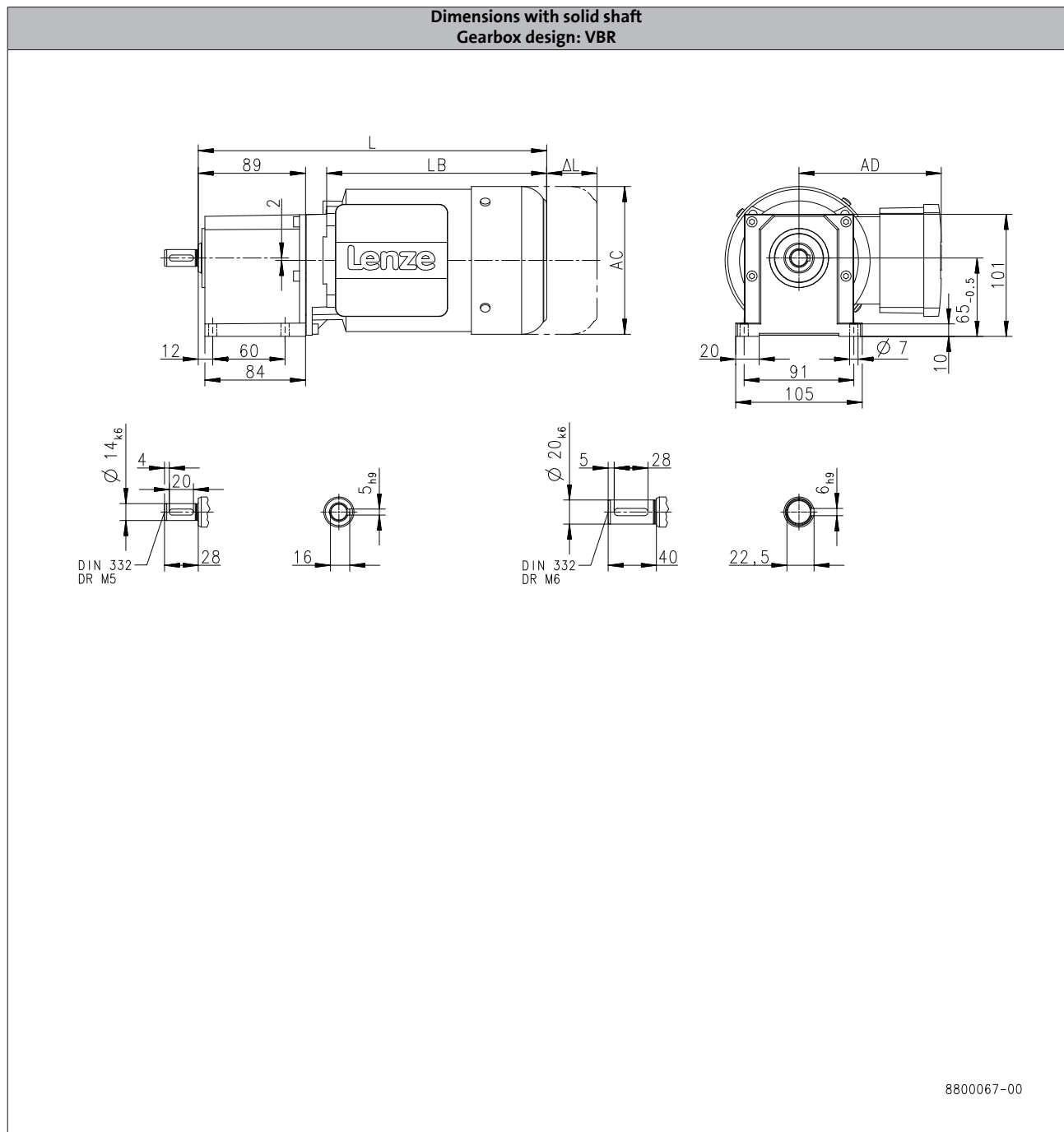
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H45



6.3

			MD□MA□□						
			063-02	063-12	063-22	063-32	063-42	071-32	071-42
Total length	L	[mm]	261	288	261	288		308	
Motor length	LB	[mm]	156	183	156	183		203	
Length of motor options	Δ L	[mm]	71.0	40.0	71.0	40.0		52.0	
Motor diameter	AC	[mm]				123			139
Distance motor/connection	AD	[mm]				107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

# g500-H helical geared motors

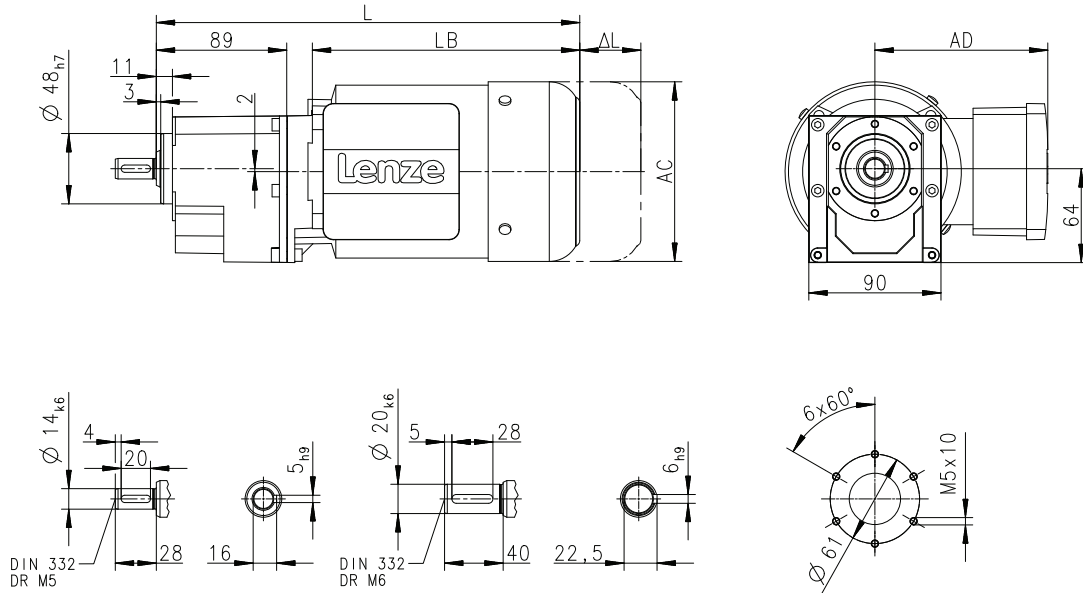
Technical data



## Dimensions, 4-pole motors

g500-H45

Dimensions with solid shaft and centering  
Gearbox design: VCR



8800069-00

			MD□MA□□						
			063-02	063-12	063-22	063-32	063-42	071-32	071-42
Total length	L	[mm]	261	288	261	288		308	
Motor length	LB	[mm]	156	183	156	183		203	
Length of motor options	Δ L	[mm]	71.0	40.0	71.0	40.0		52.0	
Motor diameter	AC	[mm]				123			
Distance motor/connection	AD	[mm]				107			

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

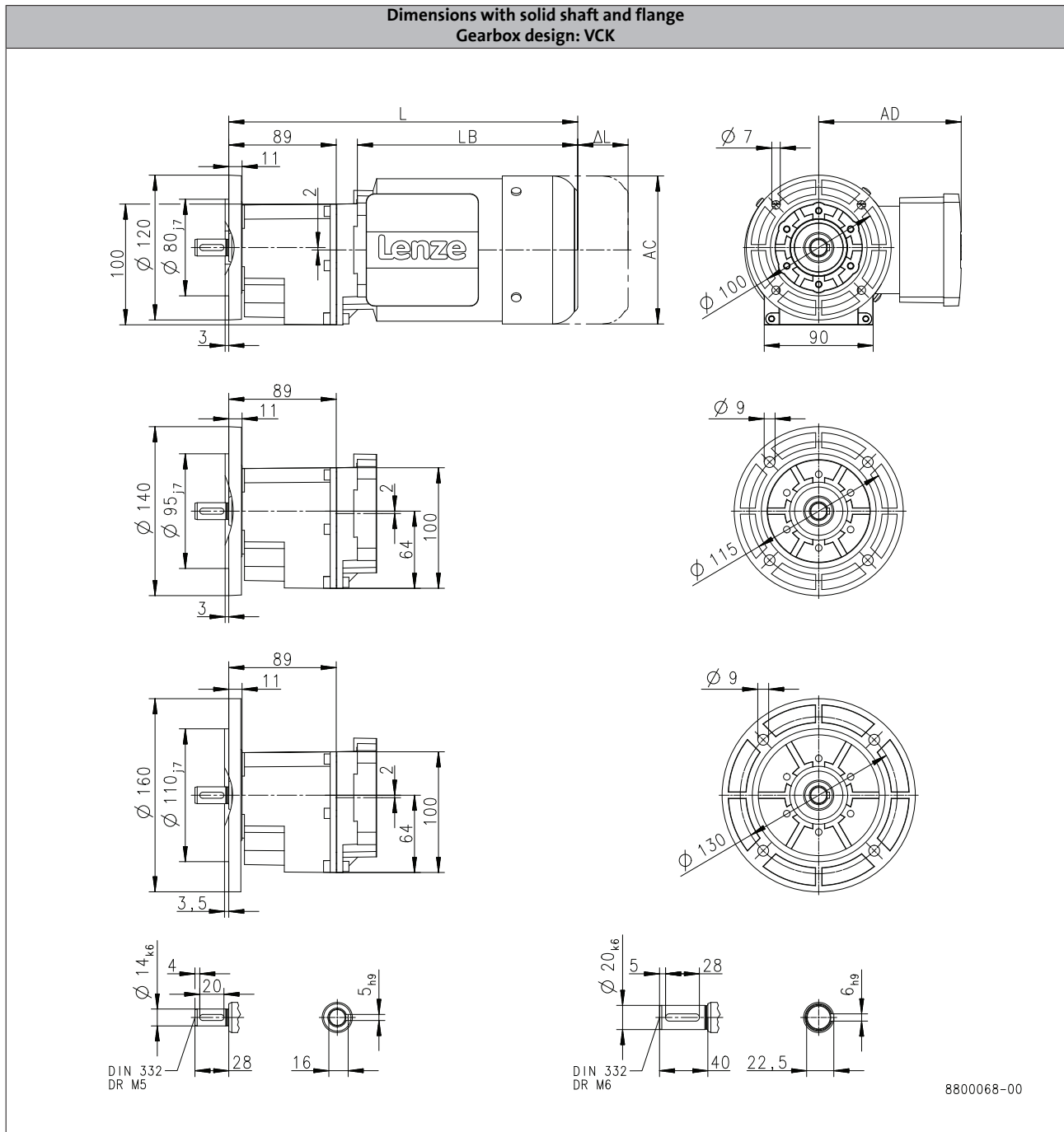
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H45



6.3

		MD□MA□□						
		063-02	063-12	063-22	063-32	063-42	071-32	071-42
Total length	L [mm]	261	288	261	288		308	
Motor length	LB [mm]	156	183	156	183		203	
Length of motor options	Δ L [mm]	71.0	40.0	71.0	40.0		52.0	
Motor diameter	AC [mm]				123			139
Distance motor/connection	AD [mm]				107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

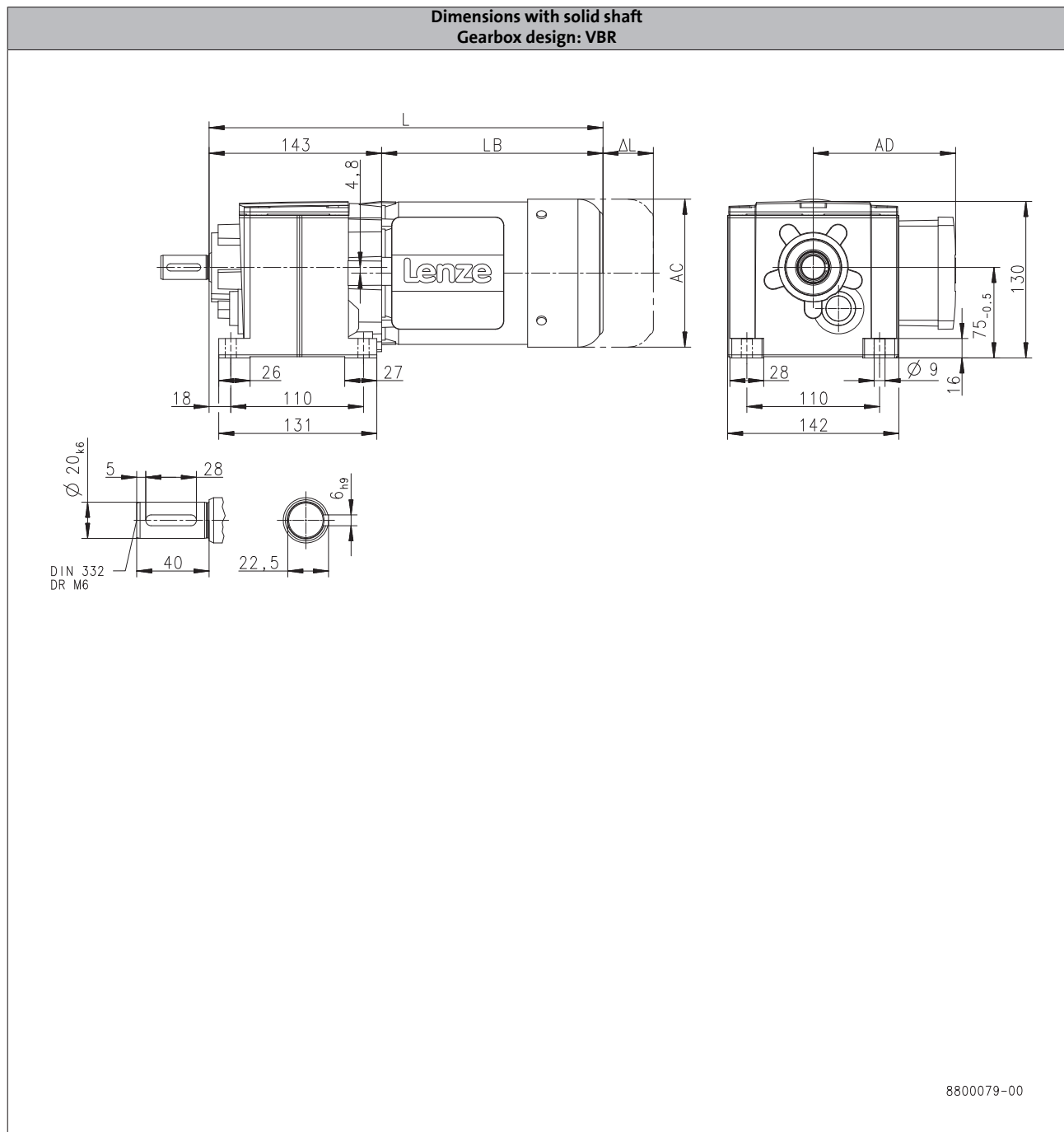
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



6.3

			MD□MA□□				
			063-12	063-32	063-42	071-32	071-42
Total length	L	[mm]		326			346
Motor length	LB	[mm]		183			203
Length of motor options	Δ L	[mm]		40.0			52.0
Motor diameter	AC	[mm]		123			139
Distance motor/connection	AD	[mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



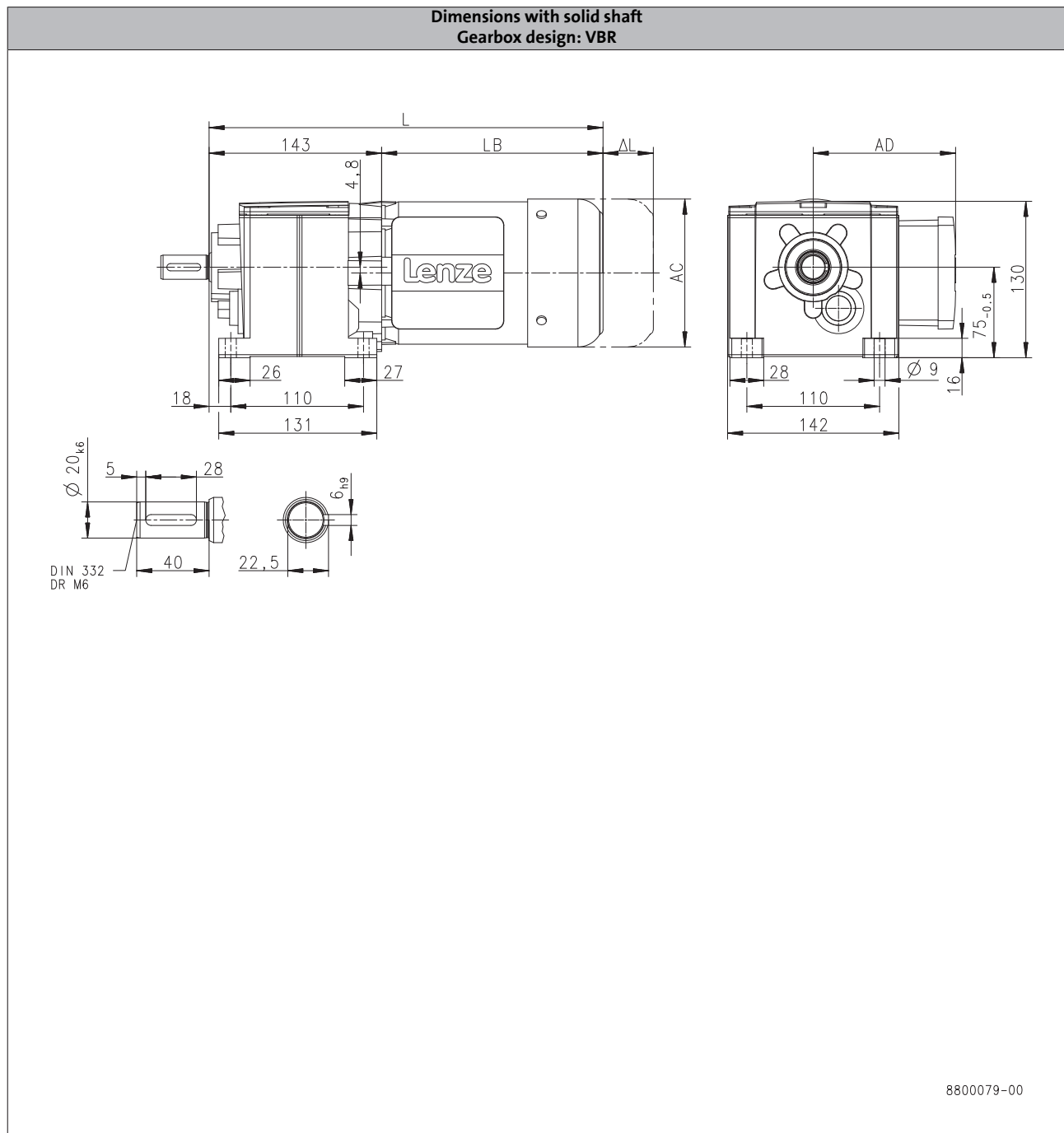
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



6.3

			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	368	437	
Motor length	LB	[mm]	225	294	
Length of motor options	Δ L	[mm]	107	92.0	
Motor diameter	AC	[mm]	158	172	
Distance motor/connection	AD	[mm]	148	155	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

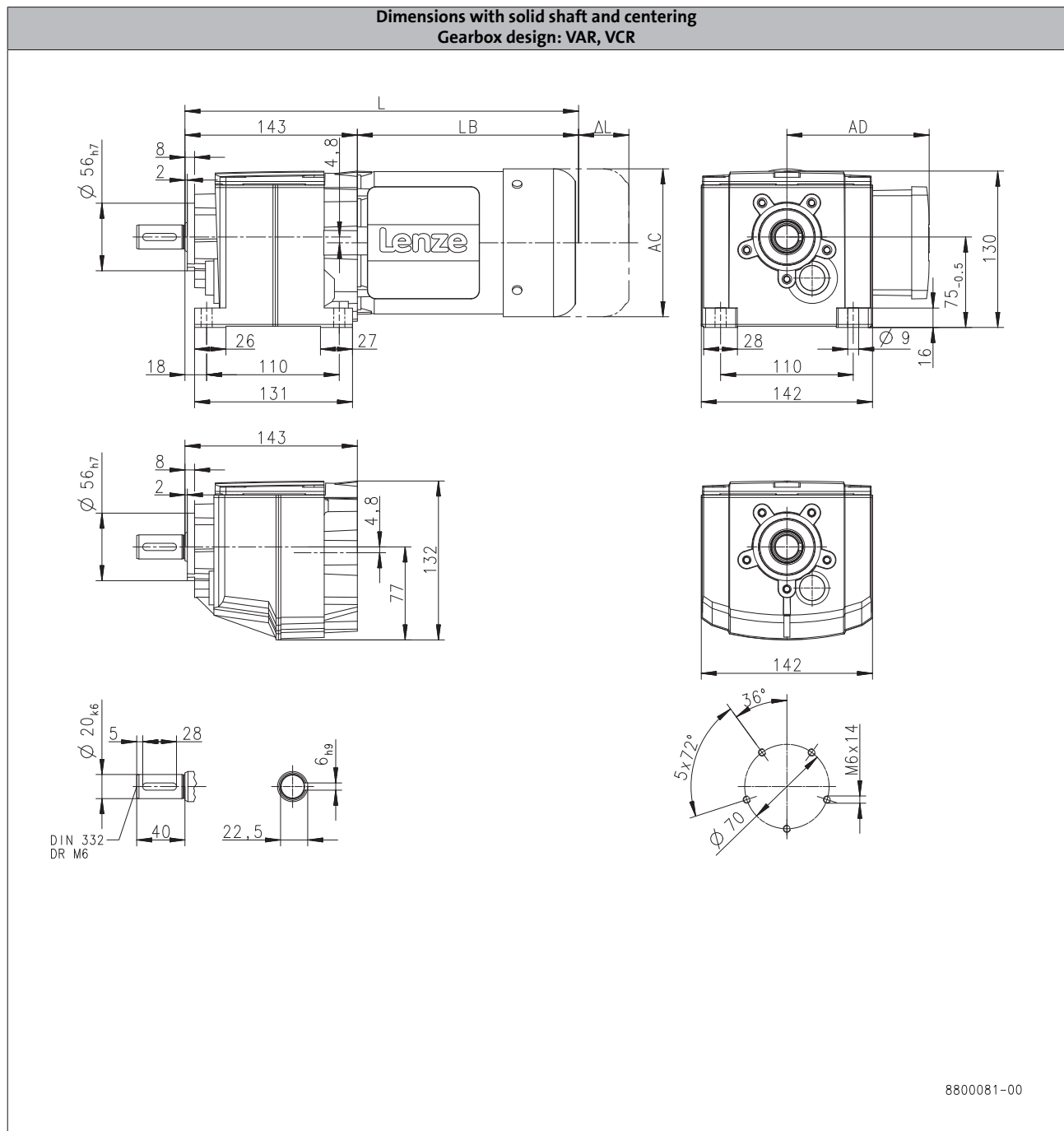
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		326			346
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

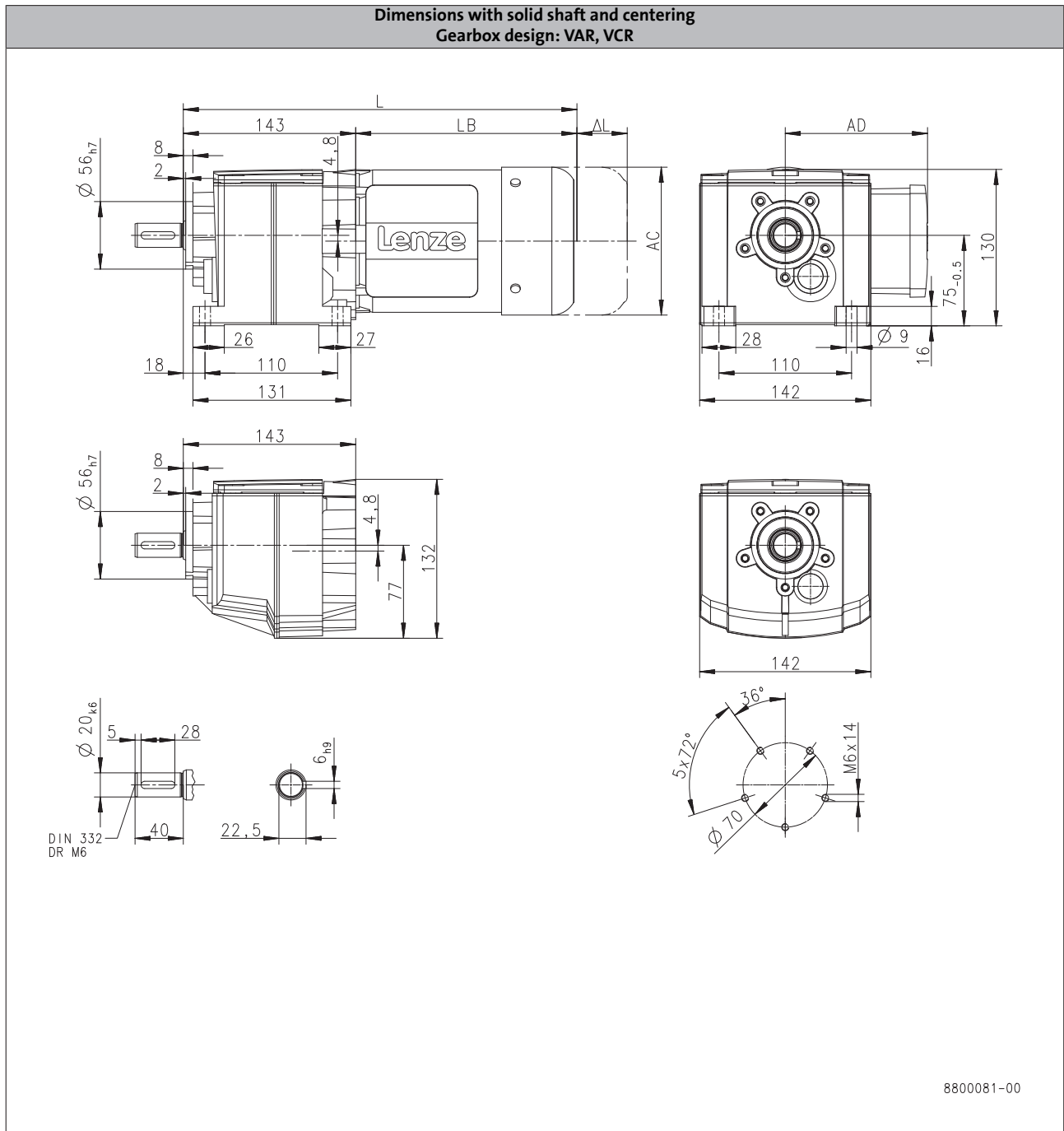
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	368		437
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

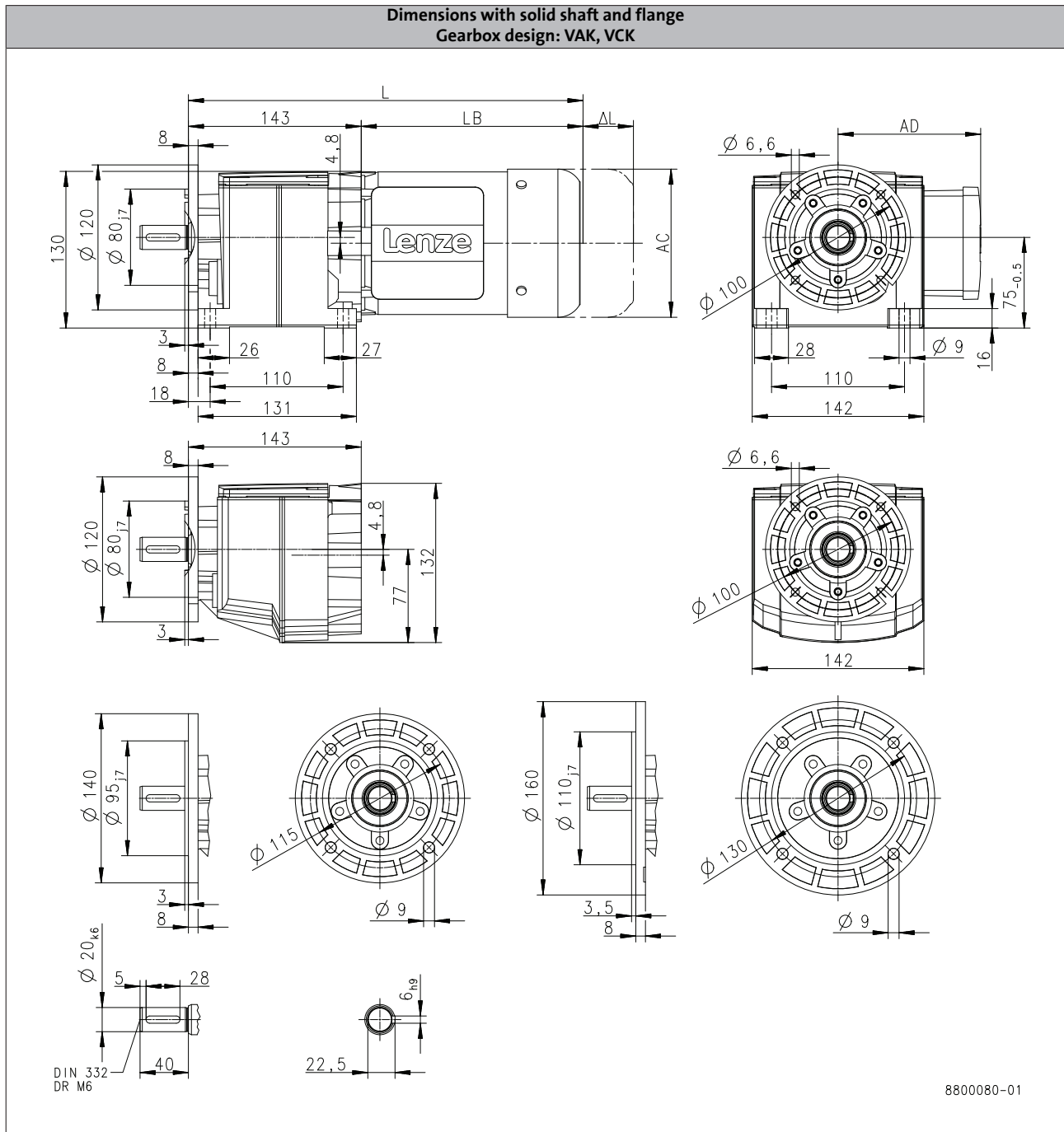
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		326			346
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

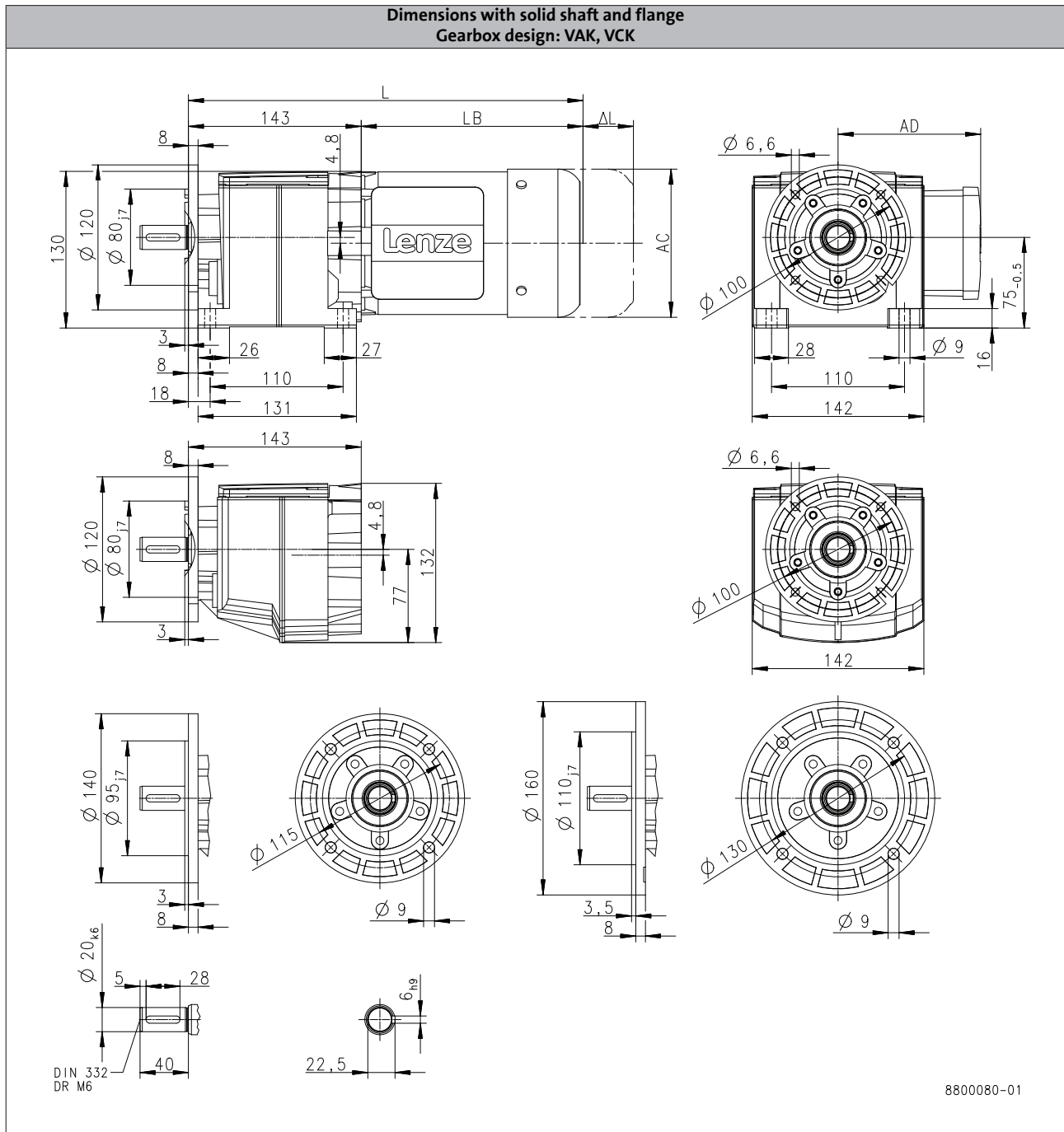
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



6.3

			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	368		437
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

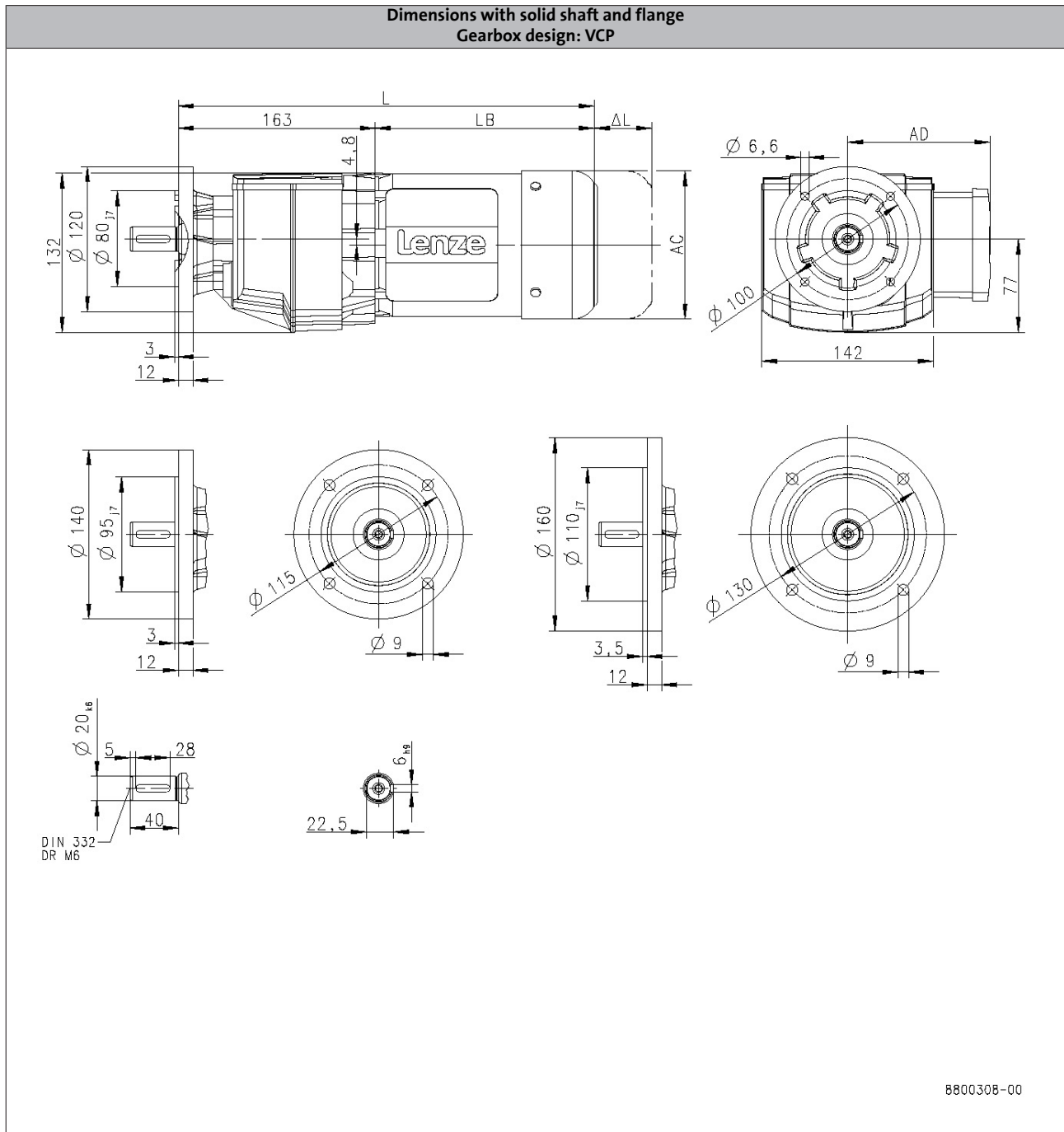
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



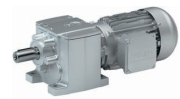
6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		346			366
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

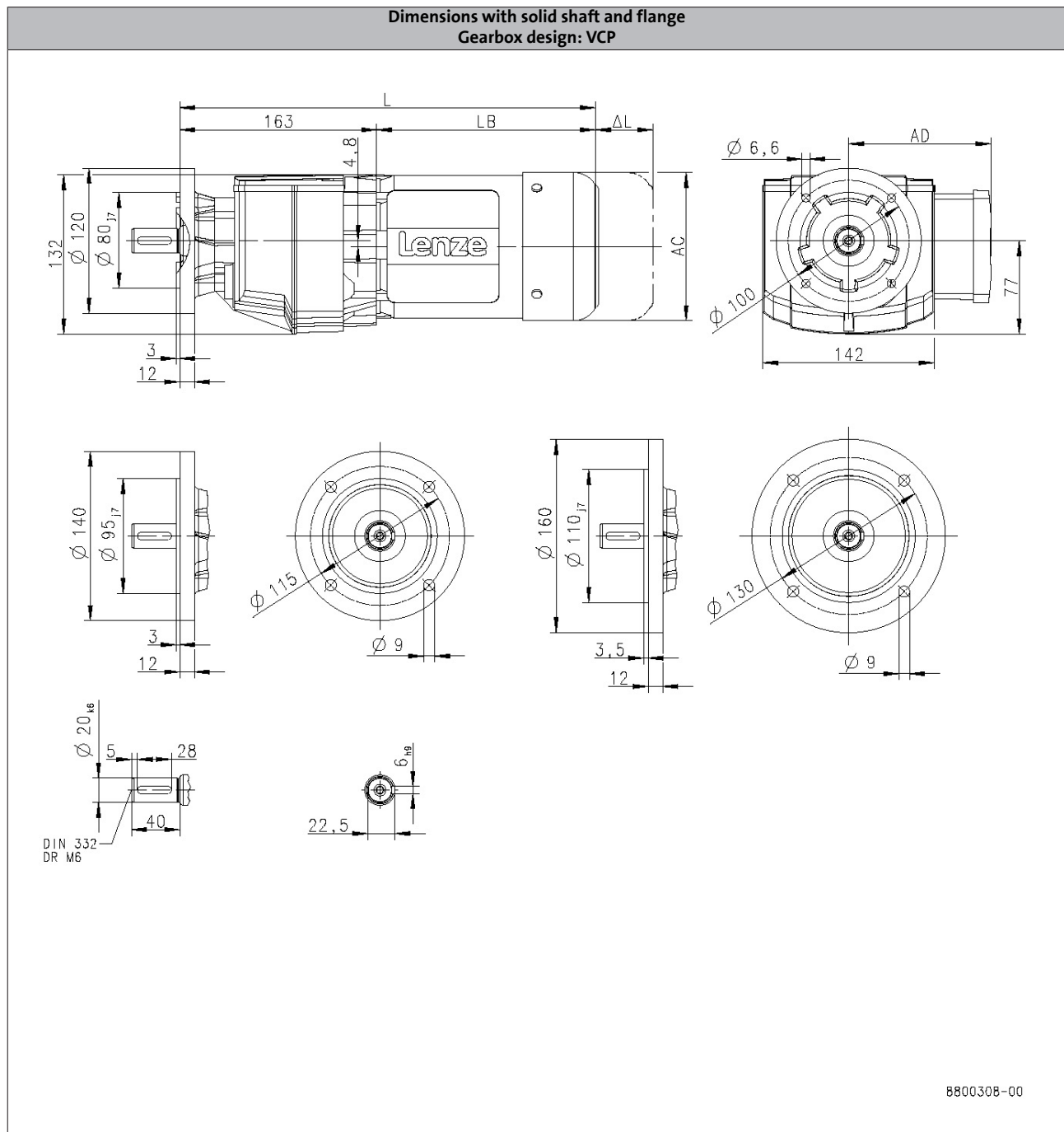
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H100



6.3

			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	388		457
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

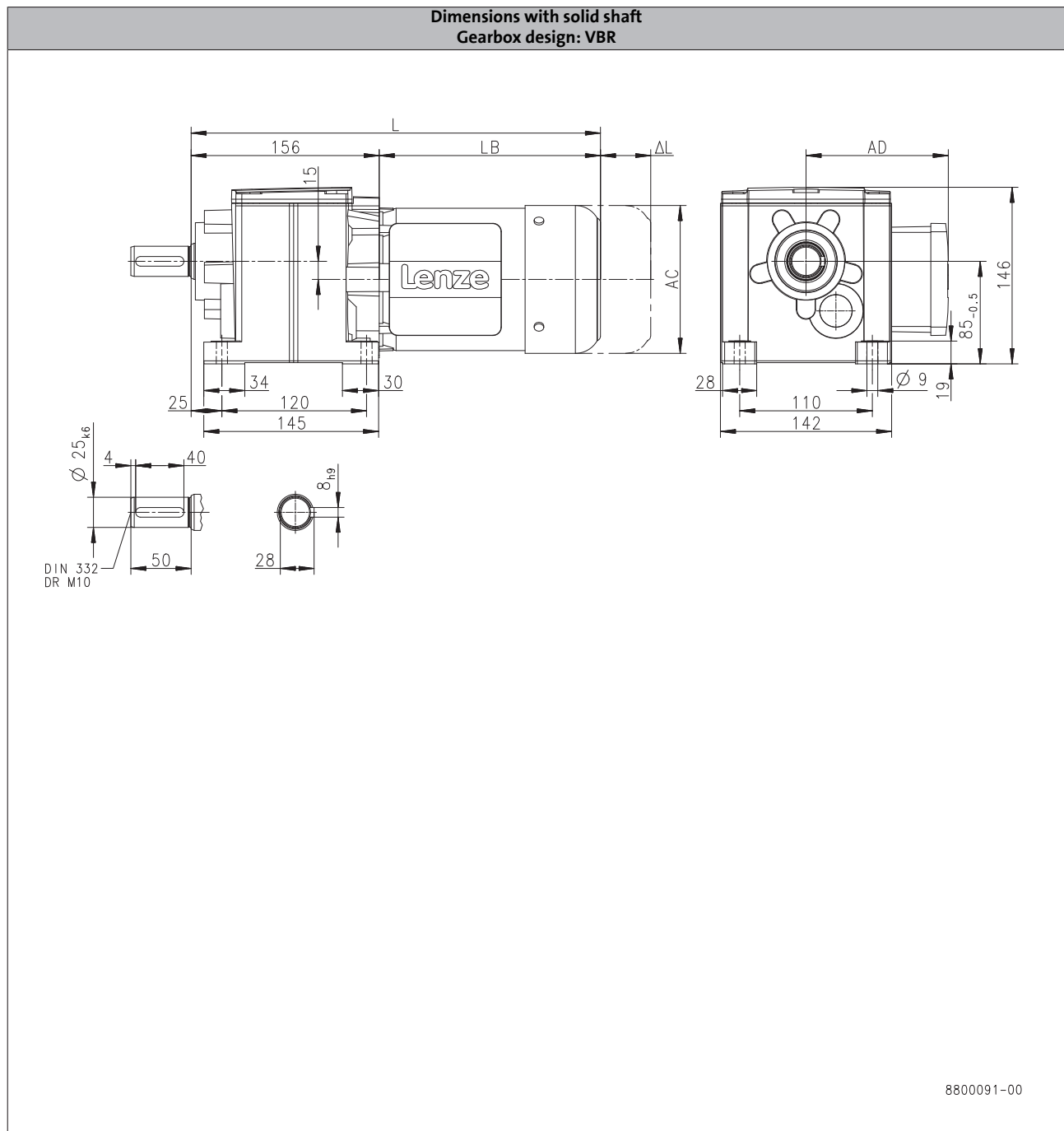
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		339			359
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



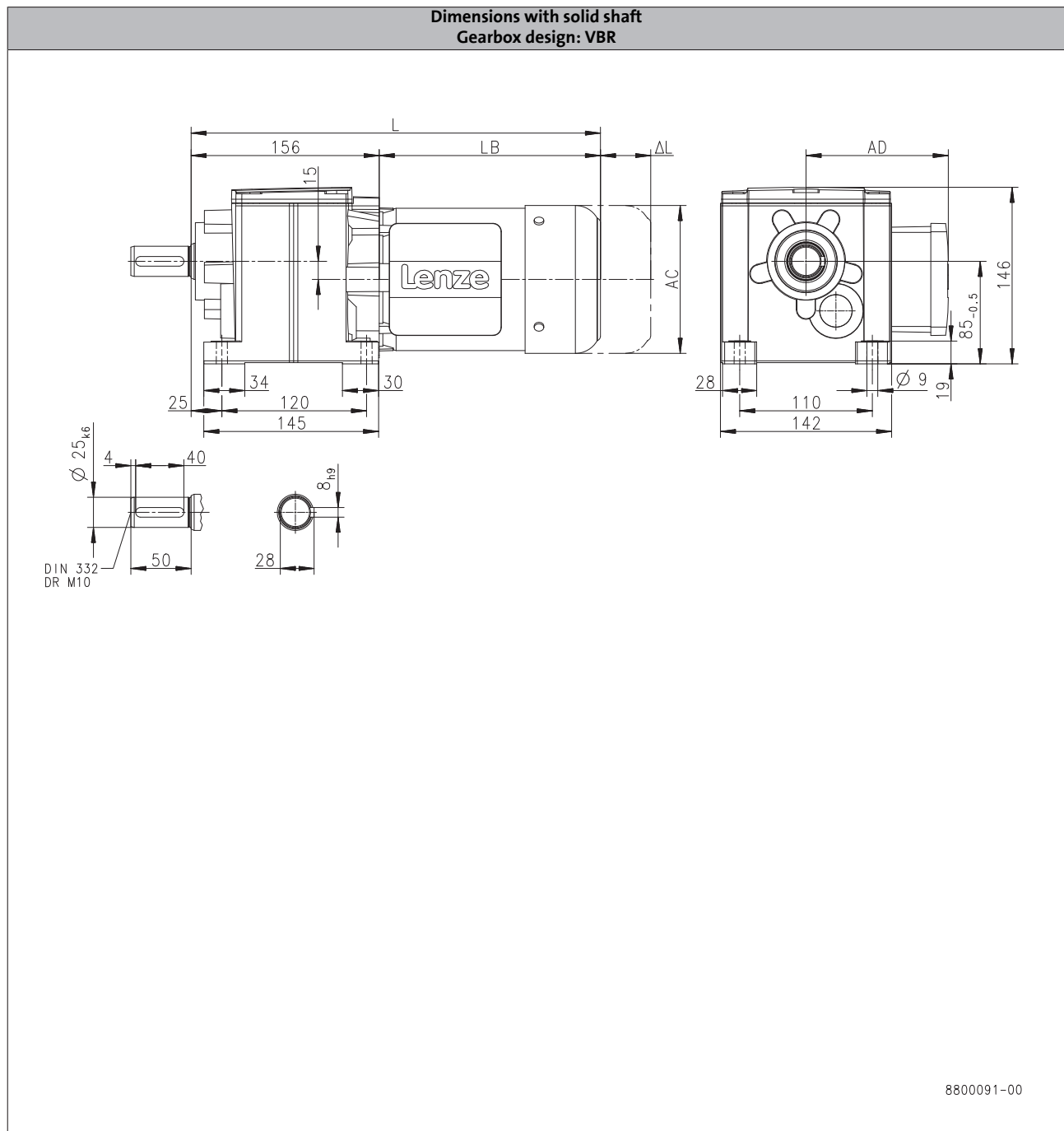
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140



			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	381	450	
Motor length	LB	[mm]	225	294	
Length of motor options	Δ L	[mm]	107	92.0	
Motor diameter	AC	[mm]	158	172	
Distance motor/connection	AD	[mm]	148	155	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

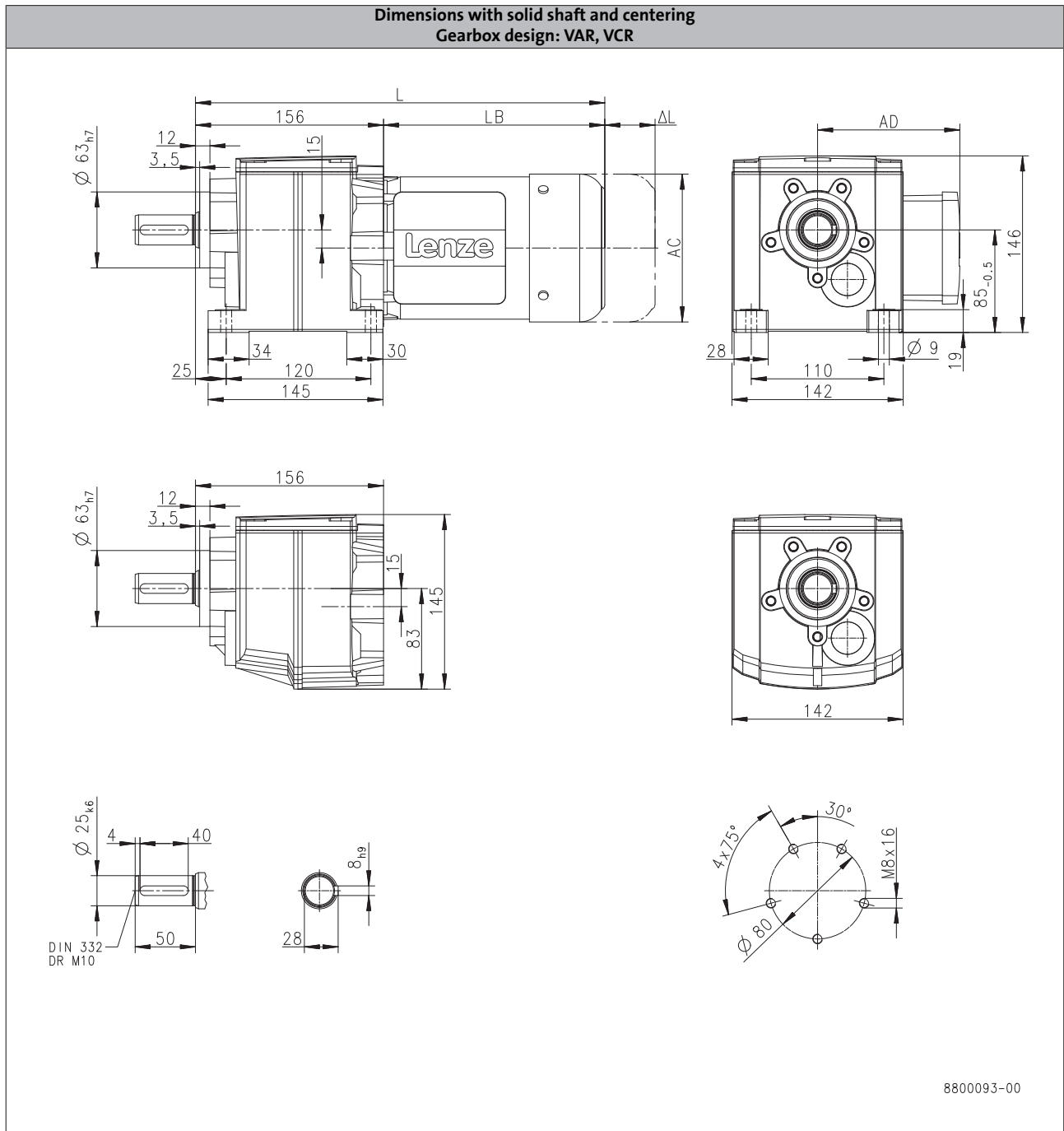
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		339			359
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

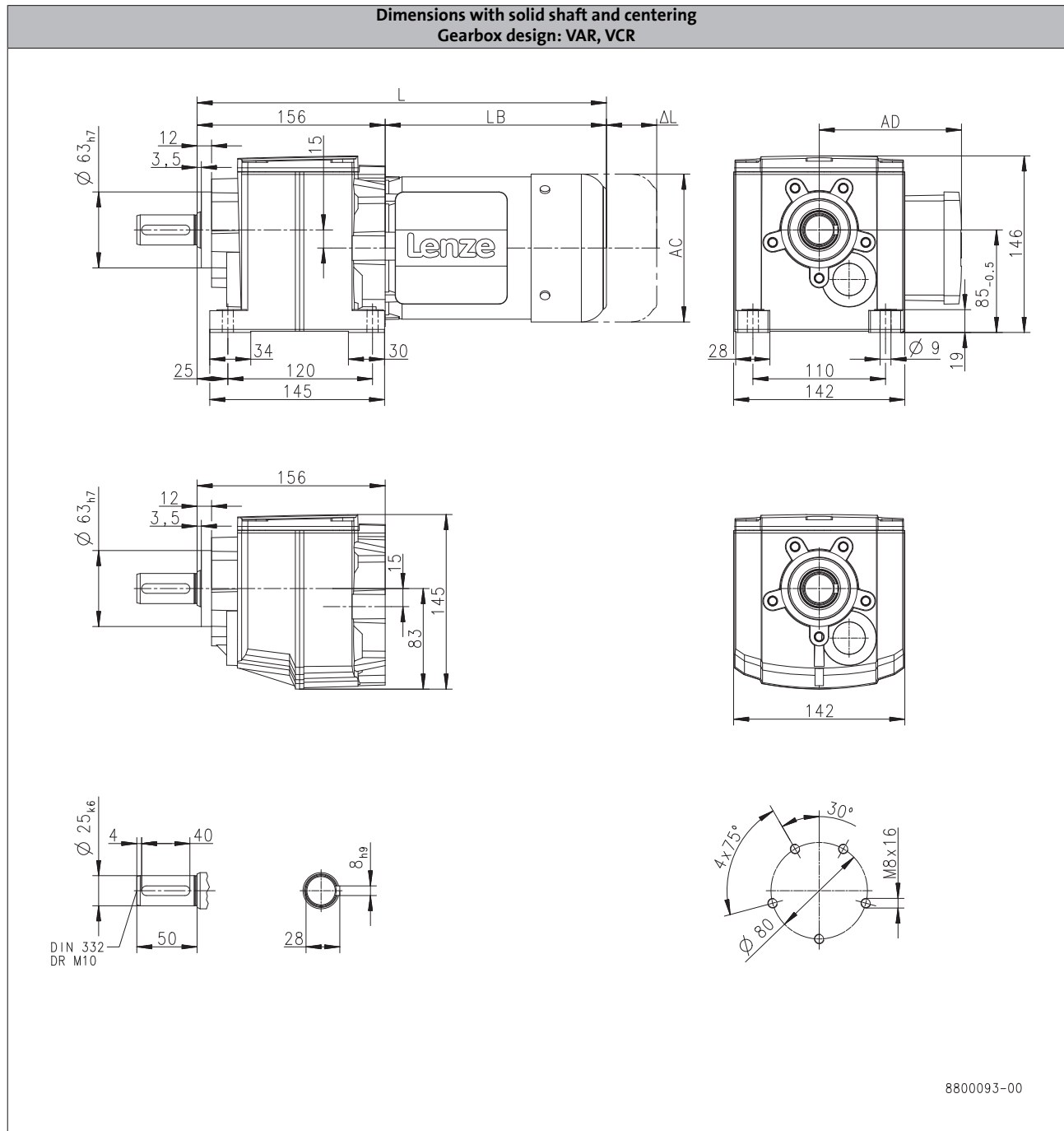
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140



6.3

			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	381	450	
Motor length	LB	[mm]	225	294	
Length of motor options	$\Delta L$	[mm]	107	92.0	
Motor diameter	AC	[mm]	158	172	
Distance motor/connection	AD	[mm]	148	155	

L = length of the motor without built-on accessories  
 $\Delta L$  = additional length of the built-on accessories (with brake)

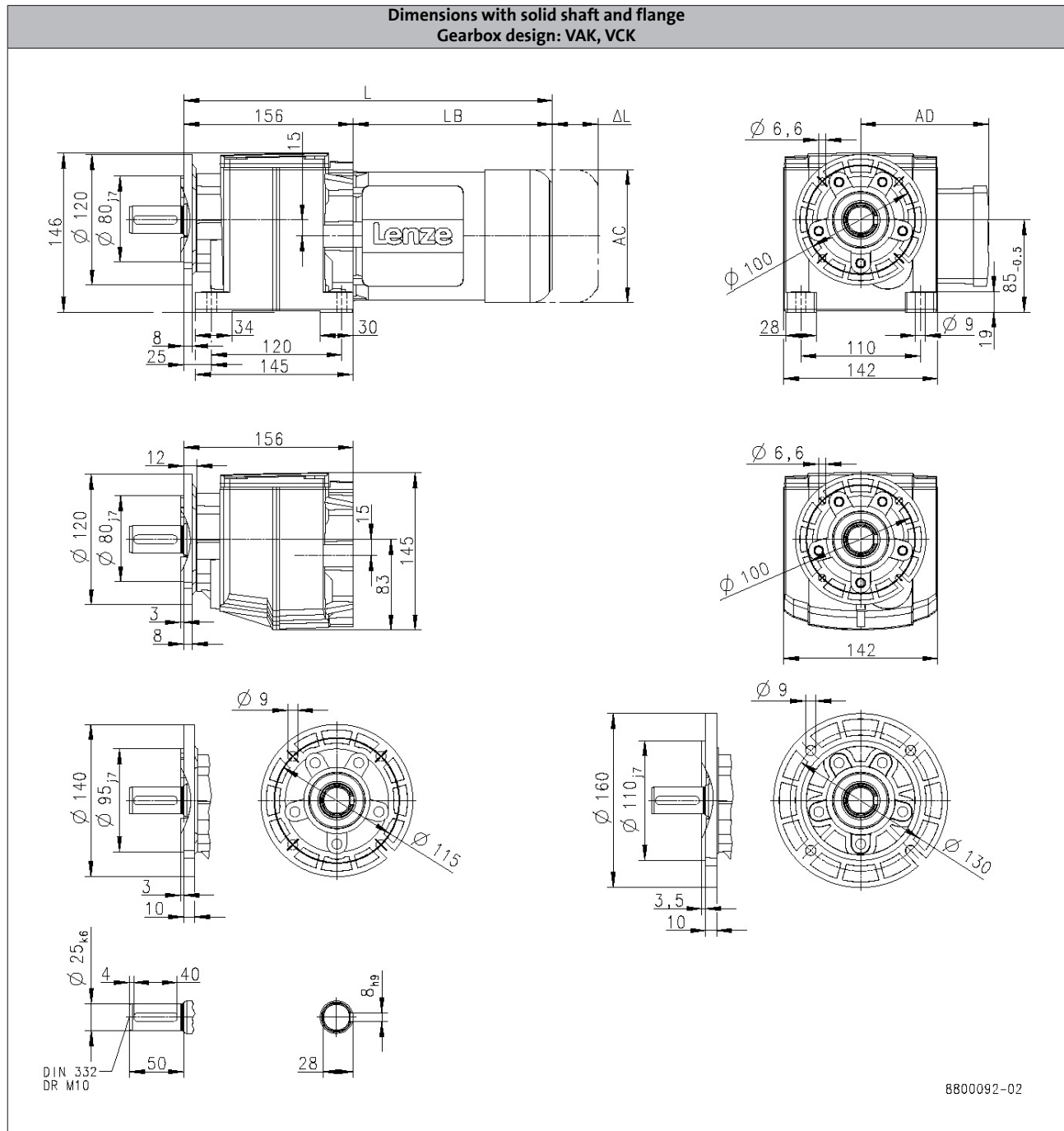
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		339			359
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

6.3

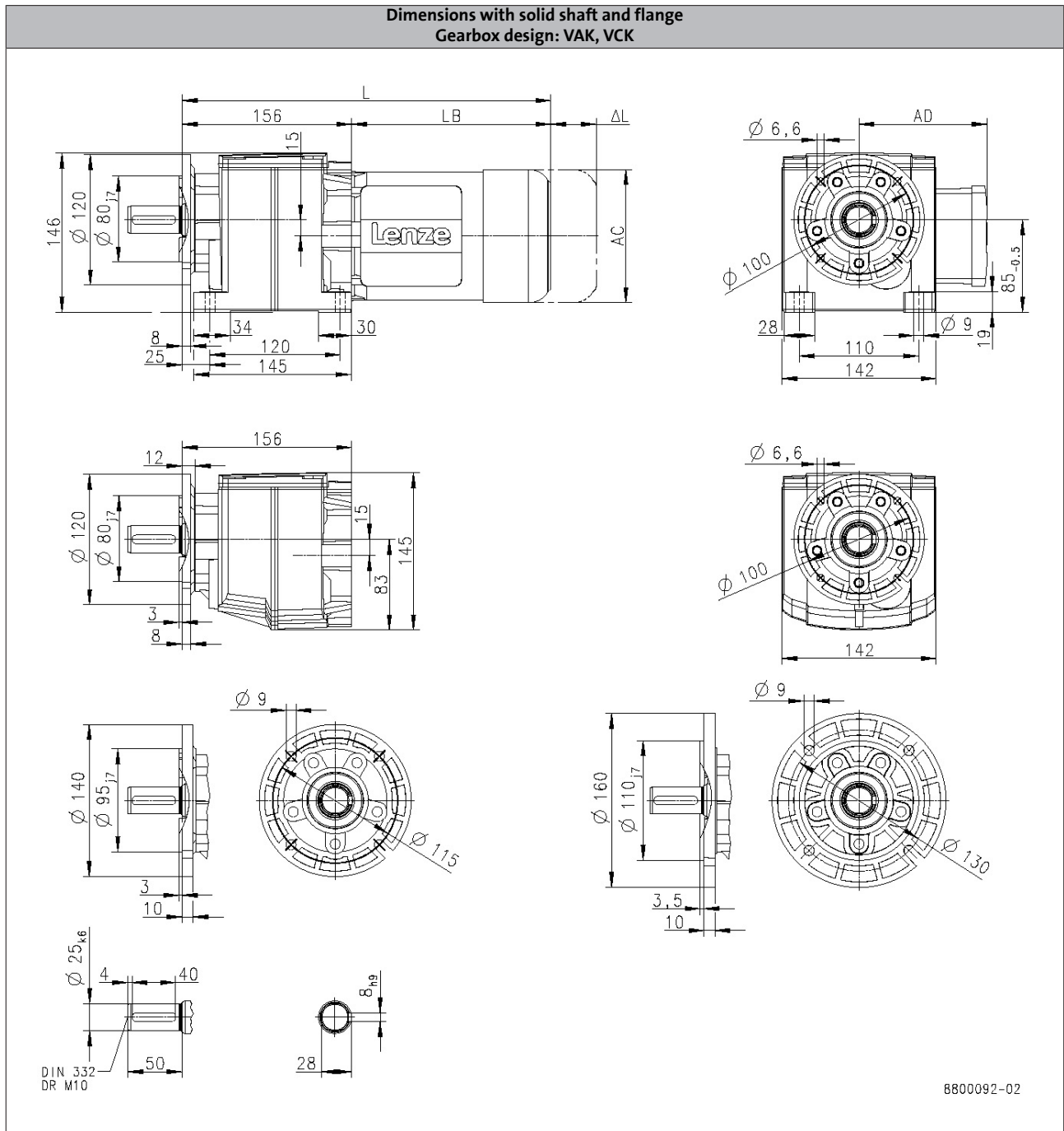
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140



		m240		
		-P80/M4	-P90/M4	-P90/L4
Total length	L [mm]	381		450
Motor length	LB [mm]	225		294
Length of motor options	$\Delta L$ [mm]	107		92.0
Motor diameter	AC [mm]	158		172
Distance motor/connection	AD [mm]	148		155

L = length of the motor without built-on accessories  
 $\Delta L$  = additional length of the built-on accessories (with brake)

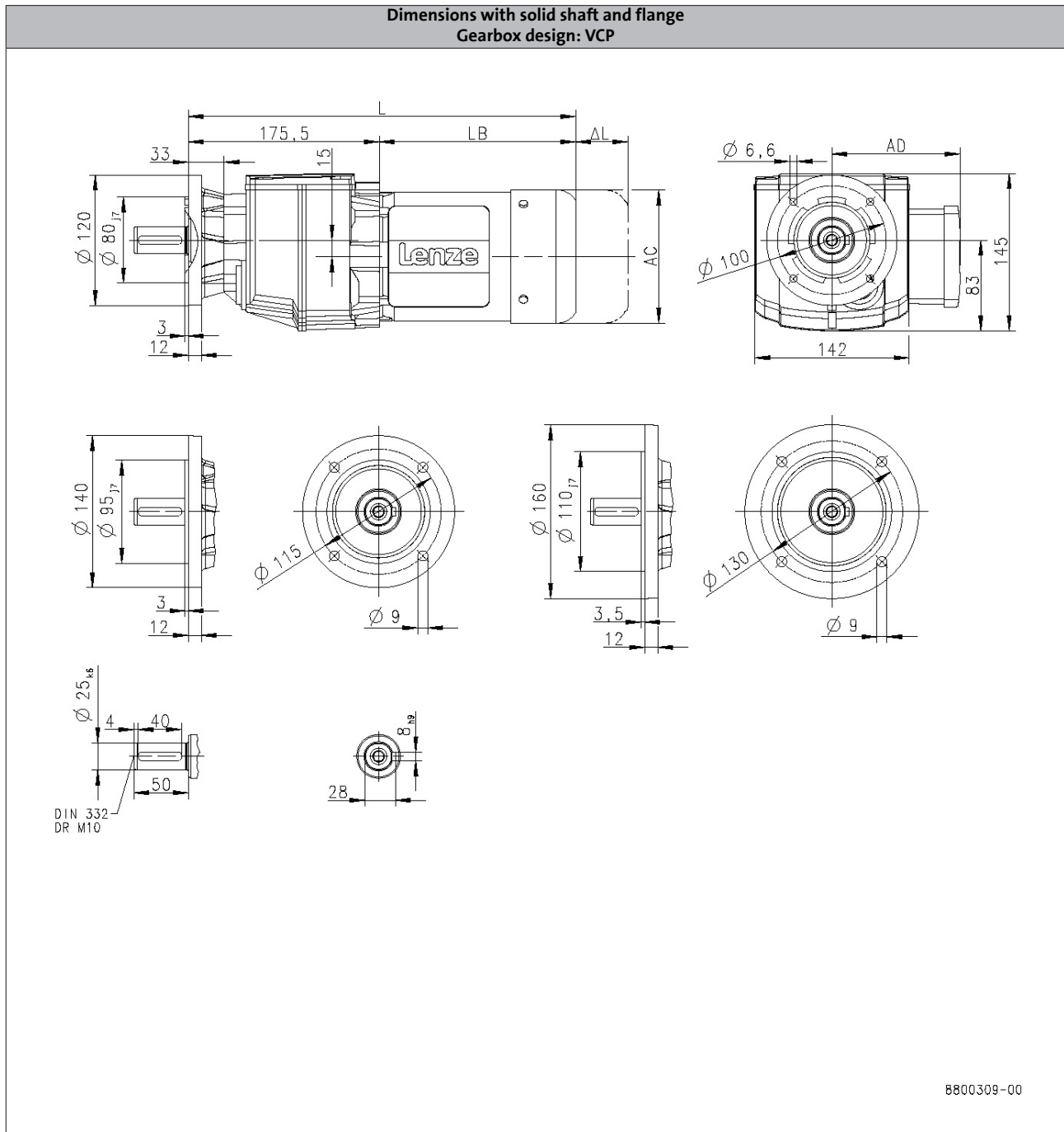
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140

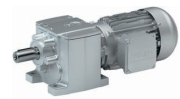


		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		359			379
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

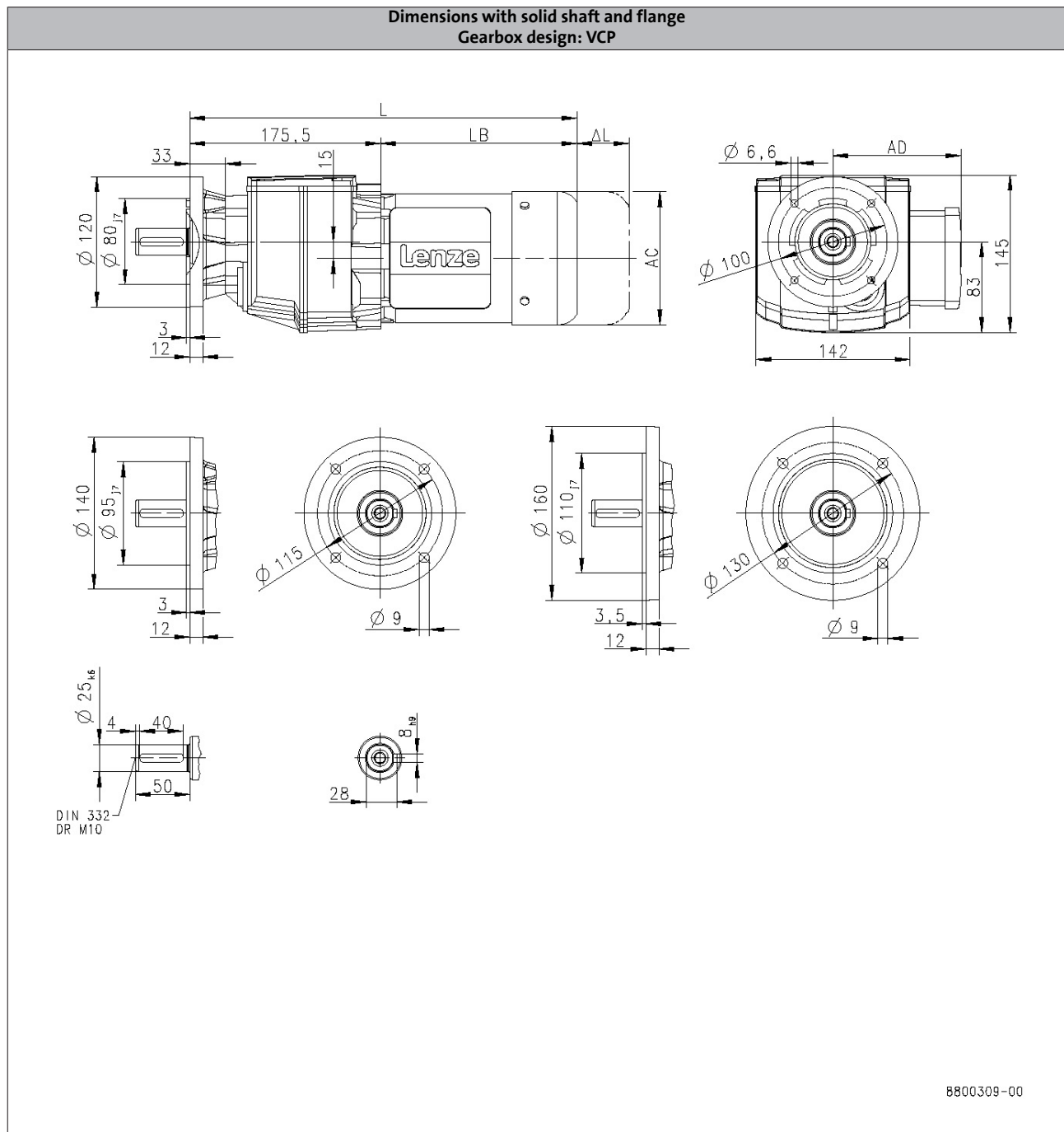
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H140



6.3

			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	401		470
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

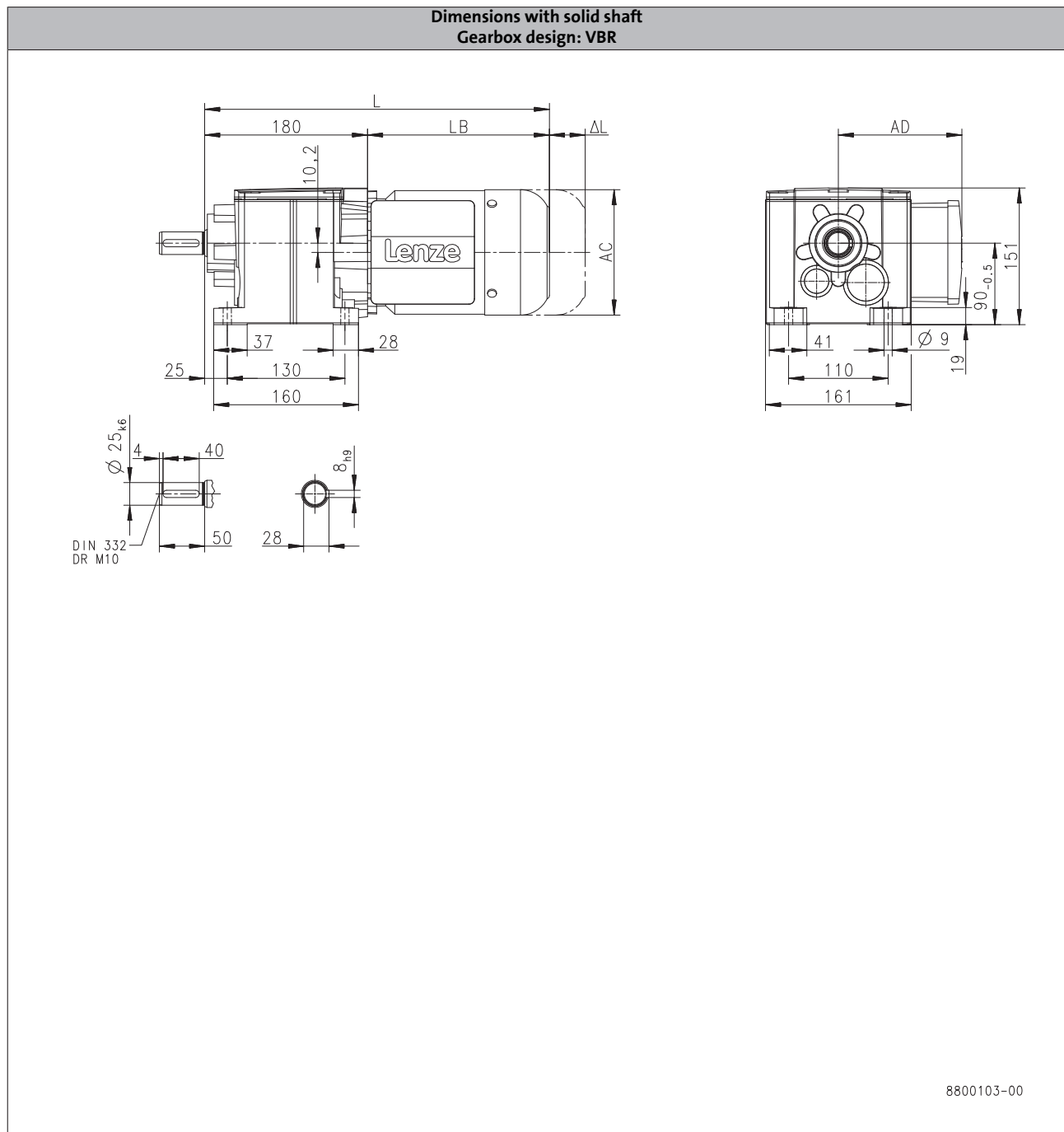
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		363			383
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



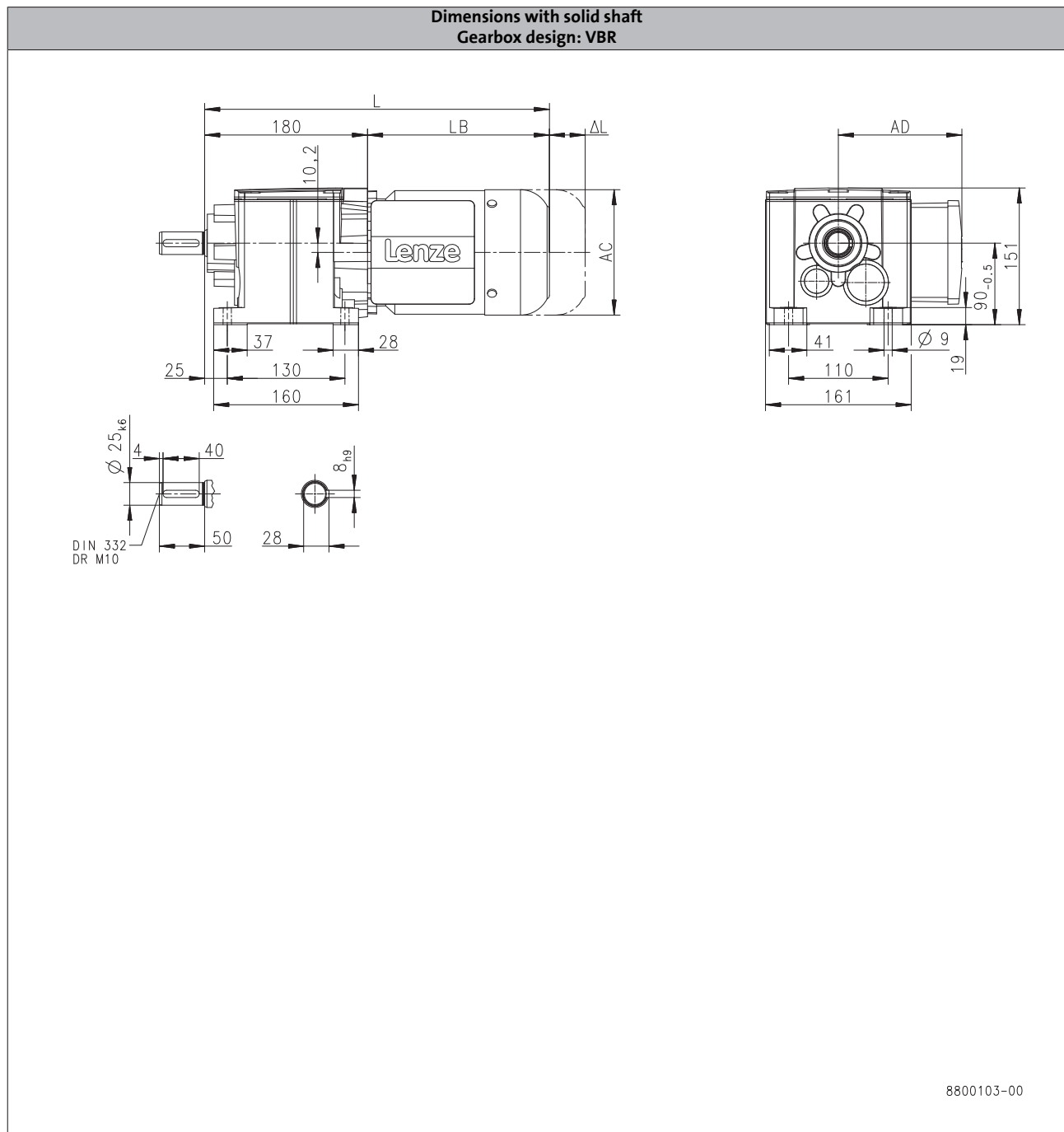
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



6.3

			m240				
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L	[mm]	405	474		536	
Motor length	LB	[mm]	225	294		356	
Length of motor options	Δ L	[mm]	107	92.0		103	
Motor diameter	AC	[mm]	158	172		192	
Distance motor/connection	AD	[mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

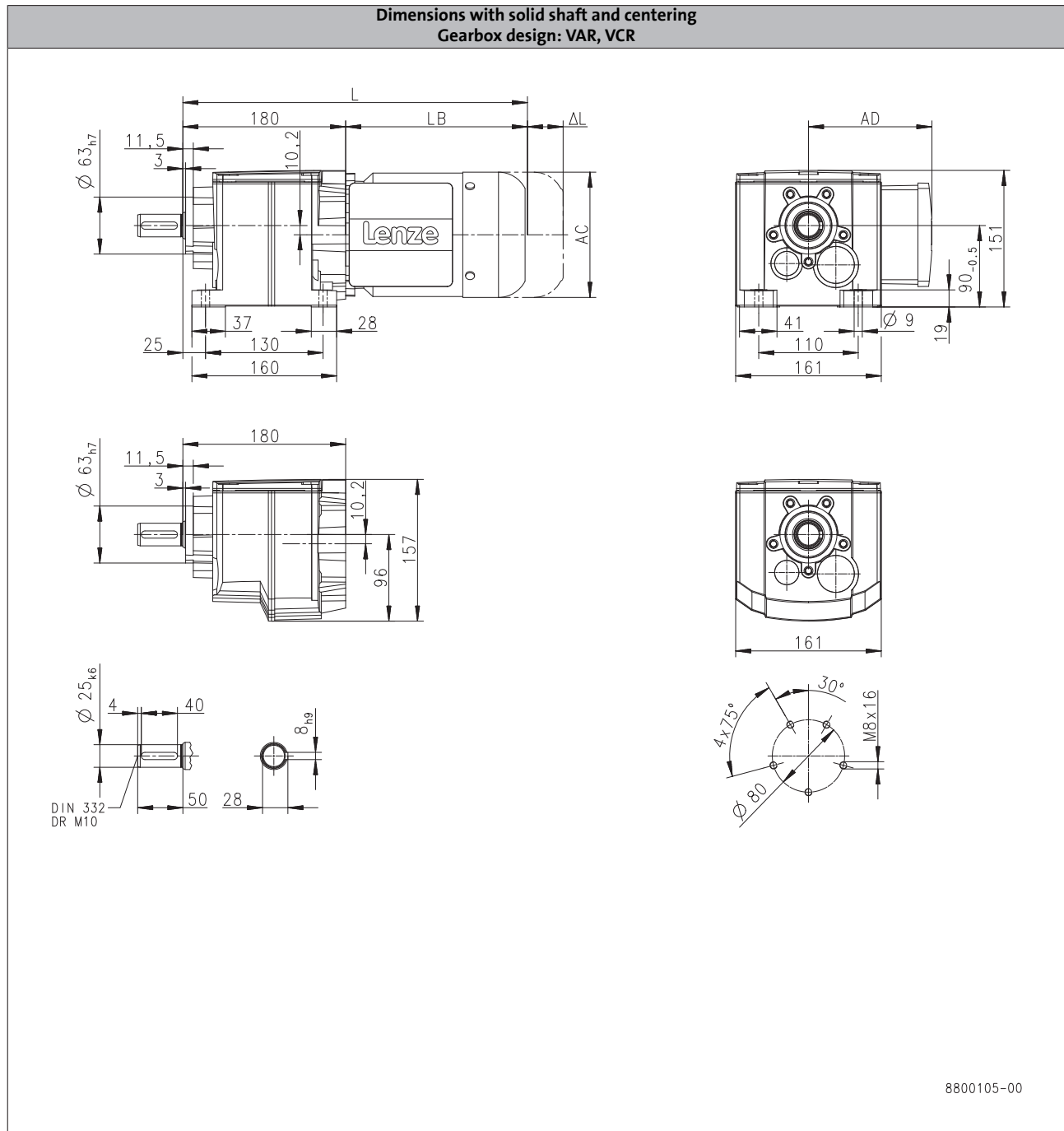
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		363			383
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

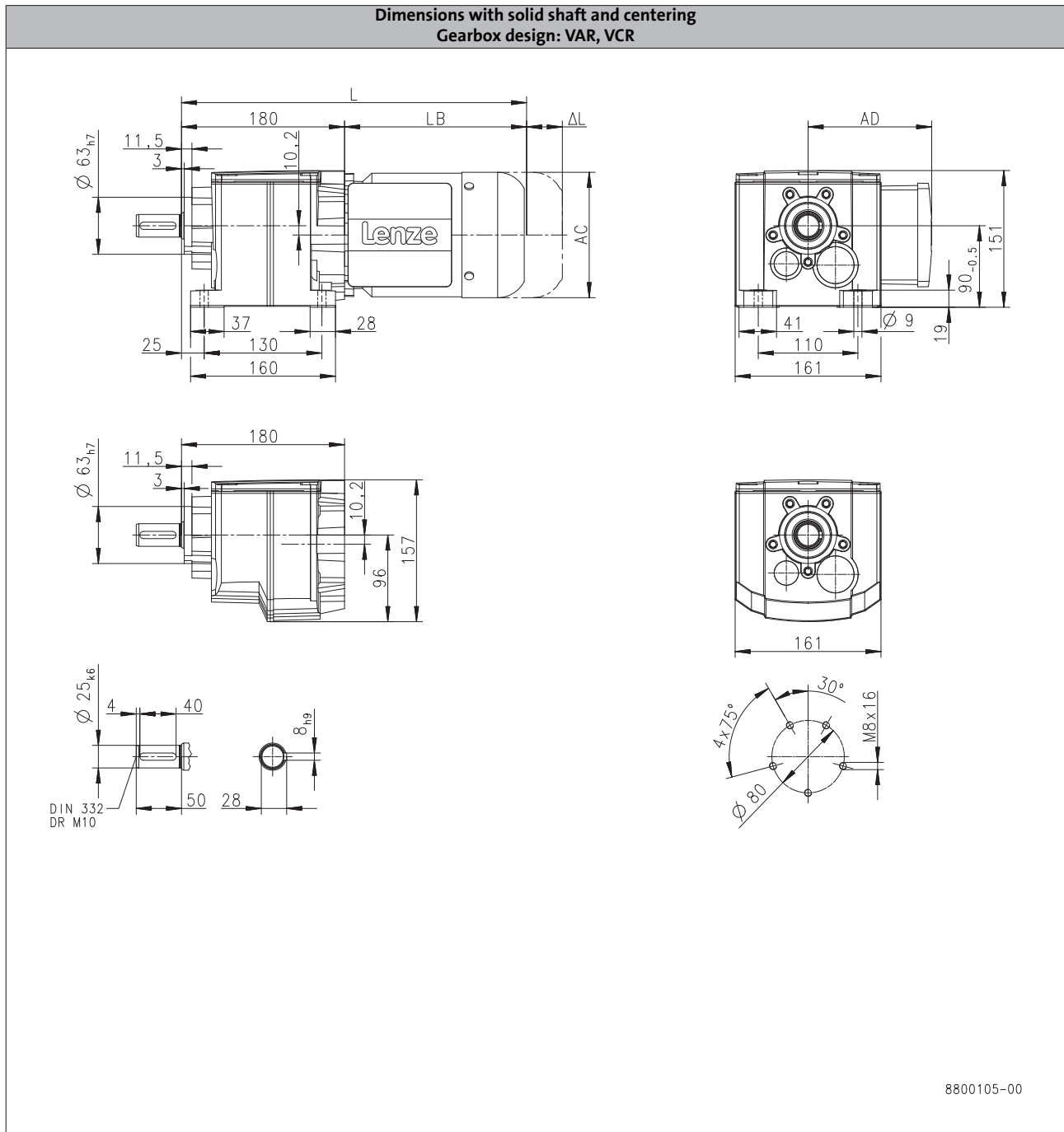
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



			m240				
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L	[mm]	405		474		536
Motor length	LB	[mm]	225		294		356
Length of motor options	$\Delta L$	[mm]	107		92.0		103
Motor diameter	AC	[mm]	158		172		192
Distance motor/connection	AD	[mm]	148		155		164

L = length of the motor without built-on accessories  
 $\Delta L$  = additional length of the built-on accessories (with brake)

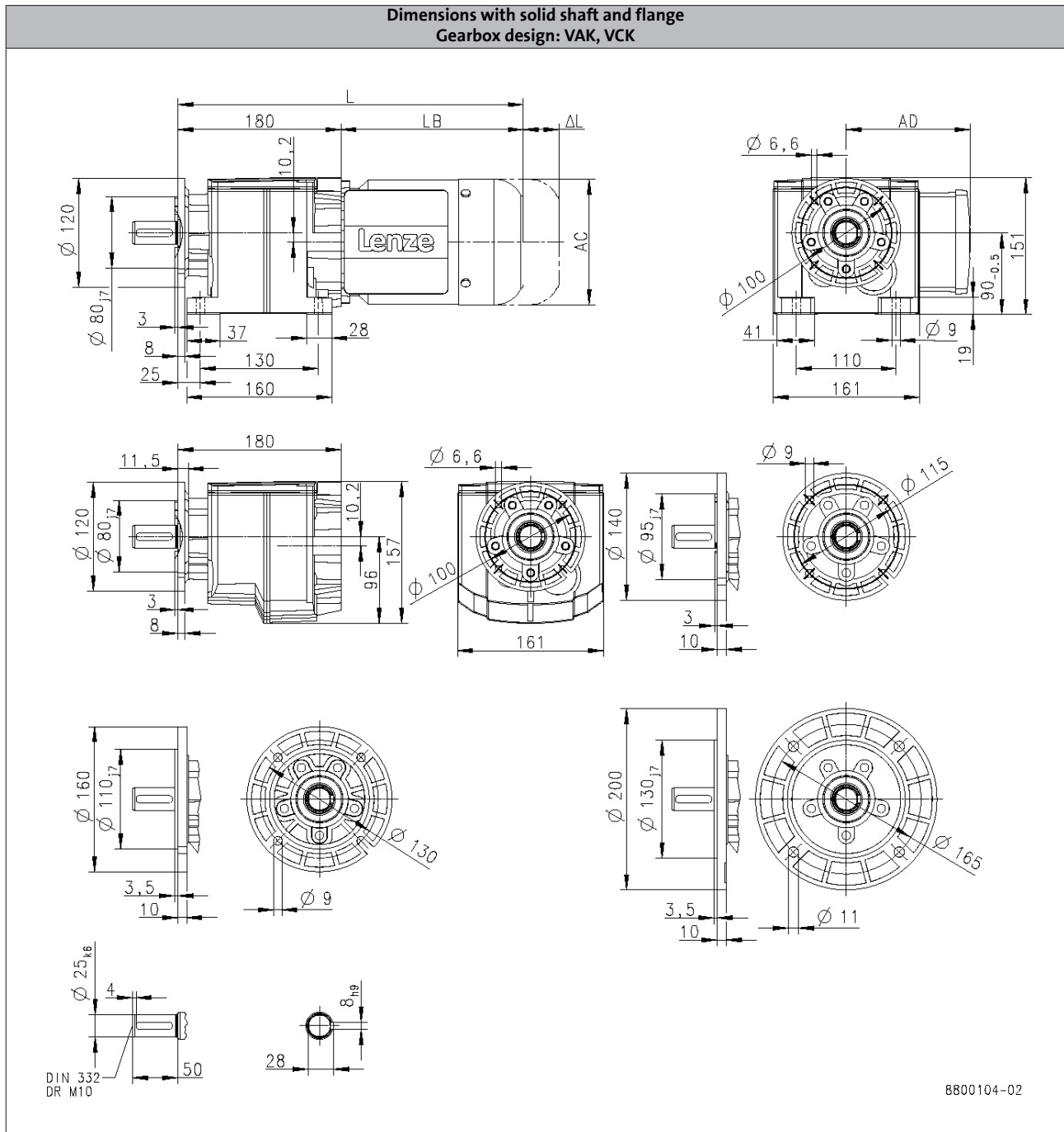
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		363			383
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

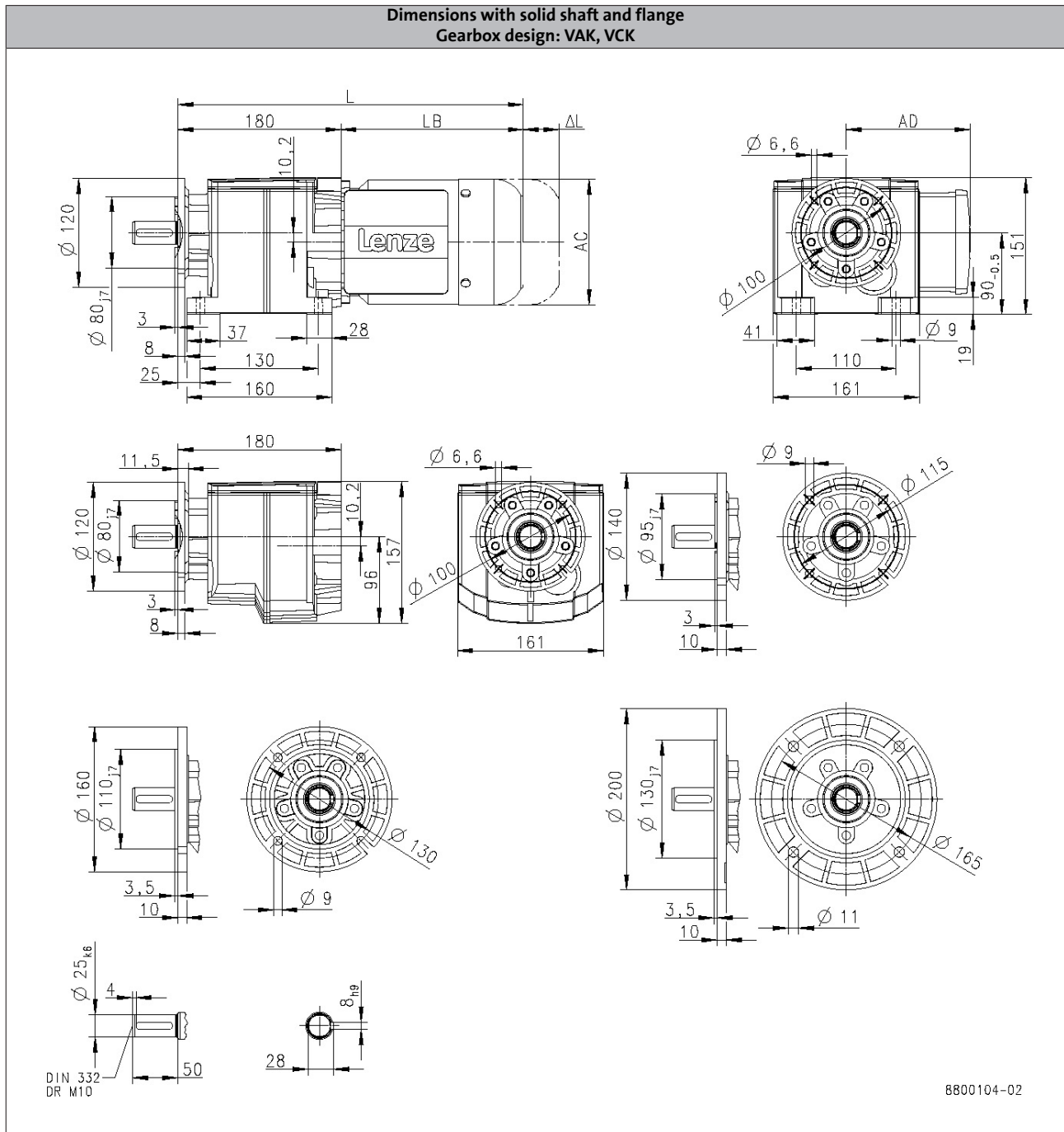
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



6.3

		m240				
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	405	474		536	
Motor length	LB [mm]	225	294		356	
Length of motor options	Δ L [mm]	107	92.0		103	
Motor diameter	AC [mm]	158	172		192	
Distance motor/connection	AD [mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

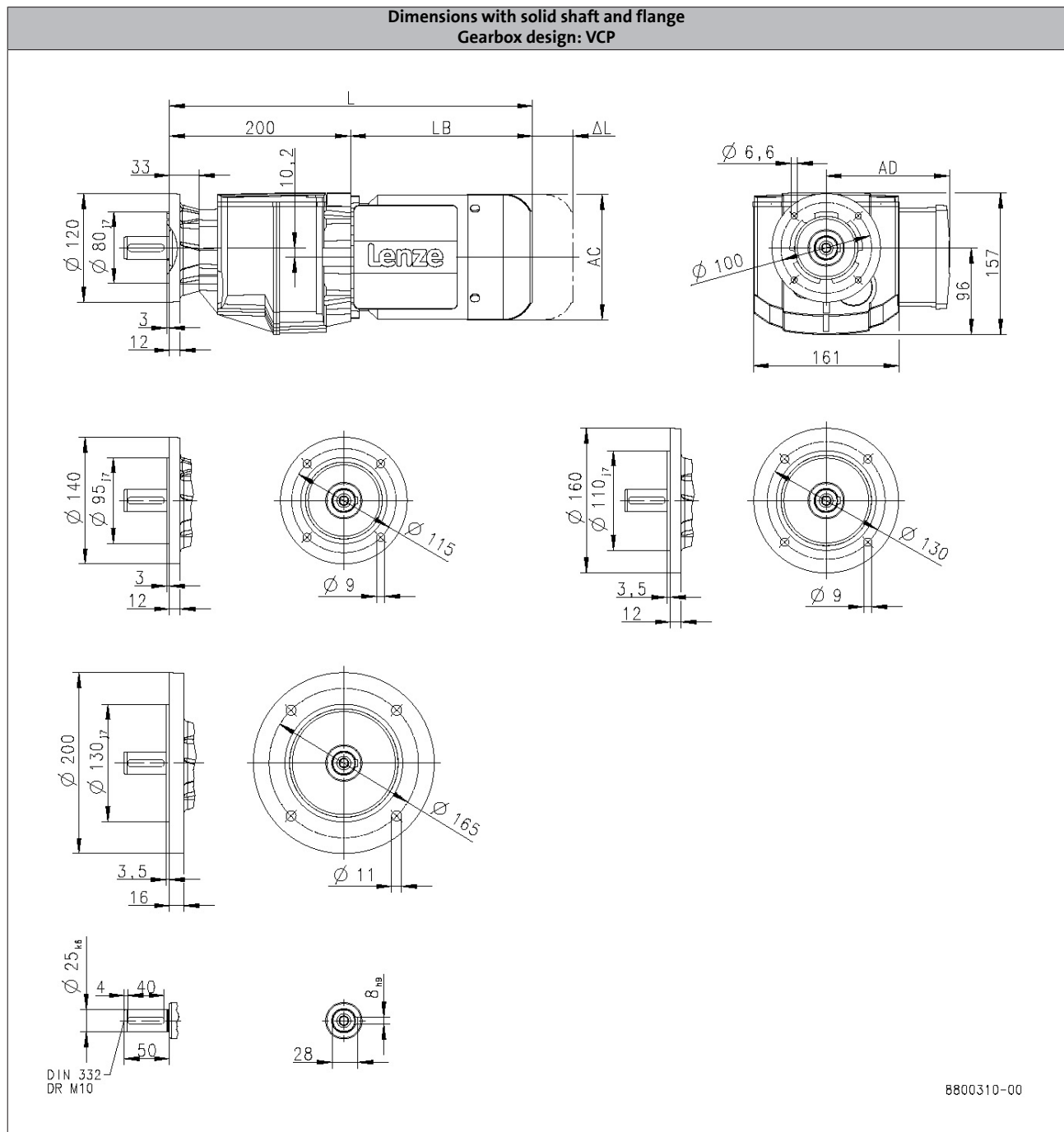
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



6.3

			MD□MA□□				
			063-12	063-32	063-42	071-32	071-42
Total length	L	[mm]		383			403
Motor length	LB	[mm]		183			203
Length of motor options	Δ L	[mm]		40.0			52.0
Motor diameter	AC	[mm]		123			139
Distance motor/connection	AD	[mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

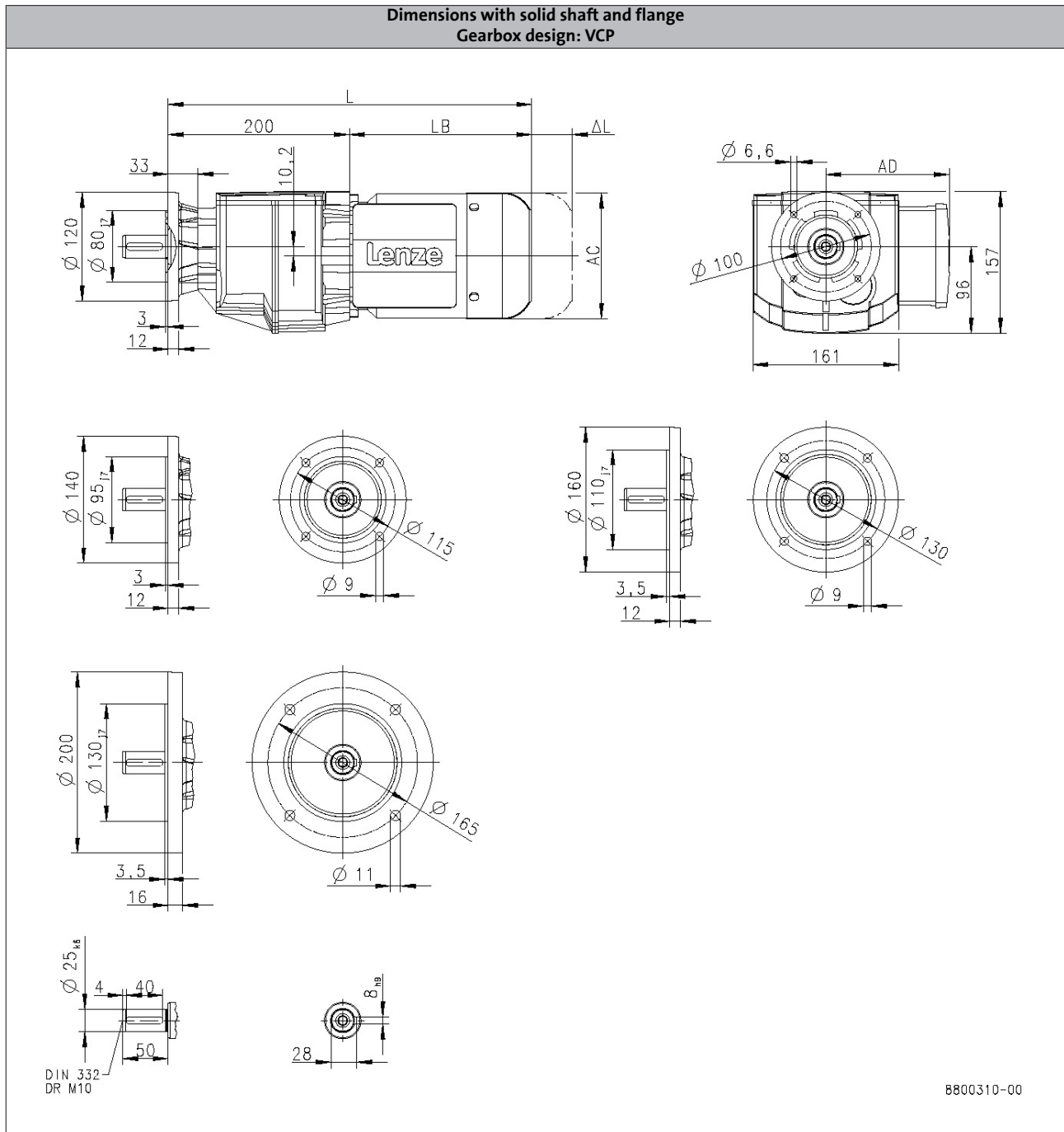
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H210



6.3

			m240				
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L	[mm]	425	494		556	
Motor length	LB	[mm]	225	294		356	
Length of motor options	Δ L	[mm]	107	92.0		103	
Motor diameter	AC	[mm]	158	172		192	
Distance motor/connection	AD	[mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

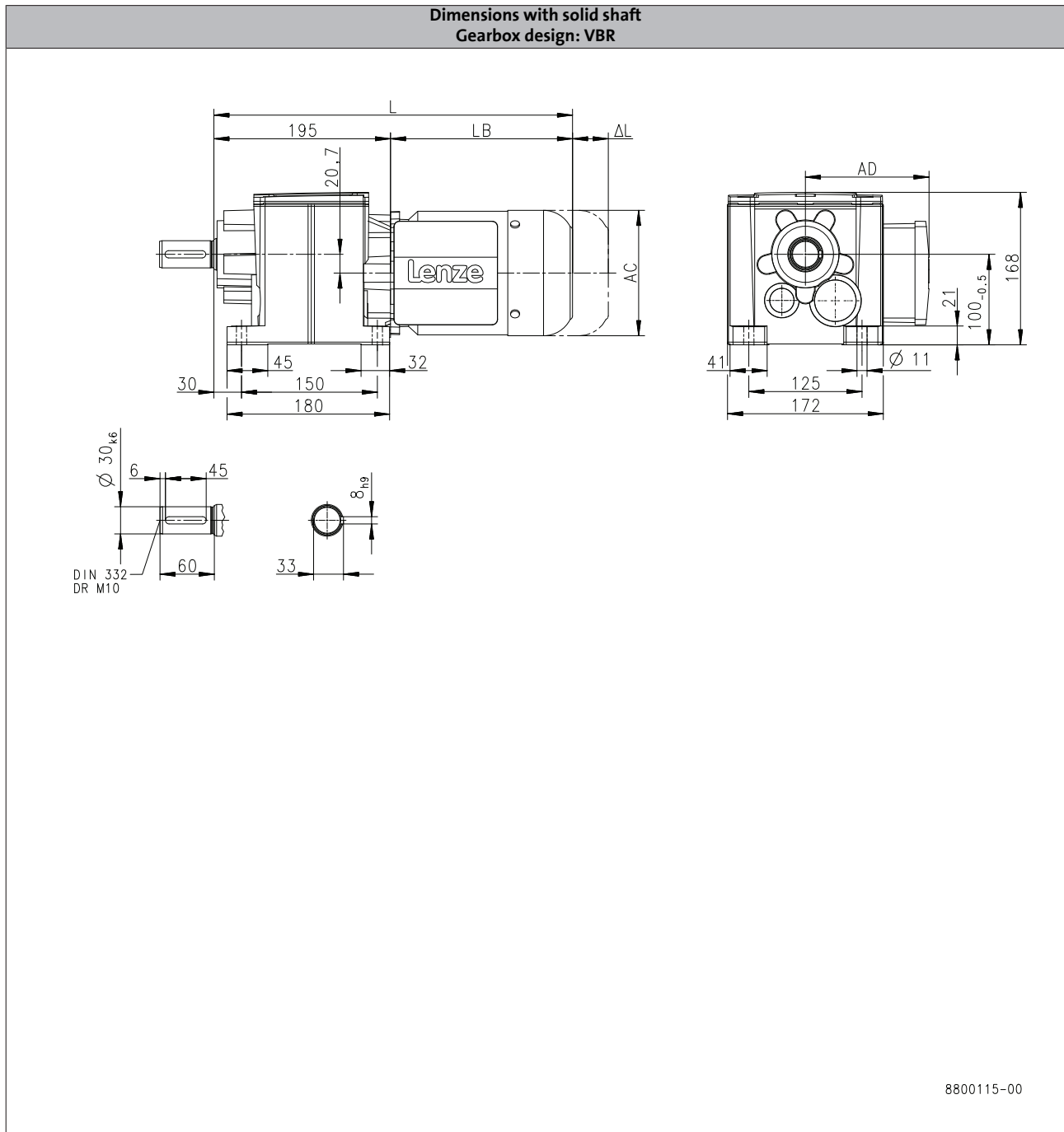
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		378			398
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



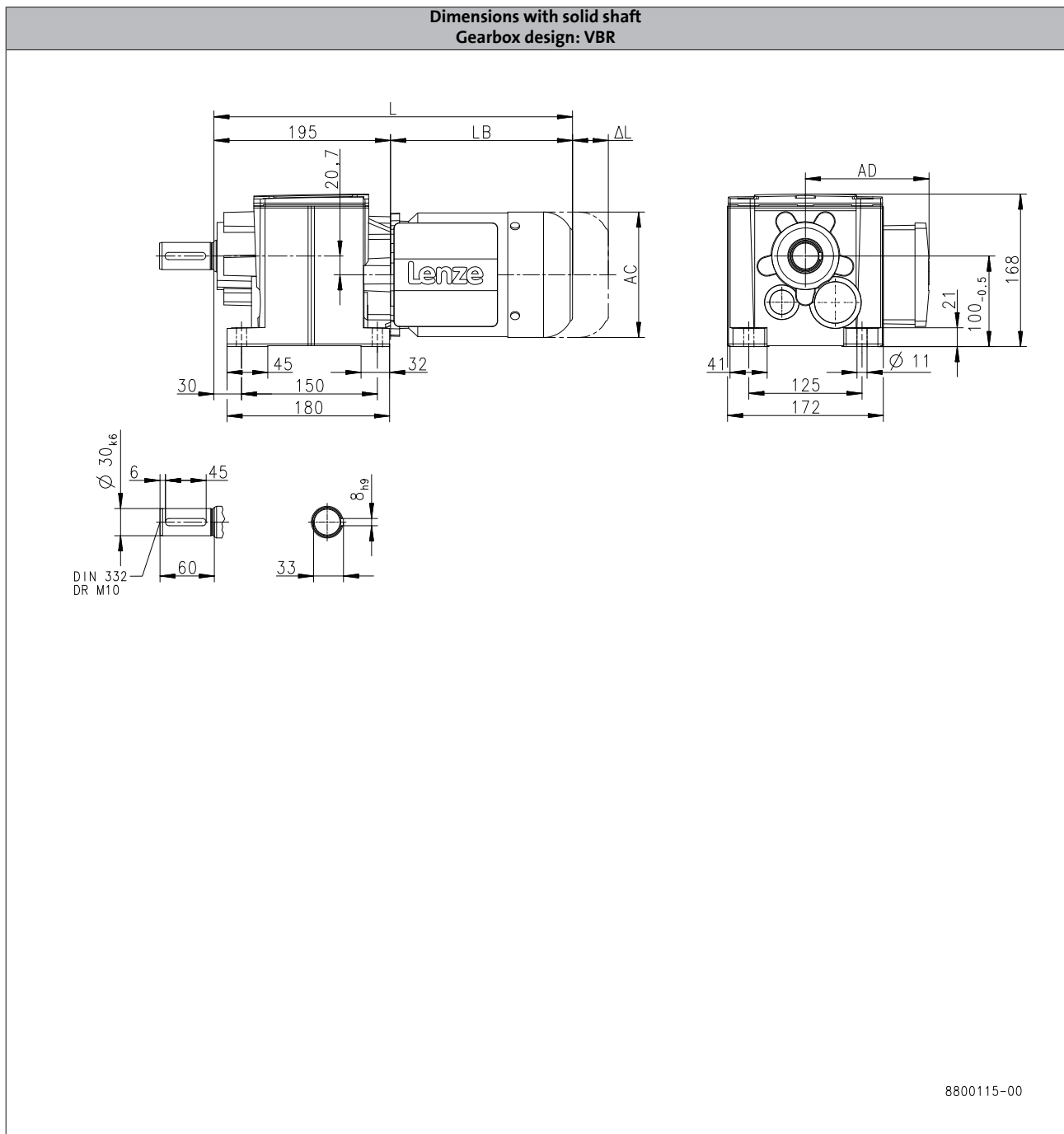
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320



6.3

			m240					
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L	[mm]	420	489		551		538
Motor length	LB	[mm]	225	294		356		343
Length of motor options	Δ L	[mm]	107	92.0		103		111
Motor diameter	AC	[mm]	158	172		192		210
Distance motor/connection	AD	[mm]	148	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

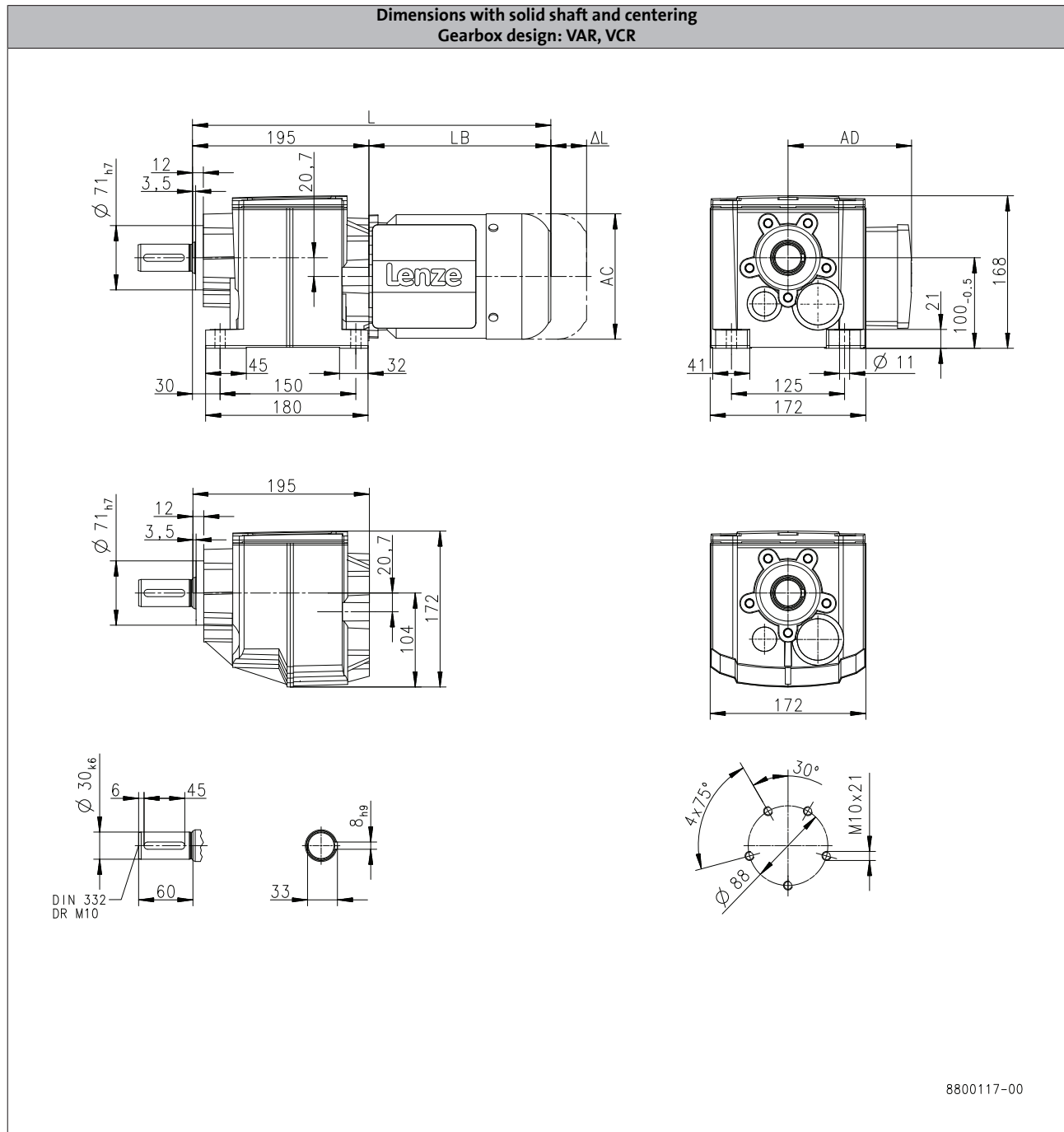
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		378			398
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

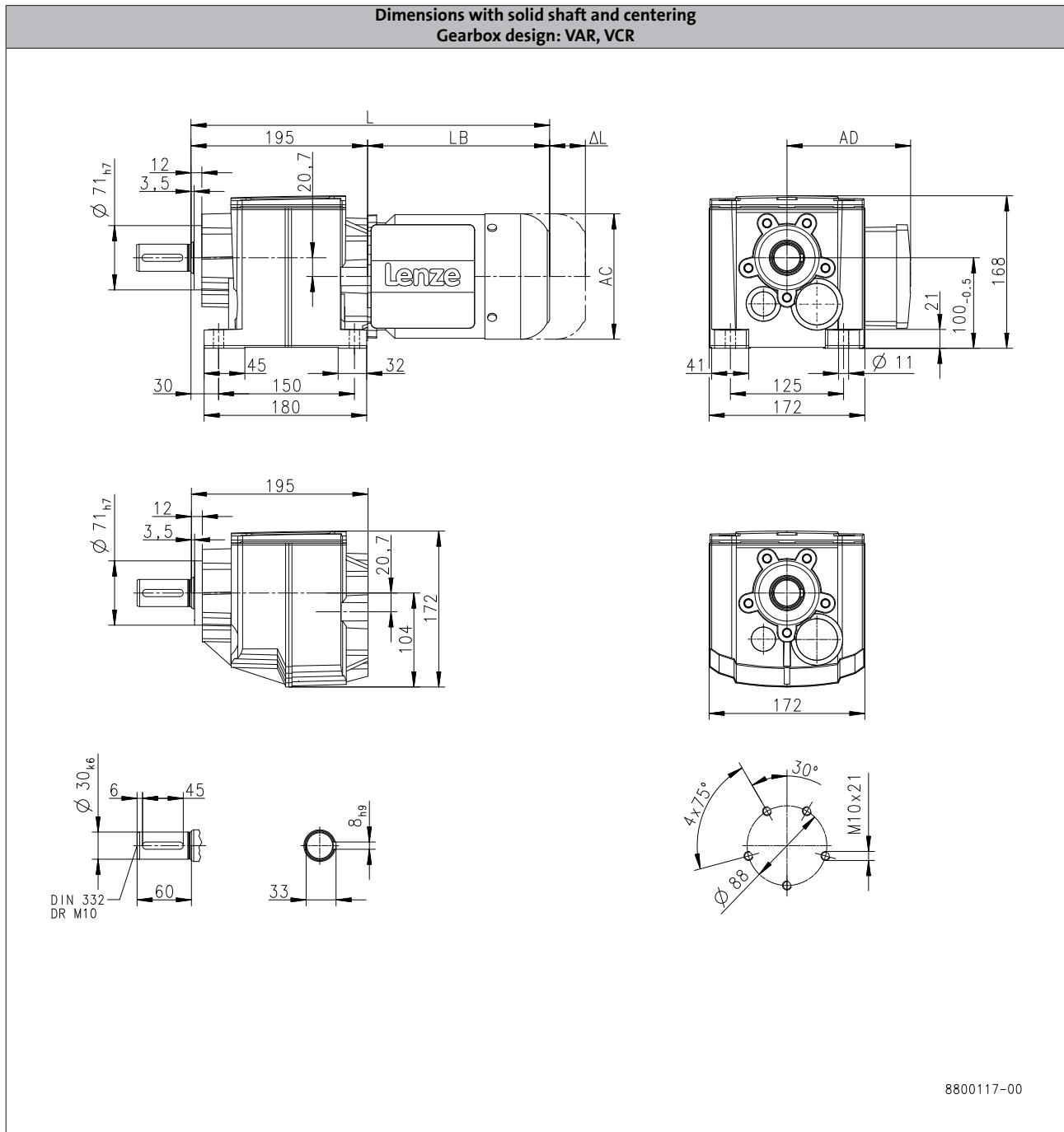
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320



6.3

		m240					
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]	420	489		551		538
Motor length	LB [mm]	225	294		356		343
Length of motor options	$\Delta L$ [mm]	107	92.0		103		111
Motor diameter	AC [mm]	158	172		192		210
Distance motor/connection	AD [mm]	148	155		164		171

L = length of the motor without built-on accessories  
 $\Delta L$  = additional length of the built-on accessories (with brake)

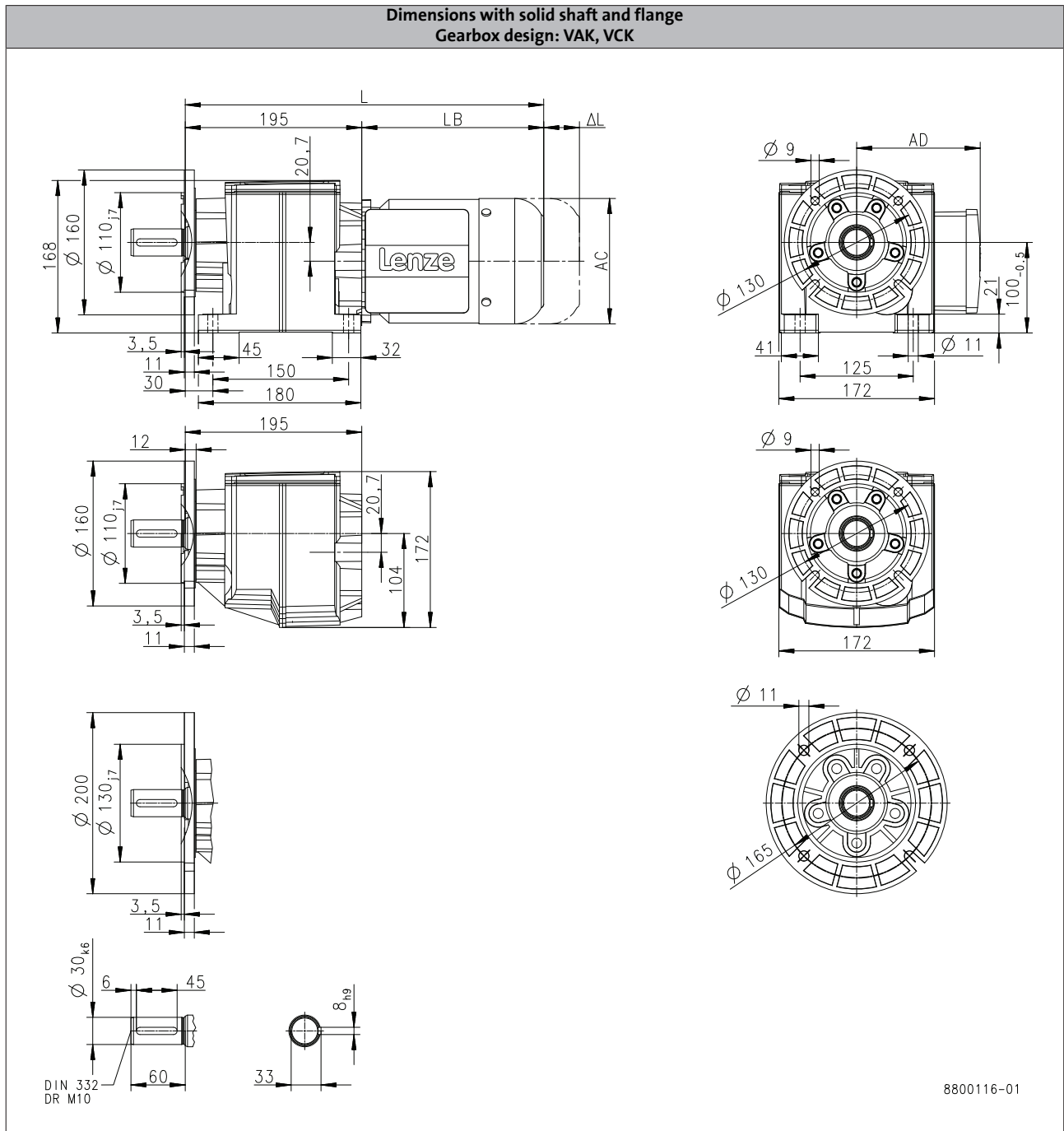
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		378			398
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

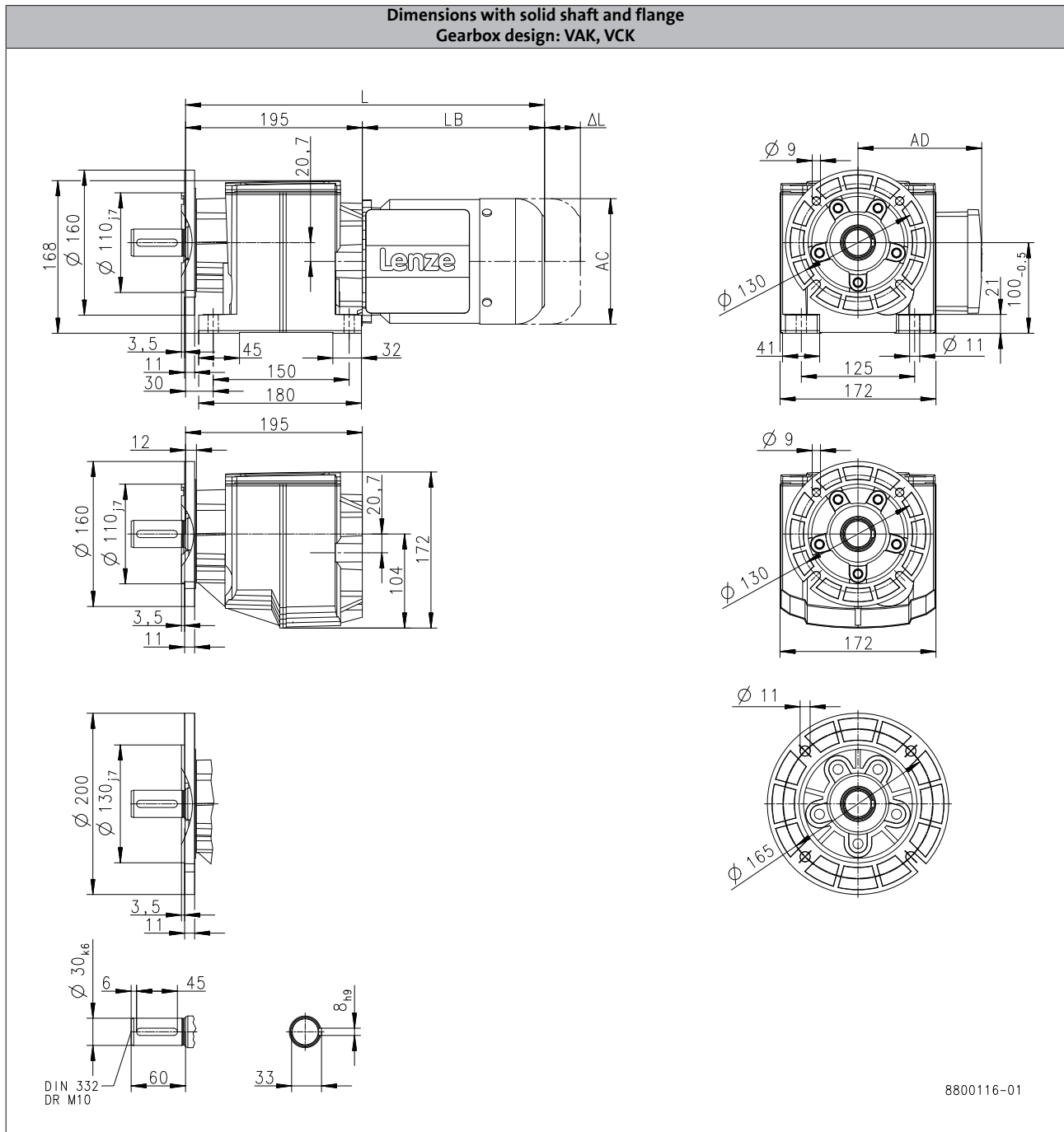
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320



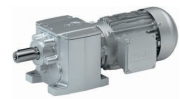
6.3

			m240					
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L	[mm]	420	489		551		538
Motor length	LB	[mm]	225	294		356		343
Length of motor options	Δ L	[mm]	107	92.0		103		111
Motor diameter	AC	[mm]	158	172		192		210
Distance motor/connection	AD	[mm]	148	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

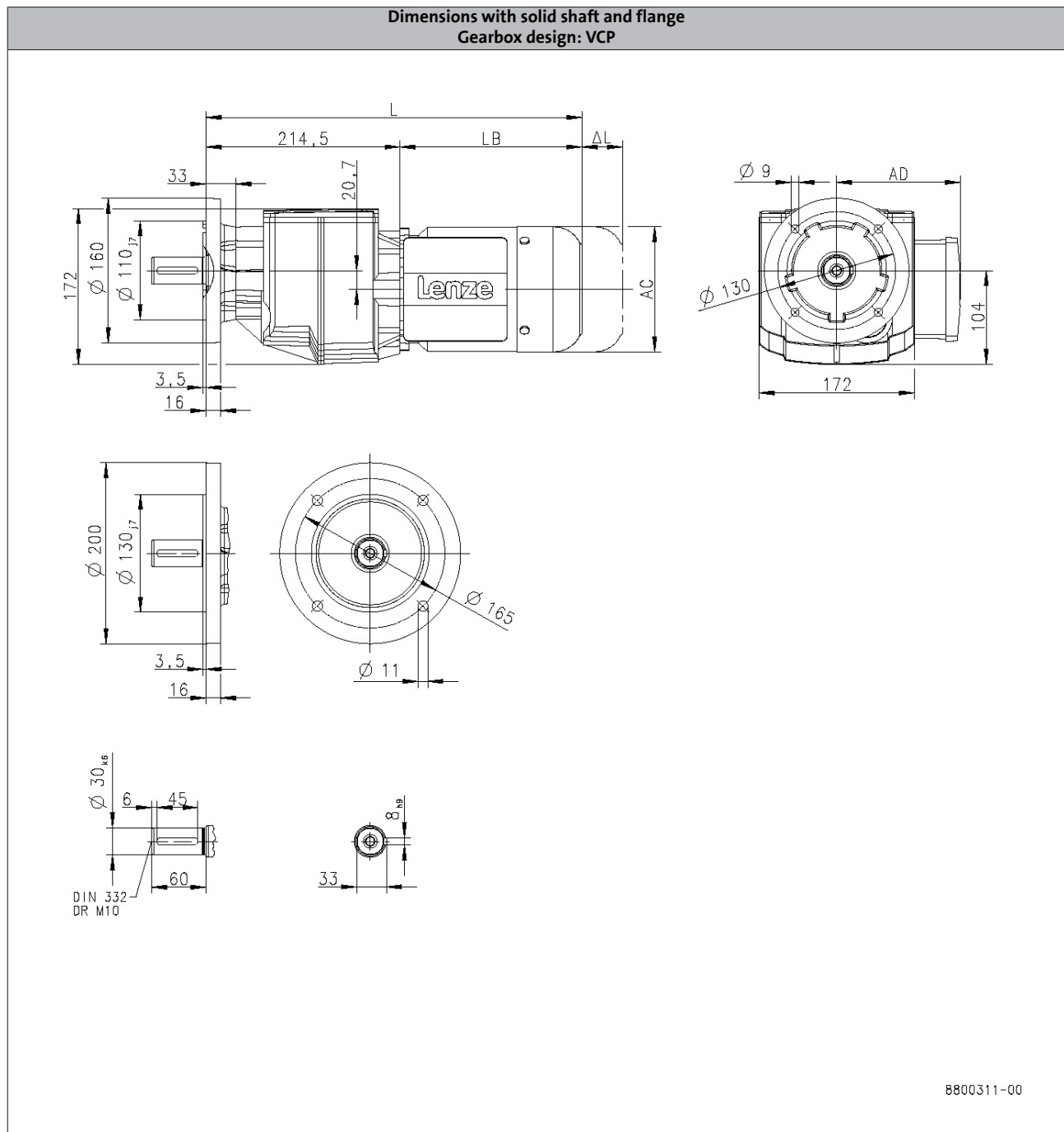
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320

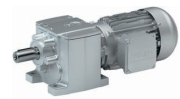


		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		398			418
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

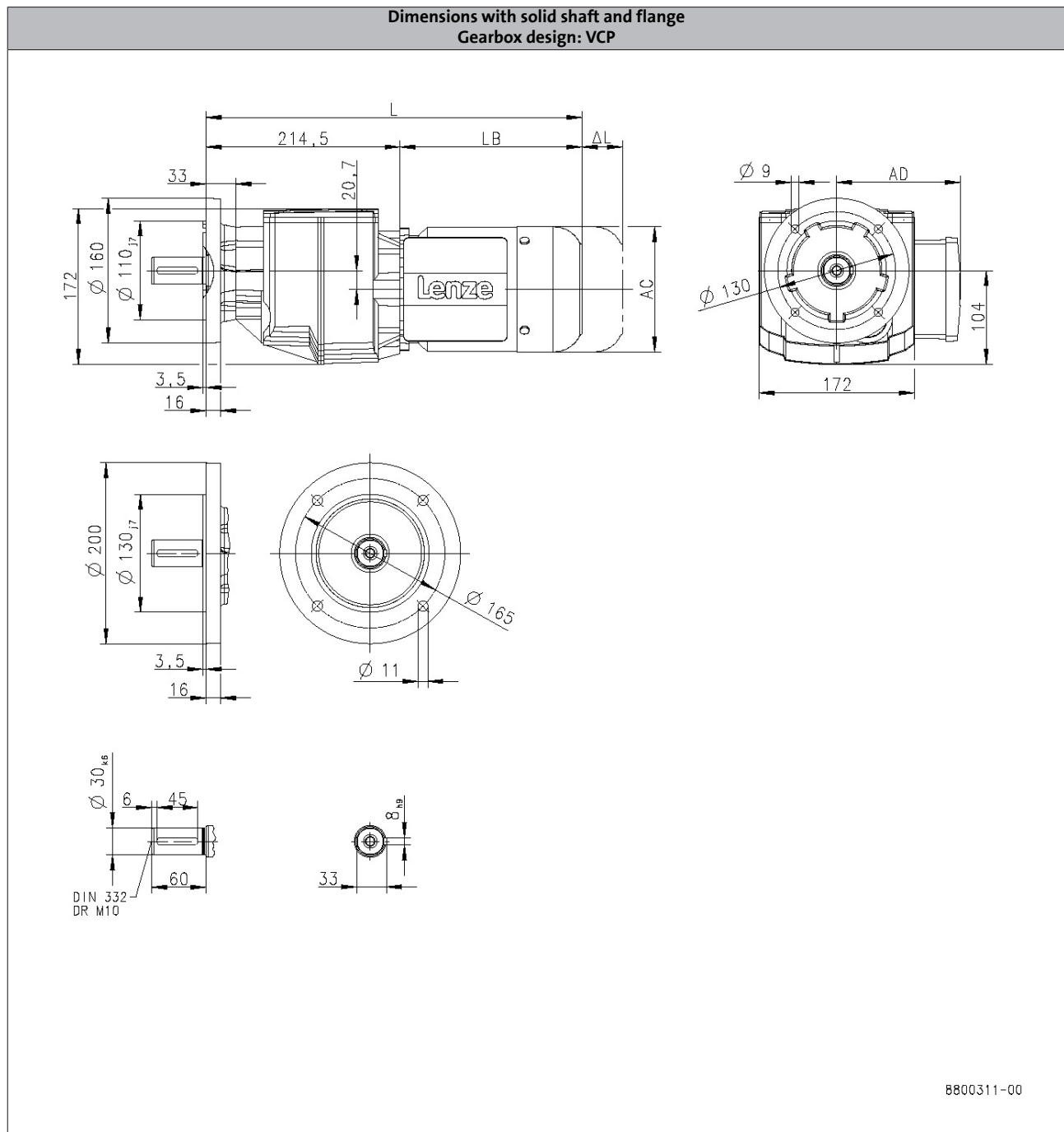
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H320



6.3

		m240						
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]		440	509		571		558
Motor length	LB [mm]		225	294		356		343
Length of motor options	Δ L [mm]		107	92.0		103		111
Motor diameter	AC [mm]		158	172		192		210
Distance motor/connection	AD [mm]		148	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

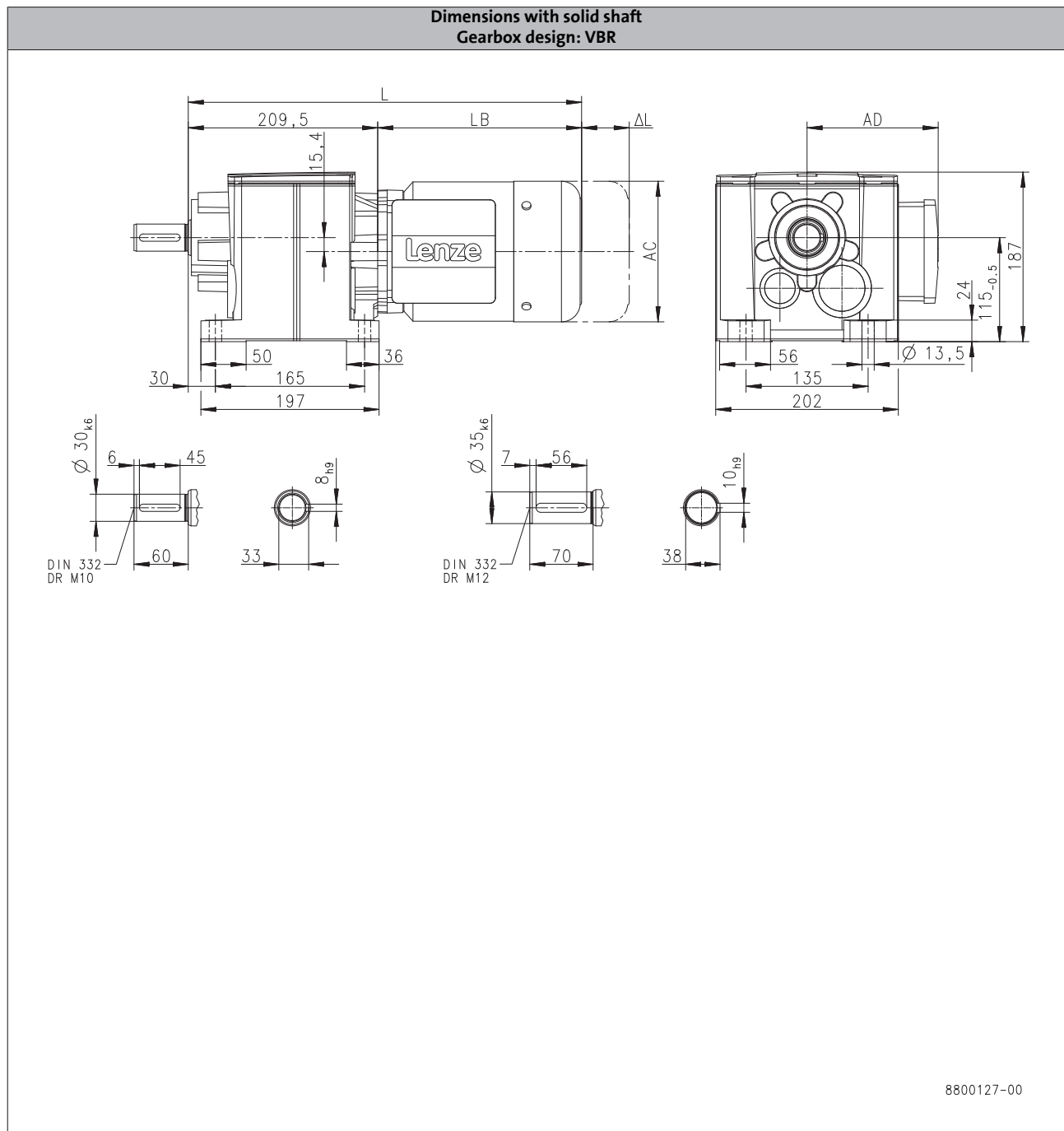
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		393			413
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



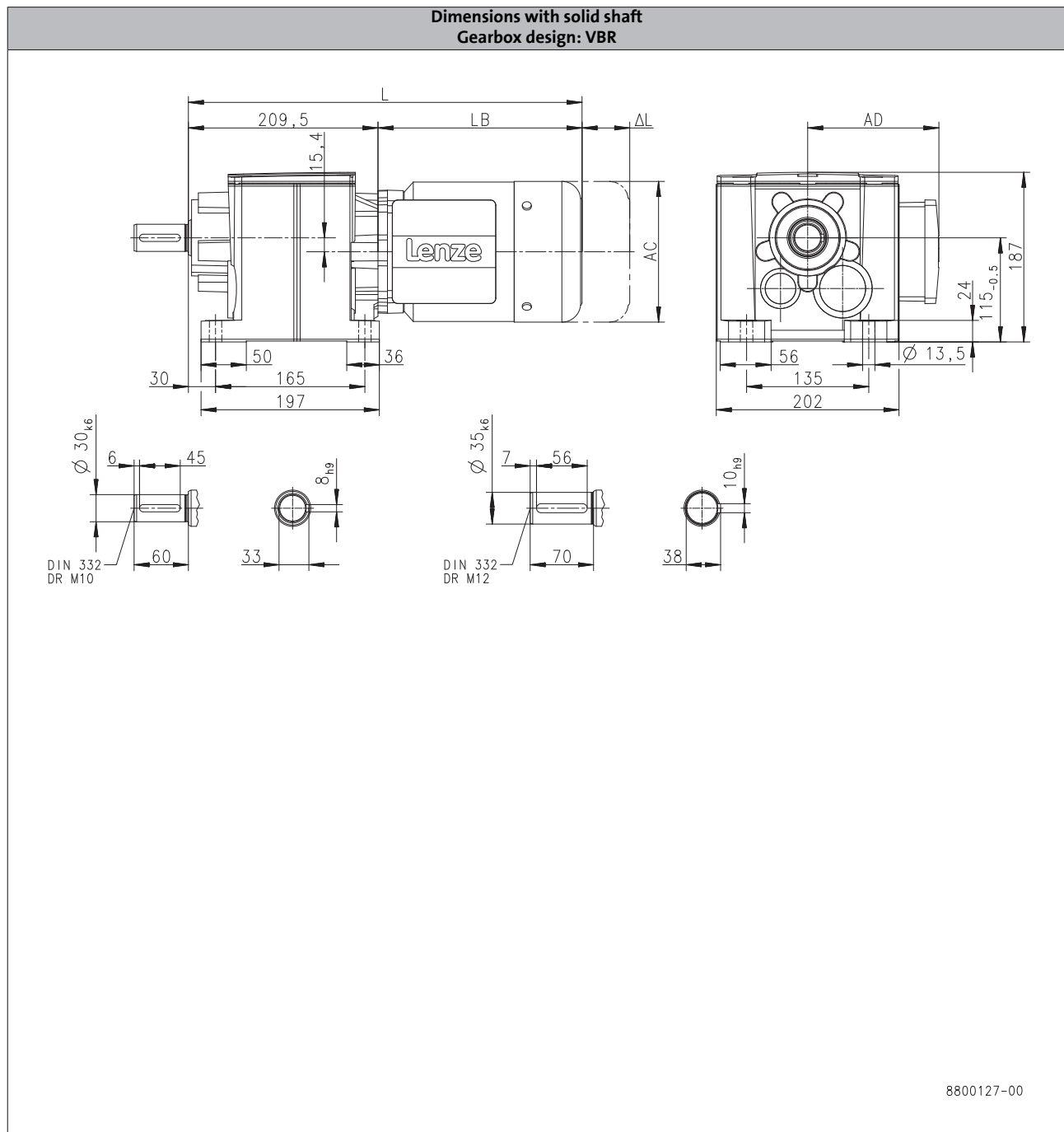
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



6.3

			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	435	504		566		553		628
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

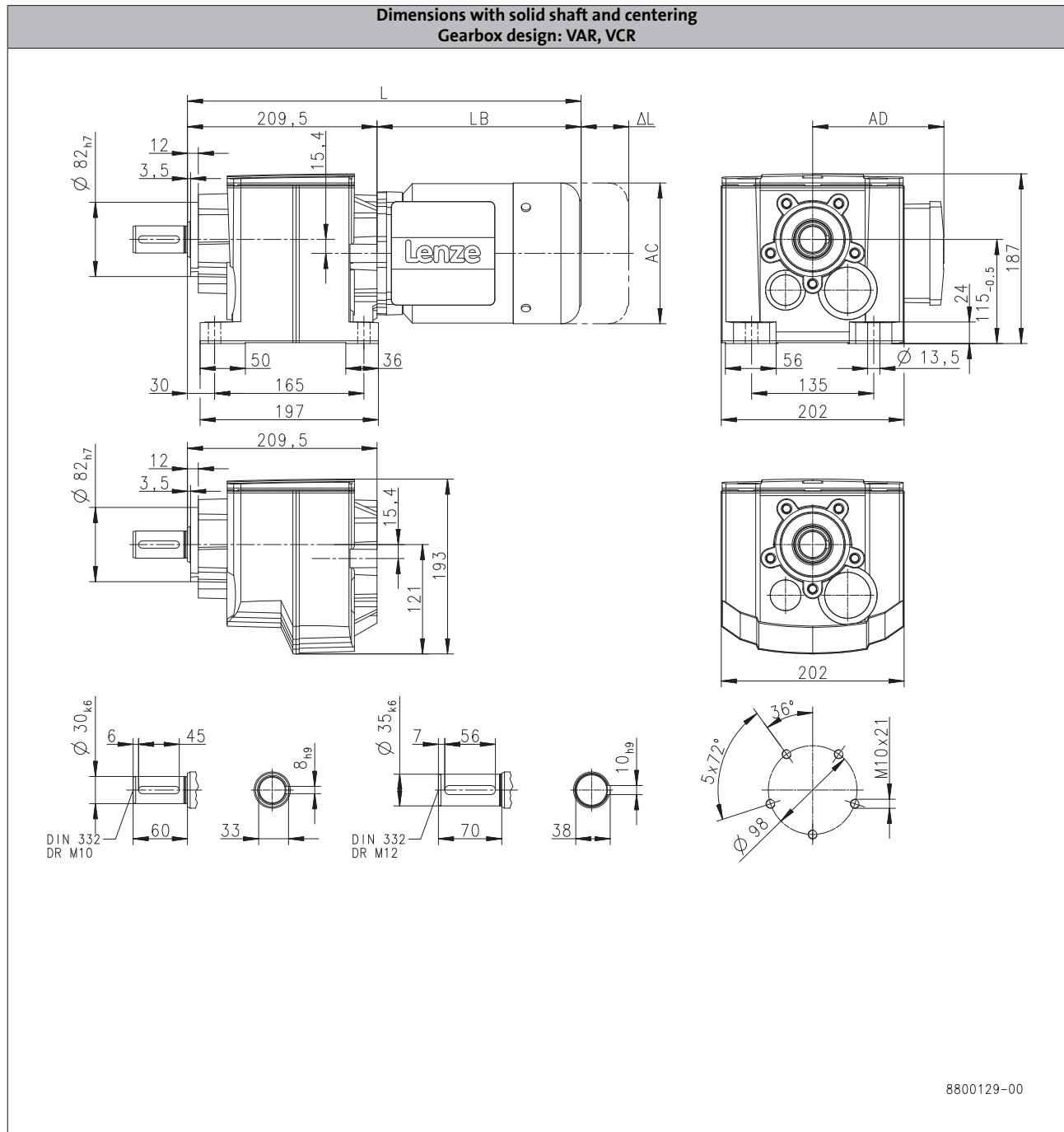
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		393			413
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

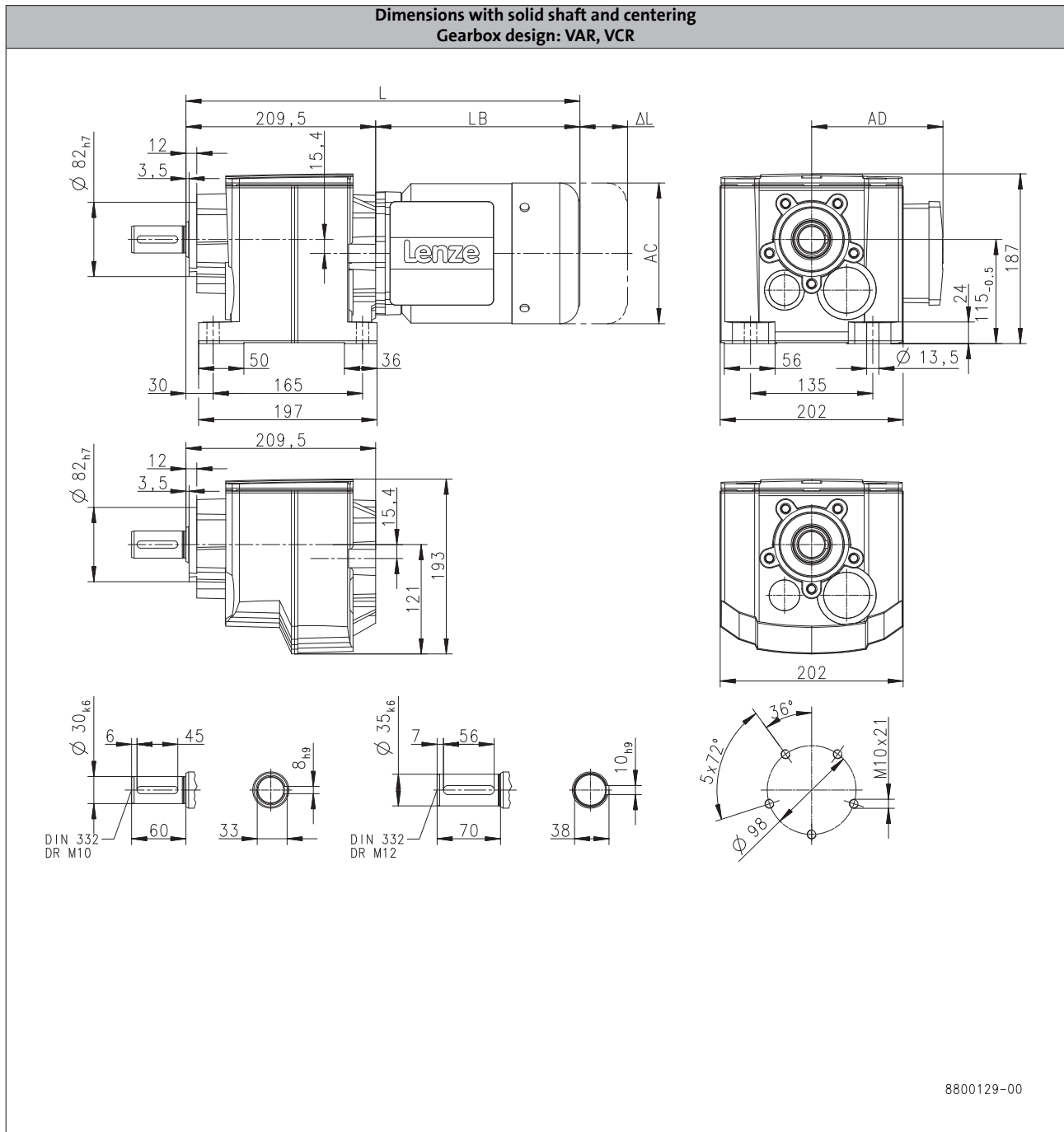
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



6.3

			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	435	504		566		553		628
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

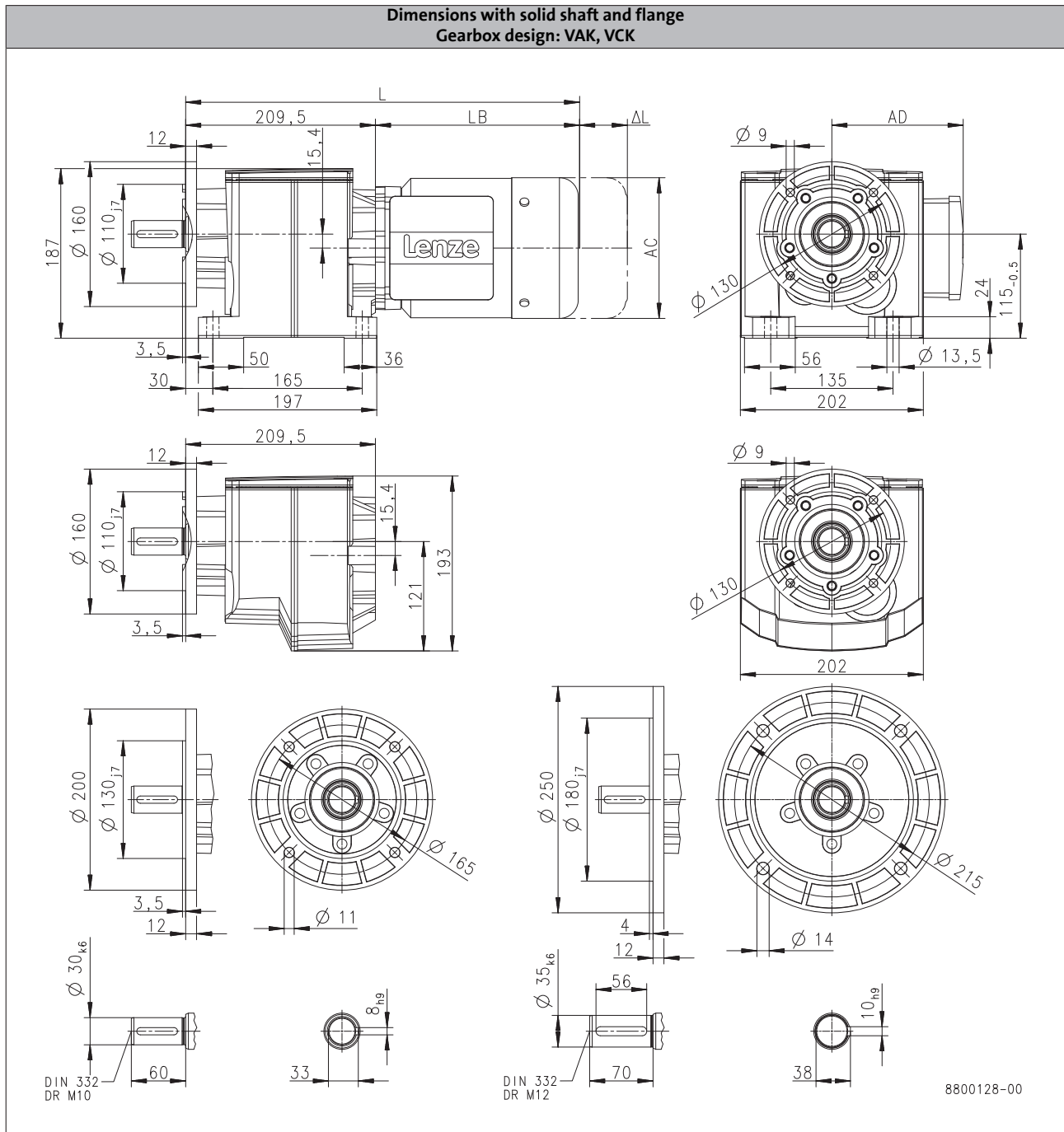
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		393			413
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

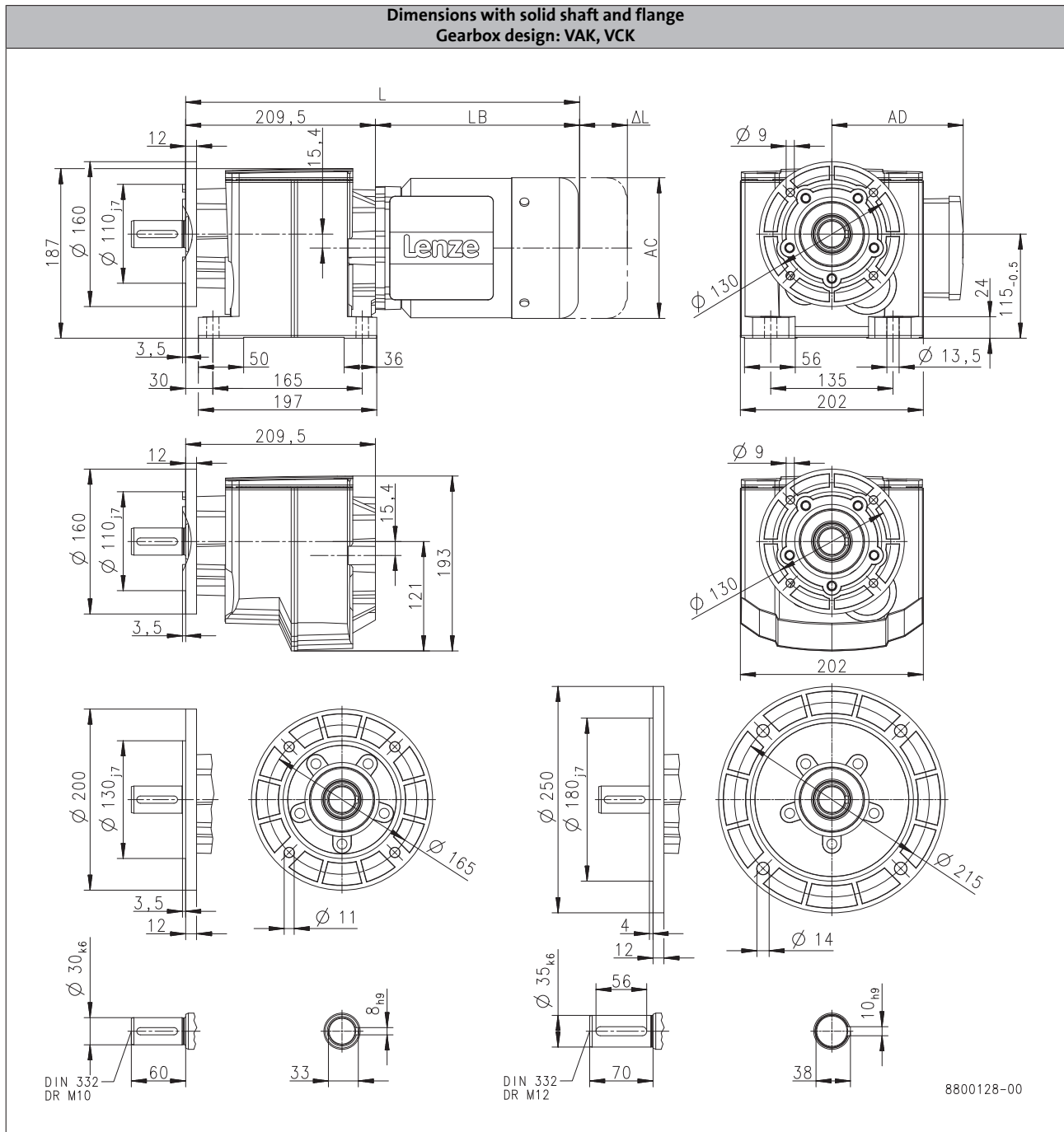
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



6.3

			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	435	504		566		553		628
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

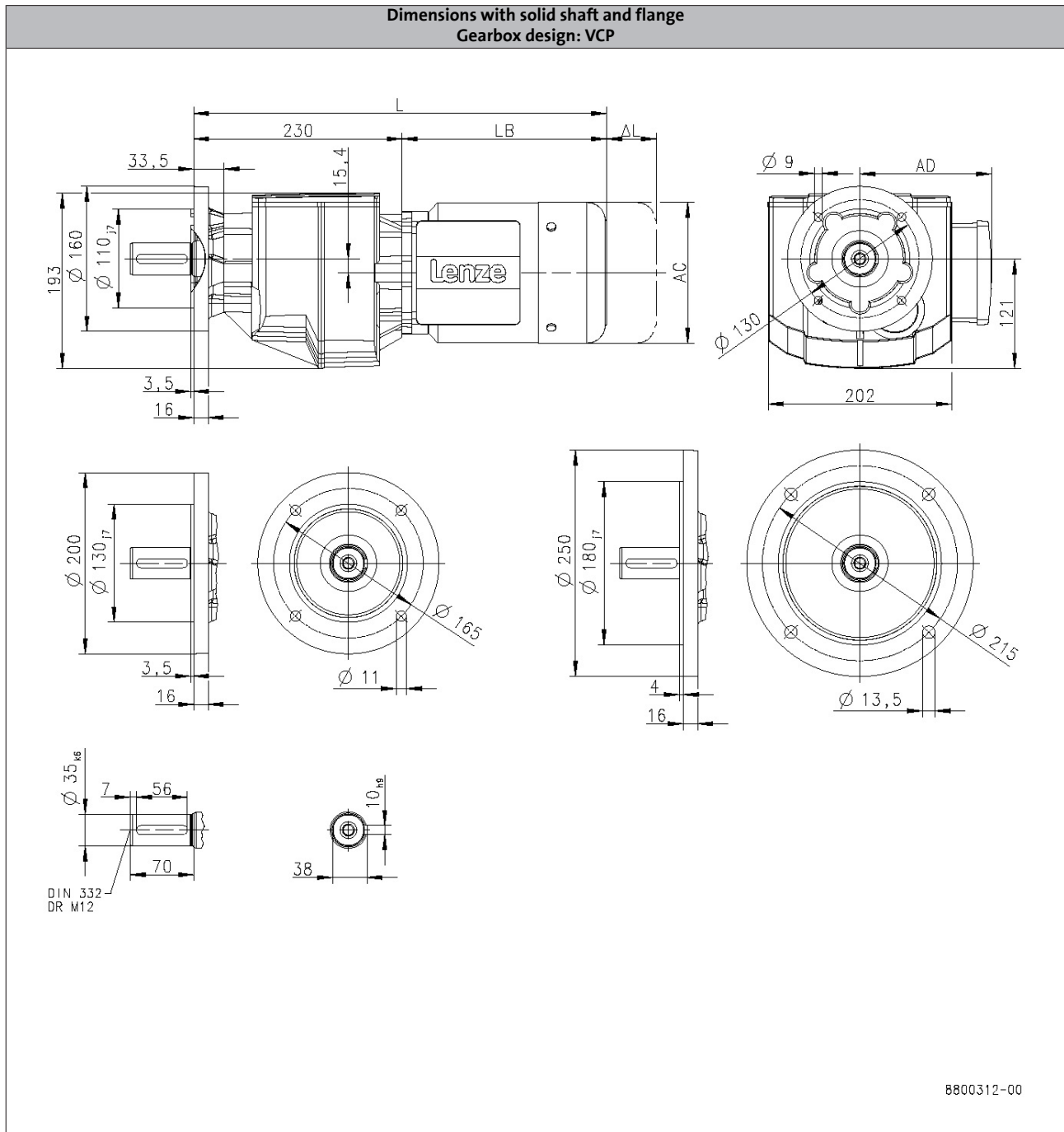
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		413			433
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

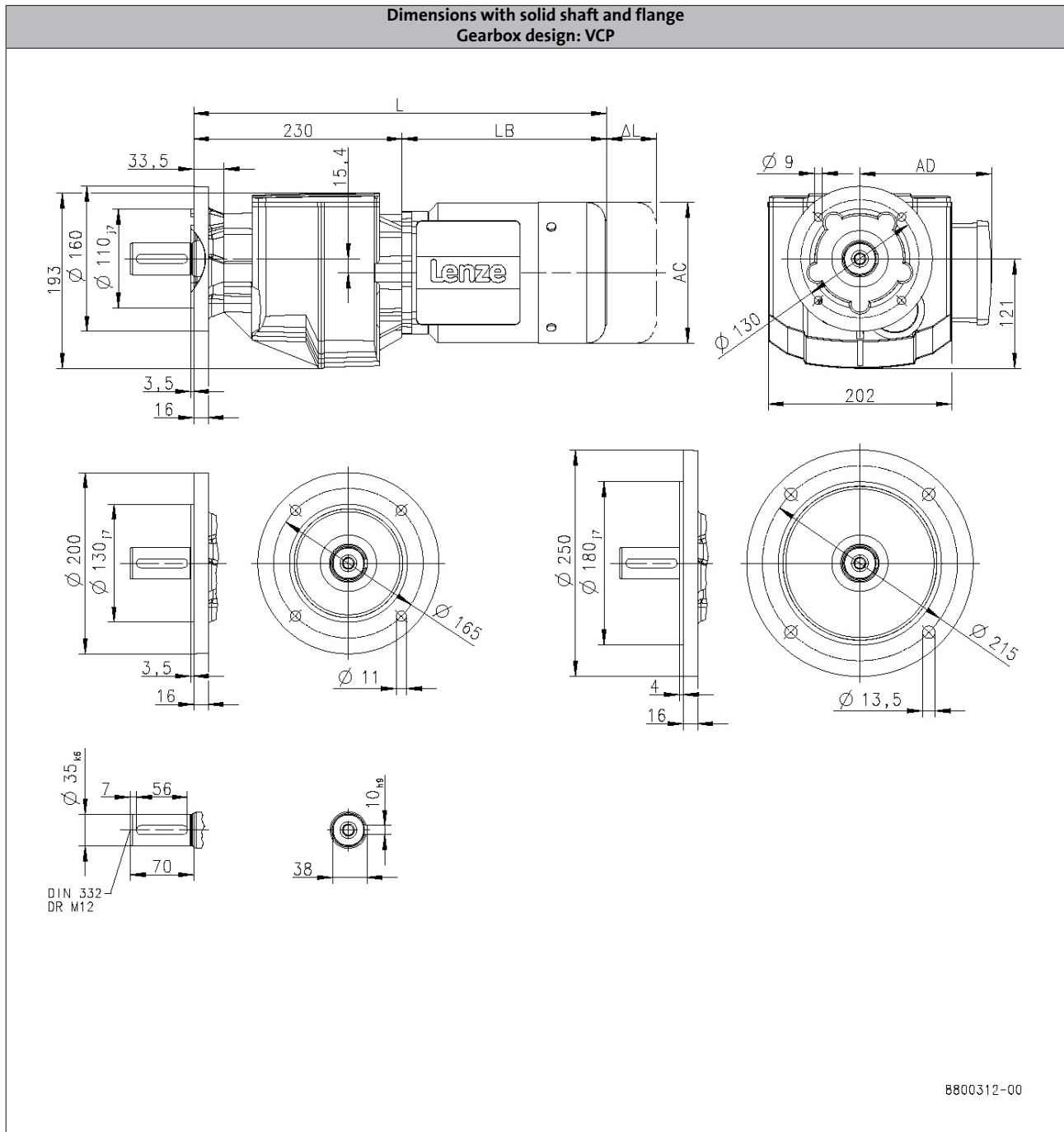
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H450



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	455	524		586		573		648
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	$\Delta L$ [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 $\Delta L$  = additional length of the built-on accessories (with brake)

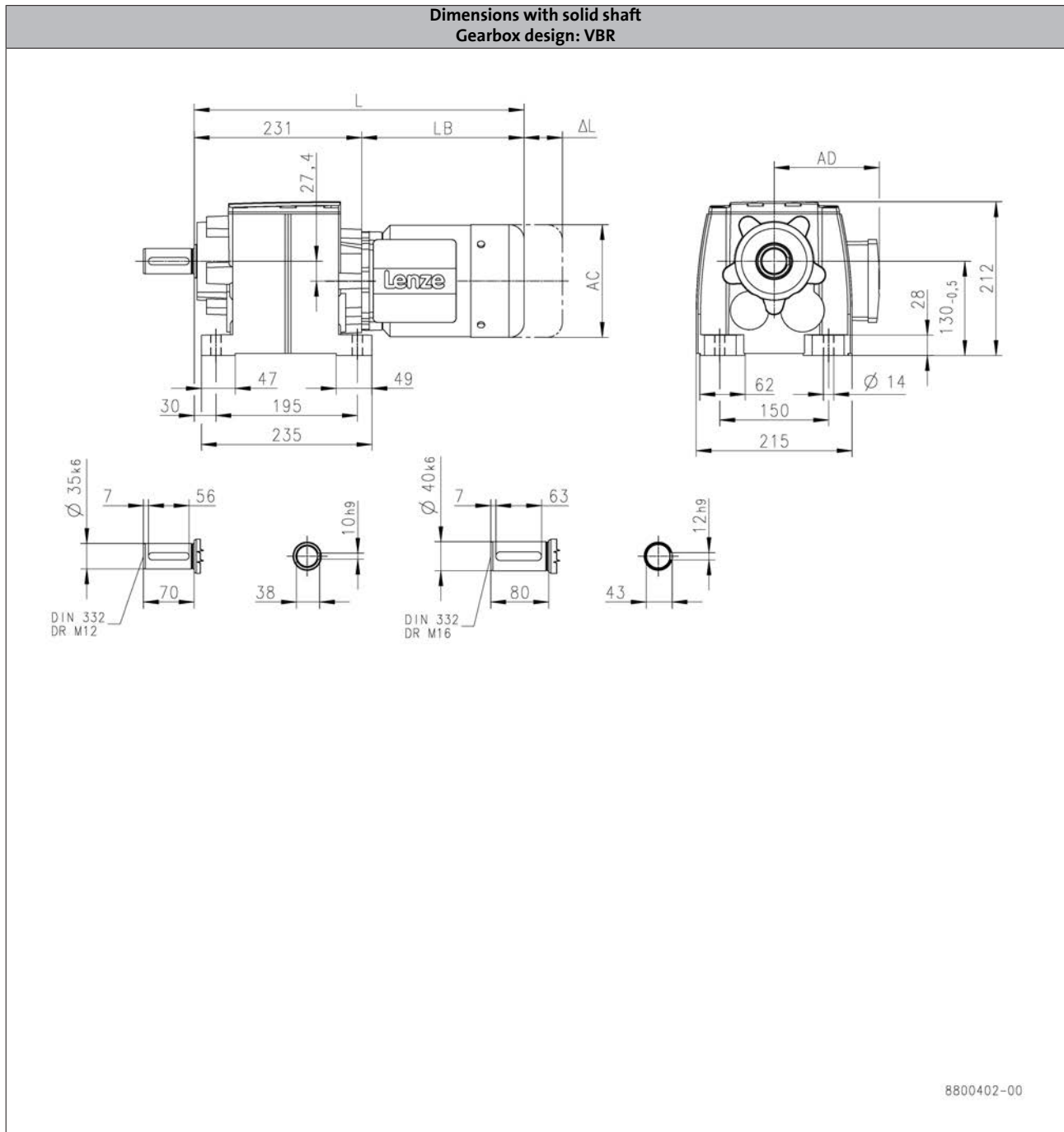
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H600



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		414			434
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



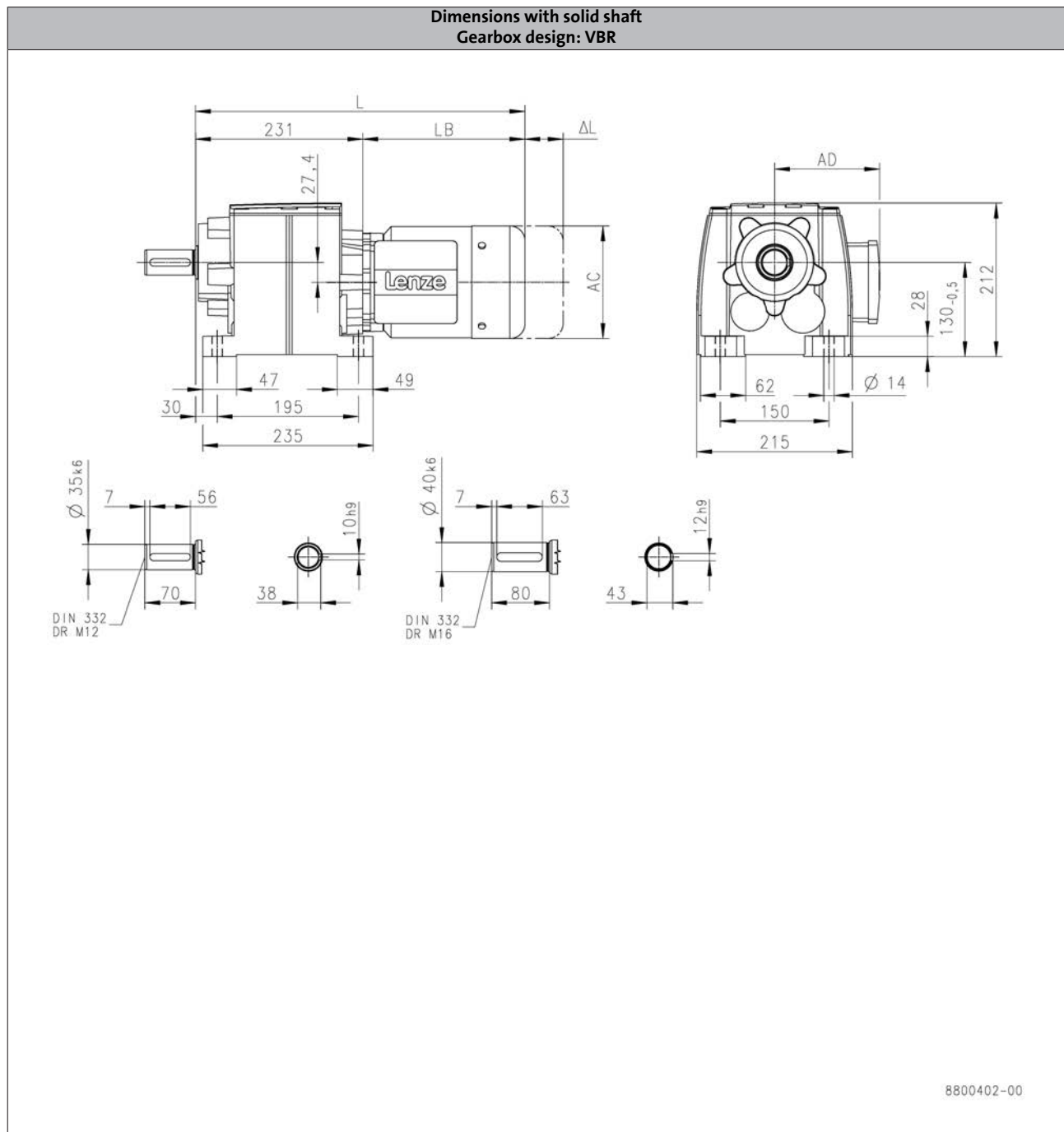
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H600



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	456	525		587		574		649
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

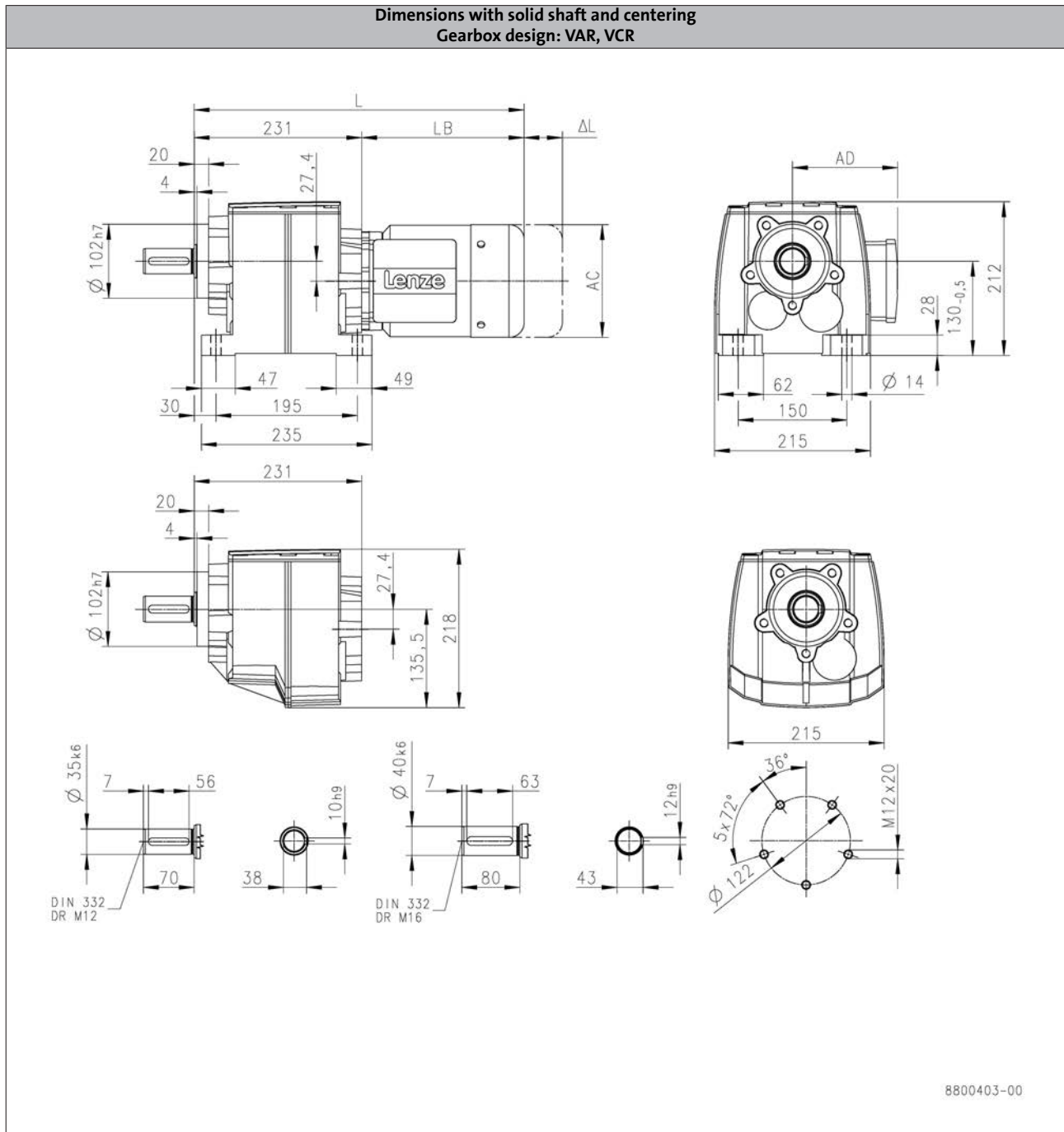
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H600



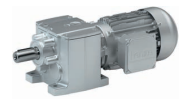
6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		414			434
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

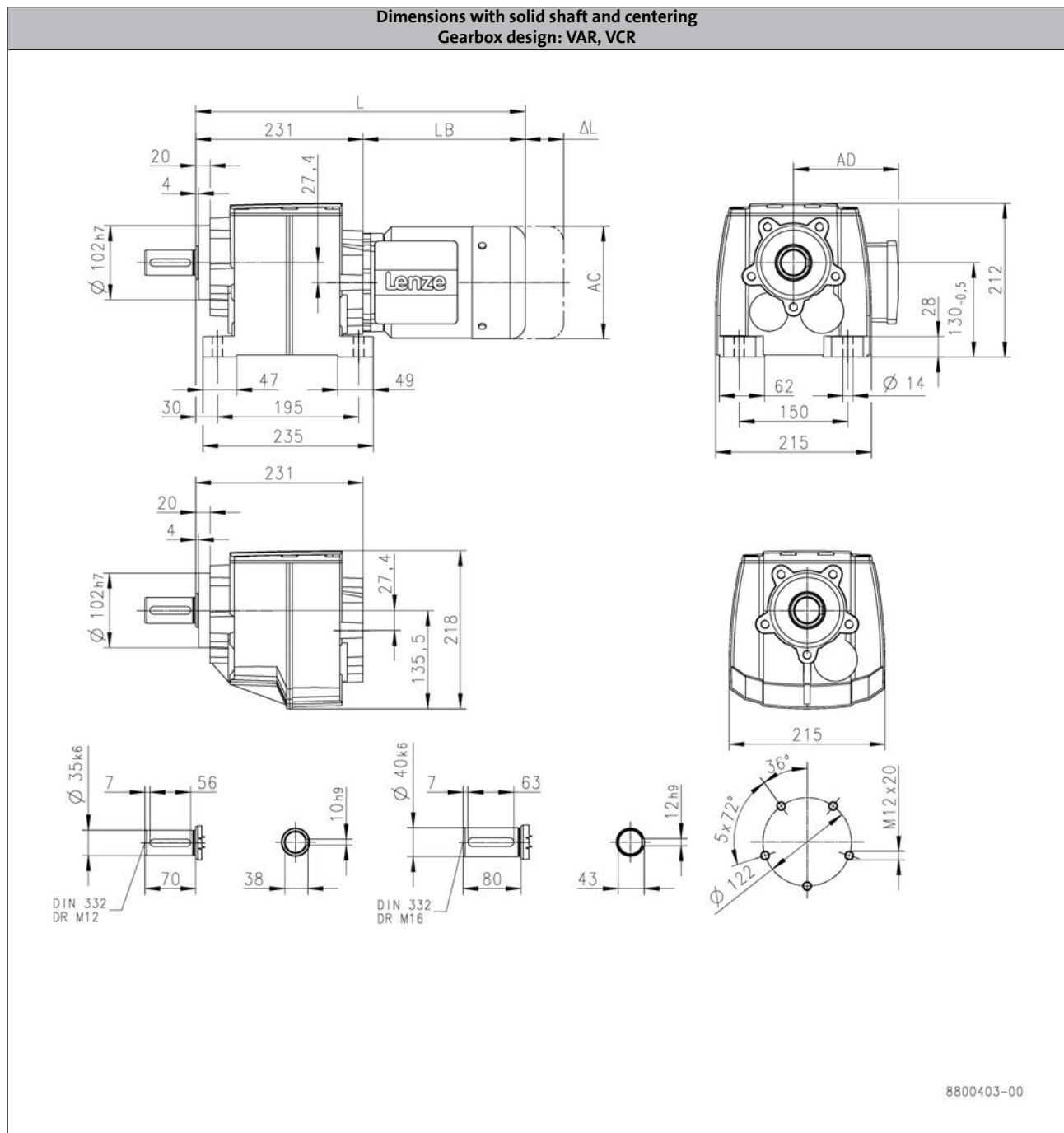
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H600



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	456	525		587		574		649
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

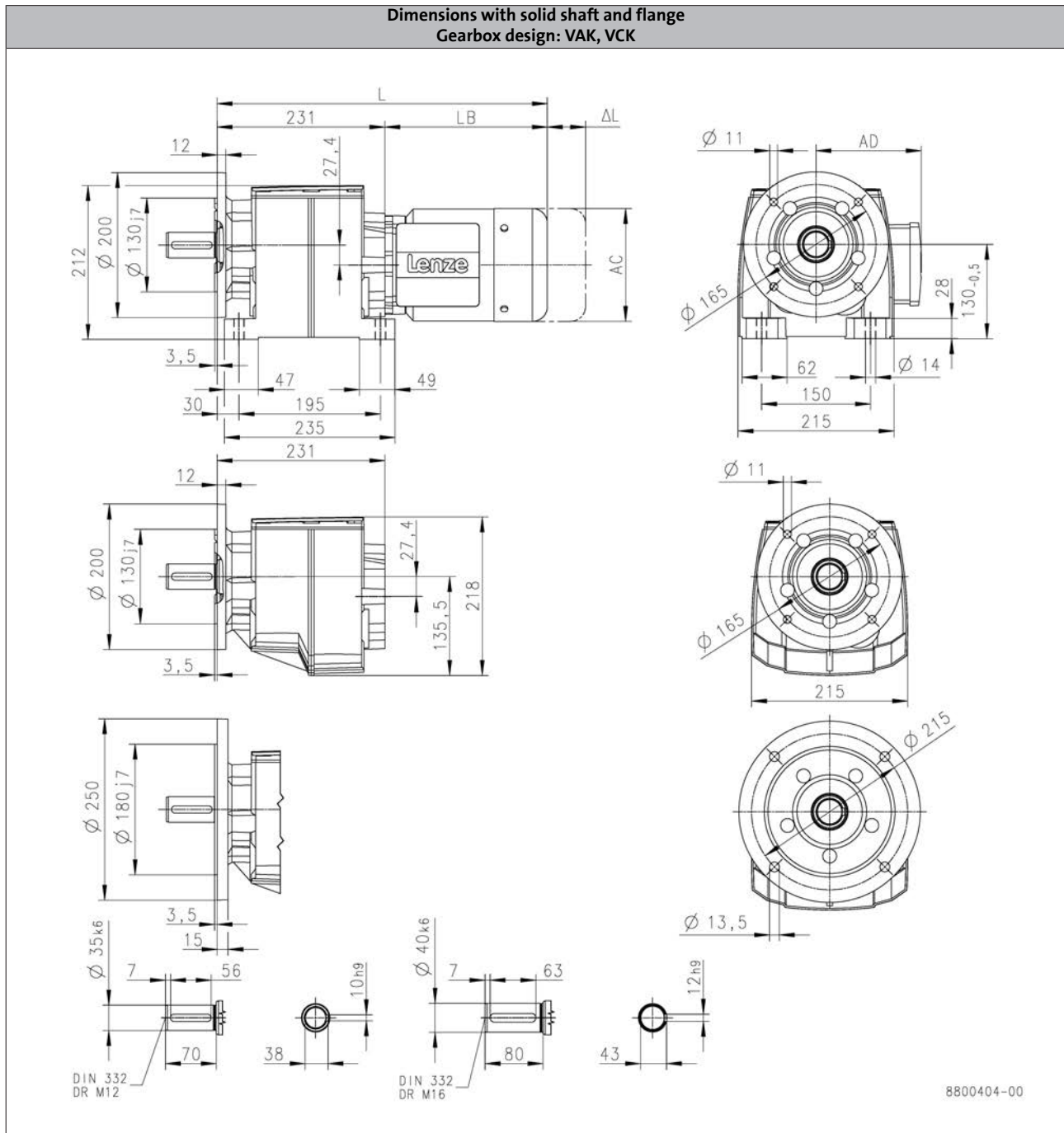
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H600



6.3

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		414			434
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

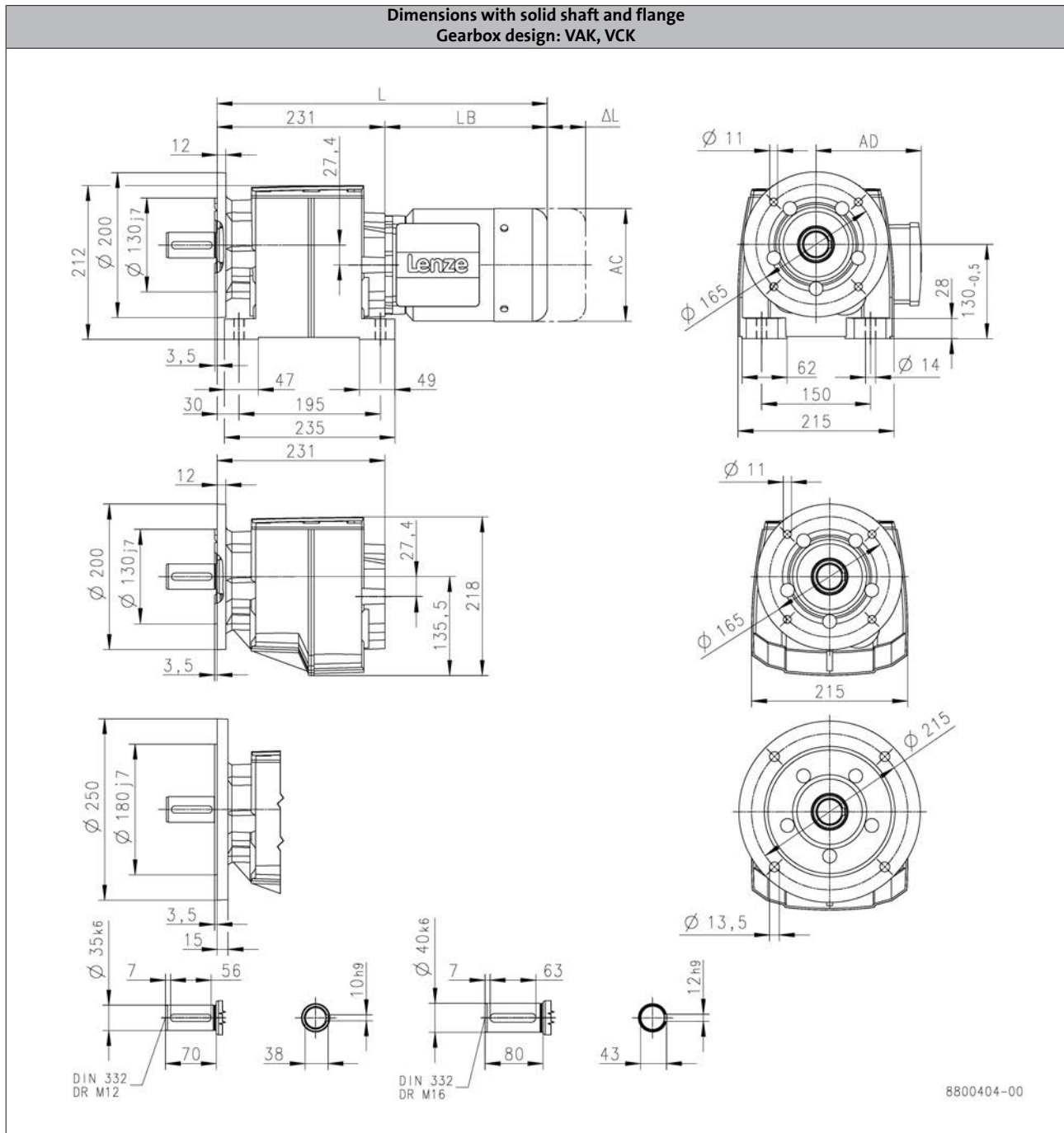
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H600



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	456	525		587		574		649
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

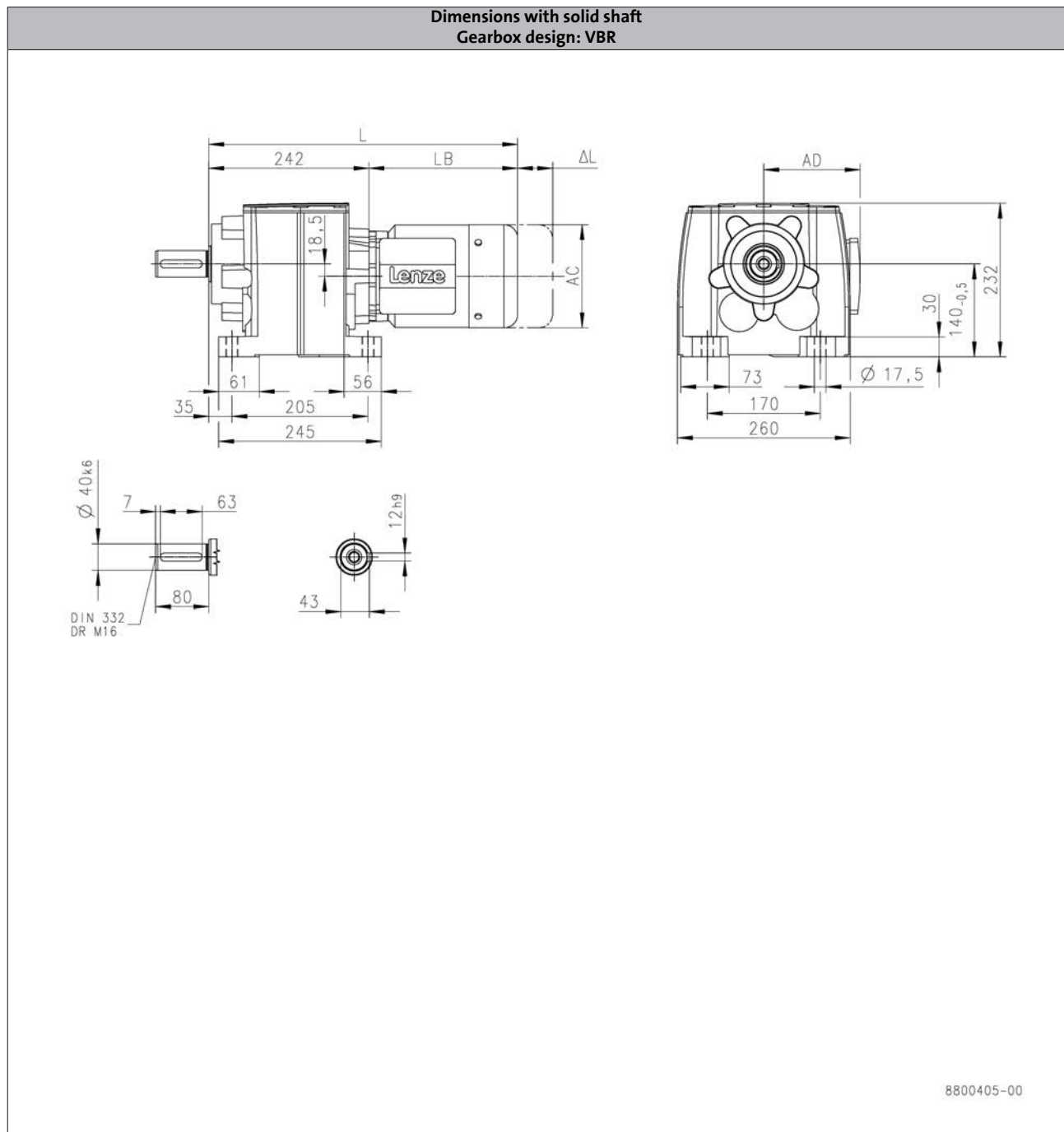
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H850



6.3

		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	425		445
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

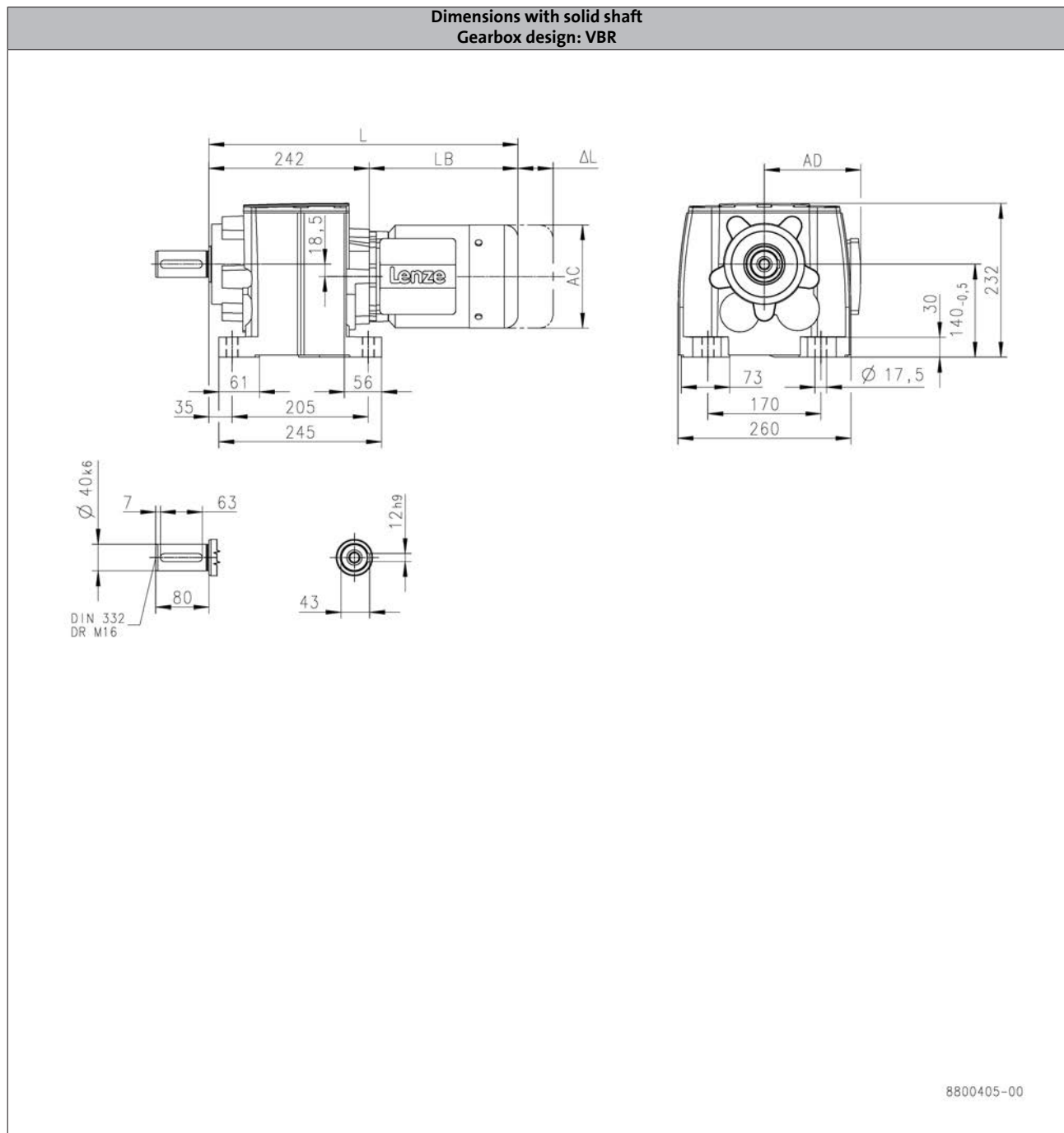
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H850



6.3

		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	467	536		598		585		660
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

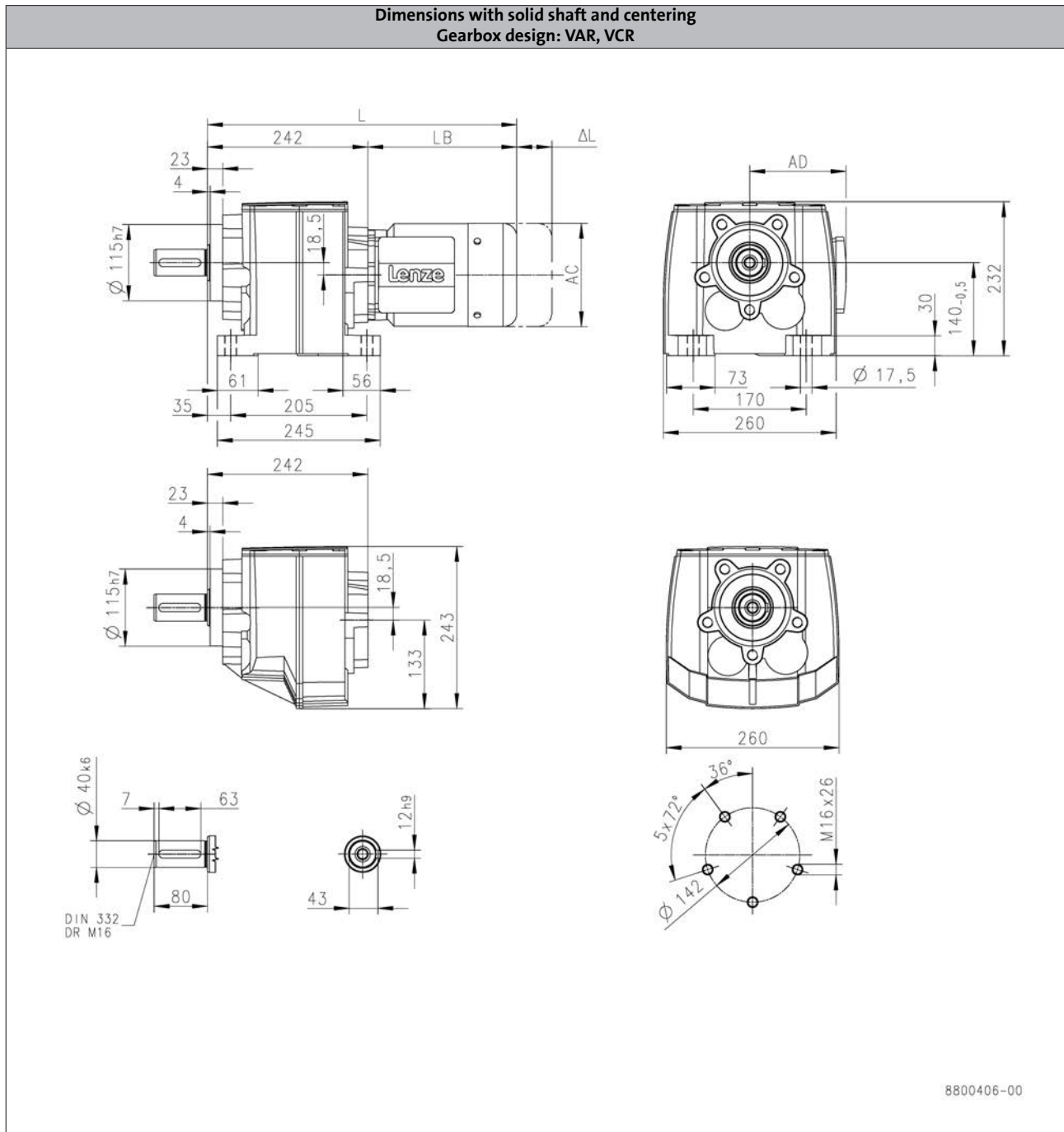
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H850



6.3

		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	425		445
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



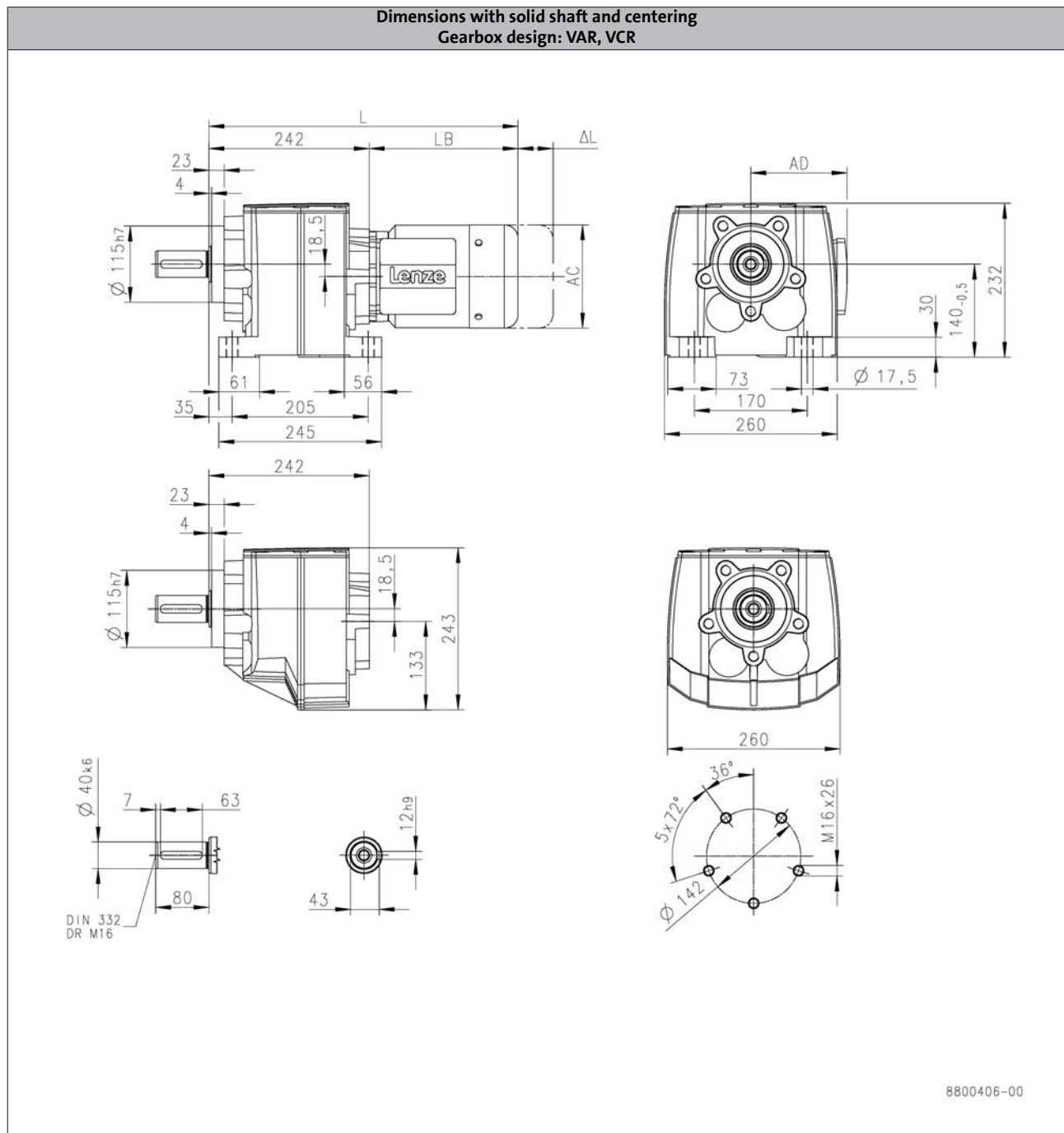
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H850



6.3

		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	467	536		598		585		660
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

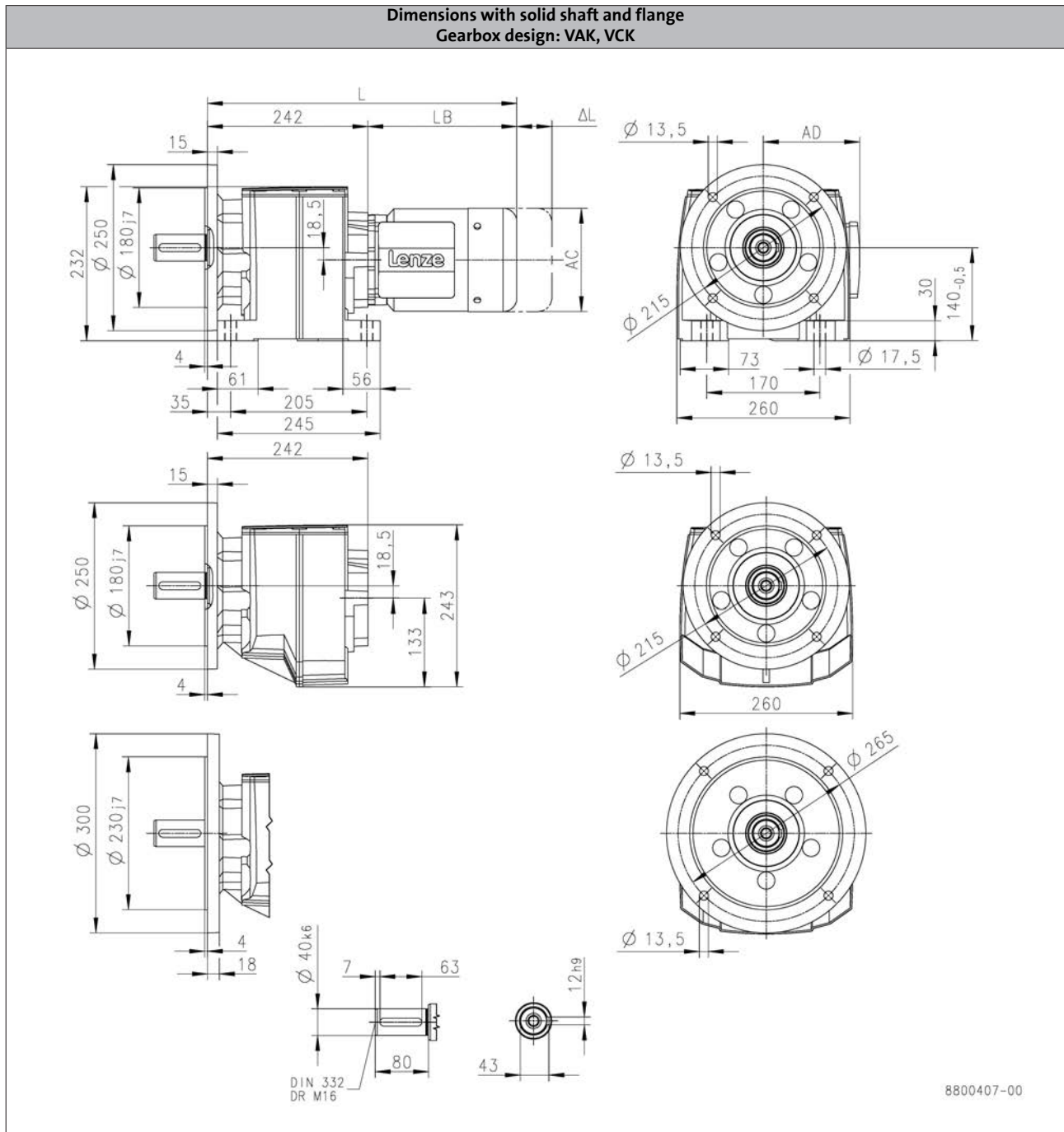
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H850



6.3

			MD□MA□□	
			063-42	071-32
				071-42
Total length	L	[mm]	425	445
Motor length	LB	[mm]	183	203
Length of motor options	Δ L	[mm]	40.0	52.0
Motor diameter	AC	[mm]	123	139
Distance motor/connection	AD	[mm]	107	118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

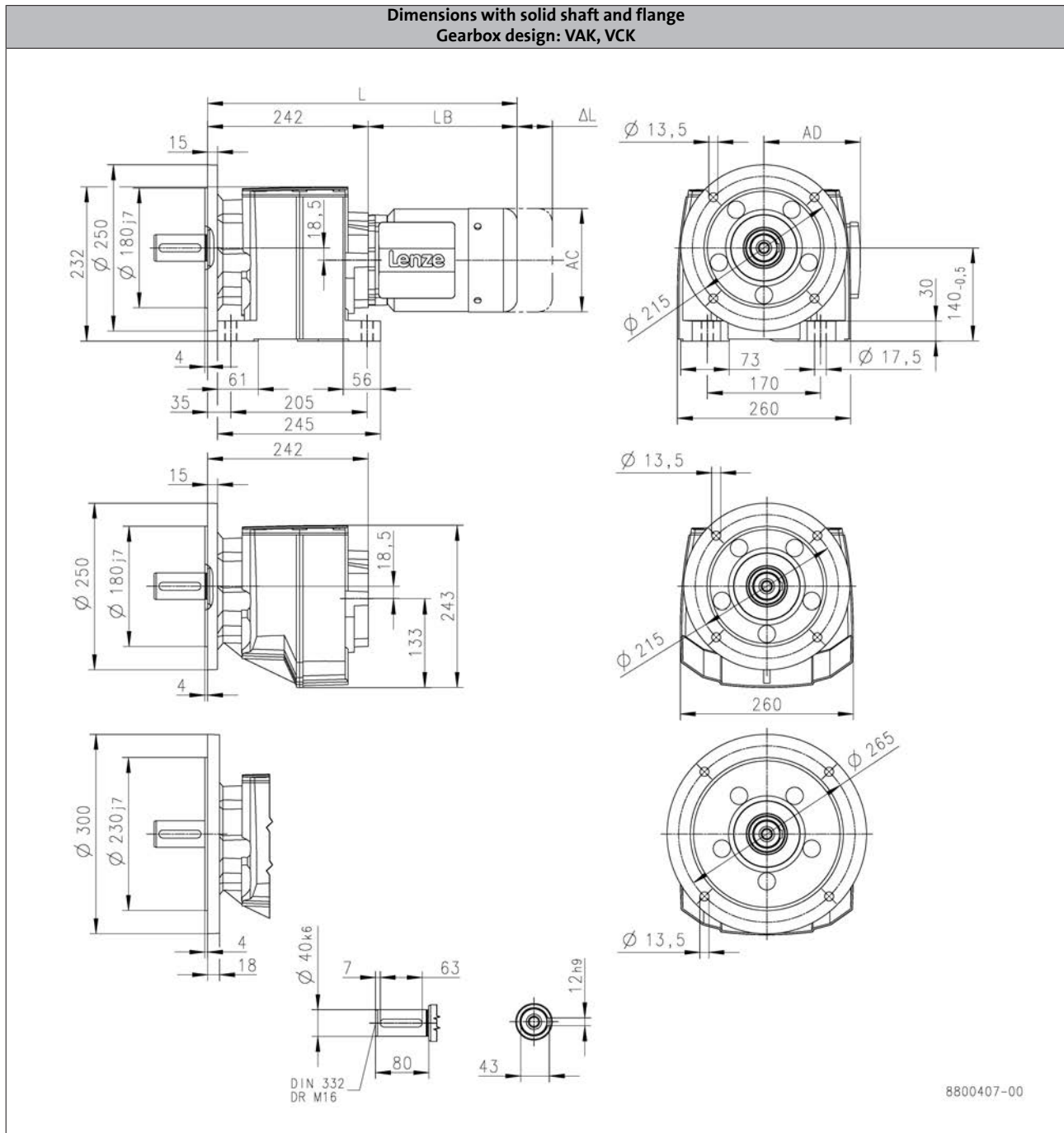
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H850



			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	467	536		598		585		660
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

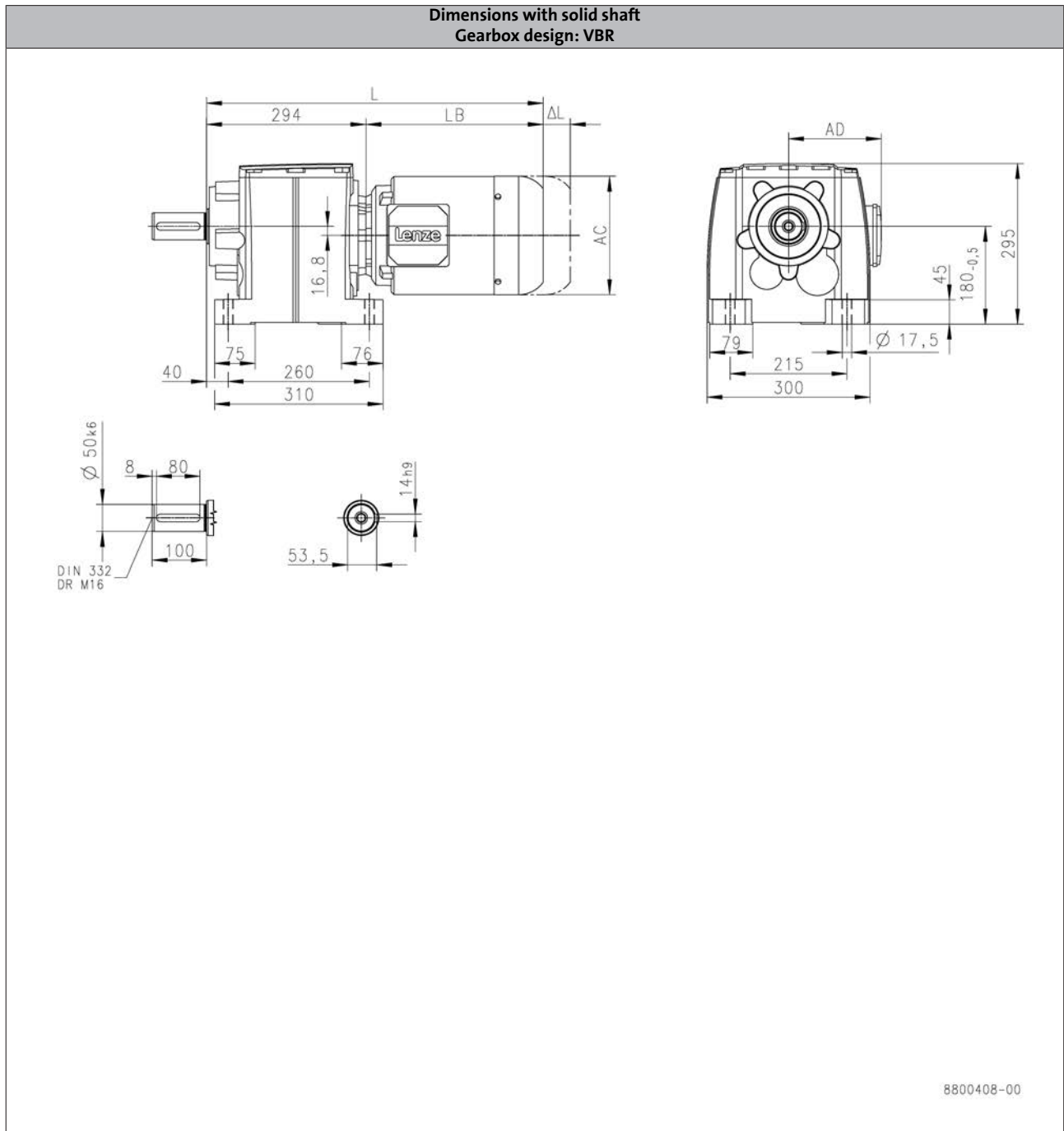
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H1500



6.3

		MD□MA□□		m240			
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	581	519	588		650	
Motor length	LB [mm]	203	225	294		356	
Length of motor options	Δ L [mm]	52.0	107	92.0		103	
Motor diameter	AC [mm]	139	158	172		192	
Distance motor/connection	AD [mm]	118	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

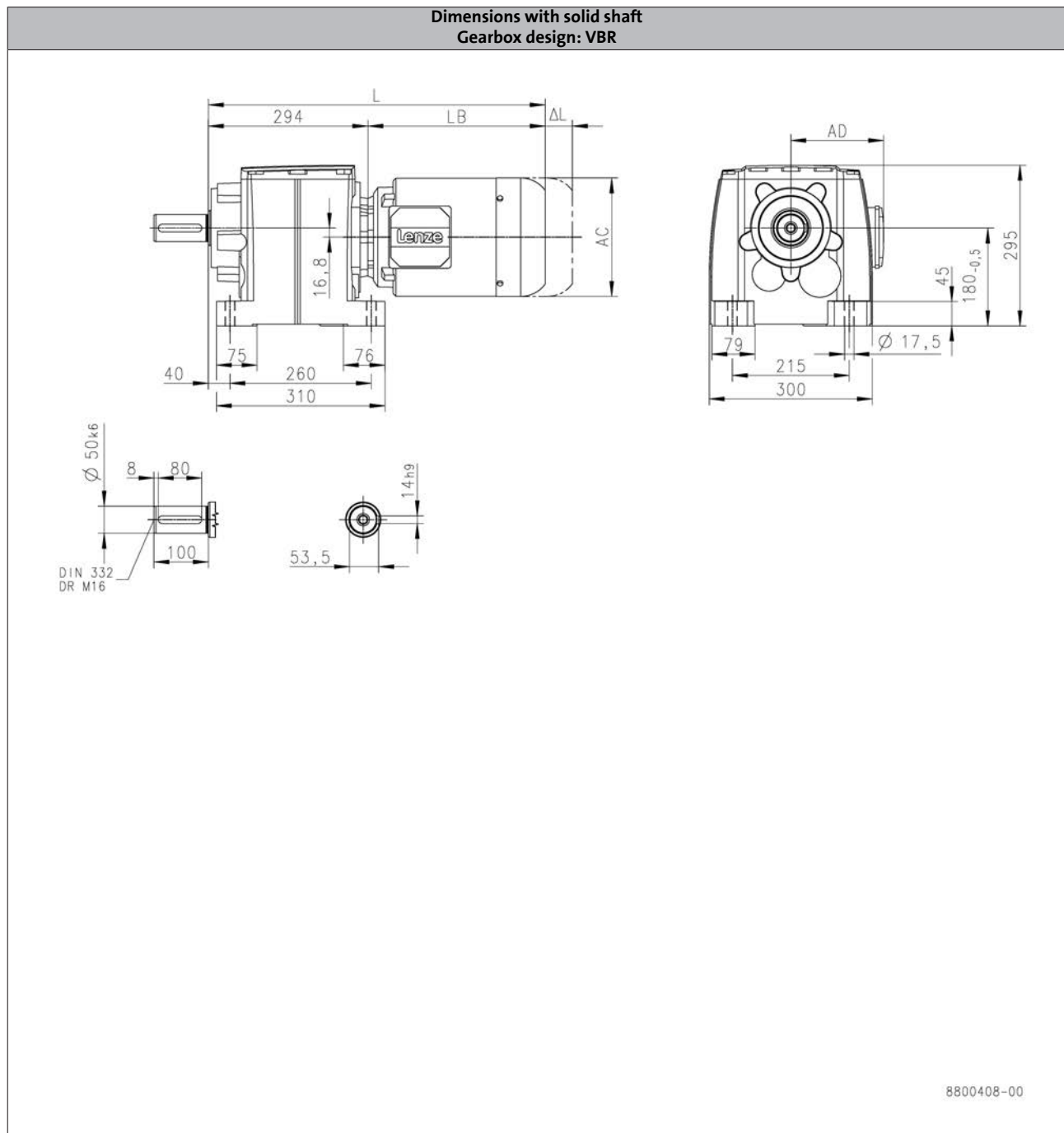
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H1500



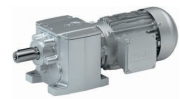
6.3

		m240						
			-P112/M4	-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4
Total length	L	[mm]	637	712		863		963
Motor length	LB	[mm]	343	418		569		669
Length of motor options	Δ L	[mm]	111	118		146		107
Motor diameter	AC	[mm]	210	281		313		351
Distance motor/connection	AD	[mm]	171	182		231		282

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

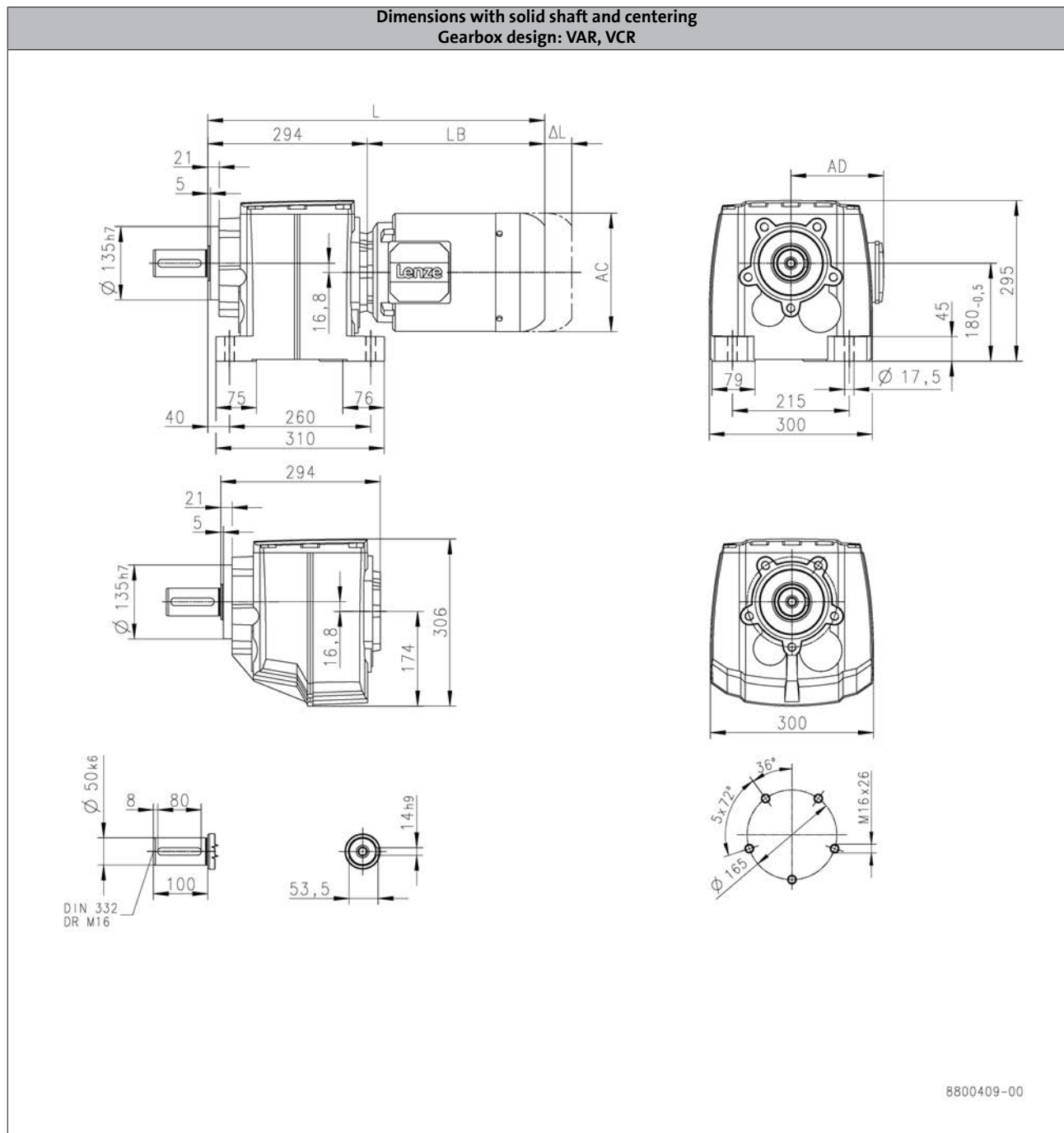
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H1500



6.3

		MD□MA□□		m240			
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	581	519	588		650	
Motor length	LB [mm]	203	225	294		356	
Length of motor options	Δ L [mm]	52.0	107	92.0		103	
Motor diameter	AC [mm]	139	158	172		192	
Distance motor/connection	AD [mm]	118	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

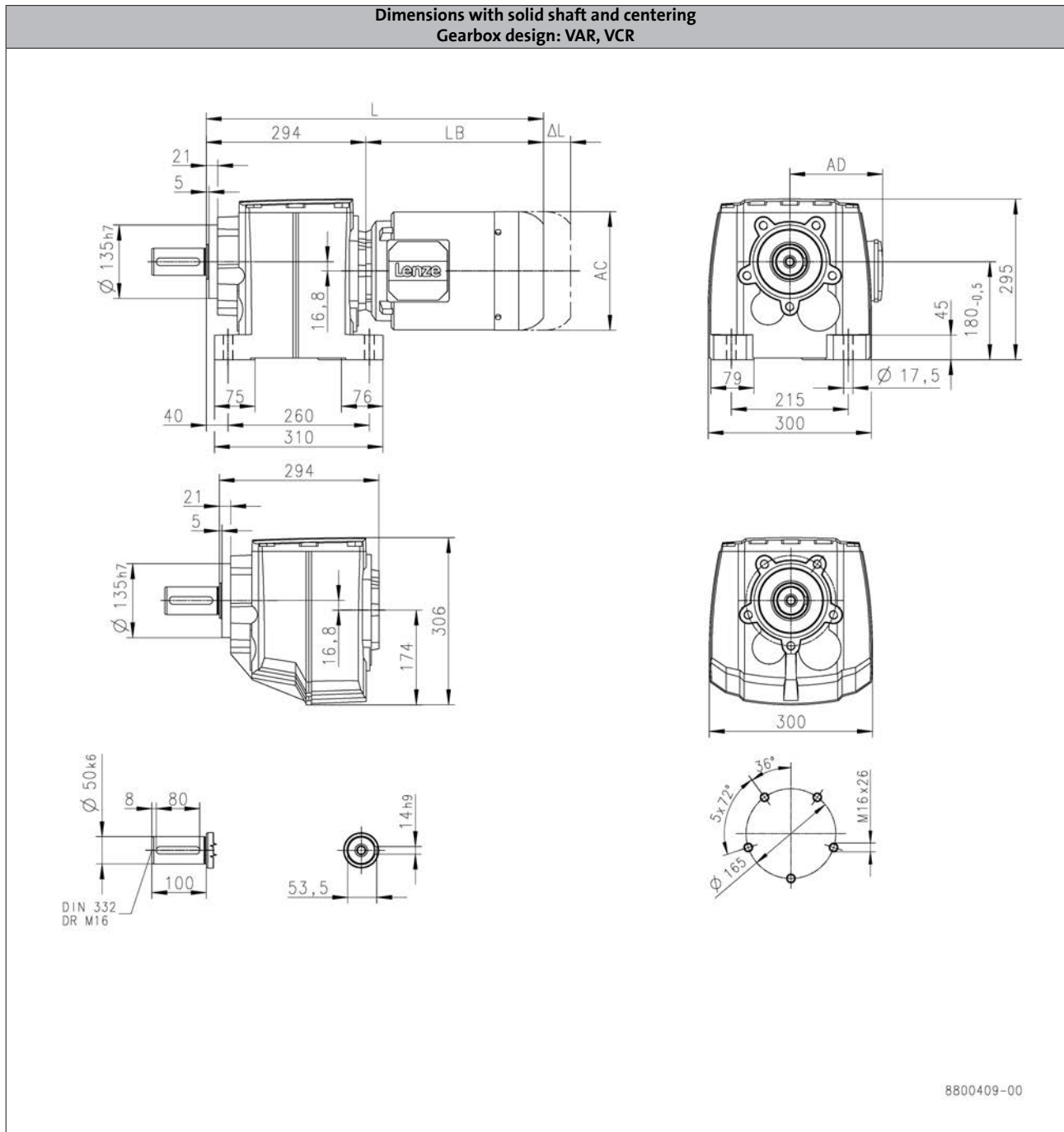
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H1500



6.3

		m240						
			-P112/M4	-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4
Total length	L	[mm]	637	712		863		963
Motor length	LB	[mm]	343	418		569		669
Length of motor options	Δ L	[mm]	111	118		146		107
Motor diameter	AC	[mm]	210	281		313		351
Distance motor/connection	AD	[mm]	171	182		231		282

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

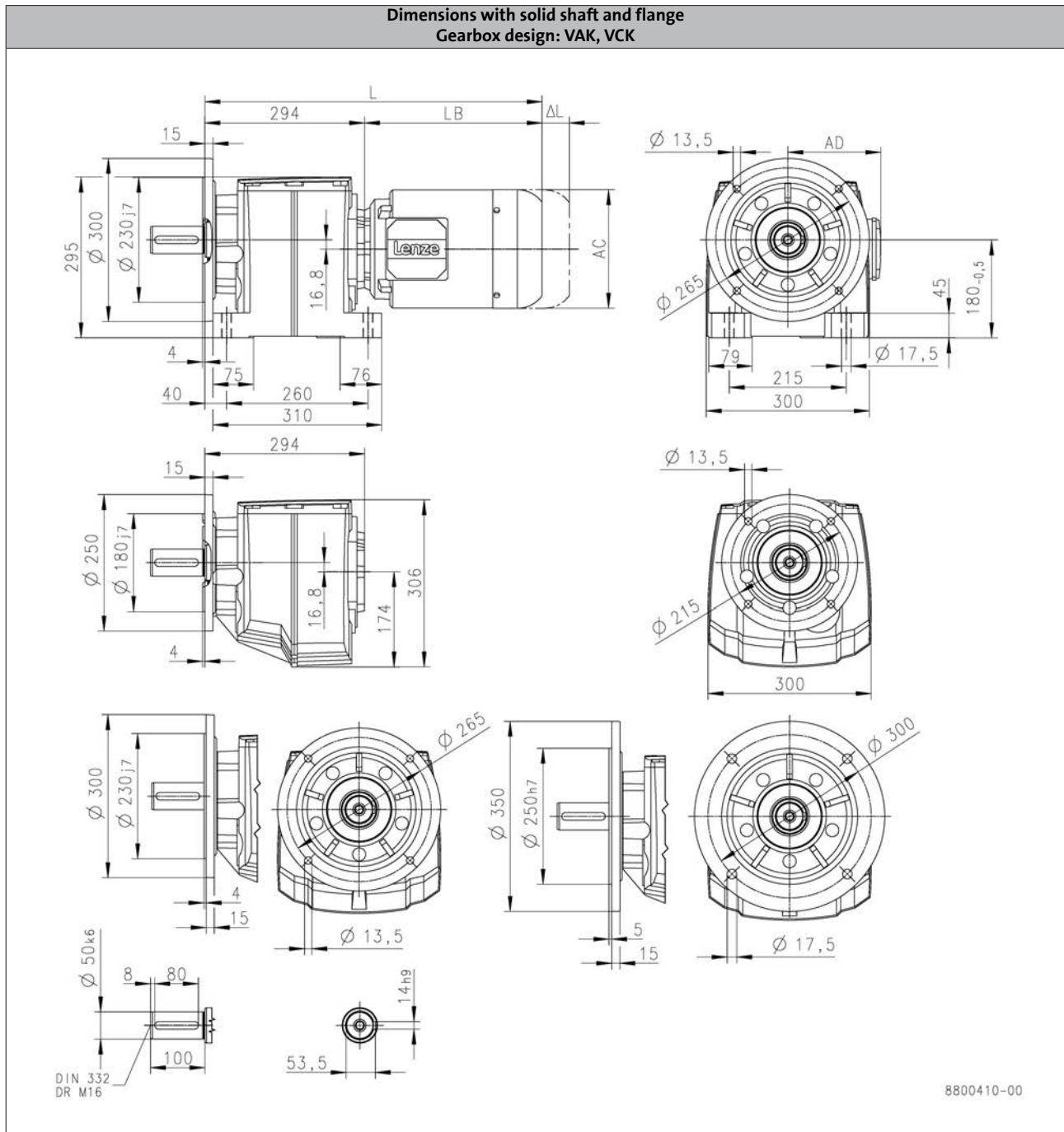
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H1500



		MD□MA□□			m240		
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	581	519		588		650
Motor length	LB [mm]	203	225		294		356
Length of motor options	Δ L [mm]	52.0	107		92.0		103
Motor diameter	AC [mm]	139	158		172		192
Distance motor/connection	AD [mm]	118	148		155		164

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



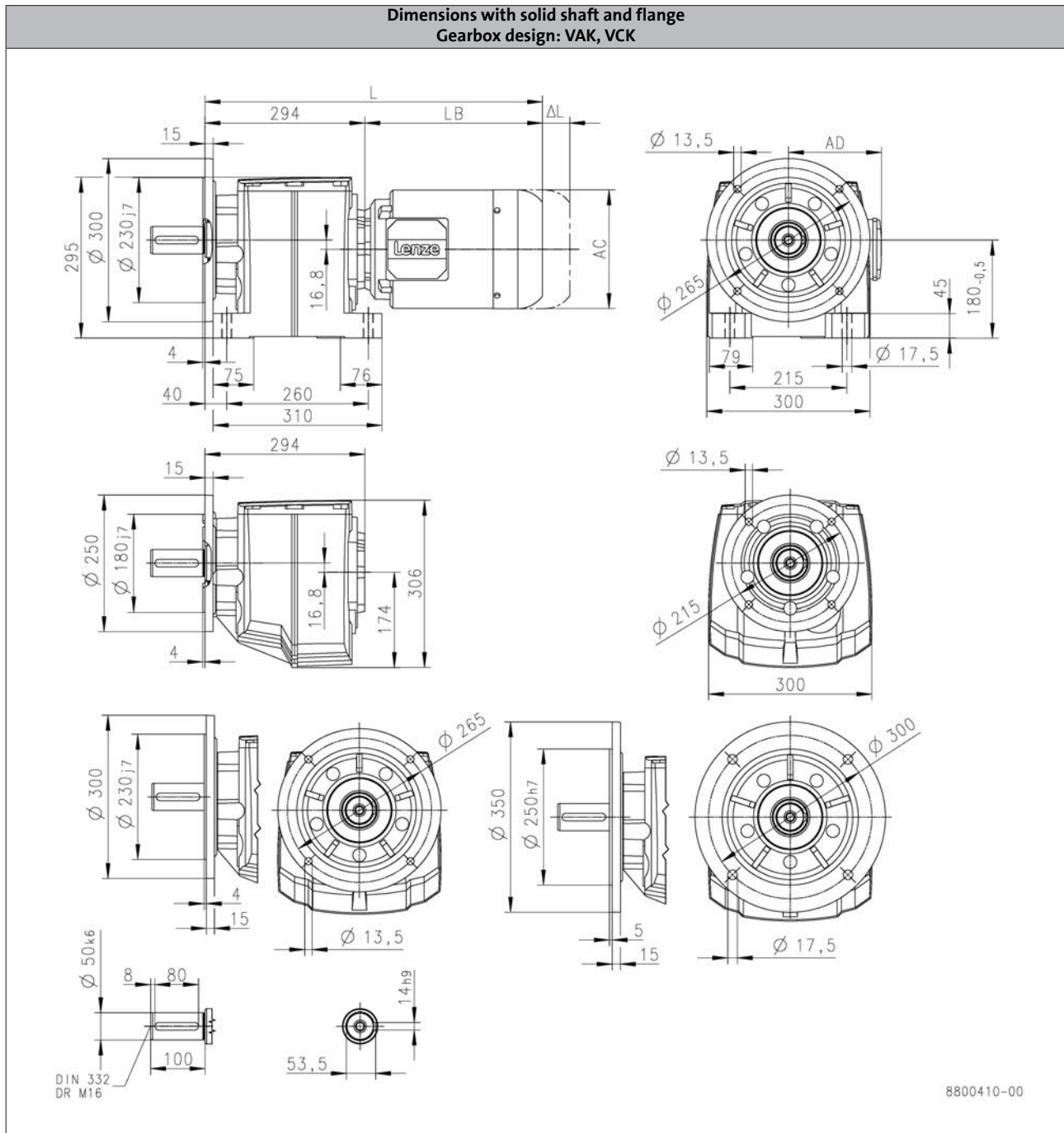
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H1500



		m240					
		-P112/M4	-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4
Total length	L [mm]	637	712		863		963
Motor length	LB [mm]	343	418		569		669
Length of motor options	Δ L [mm]	111	118		146		107
Motor diameter	AC [mm]	210	281		313		351
Distance motor/connection	AD [mm]	171	182		231		282

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

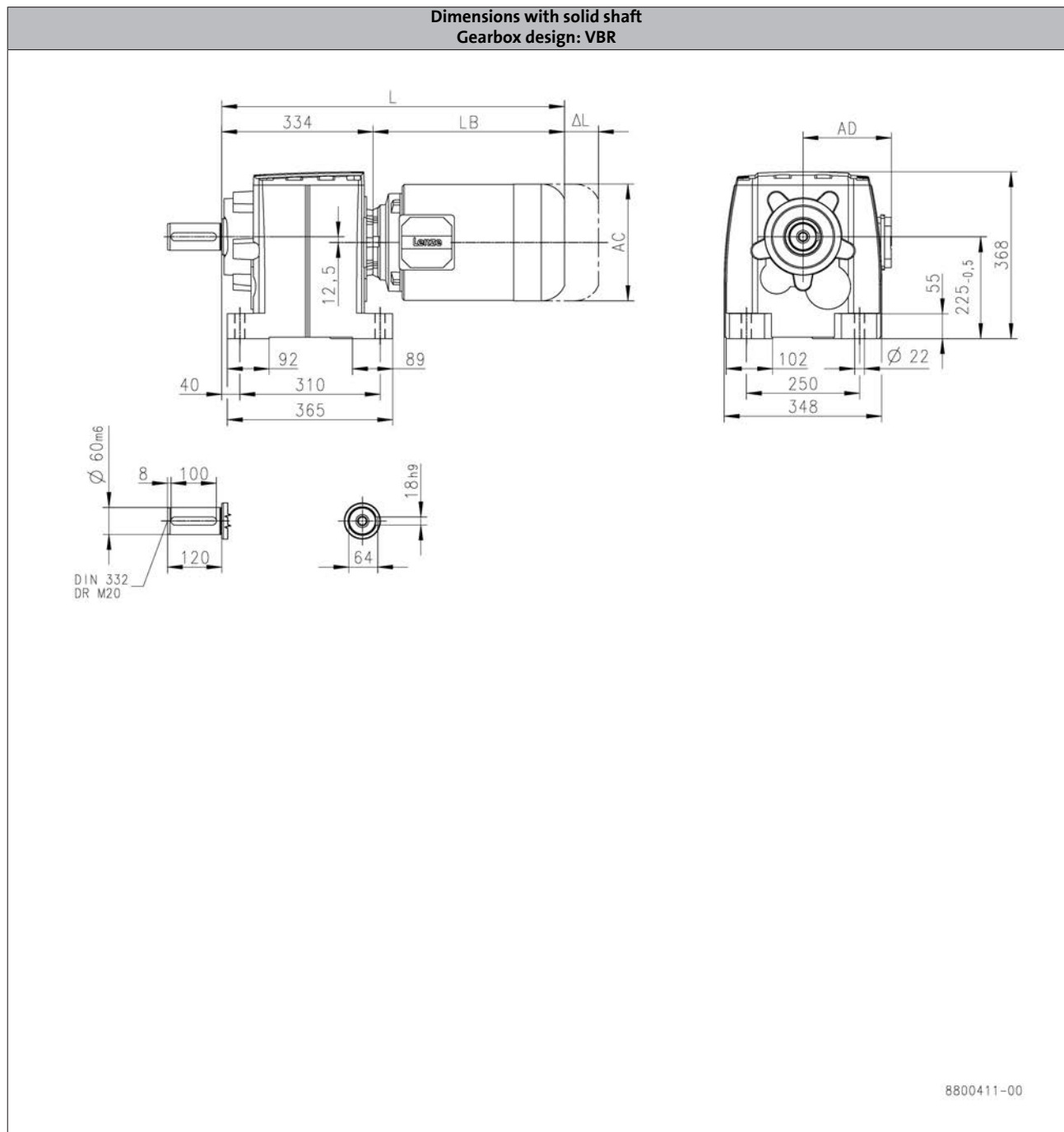
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H3000



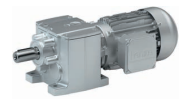
6.3

			m240				
			-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L	[mm]	628		690		677
Motor length	LB	[mm]	294		356		343
Length of motor options	Δ L	[mm]	92.0		103		111
Motor diameter	AC	[mm]	172		192		210
Distance motor/connection	AD	[mm]	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

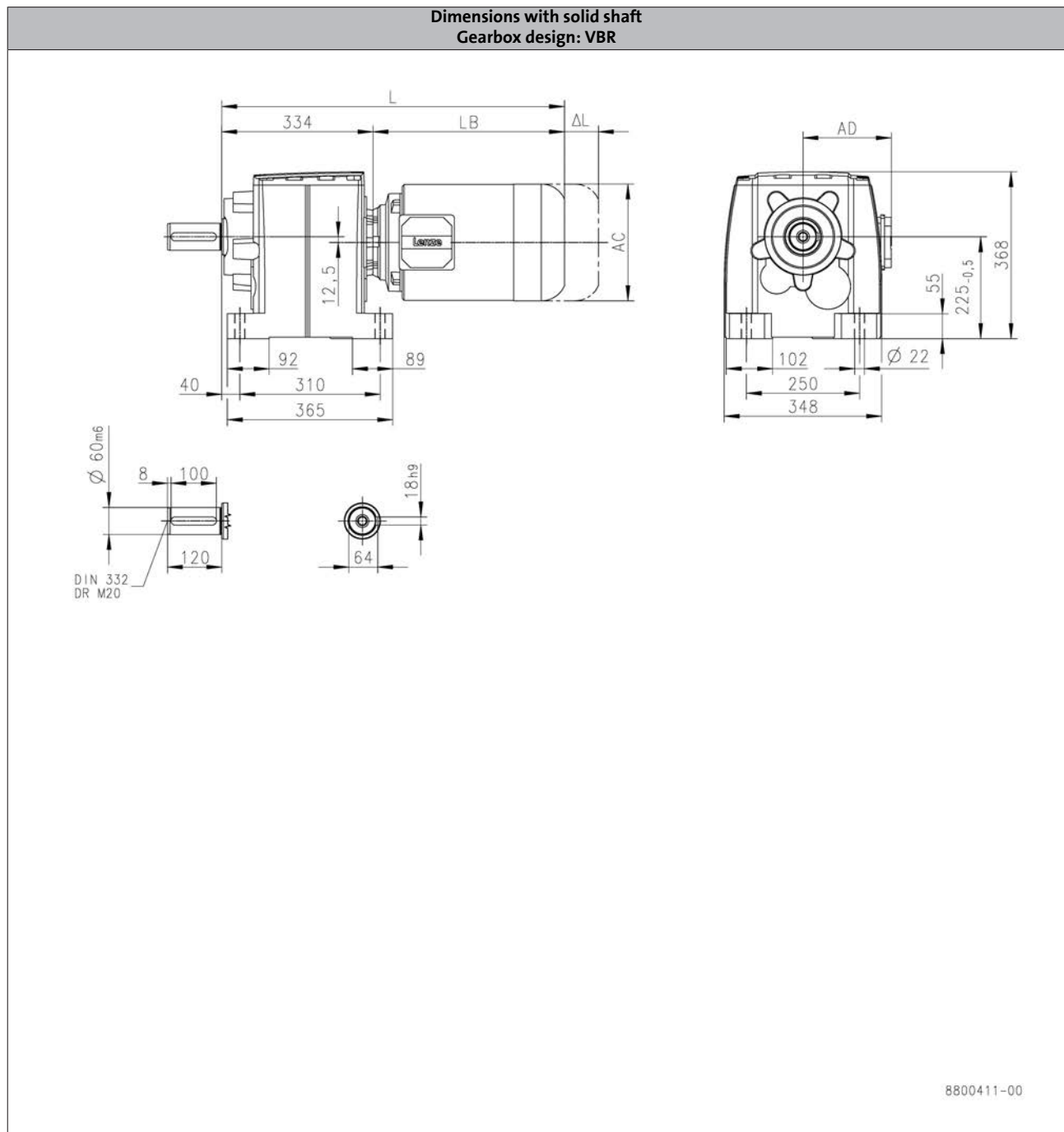
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H3000



		m240					
		-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4	-P180/L4
Total length	L [mm]	752		903		1003	
Motor length	LB [mm]	418		569		669	
Length of motor options	Δ L [mm]	118		146		107	
Motor diameter	AC [mm]	281		313		351	
Distance motor/connection	AD [mm]	182		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

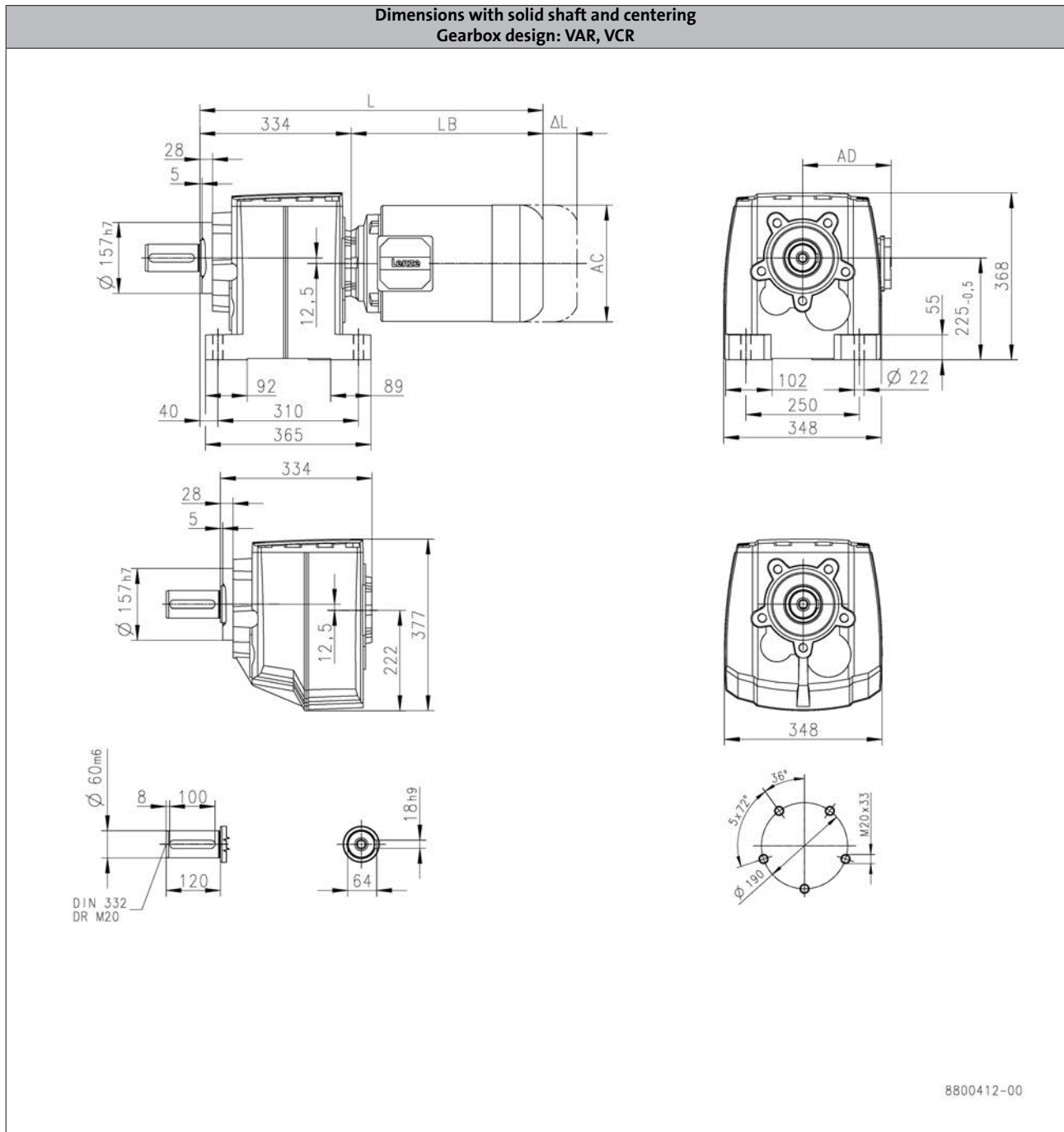
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H3000



		m240				
		-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]	628		690		677
Motor length	LB [mm]	294		356		343
Length of motor options	Δ L [mm]	92.0		103		111
Motor diameter	AC [mm]	172		192		210
Distance motor/connection	AD [mm]	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

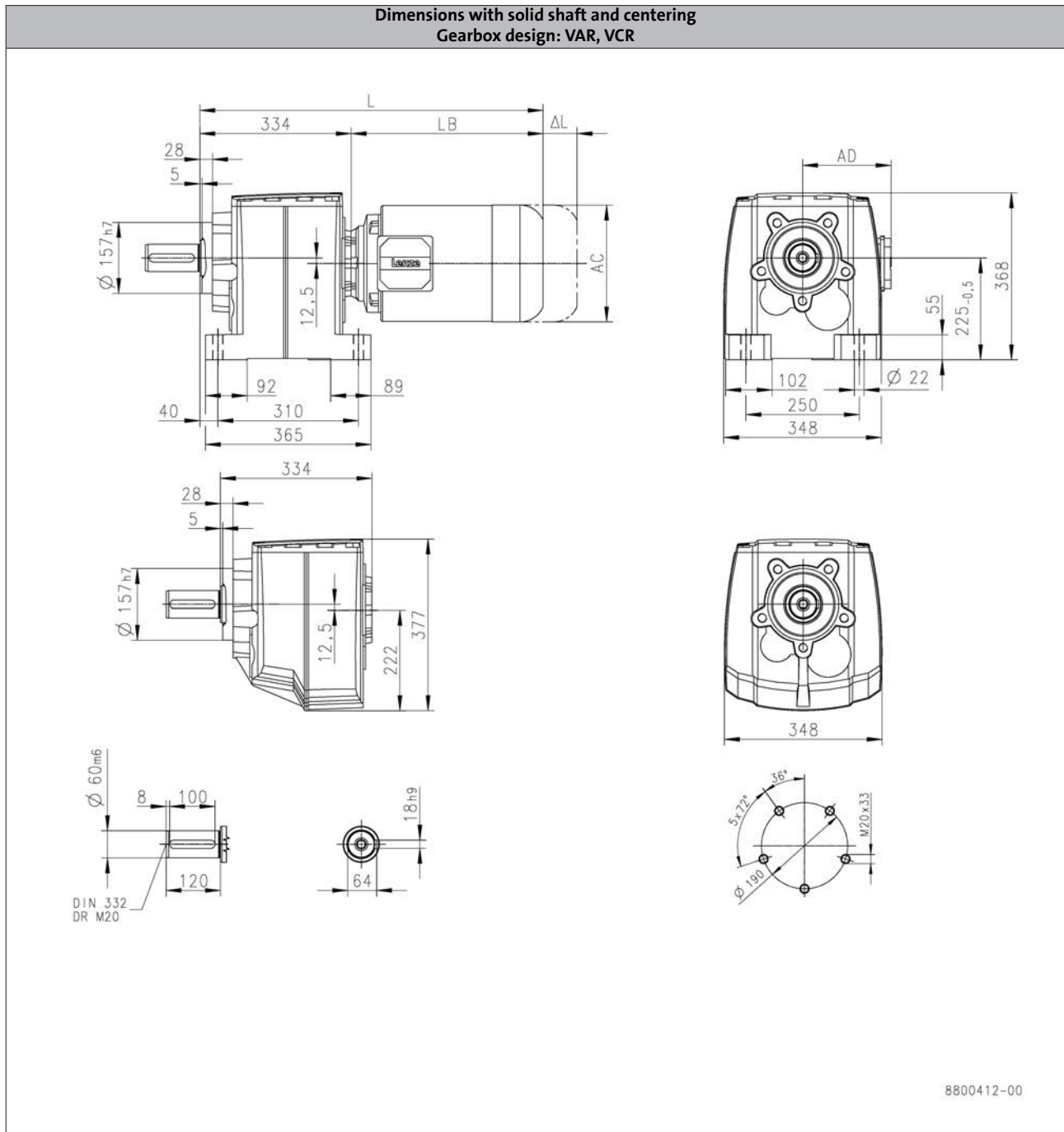
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H3000



6.3

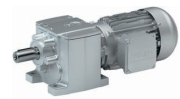
		m240					
		-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4	-P180/L4
Total length	L [mm]	752		903		1003	
Motor length	LB [mm]	418		569		669	
Length of motor options	Δ L [mm]	118		146		107	
Motor diameter	AC [mm]	281		313		351	
Distance motor/connection	AD [mm]	182		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



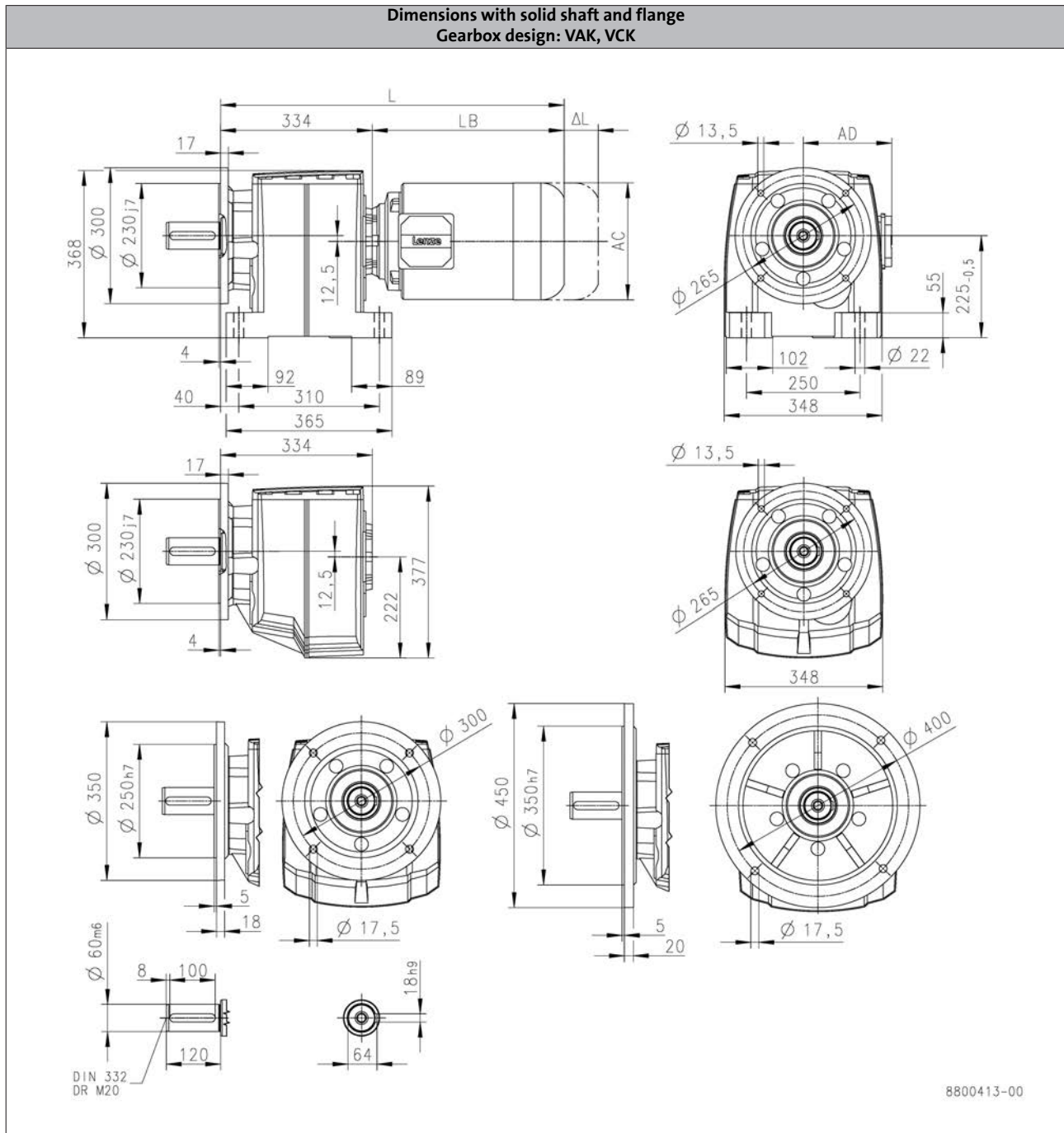
# g500-H helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-H3000



			m240					
			-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4	-P180/L4
Total length	L	[mm]	752		903		1003	
Motor length	LB	[mm]	418		569		669	
Length of motor options	Δ L	[mm]	118		146		107	
Motor diameter	AC	[mm]	281		313		351	
Distance motor/connection	AD	[mm]	182		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

# g500-H helical geared motors

## Technical data



### Weights, 4-pole motors

- Weights with oil capacity for mounting position A, all given as approximate values.  
The weights refer to the basic version, observe additional weights!

### 2-stage gearboxes

Product		Mass
		m
		[kg]
g500-H45	MD□MA□□063-02	5.20
	MD□MA□□063-12	5.70
	MD□MA□□063-22	5.20
	MD□MA□□063-32	5.70
	MD□MA□□063-42	6.00
	MD□MA□□071-32	7.40
	MD□MA□□071-42	8.00
g500-H100	MD□MA□□063-12	7.70
	MD□MA□□063-32	7.70
	MD□MA□□063-42	8.00
	MD□MA□□071-32	9.40
	MD□MA□□071-42	10.0
	m240-P80/M4	18.5
	m240-P90/M4	22.5
m240-P90/L4	23.5	
g500-H140	MD□MA□□063-12	8.80
	MD□MA□□063-32	8.80
	MD□MA□□063-42	9.10
	MD□MA□□071-32	10.5
	MD□MA□□071-42	11.1
	m240-P80/M4	19.6
	m240-P90/M4	23.6
	m240-P90/L4	24.6
g500-H210	MD□MA□□063-12	10.2
	MD□MA□□063-32	10.2
	MD□MA□□063-42	10.5
	MD□MA□□071-32	11.9
	MD□MA□□071-42	12.5
	m240-P80/M4	21.0
	m240-P90/M4	25.0
	m240-P90/L4	26.0
	m240-P100/M4	32.0
	m240-P100/L4	37.0
g500-H320	MD□MA□□063-32	12.1
	MD□MA□□063-42	12.4
	MD□MA□□071-32	13.8
	MD□MA□□071-42	14.4
	m240-P80/M4	22.9
	m240-P90/M4	26.9
	m240-P90/L4	27.9

Product		Mass
		m
		[kg]
g500-H320	m240-P100/M4	33.9
	m240-P100/L4	38.9
	m240-P112/M4	41.9
g500-H450	MD□MA□□063-42	15.8
	MD□MA□□071-32	17.2
	MD□MA□□071-42	17.8
	m240-P80/M4	26.3
	m240-P90/M4	30.3
	m240-P90/L4	31.3
	m240-P100/M4	37.3
	m240-P100/L4	42.3
	m240-P112/M4	45.3
	m240-P132/M4	66.3
m240-P132/L4	68.3	
g500-H600	MD□MA□□063-42	27.0
	MD□MA□□071-32	28.4
	MD□MA□□071-42	29.0
	m240-P80/M4	37.5
	m240-P90/M4	41.5
	m240-P90/L4	42.5
	m240-P100/M4	48.5
	m240-P100/L4	53.5
	m240-P112/M4	56.5
	m240-P132/M4	77.5
m240-P132/L4	79.5	
g500-H850	MD□MA□□071-42	37.9
	m240-P80/M4	46.4
	m240-P90/M4	50.4
	m240-P90/L4	51.4
	m240-P100/M4	57.4
	m240-P100/L4	62.4
	m240-P112/M4	65.4
	m240-P132/M4	86.4
	m240-P132/L4	88.4
	m240-P90/M4	80.5
g500-H1500	m240-P90/L4	81.5
	m240-P100/M4	87.5
	m240-P100/L4	92.5
	m240-P112/M4	95.5
	m240-P132/M4	117



# g500-H helical geared motors

## Technical data



### Weights, 4-pole motors

- Weights with oil capacity for mounting position A, all given as approximate values.  
The weights refer to the basic version, observe additional weights!

#### 2-stage gearboxes

Product		Mass
		m
		[kg]
g500-H1500	m240-P132/L4	119
	m240-P160/M4	154
	m240-P160/L4	161
	m240-P180/M4	188
g500-H3000	m240-P100/M4	129
	m240-P100/L4	134
	m240-P112/M4	137

Product		Mass
		m
		[kg]
g500-H3000	m240-P132/M4	158
	m240-P132/L4	160
	m240-P160/M4	195
	m240-P160/L4	202
	m240-P180/M4	229
	m240-P180/L4	238

#### 3-stage gearboxes

Product		Mass
		m
		[kg]
g500-H210	MD□MA□□063-12	10.4
	MD□MA□□063-32	
	MD□MA□□063-42	10.7
	MD□MA□□071-32	12.1
	MD□MA□□071-42	12.7
	m240-P80/M4	21.2
g500-H320	MD□MA□□063-12	12.3
	MD□MA□□063-32	
	MD□MA□□063-42	12.6
	MD□MA□□071-32	14.0
	MD□MA□□071-42	14.6
	m240-P80/M4	23.1
g500-H450	MD□MA□□063-12	15.9
	MD□MA□□063-32	
	MD□MA□□063-42	16.2
	MD□MA□□071-32	17.6
	MD□MA□□071-42	18.2
	m240-P80/M4	26.7
	m240-P90/M4	30.7
	m240-P90/L4	31.7
g500-H600	MD□MA□□063-12	27.6
	MD□MA□□063-32	
	MD□MA□□063-42	27.9
	MD□MA□□071-32	29.3
	MD□MA□□071-42	29.9
	m240-P80/M4	38.4
	m240-P90/M4	42.4
	m240-P90/L4	43.4

Product		Mass
		m
		[kg]
g500-H600	m240-P100/M4	49.4
	m240-P100/L4	54.4
g500-H850	MD□MA□□063-42	37.0
	MD□MA□□071-32	38.4
	MD□MA□□071-42	39.0
	m240-P80/M4	47.5
	m240-P90/M4	51.5
	m240-P90/L4	52.5
	m240-P100/M4	58.5
	m240-P100/L4	63.5
m240-P112/M4	66.5	
g500-H1500	m240-P132/M4	87.5
	MD□MA□□071-42	69.5
	m240-P80/M4	78.0
	m240-P90/M4	82.0
	m240-P90/L4	83.0
	m240-P100/M4	89.0
	m240-P100/L4	94.0
	m240-P112/M4	97.0
m240-P132/M4	118	
g500-H3000	m240-P90/M4	127
	m240-P90/L4	128
	m240-P100/M4	134
	m240-P100/L4	139
	m240-P112/M4	142
	m240-P132/M4	163
	m240-P132/L4	165
	m240-P160/M4	200

# g500-H helical geared motors

Technical data



## Additional weights for gearboxes

Product			g500-H45	g500-H100	g500-H140	g500-H210	g500-H320
Foot	m	[kg]	0.1	0.1	0.2	0.1	0.1
Flange	m	[kg]	0.3	0.4	0.6	0.6	0.8

Product			g500-H450	g500-H600	g500-H850	g500-H1500	g500-H3000
Foot	m	[kg]	0.2	2.0	2.8	4.3	5.8
Flange	m	[kg]	0.9	4.3	7.6	8.3	20.1

## Additional weights for motors

### 4-pole motors

Product			MD□MA□□			m240		
			063-02 063-22	063-12 063-32 063-42	071-32 071-42	-P80/M4	-P90/M4 -P90/L4	-P100/M4 -P100/L4
Brake			06		06 08	08 10		10 12
	m	[kg]	0.9		0.9 1.5	1.5 2.6		2.6 4.2

Product			m240				
			-P112/M4	-P132/M4 -P132/L4	-P160/M4	-P160/L4	-P180/M4 -P180/L4
Brake			12 14	14 16	16 18	18	18 20
	m	[kg]	4.2 5.8	5.8 8.7	8.7 12.6	12.6	12.6 19.5

# g500-H helical geared motors

## Appendix



### Gearbox code

Example		G	50	A	H	045	M	V	B	R	2	C	1A
Meaning	Variant												
Product family		G	50										
Generation				A									
				B									
Gearbox type	Helical gearbox				H								
Output torque	45 Nm					045							
	100 Nm					110							
	140 Nm					114							
	210 Nm					121							
	320 Nm					132							
	450 Nm					145							
	600 Nm					160							
	850 Nm					185							
	1500 Nm					215							
	3000 Nm					230							
	5000 Nm					250							
	8000 Nm					280							
14000 Nm					314								
Type of construction	Geared motor						M						
	Gearboxes						N						
Shaft type	Solid shaft with feather key							V					
	Solid shaft without keyway							G					
Housing type	Foot mounting + centering								A				
	Foot mounting								B				
	Centering								C				
Flange mounting	Without flange									R			
	Flange with through holes									k			
											P		
Number of stages	2-stage										2		
	3-stage										3		
Motor mounting	Integrated											C	
	IEC motor											N	
	NEMA motor											A	
	Servo motor											S	
Drive size												1A	
												...	
												□H	

# g500-H helical geared motors

## Appendix



### Motor code

Example	M	D	E	MA	XX	063	-	4	2	C1	C
Meaning	Variant	Motor code									
Product family		M									
Efficiency class	IE1		D								
Cooling	Natural ventilation			S							
	Integral fan			E							
	Blower			F							
Internal key				MA							
Built-on accessories	Without built-on accessories				XX						
	Brake				BR						
	Brake + resolver				BS						
	Brake + incremental encoder				BI						
	Brake + SinCos absolute value encoder				BA						
	Resolver				RS						
	Incremental encoder				IG						
	SinCos absolute value encoder				AG						
Size						063					
						071					
Overall length								0			
								1			
								2			
								3			
								4			
Number of pole pairs	4-pole motors								2		
	2-pole motors								1		
Internal key										C1	
Approval	CE										C
	cURus										U
	CCC										3

# g500-H helical geared motors

## Appendix



### Motor code

Example		M	24	A	P	080	M	04	5	E	0	0	W	T	
Meaning	Variant	Motor code													
Product family		M	24												
Generation				A											
Efficiency class	Premium - IE3				P										
Size						080									
						090									
						100									
						112									
						132									
						160									
						180									
Overall length	Medium						M								
	Long						L								
	Very long						V								
Number of poles	4-pole							04							
Degree of protection	IP5□								5						
	IP6□								6						
Cooling	Integral fan									E					
Brake attachment	Without brake										0				
	Spring-applied brake										F				
Actual value encoder	Without encoder											0			
Approval	CE												C		
	Without												N		
Design type	Internal key													T	

# g500-H helical geared motors

Appendix

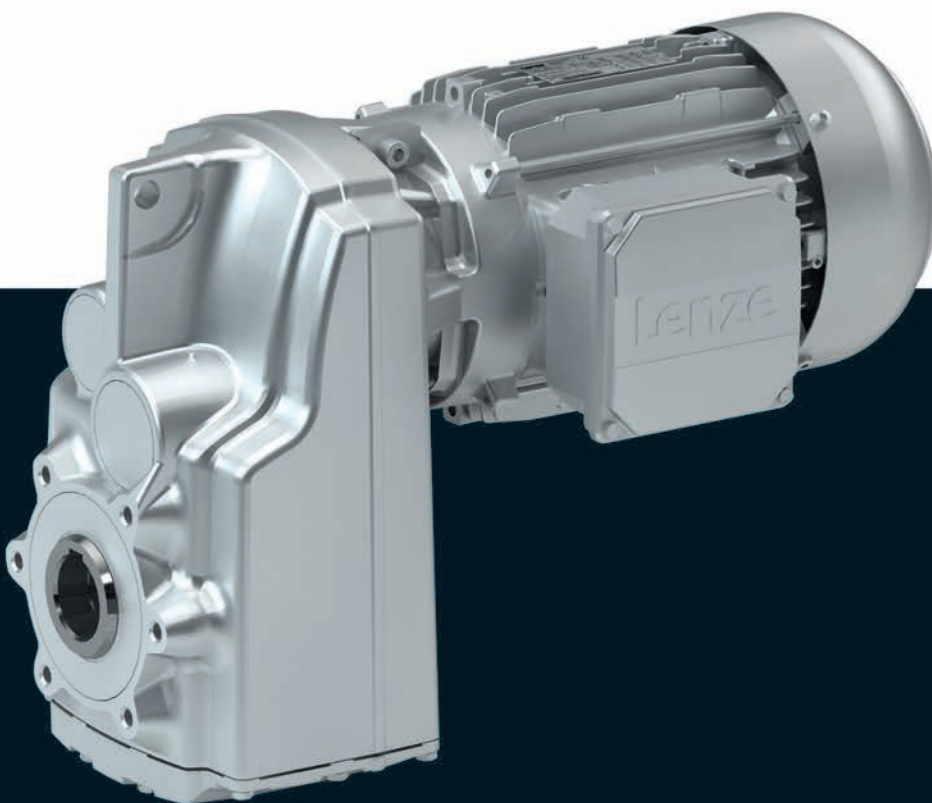


# g500-S shaft-mounted helic- al geared motors

**Mains operation**

**0.12 ... 0.55 kW (efficiency class IE1)**

**0.75 ... 30 kW (efficiency class IE3)**







# g500-S shaft-mounted helical geared motors



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# g500-S shaft-mounted helical geared motors

## General information



### List of abbreviations

$\alpha$	[rad/s <sup>2</sup> ]	Max. permissible angular acceleration
$\eta_{50\%}$	[%]	Efficiency
$\eta_{75\%}$	[%]	Efficiency
$\eta_{100\%}$	[%]	Efficiency
$\eta_a$		Efficiency
$\eta_{c=1}$		Efficiency
c		Load capacity
$\cos \phi$		Power factor
du/dt	[kV/ $\mu$ s]	Insulation resistance
$F_{ax,-}$	[N]	Min. axial force
$F_{ax,+}$	[N]	Max. axial force
$F_{ax,max}$	[N]	Max. axial force
$f_{in,max}$	[Hz]	Max. input frequency
$f_{max}$	[kHz]	Limit frequency
$f_{max}$	[kHz]	Max. switching frequency
$f_N$	[Hz]	Rated frequency
$F_{rad,max}$	[N]	Max. radial force
$f_z$		Additional radial force factor
$H_{max}$	[m]	Site altitude
$I_0$	[A]	Standstill current
i		Ratio
$I_{in,max}$	[A]	Max. input current
$I_{max}$	[A]	Max. current consumption
$I_{max}$	[A]	Max. current
$I_{max}$	[A]	Max. current consumption
$I_{max}$	[A]	Max. current
$I_{max}$	[A]	Max. short-time DC-bus current
$I_{max}$	[A]	Max. DC-bus current
$I_N$	[A]	Rated current
$I_{N,\Delta}$	[A]	Rated current
$I_{N,Y}$	[A]	Rated current
J	[kgcm <sup>2</sup> ]	Moment of inertia
$J_{MB}$	[kgcm <sup>2</sup> ]	Moment of inertia
$KE_{LL\ 150^\circ C}$	[V/(1000 r/min)]	Voltage constant
$Kt_{0\ 150^\circ C}$	[Nm/A]	Torque constant
$L_{10}$	[h]	Bearing service life
L	[mH]	Mutual inductance
$L_{1\sigma}$	[mH]	Stator leakage inductance
$L_{2\sigma}$	[mH]	Rotor leakage inductance
$L_N$	[mH]	Rated inductance
m	[kg]	Mass
$M_2$	[Nm]	Output torque
$M_{22}$	[Nm]	Output torque
$M_0$	[Nm]	Stall torque
$M_{0,max}$	[Nm]	Max. standstill torque
$M_{2,GM}$	[Nm]	Output torque
$M_{2,max}$	[Nm]	Max. output torque
$M_{2,not}$	[Nm]	Emergency off-torque

$M_a$	[Nm]	Starting torque
$M_{a,1}$	[Nm]	Starting torque
$M_{a,2}$	[Nm]	Starting torque
$M_{av}$	[Nm]	Average dynamic torque
$M_b$	[Nm]	Stalling torque
$M_B$	[Nm]	Braking torque
$M_k$	[Nm]	Rated torque
$M_{max}$	[Nm]	Max. torque
$M_N$	[Nm]	Rated torque
$n_2$	[r/min]	Output speed
$n_{21}$	[r/min]	Output speed
$n_{22}$	[r/min]	Output speed
$n_{1,max}$	[r/min]	Max. gearbox input speed
$n_{1,max\ 50\%}$	[r/min]	Max. gearbox input speed
$n_{eto}$	[r/min]	Transition speed
$n_k$	[r/min]	Speed
$n_{max}$	[r/min]	Max. speed
$n_N$	[r/min]	Rated speed
$P_{max}$	[kW]	Max. power input
$Q_{BW}$	[MJ]	Friction energy
$Q_E$	[J]	Maximum switching energy
$Q_E$	[kJ]	Maximum switching energy
$R_1$	[ $\Omega$ ]	Stator impedance
$R_2$	[ $\Omega$ ]	Rotor impedance
R	[ $\Omega$ ]	Insulation resistance
R	[ $\Omega$ ]	Min. insulation resistance
$R_{UV\ 150^\circ C}$	[ $\Omega$ ]	Stator impedance
$R_{UV\ 20^\circ C}$	[ $\Omega$ ]	Stator impedance
$S_{h\ddot{u}}$	[1/h]	Transition operating frequency
$t_1$	[ms]	Engagement time
$t_2$	[ms]	Disengagement time
$t_{11}$	[ms]	Delay time
$t_{12}$	[ms]	Rise time
T	[ $^\circ C$ ]	Max. surface temperature
T	[ $^\circ C$ ]	Min. ambient temperature for transport
T	[ $^\circ C$ ]	Max. ambient temperature for transport
T	[ $^\circ C$ ]	Max. ambient temperature of bearing
T	[ $^\circ C$ ]	Min. ambient storage temperature
T	[ $^\circ C$ ]	Ambient temperature
T	[ $^\circ C$ ]	Operating temperature
T	[ $^\circ C$ ]	Rated temperature
t	[h]	Service life
$T_{opr}$		Ambient operating temperature
$T_{opr,max}$	[ $^\circ C$ ]	Max. ambient operating temperature
$T_{opr,min}$	[ $^\circ C$ ]	Min. ambient operating temperature
$t_{re}$	[s]	Recovery time
$t_{\ddot{u}}$	[ms]	Overexcitation time
$U_{\Delta}$	[V]	Voltage range
$U_{AC}$	[V]	Mains voltage range

# g500-S shaft-mounted helical geared motors

## General information



### List of abbreviations

$U_{AC}$	[V]	Mains voltage
$U_{in,max}$	[V]	Max. input voltage
$U_{in,min}$	[V]	Min. input voltage
$U_{max}$	[V]	Max. input voltage
$U_{max}$	[V]	Max. mains voltage
$U_{min}$	[V]	Min. mains voltage
$U_{N,\Delta}$	[V]	Rated voltage
$U_{N,AC}$	[V]	Rated voltage
$U_{N,DC}$	[V]	Rated voltage
$U_{N,Y}$	[V]	Rated voltage
$Z_g$		Number of teeth
$Z_{ro}$	[ $\Omega$ ]	Rotor impedance
$Z_{rs}$	[ $\Omega$ ]	Impedance
$Z_{so}$	[ $\Omega$ ]	Stator impedance
$Z_t$		Number of teeth

CCC	China Compulsory Certificate
CE	Communauté Européenne
CEL	China Energy Label
CSA	Canadian Standards Association
CSAULE	Energy Verified Certificate
cURus	Combined certification marks of UL for the USA and Canada
DIN	Deutsches Institut für Normung e.V.
EAC	Customs union Russia / Belarus / Kazakhstan certificate
EMC	Electromagnetic compatibility
EN	European standard
IM	International Mounting Code
IP	International Protection Code
NEMA	National Electrical Manufacturers Association
UkrSEPRO	Certificate for Ukraine
UL	Underwriters Laboratory Listed Product
UR	Underwriters Laboratory Recognized Product
VDE	Verband deutscher Elektrotechniker (Association of German Electrical Engineers)

# g500-S shaft-mounted helical geared motors



## General information

### Product information

In combination with three-phase AC motors, our shaft-mounted helical gearboxes form a compact and powerful drive unit. Numerous options at the input and output end provide for the drive to be exactly adapted to your application.

The slim shaft-mounted helical gearboxes feature high reliable radial forces, closely stepped gear reductions and a low backlash. They are available in 2-stage and 3-stage design with a torque up to 4500 Nm and a ratio of up to  $i = 430$ .

### Three-phase AC motors as a basis for geared motors

In a power range of 0.12 to 30 kW, Lenze offers mains-operated three-phase AC motors for basic tasks. These drives come in different efficiency classes and can be used for the versions required for mains operation.

- IE1 motors up to a power of 0.55 kW
- IE3 motors from 0.75 kW to 30 kW

### Versions

- Slimline design saves installation space of the machine
- Solid shaft, hollow shaft and shrink disc for direct integration into the machine
- High accuracy with axial output provide for the highest efficiency

### Customer benefit

- Different efficiency classes for the greatest economic benefit
- Saving of space by compact direct mounting to Lenze gearboxes
- Optimum adaptation of the brake reaction by optional holding brakes and service brakes
- Optional overheat control by temperature monitoring

### The product name

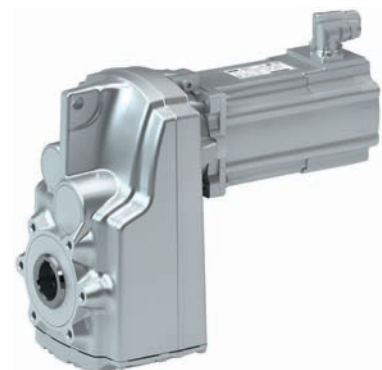
Gearbox type	Product range	Design	Rated torque [Nm]	Product	
Shaft-mounted helical gearbox	g500	-	S	130	g500-S130
				220	g500-S220
				400	g500-S400
				660	g500-S660
				950	g500-S950
				2100	g500-S2100
				3100	g500-S3100
				4500	g500-S4500



g500-S shaft-mounted helical gearbox with m240-P three-phase AC motor



g500-S shaft-mounted helical gearbox with m550-P three-phase AC motor and motec



g500-S shaft-mounted helical gearbox with MCS servo motor

# g500-S shaft-mounted helical geared motors

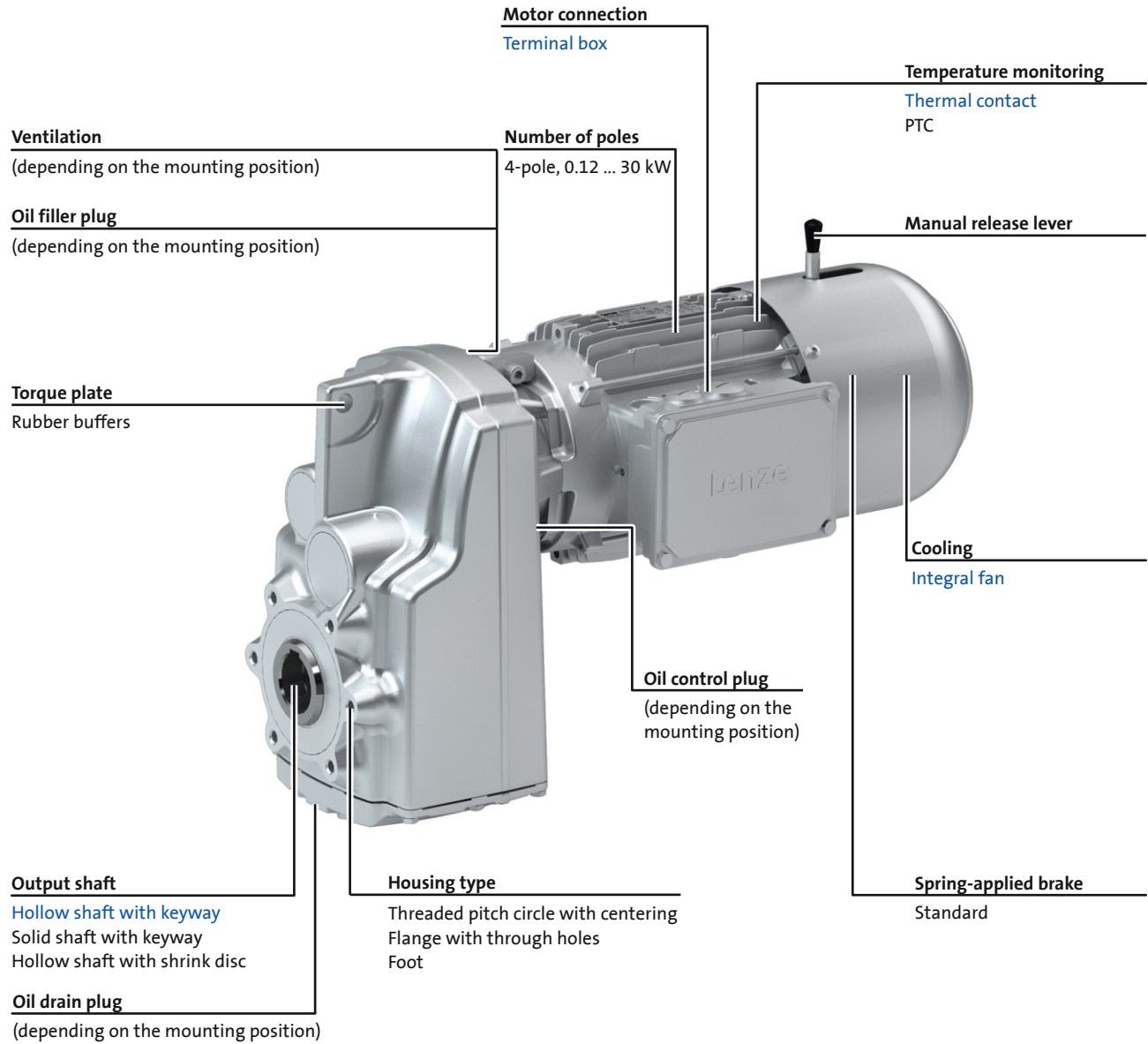
## General information



## Equipment



### Overview

The equipment includes all the options available as standard and all the built-on accessories of the product.



### Standard design

- ▶ The gearboxes g500-S950 ... S4500 comes with a housing that is always designed with foot.

  11 - Detailed information on housing type.

# g500-S shaft-mounted helical geared motors

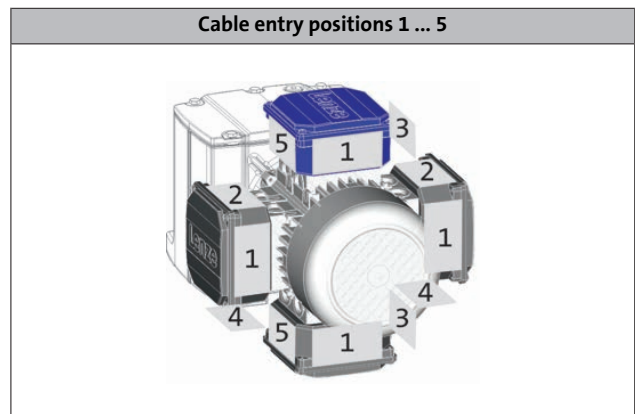
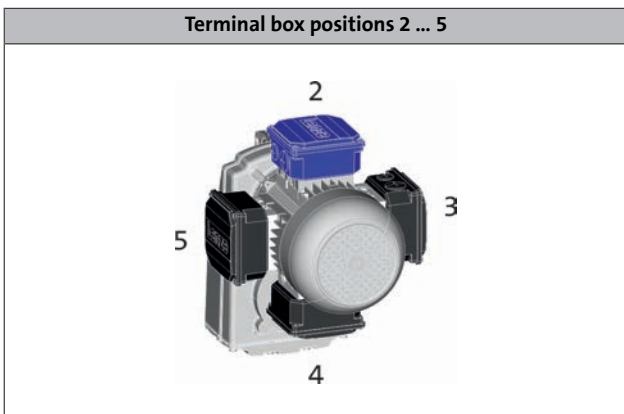
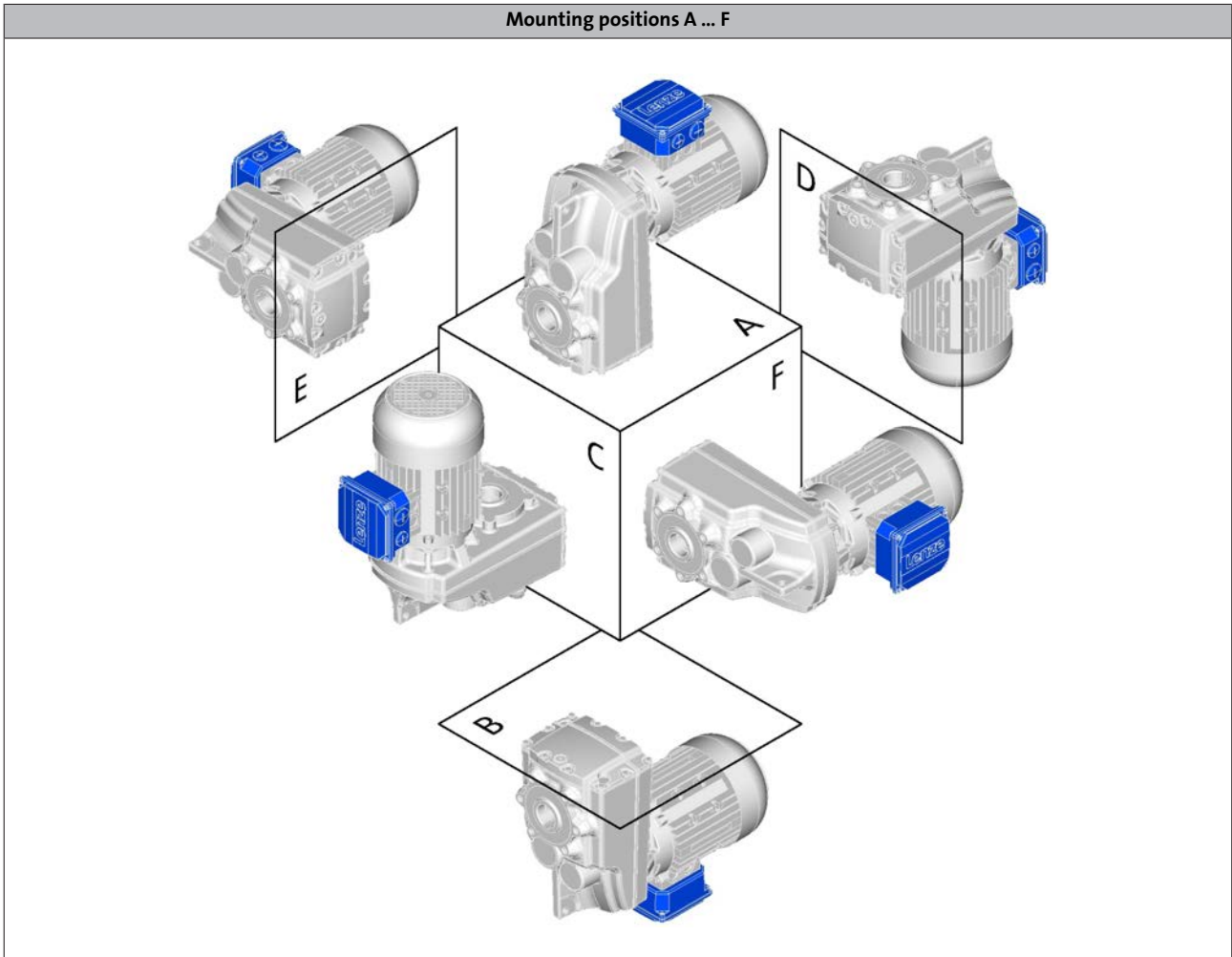
## General information



### Equipment

#### Mounting position, position of system components

- ▶ In the following graphics, the terminal box in position 2 is colour-coded. If the mounting position (A ... F) changes, the terminal box positions 2 ... 5 are rotated accordingly.
- ▶ To reduce the number of different versions, the gearboxes can also be ordered with combined mounting positions:  
- g500-S130 ... S660 in mounting position AEF



- ▶ For details regarding the cable entry see motor chapter/product extensions.

# g500-S shaft-mounted helical geared motors

General information



## Equipment

Mounting position, position of system components

### Shrink disc position 1 or 6



- ▶ Solid shaft and flange are only possible in position 6.

# g500-S shaft-mounted helical geared motors

## General information



### The geared motor kit

g500-S130 ... S660

Product	g500-S130	g500-S220	g500-S400	g500-S660
Gearbox				
Motor assignment min.	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063
Motor assignment max.	m240-P90	m240-P100	m240-P112	m240-P132
<b>Technical data</b>				
Output torque max.	130 Nm	220 Nm	400 Nm	660 Nm
Drive power min.	0.12 kW	0.12 kW	0.12 kW	0.12 kW
Drive power max.	1.5 kW	3.0 kW	4.0 kW	7.5 kW
<b>Dimensions [mm]</b>				
Solid shaft with featherkey	25 x 50	25 x 50	30 x 60	35 x 70 40 x 80
Hollow shaft with keyway	25	25/30	30/35	40/45
Hollow shaft with shrink disc	25	25/30	35	40
Output flange	160	160	200	200/250

- ▶ Values printed in bold are standard versions.  
Values not printed in bold are possible extensions, some for an additional charge.
- ▶ Values printed in bold are standard versions.  
Values not printed in bold are possible extensions, some for an additional charge.

Design	
Conformity	<b>CE</b> EAC
Approval	<b>Without</b>
Degree of protection	<b>IP55</b> IP65/IP66
Surface and corrosion protection	<b>Without</b> Different types of OKS
Colour	<b>Not coated</b> Primed/RAL colours
Hollow shaft	<b>With keyway (H□□)</b>
Hollow shaft with shrink disc	Without keyway (S□□)
Solid shaft	With featherkey (V□□)
Shaft material	<b>Steel</b> stainless steel
Shaft sealing ring material	<b>NBR</b> FKM (Viton)
Driven shaft bearing	<b>Normal</b>
Paste for shaft mounting	<b>Without</b> Enclosed
Gearbox type	<b>Without foot and centering (□DR)</b> With centering (□CR) With output flange (□CK) With foot (HBR/VBR)
Lubricant	<b>Mineral oil</b> Synthetic oil Food-compatible oil

Design	
Mounting position	<b>A/B/C/D/E/F</b> Combined
Power connection	<b>Terminal box</b>
Spring-applied brake	<b>Without</b> Brake design: Standard brake version: Standard
Feedback	<b>Without</b>
Cooling	<b>Integral fan</b>
Temperature monitoring	<b>TKO thermal contact</b> PTC thermistor



# g500-S shaft-mounted helical geared motors

General information



## The geared motor kit

g500-S130 ... S660

### Gearbox design: hollow shaft, without foot



Without centring (HDR)



With centering (HCR)



Flange with through holes (HCK)

### Gearbox design: hollow shaft, with foot



Without centring (HBR)

# g500-S shaft-mounted helical geared motors

General information



## The geared motor kit

g500-S130 ... S660

Gearbox design: hollow shaft with shrink disc, without foot



Without centring (SDR)



With centering (SCR)



Flange with through holes (SCK)

# g500-S shaft-mounted helical geared motors

General information



## The geared motor kit

g500-S130 ... S660

### Gearbox design: solid shaft, without foot



Without centring (VDR)

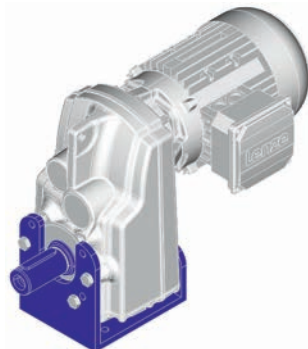


With centring (VCR)



Flange with through holes (VCK)

### Gearbox design: solid shaft, with foot



Without centring (VBR)

# g500-S shaft-mounted helical geared motors

## General information



### The geared motor kit

g500-S950 ... S4500

Product	g500-S950	g500-S2100	g500-S3100	g500-S4500
Gearbox				
Motor assignment min.	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063	MD□MA□□-071
Motor assignment max.	m240-P100	m240-P132	m240-P132	m240-P180
<b>Technical data</b>				
Output torque max.	950 Nm	2100 Nm	3100 Nm	4500 Nm
Drive power min.	0.12 kW	0.25 kW	0.25 kW	0.55 kW
Drive power max.	7.5 kW	30 kW	30 kW	30 kW
<b>Dimensions [mm]</b>				
Solid shaft with featherkey	40 x 80	50 x 100	60 x 120	70 x 140 80 x 160 <sup>1)</sup>
Hollow shaft with keyway	40	50/55	60/70	70/80
Hollow shaft with shrink disc	40	50	65	75/80
Output flange	250	250/300	350	400/450

<sup>1)</sup> Only steel shaft material is available.

- ▶ Values printed in bold are standard versions.  
Values not printed in bold are possible extensions, some for an additional charge.
- ▶ Values printed in bold are standard versions.  
Values not printed in bold are possible extensions, some for an additional charge.

Design	
Conformity	<b>CE</b> EAC
Approval	<b>Without</b>
Degree of protection	<b>IP55</b> IP65/IP66
Surface and corrosion protection	<b>OKS-S</b> Different types of OKS
Colour	<b>Painted in RAL colours</b> Primed
Hollow shaft	<b>With keyway (H□□)</b>
Hollow shaft with shrink disc	Without keyway (S□□)
Solid shaft	With featherkey (V□□)
Shaft material	<b>Steel</b> stainless steel
Shaft sealing ring material	<b>NBR</b> FKM (Viton)
Driven shaft bearing	<b>Normal</b>
Paste for shaft mounting	<b>Without</b> Enclosed
Gearbox type	<b>With foot (□BR)</b> With foot and centering (□AR) With foot and output flange (□AK)
Lubricant	<b>Mineral oil</b> Synthetic oil Food-compatible oil

Design	
Mounting position	<b>A/B/C/D/E/F</b>
Power connection	<b>Terminal box</b>
Spring-applied brake	<b>Without</b> Brake design: Standard brake version: Standard
Feedback	<b>Without</b>
Cooling	<b>Integral fan</b>
Temperature monitoring	<b>TKO thermal contact</b> PTC thermistor

# g500-S shaft-mounted helical geared motors

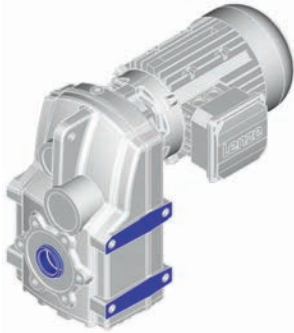
General information



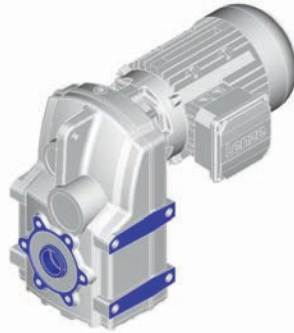
## The geared motor kit

g500-S950 ... S4500

### Gearbox design: hollow shaft, with foot



Without centring (HBR)

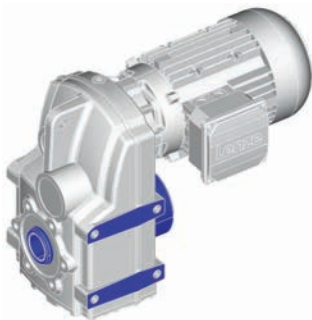


With centering (HAR)

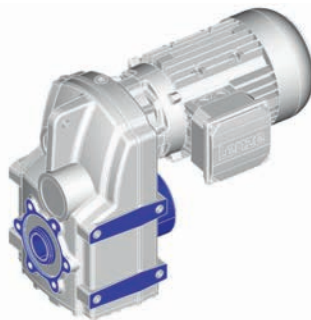


Flange with through holes (HAK)

### Gearbox design: hollow shaft with shrink disc, with foot



Without centring (SBR)



With centering (SAR)



Flange with through holes (SAK)

# g500-S shaft-mounted helical geared motors

General information



## The geared motor kit

g500-S950 ... S4500

Gearbox design: solid shaft, with foot



Without centring (VBR)



With centering (VAR)



Flange with through holes (VAK)



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

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

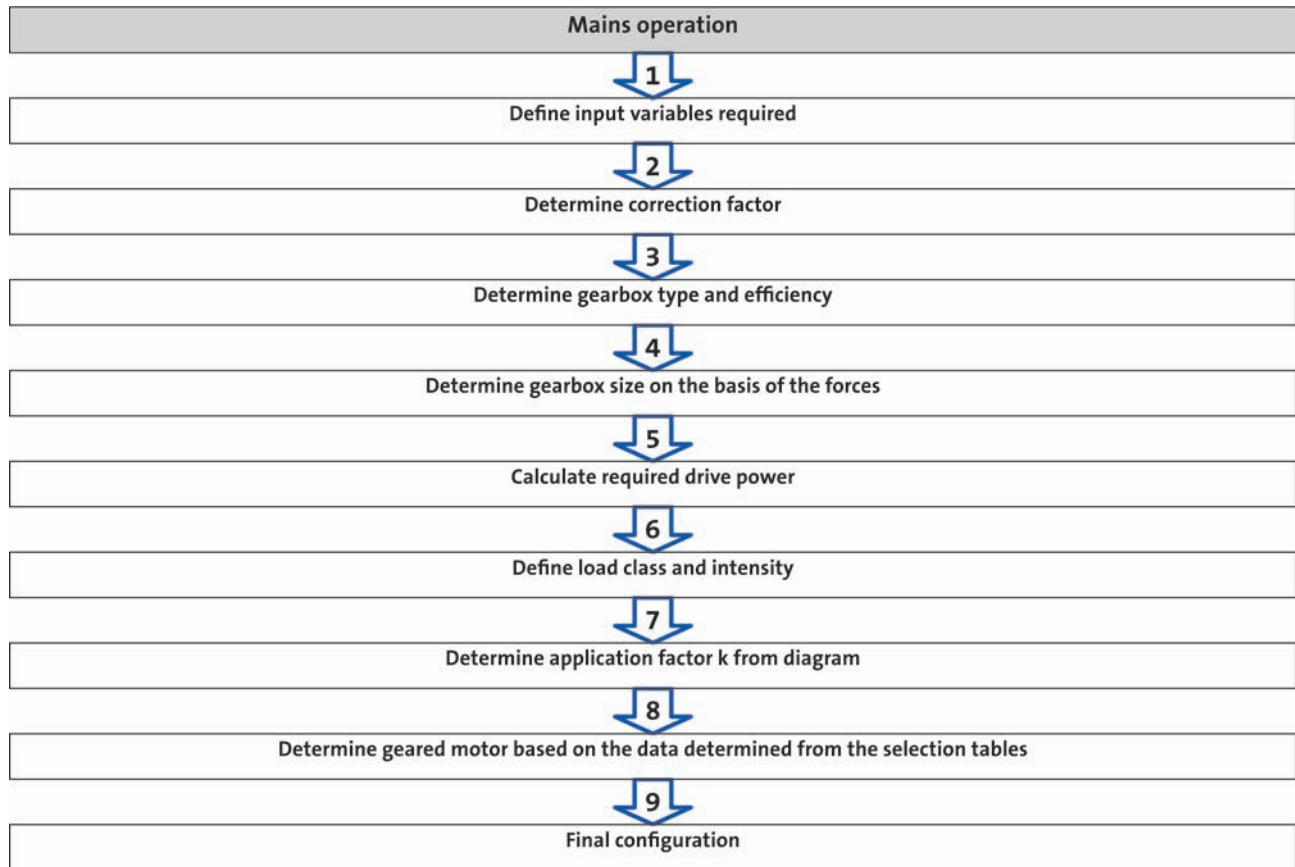
- Operating time/day = 8 h (100% OT)
- Duty class I for up to 10 switching operations/h
- Mounting positions and designs in this catalogue
- Standard lubricant
- $T_{amb} = 20\text{ °C}$  for gearboxes,  
 $T_{amb} = 40\text{ °C}$  for motors (in accordance with EN 60034)
- Site altitude  $\leq 1000\text{ m amsl}$
- The selection tables provide the permissible mechanical powers and torques. For notes on the thermal power limit, see chapter drive dimensioning.
- The rated power specified for motors and geared motors applies to operating mode S1 (in accordance with EN 60034).

Under different operating conditions, the values obtained may vary from those listed here.

In the case of extreme operating conditions, please consult your Lenze sales office.



## Procedure of a configuration process





# g500-S shaft-mounted helical geared motors

## Project planning



### Procedure of a configuration process

#### 1 required input variables

Load torque		$M_{L,max} =$	[Nm]
Load speed		$n_{L,max} =$	[r/min]
External moments of inertia		$J_{ext} =$	[kgcm <sup>2</sup> ]
Operating time / day		BD =	[h]
Switching operations per h		$S_h =$	[1/h]

#### 2 determine correction factor

Operating modes and operating time						
S1	ED	[%]	100			
	$k_L =$		1.0			
S2	ED	[%]	10	30	60	90
	$k_L =$		1.4 - 1.5	1.15 - 1.2	1.07 - 1.1	1.0 - 1.05
S3	ED	[%]	15	25	40	60
	$k_L =$		1.4 - 1.5	1.3 - 1.4	1.15 - 1.2	1.05 - 1.1
S6	ED	[%]	15	25	40	60
	$k_L =$		1.5 - 1.6	1.4 - 1.5	1.3 - 1.4	1.15 - 1.2
Site altitude						
	H	[m]	≤ 1000	≤ 2000	≤ 3000	≤ 4000
	$k_H =$		1	0.95	0.9	0.85
Ambient temperature						
	$T_U =$	[°C]	≤ 40	≤ 45	≤ 50	≤ 55
	$k_{TU} =$		1	0.95	0.9	0.8

# g500-S shaft-mounted helical geared motors

## Project planning



### Procedure of a configuration process

#### 3 determine gearbox type and efficiency

Gearbox type			Axial gearboxes		Right-angle gearboxes
			Helical gearbox	Shaft-mounted	Bevel gearbox
Product			g500-H	g500-S	g500-B
Gearbox efficiency	2-stage gearboxes	$\eta_G$	0.96	0.96	0.96
	3-stage gearboxes	$\eta_G$	0.95	0.95	0.95

#### 4 determine gearbox size based on the forces on the output

Transmission element		Gear wheels	Sprockets	Toothed belt pulleys (depending on the initial stress)	Narrow V-belt (depending on the initial stress)
Additional radial force factor	$f_z =$	$\geq 17$ teeth = 1.0 $< 17$ teeth = 1.15	$\geq 20$ teeth = 1.0 $< 20$ teeth = 1.25 $< 13$ teeth = 1.4	With belt tightener = 2.0 - 2.5 Without belt tightener = 2.5 - 3.0	1.5 - 2.0
		Calculation		Check	
Radial force	[N]	$F_{rad} = 2000 \times \frac{M_{L,max} \times f_z}{d_w}$		$F_{rad} \leq f_w \times F_{rad,max}$	
Axial force	[N]			$F_{ax} \leq F_{rad,max} \times 0.5$	

$d_w$  = effective diameter [mm] transmission element  
 $f_w$  = additional load factor

- For permissible radial and axial forces and additional load factor see the "Technical data" chapter

#### 5 calculate drive power

		Calculation	
Drive power required	[kW]	$P_1 = \frac{M_{L,max} \times \eta_{L,max}}{9549 \times k_L \times k_H \times k_{Tu} \times \eta_g}$	

$k_L$  = Correction factor - operating mode  
 $k_H$  = correction factor - installation height  
 $k_{Tu}$  = correction factor - ambient temperature

# g500-S shaft-mounted helical geared motors



Project planning



## Procedure of a configuration process

### 6 calculate intensity and determine duty class

Load class	Load type	Intensity
I	Smooth operation, small or light jolts	$F_I \leq 1.25$
II	Uneven operation, average jolts	$1.25 < F_I \leq 4$
III	Uneven operation, severe jolts and/or alternating load	$F_I > 4$

  25 - Duty classes

	Calculation	
Intensity	$F_I = \frac{\frac{J_L + J_M + J_B + J_Z}{i^2}}{J_M + J_B + J_Z}$	

$i$  = gearbox ratio



$J_L$  = moment of inertia of the load

$J_M$  = moment of inertia of the motor

$J_B$  = moment of inertia of the brake

$J_Z$  = additional moment of inertia (handwheel, 2nd shaft end ...)

### 7 determine application factor $k$ from diagram

  27 - Load capacity and application factor



### Procedure of a configuration process

8 determine geared motor based on the data determined from the selection tables

Selection table		Check
Drive power $P_N$	[kW]	$P_1 \leq P_N$
Output speed $n_2$	[r/min]	$n_{L,max} \approx n_2$
Output torque $M_2$	[Nm]	$M_{L,max} \leq M_2$
Load factor $c$		$k \leq c$
Order information		Example
Number of stages		2
Ratio $i$		3.267
Product gearbox		g500-H140
Product motor		m240-P80/M4

27 - Load capacity and application factor

#### Example: structure of a selection table

50 Hz:  $P_N = 0.75$  kW ← Rated power  $P_N$

2-stage gearboxes ← Number of the gear stage

Mains operation 400 V, 50 Hz			$i$	Product		
$n_2$ [r/min]	$M_2$ [Nm]	$c$		g500	m240	
627	11	5.2	4.600	-H100	-P80/M2	
558	12	4.9	5.167	-H100	-P80/M2	

↑  
Output speed  $n_2$

↑  
Output torque  $M_2$

↑  
Load capacity  $c$

↑  
Ratio  $i$

↑  
Product  
Gearbox

↑  
Product  
Motor

# g500-S shaft-mounted helical geared motors

Project planning



## Procedure of a configuration process

### 9 Final configuration

More information regarding the final configuration can be found under:	
- The modular geared motor system - Product extensions for gearboxes, motors	
Check operating conditions	- Operating temperature (observe lubricant, material of shaft sealing ring) - Degree of protection - Supply voltage - Surface protection required - Approvals - Conformity
Check and define connection dimensions	- Driven shaft - Foot, output flange, centering with threaded pitch circle
Determine mounting position and position of the system blocks	- Mounting position A/B/C/D/E/F or combined - Terminal box position, shaft position, flange position
Select product extensions at the gearbox (differing depending on the gearbox type)	- Torque plate at the base, threaded pitch circle, rubber buffer - Hollow shaft cover, shrink disc cover
Select product extensions at the motor	- Connection type (terminal box, connector) - Brake



### Standards

#### Operating modes

Operating modes S1 ... S10 as specified by EN 60034-1 describe the basic stress of an electrical machine.

In continuous operation a motor reaches its permissible temperature limit if it outputs the rated power dimensioned for continuous operation. However, if the motor is only subjected to load for a short time, the power output by the motor may be greater without the motor reaching its permissible temperature limit. This behaviour is referred to as overload capacity.

Depending on the duration of the load and the resulting temperature rise, the required motor can be selected reduced by the overload capacity.

#### The most important operating modes

Continuous operation S1	Short-time operation S2
<p>Operation with a constant load until the motor reaches the thermal steady state. The motor may be actuated continuously with its rated power.</p>	<p>Operation with constant load; however, the motor does not reach the thermal steady state. During the following standstill, the motor winding cools down to the ambient temperature again. The increase in power depends on the load duration.</p>
Intermittent operation S3	Non-intermittent periodic operation S6
<p>Sequence of identical duty cycles comprising operation with a constant load and subsequent standstill. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/downtime ratio.</p>	<p>Sequence of identical duty cycles comprising operation with a constant load and subsequent no-load operation. The motor cools down during the no-load phase. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/idle time ratio.</p>

# g500-S shaft-mounted helical geared motors

## Project planning



### Standards

#### Duty classes

Depending on the load type, the duty classes or impacts are divided as follows:

Duty class	Load type
I	Smooth operation, small or light jolts
II	Uneven operation, average jolts
III	Uneven operation, severe jolts and/or alternating load

In order to support you in classifying your driven machine regarding the right duty class, the following shows sample applications with the corresponding duty class. Depending on, for instance, the operating frequency, driven machines can also have a higher impact. In case of uncertainties, please contact your Lenze sales office.

Drive	Duty class
Construction machines	II
Chemical industry	II
Conveyors	II
Fans	II
Plastics industry	II
Wood working	III
Hoists	III
Metal working	III
Food	II
Paper industry	III
Stones	III
Textile industry	II

# g500-S shaft-mounted helical geared motors

## Project planning



### Standards

#### Degrees of protection

The degree of protection indicates the suitability of a motor for specific ambient conditions with regard to humidity as well as the protection against contact and the ingress of foreign particles. The degrees of protection are classified by EN 60529.

The first code number after the code letters IP indicates the protection against the ingress of foreign particles and dust.

The second code number refers to the protection against the ingress of humidity.

Code number	Degree of protection	Code number	Degree of protection
0	No protection	0	No protection
1	Protection against the ingress of foreign particles $d > 50$ mm. No protection in the case of deliberate access	1	Protection against vertically dripping water (dripping water).
2	Protection against medium-sized foreign particles, $d > 12$ mm, keeping away fingers or similar	2	Protection against diagonally falling water (dripping water), $15^\circ$ compared to normal service position.
3	Protection against small foreign particles $d > 2.5$ mm. Keeping away tools, wires and the like	3	Protection against spraying water, up to $60^\circ$ to the vertical
4	Protection against granular foreign particles, $d > 1$ mm, keeping away tools, wires and the like	4	Protection against spraying water from all directions.
5	Protection against dust deposits (dust-protected), complete protection against contact.	5	Protection against water jets from all directions.
6	Protection against the ingress of dust (dust-proof), complete protection against contact.	6	Protection against choppy seas or heavy water jets (flood protection).



# g500-S shaft-mounted helical geared motors

## Project planning



### Load capacity and application factor

#### Load capacity $c$ of gearboxes

Rated value for the load capacity of Lenze geared motors.

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

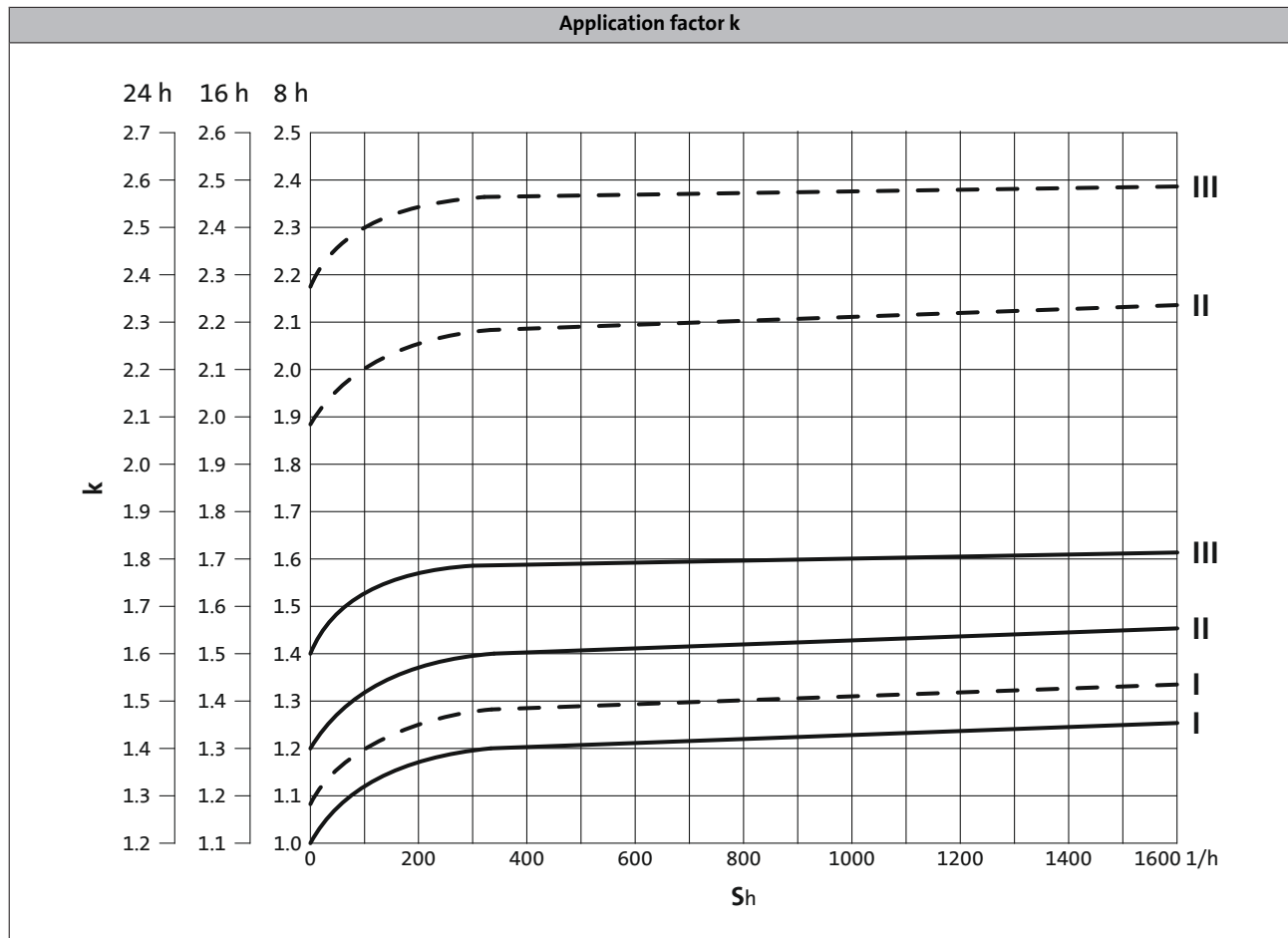
Required:  $c \geq k$

#### Application factor $k$ (according to DIN 3990)

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

$k$  is determined by:

- the type of load
- the load intensity
- temporal influences



- ▶  $S_h$  = switchings/h
- ▶ — Three-phase AC motors MD□MA
- ▶ - - - Three-phase AC motors m240/m540/m550

# g500-S shaft-mounted helical geared motors

## Project planning

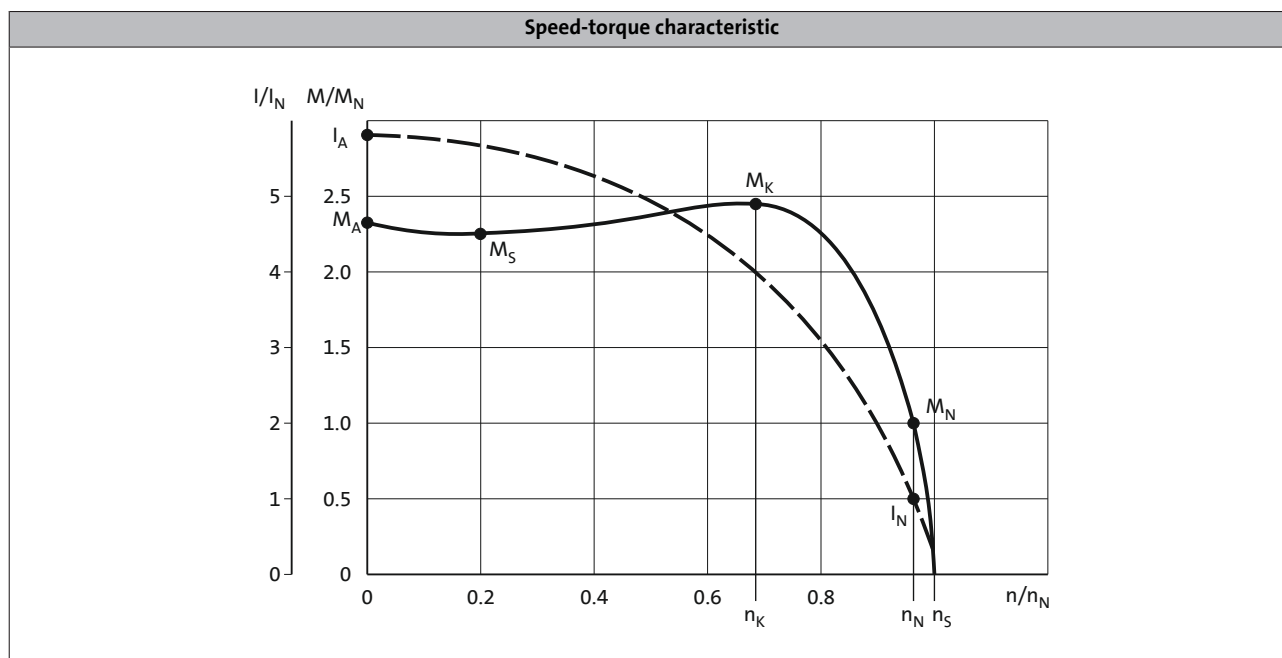


### Operational performance of three-phase AC geared motors

The g500 geared motors can be actuated directly on the mains or via an inverter. When actuated in mains operation, the motor runs at a fixed speed, for inverter operation the speed is variable. Thanks to their high degree of protection, the robust three-phase drives can be basically used in a variety of applications.

#### Mains operation

During mains operation, when switched on, the three-phase AC motor starts up according to the speed-torque characteristic. It passes through this characteristic until it reaches its stable operating point. This operating point has been reached if the load torque or rated torque ( $M_{\text{rated}}$ ) is lower than the starting torque ( $M_A$ ) and pull-up torque ( $M_S$ ). The rated speed ( $n_{\text{rated}}$ ) of the drive is always lower than the calculated synchronous speed ( $n_S$ ). The difference between rated speed and synchronous speed relating to the synchronous speed is referred to as the "slip".



# g500-S shaft-mounted helical geared motors



## Project planning

### Technical data at a glance

The following tables contain the most important data of the gearbox with the motors that can be attached for an approximate dimensioning process of a geared motor. Detailed information can be found in the following chapters.

The data given in the tables apply to

- input speed  $n_1 = 1400$  r/min
- application factor  $c = 1.0$

In order to calculate the exact ratio, the number of teeth  $z_g$  (driven) can be divided by the number of teeth  $z_t$  (driving). These are rounded values.

The data for the max. radial force refer to

- solid shaft without flange
- normal storage
- application factor  $c = 1.3$

For further designs see the "Technical data" chapter.

- The rated torque can be gathered from the last digits of the product name e.g. g500-S130 (130 Nm).

### g500-S130, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$		$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	$\pm 20\%$	[kW]	[kW]
394	63	2.68	3.661	174	637	1350	20	0.25	1.50
287	76	2.36	5.021	145	728	1420	19	0.25	1.50
205	92	2.04	7.029	725	5096	1530	18	0.18	1.50
173	116	2.17	8.322	90	749	1600	13	0.25	1.50
153	125	2.07	9.411	90	847	1660	13	0.25	1.50
224	87	2.11	6.425	87	559	1500	18	0.25	1.50
126	130	1.77	11.413	75	856	1990	13	0.25	1.50
112	130	1.57	12.907	75	968	2100	12	0.25	1.50
99.0	130	1.38	14.606	315	4601	2220	13	0.25	1.50
90.0	130	1.27	15.979	375	5992	2320	13	0.18	1.50
80.0	130	1.12	18.069	375	6776	2460	12	0.18	1.10
71.0	130	0.99	20.381	21	428	2610	13	0.18	1.10
63.0	130	0.88	23.048	21	484	2780	12	0.18	0.75
58.0	130	0.82	24.967	30	749	2890	13	0.25	0.75
51.0	130	0.72	28.233	30	847	3070	12	0.25	0.75
46.0	130	0.65	31.387	75	2354	3240	13	0.12	0.75
40.0	130	0.56	35.493	75	2662	3440	12	0.12	0.55
35.0	130	0.49	40.422	45	1819	3660	13	0.12	0.55
31.0	130	0.43	45.711	45	2057	3860	12	0.12	0.37
28.0	130	0.39	51.230	165	8453	4040	12	0.12	0.37
24.0	130	0.34	57.933	15	869	4230	12	0.12	0.37
22.0	130	0.31	64.200	5	321	4360	12	0.12	0.37
19.0	130	0.27	72.600	5	363	4500	12	0.12	0.25
16.0	102	0.18	84.581	105	8881	4500	12	0.12	0.18
14.0	115	0.18	95.648	105	10043	4500	12	0.12	0.18

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

### g500-S220, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
377	178	7.25	3.840	144	553	2360	16	0.55	3.00
275	181	5.37	5.267	15	79	2650	16	1.10	3.00
214	220	5.08	6.767	30	203	2900	13	0.55	3.00
189	217	4.43	7.667	3	23	3050	12	0.55	3.00
156	220	3.71	9.280	25	232	3250	13	1.10	3.00
138	220	3.27	10.514	35	368	3400	12	1.10	3.00
122	220	2.90	11.876	105	1247	3500	13	0.55	3.00
112	220	2.65	12.992	125	1624	3550	13	0.25	3.00
108	220	2.56	13.456	147	1978	3600	12	0.55	3.00
99.0	220	2.34	14.720	25	368	3600	12	0.25	2.20
88.0	220	2.08	16.571	7	116	3600	12	0.25	2.20
77.0	220	1.84	18.776	49	920	3600	12	0.25	2.20
71.0	220	1.69	20.300	10	203	3600	12	0.55	1.50
63.0	220	1.49	23.000	1	23	3600	12	0.55	1.50
55.0	220	1.30	26.422	45	1189	3600	12	0.25	1.50
48.0	220	1.14	29.937	63	1886	3600	12	0.25	1.10
44.0	220	1.04	32.867	15	493	3600	12	0.25	1.10
39.0	220	0.92	37.238	21	782	3600	12	0.25	1.10
34.0	220	0.81	42.533	15	638	3600	12	0.12	0.75
30.0	220	0.71	48.190	21	1012	3600	12	0.12	0.75
27.0	220	0.65	51.620	50	2581	3600	12	0.12	0.55
24.0	220	0.57	58.486	35	2047	3600	11	0.12	0.55
21.0	171	0.39	65.975	40	2639	3600	12	0.12	0.37
19.0	194	0.40	74.750	4	299	3600	11	0.12	0.37

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

### g500-S220, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
35.0	220	0.85	40.012	345	13804	3600	13	0.18	0.37
31.0	220	0.75	45.333	3	136	3600	12	0.18	0.37
28.0	220	0.67	52.587	75	3944	3600	13	0.12	0.75
24.0	220	0.57	59.581	105	6256	3600	12	0.12	0.55
21.0	220	0.50	67.298	315	21199	3600	13	0.12	0.55
18.0	220	0.44	76.249	441	33626	3600	12	0.12	0.55
16.0	220	0.40	86.079	63	5423	3600	13	0.12	0.37
14.0	220	0.35	97.528	441	43010	3600	12	0.12	0.37
13.0	220	0.30	111.747	75	8381	3600	13	0.12	0.37
11.0	220	0.26	126.610	105	13294	3600	12	0.12	0.25
10.0	220	0.23	143.205	210	30073	3600	13	0.12	0.25
8.00	220	0.20	162.252	147	23851	3600	12	0.12	0.25
6.00	220	0.14	241.022	45	10846	3600	13	0.12	0.12
5.00	220	0.13	273.079	63	17204	3600	12	0.12	0.12
5.00	220	0.11	312.233	30	9367	3600	13	0.12	0.12
4.00	220	0.10	353.762	21	7429	3600	12	0.12	0.12

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

### g500-S400, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
435	203	9.54	3.339	174	581	2360	16	0.55	4.00
317	243	8.33	4.579	145	664	2560	16	1.10	4.00
248	258	6.89	5.860	609	3569	2750	13	0.55	4.00
227	261	6.39	6.411	725	4648	2820	12	0.25	4.00
195	365	7.66	7.467	15	112	2980	13	0.55	4.00
172	380	7.06	8.436	39	329	3150	12	0.55	4.00
142	400	6.13	10.240	25	256	3450	13	1.10	4.00
126	400	5.42	11.569	65	752	3650	13	1.10	4.00
111	400	4.79	13.105	105	1376	3900	12	0.55	4.00
101	400	4.38	14.336	125	1792	4000	12	0.25	4.00
98.0	400	4.24	14.806	273	4042	4100	12	0.55	4.00
90.0	400	3.87	16.197	325	5264	4200	12	0.25	4.00
80.0	400	3.43	18.286	7	128	4400	12	0.25	4.00
70.0	400	3.03	20.659	91	1880	4650	12	0.25	3.00
65.0	400	2.79	22.400	5	112	4800	12	0.55	3.00
57.0	400	2.47	25.308	13	329	5100	12	0.55	3.00
50.0	400	2.14	29.156	45	1312	5500	12	0.25	1.50
44.0	400	1.89	32.940	117	3854	5750	12	0.25	1.50
40.0	400	1.72	36.267	15	544	5850	12	0.25	1.50
35.0	400	1.52	40.974	39	1598	5980	12	0.25	1.50
31.0	314	1.05	46.933	15	704	6100	12	0.12	0.75
27.0	348	1.03	53.026	39	2068	6200	11	0.12	0.75
25.0	268	0.71	56.960	25	1424	6200	12	0.12	0.55
22.0	303	0.71	64.354	65	4183	6200	11	0.12	0.55

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

### g500-S400, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$			Standard	Motor
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$		$P_{N, \min}$	$P_{N, \max}$
							$\pm 20\%$		
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
25.0	400	1.09	58.027	75	4352	6200	11	0.18	0.75
22.0	400	0.97	65.559	195	12784	6200	11	0.18	0.75
20.0	400	0.85	74.260	315	23392	6200	11	0.18	0.75
17.0	400	0.76	83.900	819	68714	6200	11	0.18	0.75
15.0	400	0.67	94.984	63	5984	6200	11	0.12	0.75
13.0	399	0.57	107.314	819	87890	6200	11	0.12	0.55
11.0	400	0.50	123.307	75	9248	6200	11	0.12	0.55
10.0	399	0.44	139.313	195	27166	6200	11	0.12	0.55
9.00	400	0.39	158.019	105	16592	6200	11	0.12	0.37
8.00	400	0.35	178.531	273	48739	6200	11	0.12	0.37
7.00	400	0.30	204.412	165	33728	6200	11	0.12	0.37
6.00	396	0.26	230.946	429	99076	6200	11	0.12	0.25
5.00	388	0.22	265.956	45	11968	6200	11	0.12	0.25
4.00	400	0.20	300.479	117	35156	6200	11	0.12	0.18
4.00	330	0.15	344.533	15	5168	6200	11	0.12	0.12
4.00	373	0.15	389.256	39	15181	6200	11	0.12	0.12

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

### g500-S660, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
377	419	17.0	3.920	25	98	3320	14	2.20	7.50
275	492	14.6	5.376	125	672	3580	13	2.20	7.50
230	601	14.9	6.417	12	77	3660	11	2.20	7.50
215	496	11.5	6.880	25	172	3690	13	1.10	7.50
202	593	12.9	7.311	45	329	3720	11	2.20	7.50
168	638	11.6	8.800	5	44	3900	11	2.20	7.50
147	625	9.94	10.027	75	752	4200	10	2.20	7.50
131	660	9.35	11.262	42	473	4500	11	1.10	7.50
120	660	8.54	12.320	25	308	4750	10	1.10	7.50
115	660	8.20	12.832	315	4042	4850	10	1.10	7.50
105	660	7.49	14.037	375	5264	5100	10	1.10	7.50
94.0	660	6.70	15.714	7	110	5450	10	0.55	7.50
82.0	660	5.81	17.905	21	376	5800	10	0.55	5.50
76.0	660	5.40	19.250	4	77	6000	10	1.10	5.50
67.0	660	4.74	21.933	15	329	6450	10	1.10	5.50
58.0	578	3.62	25.056	18	451	7050	10	0.55	4.00
51.0	660	3.63	28.548	135	3854	7700	10	0.55	4.00
46.0	660	3.31	31.167	6	187	8100	10	0.55	3.00
41.0	660	2.91	35.511	45	1598	8500	10	0.55	3.00
36.0	545	2.11	40.333	3	121	8750	10	0.25	1.50
31.0	620	2.10	45.956	45	2068	8850	10	0.25	1.50
30.0	446	1.42	48.950	20	979	8900	10	0.25	1.10
26.0	508	1.42	55.773	75	4183	9000	10	0.25	1.10



# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S660, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
29.0	625	1.98	49.867	15	748	9000	11	0.25	1.50
25.0	650	1.81	56.818	225	12784	9000	10	0.25	1.50
23.0	660	1.63	63.817	126	8041	9000	11	0.25	1.50
21.0	660	1.50	69.813	75	5236	9000	11	0.18	1.50
20.0	660	1.43	72.713	945	68714	9000	10	0.25	1.50
18.0	660	1.31	79.545	1125	89488	9000	10	0.18	1.50
16.0	660	1.17	89.048	21	1870	9000	11	0.18	1.10
14.0	660	1.03	101.460	63	6392	9000	10	0.18	1.10
13.0	660	0.95	109.083	12	1309	9000	11	0.25	1.10
12.0	660	0.85	124.289	45	5593	9000	10	0.25	0.75
11.0	660	0.77	137.133	15	2057	9000	11	0.12	0.75
9.00	660	0.67	156.249	225	35156	9000	10	0.12	0.75
8.00	660	0.58	176.611	18	3179	9000	11	0.12	0.55
7.00	660	0.51	201.230	135	27166	9000	10	0.12	0.55
6.00	660	0.46	223.833	6	1343	9000	11	0.12	0.37
6.00	660	0.40	255.034	495	126242	9000	10	0.12	0.37
5.00	603	0.33	280.500	2	561	9000	11	0.12	0.37
4.00	660	0.32	319.600	5	1598	9000	10	0.12	0.37
4.00	447	0.18	369.548	42	15521	9000	11	0.12	0.18
3.00	511	0.18	421.060	315	132634	9000	10	0.12	0.18

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S950, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
337	621	22.6	4.380	92	403	8430	16	4.00	7.50
274	691	20.4	5.391	23	124	9100	15	2.20	7.50
245	732	19.3	6.038	575	3472	9490	15	2.20	7.50
192	783	16.2	7.702	161	1240	10300	14	1.10	7.50
162	950	16.6	9.100	10	91	10300	10	4.00	7.50
145	950	14.9	10.183	60	611	10300	10	4.00	7.50
132	950	13.5	11.200	5	56	10300	10	2.20	7.50
118	950	12.1	12.544	125	1568	10300	10	2.20	7.50
105	950	10.8	14.037	375	5264	10300	10	2.20	7.50
92.0	950	9.46	16.000	1	16	10300	10	1.10	7.50
82.0	950	8.46	17.905	21	376	10300	10	1.10	7.50
75.0	950	7.73	19.600	5	98	10300	10	2.20	7.50
67.0	950	6.90	21.933	15	329	10300	9	2.20	7.50
57.0	950	5.87	25.511	45	1148	10300	10	1.10	5.50
51.0	950	5.24	28.548	135	3854	10300	9	1.10	5.50
46.0	950	4.77	31.267	15	469	10300	9	1.10	4.00
42.0	950	4.26	34.989	90	3149	10300	9	1.10	4.00
35.0	950	3.62	41.067	15	616	10300	9	0.55	3.00
32.0	950	3.23	45.956	45	2068	10300	9	0.55	3.00
29.0	924	2.90	49.840	25	1246	10300	9	0.55	2.20
26.0	950	2.67	55.773	75	4183	10300	9	0.55	2.20
23.0	668	1.65	63.000	1	63	10300	9	0.55	1.10
20.0	736	1.63	70.500	2	141	10300	9	0.55	1.10

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S950, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$			Standard	Motor
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$		$P_{N, \min}$	$P_{N, \max}$
							$\pm 20\%$		
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
29.0	950	3.02	50.027	75	3752	10300	10	1.10	3.00
26.0	950	2.70	55.982	225	12596	10300	10	1.10	3.00
23.0	950	2.36	64.022	45	2881	10300	10	0.55	2.20
21.0	950	2.15	70.037	375	26264	10300	10	0.25	2.20
20.0	950	2.11	71.644	1890	135407	10300	10	0.55	2.20
18.0	950	1.93	78.375	1125	88172	10300	10	0.25	2.20
16.0	950	1.68	89.333	3	268	10300	10	0.25	1.50
14.0	950	1.50	99.968	63	6298	10300	10	0.25	1.50
13.0	950	1.37	109.433	30	3283	10300	10	0.55	1.50
12.0	950	1.23	122.461	180	22043	10300	10	0.55	1.50
10.0	950	1.05	142.437	135	19229	10300	10	0.25	1.10
9.00	950	0.95	159.394	810	129109	10300	10	0.25	1.10
8.00	950	0.85	177.178	45	7973	10300	10	0.25	0.75
7.00	950	0.76	198.270	270	53533	10300	10	0.25	0.75
6.00	950	0.66	229.289	45	10318	10300	10	0.12	0.75
6.00	950	0.57	256.585	135	34639	10300	10	0.12	0.55
5.00	950	0.52	278.273	150	41741	10300	10	0.12	0.55
4.00	950	0.47	311.401	900	280261	10300	10	0.12	0.55
4.00	950	0.42	355.658	120	42679	10300	10	0.12	0.37
4.00	950	0.36	397.999	720	286559	10300	10	0.12	0.37

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S2100, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
322	1331	46.2	4.593	150	689	10430	12	7.50	30.00
245	1487	39.3	6.029	378	2279	11540	12	4.00	30.00
215	1487	34.5	6.870	54	371	12110	11	4.00	30.00
179	1487	28.7	8.272	378	3127	12980	11	2.20	22.00
156	1866	31.5	9.452	425	4017	13630	8	5.50	30.00
141	1872	28.4	10.504	125	1313	14180	8	5.50	30.00
119	2030	26.1	12.406	357	4429	15080	8	4.00	30.00
107	2047	23.7	13.787	315	4343	15680	8	4.00	22.00
105	2050	23.2	14.137	51	721	15700	8	4.00	22.00
94.0	2050	20.8	15.711	45	707	15700	8	4.00	22.00
87.0	2050	19.2	17.022	357	6077	15700	7	2.20	22.00
78.0	2050	17.4	18.917	315	5959	15700	7	2.20	18.50
71.0	2050	15.7	20.869	153	3193	15700	7	4.00	18.50
63.0	2050	14.0	23.193	135	3131	15700	7	4.00	15.00
52.0	2050	11.6	28.275	51	1442	15700	8	2.20	7.50
47.0	2050	10.4	31.422	45	1414	15700	8	2.20	7.50
43.0	2050	9.51	34.333	3	103	15700	8	2.20	7.50
39.0	2050	8.56	38.156	45	1717	15700	8	2.20	7.50
33.0	1983	7.00	44.431	51	2266	15700	8	1.10	4.00
29.0	2050	6.51	49.378	45	2222	15700	7	1.10	4.00
27.0	1957	5.68	53.924	170	9167	15700	7	1.10	4.00
24.0	2050	5.35	59.927	150	8989	15700	7	1.10	4.00
21.0	1454	3.34	68.162	68	4635	15700	7	1.10	2.20
19.0	1576	3.27	75.750	4	303	15700	7	1.10	2.20

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S2100, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
37.0	1945	7.86	40.056	18	721	15700	8	2.20	7.50
33.0	2050	7.46	44.515	270	12019	15700	8	2.20	7.50
27.0	2050	6.04	54.933	15	824	15700	8	2.20	7.50
24.0	2050	5.37	61.049	225	13736	15700	8	2.20	5.50
21.0	2050	4.67	70.302	63	4429	15700	8	1.10	5.50
19.0	2050	4.25	76.907	75	5768	15700	8	1.10	4.00
19.0	2050	4.18	78.128	945	73831	15700	8	1.10	4.00
17.0	2050	3.82	85.468	1125	96152	15700	8	1.10	4.00
15.0	2050	3.32	98.095	21	2060	15700	8	0.55	4.00
13.0	2050	2.99	109.016	63	6868	15700	8	0.55	3.00
12.0	2050	2.72	120.167	6	721	15700	8	1.10	3.00
11.0	2050	2.45	133.544	90	12019	15700	8	1.10	3.00
9.00	2050	2.09	156.407	27	4223	15700	8	0.55	2.20
8.00	2050	1.89	173.820	405	70397	15700	8	0.55	2.20
7.00	2050	1.66	194.556	9	1751	15700	8	0.55	1.50
7.00	2050	1.51	216.215	135	29189	15700	8	0.55	1.50
6.00	2050	1.28	251.778	9	2266	15700	8	0.25	1.50
5.00	2050	1.17	279.807	135	37774	15700	8	0.25	1.10
5.00	2050	1.06	305.567	30	9167	15700	8	0.25	1.10
4.00	2050	0.97	339.584	450	152813	15700	8	0.25	1.10
4.00	1878	0.74	386.250	4	1545	15700	8	0.25	0.55
3.00	2050	0.74	429.250	4	1717	15700	8	0.25	0.55

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S3100, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
298	1842	59.4	4.951	575	2847	14000	10	7.50	30.00
227	2110	51.8	6.499	483	3139	15000	10	4.00	30.00
200	2235	48.2	7.406	69	511	16000	10	4.00	30.00
166	2264	40.6	8.917	483	4307	16500	10	2.20	22.00
135	2275	33.2	10.932	207	2263	16800	10	4.00	22.00
133	3022	43.3	11.128	125	1391	17000	7	7.50	30.00
118	2965	37.6	12.584	125	1573	17500	7	7.50	30.00
101	3100	33.9	14.606	315	4601	18000	6	4.00	30.00
90.0	3100	29.9	16.517	315	5203	18200	6	4.00	30.00
89.0	3100	29.7	16.644	45	749	18600	6	4.00	30.00
78.0	3100	26.3	18.822	45	847	19000	6	4.00	30.00
74.0	3100	24.7	20.041	315	6313	19400	6	2.20	22.00
65.0	3100	21.9	22.663	315	7139	19800	6	2.20	22.00
60.0	3100	20.1	24.570	135	3317	19800	6	4.00	22.00
53.0	3100	17.8	27.785	135	3751	19800	6	4.00	22.00
44.0	3100	14.9	33.289	45	1498	19800	6	2.20	7.50
39.0	3100	13.1	37.644	45	1694	19800	6	2.20	7.50
36.0	3100	12.2	40.422	45	1819	19800	6	2.20	7.50
32.0	3100	10.8	45.711	45	2057	19800	6	2.20	7.50
28.0	2335	7.01	52.311	45	2354	19800	6	1.10	4.00
25.0	2641	7.01	59.156	45	2662	19800	6	1.10	4.00
23.0	2250	5.56	63.487	150	9523	19800	6	1.10	4.00
20.0	2408	5.25	71.793	150	10769	19800	6	1.10	4.00

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S3100, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
31.0	2958	10.2	47.159	270	12733	19800	7	2.20	7.50
28.0	3054	9.27	53.330	270	14399	19800	7	2.20	7.50
23.0	3100	7.74	64.676	225	14552	19800	7	2.20	7.50
20.0	3100	6.86	73.138	225	16456	19800	7	2.20	7.50
18.0	3100	6.05	82.769	945	78217	19800	7	1.10	7.50
16.0	3100	5.47	90.546	1125	101864	19800	7	1.10	5.50
16.0	3100	5.30	93.599	945	88451	19800	7	1.10	5.50
14.0	3100	4.86	102.393	1125	115192	19800	6	1.10	5.50
13.0	3100	4.28	115.492	63	7276	19800	7	0.55	4.00
11.0	3100	3.77	130.603	63	8228	19800	6	0.55	4.00
10.0	3100	3.50	141.478	90	12733	19800	6	1.10	4.00
9.00	3100	3.09	159.989	90	14399	19800	6	1.10	3.00
8.00	3100	2.68	184.146	405	74579	19800	6	0.55	3.00
7.00	3100	2.38	208.240	405	84337	19800	6	0.55	2.20
6.00	3100	2.14	229.059	135	30923	19800	6	0.55	2.20
6.00	3100	1.90	259.030	135	34969	19800	6	0.55	2.20
5.00	3100	1.66	296.430	135	40018	19800	6	0.25	1.50
4.00	3100	1.46	335.215	135	45254	19800	6	0.25	1.50
4.00	3100	1.36	359.758	450	161891	19800	6	0.25	1.10
4.00	3100	1.19	406.829	450	183073	19800	6	0.25	1.10

# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S4500, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
301	2113	68.6	4.914	500	2457	16500	9	15.00	30.00
229	2451	60.6	6.450	20	129	18500	9	11.00	30.00
210	2535	57.3	7.056	125	882	19000	9	7.50	30.00
165	3845	68.6	8.944	125	1118	14000	6	15.00	30.00
148	4163	66.5	9.984	125	1248	16000	5	15.00	30.00
126	4451	60.5	11.740	315	3698	17000	6	11.00	30.00
115	4500	55.9	12.843	375	4816	18000	5	7.50	30.00
113	4500	54.8	13.105	105	1376	18500	5	11.00	30.00
103	4500	50.1	14.336	125	1792	19000	5	7.50	30.00
90.0	4500	43.8	16.381	21	344	21000	5	4.00	30.00
81.0	4500	39.2	18.286	7	128	22000	5	4.00	30.00
74.0	4500	35.8	20.067	15	301	23500	5	5.50	22.00
66.0	4500	32.1	22.400	5	112	25000	4	5.50	22.00
56.0	4500	27.2	26.437	135	3569	27000	5	4.00	22.00
50.0	4500	24.4	29.511	45	1328	29000	4	4.00	22.00
46.0	4500	22.1	32.489	45	1462	30000	5	4.00	22.00
41.0	4500	19.8	36.267	15	544	30000	4	4.00	22.00
35.0	4101	15.5	42.044	45	1892	30000	5	2.20	7.50
32.0	4394	14.9	46.933	15	704	30000	4	2.20	7.50
29.0	3653	11.4	51.027	75	3827	30000	5	2.20	7.50
26.0	3946	11.0	56.960	25	1424	30000	4	2.20	7.50
22.0	2414	5.86	64.500	2	129	30000	5	2.20	4.00
20.0	2586	5.64	72.000	1	72	30000	4	2.20	4.00



# g500-S shaft-mounted helical geared motors

Project planning



## Technical data at a glance

g500-S4500, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
39.0	4150	17.7	38.090	1305	49708	30000	6	4.00	22.00
35.0	4291	16.4	42.520	435	18496	30000	5	4.00	18.50
28.0	4500	13.7	52.794	180	9503	30000	5	4.00	15.00
25.0	4500	12.3	58.933	15	884	30000	5	4.00	15.00
23.0	4500	11.2	64.978	45	2924	30000	5	2.20	11.00
20.0	4500	10.1	72.533	15	1088	30000	5	2.20	11.00
20.0	4500	10.0	72.775	1125	81872	30000	5	2.20	11.00
18.0	4500	8.97	81.237	375	30464	30000	5	2.20	11.00
16.0	4500	7.84	92.825	63	5848	30000	5	1.10	7.50
14.0	4500	7.05	103.619	21	2176	30000	5	1.10	7.50
13.0	4500	6.41	113.711	45	5117	30000	5	2.20	7.50
12.0	4500	5.67	126.933	15	1904	30000	5	2.20	5.50
10.0	4500	4.88	148.005	405	59942	30000	5	1.10	5.50
9.00	4500	4.34	165.215	135	22304	30000	5	1.10	4.00
8.00	4500	3.94	181.396	270	48977	30000	5	1.10	4.00
7.00	4500	3.55	202.489	45	9112	30000	5	1.10	4.00
6.00	4500	3.01	238.252	135	32164	30000	5	0.55	3.00
5.00	4500	2.66	265.956	45	11968	30000	5	0.55	3.00
5.00	4500	2.47	289.151	225	65059	30000	5	0.55	2.20
4.00	4500	2.22	322.773	75	24208	30000	5	0.55	2.20
4.00	3962	1.74	365.500	2	731	30000	5	0.55	1.10
4.00	4410	1.69	408.000	1	408	30000	5	0.55	1.10

# g500-S shaft-mounted helical geared motors

## Project planning



### Surface and corrosion protection

For optimum protection of geared motors against ambient conditions, the surface and corrosion protection system (OKS) offers tailor-made solutions.

Various surface coatings combined with other protective measures ensure that the geared motors operate reliably even at high air humidity, in outdoor installations or in the presence of atmospheric impurities. Any colour from the RAL Classic collection can be chosen for the top coat. The geared motors are also available unpainted (no surface and corrosion protection).

Surface and corrosion protection	Applications	Product	
		g500-H45 ... H450 g500-S130 ... S660 g500-B45 ... B450	g500-H600 ... H3000 g500-S950 ... S4500 g500-B600 ... B4300
Without OKS(uncoated) <sup>1)</sup>	<ul style="list-style-type: none"> <li>Interior installation, no special corrosion protection required</li> <li>Paint provided by the customer</li> </ul>	Standard	
OKS-G (primed)	<ul style="list-style-type: none"> <li>Dependent on subsequent top coat applied</li> </ul>	Optional	Optional
OKS-S (small)	<ul style="list-style-type: none"> <li>Standard applications</li> <li>Internal installation in heated buildings</li> <li>Air humidity up to 90%</li> </ul>		Standard
OKS-M (medium)	<ul style="list-style-type: none"> <li>Internal installation in non-heated buildings</li> <li>Covered, protected external installation</li> <li>Air humidity up to 95%</li> </ul>		Optional
OKS-L (large)	<ul style="list-style-type: none"> <li>External installation</li> <li>Air humidity above 95%</li> <li>Chemical industry plants</li> <li>Food industry</li> </ul>		Optional
OKS-XL (extra Large) <sup>2)</sup>	<ul style="list-style-type: none"> <li>External installation</li> <li>Air humidity above 95 %</li> <li>Chemical industry plants</li> <li>Food industry</li> <li>Coastal areas with moderate salinity</li> </ul>		Optional

<sup>1)</sup> Aluminium parts are uncoated, fan covers are zinc-coated or primed in grey, cast iron parts primed in grey.  
Light colour deviations of the components are possible.

<sup>2)</sup> On request

# g500-S shaft-mounted helical geared motors

Project planning



## Surface and corrosion protection

### Structure of surface coating

Surface and corrosion protection	Corrosivity category	Surface coating	Colour	Coating thickness
	DIN EN ISO 12944-2	Structure		
Without OKS(uncoated)		<ul style="list-style-type: none"> <li>• Dipping primer of the grey iron parts</li> </ul>		30 ... 50 µm
OKS-G (primed)		<ul style="list-style-type: none"> <li>• Dipping primer of the grey iron parts</li> <li>• 2K PUR priming coat</li> </ul>		60 ... 90 µm
OKS-S (small)	Comparable to C1	<ul style="list-style-type: none"> <li>• Dipping primer of the grey iron parts</li> <li>• 2K-PUR top coat</li> </ul>	<ul style="list-style-type: none"> <li>• Standard: RAL 7012</li> <li>• Optional: RAL Classic</li> </ul>	80 ... 120 µm
OKS-M (medium)	Comparable to C2	<ul style="list-style-type: none"> <li>• Dipping primer of the grey iron parts</li> </ul>		110 ... 160 µm
OKS-L (large)	Comparable to C3	<ul style="list-style-type: none"> <li>• 2K PUR priming coat</li> <li>• 2K-PUR top coat</li> </ul>		140 ... 200 µm
OKS-XL (extra Large) <sup>1)</sup>	Comparable to C4	<ul style="list-style-type: none"> <li>• Dipping primer of the grey iron parts</li> <li>• 2K-EP priming coat (two times)</li> <li>• 2K-PUR top coat</li> </ul>		160 ... 240 µm

<sup>1)</sup> On request

# g500-S shaft-mounted helical geared motors

## Project planning



### Lubricants

Lenze gearboxes and geared motors are ready for operation on delivery and are filled with lubricants specific to both the drive and the design. The mounting position and design specified in the order are key factors in choosing the volume of lubricant.

The amount and type of lubricant contained in the gearbox are given on the nameplate.

The following gearboxes are lubricated for life:

- Helical gearbox g500-H45 ... 140
- Shaft-mounted helical gearbox g500-S130
- Bevel gearbox g500-B45 ... 240

### Lubricant table

The following lubricants are recommended:

Mode	CLP 220	CLP 460	CLP HC 220
Ambient temperature [°C]	0 ... +40		-25 ... +50
Specification	Mineral oil with EP additives		Synthetic oil (polyalphaolefins basis)
Changing interval	16000 operating hours After 3 years at the latest Oil temperature 70 °C		25000 operating hours After 4 years at the latest Oil temperature 70 °C
Fuchs	Renolin CLP 220 CLP Plus 220	Renolin CLP 460 CLP Plus 460	Renolin Unisyn CLP 220 XT220
Klüber	Klüberoil GEM 1-220 N	Klüberoil GEM 1-460 N	Klübersynth GEM 4-220 N
Shell	Shell Omala S2 G 220 S2 GX 220	Shell Omala S2 G 460 S2 GX 460	Shell Omala S4 GX HD 220

Mode	CLP HC 320	CLP HC 220 USDA H1	CLP PG 460 USDA H1
Ambient temperature [°C]	-25 ... +50	-20 ... +40	
Specification	Synthetic oil (polyalphaolefins basis)		Synthetic oil (polyglycol basis)
Changing interval	25000 operating hours After 4 years at the latest Oil temperature 70 °C	16000 operating hours After 3 years at the latest Oil temperature 70 °C	
Fuchs	Renolin Unisyn CLP 320 XT 320	Cassida Fluid GL 220	Cassida Fluid WG 460
Klüber	Klübersynth GEM 4-320 N	Klüberoil 4 UH1-220 N	Klüberoil UH1 6-460
Shell	Shell Omala S4 GX HD 320		

- Please contact your Lenze sales office if you are operating at ambient temperatures in areas up to < -20 °C bzw. > or up to +40°C.

### Shaft sealing rings

6.4

By default, the gearboxes come with NBR shaft sealing rings at the output end. At high speed and unfavourable ambient conditions such as high temperature, reduced circulation of air etc., Lenze recommends the use of FKM (Viton) shaft sealing rings.

Please consider this in your order.

# g500-S shaft-mounted helical geared motors

## Project planning

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### Ventilation

#### Non-ventilated gearboxes

No ventilation is required for gearboxes g500-S130 ... S220

#### Ventilated gearboxes

From g500-S400 onwards, the gearboxes are supplied with a breather element as standard.

#### Gearbox in combined mounting position

For reducing the number of versions, the gearboxes can also be ordered in a combined mounting position:

- g500-S130 ... S660 in mounting position AEF

In these gearboxes, the lubricant amount has been optimised for the use in different mounting positions. -H45 in mounting position ABCDEfg500-H100 ... H450 in mounting position AEF In these gearboxes, the lubricant amount has been optimised for the use in different mounting positions. If required, the breather elements are loosely enclosed and have to be mounted before commissioning depending on the mounting position.

A gearbox can be used for several mounting positions.

# g500-S shaft-mounted helical geared motors

## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-S130 ... S660

Mounting position A	Mounting position B	Mounting position C	
	Filling		Drain
	Breathing		Control

# g500-S shaft-mounted helical geared motors

## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-S130 ... S660

Mounting position D	Mounting position E	Mounting position F	
	Filling		Drain
	Breathing		Control

# g500-S shaft-mounted helical geared motors

## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-S950 ... S4500

Mounting position A		Mounting position B		Mounting position C	
	Filling		Drain		
	Breathing		Control		



# g500-S shaft-mounted helical geared motors





## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-S950 ... S4500

Mounting position D	Mounting position E	Mounting position F
 Filling  Breathing	 Drain  Control	

# g500-S shaft-mounted helical geared motors

Project planning



# g500-S shaft-mounted helical geared motors

Technical data



## Standards and operating conditions

### Geared motor data

Product			MD□MA□□	m240
Motor				
Degree of protection			IP55 <sup>1)</sup> IP65 <sup>1, 3)</sup> IP66 <sup>1, 3)</sup>	
EN 60529				
Energy efficiency class			IE1	IE3
IEC 60034-30			Methodology for measuring efficiency	
IEC 60034-2-1				
Conformity			Low-Voltage Directive	
CE			2006/95/EC	2014/35/EU
EAC			TP TC 004/2011 (TR CU 004/2011)	
Approval			GB Standard 12350-2009	
CCC			CSA 22.2 No. 100	
CSA			UL 1004-1 UL 1004-8 File-No. E210321	
cURus				
Temperature class			B	
IEC/EN 60034-1; utilisation			F	
IEC/EN 60034-1; insulation system (enamel-insulated wire)				
Min. ambient operating temperature			$T_{opr,min}$ [°C]	-20
Max. ambient temperature for operation			$T_{opr,max}$ [°C]	40
With power reduction			$T_{opr,max}$ [°C]	60 <sup>2)</sup>
Site altitude			5.00	
Current derating at over 1000 m			[%/1000 m]	
Amsl			$H_{max}$ [m]	4000

<sup>1)</sup> Types with deviating degrees of protection:  
IP55 with brake (IP54 with manual release lever).

<sup>2)</sup> In case of cURus max. 40 °C are permissible.

<sup>3)</sup> m240 on request.

- In the European Union, the ErP Directive stipulates minimum efficiency levels for three-phase AC motors. Geared three-phase AC motors that do not conform with this Directive do not meet CE requirements and must not be marketed in the European Economic Area. For further information about the ErP Directive, the efficiency regulations in other countries and the Lenze products concerned, please refer to the brochure "International efficiency directives for three-phase AC motors".

# g500-S shaft-mounted helical geared motors

Technical data



## Permissible radial and axial forces at output

### Permissible radial force

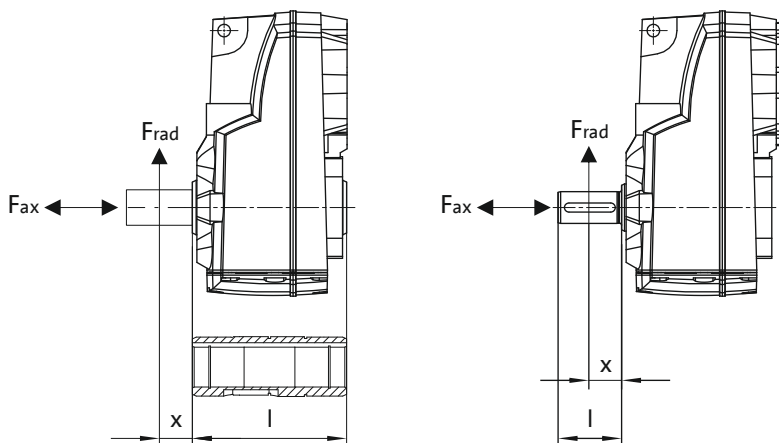
$$F_{rad,perm} = f_w \times F_{rad,max}$$

► If  $F_{rad}$  and  $F_{ax} \neq 0$ , please contact Lenze.

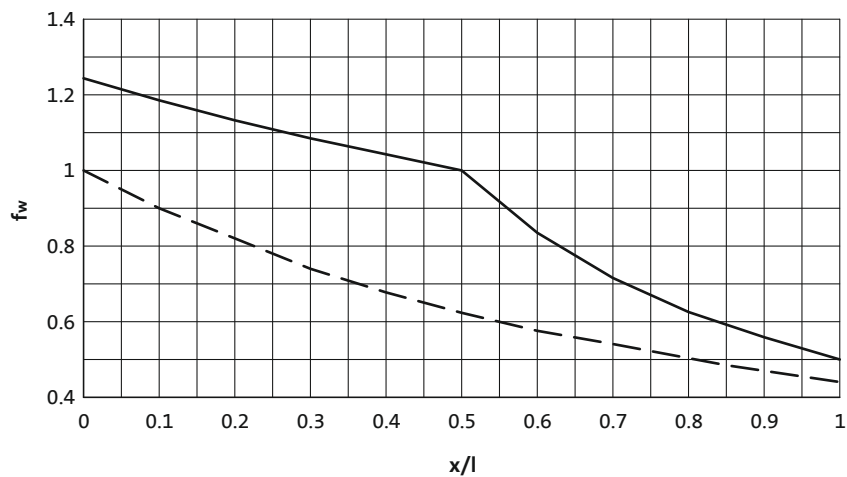
### Permissible axial force

If there is no radial force, the maximum permissible axial force is 50 % of the table value  $F_{rad,max}$

### Application of forces



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



— Solid shaft  
 - - - Hollow shaft

# g500-S shaft-mounted helical geared motors



## Technical data

### Permissible radial and axial forces at output

The values given in the table refer to the center shaft end force application point and are minimum values calculated according to the most unfavourable conditions (force application angle, mounting position, direction of rotation). The values were calculated for the motor/gear-box combination with a load capacity of  $c= 1.3$  and an input speed of 1400 rpm.

In case of different operating conditions, considerably higher forces can be transmitted. Please contact Lenze.

- A hollow shaft with shrink disc requires a check by Lenze.

Product	$n_2$ [r/min]						
	250	160	100	63	40	25	≤16

Max. radial force, Hollow shaft							
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]
g500-S130	1500	1650	2200	2750	3450	4200	4500
g500-S220	3200	3800	4600	5500	6300	7000	7000
g500-S400	3400	4100	5000	6000	7100	8000	8000
g500-S660	4000	5000	6600	8500	10800	12000	12000
g500-S950	5000	6000	8000	10300	11500	12500	13000
g500-S2100	6500	7500	10000	12000	15700	15700	16000
g500-S3100	8000	9000	12500	15000	17000	19800	19800
g500-S4500	17500	19000	20000	23000	30000	30000	30000

Max. radial force, Solid shaft without flange							
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]
g500-S130	1500	1650	2200	2750	3450	4200	4500
g500-S220	2700	3200	3600	3600	3600	3600	3600
g500-S400	2700	3200	4000	4800	5800	6200	6200
g500-S660	3600	3900	5100	6500	8400	9000	9000
g500-S950	9500	10300	10300	10300	10300	10300	10300
g500-S2100	11500	13600	15700	15700	15700	15700	15700
g500-S3100	14500	16500	18000	19800	19800	19800	19800
g500-S4500	18500	20000	22000	25000	30000	30000	30000

Max. radial force, Solid shaft with flange							
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]
g500-S130	1500	1650	2200	2750	3450	4200	4500
g500-S220	3700	4400	4600	4600	4600	4600	4600
g500-S400	5100	5900	6800	7000	7000	7000	7000
g500-S660	7000	7800	9600	10000	10000	10000	10000
g500-S950	7500	8500	10300	10300	10300	10300	10300
g500-S2100	11500	13600	15700	15700	15700	15700	15700
g500-S3100	19800	19800	19800	19800	19800	19800	19800
g500-S4500	27000	28000	30000	30000	30000	30000	30000

# g500-S shaft-mounted helical geared motors



## Technical data

### Selection tables, notes

The selection tables show the available combinations of gearbox type, number of stages, ratio and motor. They are used only to provide basic orientation.  
The following legend indicates the structure of the selection tables.

Rated power  $P_{rated}$  of the drive motor depending on the rated frequency

↓

50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes ← Number of the gear stage of the gearbox

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
432	16	4.8	3.339	-S400	40-P80/M4	
394	18	3.6	3.661	-S130	40-P80/M4	

↑ ↑ ↑ ↑ ↑

Mains operation  
Output speed  $n_2$   
Output torque  $M_2$

Load capacity **c** of the gearbox  
c is the ratio between the permissible rated torque of the gearbox and the rated torque of the three-phase AC motor (converted to the driven shaft).  
c must be always higher than the service factor k determined for the application k.

Ratio i

Product Gearbox

Product Motor

Page number for dimensions

$$c = \frac{M_{2,zul}}{M_{1N} \cdot i \cdot \eta_{Getr}} > k$$

### Motor voltages

At 50 Hz, the power and torque values indicated in the selection tables relate to the following motor voltages:

- Up to 3 kW:  $\Delta$  230 V / Y 400 V
- FROM 4 kW:  $\Delta$  400 V

# g500-S shaft-mounted helical geared motors

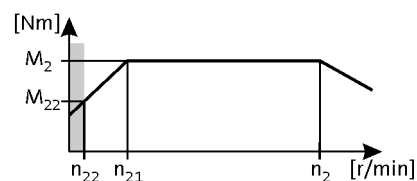


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.12$  kW  
 87 Hz:  $P_N = 0.21$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
45	24	5.3	4.6	19	19	24	45	24	5.3	81	24	5.4	31.387	-S130	063-12	
40	28	4.7	4.1	21	17	27	40	28	4.7	71	27	4.8	35.493	-S130	063-12	
35	32	4.1	3.6	24	15	31	35	32	4.1	63	31	4.2	40.422	-S130	063-12	
34	33	4.6	3.4	26	14	33	34	33	4.6	60	33	4.7	42.533	-S220	063-12	
31	36	3.7	3.2	28	13	35	31	36	3.7	56	35	3.7	45.711	-S130	063-12	
30	37	4.6	3.1	28	13	36	30	37	4.6	54	36	4.7	46.933	-S400	063-12	
30	38	4.6	3.0	29	13	37	30	38	4.6	53	37	4.7	48.190	-S220	063-12	
28	40	3.3	2.8	31	12	39	28	40	3.3	50	39	3.3	51.230	-S130	063-12	
28	40	4.0	2.8	31	12	40	28	40	4.0	49	40	4.1	51.620	-S220	063-12	
27	41	4.6	2.7	32	11	41	27	41	4.6	48	41	4.7	53.026	-S400	063-12	
25	44	4.0	2.5	34	11	44	25	44	4.0	45	44	4.1	56.960	-S400	063-12	
25	45	2.9	2.5	35	10	44	25	45	2.9	44	44	2.9	57.933	-S130	063-12	
24	46	4.0	2.5	35	10	45	24	46	4.0	43	45	4.1	58.486	-S220	063-12	
22	50	2.6	2.3	39	9.3	49	22	50	2.6	40	49	2.6	64.200	-S130	063-12	
22	50	4.0	2.3	39	9.3	49	22	50	4.0	39	49	4.1	64.354	-S400	063-12	
22	51	3.1	2.2	40	9.1	51	22	51	3.1	38	51	3.2	65.975	-S220	063-12	
20	57	2.3	2.0	44	8.3	56	20	57	2.3	35	56	2.3	72.600	-S130	063-12	
19	58	3.1	1.9	45	8.0	57	19	58	3.1	34	57	3.2	74.750	-S220	063-12	
17	66	1.6	1.7	51	7.1	65	17	66	1.6	30	65	1.6	84.581	-S130	063-12	
15	75	1.5	1.5	58	6.3	73	15	75	1.5	27	73	1.6	95.648	-S130	063-12	

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
27	40	5.4	2.8	31	11	40	27	40	5.4	48	40	5.3	52.587	-S220	063-12	
24	46	4.8	2.4	35	10	45	24	46	4.8	43	45	4.7	59.581	-S220	063-12	
21	52	4.3	2.2	40	8.9	51	21	52	4.3	38	51	4.1	67.298	-S220	063-12	
19	59	3.8	1.9	45	7.9	58	19	59	3.8	33	58	3.8	76.249	-S220	063-12	
17	66	3.3	1.7	51	7.0	65	17	66	3.3	29	65	3.4	86.079	-S220	063-12	
15	73	5.5	1.5	56	6.3	72	15	73	5.5	27	72	5.6	94.984	-S400	063-12	
15	75	2.9	1.5	58	6.2	74	15	75	2.9	26	74	3.0	97.528	-S220	063-12	
13	82	4.8	1.4	64	5.6	81	13	82	4.8	24	81	4.9	107.314	-S400	063-12	
13	86	2.6	1.3	66	5.4	84	13	86	2.6	23	84	2.6	111.747	-S220	063-12	
12	95	4.2	1.2	73	4.9	93	12	95	4.2	21	93	4.3	123.307	-S400	063-12	
11	97	2.3	1.1	75	4.7	96	11	97	2.3	20	96	2.3	126.610	-S220	063-12	
10	105	5.5	1.1	81	4.4	104	10	105	5.5	19	104	5.6	137.133	-S660	063-12	
10	107	3.7	1.0	82	4.3	105	10	107	3.7	18	105	3.8	139.313	-S400	063-12	
10	110	2.0	1.0	85	4.2	108	10	110	2.0	18	108	2.0	143.205	-S220	063-12	
9.1	120	5.5	0.9	93	3.8	118	9.1	120	5.5	16	118	5.6	156.249	-S660	063-12	

# g500-S shaft-mounted helical geared motors

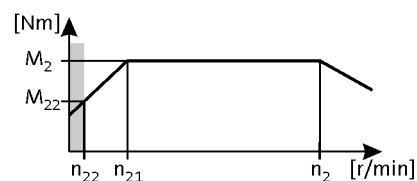


Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.12$  kW  
 87 Hz:  $P_N = 0.21$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c		
9.0	121	3.3	0.9	94	3.8	119	9.0	121	3.3	16	119	3.3	158.019	-S400	063-12		
8.8	125	1.8	0.9	96	3.7	123	8.8	125	1.8	16	123	1.8	162.252	-S220	063-12		
8.1	136	4.6	0.8	105	3.4	134	8.1	136	4.6	14	134	4.7	176.611	-S660	063-12		
8.0	137	2.9	0.8	106	3.4	135	8.0	137	2.9	14	135	3.0	178.531	-S400	063-12		
7.7	142	1.6	0.8	110	3.2	140	7.7	142	1.6	14	140	1.6	185.248	-S220	063-12		
7.1	155	4.3	0.7	119	3.0	152	7.1	155	4.3	13	152	4.3	201.230	-S660	063-12		
7.0	157	2.6	0.7	121	2.9	155	7.0	157	2.6	12	155	2.6	204.412	-S400	063-12		
6.8	161	1.4	0.7	124	2.9	159	6.8	161	1.4	12	159	1.4	209.887	-S220	063-12		
6.4	172	3.8	0.6	133	2.7	169	6.4	172	3.8	11	169	3.9	223.833	-S660	063-12		
6.2	176	4.6	0.6	136	2.6	173	6.2	176	4.6	11	173	4.7	229.289	-S950	063-12		
6.2	177	2.2	0.6	137	2.6	175	6.2	177	2.2	11	175	2.3	230.946	-S400	063-12		
5.9	185	1.2	0.6	143	2.5	182	5.9	185	1.2	11	182	1.2	241.022	-S220	063-12		
5.6	196	3.4	0.6	151	2.4	193	5.6	196	3.4	9.9	193	3.4	255.034	-S660	063-12		
5.6	197	4.6	0.6	152	2.3	194	5.6	197	4.6	9.9	194	4.7	256.585	-S950	063-12		
5.4	204	1.9	0.5	157	2.3	201	5.4	204	1.9	9.5	201	1.9	265.956	-S400	063-12		
5.2	210	1.1	0.5	162	2.2	206	5.2	210	1.1	9.3	206	1.1	273.079	-S220	063-12		
5.1	214	4.0	0.5	165	2.2	210	5.1	214	4.0	9.1	210	4.1	278.273	-S950	063-12		
5.1	216	2.8	0.5	166	2.1	212	5.1	216	2.8	9.0	212	2.8	280.500	-S660	063-12		
4.7	231	1.7	0.5	178	2.0	227	4.7	231	1.7	8.4	227	1.8	300.479	-S400	063-12		
4.6	239	4.0	0.5	184	1.9	235	4.6	239	4.0	8.1	235	4.0	311.401	-S950	063-12		
4.6	240	0.9	0.5	185	1.9	236	4.6	240	0.9	8.1	236	0.9	312.233	-S220	063-12		
4.5	246	2.7	0.5	189	1.9	242	4.5	246	2.7	7.9	242	2.7	319.600	-S660	063-12		
4.1	265	1.3	0.4	204	1.7	260	4.1	265	1.3	7.4	260	1.3	344.533	-S400	063-12		
4.0	272	0.8	0.4	209	1.7	267	4.0	272	0.8	7.2	267	0.8	353.762	-S220	063-12		
4.0	273	3.1	0.4	211	1.7	269	4.0	273	3.1	7.1	269	3.2	355.658	-S950	063-12		
3.9	284	1.6	0.4	219	1.6	279	3.9	284	1.6	6.9	279	1.6	369.548	-S660	063-12		
3.7	299	1.3	0.4	230	1.5	294	3.7	299	1.3	6.5	294	1.3	389.256	-S400	063-12		
3.6	306	3.1	0.4	236	1.5	301	3.6	306	3.1	6.4	301	3.2	397.999	-S950	063-12		
3.4	324	1.6	0.3	249	1.4	318	3.4	324	1.6	6.0	318	1.6	421.060	-S660	063-12		



# g500-S shaft-mounted helical geared motors

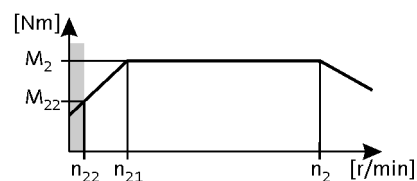


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
194	9.0	4.5	21	6.6	85	9.0	194	9.0	4.5	352	9.0	3.7	7.029	-S130	063-32	
85	20	4.5	9.1	15	38	20	85	20	4.5	155	20	3.7	15.979	-S130	063-32	
76	22	4.5	8.0	17	33	22	76	22	4.5	137	22	4.2	18.069	-S130	063-32	
67	25	4.1	7.1	19	29	25	67	25	4.1	121	25	3.9	20.381	-S130	063-32	
59	28	4.1	6.3	22	26	28	59	28	4.1	107	28	3.9	23.048	-S130	063-32	
44	38	3.4	4.6	30	19	38	44	38	3.4	79	39	3.4	31.387	-S130	063-32	
39	43	3.0	4.1	33	17	43	39	43	3.0	70	44	3.0	35.493	-S130	063-32	
34	49	2.6	3.6	38	15	49	34	49	2.6	61	50	2.6	40.422	-S130	063-32	
32	52	2.9	3.4	40	14	52	32	52	2.9	58	53	2.9	42.533	-S220	063-32	
30	56	2.3	3.2	43	13	56	30	56	2.3	54	56	2.3	45.711	-S130	063-32	
29	57	2.9	3.1	44	13	57	29	57	2.9	53	58	2.9	46.933	-S400	063-32	
28	59	2.9	3.0	45	13	59	28	59	2.9	51	60	2.9	48.190	-S220	063-32	
27	63	2.1	2.8	48	12	63	27	63	2.1	48	63	2.1	51.230	-S130	063-32	
26	63	2.6	2.8	49	12	63	26	63	2.6	48	64	2.5	51.620	-S220	063-32	
26	65	2.9	2.7	50	11	65	26	65	2.9	47	66	2.9	53.026	-S400	063-32	
24	70	2.6	2.5	54	11	70	24	70	2.6	44	70	2.5	56.960	-S400	063-32	
24	71	1.8	2.5	55	10	71	24	71	1.8	43	72	1.8	57.933	-S130	063-32	
23	71	2.6	2.5	55	10	71	23	71	2.6	42	72	2.5	58.486	-S220	063-32	
21	78	1.7	2.3	60	9.3	78	21	78	1.7	39	79	1.6	64.200	-S130	063-32	
21	79	2.6	2.3	61	9.3	79	21	79	2.6	39	79	2.5	64.354	-S400	063-32	
21	81	2.0	2.2	62	9.1	81	21	81	2.0	38	82	2.0	65.975	-S220	063-32	
19	89	1.5	2.0	68	8.3	89	19	89	1.5	34	90	1.5	72.600	-S130	063-32	
18	91	2.0	1.9	70	8.0	91	18	91	2.0	33	92	2.0	74.750	-S220	063-32	
16	103	1.0	1.7	80	7.1	103	16	103	1.0	29	104	1.0	84.581	-S130	063-32	
14	117	1.0	1.5	90	6.3	117	14	117	1.0	26	118	1.0	95.648	-S130	063-32	

### 3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
34	48	4.6	3.6	37	15	48	34	48	4.6	62	49	3.8	40.012	-S220	063-32	
30	55	4.0	3.2	42	13	55	30	55	4.0	55	55	3.4	45.333	-S220	063-32	
26	63	3.5	2.8	49	11	63	26	63	3.5	47	64	3.3	52.587	-S220	063-32	
24	70	4.5	2.5	54	10	70	24	70	4.5	43	71	4.2	58.027	-S400	063-32	
23	72	3.1	2.4	55	10	72	23	72	3.1	42	72	2.9	59.581	-S220	063-32	
21	79	4.5	2.2	61	9.2	79	21	79	4.5	38	80	4.2	65.559	-S400	063-32	
20	81	2.7	2.2	62	8.9	81	20	81	2.7	37	82	2.6	67.298	-S220	063-32	
20	84	4.5	2.1	65	8.6	84	20	84	4.5	36	85	4.2	69.813	-S660	063-32	
18	89	4.1	2.0	69	8.1	89	18	89	4.1	33	90	4.1	74.260	-S400	063-32	
18	92	2.4	1.9	71	7.9	92	18	92	2.4	33	93	2.4	76.249	-S220	063-32	

# g500-S shaft-mounted helical geared motors

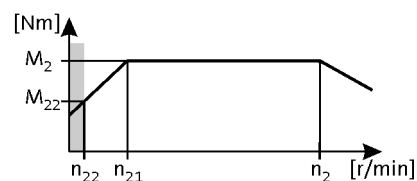


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c					
17	96	4.5	1.8	74	7.5	96	17	96	4.5	31	97	4.4	79.545	-S660	063-32		
16	101	4.0	1.7	78	7.2	101	16	101	4.0	30	102	3.9	83.900	-S400	063-32		
16	104	2.1	1.7	80	7.0	104	16	104	2.1	29	105	2.1	86.079	-S220	063-32		
15	107	4.1	1.6	83	6.7	107	15	107	4.1	28	108	4.1	89.048	-S660	063-32		
14	114	3.5	1.5	88	6.3	114	14	114	3.5	26	116	3.5	94.984	-S400	063-32		
14	117	1.9	1.5	90	6.2	117	14	117	1.9	25	119	1.9	97.528	-S220	063-32		
14	122	4.1	1.4	94	5.9	122	14	122	4.1	24	123	4.1	101.460	-S660	063-32		
13	129	3.1	1.4	99	5.6	129	13	129	3.1	23	131	3.1	107.314	-S400	063-32		
12	134	1.6	1.3	104	5.4	134	12	134	1.6	22	136	1.6	111.747	-S220	063-32		
11	148	2.7	1.2	114	4.9	148	11	148	2.7	20	150	2.7	123.307	-S400	063-32		
11	152	1.4	1.1	117	4.7	152	11	152	1.4	20	154	1.4	126.610	-S220	063-32		
10	165	3.5	1.1	127	4.4	165	10	165	3.5	18	167	3.5	137.133	-S660	063-32		
9.8	168	2.4	1.0	129	4.3	168	9.8	168	2.4	18	170	2.4	139.313	-S400	063-32		
9.5	172	1.3	1.0	133	4.2	172	9.5	172	1.3	17	174	1.3	143.205	-S220	063-32		
8.7	188	3.5	0.9	145	3.8	188	8.7	188	3.5	16	190	3.5	156.249	-S660	063-32		
8.6	190	2.1	0.9	146	3.8	190	8.6	190	2.1	16	192	2.1	158.019	-S400	063-32		
8.4	195	1.1	0.9	150	3.7	195	8.4	195	1.1	15	197	1.1	162.252	-S220	063-32		
7.7	213	2.9	0.8	164	3.4	213	7.7	213	2.9	14	215	2.9	176.611	-S660	063-32		
7.6	215	1.9	0.8	165	3.4	215	7.6	215	1.9	14	217	1.8	178.531	-S400	063-32		
7.4	223	1.0	0.8	172	3.2	223	7.4	223	1.0	13	225	1.0	185.248	-S220	063-32		
6.8	242	2.7	0.7	187	3.0	242	6.8	242	2.7	12	245	2.7	201.230	-S660	063-32		
6.7	246	1.6	0.7	189	2.9	246	6.7	246	1.6	12	249	1.6	204.412	-S400	063-32		
6.5	253	0.9	0.7	195	2.9	253	6.5	253	0.9	12	255	0.9	209.887	-S220	063-32		
6.1	269	2.5	0.6	207	2.7	269	6.1	269	2.5	11	272	2.4	223.833	-S660	063-32		
6.0	276	2.9	0.6	213	2.6	276	6.0	276	2.9	11	279	2.9	229.289	-S950	063-32		
5.9	278	1.4	0.6	214	2.6	278	5.9	278	1.4	11	281	1.4	230.946	-S400	063-32		
5.4	307	2.2	0.6	236	2.4	307	5.4	307	2.2	9.7	310	2.1	255.034	-S660	063-32		
5.3	309	2.9	0.6	238	2.3	309	5.3	309	2.9	9.6	312	2.9	256.585	-S950	063-32		
5.1	320	1.2	0.5	246	2.3	320	5.1	320	1.2	9.3	324	1.2	265.956	-S400	063-32		
4.9	335	2.6	0.5	258	2.2	335	4.9	335	2.6	8.9	339	2.5	278.273	-S950	063-32		
4.9	338	1.8	0.5	260	2.1	338	4.9	338	1.8	8.8	341	1.8	280.500	-S660	063-32		
4.5	362	1.1	0.5	278	2.0	362	4.5	362	1.1	8.2	366	1.1	300.479	-S400	063-32		
4.4	375	2.5	0.5	289	1.9	375	4.4	375	2.5	7.9	379	2.5	311.401	-S950	063-32		
4.3	385	1.7	0.5	296	1.9	385	4.3	385	1.7	7.7	389	1.7	319.600	-S660	063-32		
3.8	428	2.0	0.4	330	1.7	428	3.8	428	2.0	7.0	433	2.0	355.658	-S950	063-32		

# g500-S shaft-mounted helical geared motors

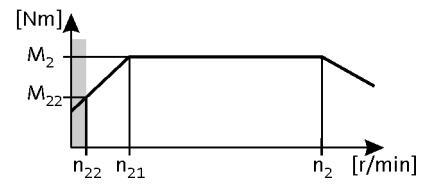
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
3.7	445	1.0	0.4	342	1.6	445	3.7	445	1.0	6.7	450	1.0	369.548	-S660	063-32	
3.4	479	2.0	0.4	369	1.5	479	3.4	479	2.0	6.2	484	2.0	397.999	-S950	063-32	
3.2	507	1.0	0.3	390	1.4	507	3.2	507	1.0	5.9	512	1.0	421.060	-S660	063-32	

# g500-S shaft-mounted helical geared motors

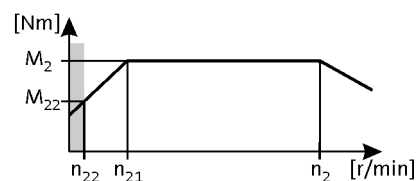


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [r/min]		M <sub>2</sub> [Nm]	c
374	6.0	5.6	40	4.8	164	6.0	374	6.0	5.6	677	6.0	4.8	3.661	-S130	063-42		
273	8.0	5.6	29	6.5	120	8.0	273	8.0	5.6	494	8.0	4.8	5.021	-S130	063-42		
214	11	5.6	23	8.3	94	11	214	11	5.6	387	11	4.8	6.411	-S400	063-42		
213	11	5.2	23	8.4	93	11	213	11	5.2	386	11	4.4	6.425	-S130	063-42		
195	12	5.2	21	9.2	85	12	195	12	5.2	353	12	4.4	7.029	-S130	063-42		
165	14	5.6	17	11	72	14	165	14	5.6	298	14	4.8	8.322	-S130	063-42		
146	16	5.6	15	12	64	16	146	16	5.6	264	16	4.8	9.411	-S130	063-42		
120	19	5.6	13	15	53	19	120	19	5.6	217	19	4.8	11.413	-S130	063-42		
106	22	5.6	11	17	47	22	106	22	5.6	192	22	4.8	12.907	-S130	063-42		
105	22	5.6	11	17	46	22	105	22	5.6	191	22	4.8	12.992	-S220	063-42		
96	24	5.6	10	19	42	24	96	24	5.6	173	24	4.8	14.336	-S400	063-42		
94	25	5.2	9.9	19	41	25	94	25	5.2	170	25	4.4	14.606	-S130	063-42		
93	25	5.6	9.9	19	41	25	93	25	5.6	169	25	4.8	14.720	-S220	063-42		
86	27	4.8	9.1	21	38	27	86	27	4.8	155	27	4.1	15.979	-S130	063-42		
85	27	5.6	9.0	21	37	27	85	27	5.6	153	27	4.8	16.197	-S400	063-42		
83	28	5.2	8.8	22	36	28	83	28	5.2	150	28	4.4	16.571	-S220	063-42		
76	31	4.3	8.0	24	33	30	76	31	4.3	137	30	4.1	18.069	-S130	063-42		
75	31	5.2	7.9	24	33	31	75	31	5.2	136	31	5.1	18.286	-S400	063-42		
73	32	5.2	7.7	24	32	32	73	32	5.2	132	32	5.1	18.776	-S220	063-42		
67	34	3.8	7.1	27	29	34	67	34	3.8	122	34	3.7	20.381	-S130	063-42		
66	35	5.2	7.0	27	29	35	66	35	5.2	120	35	5.1	20.659	-S400	063-42		
59	39	3.3	6.3	30	26	39	59	39	3.3	108	39	3.2	23.048	-S130	063-42		
55	42	3.1	5.8	33	24	42	55	42	3.1	99	42	3.0	24.967	-S130	063-42		
52	45	4.3	5.5	34	23	44	52	45	4.3	94	44	4.2	26.422	-S220	063-42		
49	48	2.7	5.1	37	21	47	49	48	2.7	88	47	2.6	28.233	-S130	063-42		
47	49	4.3	5.0	38	21	49	47	49	4.3	85	49	4.2	29.156	-S400	063-42		
46	51	4.3	4.8	39	20	50	46	51	4.3	83	50	4.2	29.937	-S220	063-42		
44	53	2.5	4.6	41	19	53	44	53	2.5	79	53	2.5	31.387	-S130	063-42		
42	56	3.7	4.4	43	18	55	42	56	3.7	76	55	3.7	32.867	-S220	063-42		
42	56	4.3	4.4	43	18	55	42	56	4.3	75	55	4.3	32.940	-S400	063-42		
39	60	2.2	4.1	46	17	60	39	60	2.2	70	60	2.2	35.493	-S130	063-42		
38	61	3.7	4.0	47	17	61	38	61	3.7	68	61	3.7	36.267	-S400	063-42		
37	63	3.5	3.9	49	16	63	37	63	3.5	67	63	3.5	37.238	-S220	063-42		
34	68	3.7	3.6	53	15	68	34	68	3.7	62	68	3.7	40.333	-S660	063-42		
34	68	1.9	3.6	53	15	68	34	68	1.9	61	68	1.9	40.422	-S130	063-42		

# g500-S shaft-mounted helical geared motors

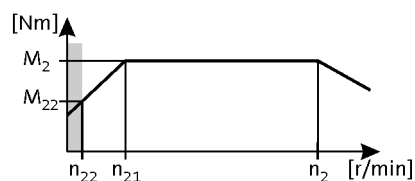


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
33	69	3.7	3.5	53	15	69	33	69	3.7	61	69	3.7	40.974	-S400	063-42	
32	72	3.1	3.4	55	14	72	32	72	3.1	58	72	3.1	42.533	-S220	063-42	
30	77	1.7	3.2	60	13	77	30	77	1.7	54	77	1.7	45.711	-S130	063-42	
30	78	3.7	3.2	60	13	77	30	78	3.7	54	77	3.7	45.956	-S660	063-42	
29	79	3.3	3.1	61	13	79	29	79	3.3	53	79	3.3	46.933	-S400	063-42	
28	81	2.7	3.0	63	13	81	28	81	2.7	52	81	2.7	48.190	-S220	063-42	
28	83	3.2	3.0	64	12	82	28	83	3.2	51	82	3.2	48.950	-S660	063-42	
27	87	1.5	2.8	67	12	86	27	87	1.5	48	86	1.5	51.230	-S130	063-42	
27	87	2.5	2.8	67	12	87	27	87	2.5	48	87	2.5	51.620	-S220	063-42	
26	90	3.3	2.7	69	11	89	26	90	3.3	47	89	3.3	53.026	-S400	063-42	
25	94	3.2	2.6	73	11	94	25	94	3.2	45	94	3.2	55.773	-S660	063-42	
24	96	2.8	2.5	74	11	96	24	96	2.8	44	96	2.8	56.960	-S400	063-42	
24	98	1.3	2.5	75	10	97	24	98	1.3	43	97	1.3	57.933	-S130	063-42	
23	99	2.2	2.5	76	10	98	23	99	2.2	42	98	2.2	58.486	-S220	063-42	
21	109	1.2	2.3	84	9.3	108	21	109	1.2	39	108	1.2	64.200	-S130	063-42	
21	109	2.8	2.3	84	9.3	108	21	109	2.8	39	108	2.8	64.354	-S400	063-42	
21	112	1.4	2.2	86	9.1	111	21	112	1.4	38	111	1.4	65.975	-S220	063-42	
19	123	1.1	2.0	95	8.3	122	19	123	1.1	34	122	1.1	72.600	-S130	063-42	
18	126	1.4	1.9	97	8.0	126	18	126	1.4	33	126	1.4	74.750	-S220	063-42	

### 3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
34	67	3.3	3.6	51	15	66	34	67	3.3	62	66	2.8	40.012	-S220	063-42	
30	75	2.9	3.2	58	13	75	30	75	2.9	55	75	2.5	45.333	-S220	063-42	
28	83	5.6	2.9	64	12	83	28	83	5.6	50	83	5.4	49.867	-S660	063-42	
26	88	2.5	2.8	67	11	87	26	88	2.5	47	87	2.4	52.587	-S220	063-42	
24	95	5.6	2.6	73	11	94	24	95	5.6	44	94	5.4	56.818	-S660	063-42	
24	97	4.1	2.5	74	10	96	24	97	4.1	43	96	4.0	58.027	-S400	063-42	
23	99	2.2	2.4	76	10	99	23	99	2.2	42	99	2.1	59.581	-S220	063-42	
22	106	5.2	2.3	82	9.4	106	22	106	5.2	39	106	5.1	63.817	-S660	063-42	
21	109	3.7	2.2	84	9.2	109	21	109	3.7	38	109	3.5	65.559	-S400	063-42	
20	112	2.0	2.2	86	8.9	111	20	112	2.0	37	111	1.9	67.298	-S220	063-42	
20	116	5.2	2.1	90	8.6	116	20	116	5.2	36	116	5.0	69.813	-S660	063-42	
20	117	5.6	2.1	90	8.6	116	20	117	5.6	35	116	5.6	70.037	-S950	063-42	
19	121	5.2	2.0	93	8.3	120	19	121	5.2	34	120	5.3	72.713	-S660	063-42	
18	124	3.2	2.0	95	8.1	123	18	124	3.2	33	123	3.3	74.260	-S400	063-42	
18	127	1.7	1.9	98	7.9	126	18	127	1.7	33	126	1.7	76.249	-S220	063-42	
18	131	5.6	1.9	101	7.7	130	18	131	5.6	32	130	5.6	78.375	-S950	063-42	

# g500-S shaft-mounted helical geared motors

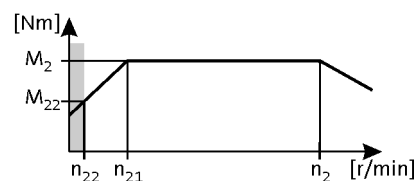


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
17	132	5.0	1.8	102	7.5	132	17	132	5.0	31	132	5.0	79.545	-S660	063-42	
16	140	2.9	1.7	108	7.2	139	16	140	2.9	30	139	2.9	83.900	-S400	063-42	
16	143	1.5	1.7	110	7.0	143	16	143	1.5	29	143	1.5	86.079	-S220	063-42	
15	148	4.5	1.6	114	6.7	147	15	148	4.5	28	147	4.5	89.048	-S660	063-42	
15	149	5.2	1.6	115	6.7	148	15	149	5.2	28	148	5.3	89.333	-S950	063-42	
14	158	2.5	1.5	122	6.3	157	14	158	2.5	26	157	2.5	94.984	-S400	063-42	
14	162	1.4	1.5	125	6.2	161	14	162	1.4	25	161	1.4	97.528	-S220	063-42	
14	166	5.2	1.5	128	6.0	166	14	166	5.2	25	166	5.3	99.968	-S950	063-42	
14	169	3.9	1.4	130	5.9	168	14	169	3.9	24	168	3.9	101.460	-S660	063-42	
13	179	2.2	1.4	138	5.6	178	13	179	2.2	23	178	2.3	107.314	-S400	063-42	
13	182	3.6	1.3	140	5.5	181	13	182	3.6	23	181	3.7	109.083	-S660	063-42	
12	186	1.2	1.3	143	5.4	185	12	186	1.2	22	185	1.2	111.747	-S220	063-42	
11	205	2.0	1.2	158	4.9	204	11	205	2.0	20	204	2.0	123.307	-S400	063-42	
11	207	3.2	1.2	159	4.8	206	11	207	3.2	20	206	3.2	124.289	-S660	063-42	
11	211	1.0	1.1	162	4.7	210	11	211	1.0	20	210	1.1	126.610	-S220	063-42	
10	228	2.9	1.1	176	4.4	227	10	228	2.9	18	227	2.9	137.133	-S660	063-42	
9.8	232	1.7	1.0	179	4.3	231	9.8	232	1.7	18	231	1.7	139.313	-S400	063-42	
9.6	237	4.0	1.0	183	4.2	236	9.6	237	4.0	17	236	4.0	142.437	-S950	063-42	
9.6	238	0.9	1.0	184	4.2	237	9.6	238	0.9	17	237	0.9	143.205	-S220	063-42	
8.8	260	2.5	0.9	200	3.8	259	8.8	260	2.5	16	259	2.6	156.249	-S660	063-42	
8.7	263	1.5	0.9	203	3.8	262	8.7	263	1.5	16	262	1.5	158.019	-S400	063-42	
8.6	265	3.6	0.9	204	3.8	264	8.6	265	3.6	16	264	3.6	159.394	-S950	063-42	
8.4	270	0.8	0.9	208	3.7	269	8.4	270	0.8	15	269	0.8	162.252	-S220	063-42	
7.8	294	2.2	0.8	227	3.4	292	7.8	294	2.2	14	292	2.3	176.611	-S660	063-42	
7.7	295	3.2	0.8	227	3.4	293	7.7	295	3.2	14	293	3.2	177.178	-S950	063-42	
7.7	297	1.3	0.8	229	3.4	296	7.7	297	1.3	14	296	1.4	178.531	-S400	063-42	
6.9	330	2.9	0.7	254	3.0	328	6.9	330	2.9	13	328	2.9	198.270	-S950	063-42	
6.8	335	2.0	0.7	258	3.0	333	6.8	335	2.0	12	333	2.0	201.230	-S660	063-42	
6.7	340	1.2	0.7	262	2.9	338	6.7	340	1.2	12	338	1.2	204.412	-S400	063-42	
6.1	373	1.8	0.6	287	2.7	371	6.1	373	1.8	11	371	1.8	223.833	-S660	063-42	
6.0	382	2.5	0.6	294	2.6	380	6.0	382	2.5	11	380	2.5	229.289	-S950	063-42	
5.9	385	1.0	0.6	296	2.6	382	5.9	385	1.0	11	382	1.0	230.946	-S400	063-42	
5.4	419	3.7	0.6	323	2.4	417	5.4	419	3.7	9.8	417	3.7	251.778	-S2100	063-42	
5.4	425	1.6	0.6	327	2.4	422	5.4	425	1.6	9.7	422	1.6	255.034	-S660	063-42	
5.3	427	2.2	0.6	329	2.3	425	5.3	427	2.2	9.7	425	2.2	256.585	-S950	063-42	

# g500-S shaft-mounted helical geared motors

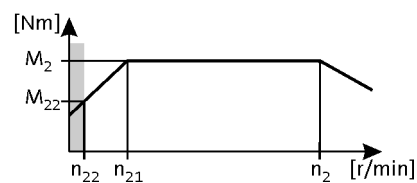
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
87 Hz:  $P_N = 0.45$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
5.2	443	0.9	0.5	341	2.3	440	5.2	443	0.9	9.3	440	0.9	265.956	-S400	063-42	
4.9	463	2.1	0.5	357	2.2	461	4.9	463	2.1	8.9	461	2.1	278.273	-S950	063-42	
4.9	466	3.7	0.5	359	2.1	463	4.9	466	3.7	8.9	463	3.7	279.807	-S2100	063-42	
4.9	467	1.2	0.5	360	2.1	464	4.9	467	1.2	8.8	464	1.2	280.500	-S660	063-42	
4.6	494	3.7	0.5	380	2.0	491	4.6	494	3.7	8.4	491	3.7	296.430	-S3100	063-42	
4.5	509	3.2	0.5	392	2.0	506	4.5	509	3.2	8.1	506	3.2	305.567	-S2100	063-42	
4.4	519	1.8	0.5	399	1.9	516	4.4	519	1.8	8.0	516	1.8	311.401	-S950	063-42	
4.3	532	1.2	0.5	410	1.9	529	4.3	532	1.2	7.8	529	1.2	319.600	-S660	063-42	
4.1	558	3.7	0.4	430	1.8	555	4.1	558	3.7	7.4	555	3.7	335.215	-S3100	063-42	
4.0	566	3.2	0.4	435	1.8	562	4.0	566	3.2	7.3	562	3.2	339.584	-S2100	063-42	
3.9	592	1.4	0.4	456	1.7	589	3.9	592	1.4	7.0	589	1.4	355.658	-S950	063-42	
3.8	599	3.2	0.4	461	1.7	596	3.8	599	3.2	6.9	596	3.2	359.758	-S3100	063-42	
3.5	643	2.6	0.4	495	1.6	640	3.5	643	2.6	6.4	640	2.6	386.250	-S2100	063-42	
3.4	663	1.4	0.4	510	1.5	659	3.4	663	1.4	6.2	659	1.4	397.999	-S950	063-42	
3.4	678	3.2	0.4	522	1.5	674	3.4	678	3.2	6.1	674	3.2	406.829	-S3100	063-42	
3.2	715	2.6	0.3	550	1.4	711	3.2	715	2.6	5.8	711	2.6	429.250	-S2100	063-42	

# g500-S shaft-mounted helical geared motors

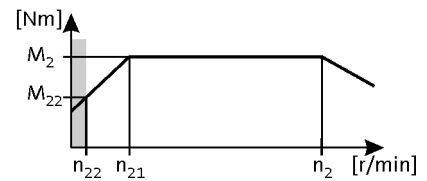
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
87 Hz:  $P_N = 0.66$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c					
385	9.0	4.9	40	6.9	164	9.0	385	9.0	4.9	688	9.0	4.1	3.661	-S130	071-32		
281	12	4.9	29	9.4	120	12	281	12	4.9	502	12	4.1	5.021	-S130	071-32		
220	16	4.9	23	12	94	16	220	16	4.9	393	16	4.1	6.411	-S400	071-32		
219	16	4.5	23	12	93	16	219	16	4.5	392	16	3.8	6.425	-S130	071-32		
201	17	4.5	21	13	85	17	201	17	4.5	359	17	3.8	7.029	-S130	071-32		
169	20	4.9	17	16	72	20	169	20	4.9	303	20	4.1	8.322	-S130	071-32		
150	23	4.9	15	18	64	23	150	23	4.9	268	23	4.1	9.411	-S130	071-32		
124	28	4.7	13	21	53	28	124	28	4.7	221	28	4.0	11.413	-S130	071-32		
109	31	4.1	11	24	47	31	109	31	4.1	195	31	3.5	12.907	-S130	071-32		
109	32	4.9	11	24	46	32	109	32	4.9	194	32	4.1	12.992	-S220	071-32		
98	35	4.9	10	27	42	35	98	35	4.9	176	35	4.1	14.336	-S400	071-32		
97	36	3.7	9.9	27	41	35	97	36	3.7	173	35	3.1	14.606	-S130	071-32		
96	36	4.9	9.9	28	41	36	96	36	4.9	171	36	4.1	14.720	-S220	071-32		
88	39	3.4	9.1	30	38	39	88	39	3.4	158	39	2.8	15.979	-S130	071-32		
87	39	4.9	9.0	30	37	39	87	39	4.9	156	39	4.1	16.197	-S400	071-32		
85	40	4.5	8.8	31	36	40	85	40	4.5	152	40	3.8	16.571	-S220	071-32		
78	44	3.0	8.0	34	33	44	78	44	3.0	140	44	2.8	18.069	-S130	071-32		
77	44	4.5	7.9	34	33	44	77	44	4.5	138	44	4.4	18.286	-S400	071-32		
75	46	4.5	7.7	35	32	46	75	46	4.5	134	46	4.4	18.776	-S220	071-32		
69	50	2.6	7.1	38	29	49	69	50	2.6	124	49	2.5	20.381	-S130	071-32		
61	56	2.3	6.3	43	26	56	61	56	2.3	109	56	2.2	23.048	-S130	071-32		
57	61	2.1	5.8	47	24	61	57	61	2.1	101	61	2.1	24.967	-S130	071-32		
53	64	3.4	5.5	50	23	64	53	64	3.4	95	64	3.3	26.422	-S220	071-32		
50	69	1.9	5.1	53	21	69	50	69	1.9	89	69	1.8	28.233	-S130	071-32		
48	71	3.7	5.0	55	21	71	48	71	3.7	86	71	3.6	29.156	-S400	071-32		
47	73	3.0	4.8	56	20	73	47	73	3.0	84	73	2.9	29.937	-S220	071-32		
45	76	1.7	4.6	59	19	76	45	76	1.7	80	76	1.7	31.387	-S130	071-32		
43	80	2.8	4.4	62	18	80	43	80	2.8	77	80	2.8	32.867	-S220	071-32		
43	80	3.7	4.4	62	18	80	43	80	3.7	77	80	3.8	32.940	-S400	071-32		
40	86	1.5	4.1	66	17	86	40	86	1.5	71	86	1.5	35.493	-S130	071-32		
39	88	3.2	4.0	68	17	88	39	88	3.2	70	88	3.2	36.267	-S400	071-32		
38	91	2.4	3.9	70	16	90	38	91	2.4	68	90	2.4	37.238	-S220	071-32		
35	98	3.2	3.6	76	15	98	35	98	3.2	63	98	3.2	40.333	-S660	071-32		
35	98	1.3	3.6	76	15	98	35	98	1.3	62	98	1.3	40.422	-S130	071-32		
34	100	3.2	3.5	77	15	100	34	100	3.2	62	99	3.2	40.974	-S400	071-32		



# g500-S shaft-mounted helical geared motors

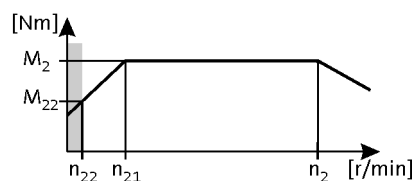


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
33	103	2.1	3.4	80	14	103	33	103	2.1	59	103	2.1	42.533	-S220	071-32	
31	111	1.2	3.2	86	13	111	31	111	1.2	55	111	1.2	45.711	-S130	071-32	
31	112	3.2	3.2	86	13	112	31	112	3.2	55	112	3.2	45.956	-S660	071-32	
30	114	2.8	3.1	88	13	114	30	114	2.8	54	114	2.8	46.933	-S400	071-32	
29	117	1.9	3.0	90	13	117	29	117	1.9	52	117	1.9	48.190	-S220	071-32	
29	119	2.8	3.0	92	12	119	29	119	2.8	52	119	2.8	48.950	-S660	071-32	
28	125	1.0	2.8	96	12	124	28	125	1.0	49	124	1.1	51.230	-S130	071-32	
27	126	1.8	2.8	97	12	125	27	126	1.8	49	125	1.8	51.620	-S220	071-32	
27	129	2.7	2.7	99	11	129	27	129	2.7	48	129	2.7	53.026	-S400	071-32	
25	136	2.8	2.6	104	11	135	25	136	2.8	45	135	2.8	55.773	-S660	071-32	
25	138	1.9	2.5	107	11	138	25	138	1.9	44	138	1.9	56.960	-S400	071-32	
24	141	0.9	2.5	109	10	141	24	141	0.9	44	141	0.9	57.933	-S130	071-32	
24	142	1.6	2.5	110	10	142	24	142	1.6	43	142	1.6	58.486	-S220	071-32	
22	156	0.8	2.3	120	9.3	156	22	156	0.8	39	156	0.8	64.200	-S130	071-32	
22	156	1.9	2.3	121	9.3	156	22	156	1.9	39	156	1.9	64.354	-S400	071-32	
21	160	1.1	2.2	124	9.1	160	21	160	1.1	38	160	1.1	65.975	-S220	071-32	
19	182	1.1	1.9	140	8.0	181	19	182	1.1	34	181	1.1	74.750	-S220	071-32	

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
35	96	2.3	3.6	74	15	96	35	96	2.3	63	96	1.9	40.012	-S220	071-32	
31	109	2.0	3.2	84	13	108	31	109	2.0	56	108	1.7	45.333	-S220	071-32	
28	119	4.9	2.9	92	12	119	28	119	4.9	51	119	4.7	49.867	-S660	071-32	
27	126	1.8	2.8	97	11	126	27	126	1.8	48	126	1.7	52.587	-S220	071-32	
25	136	4.8	2.6	105	11	136	25	136	4.8	44	136	4.6	56.818	-S660	071-32	
24	139	2.9	2.5	107	10	139	24	139	2.9	43	139	2.8	58.027	-S400	071-32	
24	143	1.5	2.4	110	10	142	24	143	1.5	42	142	1.5	59.581	-S220	071-32	
22	153	4.3	2.3	118	9.4	153	22	153	4.3	40	153	4.1	63.817	-S660	071-32	
22	157	2.6	2.2	121	9.2	157	22	157	2.6	38	157	2.4	65.559	-S400	071-32	
21	161	1.4	2.2	124	8.9	161	21	161	1.4	37	161	1.3	67.298	-S220	071-32	
20	167	4.0	2.1	129	8.6	167	20	167	4.0	36	167	3.8	69.813	-S660	071-32	
20	168	4.9	2.1	129	8.6	167	20	168	4.9	36	167	4.9	70.037	-S950	071-32	
19	174	3.8	2.0	134	8.3	174	19	174	3.8	35	174	3.8	72.713	-S660	071-32	
19	178	2.3	2.0	137	8.1	177	19	178	2.3	34	177	2.3	74.260	-S400	071-32	
19	183	1.2	1.9	141	7.9	182	19	183	1.2	33	182	1.2	76.249	-S220	071-32	
18	188	4.9	1.9	145	7.7	187	18	188	4.9	32	187	4.9	78.375	-S950	071-32	
18	190	3.5	1.8	147	7.5	190	18	190	3.5	32	190	3.5	79.545	-S660	071-32	
17	201	2.0	1.7	155	7.2	201	17	201	2.0	30	201	2.0	83.900	-S400	071-32	

# g500-S shaft-mounted helical geared motors

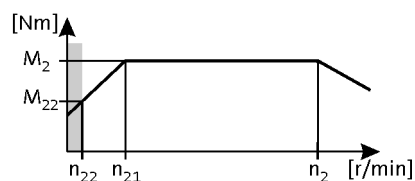


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
16	206	1.1	1.7	159	7.0	206	16	206	1.1	29	206	1.1	86.079	-S220	071-32	
16	213	3.1	1.6	164	6.7	213	16	213	3.1	28	213	3.1	89.048	-S660	071-32	
16	214	4.4	1.6	165	6.7	214	16	214	4.4	28	214	4.5	89.333	-S950	071-32	
15	227	1.8	1.5	175	6.3	227	15	227	1.8	27	227	1.8	94.984	-S400	071-32	
15	234	0.9	1.5	180	6.2	233	15	234	0.9	26	233	0.9	97.528	-S220	071-32	
14	239	4.0	1.5	184	6.0	239	14	239	4.0	25	239	4.0	99.968	-S950	071-32	
14	243	2.7	1.4	187	5.9	243	14	243	2.7	25	243	2.7	101.460	-S660	071-32	
13	257	1.6	1.4	198	5.6	256	13	257	1.6	24	256	1.6	107.314	-S400	071-32	
13	261	2.5	1.3	201	5.5	261	13	261	2.5	23	261	2.5	109.083	-S660	071-32	
13	268	0.8	1.3	206	5.4	267	13	268	0.8	23	267	0.8	111.747	-S220	071-32	
11	295	1.4	1.2	227	4.9	295	11	295	1.4	20	295	1.4	123.307	-S400	071-32	
11	298	2.2	1.2	229	4.8	297	11	298	2.2	20	297	2.2	124.289	-S660	071-32	
10	328	2.0	1.1	253	4.4	328	10	328	2.0	18	328	2.0	137.133	-S660	071-32	
10	334	1.2	1.0	257	4.3	333	10	334	1.2	18	333	1.2	139.313	-S400	071-32	
9.9	341	2.8	1.0	263	4.2	340	9.9	341	2.8	18	340	2.8	142.437	-S950	071-32	
9.0	374	1.8	0.9	288	3.8	373	9.0	374	1.8	16	373	1.8	156.249	-S660	071-32	
8.9	378	1.1	0.9	291	3.8	378	8.9	378	1.1	16	378	1.1	158.019	-S400	071-32	
8.8	382	2.5	0.9	294	3.8	381	8.8	382	2.5	16	381	2.5	159.394	-S950	071-32	
8.0	423	1.6	0.8	326	3.4	422	8.0	423	1.6	14	422	1.6	176.611	-S660	071-32	
8.0	424	2.2	0.8	327	3.4	423	8.0	424	2.2	14	423	2.2	177.178	-S950	071-32	
7.9	428	0.9	0.8	329	3.4	427	7.9	428	0.9	14	427	0.9	178.531	-S400	071-32	
7.1	475	2.0	0.7	366	3.0	474	7.1	475	2.0	13	474	2.0	198.270	-S950	071-32	
7.0	482	1.4	0.7	371	3.0	481	7.0	482	1.4	13	481	1.4	201.230	-S660	071-32	
6.9	490	0.8	0.7	377	2.9	489	6.9	490	0.8	12	489	0.8	204.412	-S400	071-32	
6.3	536	1.2	0.6	413	2.7	535	6.3	536	1.2	11	535	1.2	223.833	-S660	071-32	
6.1	549	1.7	0.6	423	2.6	548	6.1	549	1.7	11	548	1.7	229.289	-S950	071-32	
5.6	603	3.2	0.6	464	2.4	602	5.6	603	3.2	10	602	3.2	251.778	-S2100	071-32	
5.5	611	1.1	0.6	470	2.4	610	5.5	611	1.1	9.9	610	1.1	255.034	-S660	071-32	
5.5	614	1.6	0.6	473	2.3	613	5.5	614	1.6	9.8	613	1.6	256.585	-S950	071-32	
5.1	666	1.4	0.5	513	2.2	665	5.1	666	1.4	9.1	665	1.4	278.273	-S950	071-32	
5.0	670	3.1	0.5	516	2.1	669	5.0	670	3.1	9.0	669	3.1	279.807	-S2100	071-32	
5.0	672	0.9	0.5	517	2.1	670	5.0	672	0.9	9.0	670	0.9	280.500	-S660	071-32	
4.8	710	3.2	0.5	547	2.0	709	4.8	710	3.2	8.5	709	3.2	296.430	-S3100	071-32	
4.6	732	2.8	0.5	564	2.0	730	4.6	732	2.8	8.2	730	2.8	305.567	-S2100	071-32	
4.5	746	1.3	0.5	574	1.9	744	4.5	746	1.3	8.1	744	1.3	311.401	-S950	071-32	

# g500-S shaft-mounted helical geared motors

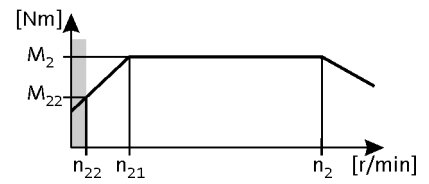
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
4.4	765	0.9	0.5	589	1.9	764	4.4	765	0.9	7.9	764	0.9	319.600	-S660	071-32	
4.2	803	3.2	0.4	618	1.8	801	4.2	803	3.2	7.5	801	3.2	335.215	-S3100	071-32	
4.2	813	2.5	0.4	626	1.8	812	4.2	813	2.5	7.4	812	2.5	339.584	-S2100	071-32	
4.0	852	1.1	0.4	656	1.7	850	4.0	852	1.1	7.1	850	1.1	355.658	-S950	071-32	
3.9	862	2.8	0.4	663	1.7	860	3.9	862	2.8	7.0	860	2.8	359.758	-S3100	071-32	
3.7	925	2.2	0.4	712	1.6	923	3.7	925	2.2	6.5	923	2.2	386.250	-S2100	071-32	
3.5	953	1.0	0.4	734	1.5	951	3.5	953	1.0	6.3	951	1.0	397.999	-S950	071-32	
3.5	974	2.8	0.4	750	1.5	972	3.5	974	2.8	6.2	972	2.8	406.829	-S3100	071-32	
3.3	1028	2.0	0.3	792	1.4	1026	3.3	1028	2.0	5.9	1026	2.0	429.250	-S2100	071-32	

# g500-S shaft-mounted helical geared motors

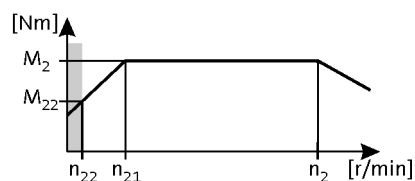


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c					
421	12	5.1	43	9.3	180	12	421	12	5.1	753	12	4.3	3.339	-S400	071-42		
384	13	4.5	40	10	164	13	384	13	4.5	687	13	3.8	3.661	-S130	071-42		
366	14	5.1	38	11	156	14	366	14	5.1	655	14	4.3	3.840	-S220	071-42		
280	18	4.2	29	14	120	18	280	18	4.2	501	18	3.5	5.021	-S130	071-42		
240	21	4.5	25	16	102	21	240	21	4.5	429	22	3.7	5.860	-S400	071-42		
219	23	4.5	23	18	94	23	219	23	4.5	392	24	3.8	6.411	-S400	071-42		
219	23	3.7	23	18	93	23	219	23	3.7	391	24	3.1	6.425	-S130	071-42		
208	25	5.1	21	19	89	25	208	25	5.1	372	25	4.3	6.767	-S220	071-42		
200	25	3.6	21	20	85	25	200	25	3.6	358	26	3.0	7.029	-S130	071-42		
188	27	5.1	19	21	80	27	188	27	5.1	337	28	4.3	7.467	-S400	071-42		
183	28	5.1	19	21	78	28	183	28	5.1	328	28	4.3	7.667	-S220	071-42		
169	30	3.8	17	23	72	30	169	30	3.8	302	31	3.2	8.322	-S130	071-42		
167	31	5.1	17	24	71	31	167	31	5.1	298	31	4.3	8.436	-S400	071-42		
149	34	3.7	15	26	64	34	149	34	3.7	267	35	3.0	9.411	-S130	071-42		
123	41	3.1	13	32	53	41	123	41	3.1	220	42	2.6	11.413	-S130	071-42		
118	43	4.5	12	33	51	43	118	43	4.5	212	44	3.7	11.876	-S220	071-42		
109	47	2.8	11	36	47	47	109	47	2.8	195	48	2.3	12.907	-S130	071-42		
108	47	4.5	11	36	46	47	108	47	4.5	194	48	3.8	12.992	-S220	071-42		
107	48	4.5	11	37	46	48	107	48	4.5	192	48	3.7	13.105	-S400	071-42		
104	49	4.5	11	38	45	49	104	49	4.5	187	50	3.7	13.456	-S220	071-42		
98	52	4.5	10	40	42	52	98	52	4.5	175	53	3.8	14.336	-S400	071-42		
96	53	2.5	9.9	41	41	53	96	53	2.5	172	54	2.0	14.606	-S130	071-42		
95	53	4.1	9.9	41	41	53	95	53	4.1	171	54	3.4	14.720	-S220	071-42		
95	54	4.5	9.8	41	41	54	95	54	4.5	170	55	3.7	14.806	-S400	071-42		
89	57	4.5	9.2	44	38	57	89	57	4.5	160	58	3.7	15.714	-S660	071-42		
88	58	2.2	9.1	45	38	58	88	58	2.2	157	59	1.9	15.979	-S130	071-42		
87	59	4.5	9.0	45	37	59	87	59	4.5	155	60	3.8	16.197	-S400	071-42		
85	60	3.7	8.8	46	36	60	85	60	3.7	152	61	3.0	16.571	-S220	071-42		
79	65	4.5	8.1	50	34	65	79	65	4.5	141	66	3.7	17.905	-S660	071-42		
78	66	2.0	8.0	51	33	66	78	66	2.0	139	67	1.9	18.069	-S130	071-42		
77	66	4.2	7.9	51	33	66	77	66	4.2	138	67	4.0	18.286	-S400	071-42		
75	68	3.2	7.7	52	32	68	75	68	3.2	134	69	3.0	18.776	-S220	071-42		
69	74	3.0	7.1	57	30	74	69	74	3.0	124	75	2.8	20.300	-S220	071-42		
69	74	1.8	7.1	57	29	74	69	74	1.8	123	75	1.7	20.381	-S130	071-42		
68	75	4.2	7.0	58	29	75	68	75	4.2	122	76	4.0	20.659	-S400	071-42		

# g500-S shaft-mounted helical geared motors

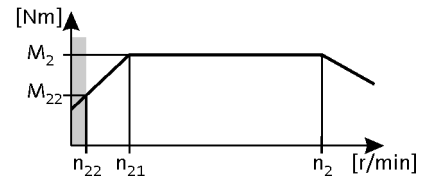


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
63	81	3.7	6.5	63	27	81	63	81	3.7	112	83	3.5	22.400	-S400	071-42	
61	83	2.6	6.3	64	26	83	61	83	2.6	109	85	2.5	23.000	-S220	071-42	
61	84	1.6	6.3	64	26	84	61	84	1.6	109	85	1.5	23.048	-S130	071-42	
56	91	1.4	5.8	70	24	91	56	91	1.4	101	92	1.4	24.967	-S130	071-42	
56	91	3.7	5.8	70	24	91	56	91	3.7	100	92	3.5	25.056	-S660	071-42	
56	92	3.7	5.7	71	24	92	56	92	3.7	99	93	3.5	25.308	-S400	071-42	
53	96	2.3	5.5	74	23	96	53	96	2.3	95	97	2.2	26.422	-S220	071-42	
50	102	1.3	5.1	79	21	102	50	102	1.3	89	104	1.2	28.233	-S130	071-42	
49	104	3.7	5.1	80	21	104	49	104	3.7	88	105	3.5	28.548	-S660	071-42	
48	106	3.4	5.0	81	21	106	48	106	3.4	86	107	3.2	29.156	-S400	071-42	
47	109	2.0	4.8	84	20	109	47	109	2.0	84	110	1.9	29.937	-S220	071-42	
45	113	3.2	4.7	87	19	113	45	113	3.2	81	115	3.1	31.167	-S660	071-42	
45	114	1.1	4.6	88	19	114	45	114	1.1	80	116	1.1	31.387	-S130	071-42	
43	119	1.9	4.4	92	18	119	43	119	1.9	77	121	1.8	32.867	-S220	071-42	
43	119	3.4	4.4	92	18	119	43	119	3.4	76	121	3.3	32.940	-S400	071-42	
40	129	1.0	4.1	99	17	129	40	129	1.0	71	131	1.0	35.493	-S130	071-42	
40	129	3.2	4.1	99	17	129	40	129	3.2	71	131	3.1	35.511	-S660	071-42	
39	132	2.9	4.0	101	17	132	39	132	2.9	69	134	2.8	36.267	-S400	071-42	
38	135	1.6	3.9	104	16	135	38	135	1.6	68	137	1.6	37.238	-S220	071-42	
35	146	2.9	3.6	113	15	146	35	146	2.9	62	149	2.8	40.333	-S660	071-42	
35	147	0.9	3.6	113	15	147	35	147	0.9	62	149	0.9	40.422	-S130	071-42	
34	149	2.7	3.5	114	15	149	34	149	2.7	61	151	2.7	40.974	-S400	071-42	
34	149	3.2	3.5	115	15	149	34	149	3.2	61	151	3.1	41.067	-S950	071-42	
33	154	1.4	3.4	119	14	154	33	154	1.4	59	157	1.4	42.533	-S220	071-42	
31	167	3.2	3.2	128	13	167	31	167	3.2	55	169	3.1	45.956	-S950	071-42	
31	167	2.9	3.2	128	13	167	31	167	2.9	55	169	2.8	45.956	-S660	071-42	
30	170	1.9	3.1	131	13	170	30	170	1.9	54	173	1.8	46.933	-S400	071-42	
29	175	1.3	3.0	135	13	175	29	175	1.3	52	178	1.2	48.190	-S220	071-42	
29	178	2.4	3.0	137	12	178	29	178	2.4	51	180	2.4	48.950	-S660	071-42	
28	181	2.8	2.9	139	12	181	28	181	2.8	51	184	2.7	49.840	-S950	071-42	
27	187	1.2	2.8	144	12	187	27	187	1.2	49	190	1.2	51.620	-S220	071-42	
27	192	1.8	2.7	148	11	192	27	192	1.8	47	195	1.8	53.026	-S400	071-42	
25	202	2.8	2.6	156	11	202	25	202	2.8	45	205	2.7	55.773	-S950	071-42	
25	202	2.4	2.6	156	11	202	25	202	2.4	45	205	2.4	55.773	-S660	071-42	
25	207	1.3	2.5	159	11	207	25	207	1.3	44	210	1.3	56.960	-S400	071-42	

# g500-S shaft-mounted helical geared motors

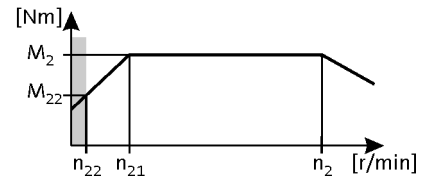


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
24	212	1.0	2.5	163	10	212	24	212	1.0	43	215	1.0	58.486	-S220	071-42	
22	228	2.2	2.3	176	9.5	228	22	228	2.2	40	232	2.2	63.000	-S950	071-42	
22	233	1.3	2.3	180	9.3	233	22	233	1.3	39	237	1.3	64.354	-S400	071-42	
20	256	2.2	2.1	197	8.5	256	20	256	2.2	36	260	2.2	70.500	-S950	071-42	

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
28	178	3.5	2.9	137	12	178	28	178	3.5	50	181	3.3	49.867	-S660	071-42	
25	203	3.2	2.6	156	11	203	25	203	3.2	44	206	3.0	56.818	-S660	071-42	
24	207	1.9	2.5	160	10	207	24	207	1.9	43	211	1.8	58.027	-S400	071-42	
22	228	2.9	2.3	176	9.4	228	22	228	2.9	39	232	2.7	63.817	-S660	071-42	
22	229	4.2	2.3	176	9.4	229	22	229	4.2	39	232	3.9	64.022	-S950	071-42	
21	234	1.7	2.2	180	9.2	234	21	234	1.7	38	238	1.6	65.559	-S400	071-42	
20	249	2.7	2.1	192	8.6	249	20	249	2.7	36	253	2.5	69.813	-S660	071-42	
20	250	3.8	2.1	193	8.6	250	20	250	3.8	36	254	3.7	70.037	-S950	071-42	
20	256	3.7	2.0	197	8.4	256	20	256	3.7	35	260	3.7	71.644	-S950	071-42	
19	260	2.5	2.0	200	8.3	260	19	260	2.5	35	264	2.5	72.713	-S660	071-42	
19	265	1.5	2.0	204	8.1	265	19	265	1.5	34	269	1.5	74.260	-S400	071-42	
18	280	3.4	1.9	216	7.7	280	18	280	3.4	32	284	3.3	78.375	-S950	071-42	
18	284	2.3	1.8	219	7.5	284	18	284	2.3	32	289	2.3	79.545	-S660	071-42	
17	300	1.3	1.7	231	7.2	300	17	300	1.3	30	304	1.3	83.900	-S400	071-42	
16	318	2.1	1.6	245	6.7	318	16	318	2.1	28	323	2.0	89.048	-S660	071-42	
16	319	3.0	1.6	246	6.7	319	16	319	3.0	28	324	2.9	89.333	-S950	071-42	
15	339	1.2	1.5	261	6.3	339	15	339	1.2	27	345	1.2	94.984	-S400	071-42	
14	350	4.5	1.5	270	6.1	350	14	350	4.5	26	356	4.4	98.095	-S2100	071-42	
14	357	2.7	1.5	275	6.0	357	14	357	2.7	25	363	2.6	99.968	-S950	071-42	
14	362	1.8	1.4	279	5.9	362	14	362	1.8	25	368	1.8	101.460	-S660	071-42	
13	383	1.0	1.4	295	5.6	383	13	383	1.0	23	389	1.0	107.314	-S400	071-42	
13	389	4.5	1.3	300	5.5	389	13	389	4.5	23	396	4.4	109.016	-S2100	071-42	
13	390	1.7	1.3	300	5.5	390	13	390	1.7	23	396	1.7	109.083	-S660	071-42	
13	391	2.4	1.3	301	5.5	391	13	391	2.4	23	397	2.4	109.433	-S950	071-42	
12	413	4.5	1.3	318	5.2	413	12	413	4.5	22	419	4.4	115.492	-S3100	071-42	
12	437	2.2	1.2	337	4.9	437	12	437	2.2	21	444	2.1	122.461	-S950	071-42	
11	441	0.9	1.2	339	4.9	441	11	441	0.9	20	447	0.9	123.307	-S400	071-42	
11	444	1.5	1.2	342	4.8	444	11	444	1.5	20	451	1.5	124.289	-S660	071-42	
11	467	4.5	1.1	359	4.6	467	11	467	4.5	19	474	4.4	130.603	-S3100	071-42	
10	490	1.4	1.1	377	4.4	490	10	490	1.4	18	498	1.3	137.133	-S660	071-42	
9.9	509	1.9	1.0	392	4.2	509	9.9	509	1.9	18	517	1.8	142.437	-S950	071-42	

# g500-S shaft-mounted helical geared motors

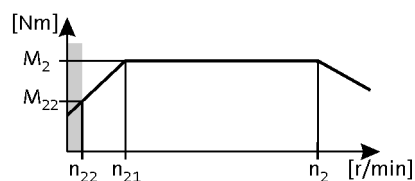


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
9.0	558	1.2	0.9	430	3.8	558	9.0	558	1.2	16	567	1.2	156.249	-S660	071-42	
9.0	559	3.7	0.9	430	3.8	559	9.0	559	3.7	16	568	3.6	156.407	-S2100	071-42	
8.8	569	1.7	0.9	439	3.8	569	8.8	569	1.7	16	578	1.6	159.394	-S950	071-42	
8.1	621	3.3	0.8	478	3.5	621	8.1	621	3.3	15	631	3.3	173.820	-S2100	071-42	
8.0	631	1.1	0.8	486	3.4	631	8.0	631	1.1	14	641	1.0	176.611	-S660	071-42	
7.9	633	1.5	0.8	487	3.4	633	7.9	633	1.5	14	643	1.5	177.178	-S950	071-42	
7.6	658	3.7	0.8	507	3.3	658	7.6	658	3.7	14	668	3.7	184.146	-S3100	071-42	
7.2	695	3.0	0.7	535	3.1	695	7.2	695	3.0	13	706	2.9	194.556	-S2100	071-42	
7.1	708	1.3	0.7	545	3.0	708	7.1	708	1.3	13	719	1.3	198.270	-S950	071-42	
7.0	719	0.9	0.7	554	3.0	719	7.0	719	0.9	13	730	0.9	201.230	-S660	071-42	
6.7	744	3.7	0.7	573	2.9	744	6.7	744	3.7	12	756	3.7	208.240	-S3100	071-42	
6.5	772	2.7	0.7	595	2.8	772	6.5	772	2.7	12	785	2.6	216.215	-S2100	071-42	
6.1	818	3.2	0.6	630	2.6	818	6.1	818	3.2	11	831	3.1	229.059	-S3100	071-42	
6.1	819	1.2	0.6	631	2.6	819	6.1	819	1.2	11	832	1.1	229.289	-S950	071-42	
5.9	851	3.2	0.6	655	2.5	851	5.9	851	3.2	11	865	3.1	238.252	-S4500	071-42	
5.6	899	2.3	0.6	693	2.4	899	5.6	899	2.3	10	914	2.2	251.778	-S2100	071-42	
5.5	917	1.0	0.6	706	2.3	917	5.5	917	1.0	9.8	931	1.0	256.585	-S950	071-42	
5.4	925	3.2	0.6	713	2.3	925	5.4	925	3.2	9.7	940	3.1	259.030	-S3100	071-42	
5.3	950	3.2	0.5	732	2.3	950	5.3	950	3.2	9.5	965	3.1	265.956	-S4500	071-42	
5.0	994	1.0	0.5	766	2.2	1010	5.0	994	1.0	9.0	1010	0.9	278.273	-S950	071-42	
5.0	1000	2.1	0.5	770	2.1	1000	5.0	1000	2.1	9.0	1015	2.0	279.807	-S2100	071-42	
4.9	1033	2.8	0.5	795	2.1	1033	4.9	1033	2.8	8.7	1049	2.7	289.151	-S4500	071-42	
4.7	1059	2.9	0.5	815	2.0	1059	4.7	1059	2.9	8.5	1076	2.8	296.430	-S3100	071-42	
4.6	1092	1.9	0.5	841	2.0	1092	4.6	1092	1.9	8.2	1109	1.9	305.567	-S2100	071-42	
4.5	1112	0.9	0.5	857	1.9	1112	4.5	1112	0.9	8.1	1130	0.8	311.401	-S950	071-42	
4.4	1153	2.8	0.4	888	1.9	1153	4.4	1153	2.8	7.8	1171	2.7	322.773	-S4500	071-42	
4.2	1198	2.6	0.4	922	1.8	1198	4.2	1198	2.6	7.5	1216	2.6	335.215	-S3100	071-42	
4.1	1213	1.7	0.4	934	1.8	1213	4.1	1213	1.7	7.4	1232	1.7	339.584	-S2100	071-42	
3.9	1285	2.4	0.4	990	1.7	1285	3.9	1285	2.4	7.0	1305	2.4	359.758	-S3100	071-42	
3.8	1306	2.2	0.4	1005	1.6	1306	3.8	1306	2.2	6.9	1326	2.2	365.500	-S4500	071-42	
3.6	1380	1.4	0.4	1063	1.6	1380	3.6	1380	1.4	6.5	1402	1.3	386.250	-S2100	071-42	
3.5	1453	2.1	0.4	1119	1.5	1453	3.5	1453	2.1	6.2	1476	2.1	406.829	-S3100	071-42	
3.4	1458	2.2	0.4	1122	1.5	1458	3.4	1458	2.2	6.2	1480	2.2	408.000	-S4500	071-42	
3.3	1533	1.3	0.3	1181	1.4	1533	3.3	1533	1.3	5.9	1558	1.3	429.250	-S2100	071-42	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
432	16	4.8	3.339	-S400	40-P80/M4	
394	18	3.6	3.661	-S130	40-P80/M4	
376	18	4.8	3.840	-S220	40-P80/M4	
287	24	3.1	5.021	-S130	40-P80/M4	
246	28	4.2	5.860	-S400	40-P80/M4	
225	31	4.3	6.411	-S400	40-P80/M4	
225	31	2.8	6.425	-S130	40-P80/M4	
213	33	4.8	6.767	-S220	40-P80/M4	
205	34	2.7	7.029	-S130	40-P80/M4	
193	36	4.8	7.467	-S400	40-P80/M4	
188	37	4.8	7.667	-S220	40-P80/M4	
173	40	2.9	8.322	-S130	40-P80/M4	
171	41	4.8	8.436	-S400	40-P80/M4	
153	45	2.8	9.411	-S130	40-P80/M4	
126	55	2.4	11.413	-S130	40-P80/M4	
122	57	3.9	11.876	-S220	40-P80/M4	
112	62	2.1	12.907	-S130	40-P80/M4	
111	63	3.5	12.992	-S220	40-P80/M4	
110	63	4.2	13.105	-S400	40-P80/M4	
107	65	3.4	13.456	-S220	40-P80/M4	
101	69	4.3	14.336	-S400	40-P80/M4	
99	70	1.9	14.606	-S130	40-P80/M4	
98	71	3.1	14.720	-S220	40-P80/M4	
98	71	4.2	14.806	-S400	40-P80/M4	
92	76	4.2	15.714	-S660	40-P80/M4	
90	77	1.7	15.979	-S130	40-P80/M4	
89	78	4.3	16.197	-S400	40-P80/M4	
87	80	2.8	16.571	-S220	40-P80/M4	
81	86	4.2	17.905	-S660	40-P80/M4	
80	87	1.5	18.069	-S130	40-P80/M4	
79	88	4.0	18.286	-S400	40-P80/M4	
77	90	2.4	18.776	-S220	40-P80/M4	
71	98	2.3	20.300	-S220	40-P80/M4	
71	98	1.3	20.381	-S130	40-P80/M4	
70	99	4.0	20.659	-S400	40-P80/M4	
64	108	3.5	22.400	-S400	40-P80/M4	
63	111	2.0	23.000	-S220	40-P80/M4	

6.4



# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
63	111	1.2	23.048	-S130	40-P80/M4	
58	120	1.1	24.967	-S130	40-P80/M4	
58	121	3.5	25.056	-S660	40-P80/M4	
57	122	3.3	25.308	-S400	40-P80/M4	
55	127	1.7	26.422	-S220	40-P80/M4	
51	136	1.0	28.233	-S130	40-P80/M4	
51	137	3.5	28.548	-S660	40-P80/M4	
50	140	2.9	29.156	-S400	40-P80/M4	
48	144	1.5	29.937	-S220	40-P80/M4	
46	150	3.0	31.167	-S660	40-P80/M4	
46	151	0.9	31.387	-S130	40-P80/M4	
44	158	1.4	32.867	-S220	40-P80/M4	
44	159	2.5	32.940	-S400	40-P80/M4	
41	171	3.0	35.511	-S660	40-P80/M4	
40	175	2.3	36.267	-S400	40-P80/M4	
39	179	1.2	37.238	-S220	40-P80/M4	
36	194	2.7	40.333	-S660	40-P80/M4	
35	197	2.0	40.974	-S400	40-P80/M4	
35	198	3.0	41.067	-S950	40-P80/M4	
34	205	1.1	42.533	-S220	40-P80/M4	
31	221	3.0	45.956	-S950	40-P80/M4	
31	221	2.7	45.956	-S660	40-P80/M4	
31	226	1.4	46.933	-S400	40-P80/M4	
30	232	1.0	48.190	-S220	40-P80/M4	
30	236	1.9	48.950	-S660	40-P80/M4	
29	240	2.6	49.840	-S950	40-P80/M4	
28	249	0.9	51.620	-S220	40-P80/M4	
27	255	1.4	53.026	-S400	40-P80/M4	
26	269	2.6	55.773	-S950	40-P80/M4	
26	269	1.9	55.773	-S660	40-P80/M4	
25	274	1.0	56.960	-S400	40-P80/M4	
23	303	2.1	63.000	-S950	40-P80/M4	
22	310	1.0	64.354	-S400	40-P80/M4	
21	339	2.1	70.500	-S950	40-P80/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
29	237	2.6	49.867	-S660	40-P80/M4	
27	249	0.9	52.587	-S220	40-P80/M4	
25	270	2.4	56.818	-S660	40-P80/M4	
25	275	1.5	58.027	-S400	40-P80/M4	
23	303	2.2	63.817	-S660	40-P80/M4	
23	304	3.1	64.022	-S950	40-P80/M4	
22	311	1.3	65.559	-S400	40-P80/M4	
21	331	2.0	69.813	-S660	40-P80/M4	
21	332	2.9	70.037	-S950	40-P80/M4	
20	340	2.8	71.644	-S950	40-P80/M4	
20	345	1.9	72.713	-S660	40-P80/M4	
19	352	1.1	74.260	-S400	40-P80/M4	
18	372	2.6	78.375	-S950	40-P80/M4	
18	377	1.8	79.545	-S660	40-P80/M4	
17	398	1.0	83.900	-S400	40-P80/M4	
16	422	1.6	89.048	-S660	40-P80/M4	
16	424	2.2	89.333	-S950	40-P80/M4	
15	451	0.9	94.984	-S400	40-P80/M4	
15	465	4.2	98.095	-S2100	40-P80/M4	
14	474	2.0	99.968	-S950	40-P80/M4	
14	481	1.4	101.460	-S660	40-P80/M4	
13	517	4.0	109.016	-S2100	40-P80/M4	
13	517	1.3	109.083	-S660	40-P80/M4	
13	519	1.8	109.433	-S950	40-P80/M4	
13	548	4.2	115.492	-S3100	40-P80/M4	
12	581	1.6	122.461	-S950	40-P80/M4	
12	590	1.1	124.289	-S660	40-P80/M4	
11	619	4.2	130.603	-S3100	40-P80/M4	
11	650	1.0	137.133	-S660	40-P80/M4	
10	676	1.4	142.437	-S950	40-P80/M4	
9.2	741	0.9	156.249	-S660	40-P80/M4	
9.2	742	2.8	156.407	-S2100	40-P80/M4	
9.1	756	1.3	159.394	-S950	40-P80/M4	
8.3	824	2.5	173.820	-S2100	40-P80/M4	
8.1	840	1.1	177.178	-S950	40-P80/M4	
7.8	873	3.5	184.146	-S3100	40-P80/M4	
7.4	923	2.2	194.556	-S2100	40-P80/M4	

6.4

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
7.3	940	1.0	198.270	-S950	40-P80/M4	
6.9	988	3.1	208.240	-S3100	40-P80/M4	
6.7	1026	2.0	216.215	-S2100	40-P80/M4	
6.3	1086	2.9	229.059	-S3100	40-P80/M4	
6.3	1088	0.9	229.289	-S950	40-P80/M4	
6.1	1130	3.0	238.252	-S4500	40-P80/M4	
5.7	1194	1.7	251.778	-S2100	40-P80/M4	
5.6	1229	2.5	259.030	-S3100	40-P80/M4	
5.4	1261	3.0	265.956	-S4500	40-P80/M4	
5.2	1327	1.5	279.807	-S2100	40-P80/M4	
5.0	1372	2.6	289.151	-S4500	40-P80/M4	
4.9	1406	2.2	296.430	-S3100	40-P80/M4	
4.7	1449	1.4	305.567	-S2100	40-P80/M4	
4.5	1531	2.6	322.773	-S4500	40-P80/M4	
4.3	1590	2.0	335.215	-S3100	40-P80/M4	
4.2	1611	1.3	339.584	-S2100	40-P80/M4	
4.0	1706	1.8	359.758	-S3100	40-P80/M4	
3.9	1734	2.1	365.500	-S4500	40-P80/M4	
3.7	1832	1.1	386.250	-S2100	40-P80/M4	
3.5	1930	1.6	406.829	-S3100	40-P80/M4	
3.5	1935	2.1	408.000	-S4500	40-P80/M4	
3.4	2036	1.0	429.250	-S2100	40-P80/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
433	24	5.9	3.339	-S400	40-P90/M4	
395	26	2.4	3.661	-S130	40-P90/M4	
376	27	5.9	3.840	-S220	40-P90/M4	
316	32	5.9	4.579	-S400	40-P90/M4	
288	35	2.2	5.021	-S130	40-P90/M4	
274	37	4.9	5.267	-S220	40-P90/M4	
247	41	5.5	5.860	-S400	40-P90/M4	
225	45	5.5	6.411	-S400	40-P90/M4	
225	45	1.9	6.425	-S130	40-P90/M4	
214	48	4.6	6.767	-S220	40-P90/M4	
210	49	5.8	6.880	-S660	40-P90/M4	
206	50	1.9	7.029	-S130	40-P90/M4	
194	53	5.9	7.467	-S400	40-P90/M4	
189	54	4.0	7.667	-S220	40-P90/M4	
188	54	5.8	7.702	-S950	40-P90/M4	
174	59	2.0	8.322	-S130	40-P90/M4	
171	59	5.9	8.436	-S400	40-P90/M4	
156	65	3.4	9.280	-S220	40-P90/M4	
154	66	1.9	9.411	-S130	40-P90/M4	
141	72	5.5	10.240	-S400	40-P90/M4	
137	74	3.0	10.514	-S220	40-P90/M4	
128	79	5.8	11.262	-S660	40-P90/M4	
127	80	1.6	11.413	-S130	40-P90/M4	
125	82	4.9	11.569	-S400	40-P90/M4	
122	84	2.6	11.876	-S220	40-P90/M4	
117	87	5.9	12.320	-S660	40-P90/M4	
113	91	5.8	12.832	-S660	40-P90/M4	
112	91	1.4	12.907	-S130	40-P90/M4	
111	92	2.4	12.992	-S220	40-P90/M4	
110	92	4.3	13.105	-S400	40-P90/M4	
107	95	2.3	13.456	-S220	40-P90/M4	
103	99	5.9	14.037	-S660	40-P90/M4	
101	101	4.0	14.336	-S400	40-P90/M4	
99	103	1.3	14.606	-S130	40-P90/M4	
98	104	2.1	14.720	-S220	40-P90/M4	
98	104	3.8	14.806	-S400	40-P90/M4	
92	111	5.5	15.714	-S660	40-P90/M4	

6.4

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
90	113	1.2	15.979	-S130	40-P90/M4	
90	113	5.8	16.000	-S950	40-P90/M4	
89	114	3.5	16.197	-S400	40-P90/M4	
87	117	1.9	16.571	-S220	40-P90/M4	
81	126	5.8	17.905	-S950	40-P90/M4	
81	126	5.2	17.905	-S660	40-P90/M4	
80	127	1.0	18.069	-S130	40-P90/M4	
79	129	3.1	18.286	-S400	40-P90/M4	
77	132	1.7	18.776	-S220	40-P90/M4	
75	136	4.8	19.250	-S660	40-P90/M4	
71	143	1.5	20.300	-S220	40-P90/M4	
71	144	0.9	20.381	-S130	40-P90/M4	
70	146	2.8	20.659	-S400	40-P90/M4	
66	155	4.3	21.933	-S660	40-P90/M4	
65	158	2.5	22.400	-S400	40-P90/M4	
63	162	1.4	23.000	-S220	40-P90/M4	
58	177	3.3	25.056	-S660	40-P90/M4	
57	178	2.2	25.308	-S400	40-P90/M4	
57	180	4.8	25.511	-S950	40-P90/M4	
55	186	1.2	26.422	-S220	40-P90/M4	
51	201	4.7	28.548	-S950	40-P90/M4	
51	201	3.3	28.548	-S660	40-P90/M4	
50	206	2.0	29.156	-S400	40-P90/M4	
48	211	1.0	29.937	-S220	40-P90/M4	
46	220	3.0	31.167	-S660	40-P90/M4	
46	221	4.0	31.267	-S950	40-P90/M4	
44	232	1.0	32.867	-S220	40-P90/M4	
44	232	1.7	32.940	-S400	40-P90/M4	
41	247	3.9	34.989	-S950	40-P90/M4	
41	250	2.6	35.511	-S660	40-P90/M4	
40	256	1.6	36.267	-S400	40-P90/M4	
39	263	0.8	37.238	-S220	40-P90/M4	
36	284	1.9	40.333	-S660	40-P90/M4	
35	289	1.4	40.974	-S400	40-P90/M4	
35	290	3.3	41.067	-S950	40-P90/M4	
33	313	4.0	44.431	-S2100	40-P90/M4	
31	324	2.9	45.956	-S950	40-P90/M4	

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# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
31	324	1.9	45.956	-S660	40-P90/M4	
30	345	1.3	48.950	-S660	40-P90/M4	
29	348	4.0	49.378	-S2100	40-P90/M4	
29	352	2.6	49.840	-S950	40-P90/M4	
28	369	4.0	52.311	-S3100	40-P90/M4	
27	380	3.5	53.924	-S2100	40-P90/M4	
26	393	2.4	55.773	-S950	40-P90/M4	
26	393	1.3	55.773	-S660	40-P90/M4	
24	417	4.0	59.156	-S3100	40-P90/M4	
24	423	3.5	59.927	-S2100	40-P90/M4	
23	444	1.5	63.000	-S950	40-P90/M4	
23	448	3.5	63.487	-S3100	40-P90/M4	
21	481	2.7	68.162	-S2100	40-P90/M4	
21	497	1.5	70.500	-S950	40-P90/M4	
20	506	3.5	71.793	-S3100	40-P90/M4	
19	534	2.7	75.750	-S2100	40-P90/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
29	346	1.8	49.867	-S660	40-P90/M4	
29	348	2.7	50.027	-S950	40-P90/M4	
26	389	2.4	55.982	-S950	40-P90/M4	
25	395	1.7	56.818	-S660	40-P90/M4	
23	443	1.5	63.817	-S660	40-P90/M4	
23	445	2.1	64.022	-S950	40-P90/M4	
21	485	1.4	69.813	-S660	40-P90/M4	
21	487	2.0	70.037	-S950	40-P90/M4	
21	488	4.2	70.302	-S2100	40-P90/M4	
20	498	1.9	71.644	-S950	40-P90/M4	
20	505	1.3	72.713	-S660	40-P90/M4	
19	534	3.8	76.907	-S2100	40-P90/M4	
19	543	3.8	78.128	-S2100	40-P90/M4	
18	544	1.7	78.375	-S950	40-P90/M4	
18	553	1.2	79.545	-S660	40-P90/M4	
18	575	5.4	82.769	-S3100	40-P90/M4	
17	594	3.5	85.468	-S2100	40-P90/M4	
16	619	1.1	89.048	-S660	40-P90/M4	
16	621	1.5	89.333	-S950	40-P90/M4	
16	629	4.9	90.546	-S3100	40-P90/M4	
16	645	5.8	92.825	-S4500	40-P90/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
15	650	4.8	93.599	-S3100	40-P90/M4	
15	681	3.0	98.095	-S2100	40-P90/M4	
15	694	1.4	99.968	-S950	40-P90/M4	
14	705	0.9	101.460	-S660	40-P90/M4	
14	711	4.4	102.393	-S3100	40-P90/M4	
14	720	5.8	103.619	-S4500	40-P90/M4	
13	757	2.7	109.016	-S2100	40-P90/M4	
13	758	0.9	109.083	-S660	40-P90/M4	
13	760	1.3	109.433	-S950	40-P90/M4	
13	802	3.9	115.492	-S3100	40-P90/M4	
12	835	2.5	120.167	-S2100	40-P90/M4	
12	851	1.1	122.461	-S950	40-P90/M4	
11	907	3.4	130.603	-S3100	40-P90/M4	
11	928	2.2	133.544	-S2100	40-P90/M4	
10	983	3.2	141.478	-S3100	40-P90/M4	
10	990	1.0	142.437	-S950	40-P90/M4	
9.8	1028	4.4	148.005	-S4500	40-P90/M4	
9.2	1087	1.9	156.407	-S2100	40-P90/M4	
9.1	1107	0.9	159.394	-S950	40-P90/M4	
9.0	1111	2.8	159.989	-S3100	40-P90/M4	
8.7	1148	3.9	165.215	-S4500	40-P90/M4	
8.3	1208	1.7	173.820	-S2100	40-P90/M4	
8.0	1260	3.6	181.396	-S4500	40-P90/M4	
7.8	1279	2.4	184.146	-S3100	40-P90/M4	
7.4	1352	1.5	194.556	-S2100	40-P90/M4	
7.1	1407	3.2	202.489	-S4500	40-P90/M4	
6.9	1447	2.1	208.240	-S3100	40-P90/M4	
6.7	1502	1.4	216.215	-S2100	40-P90/M4	
6.3	1591	2.0	229.059	-S3100	40-P90/M4	
6.1	1655	2.7	238.252	-S4500	40-P90/M4	
5.7	1749	1.2	251.778	-S2100	40-P90/M4	
5.6	1800	1.7	259.030	-S3100	40-P90/M4	
5.4	1848	2.4	265.956	-S4500	40-P90/M4	
5.2	1944	1.1	279.807	-S2100	40-P90/M4	
5.0	2009	2.2	289.151	-S4500	40-P90/M4	
4.9	2059	1.5	296.430	-S3100	40-P90/M4	
4.7	2123	1.0	305.567	-S2100	40-P90/M4	

6.4

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
4.5	2242	2.0	322.773	-S4500	40-P90/M4	
4.3	2329	1.3	335.215	-S3100	40-P90/M4	
4.3	2359	0.9	339.584	-S2100	40-P90/M4	
4.0	2499	1.2	359.758	-S3100	40-P90/M4	
4.0	2539	1.6	365.500	-S4500	40-P90/M4	
3.6	2826	1.1	406.829	-S3100	40-P90/M4	
3.5	2834	1.6	408.000	-S4500	40-P90/M4	



# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
430	32	4.3	3.339	-S400	40-P90/L4	
392	35	1.8	3.661	-S130	40-P90/L4	
374	37	4.3	3.840	-S220	40-P90/L4	
313	44	4.3	4.579	-S400	40-P90/L4	
286	49	1.6	5.021	-S130	40-P90/L4	
273	51	3.6	5.267	-S220	40-P90/L4	
245	57	4.0	5.860	-S400	40-P90/L4	
224	62	4.0	6.411	-S400	40-P90/L4	
223	62	1.4	6.425	-S130	40-P90/L4	
212	66	3.4	6.767	-S220	40-P90/L4	
209	67	4.2	6.880	-S660	40-P90/L4	
204	68	1.4	7.029	-S130	40-P90/L4	
192	72	4.3	7.467	-S400	40-P90/L4	
187	74	2.9	7.667	-S220	40-P90/L4	
186	75	4.2	7.702	-S950	40-P90/L4	
172	81	1.4	8.322	-S130	40-P90/L4	
170	82	4.3	8.436	-S400	40-P90/L4	
155	90	2.5	9.280	-S220	40-P90/L4	
153	91	1.4	9.411	-S130	40-P90/L4	
140	99	4.0	10.240	-S400	40-P90/L4	
137	102	2.2	10.514	-S220	40-P90/L4	
127	109	4.2	11.262	-S660	40-P90/L4	
126	111	1.2	11.413	-S130	40-P90/L4	
124	112	3.6	11.569	-S400	40-P90/L4	
121	115	1.9	11.876	-S220	40-P90/L4	
117	119	4.3	12.320	-S660	40-P90/L4	
112	124	4.2	12.832	-S660	40-P90/L4	
111	125	1.0	12.907	-S130	40-P90/L4	
111	126	1.8	12.992	-S220	40-P90/L4	
110	127	3.2	13.105	-S400	40-P90/L4	
107	130	1.7	13.456	-S220	40-P90/L4	
102	136	4.3	14.037	-S660	40-P90/L4	
100	139	2.9	14.336	-S400	40-P90/L4	
98	141	0.9	14.606	-S130	40-P90/L4	
98	143	1.5	14.720	-S220	40-P90/L4	
97	143	2.8	14.806	-S400	40-P90/L4	
91	152	4.0	15.714	-S660	40-P90/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
90	155	0.8	15.979	-S130	40-P90/L4	
90	155	4.2	16.000	-S950	40-P90/L4	
89	157	2.6	16.197	-S400	40-P90/L4	
87	160	1.4	16.571	-S220	40-P90/L4	
80	173	4.2	17.905	-S950	40-P90/L4	
80	173	3.8	17.905	-S660	40-P90/L4	
79	177	2.3	18.286	-S400	40-P90/L4	
76	182	1.2	18.776	-S220	40-P90/L4	
75	186	3.5	19.250	-S660	40-P90/L4	
71	197	1.1	20.300	-S220	40-P90/L4	
70	200	2.0	20.659	-S400	40-P90/L4	
65	212	3.1	21.933	-S660	40-P90/L4	
64	217	1.8	22.400	-S400	40-P90/L4	
62	223	1.0	23.000	-S220	40-P90/L4	
57	243	2.4	25.056	-S660	40-P90/L4	
57	245	1.6	25.308	-S400	40-P90/L4	
56	247	3.5	25.511	-S950	40-P90/L4	
54	256	0.9	26.422	-S220	40-P90/L4	
50	276	3.4	28.548	-S950	40-P90/L4	
50	276	2.4	28.548	-S660	40-P90/L4	
49	282	1.4	29.156	-S400	40-P90/L4	
46	302	2.2	31.167	-S660	40-P90/L4	
46	303	2.9	31.267	-S950	40-P90/L4	
44	319	1.3	32.940	-S400	40-P90/L4	
41	339	2.8	34.989	-S950	40-P90/L4	
40	344	1.9	35.511	-S660	40-P90/L4	
40	351	1.1	36.267	-S400	40-P90/L4	
36	391	1.4	40.333	-S660	40-P90/L4	
35	397	1.0	40.974	-S400	40-P90/L4	
35	398	2.4	41.067	-S950	40-P90/L4	
32	430	2.9	44.431	-S2100	40-P90/L4	
31	445	2.1	45.956	-S950	40-P90/L4	
31	445	1.4	45.956	-S660	40-P90/L4	
29	474	0.9	48.950	-S660	40-P90/L4	
29	478	2.9	49.378	-S2100	40-P90/L4	
29	483	1.9	49.840	-S950	40-P90/L4	
27	507	2.9	52.311	-S3100	40-P90/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
27	522	2.6	53.924	-S2100	40-P90/L4	
26	540	1.8	55.773	-S950	40-P90/L4	
26	540	0.9	55.773	-S660	40-P90/L4	
24	573	2.9	59.156	-S3100	40-P90/L4	
24	580	2.6	59.927	-S2100	40-P90/L4	
23	610	1.1	63.000	-S950	40-P90/L4	
23	615	2.6	63.487	-S3100	40-P90/L4	
21	660	2.0	68.162	-S2100	40-P90/L4	
20	683	1.1	70.500	-S950	40-P90/L4	
20	695	2.6	71.793	-S3100	40-P90/L4	
19	734	2.0	75.750	-S2100	40-P90/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
29	476	1.3	49.867	-S660	40-P90/L4	
29	477	2.0	50.027	-S950	40-P90/L4	
26	534	1.8	55.982	-S950	40-P90/L4	
25	542	1.2	56.818	-S660	40-P90/L4	
23	609	1.1	63.817	-S660	40-P90/L4	
22	611	1.6	64.022	-S950	40-P90/L4	
21	666	1.0	69.813	-S660	40-P90/L4	
21	668	1.4	70.037	-S950	40-P90/L4	
20	671	3.1	70.302	-S2100	40-P90/L4	
20	683	1.4	71.644	-S950	40-P90/L4	
20	694	1.0	72.713	-S660	40-P90/L4	
19	734	2.8	76.907	-S2100	40-P90/L4	
18	745	2.8	78.128	-S2100	40-P90/L4	
18	748	1.3	78.375	-S950	40-P90/L4	
18	759	0.9	79.545	-S660	40-P90/L4	
17	790	3.9	82.769	-S3100	40-P90/L4	
17	815	2.5	85.468	-S2100	40-P90/L4	
16	852	1.1	89.333	-S950	40-P90/L4	
16	864	3.6	90.546	-S3100	40-P90/L4	
16	885	4.2	92.825	-S4500	40-P90/L4	
15	893	3.5	93.599	-S3100	40-P90/L4	
15	936	2.2	98.095	-S2100	40-P90/L4	
14	954	1.0	99.968	-S950	40-P90/L4	
14	977	3.2	102.393	-S3100	40-P90/L4	
14	988	4.2	103.619	-S4500	40-P90/L4	
13	1040	2.0	109.016	-S2100	40-P90/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
13	1044	0.9	109.433	-S950	40-P90/L4	
12	1102	2.8	115.492	-S3100	40-P90/L4	
12	1146	1.8	120.167	-S2100	40-P90/L4	
12	1168	0.8	122.461	-S950	40-P90/L4	
11	1246	2.5	130.603	-S3100	40-P90/L4	
11	1274	1.6	133.544	-S2100	40-P90/L4	
10	1350	2.3	141.478	-S3100	40-P90/L4	
9.7	1412	3.2	148.005	-S4500	40-P90/L4	
9.2	1492	1.4	156.407	-S2100	40-P90/L4	
9.0	1526	2.0	159.989	-S3100	40-P90/L4	
8.7	1576	2.9	165.215	-S4500	40-P90/L4	
8.3	1658	1.2	173.820	-S2100	40-P90/L4	
7.9	1730	2.6	181.396	-S4500	40-P90/L4	
7.8	1757	1.8	184.146	-S3100	40-P90/L4	
7.4	1856	1.1	194.556	-S2100	40-P90/L4	
7.1	1932	2.3	202.489	-S4500	40-P90/L4	
6.9	1986	1.6	208.240	-S3100	40-P90/L4	
6.6	2063	1.0	216.215	-S2100	40-P90/L4	
6.3	2185	1.4	229.059	-S3100	40-P90/L4	
6.0	2273	2.0	238.252	-S4500	40-P90/L4	
5.7	2402	0.9	251.778	-S2100	40-P90/L4	
5.5	2471	1.3	259.030	-S3100	40-P90/L4	
5.4	2537	1.8	265.956	-S4500	40-P90/L4	
5.0	2758	1.6	289.151	-S4500	40-P90/L4	
4.8	2828	1.1	296.430	-S3100	40-P90/L4	
4.4	3079	1.5	322.773	-S4500	40-P90/L4	
4.3	3198	1.0	335.215	-S3100	40-P90/L4	
4.0	3432	0.9	359.758	-S3100	40-P90/L4	
3.9	3487	1.1	365.500	-S4500	40-P90/L4	
3.5	3892	1.1	408.000	-S4500	40-P90/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
433	47	4.3	3.339	-S400	40-P100/M4	
377	54	3.3	3.840	-S220	40-P100/M4	
369	55	5.6	3.920	-S660	40-P100/M4	
316	65	3.8	4.579	-S400	40-P100/M4	
275	74	2.4	5.267	-S220	40-P100/M4	
269	76	5.6	5.376	-S660	40-P100/M4	
268	76	5.7	5.391	-S950	40-P100/M4	
247	83	3.1	5.860	-S400	40-P100/M4	
240	85	5.6	6.038	-S950	40-P100/M4	
226	90	2.9	6.411	-S400	40-P100/M4	
225	90	5.6	6.417	-S660	40-P100/M4	
214	95	2.3	6.767	-S220	40-P100/M4	
210	97	4.7	6.880	-S660	40-P100/M4	
198	103	5.6	7.311	-S660	40-P100/M4	
194	105	3.5	7.467	-S400	40-P100/M4	
189	108	2.0	7.667	-S220	40-P100/M4	
188	109	4.7	7.702	-S950	40-P100/M4	
175	117	5.7	8.272	-S2100	40-P100/M4	
171	119	3.2	8.436	-S400	40-P100/M4	
164	124	5.1	8.800	-S660	40-P100/M4	
162	126	5.7	8.917	-S3100	40-P100/M4	
156	131	1.7	9.280	-S220	40-P100/M4	
144	141	4.4	10.027	-S660	40-P100/M4	
141	144	2.8	10.240	-S400	40-P100/M4	
138	148	1.5	10.514	-S220	40-P100/M4	
129	158	5.7	11.200	-S950	40-P100/M4	
128	159	4.2	11.262	-S660	40-P100/M4	
125	163	2.5	11.569	-S400	40-P100/M4	
122	167	1.3	11.876	-S220	40-P100/M4	
117	174	3.8	12.320	-S660	40-P100/M4	
115	177	5.4	12.544	-S950	40-P100/M4	
113	181	3.7	12.832	-S660	40-P100/M4	
111	183	1.2	12.992	-S220	40-P100/M4	
110	185	2.2	13.105	-S400	40-P100/M4	
108	190	1.2	13.456	-S220	40-P100/M4	
103	198	4.8	14.037	-S950	40-P100/M4	
103	198	3.3	14.037	-S660	40-P100/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
101	202	2.0	14.336	-S400	40-P100/M4	
98	207	1.1	14.720	-S220	40-P100/M4	
98	209	1.9	14.806	-S400	40-P100/M4	
92	222	3.0	15.714	-S660	40-P100/M4	
90	226	4.2	16.000	-S950	40-P100/M4	
89	228	1.8	16.197	-S400	40-P100/M4	
87	234	0.9	16.571	-S220	40-P100/M4	
85	240	5.7	17.022	-S2100	40-P100/M4	
81	252	3.8	17.905	-S950	40-P100/M4	
81	252	2.6	17.905	-S660	40-P100/M4	
79	258	1.6	18.286	-S400	40-P100/M4	
77	265	0.8	18.776	-S220	40-P100/M4	
76	267	5.7	18.917	-S2100	40-P100/M4	
75	271	2.4	19.250	-S660	40-P100/M4	
74	276	3.4	19.600	-S950	40-P100/M4	
72	283	5.7	20.041	-S3100	40-P100/M4	
70	291	1.4	20.659	-S400	40-P100/M4	
66	309	3.1	21.933	-S950	40-P100/M4	
66	309	2.1	21.933	-S660	40-P100/M4	
65	316	1.3	22.400	-S400	40-P100/M4	
64	319	5.7	22.663	-S3100	40-P100/M4	
58	353	1.6	25.056	-S660	40-P100/M4	
57	357	1.1	25.308	-S400	40-P100/M4	
57	360	2.6	25.511	-S950	40-P100/M4	
51	399	4.1	28.275	-S2100	40-P100/M4	
51	402	2.4	28.548	-S950	40-P100/M4	
51	402	1.6	28.548	-S660	40-P100/M4	
46	439	1.5	31.167	-S660	40-P100/M4	
46	441	2.2	31.267	-S950	40-P100/M4	
46	443	4.1	31.422	-S2100	40-P100/M4	
43	469	4.1	33.289	-S3100	40-P100/M4	
42	484	3.5	34.333	-S2100	40-P100/M4	
41	493	1.9	34.989	-S950	40-P100/M4	
41	501	1.3	35.511	-S660	40-P100/M4	
38	531	4.1	37.644	-S3100	40-P100/M4	
38	538	3.5	38.156	-S2100	40-P100/M4	
36	570	3.5	40.422	-S3100	40-P100/M4	

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# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
35	579	1.6	41.067	-S950	40-P100/M4	
34	593	3.5	42.044	-S4500	40-P100/M4	
33	626	2.8	44.431	-S2100	40-P100/M4	
32	644	3.5	45.711	-S3100	40-P100/M4	
32	648	1.5	45.956	-S950	40-P100/M4	
31	662	3.5	46.933	-S4500	40-P100/M4	
29	696	2.8	49.378	-S2100	40-P100/M4	
29	703	1.3	49.840	-S950	40-P100/M4	
28	719	2.9	51.027	-S4500	40-P100/M4	
28	737	2.8	52.311	-S3100	40-P100/M4	
27	760	2.3	53.924	-S2100	40-P100/M4	
26	786	1.2	55.773	-S950	40-P100/M4	
25	803	2.9	56.960	-S4500	40-P100/M4	
24	834	2.8	59.156	-S3100	40-P100/M4	
24	845	2.3	59.927	-S2100	40-P100/M4	
23	895	2.3	63.487	-S3100	40-P100/M4	
22	909	2.3	64.500	-S4500	40-P100/M4	
21	961	1.5	68.162	-S2100	40-P100/M4	
20	1012	2.3	71.793	-S3100	40-P100/M4	
20	1015	2.3	72.000	-S4500	40-P100/M4	
19	1068	1.5	75.750	-S2100	40-P100/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
36	556	3.5	40.056	-S2100	40-P100/M4	
33	618	3.3	44.515	-S2100	40-P100/M4	
31	655	4.5	47.159	-S3100	40-P100/M4	
29	695	1.4	50.027	-S950	40-P100/M4	
27	740	4.1	53.330	-S3100	40-P100/M4	
26	763	2.7	54.933	-S2100	40-P100/M4	
26	777	1.2	55.982	-S950	40-P100/M4	
24	848	2.4	61.049	-S2100	40-P100/M4	
23	889	1.1	64.022	-S950	40-P100/M4	
22	898	3.5	64.676	-S3100	40-P100/M4	
22	902	5.0	64.978	-S4500	40-P100/M4	
21	972	1.0	70.037	-S950	40-P100/M4	
21	976	2.1	70.302	-S2100	40-P100/M4	
20	995	1.0	71.644	-S950	40-P100/M4	
20	1007	4.5	72.533	-S4500	40-P100/M4	
20	1010	4.5	72.775	-S4500	40-P100/M4	

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# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
20	1015	3.1	73.138	-S3100	40-P100/M4	
19	1068	1.9	76.907	-S2100	40-P100/M4	
19	1085	1.9	78.128	-S2100	40-P100/M4	
18	1088	0.9	78.375	-S950	40-P100/M4	
18	1128	4.0	81.237	-S4500	40-P100/M4	
18	1149	2.7	82.769	-S3100	40-P100/M4	
17	1187	1.7	85.468	-S2100	40-P100/M4	
16	1257	2.5	90.546	-S3100	40-P100/M4	
16	1289	3.5	92.825	-S4500	40-P100/M4	
15	1300	2.4	93.599	-S3100	40-P100/M4	
15	1362	1.5	98.095	-S2100	40-P100/M4	
14	1422	2.2	102.393	-S3100	40-P100/M4	
14	1439	3.1	103.619	-S4500	40-P100/M4	
13	1514	1.4	109.016	-S2100	40-P100/M4	
13	1579	2.9	113.711	-S4500	40-P100/M4	
13	1604	1.9	115.492	-S3100	40-P100/M4	
12	1668	1.2	120.167	-S2100	40-P100/M4	
11	1762	2.6	126.933	-S4500	40-P100/M4	
11	1813	1.7	130.603	-S3100	40-P100/M4	
11	1854	1.1	133.544	-S2100	40-P100/M4	
10	1964	1.6	141.478	-S3100	40-P100/M4	
9.8	2055	2.2	148.005	-S4500	40-P100/M4	
9.2	2172	0.9	156.407	-S2100	40-P100/M4	
9.0	2221	1.4	159.989	-S3100	40-P100/M4	
8.8	2294	2.0	165.215	-S4500	40-P100/M4	
8.3	2413	0.9	173.820	-S2100	40-P100/M4	
8.0	2519	1.8	181.396	-S4500	40-P100/M4	
7.9	2557	1.2	184.146	-S3100	40-P100/M4	
7.1	2811	1.6	202.489	-S4500	40-P100/M4	
6.9	2891	1.1	208.240	-S3100	40-P100/M4	
6.3	3180	1.0	229.059	-S3100	40-P100/M4	
6.1	3308	1.4	238.252	-S4500	40-P100/M4	
5.6	3597	0.9	259.030	-S3100	40-P100/M4	
5.4	3693	1.2	265.956	-S4500	40-P100/M4	
5.0	4015	1.1	289.151	-S4500	40-P100/M4	
4.5	4482	1.0	322.773	-S4500	40-P100/M4	



# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
435	64	3.2	3.339	-S400	40-P100/L4	
378	73	2.4	3.840	-S220	40-P100/L4	
371	75	4.1	3.920	-S660	40-P100/L4	
317	88	2.8	4.579	-S400	40-P100/L4	
276	101	1.8	5.267	-S220	40-P100/L4	
270	103	4.1	5.376	-S660	40-P100/L4	
270	103	4.2	5.391	-S950	40-P100/L4	
248	112	2.3	5.860	-S400	40-P100/L4	
241	116	4.1	6.038	-S950	40-P100/L4	
227	123	2.1	6.411	-S400	40-P100/L4	
226	123	4.1	6.417	-S660	40-P100/L4	
215	129	1.7	6.767	-S220	40-P100/L4	
211	132	3.5	6.880	-S660	40-P100/L4	
199	140	4.1	7.311	-S660	40-P100/L4	
195	143	2.6	7.467	-S400	40-P100/L4	
190	147	1.5	7.667	-S220	40-P100/L4	
189	147	3.5	7.702	-S950	40-P100/L4	
176	158	4.2	8.272	-S2100	40-P100/L4	
172	161	2.4	8.436	-S400	40-P100/L4	
165	168	3.8	8.800	-S660	40-P100/L4	
163	171	4.2	8.917	-S3100	40-P100/L4	
157	178	1.2	9.280	-S220	40-P100/L4	
145	192	3.3	10.027	-S660	40-P100/L4	
142	196	2.0	10.240	-S400	40-P100/L4	
138	201	1.1	10.514	-S220	40-P100/L4	
130	214	4.2	11.200	-S950	40-P100/L4	
129	215	3.1	11.262	-S660	40-P100/L4	
126	221	1.8	11.569	-S400	40-P100/L4	
122	227	1.0	11.876	-S220	40-P100/L4	
118	236	2.8	12.320	-S660	40-P100/L4	
116	240	4.0	12.544	-S950	40-P100/L4	
113	245	2.7	12.832	-S660	40-P100/L4	
112	249	0.9	12.992	-S220	40-P100/L4	
111	251	1.6	13.105	-S400	40-P100/L4	
108	257	0.9	13.456	-S220	40-P100/L4	
104	269	3.5	14.037	-S950	40-P100/L4	
104	269	2.5	14.037	-S660	40-P100/L4	

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# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
101	274	1.5	14.336	-S400	40-P100/L4	
98	283	1.4	14.806	-S400	40-P100/L4	
93	301	2.2	15.714	-S660	40-P100/L4	
91	306	3.1	16.000	-S950	40-P100/L4	
90	310	1.3	16.197	-S400	40-P100/L4	
85	326	4.2	17.022	-S2100	40-P100/L4	
81	343	2.8	17.905	-S950	40-P100/L4	
81	343	1.9	17.905	-S660	40-P100/L4	
80	350	1.1	18.286	-S400	40-P100/L4	
77	362	4.2	18.917	-S2100	40-P100/L4	
76	368	1.8	19.250	-S660	40-P100/L4	
74	375	2.5	19.600	-S950	40-P100/L4	
73	383	4.2	20.041	-S3100	40-P100/L4	
70	395	1.0	20.659	-S400	40-P100/L4	
66	420	2.3	21.933	-S950	40-P100/L4	
66	420	1.6	21.933	-S660	40-P100/L4	
65	428	0.9	22.400	-S400	40-P100/L4	
64	434	4.2	22.663	-S3100	40-P100/L4	
58	479	1.2	25.056	-S660	40-P100/L4	
57	484	0.8	25.308	-S400	40-P100/L4	
57	488	2.0	25.511	-S950	40-P100/L4	
51	541	3.0	28.275	-S2100	40-P100/L4	
51	546	1.7	28.548	-S950	40-P100/L4	
51	546	1.2	28.548	-S660	40-P100/L4	
47	596	1.1	31.167	-S660	40-P100/L4	
47	598	1.6	31.267	-S950	40-P100/L4	
46	601	3.0	31.422	-S2100	40-P100/L4	
44	637	3.0	33.289	-S3100	40-P100/L4	
42	657	2.6	34.333	-S2100	40-P100/L4	
42	669	1.4	34.989	-S950	40-P100/L4	
41	679	1.0	35.511	-S660	40-P100/L4	
39	720	3.0	37.644	-S3100	40-P100/L4	
38	730	2.6	38.156	-S2100	40-P100/L4	
36	773	2.6	40.422	-S3100	40-P100/L4	
35	786	1.2	41.067	-S950	40-P100/L4	
35	804	2.6	42.044	-S4500	40-P100/L4	
33	850	2.1	44.431	-S2100	40-P100/L4	

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# g500-S shaft-mounted helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
32	874	2.6	45.711	-S3100	40-P100/L4	
32	879	1.1	45.956	-S950	40-P100/L4	
31	898	2.6	46.933	-S4500	40-P100/L4	
29	945	2.1	49.378	-S2100	40-P100/L4	
29	953	1.0	49.840	-S950	40-P100/L4	
29	976	2.1	51.027	-S4500	40-P100/L4	
28	1001	2.1	52.311	-S3100	40-P100/L4	
27	1032	1.7	53.924	-S2100	40-P100/L4	
26	1067	0.9	55.773	-S950	40-P100/L4	
26	1090	2.1	56.960	-S4500	40-P100/L4	
25	1132	2.1	59.156	-S3100	40-P100/L4	
24	1146	1.7	59.927	-S2100	40-P100/L4	
23	1214	1.7	63.487	-S3100	40-P100/L4	
23	1234	1.7	64.500	-S4500	40-P100/L4	
21	1304	1.1	68.162	-S2100	40-P100/L4	
20	1373	1.7	71.793	-S3100	40-P100/L4	
20	1377	1.7	72.000	-S4500	40-P100/L4	
19	1449	1.1	75.750	-S2100	40-P100/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
36	755	2.6	40.056	-S2100	40-P100/L4	
33	839	2.4	44.515	-S2100	40-P100/L4	
31	889	3.3	47.159	-S3100	40-P100/L4	
29	943	1.0	50.027	-S950	40-P100/L4	
27	1005	3.0	53.330	-S3100	40-P100/L4	
27	1035	2.0	54.933	-S2100	40-P100/L4	
26	1055	0.9	55.982	-S950	40-P100/L4	
24	1150	1.8	61.049	-S2100	40-P100/L4	
23	1219	2.5	64.676	-S3100	40-P100/L4	
22	1224	3.7	64.978	-S4500	40-P100/L4	
21	1325	1.6	70.302	-S2100	40-P100/L4	
20	1367	3.3	72.533	-S4500	40-P100/L4	
20	1371	3.3	72.775	-S4500	40-P100/L4	
20	1378	2.3	73.138	-S3100	40-P100/L4	
19	1449	1.4	76.907	-S2100	40-P100/L4	
19	1472	1.4	78.128	-S2100	40-P100/L4	
18	1531	2.9	81.237	-S4500	40-P100/L4	
18	1560	2.0	82.769	-S3100	40-P100/L4	
17	1610	1.3	85.468	-S2100	40-P100/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
16	1706	1.8	90.546	-S3100	40-P100/L4	
16	1749	2.6	92.825	-S4500	40-P100/L4	
16	1764	1.8	93.599	-S3100	40-P100/L4	
15	1848	1.1	98.095	-S2100	40-P100/L4	
14	1929	1.6	102.393	-S3100	40-P100/L4	
14	1952	2.3	103.619	-S4500	40-P100/L4	
13	2054	1.0	109.016	-S2100	40-P100/L4	
13	2143	2.1	113.711	-S4500	40-P100/L4	
13	2176	1.4	115.492	-S3100	40-P100/L4	
12	2264	0.9	120.167	-S2100	40-P100/L4	
11	2392	1.9	126.933	-S4500	40-P100/L4	
11	2461	1.3	130.603	-S3100	40-P100/L4	
11	2516	0.8	133.544	-S2100	40-P100/L4	
10	2666	1.2	141.478	-S3100	40-P100/L4	
9.8	2789	1.6	148.005	-S4500	40-P100/L4	
9.1	3015	1.0	159.989	-S3100	40-P100/L4	
8.8	3113	1.5	165.215	-S4500	40-P100/L4	
8.0	3418	1.3	181.396	-S4500	40-P100/L4	
7.9	3470	0.9	184.146	-S3100	40-P100/L4	
7.2	3815	1.2	202.489	-S4500	40-P100/L4	
6.1	4489	1.0	238.252	-S4500	40-P100/L4	
5.5	5011	0.9	265.956	-S4500	40-P100/L4	
5.0	5448	0.8	289.151	-S4500	40-P100/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
430	86	2.4	3.339	-S400	40-P112/M4	
366	101	3.4	3.920	-S660	40-P112/M4	
328	113	4.2	4.380	-S950	40-P112/M4	
313	118	2.1	4.579	-S400	40-P112/M4	
267	139	3.4	5.376	-S660	40-P112/M4	
266	139	3.6	5.391	-S950	40-P112/M4	
245	151	1.7	5.860	-S400	40-P112/M4	
238	156	4.7	6.029	-S2100	40-P112/M4	
238	156	3.4	6.038	-S950	40-P112/M4	
224	166	1.6	6.411	-S400	40-P112/M4	
224	166	3.4	6.417	-S660	40-P112/M4	
221	168	4.7	6.499	-S3100	40-P112/M4	
209	177	4.3	6.870	-S2100	40-P112/M4	
209	178	2.8	6.880	-S660	40-P112/M4	
196	189	3.1	7.311	-S660	40-P112/M4	
194	191	4.3	7.406	-S3100	40-P112/M4	
192	193	1.9	7.467	-S400	40-P112/M4	
186	199	2.5	7.702	-S950	40-P112/M4	
174	214	3.8	8.272	-S2100	40-P112/M4	
170	218	1.7	8.436	-S400	40-P112/M4	
163	227	2.8	8.800	-S660	40-P112/M4	
161	230	3.8	8.917	-S3100	40-P112/M4	
158	235	4.0	9.100	-S950	40-P112/M4	
143	259	2.4	10.027	-S660	40-P112/M4	
141	263	3.6	10.183	-S950	40-P112/M4	
140	264	1.5	10.240	-S400	40-P112/M4	
131	282	3.2	10.932	-S3100	40-P112/M4	
128	289	3.3	11.200	-S950	40-P112/M4	
127	291	2.3	11.262	-S660	40-P112/M4	
124	299	1.3	11.569	-S400	40-P112/M4	
117	318	2.1	12.320	-S660	40-P112/M4	
116	320	4.7	12.406	-S2100	40-P112/M4	
114	324	2.9	12.544	-S950	40-P112/M4	
112	331	2.0	12.832	-S660	40-P112/M4	
110	338	1.2	13.105	-S400	40-P112/M4	
104	356	4.7	13.787	-S2100	40-P112/M4	
102	363	2.6	14.037	-S950	40-P112/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
102	363	1.8	14.037	-S660	40-P112/M4	
102	365	4.3	14.137	-S2100	40-P112/M4	
100	370	1.1	14.336	-S400	40-P112/M4	
98	377	4.7	14.606	-S3100	40-P112/M4	
97	382	1.1	14.806	-S400	40-P112/M4	
91	406	4.3	15.711	-S2100	40-P112/M4	
91	406	1.6	15.714	-S660	40-P112/M4	
90	413	2.3	16.000	-S950	40-P112/M4	
89	418	1.0	16.197	-S400	40-P112/M4	
88	423	4.7	16.381	-S4500	40-P112/M4	
87	427	4.7	16.517	-S3100	40-P112/M4	
86	430	4.3	16.644	-S3100	40-P112/M4	
84	440	3.8	17.022	-S2100	40-P112/M4	
80	462	2.1	17.905	-S950	40-P112/M4	
80	462	1.4	17.905	-S660	40-P112/M4	
79	472	0.9	18.286	-S400	40-P112/M4	
79	472	4.7	18.286	-S4500	40-P112/M4	
76	486	4.3	18.822	-S3100	40-P112/M4	
76	489	3.8	18.917	-S2100	40-P112/M4	
75	497	1.3	19.250	-S660	40-P112/M4	
73	506	1.9	19.600	-S950	40-P112/M4	
72	518	3.8	20.041	-S3100	40-P112/M4	
69	539	3.2	20.869	-S2100	40-P112/M4	
65	566	1.7	21.933	-S950	40-P112/M4	
65	566	1.2	21.933	-S660	40-P112/M4	
63	585	3.8	22.663	-S3100	40-P112/M4	
62	599	3.2	23.193	-S2100	40-P112/M4	
58	635	3.2	24.570	-S3100	40-P112/M4	
57	647	0.9	25.056	-S660	40-P112/M4	
56	659	1.4	25.511	-S950	40-P112/M4	
54	683	3.2	26.437	-S4500	40-P112/M4	
52	718	3.2	27.785	-S3100	40-P112/M4	
51	730	2.5	28.275	-S2100	40-P112/M4	
50	737	1.3	28.548	-S950	40-P112/M4	
50	737	0.9	28.548	-S660	40-P112/M4	
49	762	3.2	29.511	-S4500	40-P112/M4	
46	807	1.2	31.267	-S950	40-P112/M4	

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# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
46	812	2.5	31.422	-S2100	40-P112/M4	
44	839	2.7	32.489	-S4500	40-P112/M4	
43	860	2.5	33.289	-S3100	40-P112/M4	
42	887	2.2	34.333	-S2100	40-P112/M4	
41	904	1.1	34.989	-S950	40-P112/M4	
40	937	2.7	36.267	-S4500	40-P112/M4	
38	972	2.5	37.644	-S3100	40-P112/M4	
38	985	2.1	38.156	-S2100	40-P112/M4	
36	1044	2.2	40.422	-S3100	40-P112/M4	
34	1086	2.2	42.044	-S4500	40-P112/M4	
32	1147	1.7	44.431	-S2100	40-P112/M4	
31	1181	2.2	45.711	-S3100	40-P112/M4	
31	1212	2.2	46.933	-S4500	40-P112/M4	
29	1275	1.6	49.378	-S2100	40-P112/M4	
28	1318	1.8	51.027	-S4500	40-P112/M4	
27	1351	1.7	52.311	-S3100	40-P112/M4	
27	1393	1.4	53.924	-S2100	40-P112/M4	
25	1471	1.8	56.960	-S4500	40-P112/M4	
24	1528	1.7	59.156	-S3100	40-P112/M4	
24	1548	1.3	59.927	-S2100	40-P112/M4	
23	1640	1.4	63.487	-S3100	40-P112/M4	
22	1666	1.5	64.500	-S4500	40-P112/M4	
20	1854	1.3	71.793	-S3100	40-P112/M4	
20	1859	1.4	72.000	-S4500	40-P112/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
38	969	4.2	38.090	-S4500	40-P112/M4	
36	1019	1.9	40.056	-S2100	40-P112/M4	
34	1082	4.0	42.520	-S4500	40-P112/M4	
32	1132	1.8	44.515	-S2100	40-P112/M4	
30	1200	2.5	47.159	-S3100	40-P112/M4	
27	1343	3.4	52.794	-S4500	40-P112/M4	
27	1357	2.3	53.330	-S3100	40-P112/M4	
26	1397	1.5	54.933	-S2100	40-P112/M4	
24	1499	3.0	58.933	-S4500	40-P112/M4	
24	1553	1.3	61.049	-S2100	40-P112/M4	
22	1645	1.9	64.676	-S3100	40-P112/M4	
22	1653	2.7	64.978	-S4500	40-P112/M4	
20	1788	1.2	70.302	-S2100	40-P112/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
20	1845	2.4	72.533	-S4500	40-P112/M4	
20	1851	2.4	72.775	-S4500	40-P112/M4	
20	1861	1.7	73.138	-S3100	40-P112/M4	
19	1956	1.1	76.907	-S2100	40-P112/M4	
18	1987	1.0	78.128	-S2100	40-P112/M4	
18	2067	2.2	81.237	-S4500	40-P112/M4	
17	2106	1.5	82.769	-S3100	40-P112/M4	
17	2174	0.9	85.468	-S2100	40-P112/M4	
16	2303	1.4	90.546	-S3100	40-P112/M4	
16	2361	1.9	92.825	-S4500	40-P112/M4	
15	2381	1.3	93.599	-S3100	40-P112/M4	
15	2495	0.8	98.095	-S2100	40-P112/M4	
14	2605	1.2	102.393	-S3100	40-P112/M4	
14	2636	1.7	103.619	-S4500	40-P112/M4	
13	2893	1.6	113.711	-S4500	40-P112/M4	
12	2938	1.1	115.492	-S3100	40-P112/M4	
11	3229	1.4	126.933	-S4500	40-P112/M4	
11	3322	0.9	130.603	-S3100	40-P112/M4	
10	3599	0.9	141.478	-S3100	40-P112/M4	
9.7	3765	1.2	148.005	-S4500	40-P112/M4	
8.7	4203	1.1	165.215	-S4500	40-P112/M4	
7.9	4614	1.0	181.396	-S4500	40-P112/M4	
7.1	5151	0.9	202.489	-S4500	40-P112/M4	



# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 5.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
374	136	3.1	3.920	-S660	40-P132/M4	
334	152	4.1	4.380	-S950	40-P132/M4	
273	187	2.6	5.376	-S660	40-P132/M4	
272	188	3.7	5.391	-S950	40-P132/M4	
243	210	3.5	6.038	-S950	40-P132/M4	
228	223	2.7	6.417	-S660	40-P132/M4	
213	239	2.1	6.880	-S660	40-P132/M4	
200	254	2.3	7.311	-S660	40-P132/M4	
190	268	2.9	7.702	-S950	40-P132/M4	
177	288	5.2	8.272	-S2100	40-P132/M4	
167	306	2.1	8.800	-S660	40-P132/M4	
164	310	5.9	8.917	-S3100	40-P132/M4	
161	317	3.0	9.100	-S950	40-P132/M4	
155	329	5.7	9.452	-S2100	40-P132/M4	
146	349	1.8	10.027	-S660	40-P132/M4	
144	354	2.7	10.183	-S950	40-P132/M4	
140	365	5.1	10.504	-S2100	40-P132/M4	
134	380	5.1	10.932	-S3100	40-P132/M4	
131	390	2.4	11.200	-S950	40-P132/M4	
130	392	1.7	11.262	-S660	40-P132/M4	
119	429	1.5	12.320	-S660	40-P132/M4	
118	432	4.7	12.406	-S2100	40-P132/M4	
117	436	2.2	12.544	-S950	40-P132/M4	
114	446	1.5	12.832	-S660	40-P132/M4	
106	480	4.3	13.787	-S2100	40-P132/M4	
104	488	2.0	14.037	-S950	40-P132/M4	
104	488	1.4	14.037	-S660	40-P132/M4	
104	492	4.2	14.137	-S2100	40-P132/M4	
93	546	3.8	15.711	-S2100	40-P132/M4	
93	547	1.2	15.714	-S660	40-P132/M4	
92	557	1.7	16.000	-S950	40-P132/M4	
89	575	5.4	16.517	-S3100	40-P132/M4	
88	579	5.4	16.644	-S3100	40-P132/M4	
86	592	3.5	17.022	-S2100	40-P132/M4	
82	623	1.5	17.905	-S950	40-P132/M4	
82	623	1.1	17.905	-S660	40-P132/M4	
78	655	4.7	18.822	-S3100	40-P132/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 5.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
77	658	3.1	18.917	-S2100	40-P132/M4	
76	670	1.0	19.250	-S660	40-P132/M4	
75	682	1.4	19.600	-S950	40-P132/M4	
73	697	4.5	20.041	-S3100	40-P132/M4	
73	698	5.7	20.067	-S4500	40-P132/M4	
70	726	2.8	20.869	-S2100	40-P132/M4	
67	763	1.3	21.933	-S950	40-P132/M4	
67	763	0.9	21.933	-S660	40-P132/M4	
65	779	5.7	22.400	-S4500	40-P132/M4	
65	788	3.9	22.663	-S3100	40-P132/M4	
63	807	2.5	23.193	-S2100	40-P132/M4	
60	855	3.6	24.570	-S3100	40-P132/M4	
57	887	1.1	25.511	-S950	40-P132/M4	
55	920	4.9	26.437	-S4500	40-P132/M4	
53	966	3.2	27.785	-S3100	40-P132/M4	
52	983	2.1	28.275	-S2100	40-P132/M4	
51	993	1.0	28.548	-S950	40-P132/M4	
50	1026	4.4	29.511	-S4500	40-P132/M4	
47	1093	1.9	31.422	-S2100	40-P132/M4	
45	1130	4.0	32.489	-S4500	40-P132/M4	
44	1158	2.7	33.289	-S3100	40-P132/M4	
43	1194	1.7	34.333	-S2100	40-P132/M4	
40	1261	3.6	36.267	-S4500	40-P132/M4	
39	1309	2.4	37.644	-S3100	40-P132/M4	
38	1327	1.5	38.156	-S2100	40-P132/M4	
36	1406	2.2	40.422	-S3100	40-P132/M4	
35	1462	2.8	42.044	-S4500	40-P132/M4	
32	1590	2.0	45.711	-S3100	40-P132/M4	
31	1632	2.7	46.933	-S4500	40-P132/M4	
29	1775	2.1	51.027	-S4500	40-P132/M4	
26	1981	2.0	56.960	-S4500	40-P132/M4	

6.4

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
39	1305	3.2	38.090	-S4500	40-P132/M4	
37	1372	1.4	40.056	-S2100	40-P132/M4	
35	1457	3.0	42.520	-S4500	40-P132/M4	
33	1525	1.3	44.515	-S2100	40-P132/M4	
31	1616	1.8	47.159	-S3100	40-P132/M4	
28	1809	2.5	52.794	-S4500	40-P132/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 5.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
28	1827	1.7	53.330	-S3100	40-P132/M4	
27	1882	1.1	54.933	-S2100	40-P132/M4	
25	2019	2.2	58.933	-S4500	40-P132/M4	
24	2092	1.0	61.049	-S2100	40-P132/M4	
23	2216	1.4	64.676	-S3100	40-P132/M4	
23	2226	2.0	64.978	-S4500	40-P132/M4	
21	2409	0.9	70.302	-S2100	40-P132/M4	
20	2485	1.8	72.533	-S4500	40-P132/M4	
20	2493	1.8	72.775	-S4500	40-P132/M4	
20	2506	1.2	73.138	-S3100	40-P132/M4	
18	2783	1.6	81.237	-S4500	40-P132/M4	
18	2836	1.1	82.769	-S3100	40-P132/M4	
16	3102	1.0	90.546	-S3100	40-P132/M4	
16	3180	1.4	92.825	-S4500	40-P132/M4	
16	3207	1.0	93.599	-S3100	40-P132/M4	
14	3508	0.9	102.393	-S3100	40-P132/M4	
14	3550	1.3	103.619	-S4500	40-P132/M4	
13	3896	1.2	113.711	-S4500	40-P132/M4	
12	4349	1.0	126.933	-S4500	40-P132/M4	
9.9	5071	0.9	148.005	-S4500	40-P132/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 7.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
372	187	2.3	3.920	-S660	40-P132/L4	
333	208	3.0	4.380	-S950	40-P132/L4	
318	219	5.1	4.593	-S2100	40-P132/L4	
295	236	5.1	4.951	-S3100	40-P132/L4	
272	256	1.9	5.376	-S660	40-P132/L4	
271	257	2.7	5.391	-S950	40-P132/L4	
242	287	4.8	6.029	-S2100	40-P132/L4	
242	287	2.6	6.038	-S950	40-P132/L4	
228	305	2.0	6.417	-S660	40-P132/L4	
225	309	4.8	6.499	-S3100	40-P132/L4	
213	327	4.6	6.870	-S2100	40-P132/L4	
212	327	1.5	6.880	-S660	40-P132/L4	
207	336	5.1	7.056	-S4500	40-P132/L4	
200	348	1.7	7.311	-S660	40-P132/L4	
197	352	4.8	7.406	-S3100	40-P132/L4	
190	367	2.1	7.702	-S950	40-P132/L4	
177	394	3.8	8.272	-S2100	40-P132/L4	
166	419	1.5	8.800	-S660	40-P132/L4	
164	424	4.3	8.917	-S3100	40-P132/L4	
160	433	2.2	9.100	-S950	40-P132/L4	
155	450	4.2	9.452	-S2100	40-P132/L4	
146	477	1.3	10.027	-S660	40-P132/L4	
143	485	2.0	10.183	-S950	40-P132/L4	
139	500	3.7	10.504	-S2100	40-P132/L4	
134	520	3.7	10.932	-S3100	40-P132/L4	
131	530	5.1	11.128	-S3100	40-P132/L4	
130	533	1.8	11.200	-S950	40-P132/L4	
130	536	1.2	11.262	-S660	40-P132/L4	
119	586	1.1	12.320	-S660	40-P132/L4	
118	590	3.4	12.406	-S2100	40-P132/L4	
116	597	1.6	12.544	-S950	40-P132/L4	
116	599	5.0	12.584	-S3100	40-P132/L4	
114	611	1.1	12.832	-S660	40-P132/L4	
114	611	5.1	12.843	-S4500	40-P132/L4	
106	656	3.1	13.787	-S2100	40-P132/L4	
104	668	1.4	14.037	-S950	40-P132/L4	
104	668	1.0	14.037	-S660	40-P132/L4	

6.4

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 7.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
103	673	3.1	14.137	-S2100	40-P132/L4	
102	682	5.1	14.336	-S4500	40-P132/L4	
100	695	4.5	14.606	-S3100	40-P132/L4	
93	748	2.7	15.711	-S2100	40-P132/L4	
93	748	0.9	15.714	-S660	40-P132/L4	
91	762	1.3	16.000	-S950	40-P132/L4	
89	780	4.8	16.381	-S4500	40-P132/L4	
88	786	3.9	16.517	-S3100	40-P132/L4	
88	792	3.9	16.644	-S3100	40-P132/L4	
86	810	2.5	17.022	-S2100	40-P132/L4	
82	852	1.1	17.905	-S950	40-P132/L4	
80	870	4.8	18.286	-S4500	40-P132/L4	
78	896	3.5	18.822	-S3100	40-P132/L4	
77	900	2.3	18.917	-S2100	40-P132/L4	
75	933	1.0	19.600	-S950	40-P132/L4	
73	954	3.3	20.041	-S3100	40-P132/L4	
73	955	4.2	20.067	-S4500	40-P132/L4	
70	993	2.1	20.869	-S2100	40-P132/L4	
67	1044	0.9	21.933	-S950	40-P132/L4	
65	1066	4.2	22.400	-S4500	40-P132/L4	
64	1079	2.9	22.663	-S3100	40-P132/L4	
63	1104	1.9	23.193	-S2100	40-P132/L4	
59	1169	2.7	24.570	-S3100	40-P132/L4	
55	1258	3.6	26.437	-S4500	40-P132/L4	
53	1322	2.3	27.785	-S3100	40-P132/L4	
52	1346	1.5	28.275	-S2100	40-P132/L4	
50	1405	3.2	29.511	-S4500	40-P132/L4	
47	1496	1.4	31.422	-S2100	40-P132/L4	
45	1546	2.9	32.489	-S4500	40-P132/L4	
44	1584	2.0	33.289	-S3100	40-P132/L4	
43	1634	1.3	34.333	-S2100	40-P132/L4	
40	1726	2.6	36.267	-S4500	40-P132/L4	
39	1792	1.7	37.644	-S3100	40-P132/L4	
38	1816	1.1	38.156	-S2100	40-P132/L4	
36	1924	1.6	40.422	-S3100	40-P132/L4	
35	2001	2.1	42.044	-S4500	40-P132/L4	
32	2176	1.4	45.711	-S3100	40-P132/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 7.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
31	2234	2.0	46.933	-S4500	40-P132/L4	
29	2429	1.5	51.027	-S4500	40-P132/L4	
26	2711	1.5	56.960	-S4500	40-P132/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
38	1786	2.3	38.090	-S4500	40-P132/L4	
36	1878	1.0	40.056	-S2100	40-P132/L4	
34	1993	2.2	42.520	-S4500	40-P132/L4	
33	2087	1.0	44.515	-S2100	40-P132/L4	
31	2211	1.3	47.159	-S3100	40-P132/L4	
28	2475	1.8	52.794	-S4500	40-P132/L4	
27	2500	1.2	53.330	-S3100	40-P132/L4	
25	2763	1.6	58.933	-S4500	40-P132/L4	
23	3032	1.0	64.676	-S3100	40-P132/L4	
23	3046	1.5	64.978	-S4500	40-P132/L4	
20	3400	1.3	72.533	-S4500	40-P132/L4	
20	3412	1.3	72.775	-S4500	40-P132/L4	
20	3429	0.9	73.138	-S3100	40-P132/L4	
18	3808	1.2	81.237	-S4500	40-P132/L4	
16	4352	1.0	92.825	-S4500	40-P132/L4	
14	4858	0.9	103.619	-S4500	40-P132/L4	
13	5331	0.8	113.711	-S4500	40-P132/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 11.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
320	318	4.2	4.593	-S2100	40-P160/M4	
297	343	5.4	4.951	-S3100	40-P160/M4	
244	418	3.6	6.029	-S2100	40-P160/M4	
228	447	5.5	6.450	-S4500	40-P160/M4	
226	451	4.7	6.499	-S3100	40-P160/M4	
214	476	3.1	6.870	-S2100	40-P160/M4	
208	489	5.2	7.056	-S4500	40-P160/M4	
199	513	4.4	7.406	-S3100	40-P160/M4	
178	574	2.6	8.272	-S2100	40-P160/M4	
165	618	3.7	8.917	-S3100	40-P160/M4	
156	655	2.9	9.452	-S2100	40-P160/M4	
140	728	2.6	10.504	-S2100	40-P160/M4	
135	758	3.0	10.932	-S3100	40-P160/M4	
132	772	3.9	11.128	-S3100	40-P160/M4	
125	814	5.5	11.740	-S4500	40-P160/M4	
119	860	2.4	12.406	-S2100	40-P160/M4	
117	872	3.4	12.584	-S3100	40-P160/M4	
115	890	5.1	12.843	-S4500	40-P160/M4	
112	909	5.0	13.105	-S4500	40-P160/M4	
107	956	2.1	13.787	-S2100	40-P160/M4	
104	980	2.1	14.137	-S2100	40-P160/M4	
103	994	4.5	14.336	-S4500	40-P160/M4	
101	1013	3.1	14.606	-S3100	40-P160/M4	
94	1089	1.9	15.711	-S2100	40-P160/M4	
90	1136	4.0	16.381	-S4500	40-P160/M4	
89	1145	2.7	16.517	-S3100	40-P160/M4	
88	1154	2.7	16.644	-S3100	40-P160/M4	
86	1180	1.7	17.022	-S2100	40-P160/M4	
80	1268	3.6	18.286	-S4500	40-P160/M4	
78	1305	2.4	18.822	-S3100	40-P160/M4	
78	1312	1.6	18.917	-S2100	40-P160/M4	
73	1389	2.2	20.041	-S3100	40-P160/M4	
73	1391	3.2	20.067	-S4500	40-P160/M4	
70	1447	1.4	20.869	-S2100	40-P160/M4	
66	1553	2.9	22.400	-S4500	40-P160/M4	
65	1571	2.0	22.663	-S3100	40-P160/M4	
63	1608	1.3	23.193	-S2100	40-P160/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 11.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
60	1703	1.8	24.570	-S3100	40-P160/M4	
56	1833	2.5	26.437	-S4500	40-P160/M4	
53	1926	1.6	27.785	-S3100	40-P160/M4	
50	2046	2.2	29.511	-S4500	40-P160/M4	
45	2252	2.0	32.489	-S4500	40-P160/M4	
41	2514	1.8	36.267	-S4500	40-P160/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
39	2601	1.6	38.090	-S4500	40-P160/M4	
35	2904	1.5	42.520	-S4500	40-P160/M4	
28	3605	1.3	52.794	-S4500	40-P160/M4	
25	4025	1.1	58.933	-S4500	40-P160/M4	
23	4437	1.0	64.978	-S4500	40-P160/M4	
20	4953	0.9	72.533	-S4500	40-P160/M4	
20	4970	0.9	72.775	-S4500	40-P160/M4	
18	5548	0.8	81.237	-S4500	40-P160/M4	



# g500-S shaft-mounted helical geared motors



Technical data

## Selection tables, 4-pole motors

50 Hz:  $P_N = 15.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
320	434	3.1	4.593	-S2100	40-P160/L4	
299	465	4.6	4.914	-S4500	40-P160/L4	
297	468	3.9	4.951	-S3100	40-P160/L4	
244	570	2.6	6.029	-S2100	40-P160/L4	
228	610	4.0	6.450	-S4500	40-P160/L4	
226	614	3.4	6.499	-S3100	40-P160/L4	
214	650	2.3	6.870	-S2100	40-P160/L4	
208	667	3.8	7.056	-S4500	40-P160/L4	
199	700	3.2	7.406	-S3100	40-P160/L4	
178	782	1.9	8.272	-S2100	40-P160/L4	
165	843	2.7	8.917	-S3100	40-P160/L4	
164	846	4.6	8.944	-S4500	40-P160/L4	
156	894	2.1	9.452	-S2100	40-P160/L4	
147	944	4.4	9.984	-S4500	40-P160/L4	
140	993	1.9	10.504	-S2100	40-P160/L4	
135	1034	2.2	10.932	-S3100	40-P160/L4	
132	1052	2.9	11.128	-S3100	40-P160/L4	
125	1110	4.0	11.740	-S4500	40-P160/L4	
119	1173	1.7	12.406	-S2100	40-P160/L4	
117	1190	2.5	12.584	-S3100	40-P160/L4	
115	1214	3.7	12.843	-S4500	40-P160/L4	
112	1239	3.6	13.105	-S4500	40-P160/L4	
107	1303	1.6	13.787	-S2100	40-P160/L4	
104	1337	1.5	14.137	-S2100	40-P160/L4	
103	1355	3.3	14.336	-S4500	40-P160/L4	
101	1381	2.2	14.606	-S3100	40-P160/L4	
94	1485	1.4	15.711	-S2100	40-P160/L4	
90	1549	2.9	16.381	-S4500	40-P160/L4	
89	1562	2.0	16.517	-S3100	40-P160/L4	
88	1574	2.0	16.644	-S3100	40-P160/L4	
86	1609	1.3	17.022	-S2100	40-P160/L4	
80	1729	2.6	18.286	-S4500	40-P160/L4	
78	1779	1.7	18.822	-S3100	40-P160/L4	
78	1788	1.2	18.917	-S2100	40-P160/L4	
73	1895	1.6	20.041	-S3100	40-P160/L4	
73	1897	2.4	20.067	-S4500	40-P160/L4	
70	1973	1.0	20.869	-S2100	40-P160/L4	

6.4

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 15.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
66	2118	2.1	22.400	-S4500	40-P160/L4	
65	2143	1.5	22.663	-S3100	40-P160/L4	
63	2193	0.9	23.193	-S2100	40-P160/L4	
60	2323	1.3	24.570	-S3100	40-P160/L4	
56	2499	1.8	26.437	-S4500	40-P160/L4	
53	2627	1.2	27.785	-S3100	40-P160/L4	
50	2790	1.6	29.511	-S4500	40-P160/L4	
45	3072	1.5	32.489	-S4500	40-P160/L4	
41	3429	1.3	36.267	-S4500	40-P160/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
39	3547	1.2	38.090	-S4500	40-P160/L4	
35	3960	1.1	42.520	-S4500	40-P160/L4	
28	4916	0.9	52.794	-S4500	40-P160/L4	
25	5488	0.8	58.933	-S4500	40-P160/L4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 18.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
318	539	2.5	4.593	-S2100	40-P180/M4	
297	577	3.7	4.914	-S4500	40-P180/M4	
295	581	3.2	4.951	-S3100	40-P180/M4	
242	708	2.1	6.029	-S2100	40-P180/M4	
226	757	3.2	6.450	-S4500	40-P180/M4	
225	763	2.8	6.499	-S3100	40-P180/M4	
213	807	1.8	6.870	-S2100	40-P180/M4	
207	828	3.1	7.056	-S4500	40-P180/M4	
197	869	2.6	7.406	-S3100	40-P180/M4	
177	971	1.5	8.272	-S2100	40-P180/M4	
164	1047	2.2	8.917	-S3100	40-P180/M4	
163	1050	3.7	8.944	-S4500	40-P180/M4	
155	1110	1.7	9.452	-S2100	40-P180/M4	
146	1172	3.6	9.984	-S4500	40-P180/M4	
134	1283	1.8	10.932	-S3100	40-P180/M4	
131	1306	2.3	11.128	-S3100	40-P180/M4	
124	1378	3.2	11.740	-S4500	40-P180/M4	
118	1456	1.4	12.406	-S2100	40-P180/M4	
116	1477	2.0	12.584	-S3100	40-P180/M4	
114	1508	3.0	12.843	-S4500	40-P180/M4	
111	1538	2.9	13.105	-S4500	40-P180/M4	
106	1619	1.3	13.787	-S2100	40-P180/M4	
103	1660	1.2	14.137	-S2100	40-P180/M4	
102	1683	2.7	14.336	-S4500	40-P180/M4	
100	1715	1.8	14.606	-S3100	40-P180/M4	
93	1844	1.1	15.711	-S2100	40-P180/M4	
89	1923	2.3	16.381	-S4500	40-P180/M4	
88	1939	1.6	16.517	-S3100	40-P180/M4	
88	1954	1.6	16.644	-S3100	40-P180/M4	
86	1998	1.0	17.022	-S2100	40-P180/M4	
80	2147	2.1	18.286	-S4500	40-P180/M4	
78	2210	1.4	18.822	-S3100	40-P180/M4	
77	2221	0.9	18.917	-S2100	40-P180/M4	
73	2353	1.3	20.041	-S3100	40-P180/M4	
73	2356	1.9	20.067	-S4500	40-P180/M4	
70	2450	0.8	20.869	-S2100	40-P180/M4	
65	2630	1.7	22.400	-S4500	40-P180/M4	

6.4

# g500-S shaft-mounted helical geared motors


Technical data




## Selection tables, 4-pole motors

50 Hz:  $P_N = 18.5 \text{ kW}$

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
64	2661	1.2	22.663	-S3100	40-P180/M4	
59	2885	1.1	24.570	-S3100	40-P180/M4	
55	3104	1.5	26.437	-S4500	40-P180/M4	
53	3262	1.0	27.785	-S3100	40-P180/M4	
50	3465	1.3	29.511	-S4500	40-P180/M4	
45	3814	1.2	32.489	-S4500	40-P180/M4	
40	4258	1.1	36.267	-S4500	40-P180/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
38	4405	0.9	38.090	-S4500	40-P180/M4	

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 22.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
319	639	2.1	4.593	-S2100	40-P180/L4	
298	684	3.1	4.914	-S4500	40-P180/L4	
296	689	2.7	4.951	-S3100	40-P180/L4	
243	839	1.8	6.029	-S2100	40-P180/L4	
227	897	2.7	6.450	-S4500	40-P180/L4	
225	904	2.3	6.499	-S3100	40-P180/L4	
213	956	1.6	6.870	-S2100	40-P180/L4	
208	982	2.6	7.056	-S4500	40-P180/L4	
198	1030	2.2	7.406	-S3100	40-P180/L4	
177	1151	1.3	8.272	-S2100	40-P180/L4	
164	1241	1.8	8.917	-S3100	40-P180/L4	
164	1244	3.1	8.944	-S4500	40-P180/L4	
147	1389	3.0	9.984	-S4500	40-P180/L4	
134	1521	1.5	10.932	-S3100	40-P180/L4	
132	1548	2.0	11.128	-S3100	40-P180/L4	
125	1633	2.7	11.740	-S4500	40-P180/L4	
116	1751	1.7	12.584	-S3100	40-P180/L4	
114	1787	2.5	12.843	-S4500	40-P180/L4	
112	1823	2.5	13.105	-S4500	40-P180/L4	
102	1995	2.3	14.336	-S4500	40-P180/L4	
100	2032	1.5	14.606	-S3100	40-P180/L4	
89	2279	2.0	16.381	-S4500	40-P180/L4	
89	2298	1.4	16.517	-S3100	40-P180/L4	
88	2316	1.3	16.644	-S3100	40-P180/L4	
80	2544	1.8	18.286	-S4500	40-P180/L4	
78	2619	1.2	18.822	-S3100	40-P180/L4	
73	2788	1.1	20.041	-S3100	40-P180/L4	
73	2792	1.6	20.067	-S4500	40-P180/L4	
65	3117	1.4	22.400	-S4500	40-P180/L4	
65	3153	1.0	22.663	-S3100	40-P180/L4	
60	3419	0.9	24.570	-S3100	40-P180/L4	
55	3678	1.2	26.437	-S4500	40-P180/L4	
50	4106	1.1	29.511	-S4500	40-P180/L4	
45	4520	1.0	32.489	-S4500	40-P180/L4	
40	5046	0.9	36.267	-S4500	40-P180/L4	

6.4

# g500-S shaft-mounted helical geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 30.0$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
298	933	2.0	4.951	-S3100	40-P180/V4	
245	1136	1.3	6.029	-S2100	40-P180/V4	
229	1215	2.0	6.450	-S4500	40-P180/V4	
227	1225	1.7	6.499	-S3100	40-P180/V4	
215	1295	1.2	6.870	-S2100	40-P180/V4	
209	1330	1.9	7.056	-S4500	40-P180/V4	
199	1396	1.6	7.406	-S3100	40-P180/V4	
178	1559	1.0	8.272	-S2100	40-P180/V4	
165	1680	1.4	8.917	-S3100	40-P180/V4	
135	2060	1.1	10.932	-S3100	40-P180/V4	
126	2212	2.0	11.740	-S4500	40-P180/V4	
115	2420	1.9	12.843	-S4500	40-P180/V4	
113	2469	1.8	13.105	-S4500	40-P180/V4	
90	3087	1.5	16.381	-S4500	40-P180/V4	
81	3446	1.3	18.286	-S4500	40-P180/V4	
74	3781	1.2	20.067	-S4500	40-P180/V4	
66	4221	1.1	22.400	-S4500	40-P180/V4	
56	4982	0.9	26.437	-S4500	40-P180/V4	
50	5561	0.8	29.511	-S4500	40-P180/V4	

# g500-S shaft-mounted helical geared motors

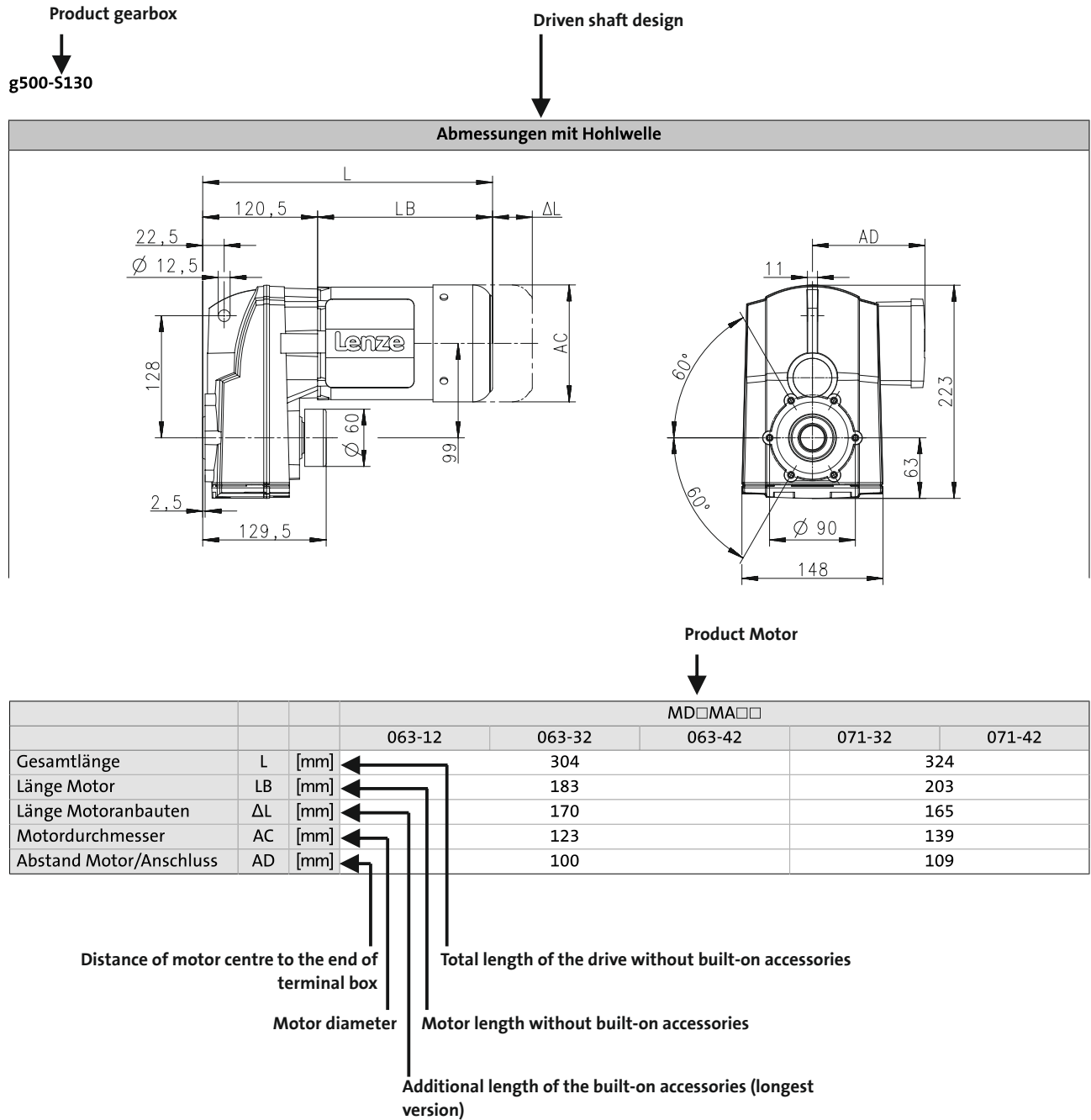
Technical data



## Dimensions, notes

### Notes on the dimensions

The following legend shows the layout of the dimension sheets.



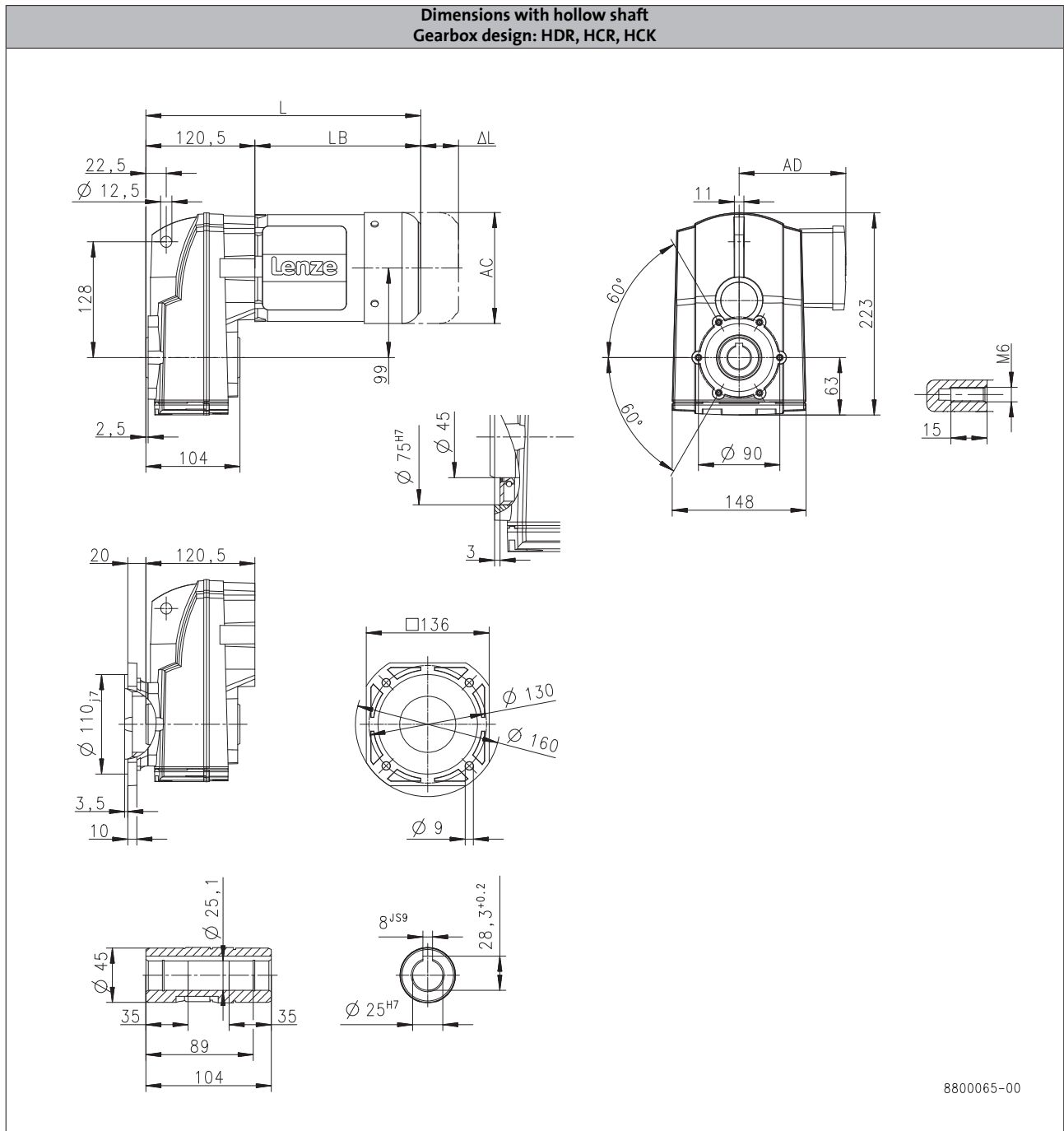
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		304			324
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



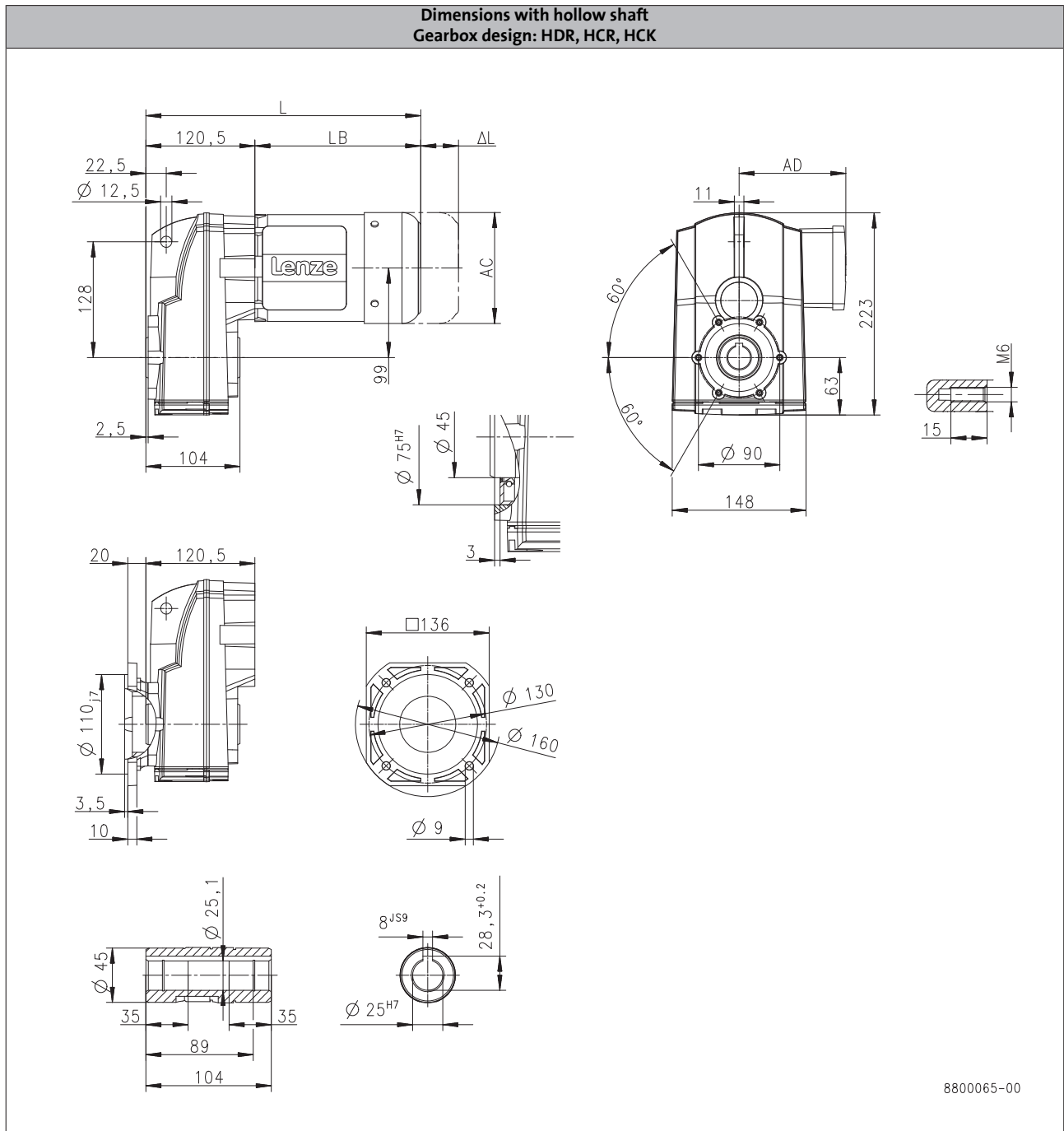
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



6.4

			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	346		415
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



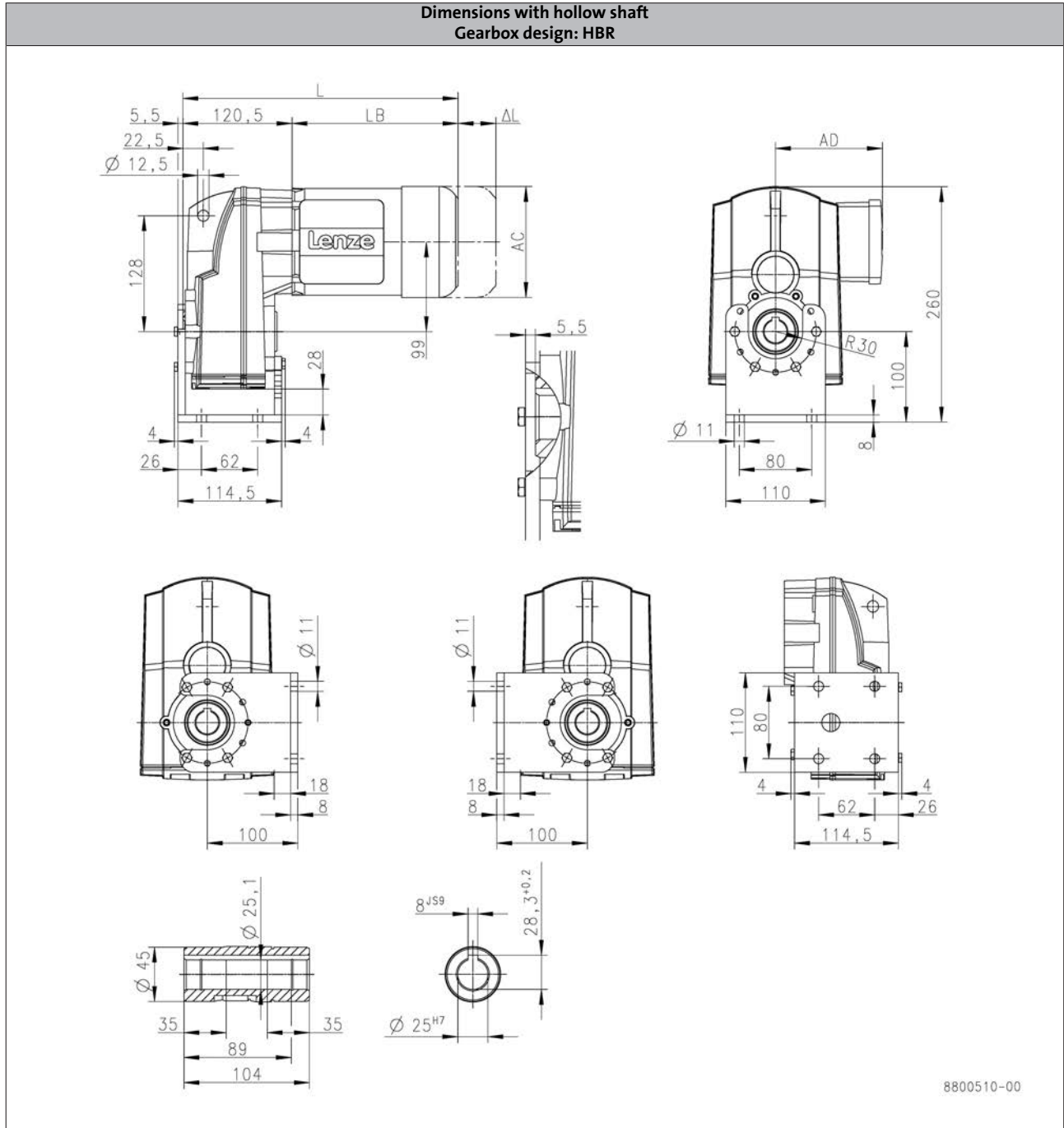
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	346		415
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

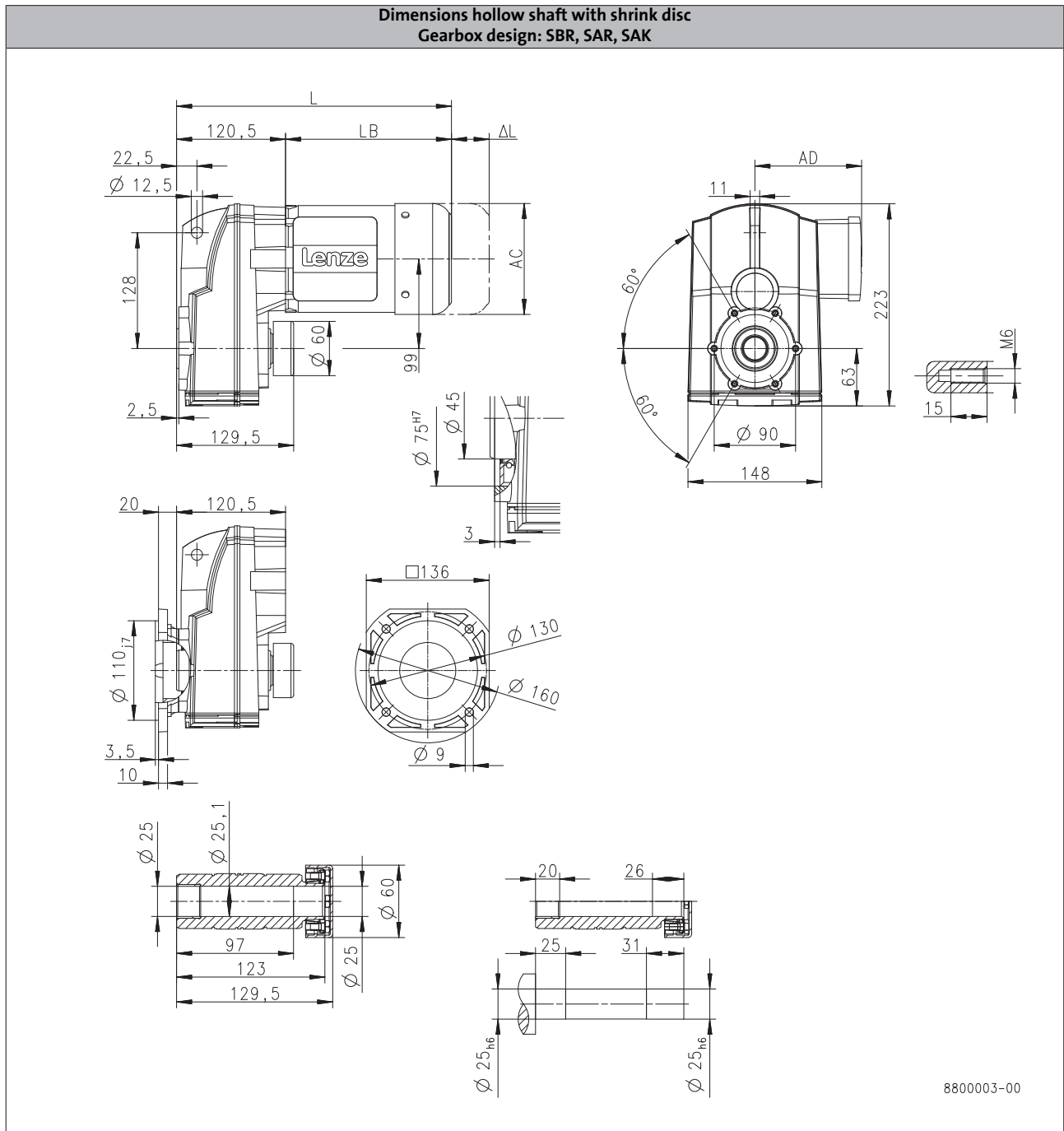
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		304			324
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

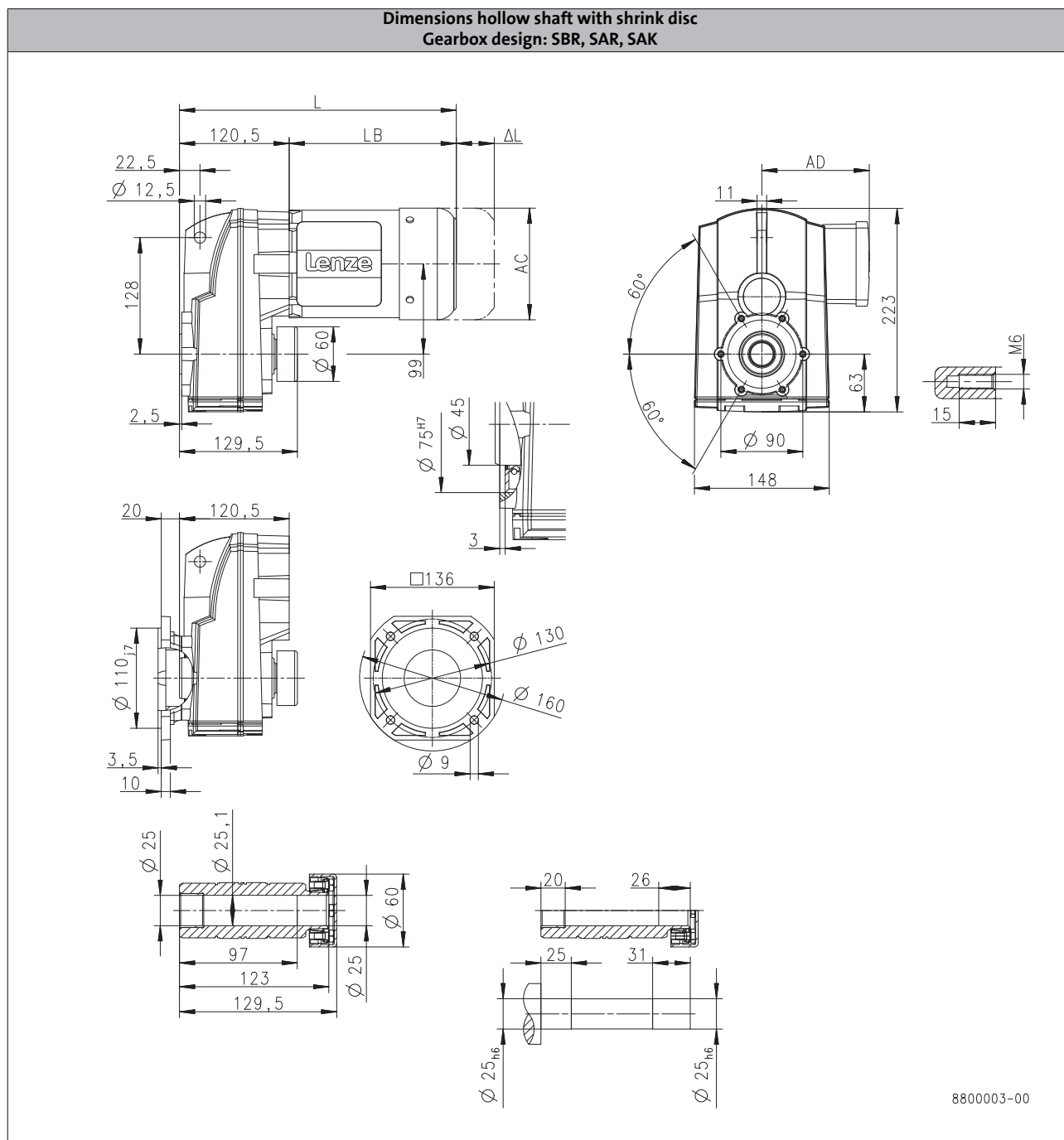
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	346		415
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

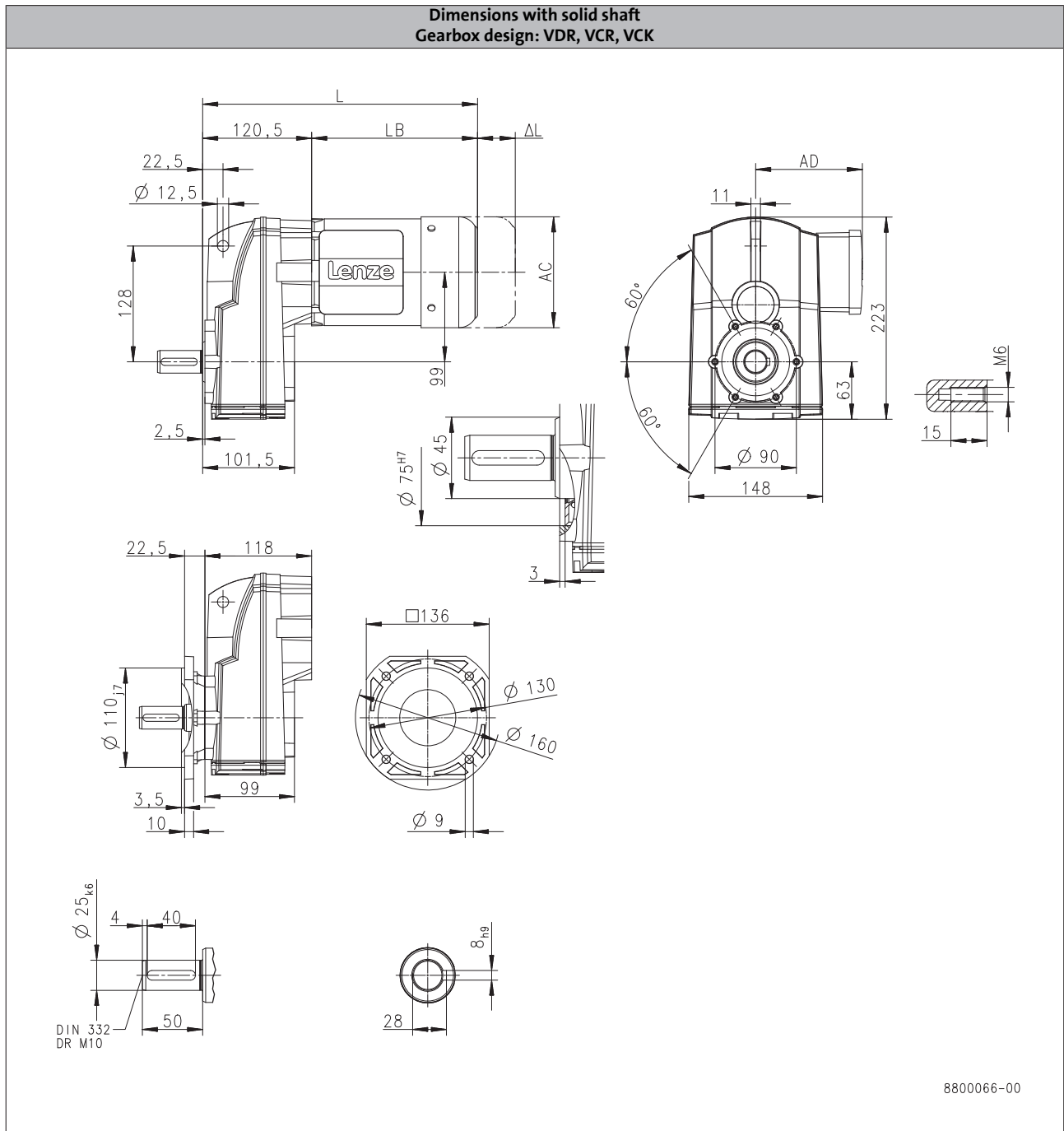
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		304			324
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

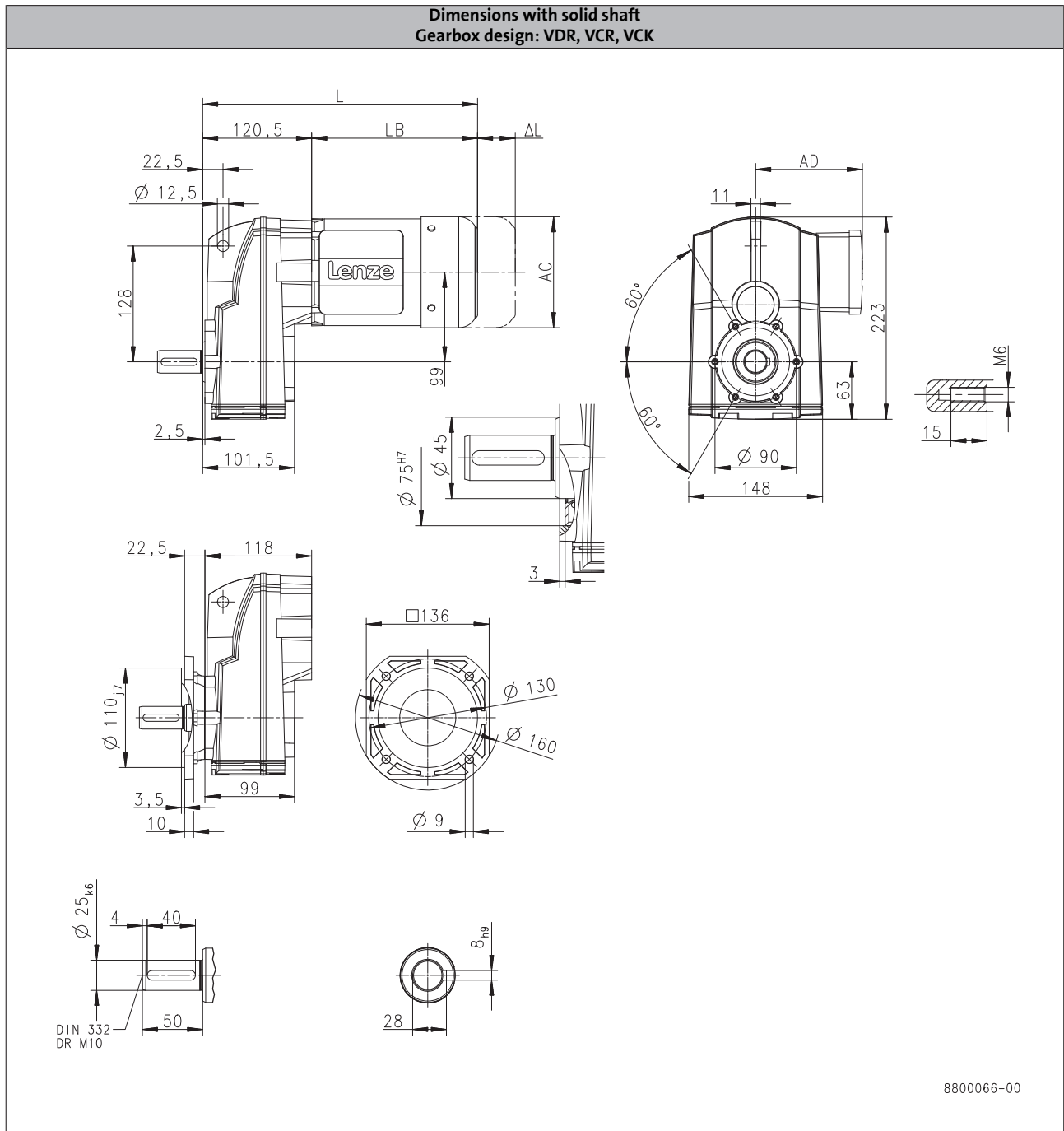
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	346	415	
Motor length	LB	[mm]	225	294	
Length of motor options	Δ L	[mm]	107	92.0	
Motor diameter	AC	[mm]	158	172	
Distance motor/connection	AD	[mm]	148	155	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

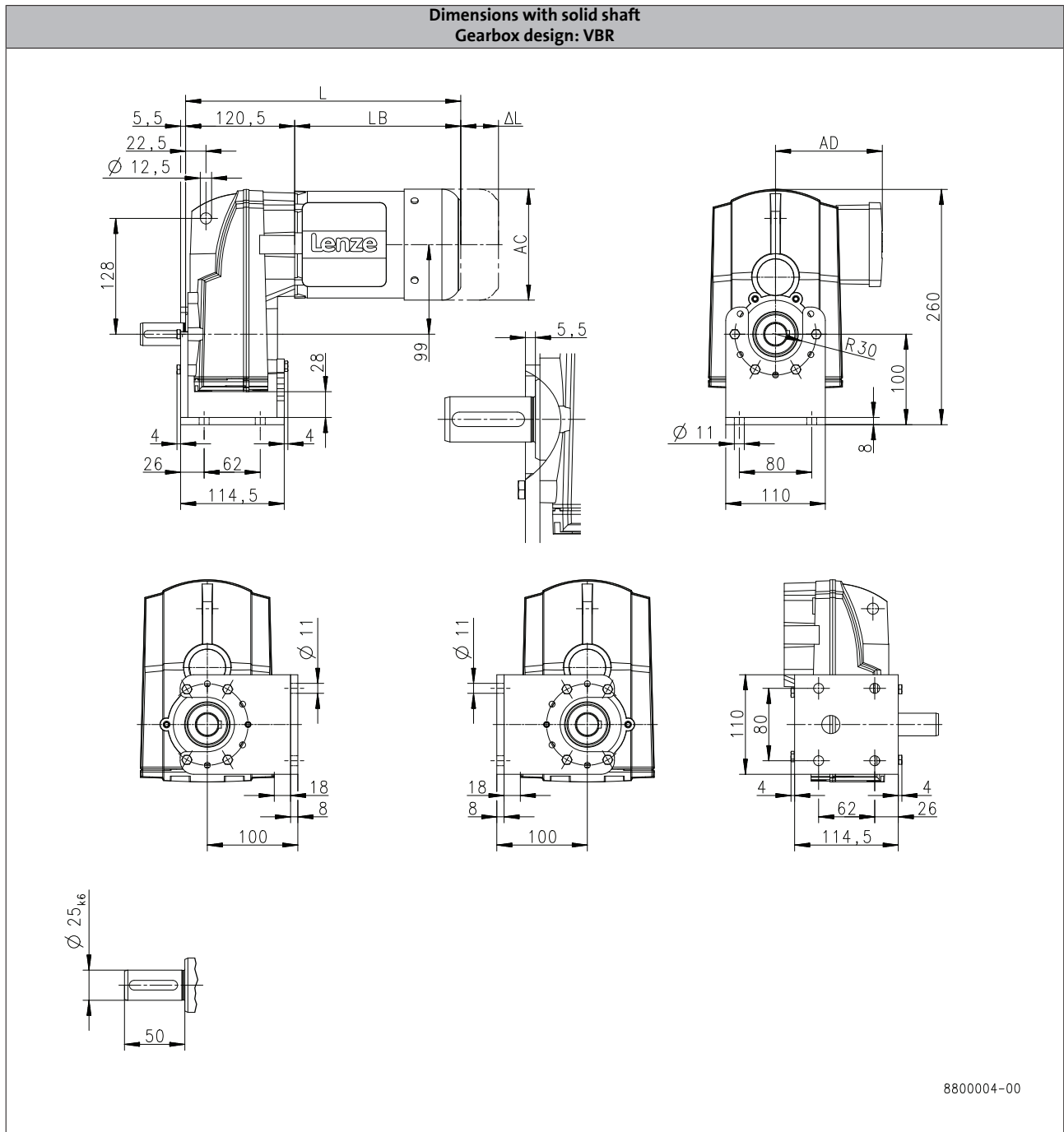
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		304			324
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



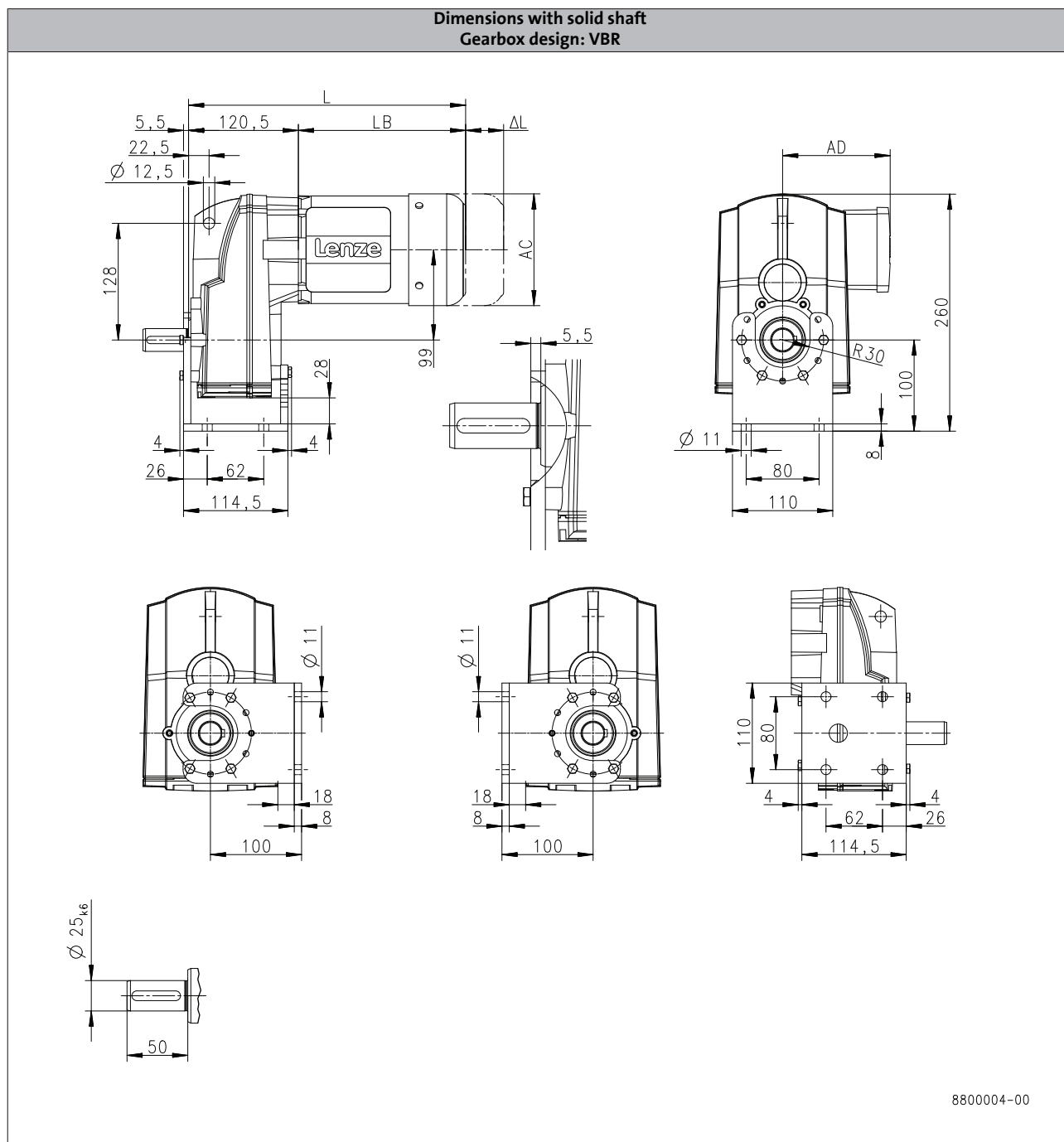
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S130



			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	346		415
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

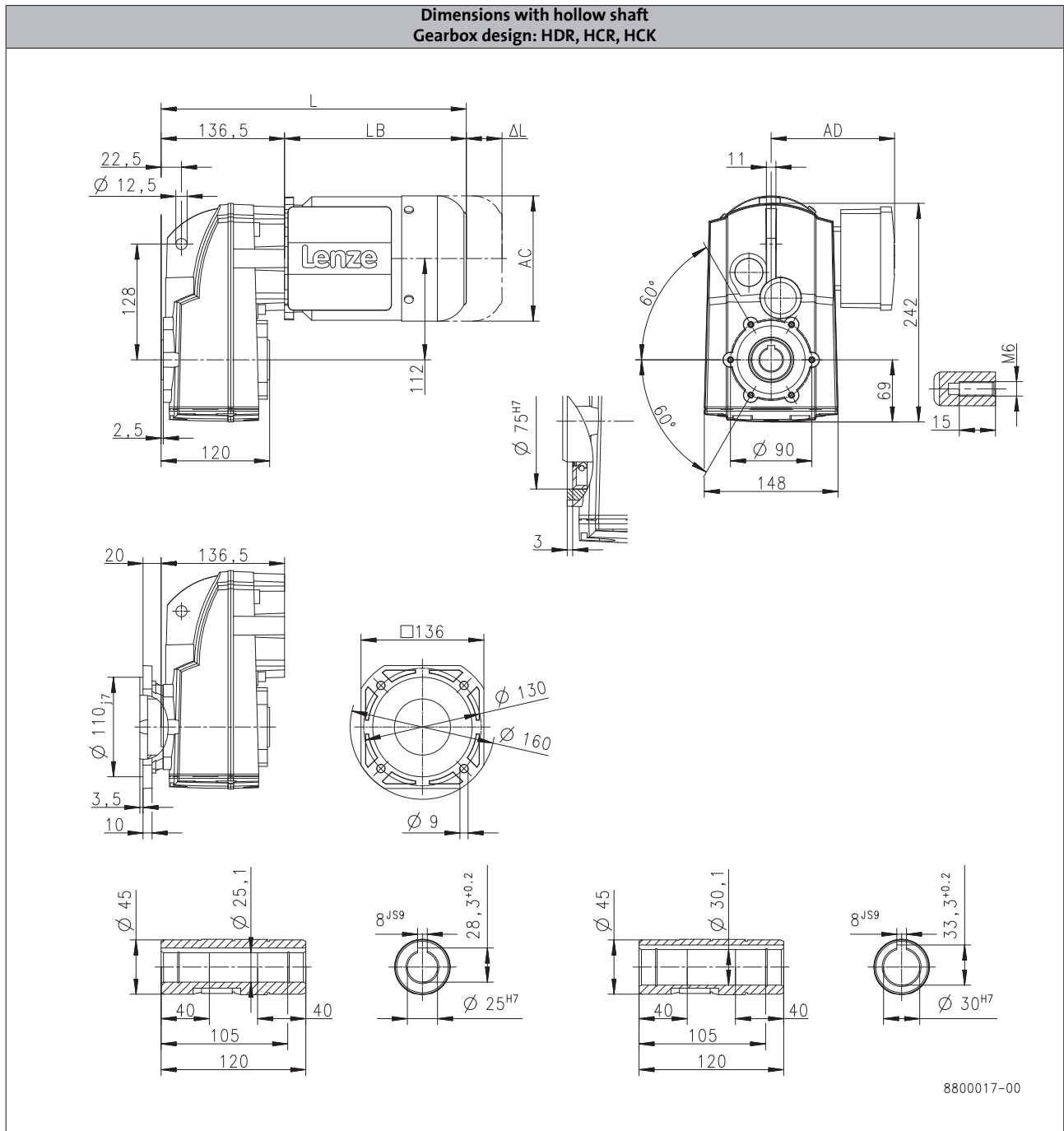
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		320			340
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

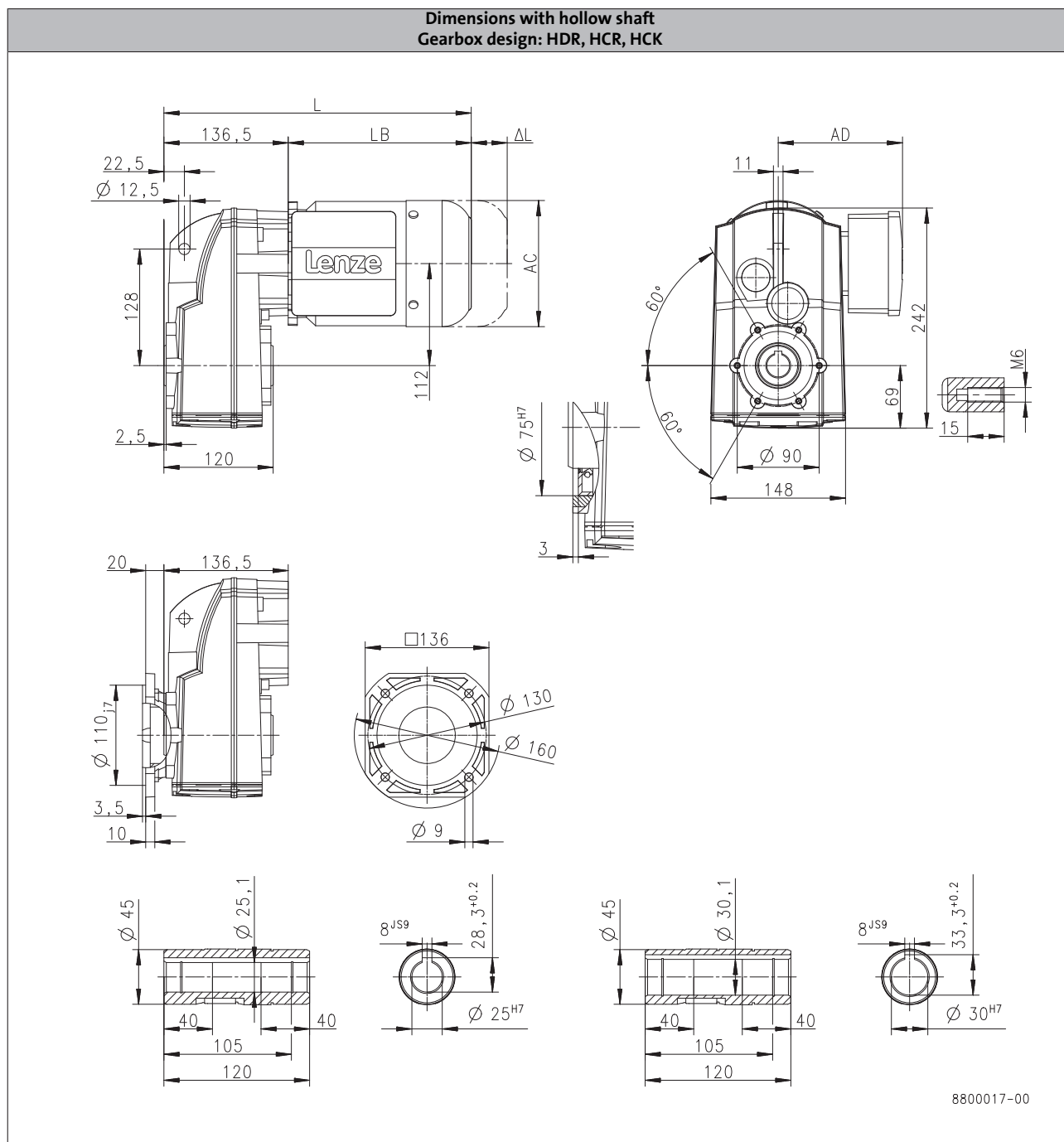
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



		m240				
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	362	431	431	493	493
Motor length	LB [mm]	225	294	294	356	356
Length of motor options	Δ L [mm]	107	92.0	92.0	103	103
Motor diameter	AC [mm]	158	172	172	192	192
Distance motor/connection	AD [mm]	148	155	155	164	164

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

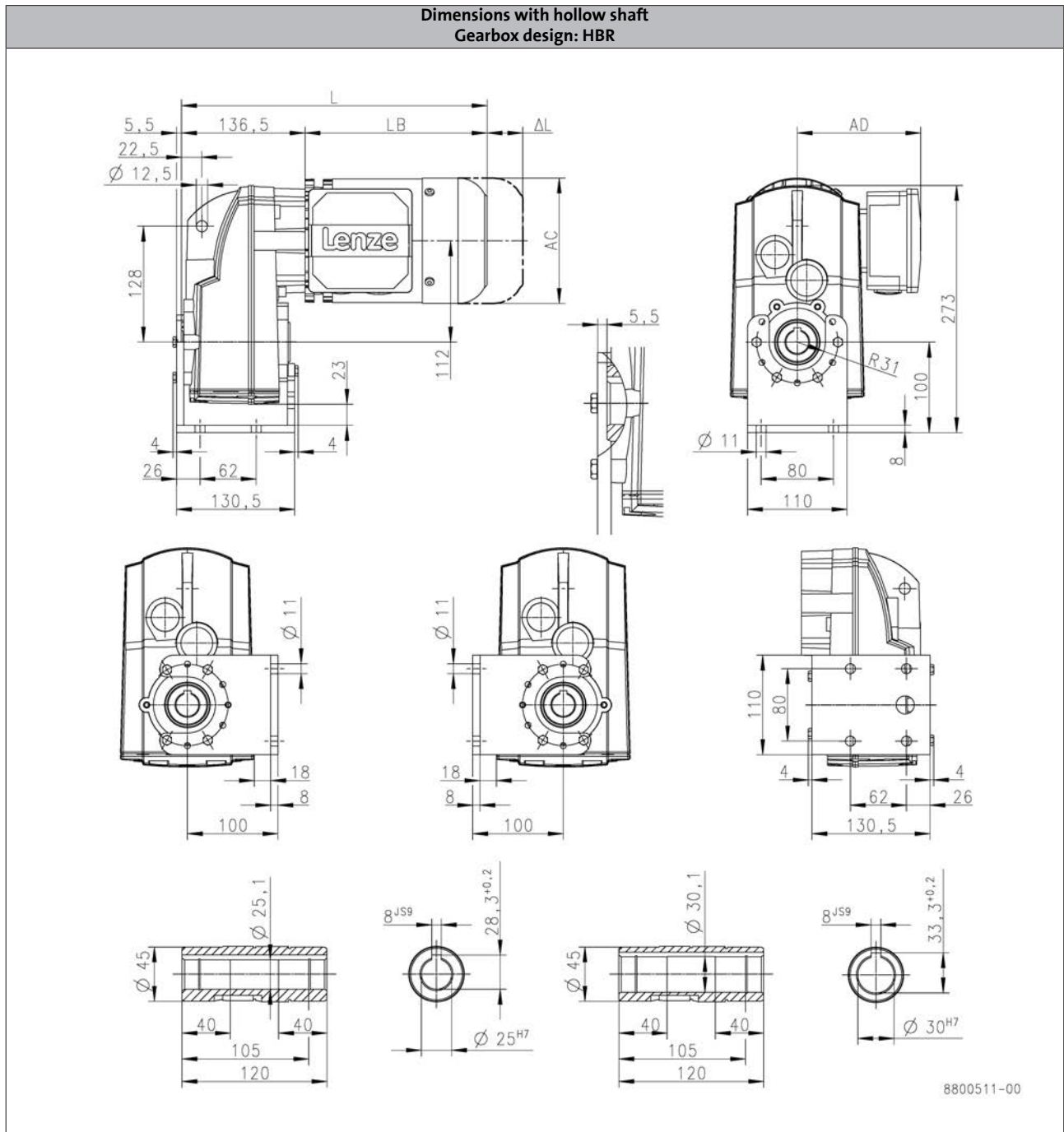
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		320			340
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

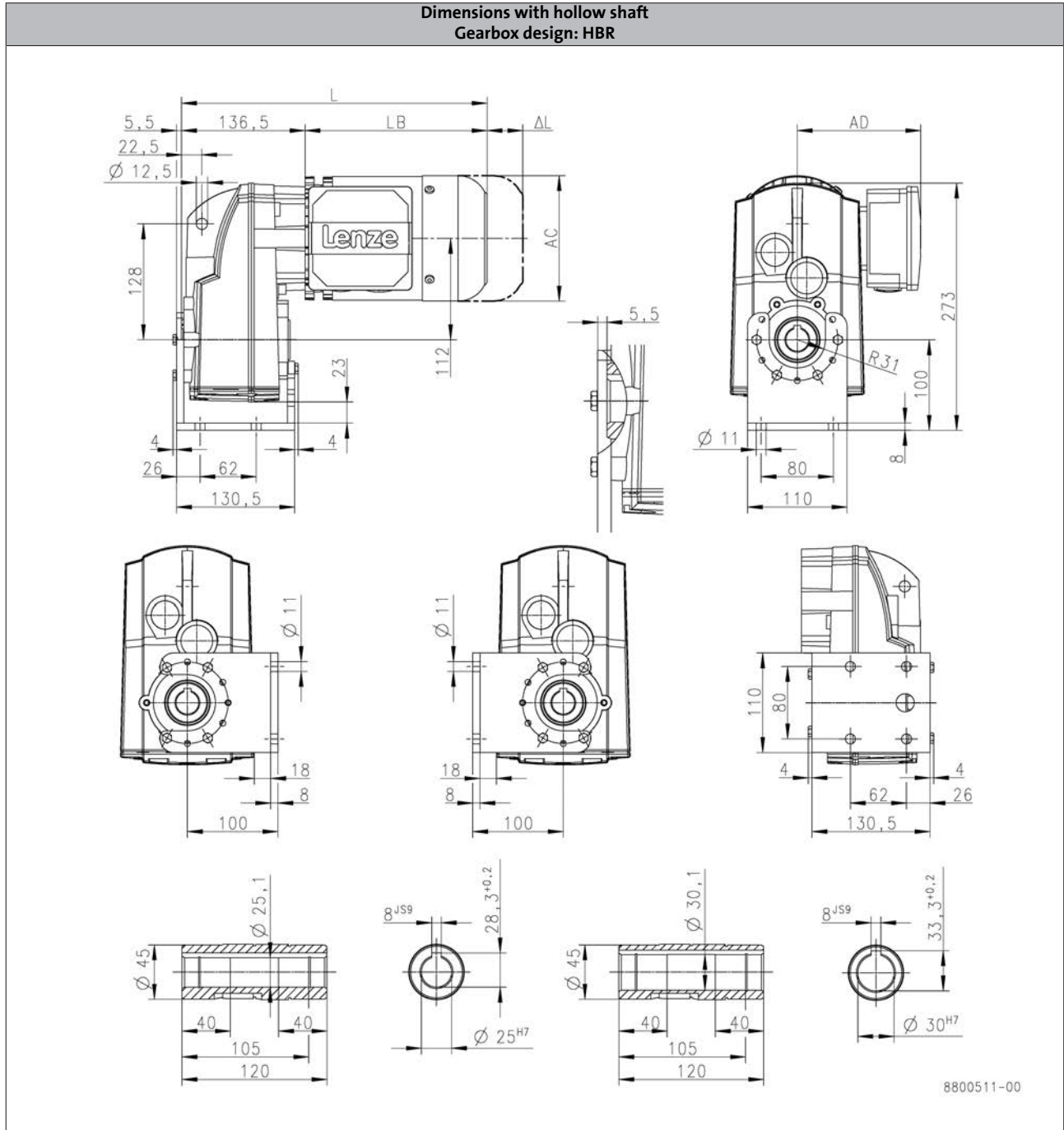
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



			m240				
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L	[mm]	362	431		493	
Motor length	LB	[mm]	225	294		356	
Length of motor options	Δ L	[mm]	107	92.0		103	
Motor diameter	AC	[mm]	158	172		192	
Distance motor/connection	AD	[mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

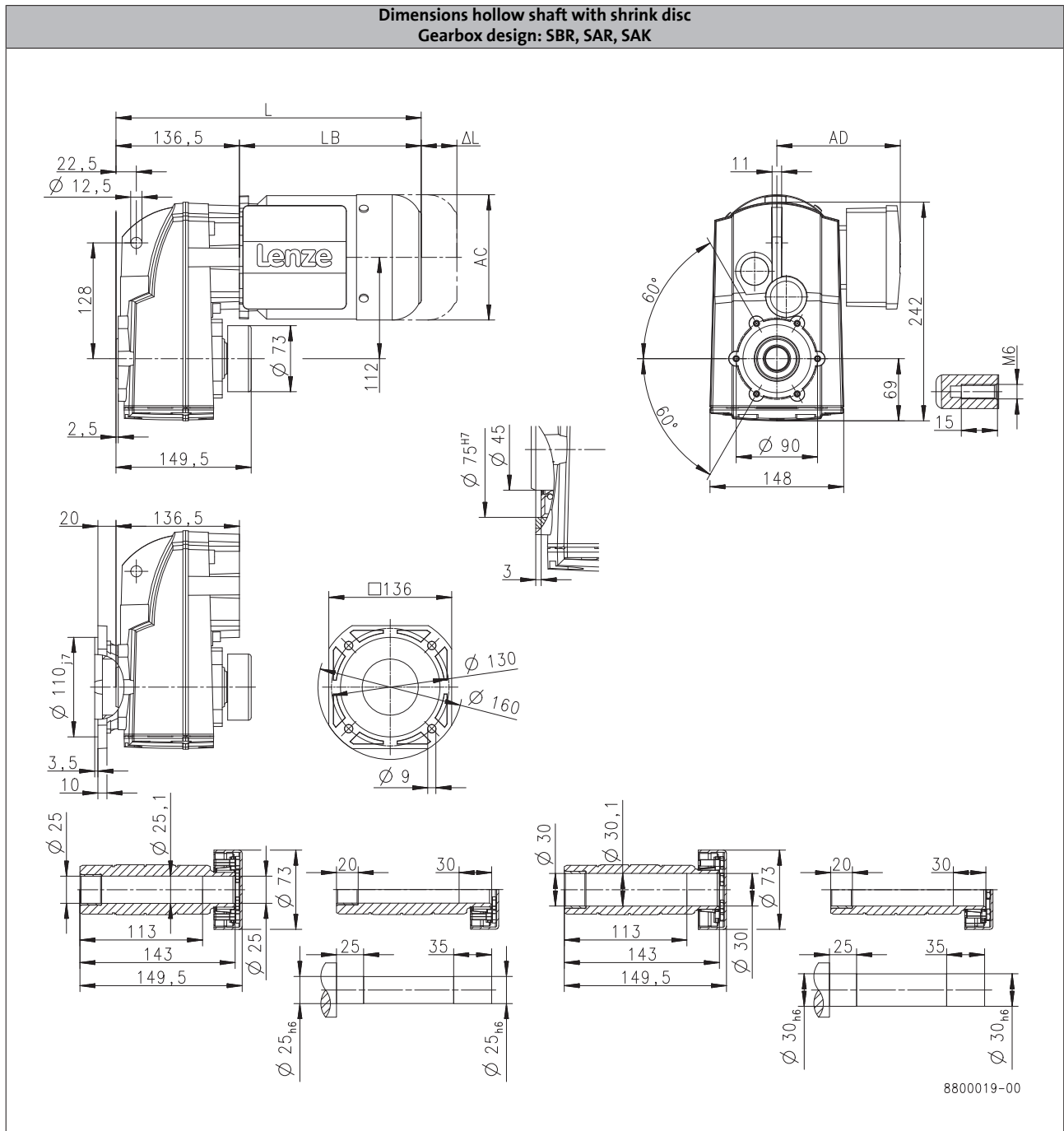
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		320			340
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

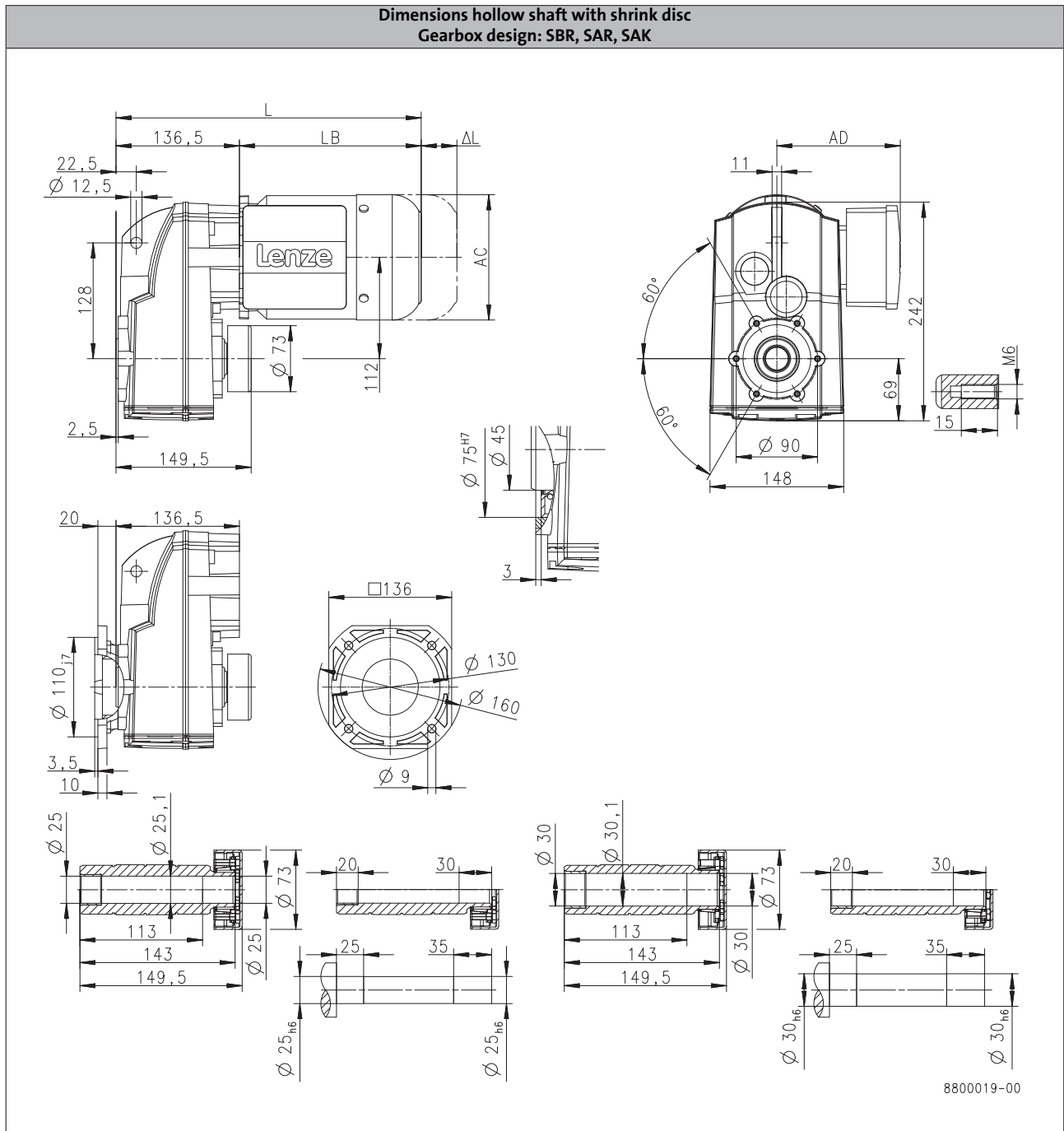
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



		m240				
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	362	431		493	
Motor length	LB [mm]	225	294		356	
Length of motor options	Δ L [mm]	107	92.0		103	
Motor diameter	AC [mm]	158	172		192	
Distance motor/connection	AD [mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

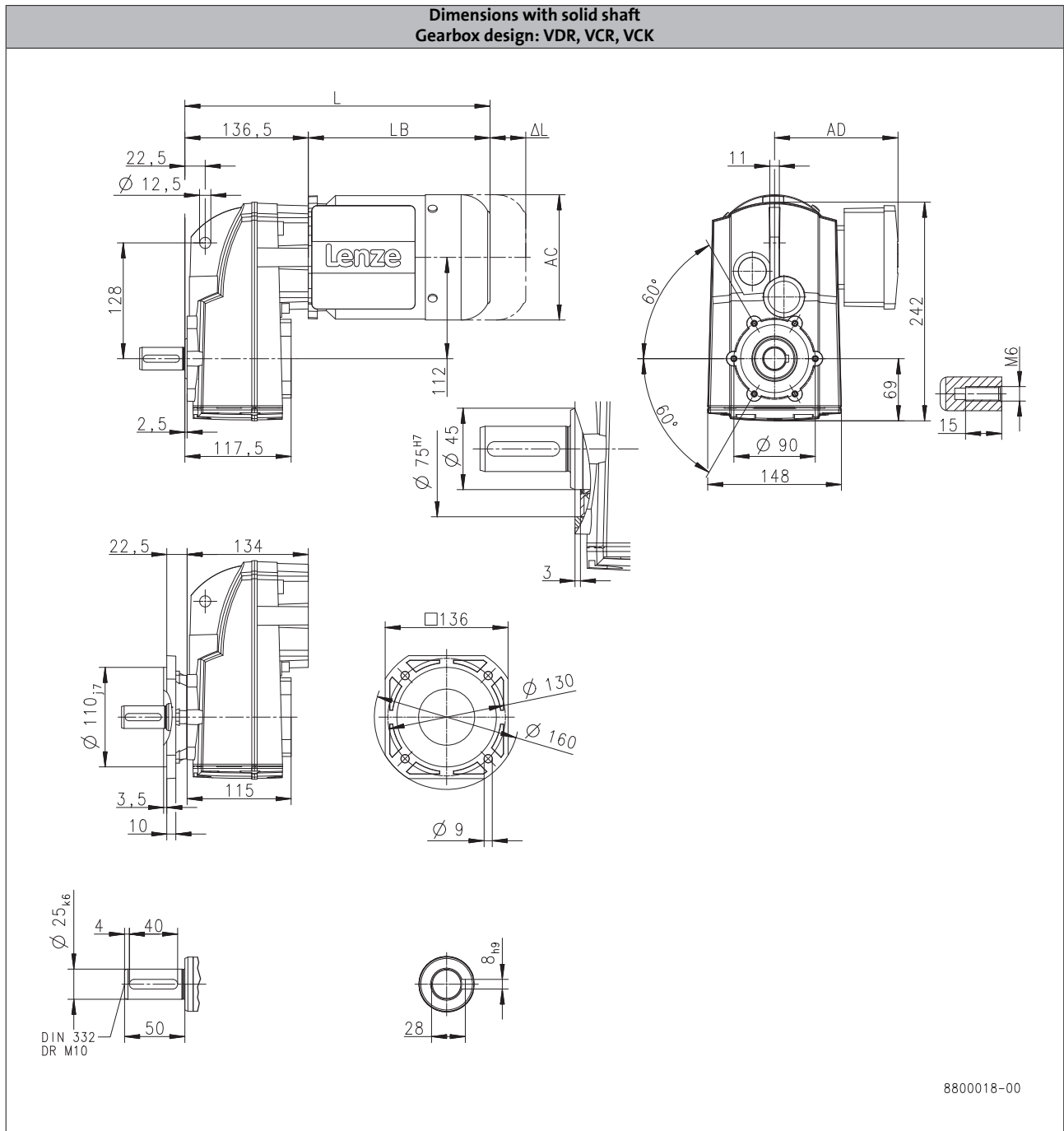
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		320			340
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



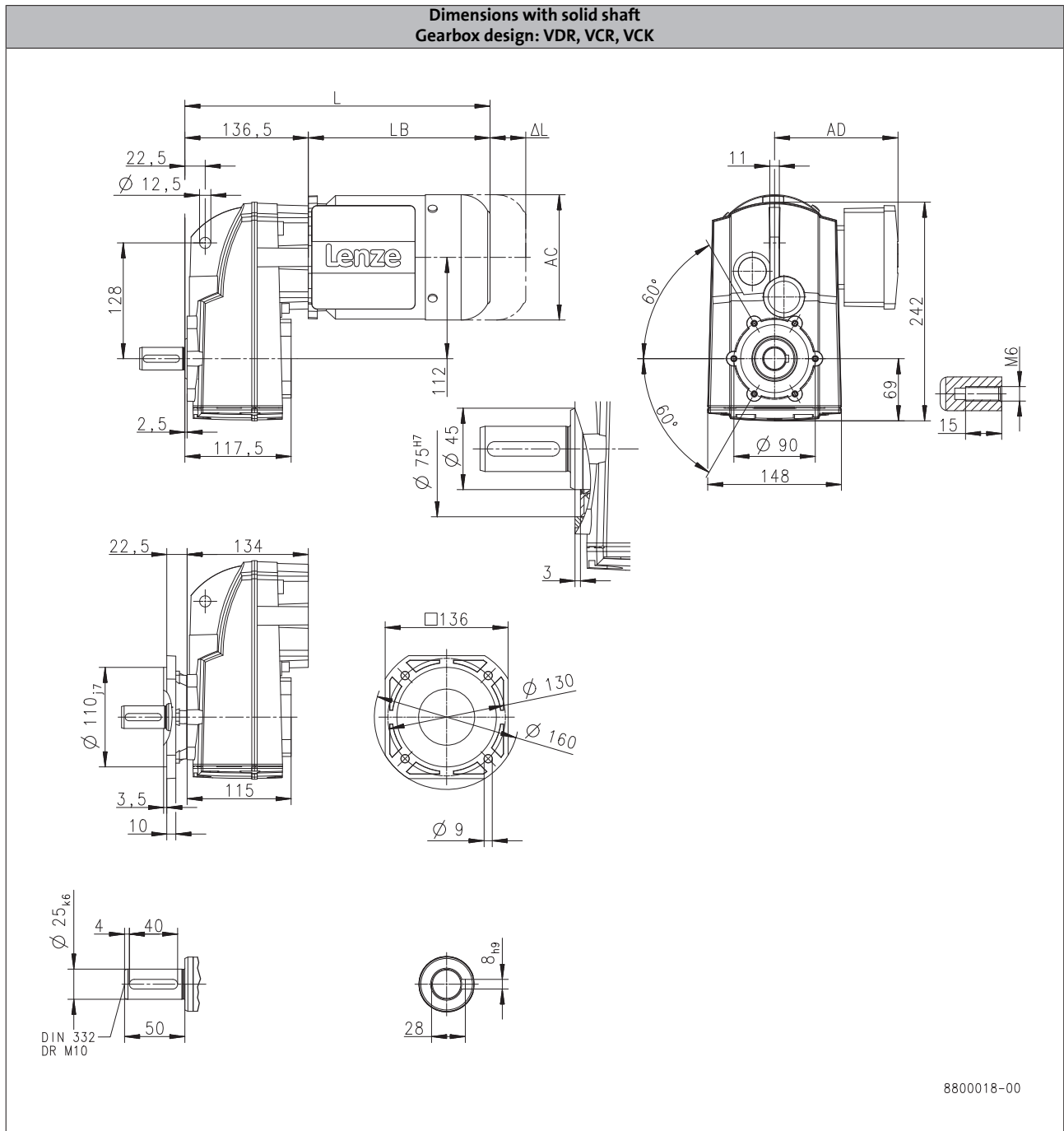
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



		m240				
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	362	431		493	
Motor length	LB [mm]	225	294		356	
Length of motor options	Δ L [mm]	107	92.0		103	
Motor diameter	AC [mm]	158	172		192	
Distance motor/connection	AD [mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

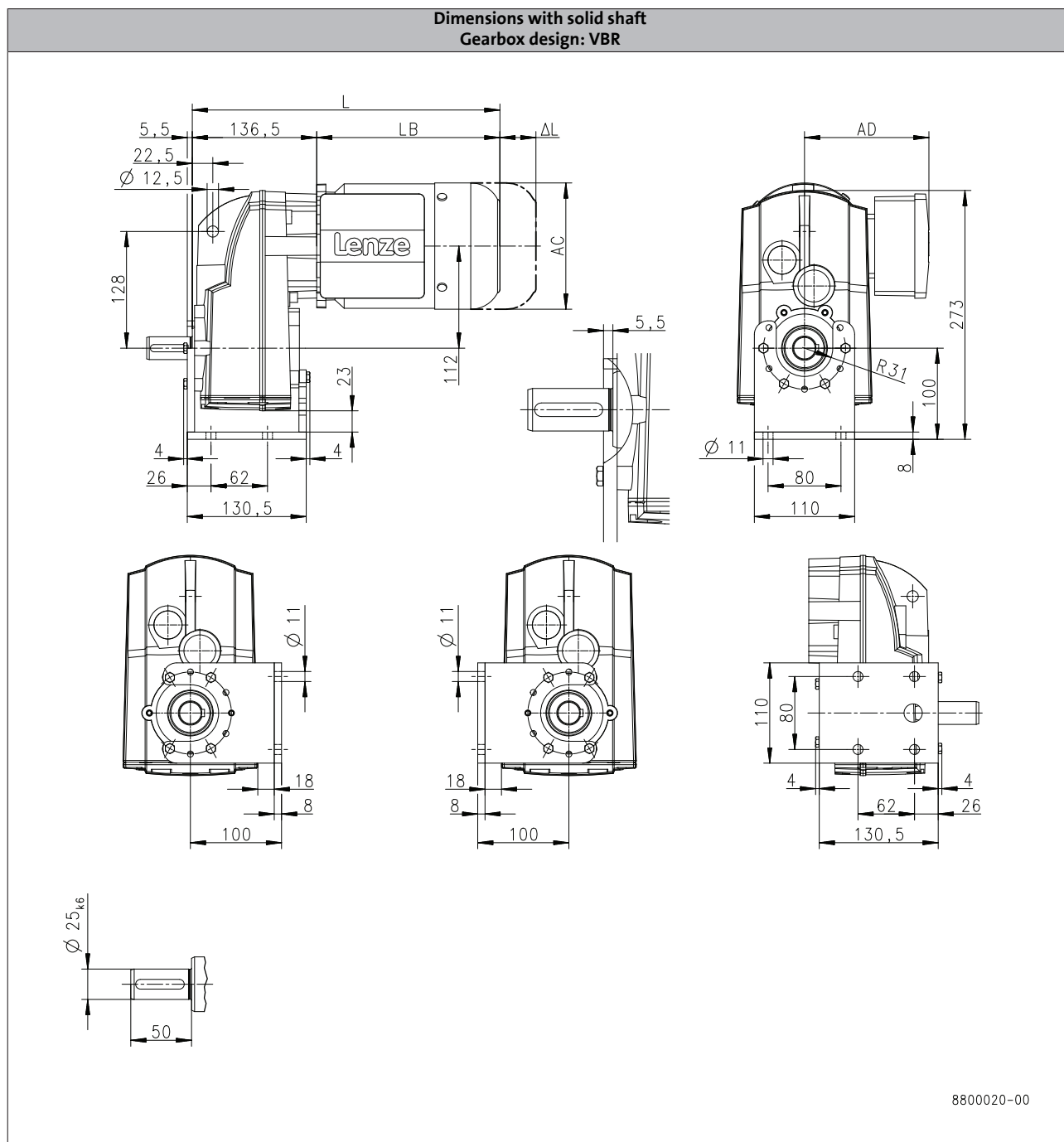
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		320			340
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

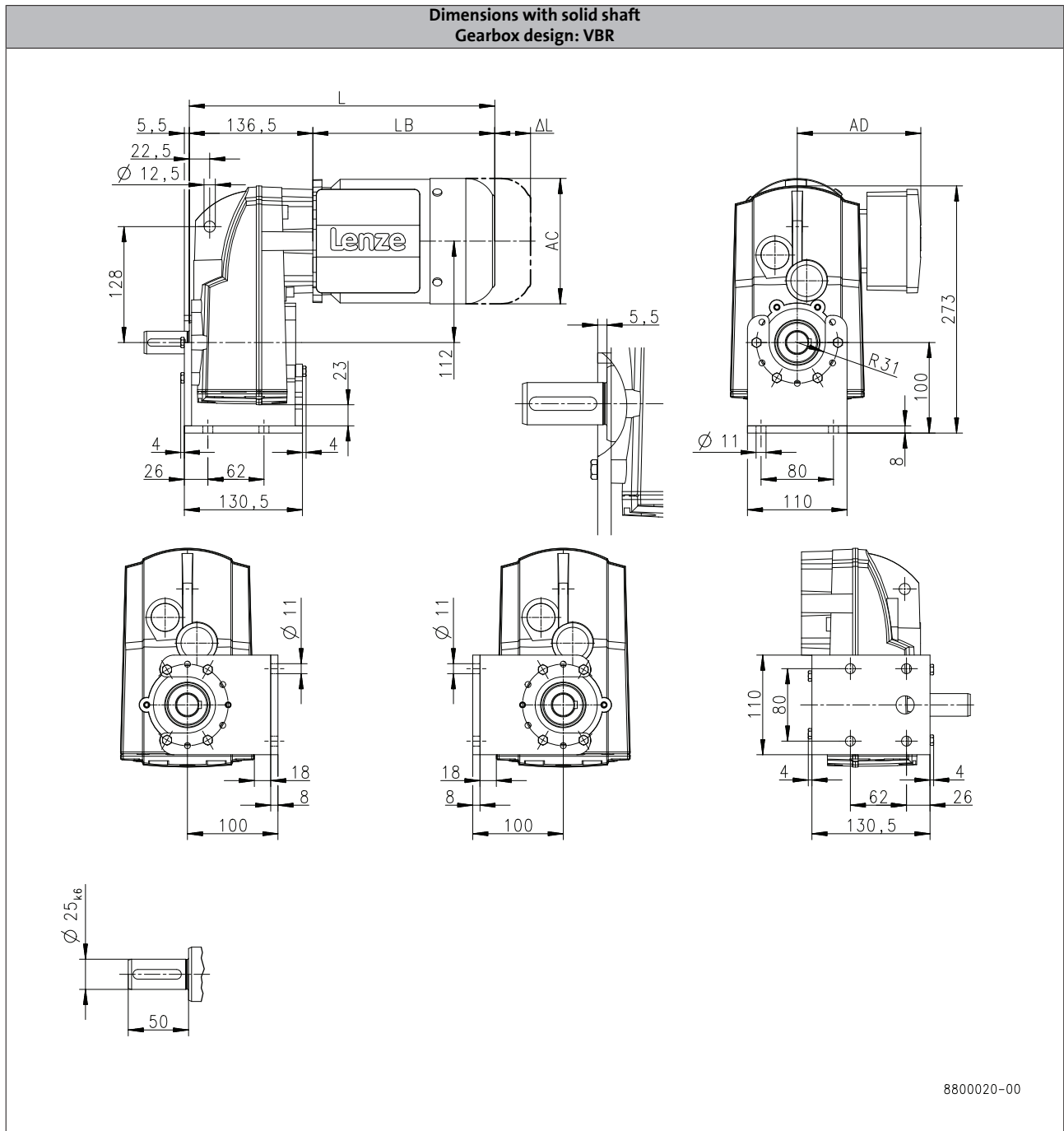
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S220



			m240				
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L	[mm]	362	431		493	
Motor length	LB	[mm]	225	294		356	
Length of motor options	Δ L	[mm]	107	92.0		103	
Motor diameter	AC	[mm]	158	172		192	
Distance motor/connection	AD	[mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

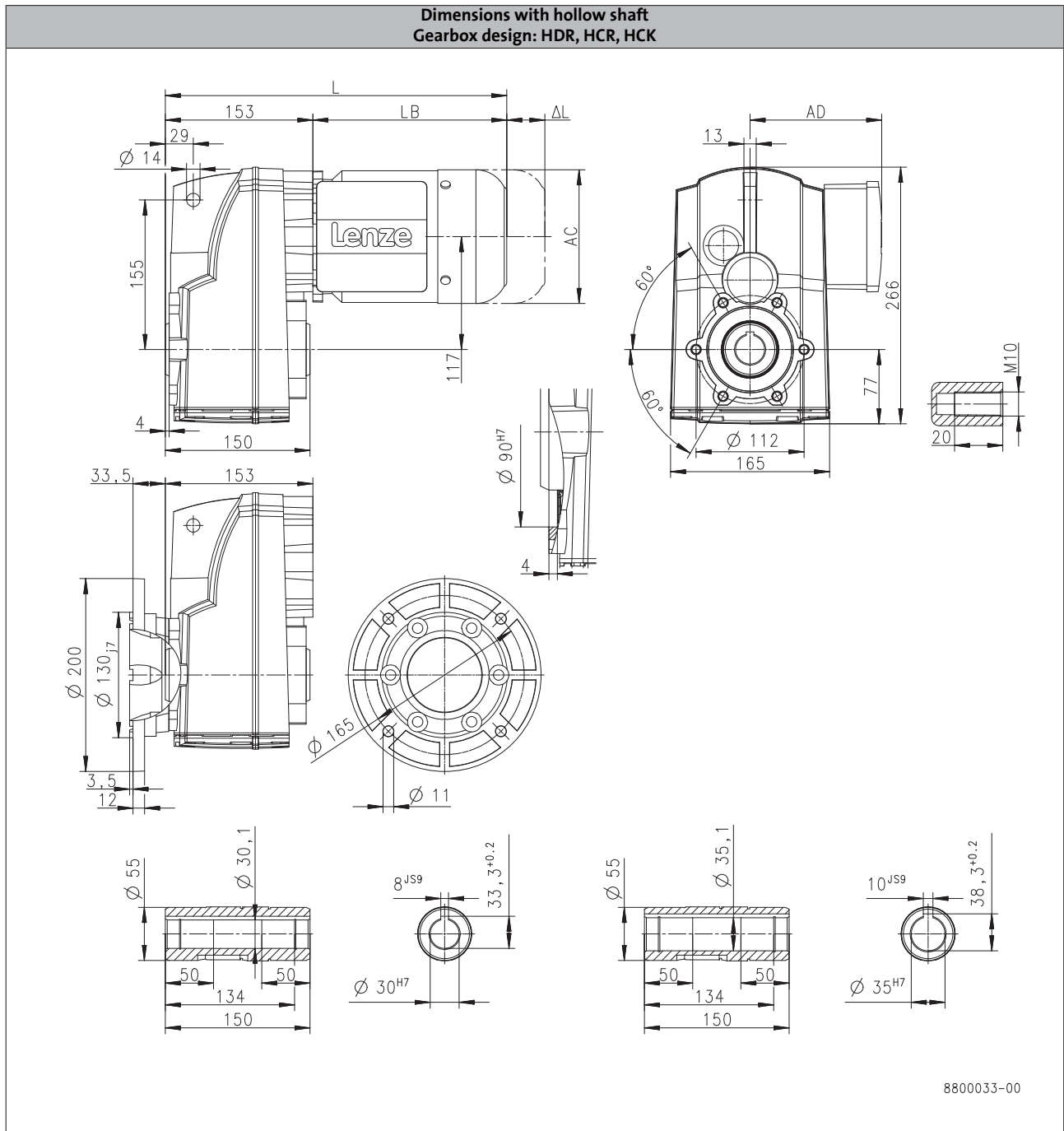
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		336			356
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

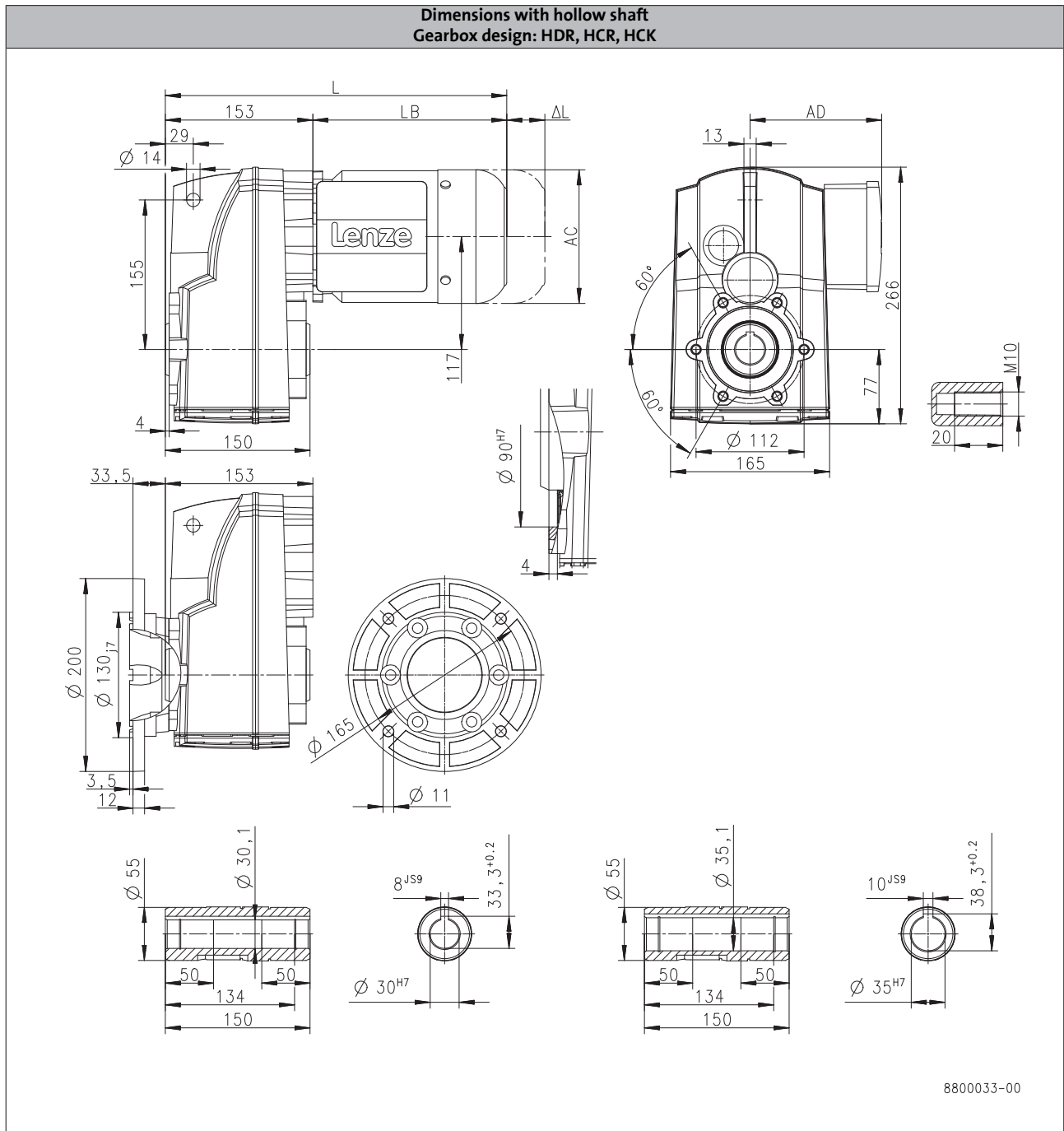
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



		m240						
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L	[mm]	378	447		509		496
Motor length	LB	[mm]	225	294		356		343
Length of motor options	Δ L	[mm]	107	92.0		103		111
Motor diameter	AC	[mm]	158	172		192		210
Distance motor/connection	AD	[mm]	148	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

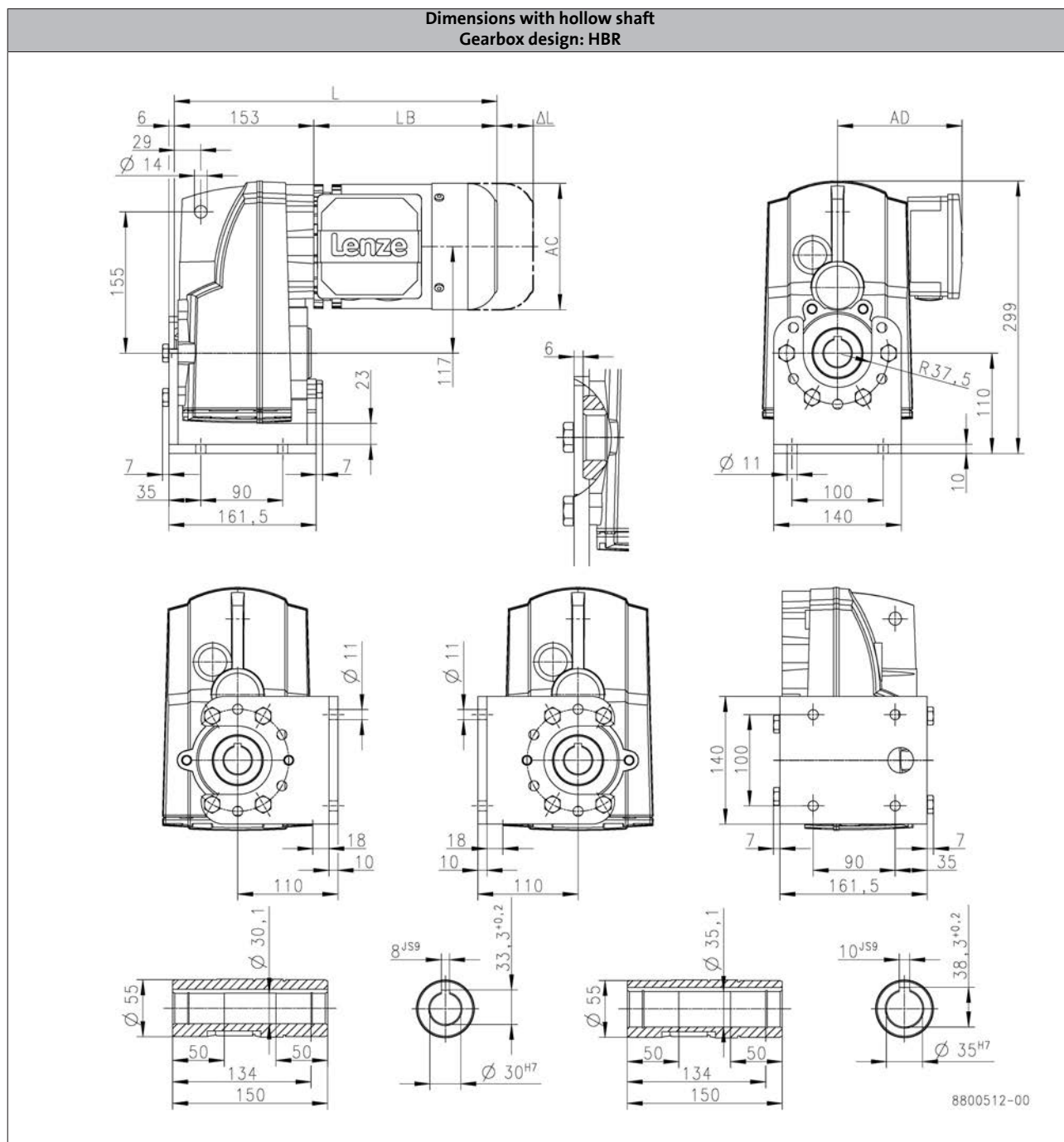
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		336			356
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



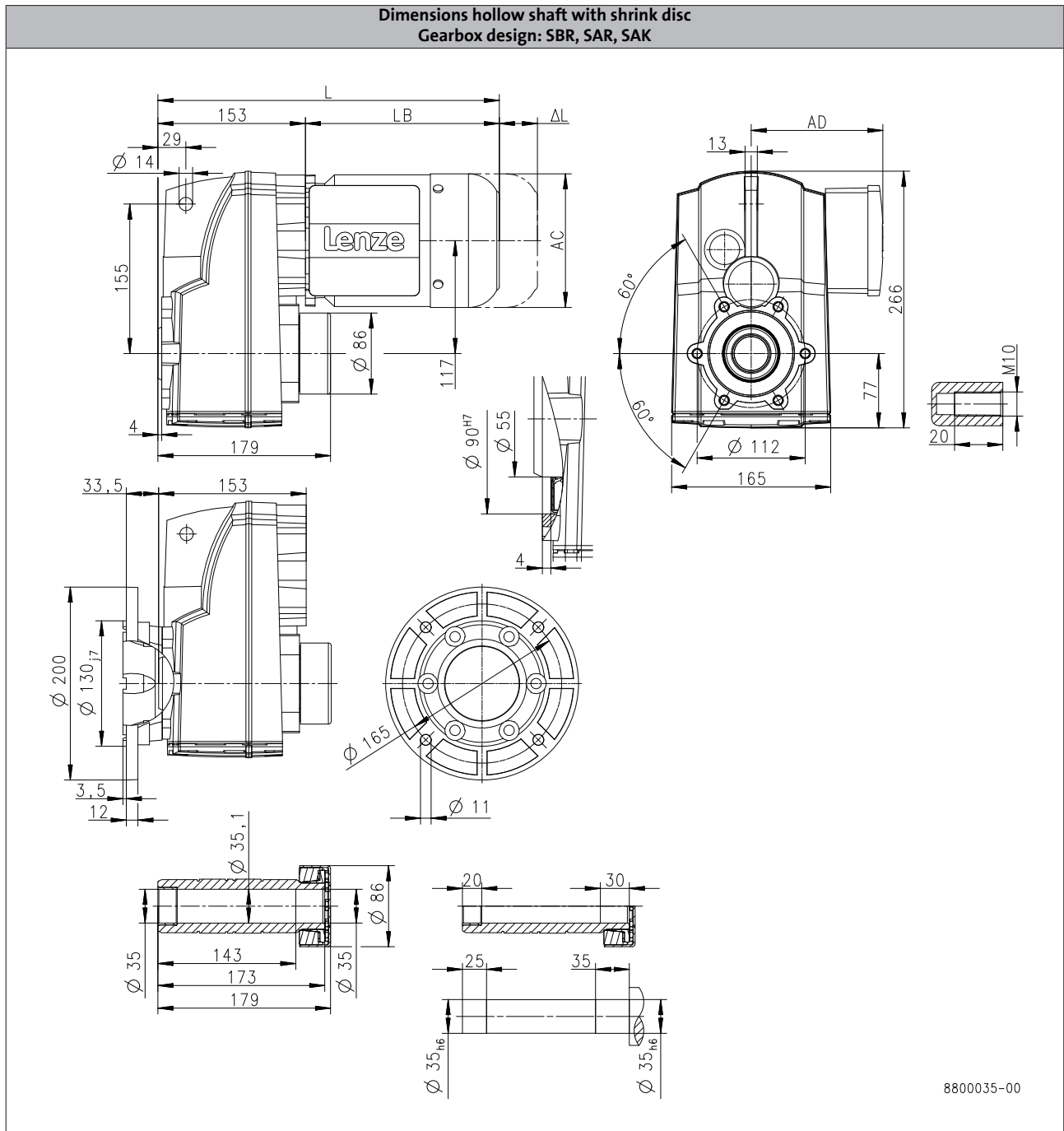
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		336			356
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions



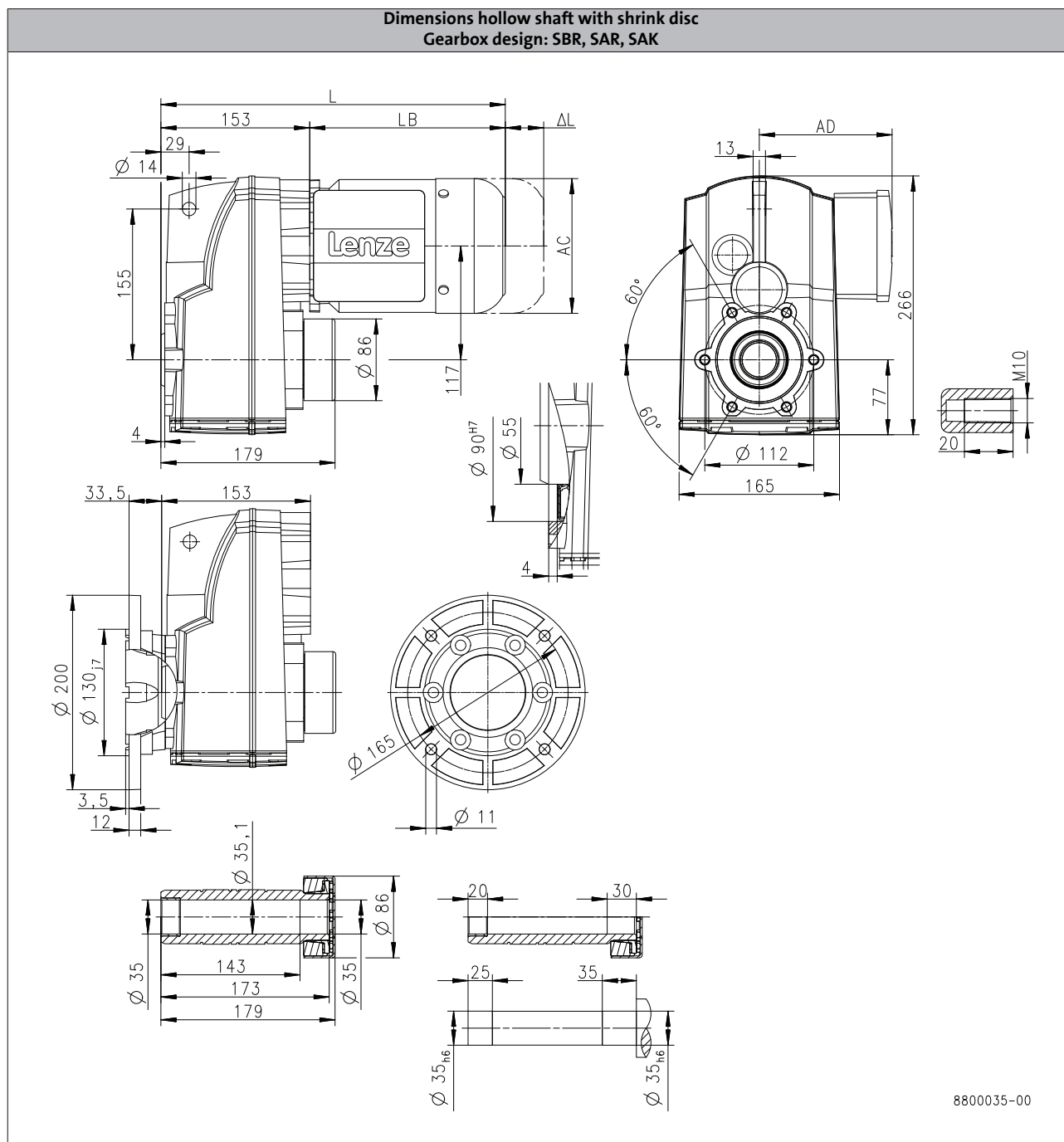
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



6.4

			m240					
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L	[mm]	378	447		509		496
Motor length	LB	[mm]	225	294		356		343
Length of motor options	Δ L	[mm]	107	92.0		103		111
Motor diameter	AC	[mm]	158	172		192		210
Distance motor/connection	AD	[mm]	148	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

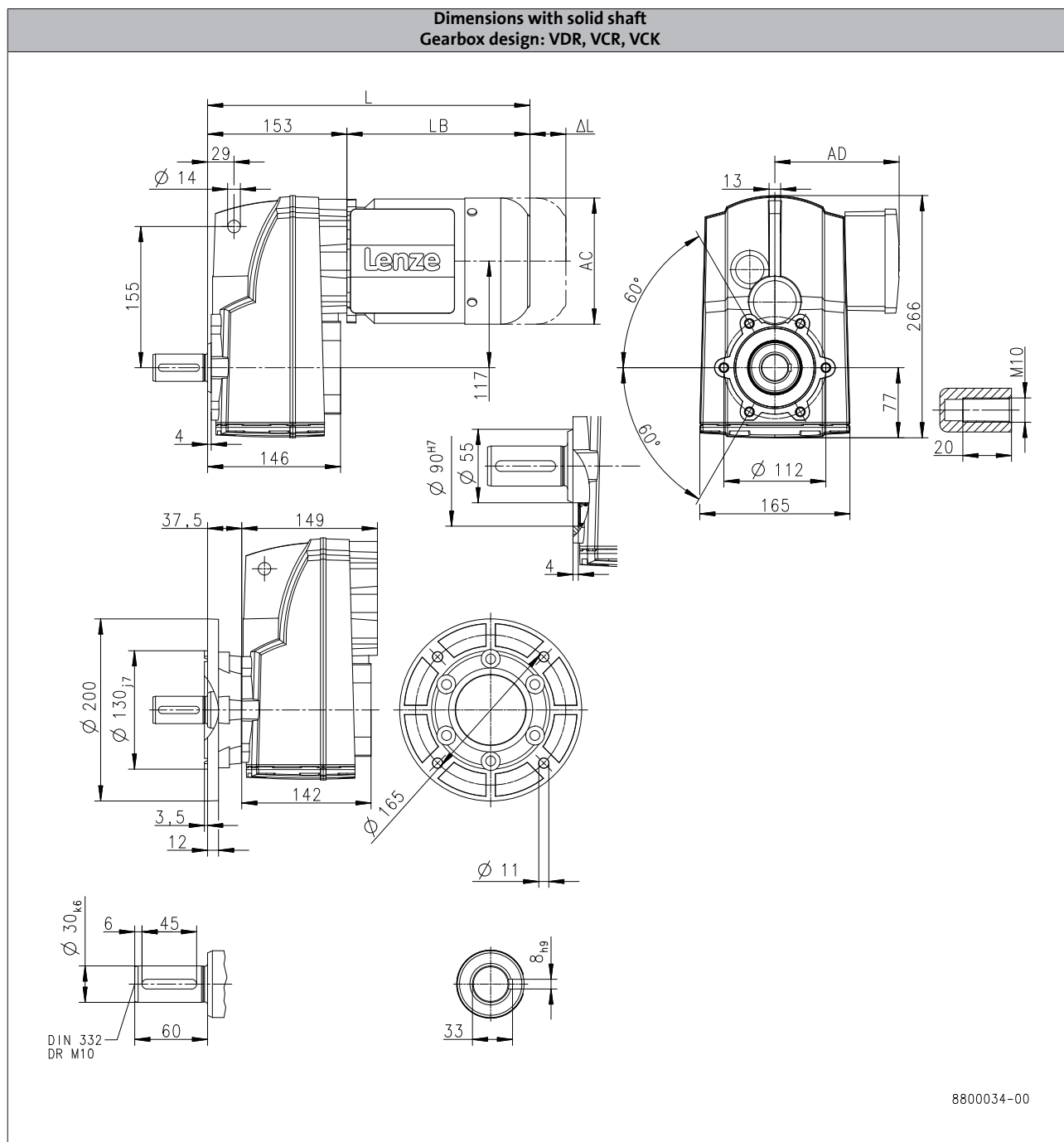
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



6.4

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		336			356
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

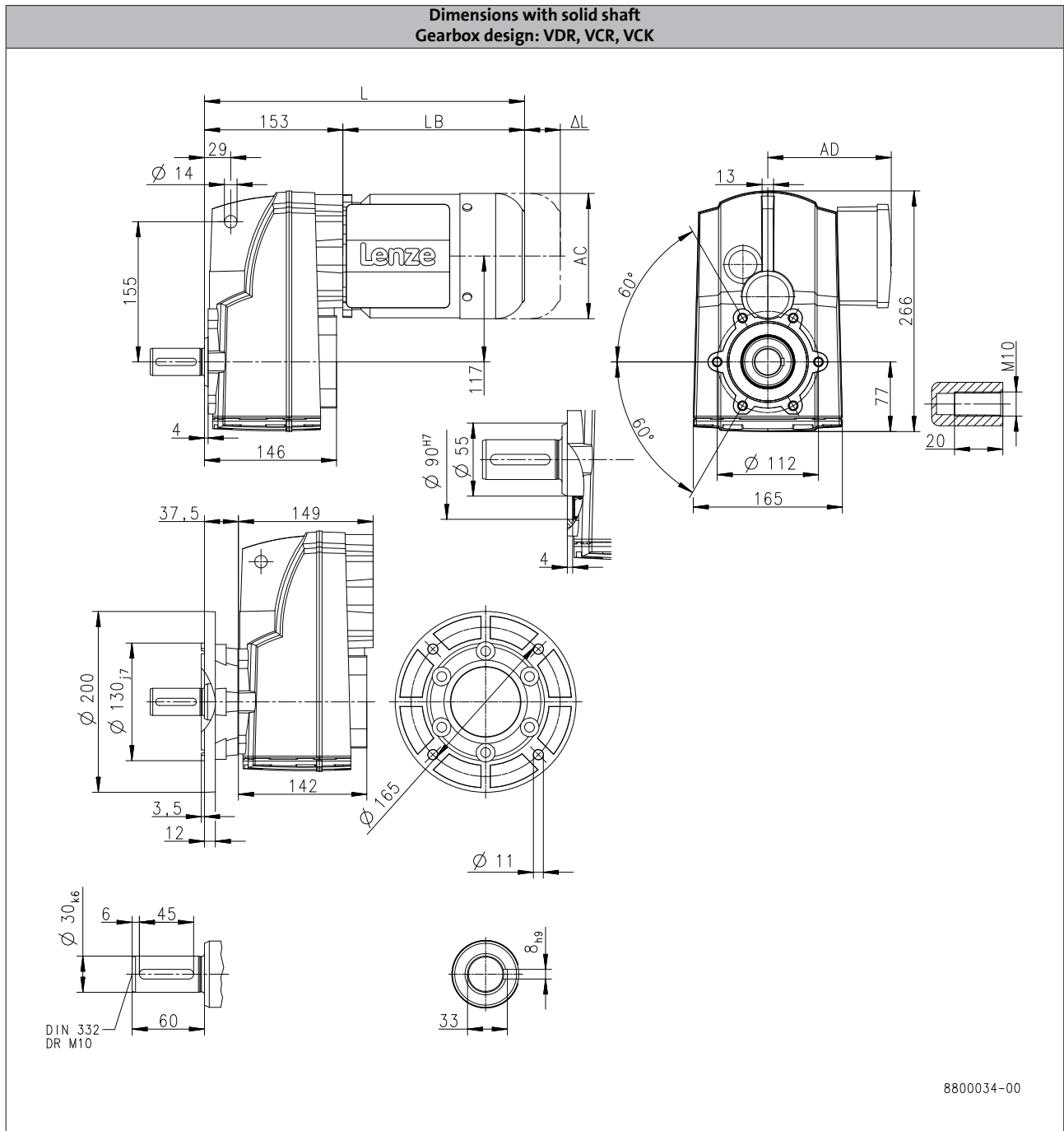
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



		m240						
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]		378	447		509		496
Motor length	LB [mm]		225	294		356		343
Length of motor options	$\Delta L$ [mm]		107	92.0		103		111
Motor diameter	AC [mm]		158	172		192		210
Distance motor/connection	AD [mm]		148	155		164		171

L = length of the motor without built-on accessories  
 $\Delta L$  = additional length of the built-on accessories (with brake)

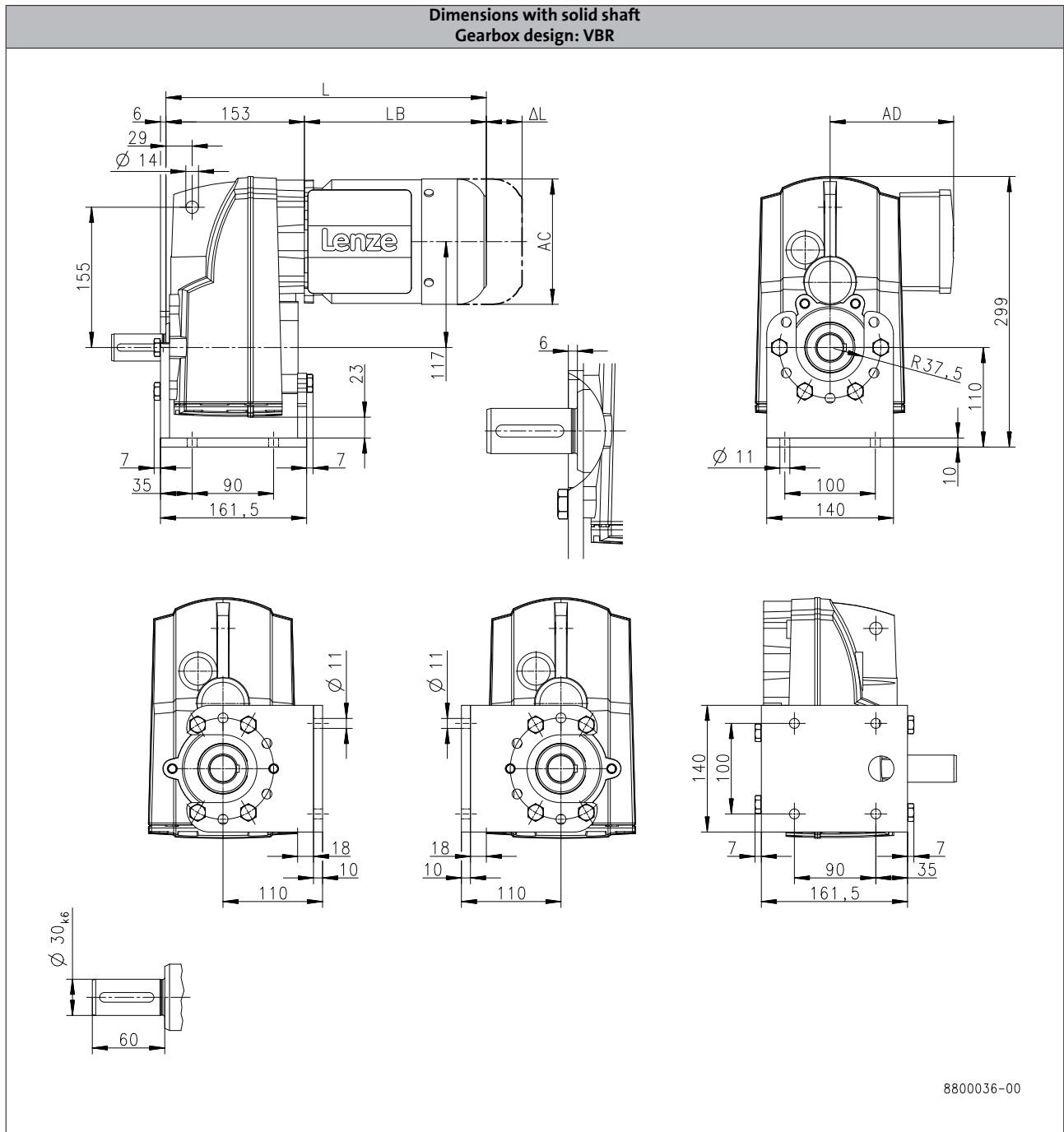
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		336			356
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

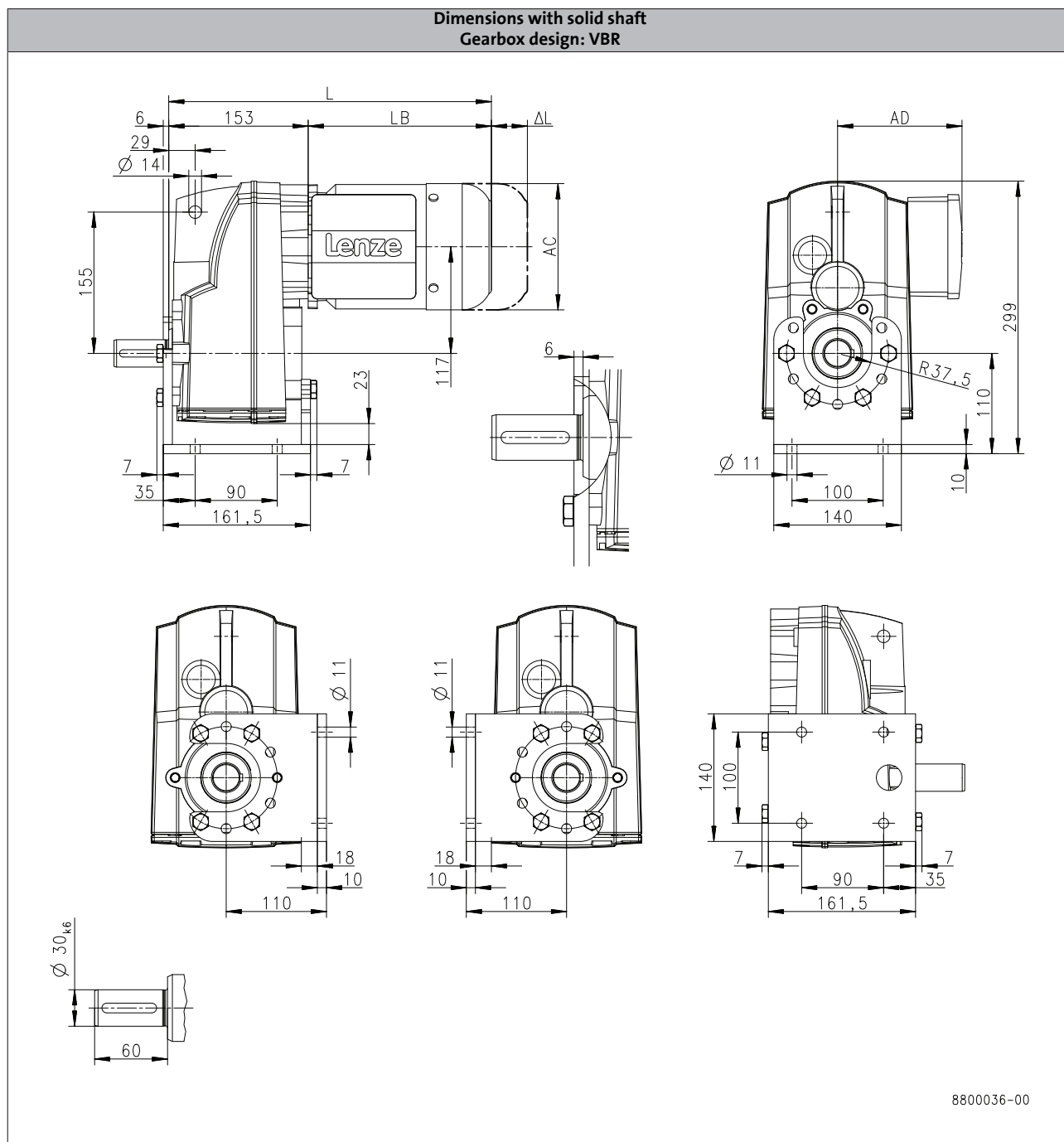
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S400



		m240						
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]		378	447		509		496
Motor length	LB [mm]		225	294		356		343
Length of motor options	Δ L [mm]		107	92.0		103		111
Motor diameter	AC [mm]		158	172		192		210
Distance motor/connection	AD [mm]		148	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

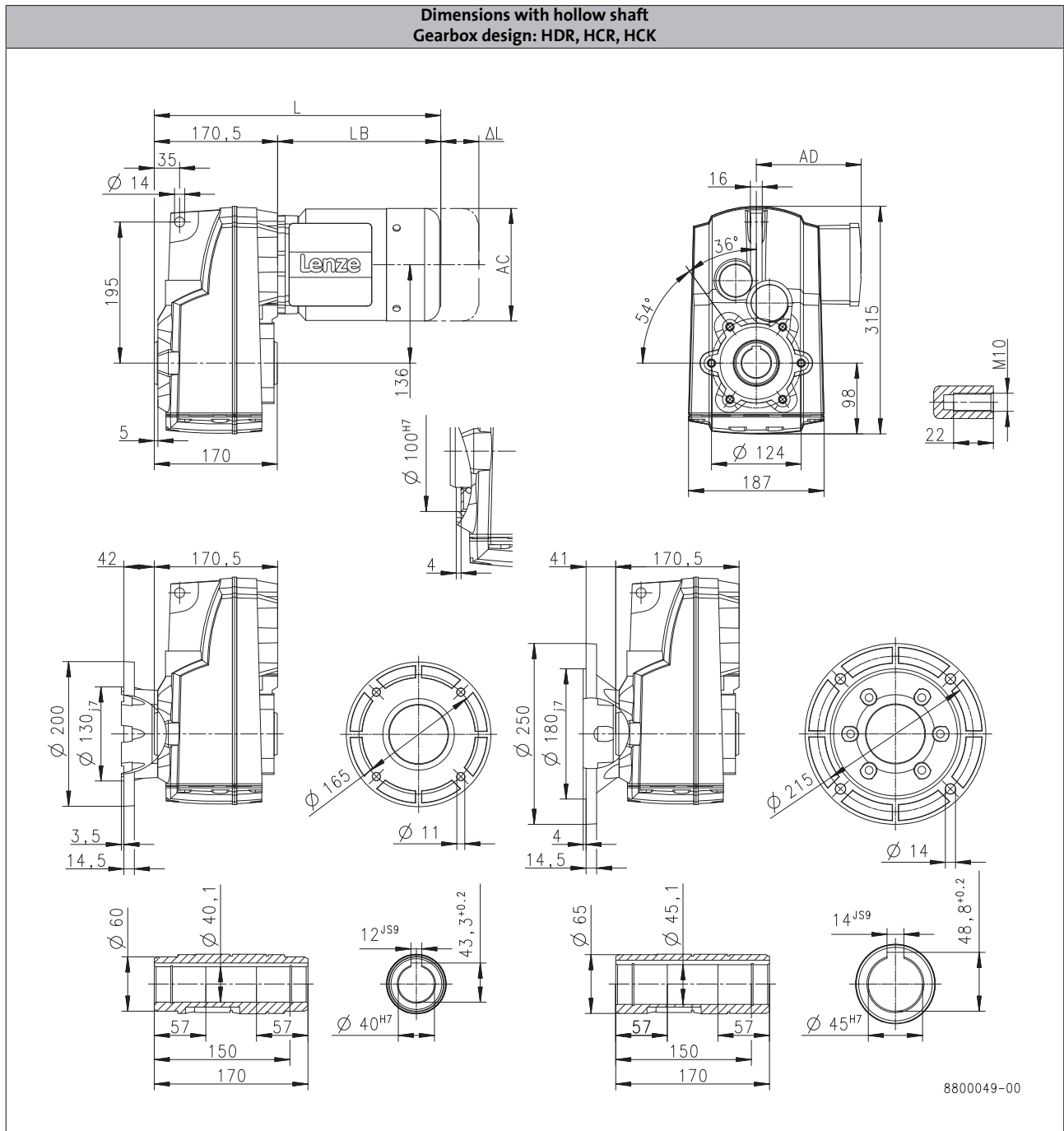
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		354			374
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

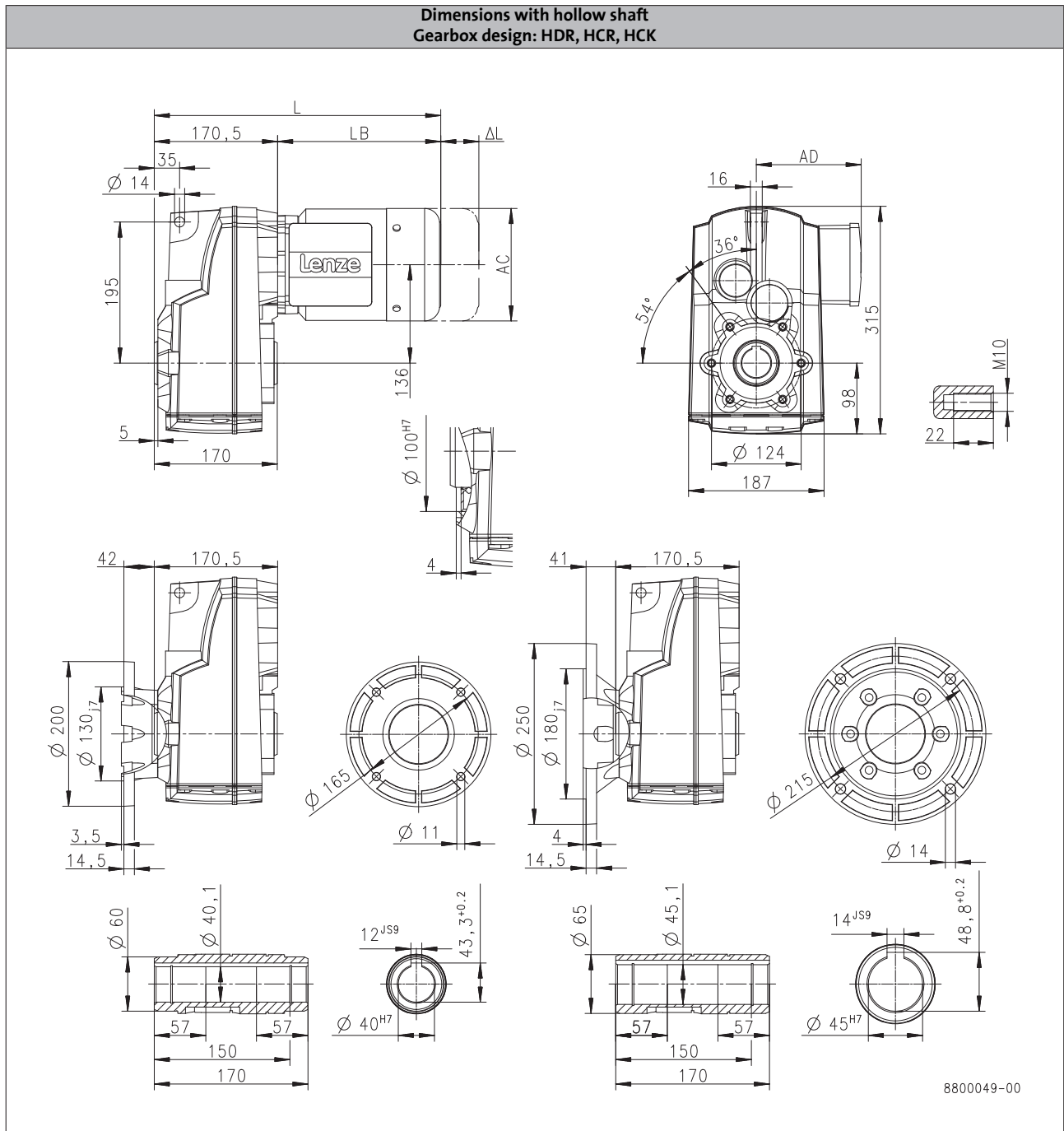
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	396	465		527		514		589
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

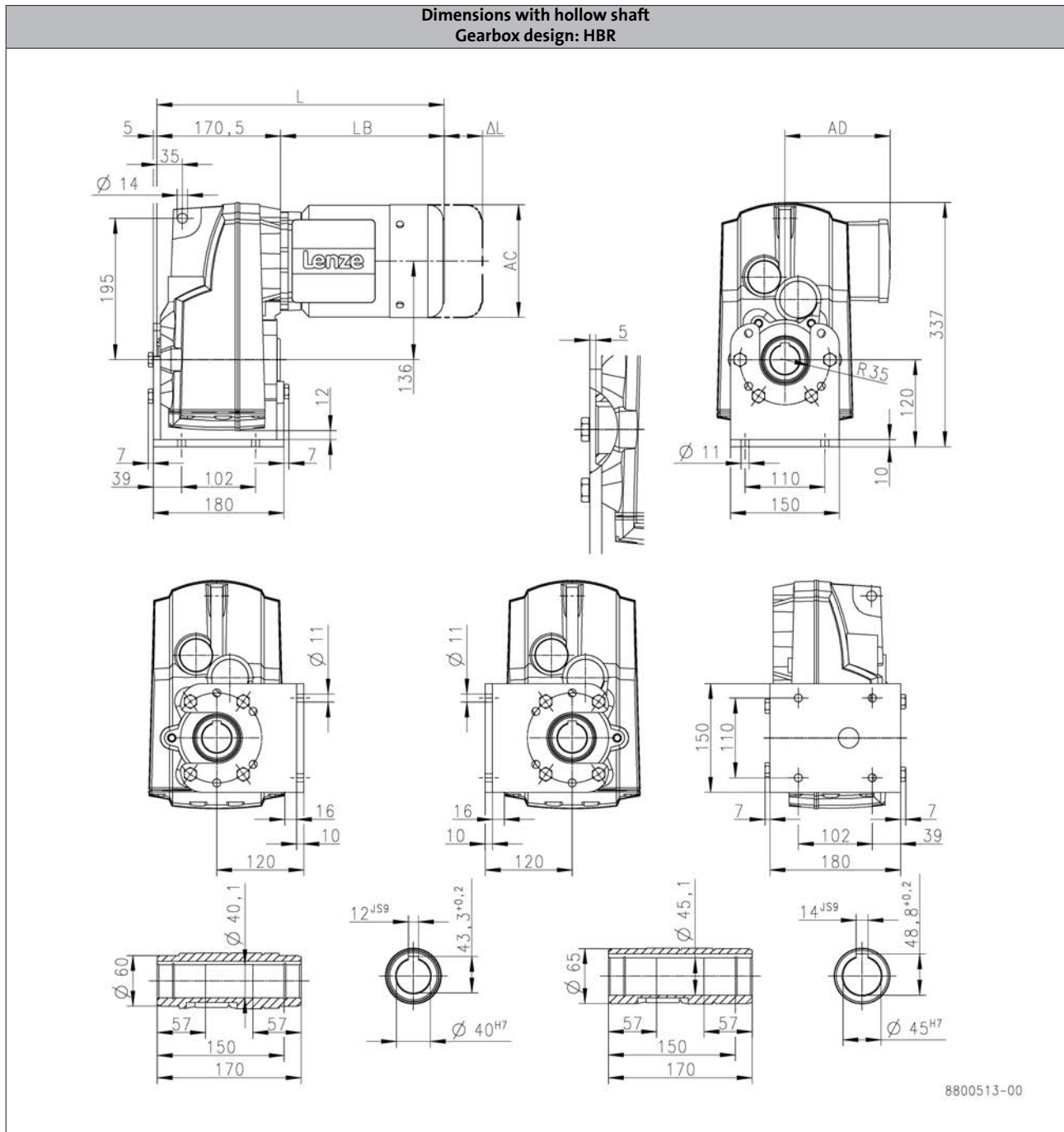
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		354			374
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



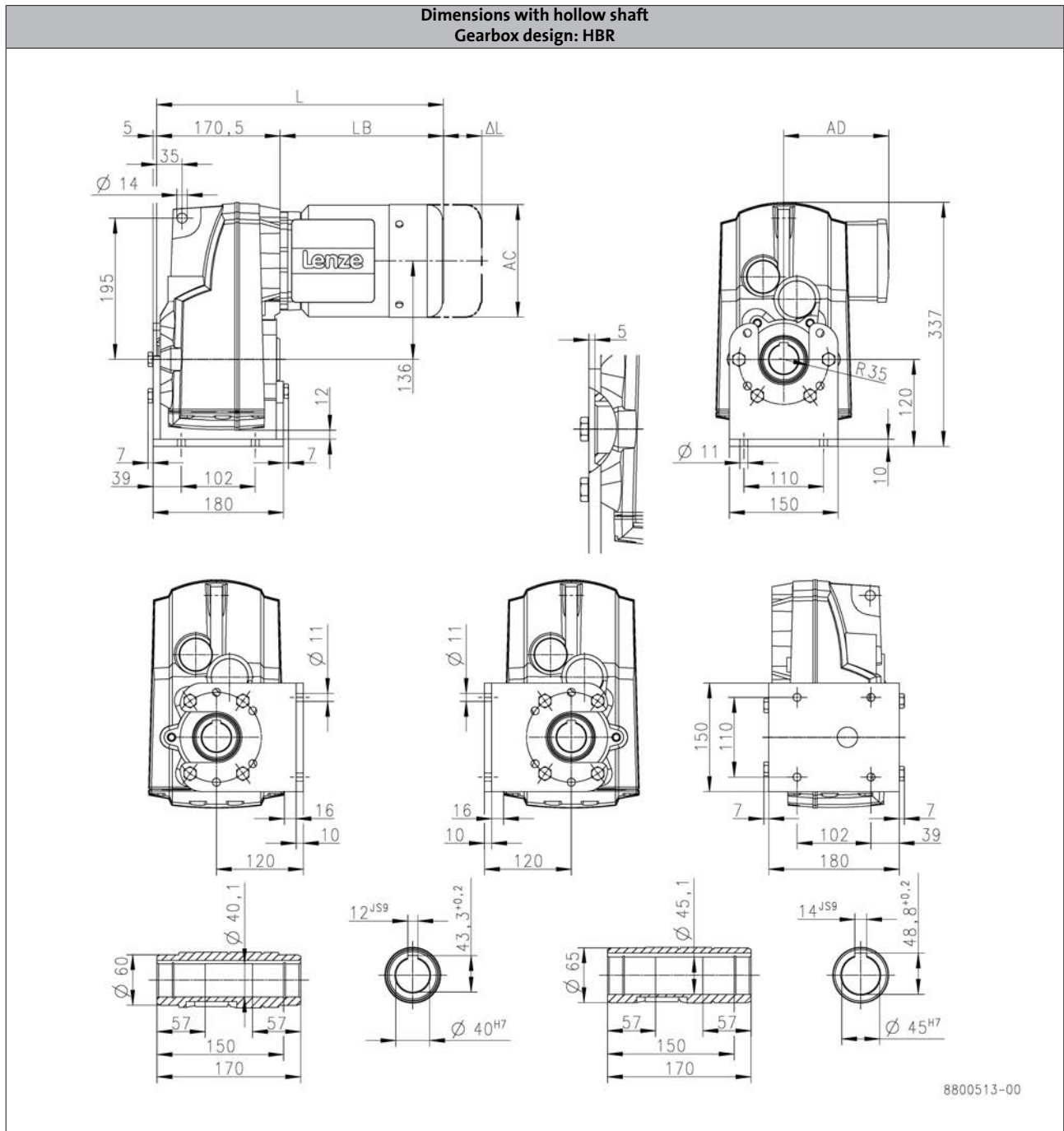
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	396	465		527		514		589
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

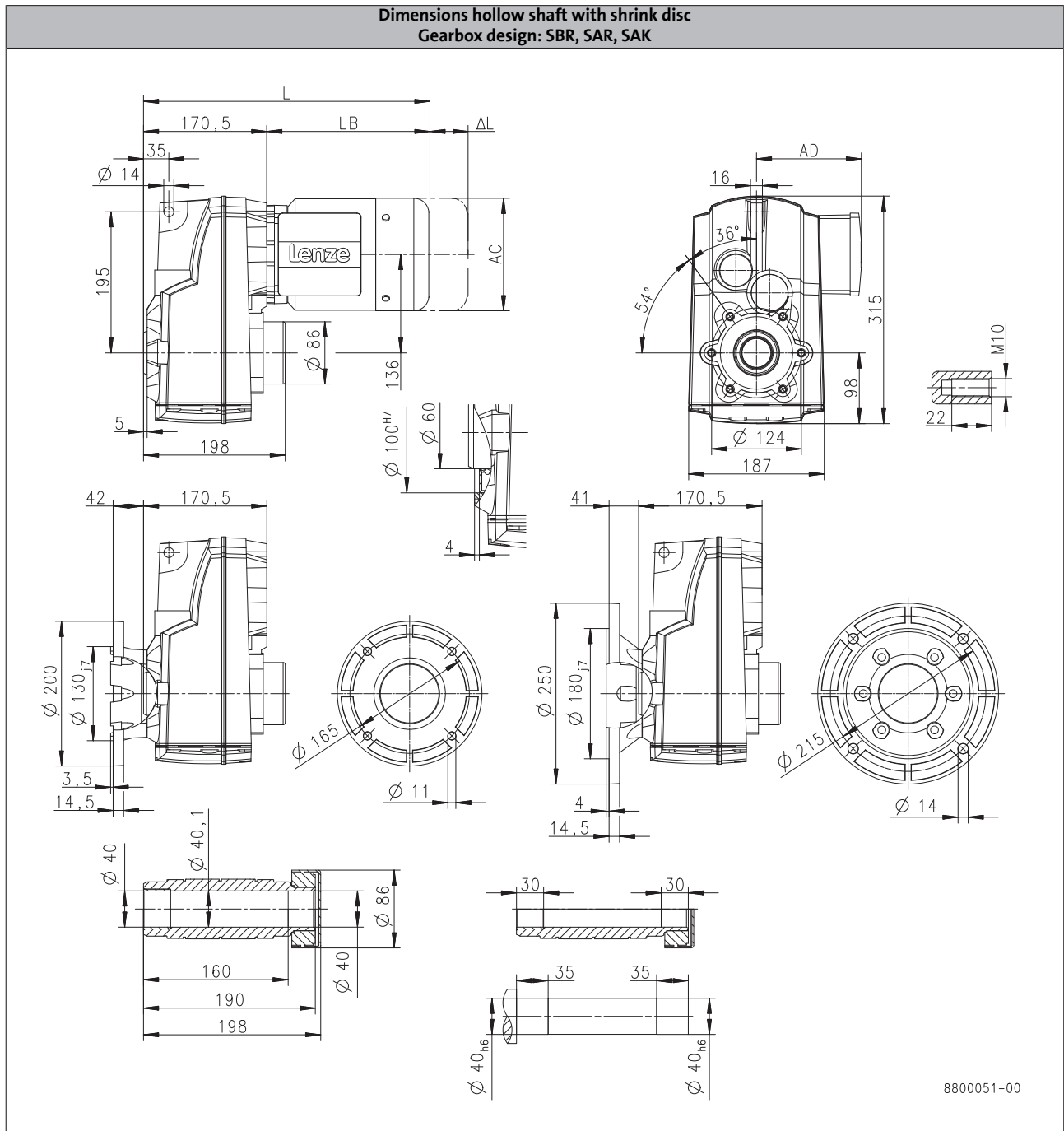
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		354			374
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

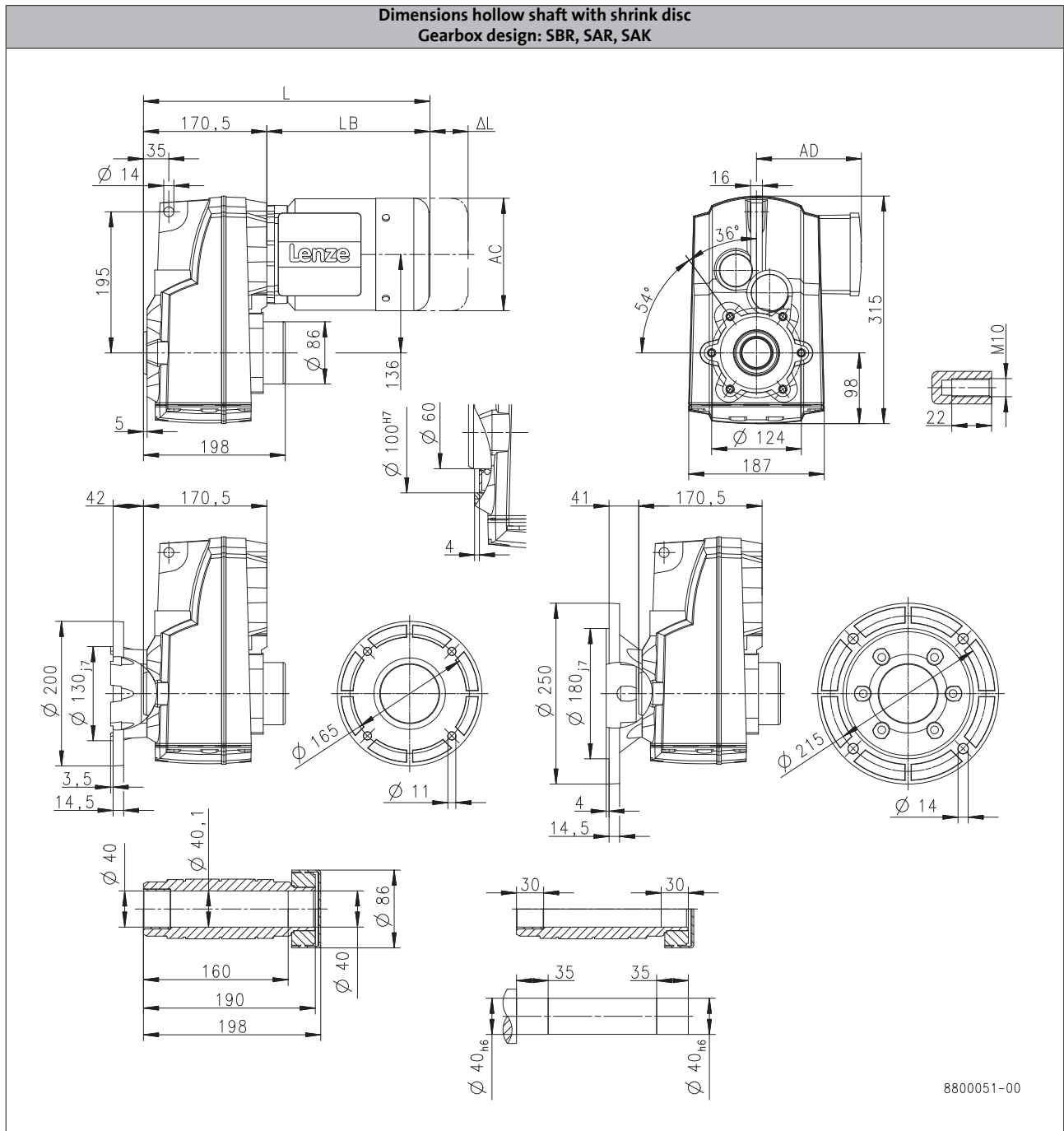
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	396	465		527		514		589
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

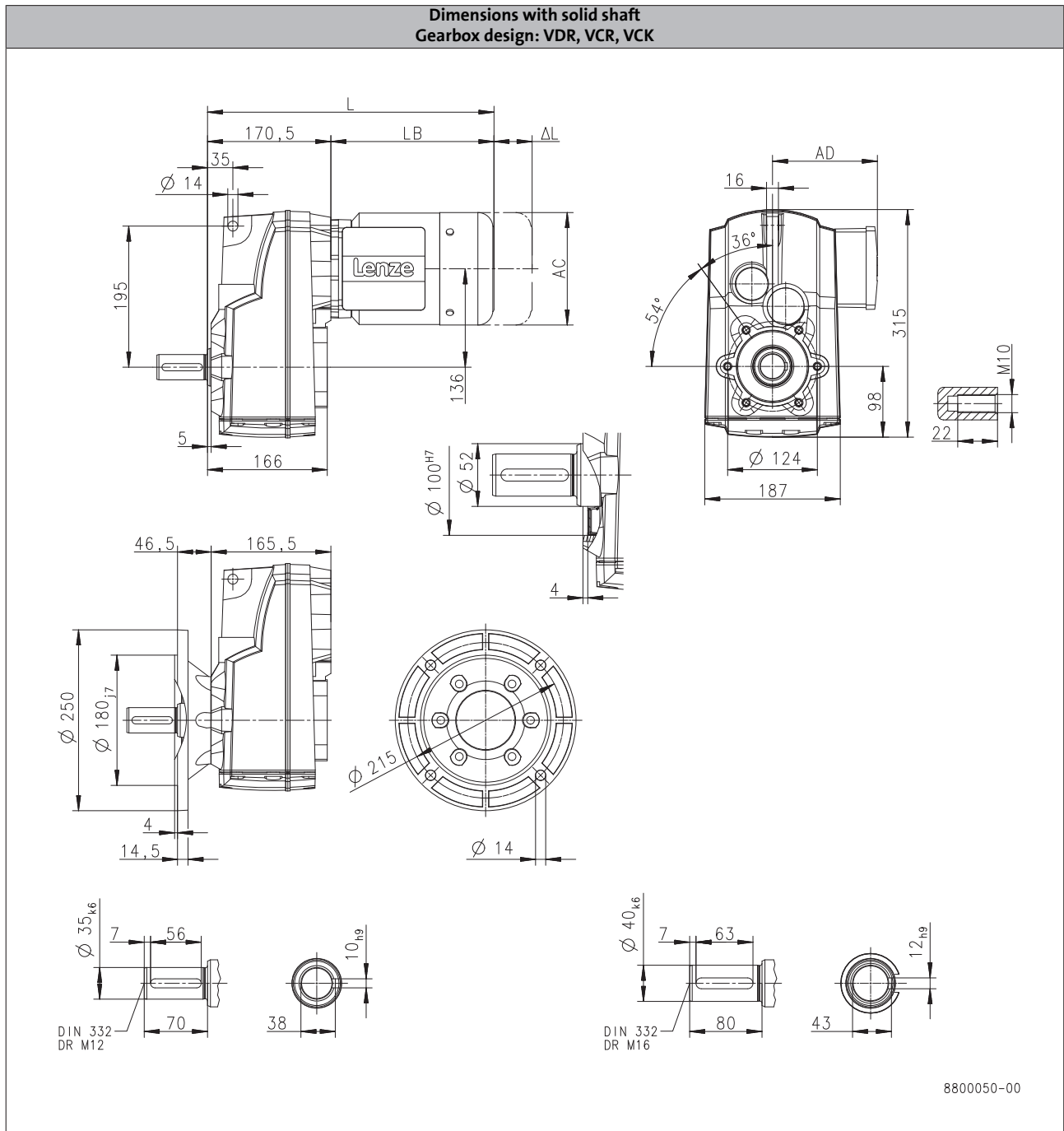
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		354			374
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

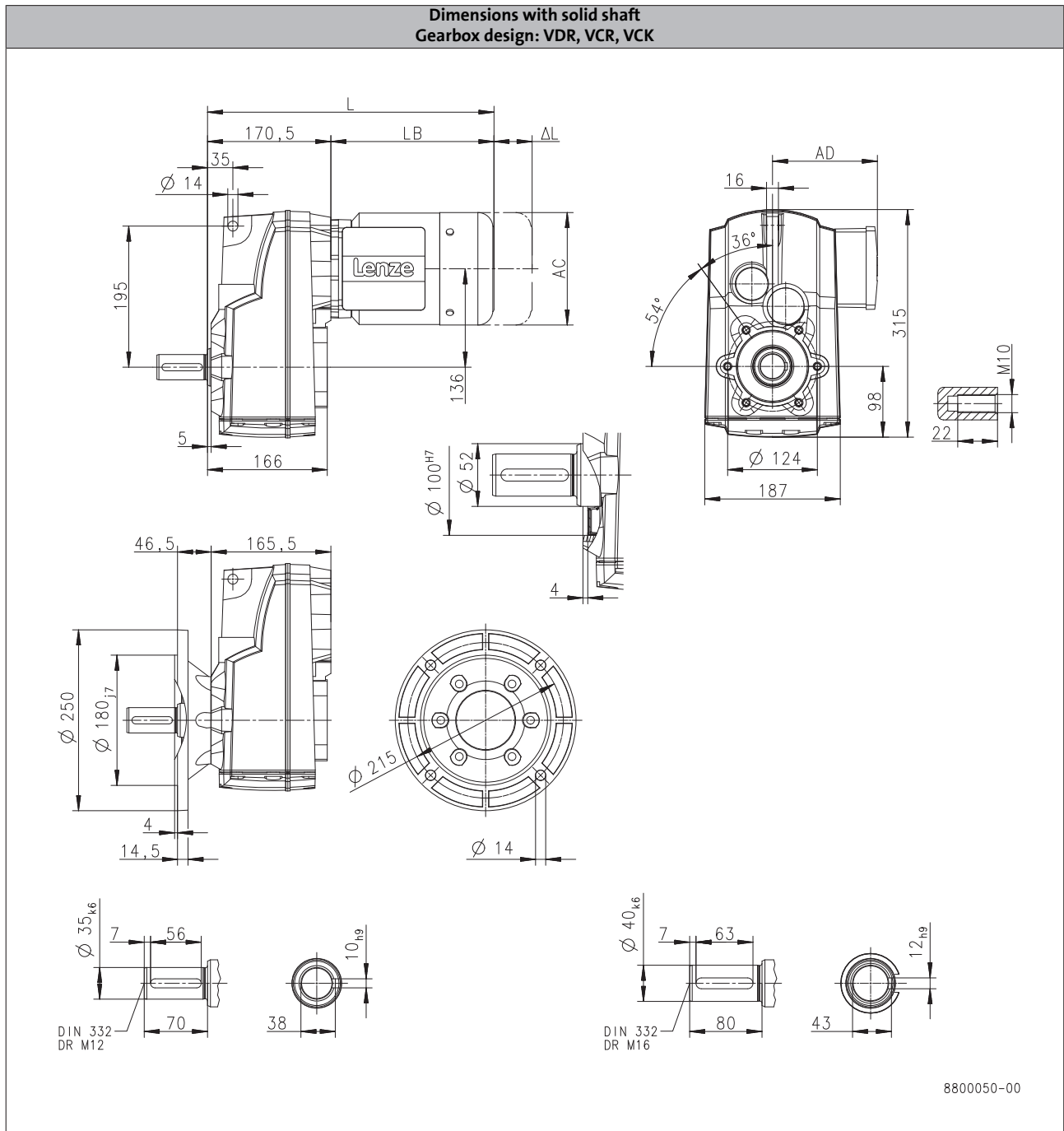
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	396	465		527		514		589
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

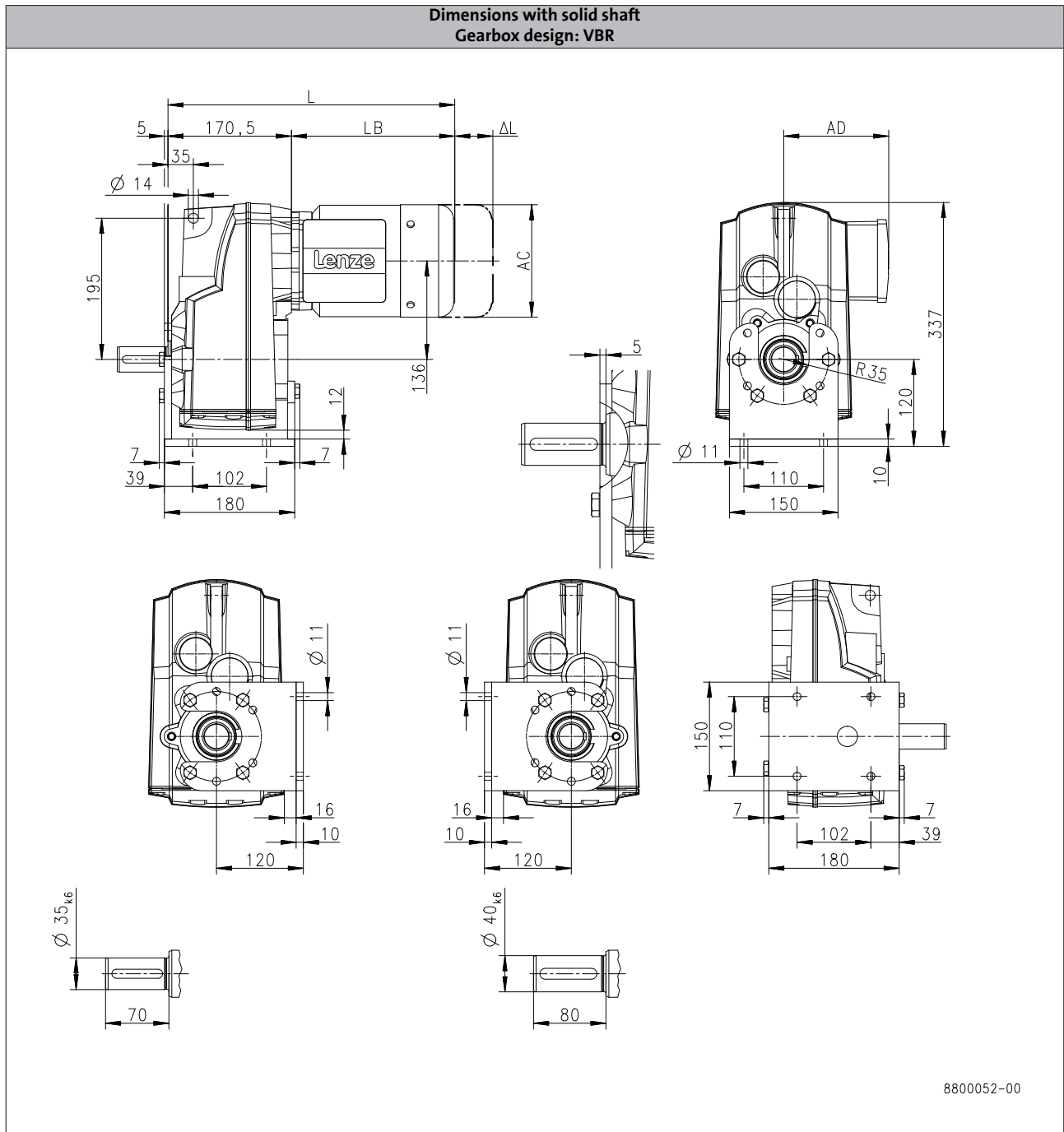
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S660



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		354			374
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



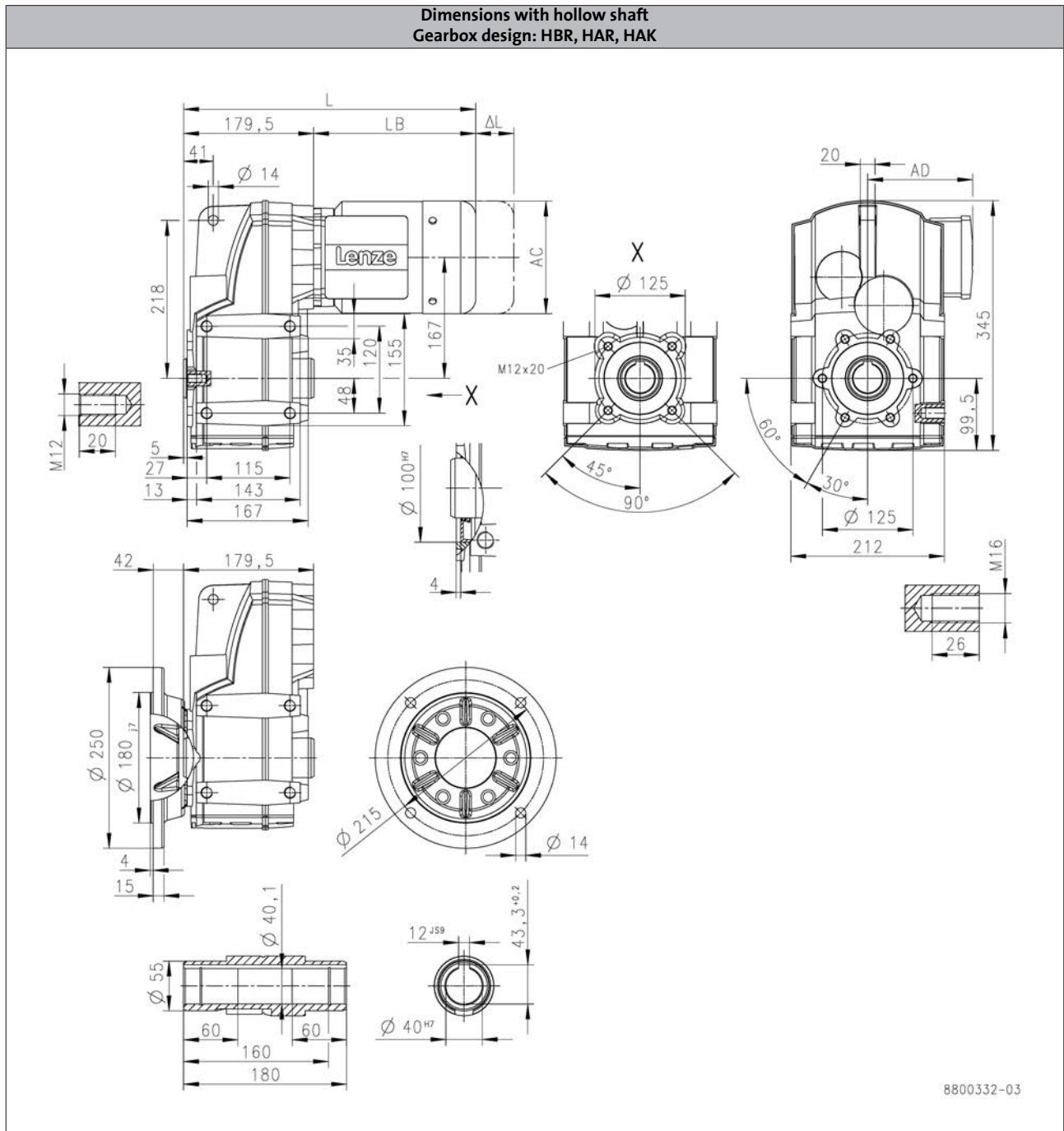
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S950



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		363			383
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



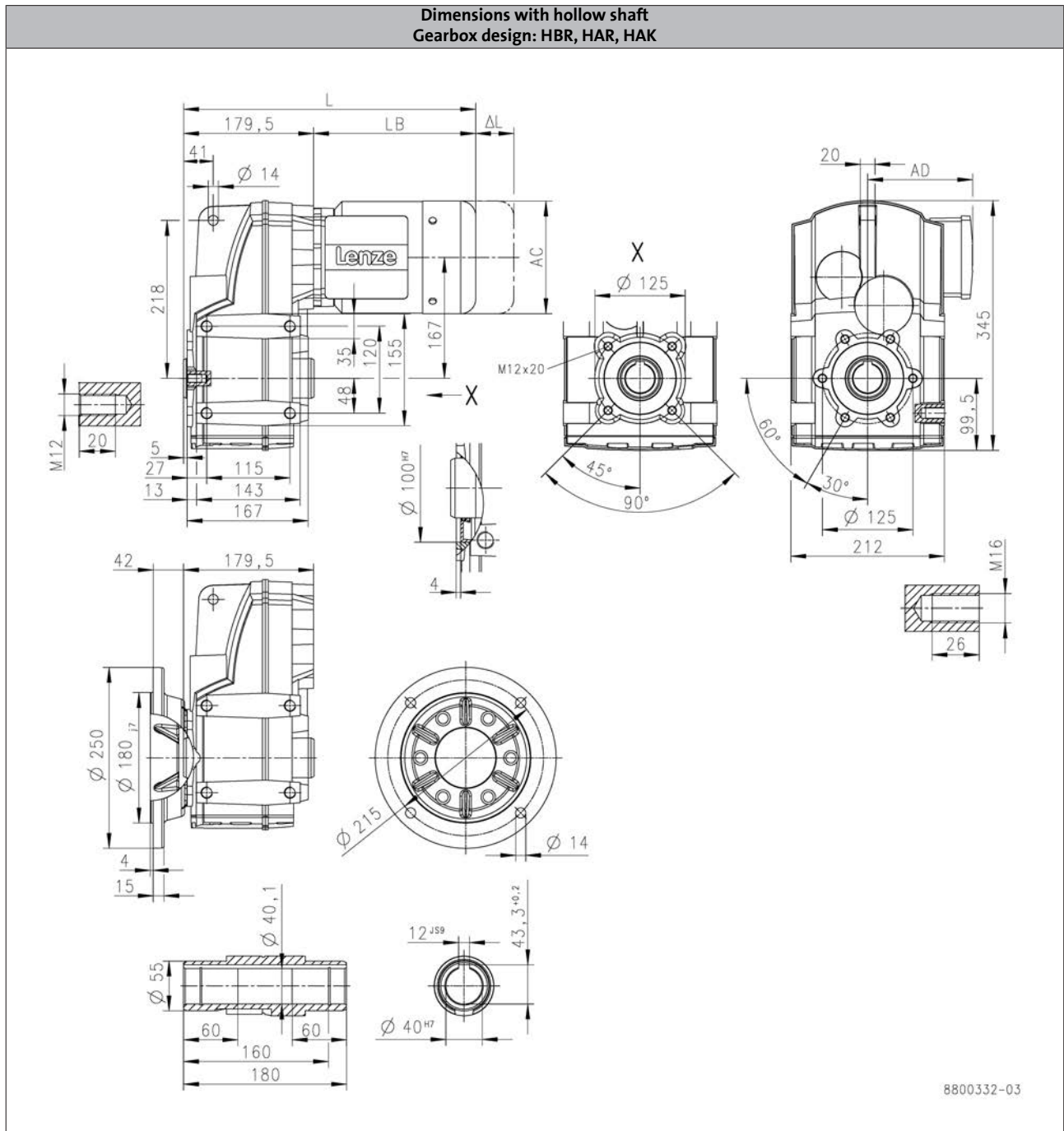
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S950



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	405	474		536		523		598
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

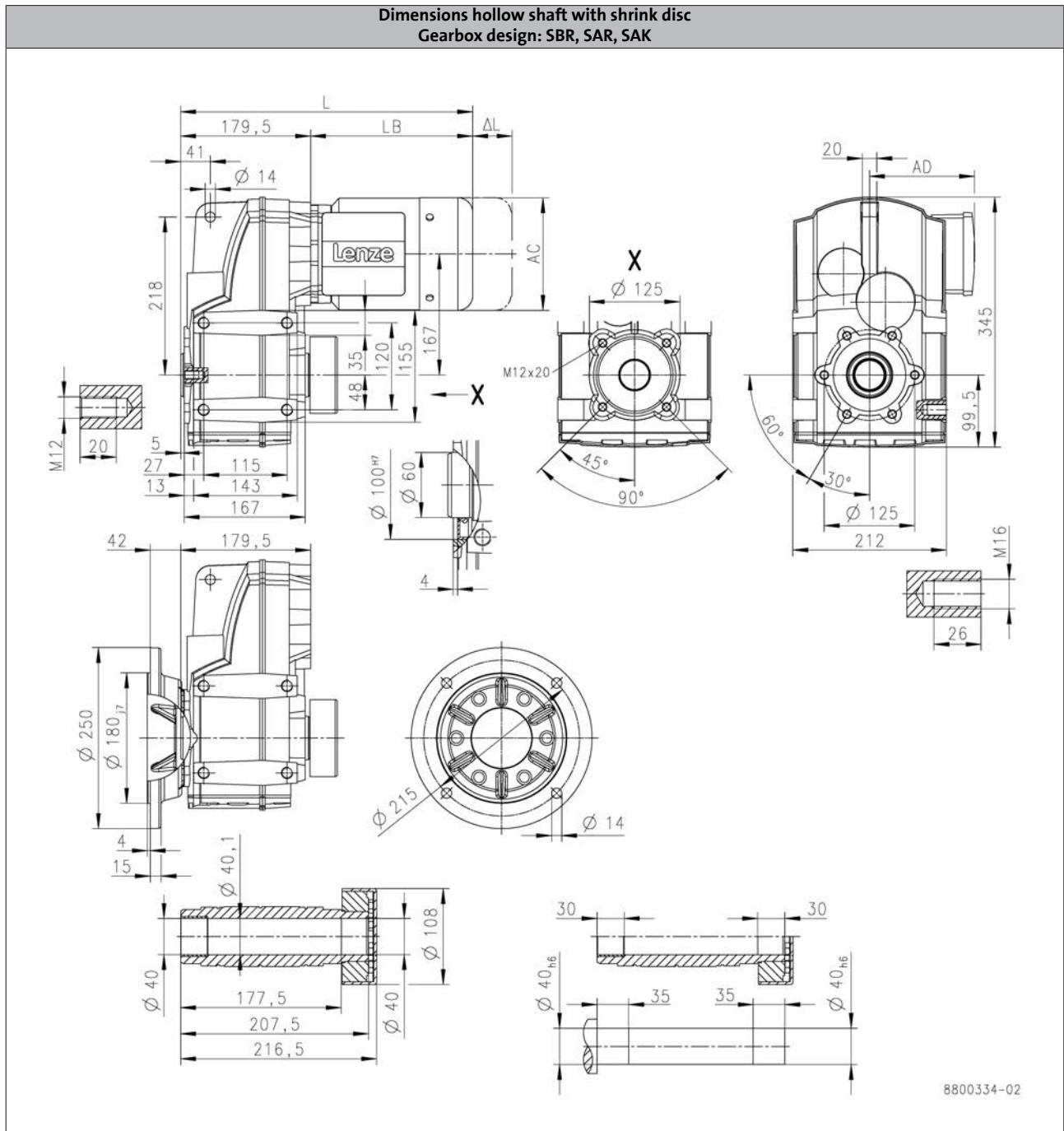
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S950



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		363			383
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

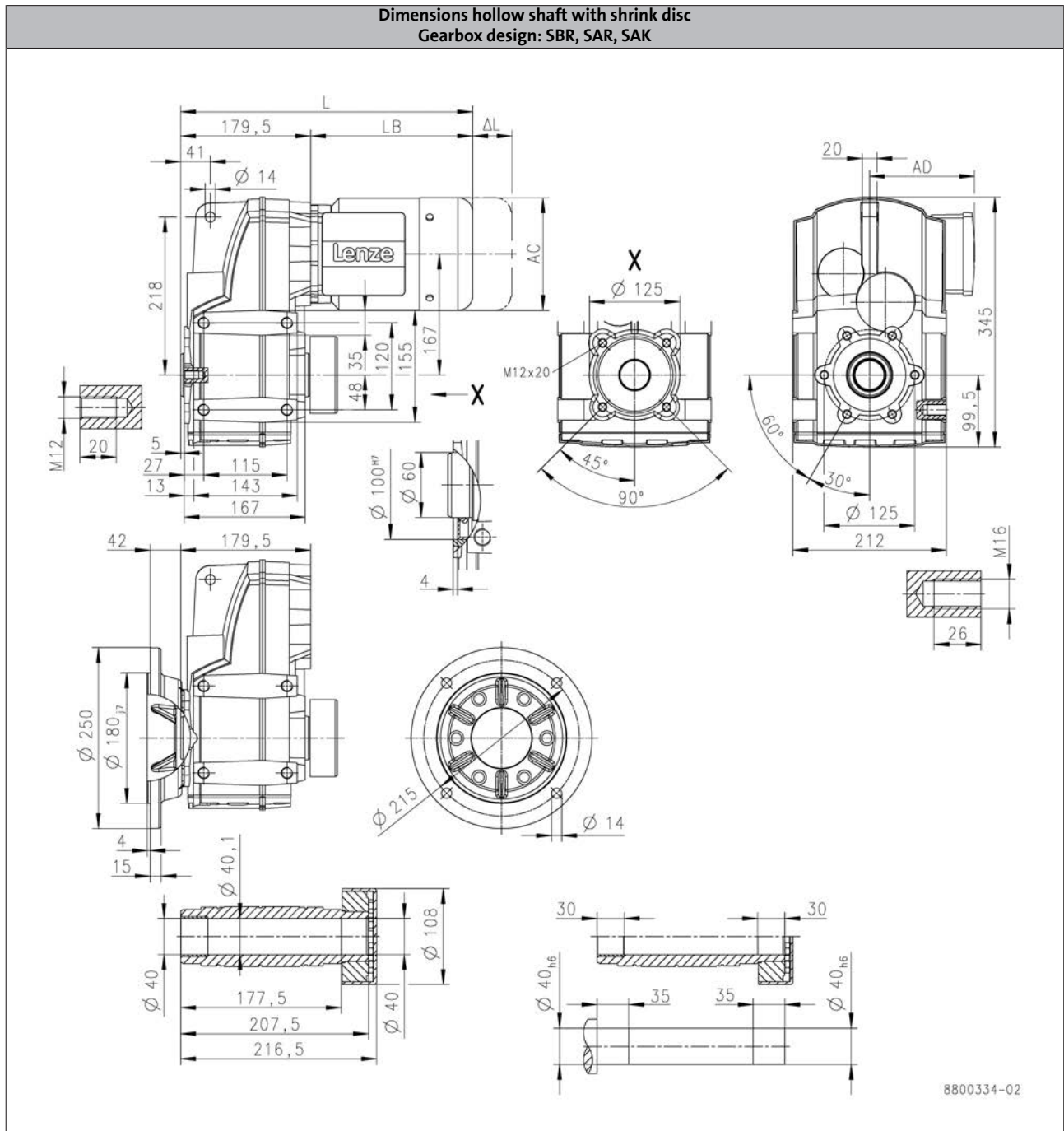
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S950



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	405	474		536		523		598
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

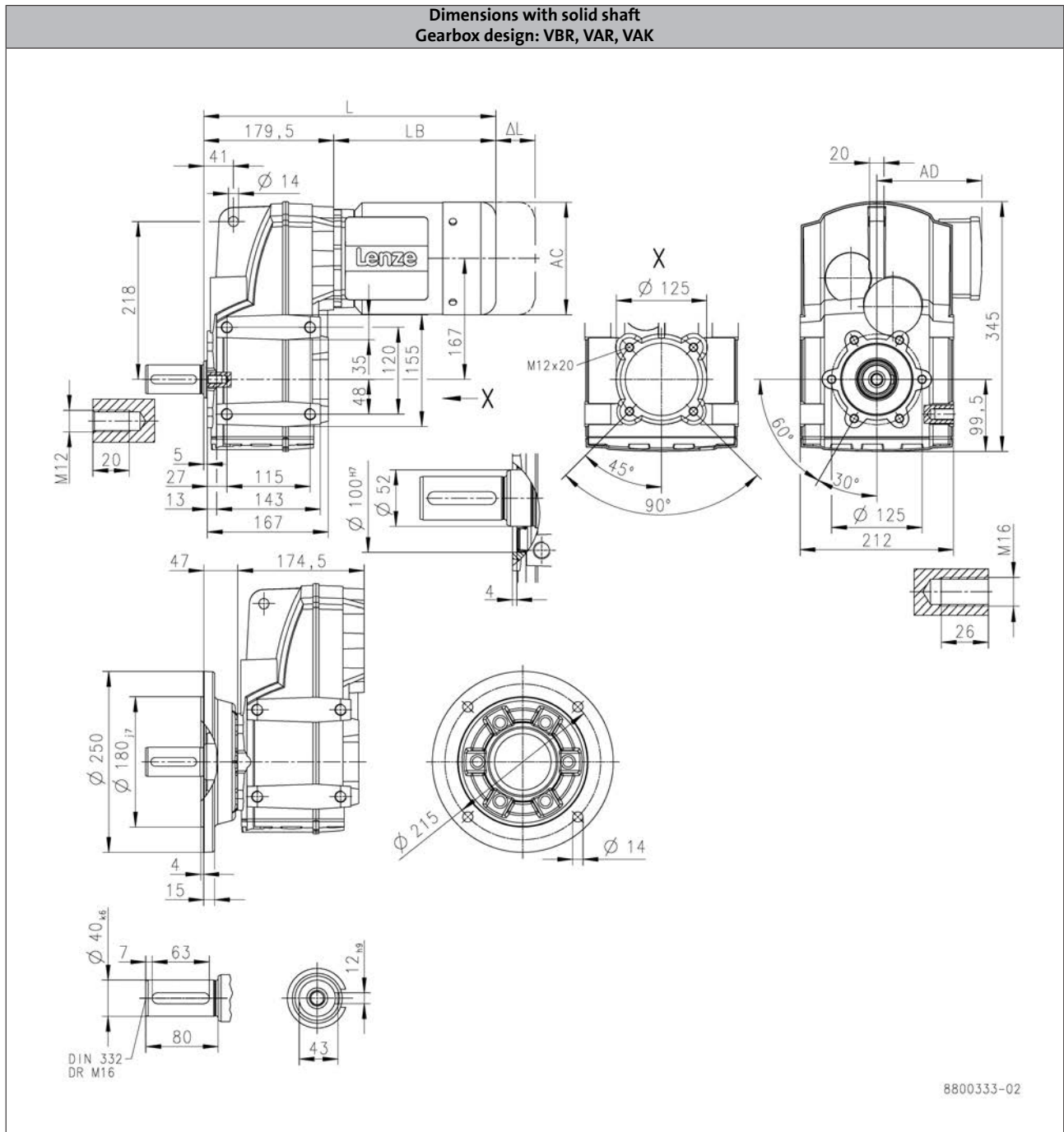
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S950



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		363			383
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



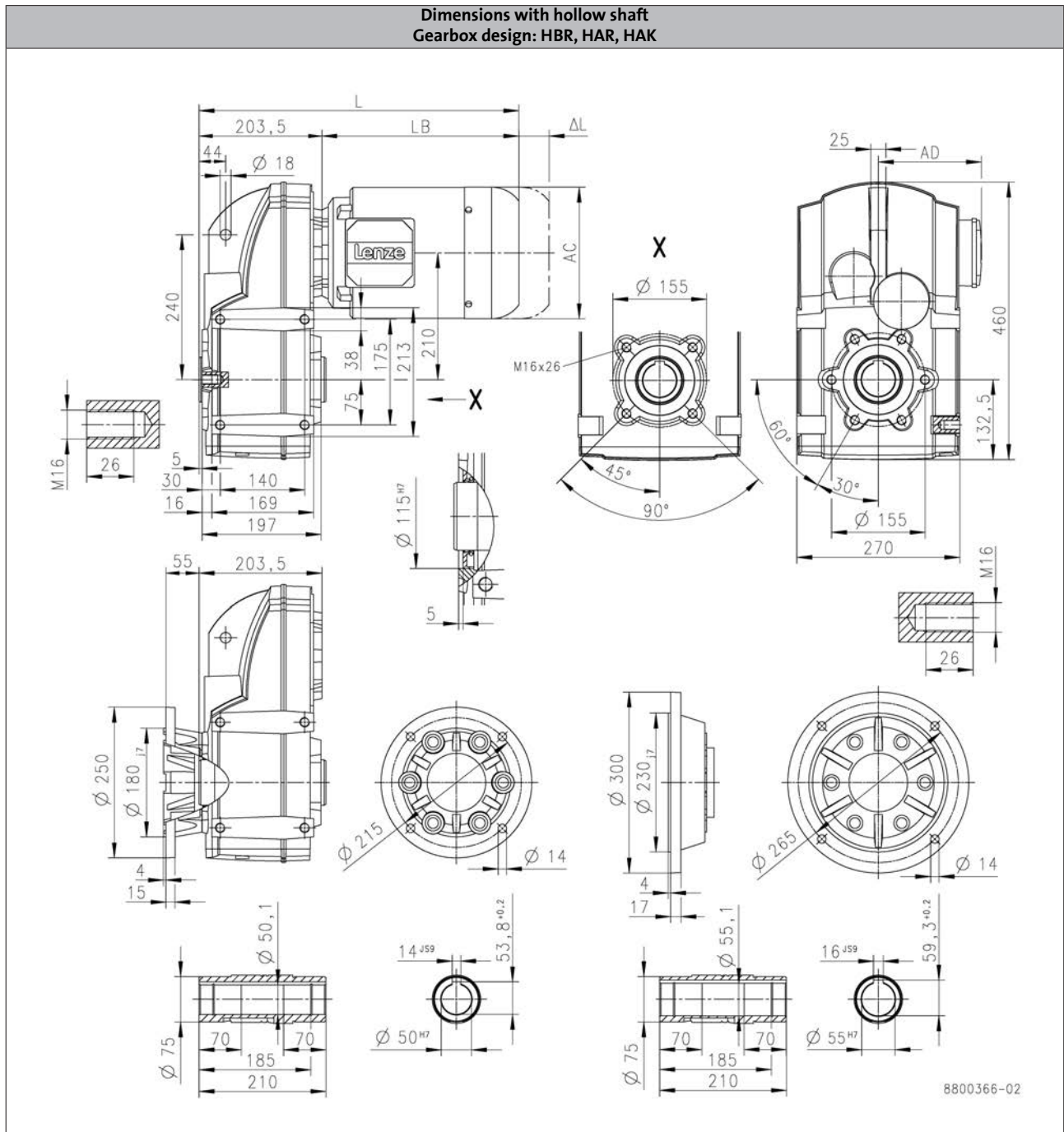
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	387		407
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

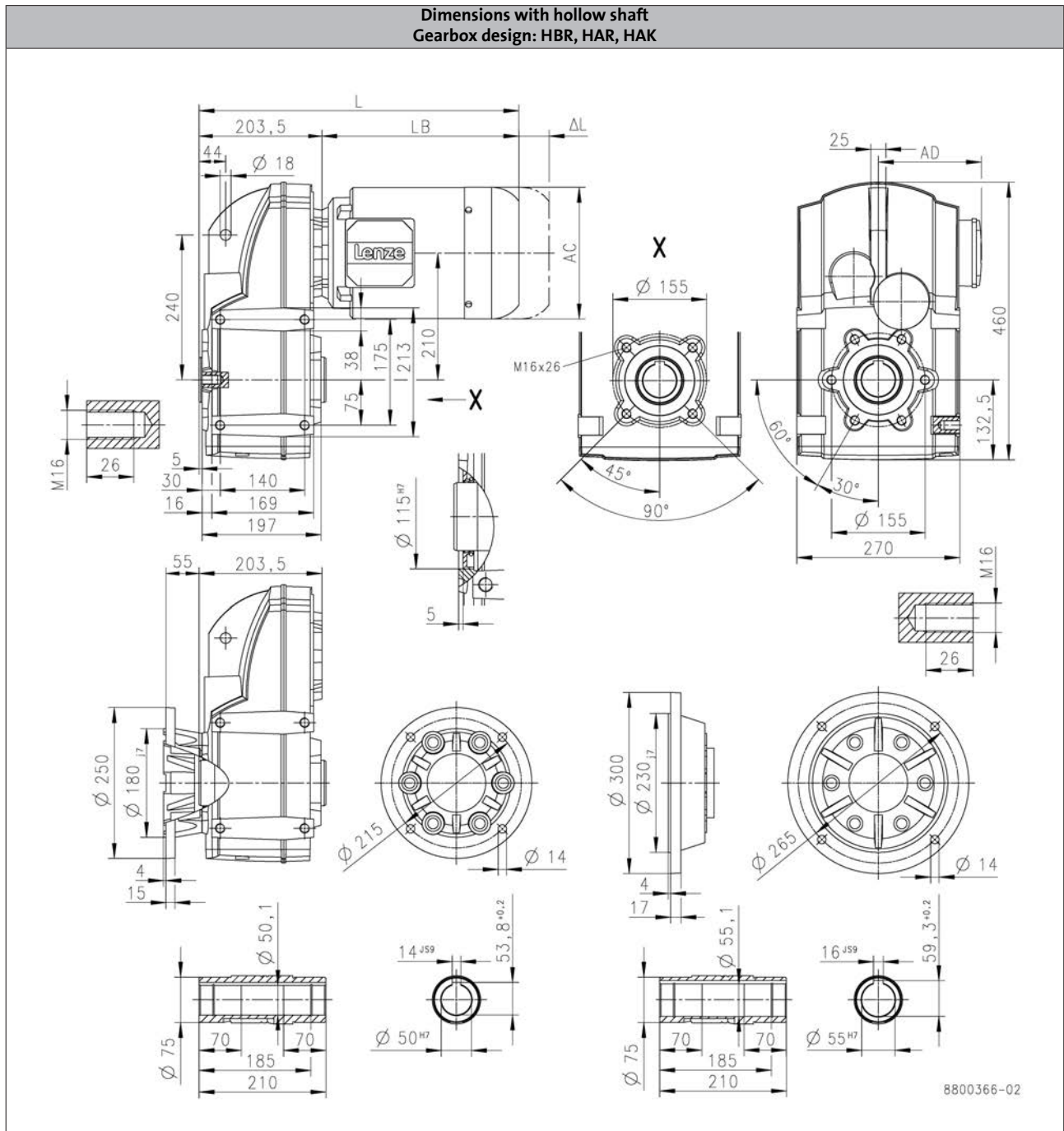
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	429	498		560		547		622
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

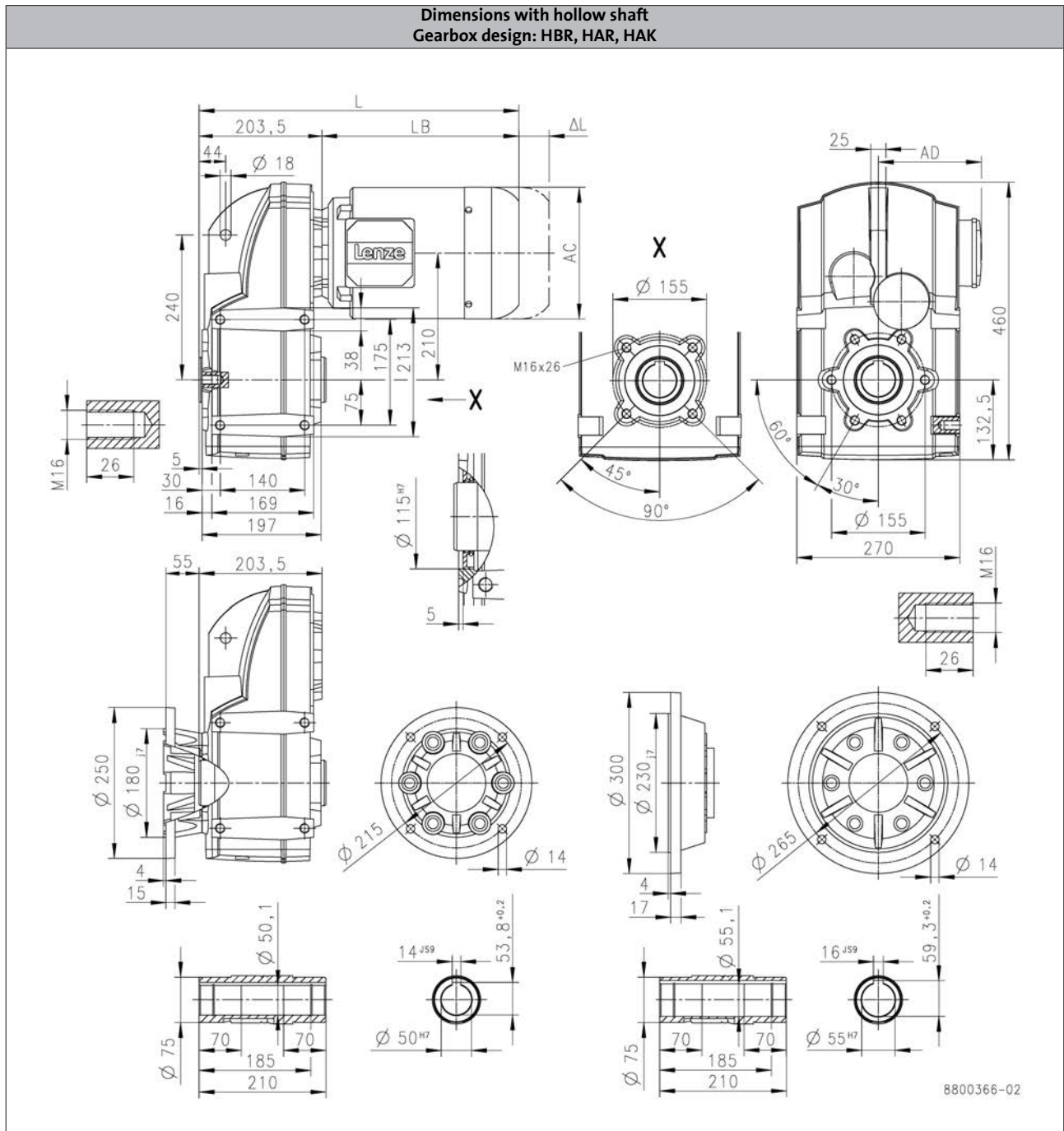
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]		773		873	
Motor length	LB [mm]		569		669	
Length of motor options	Δ L [mm]		146		107	
Motor diameter	AC [mm]		313		351	
Distance motor/connection	AD [mm]		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



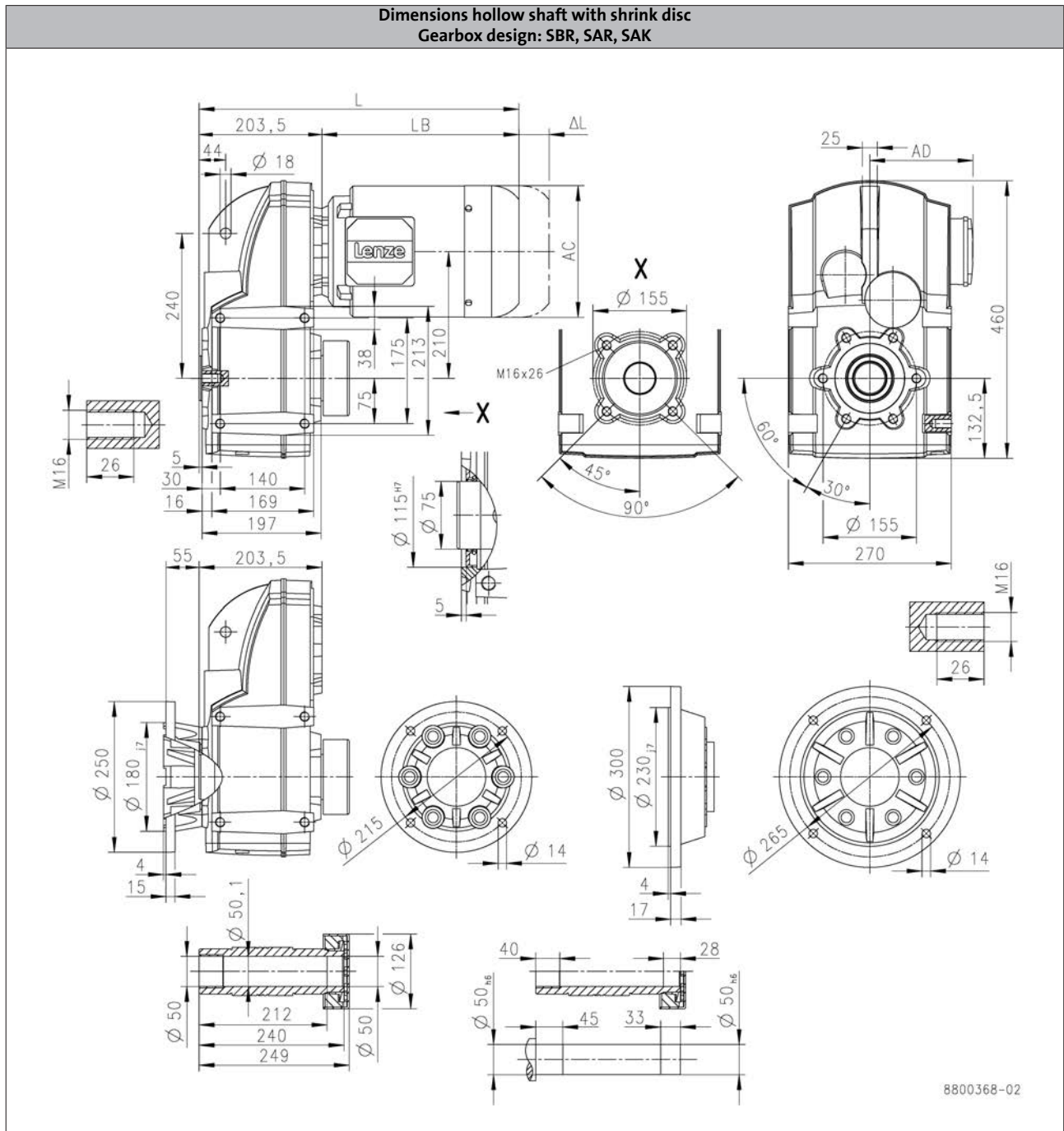
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	387		407
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

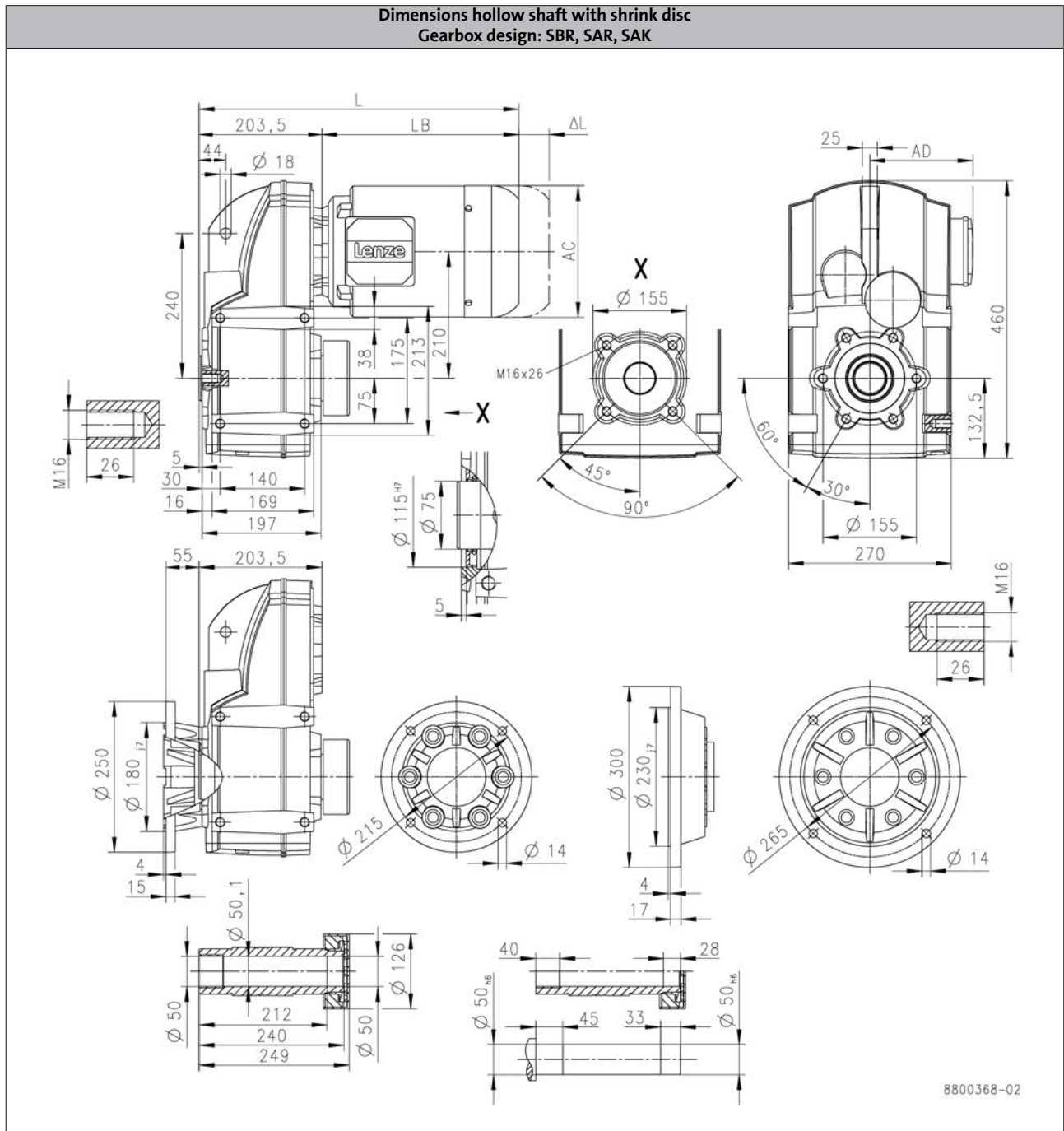
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	429	498		560		547		622
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

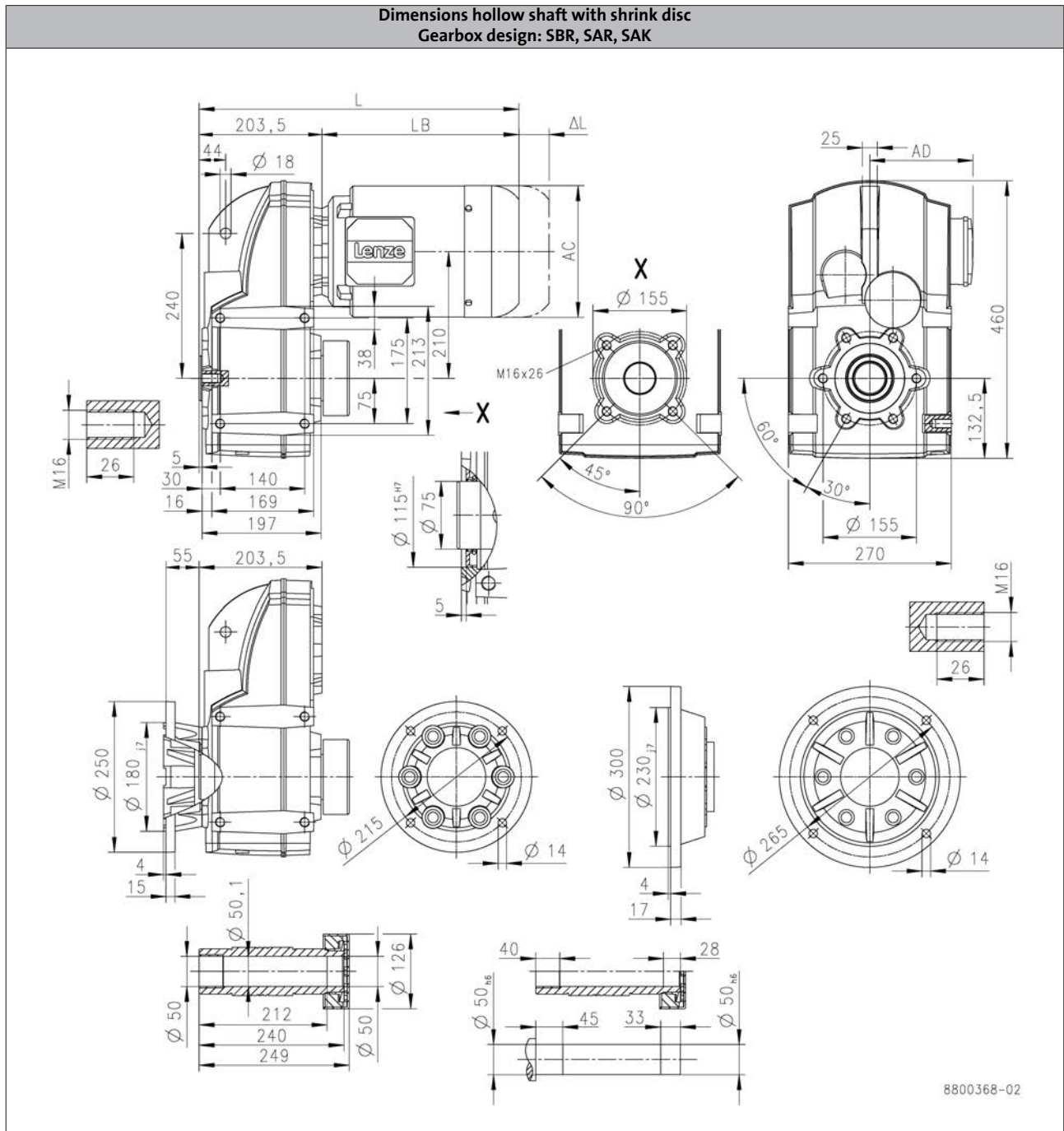
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]	773			873	
Motor length	LB [mm]	569			669	
Length of motor options	Δ L [mm]	146			107	
Motor diameter	AC [mm]	313			351	
Distance motor/connection	AD [mm]	231			282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

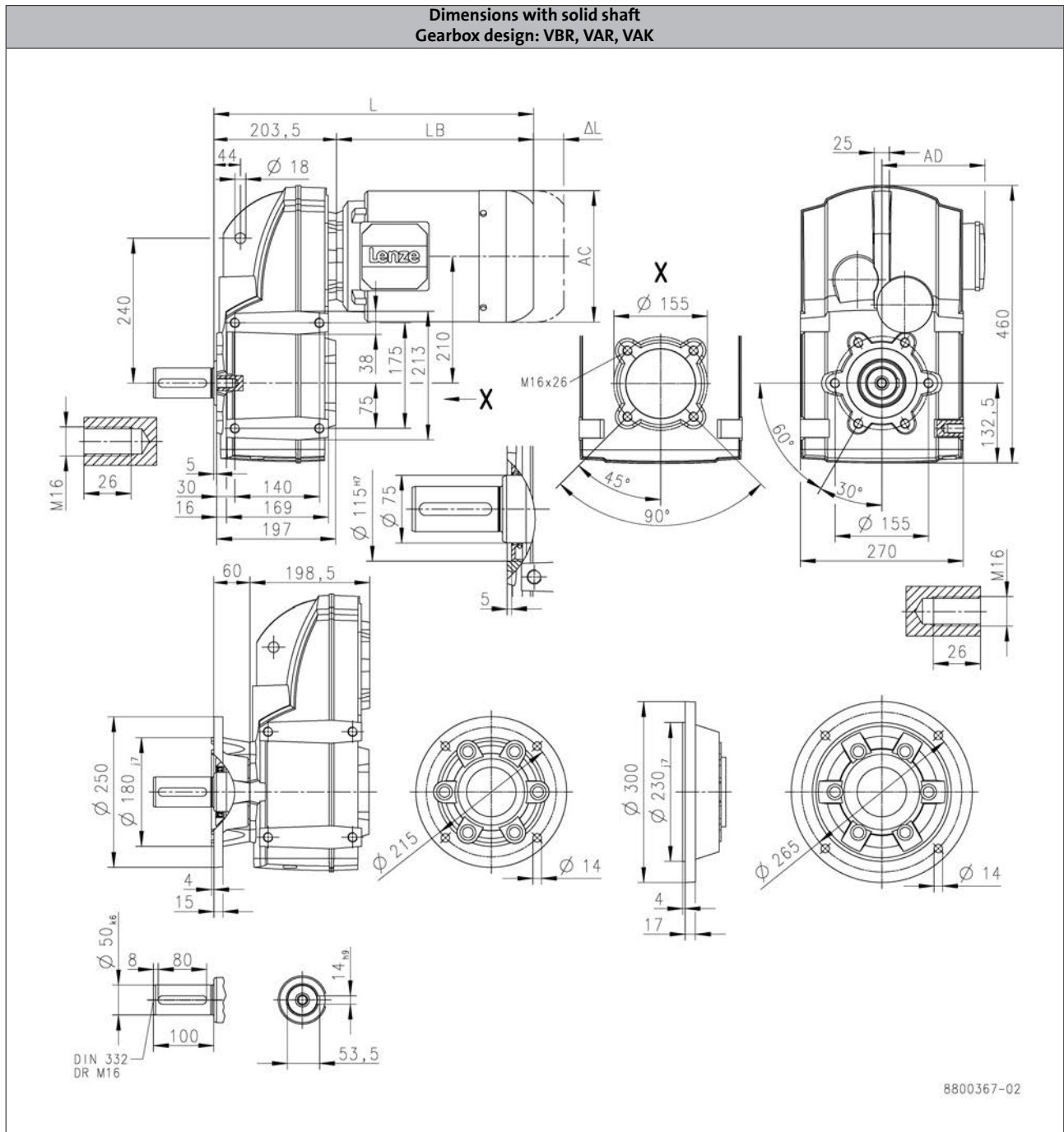
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	387		407
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

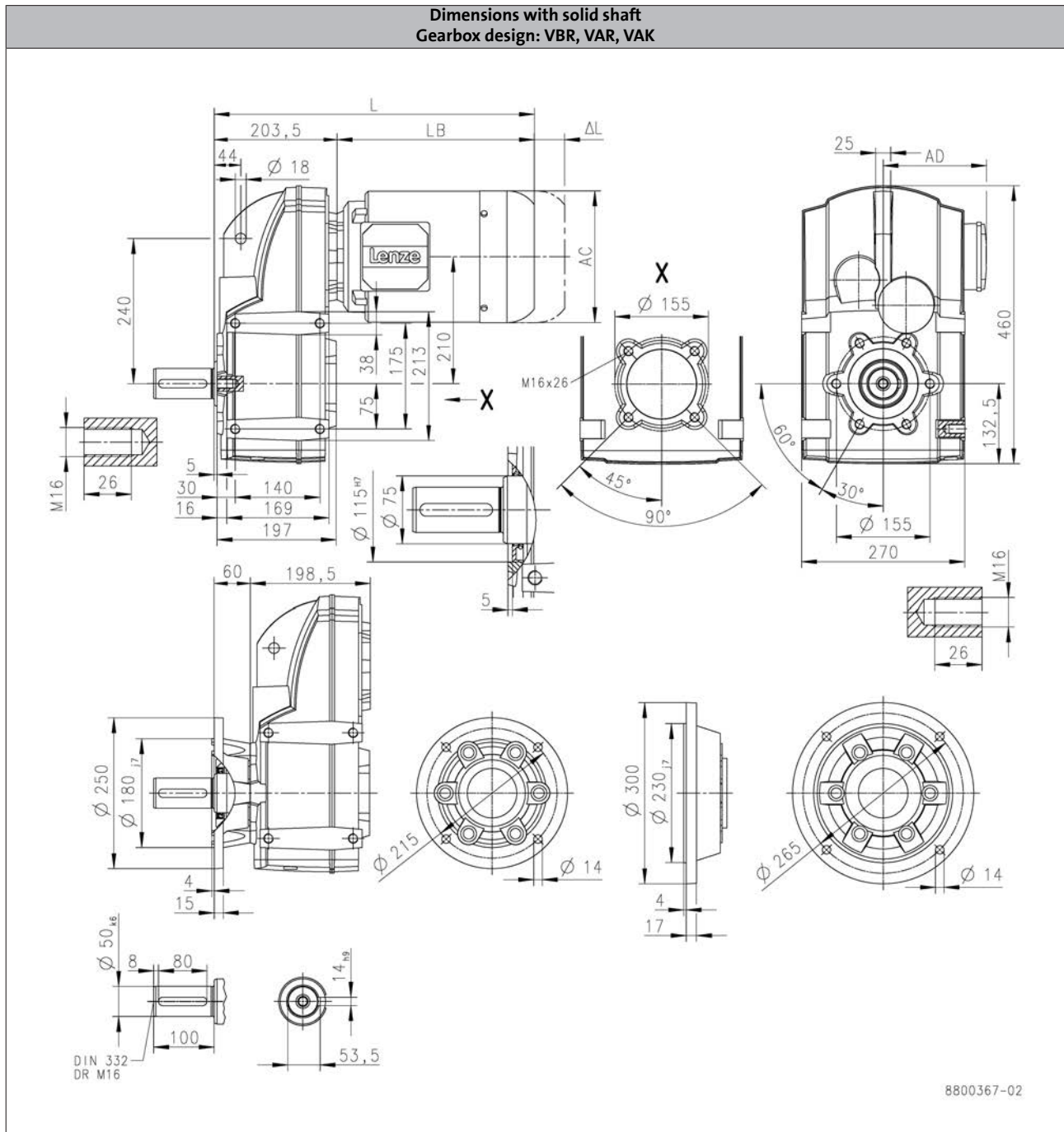
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	429	498		560		547		622
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

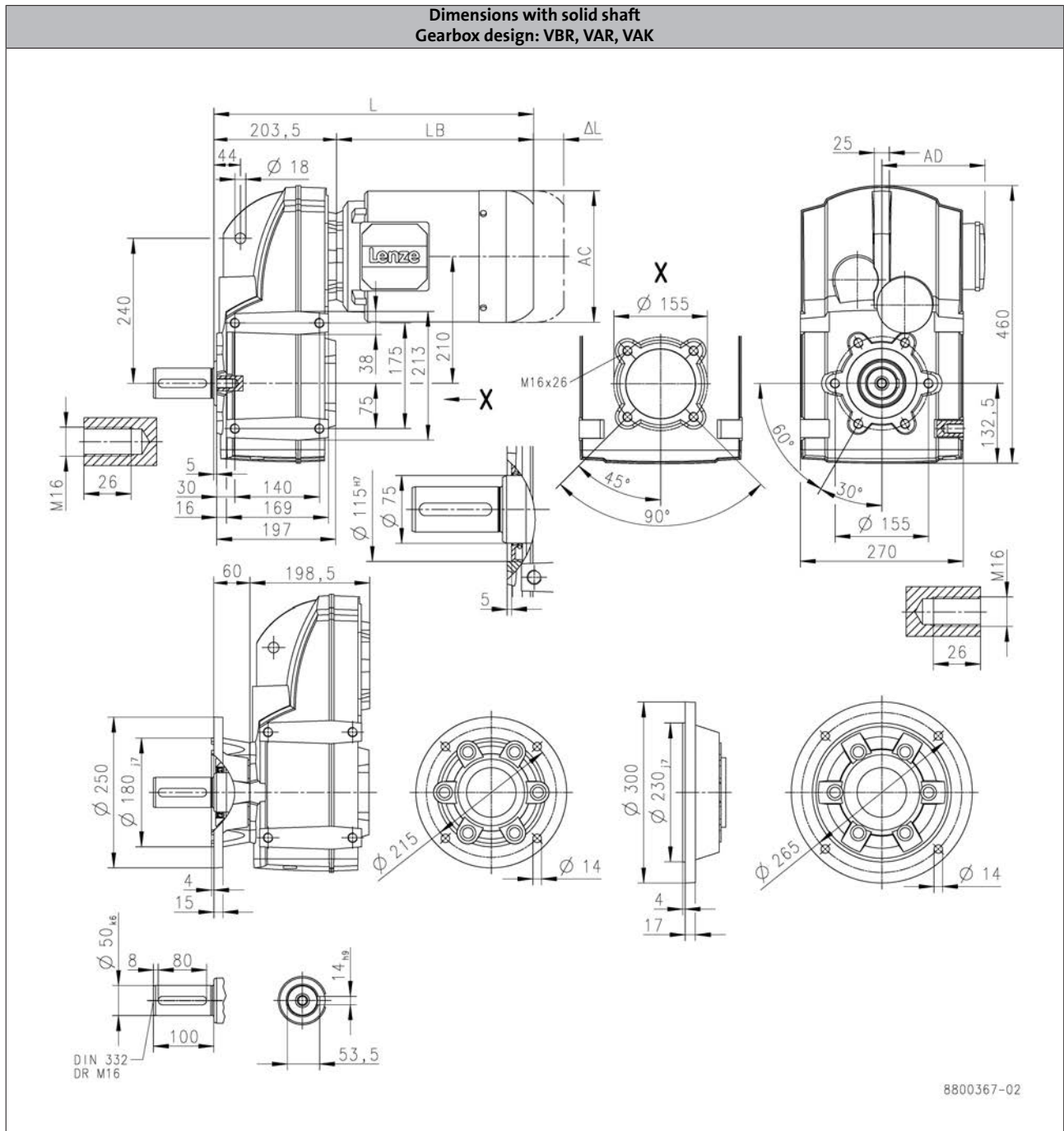
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S2100



		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]		773		873	
Motor length	LB [mm]		569		669	
Length of motor options	Δ L [mm]		146		107	
Motor diameter	AC [mm]		313		351	
Distance motor/connection	AD [mm]		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

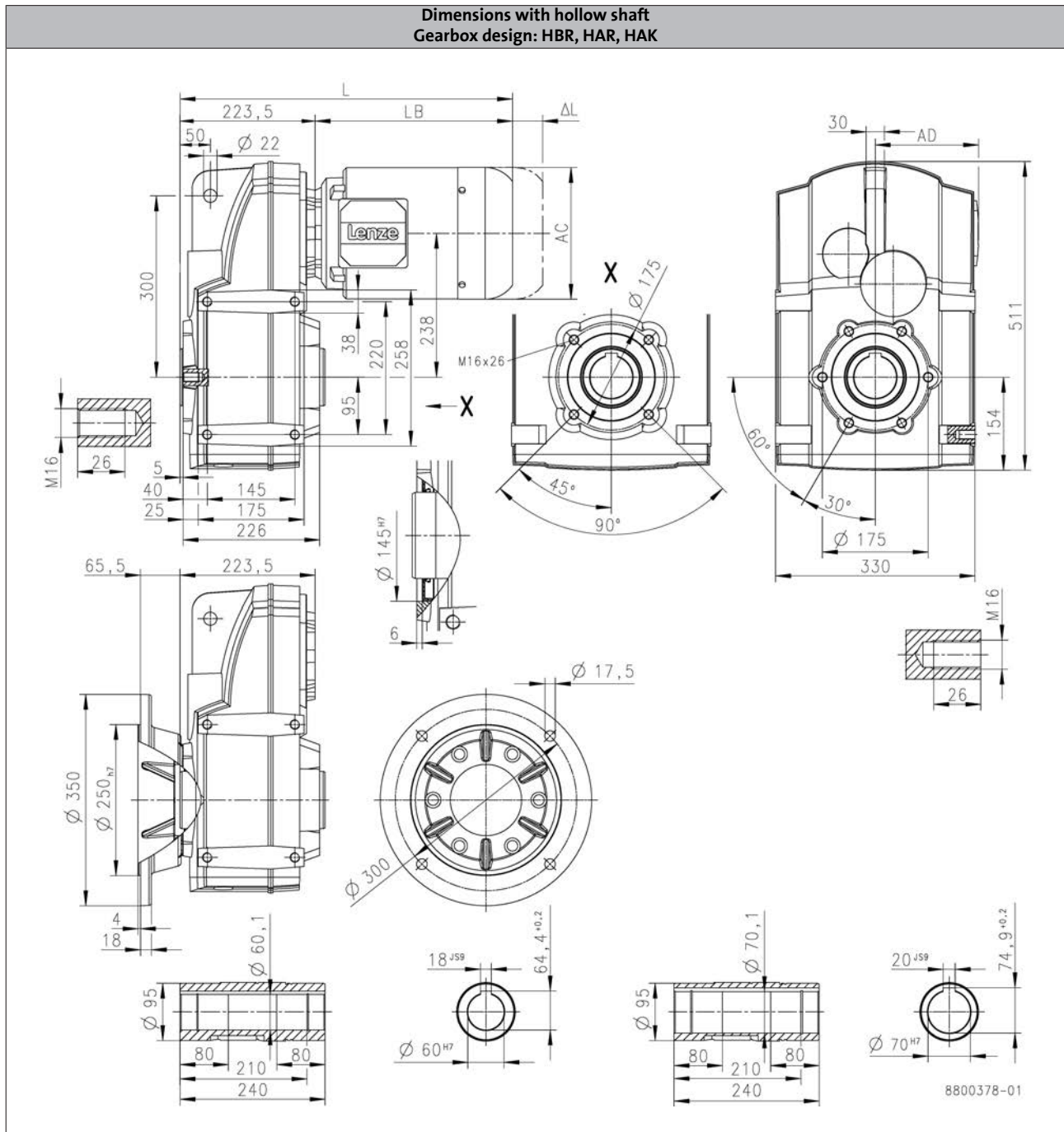
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	407		427
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

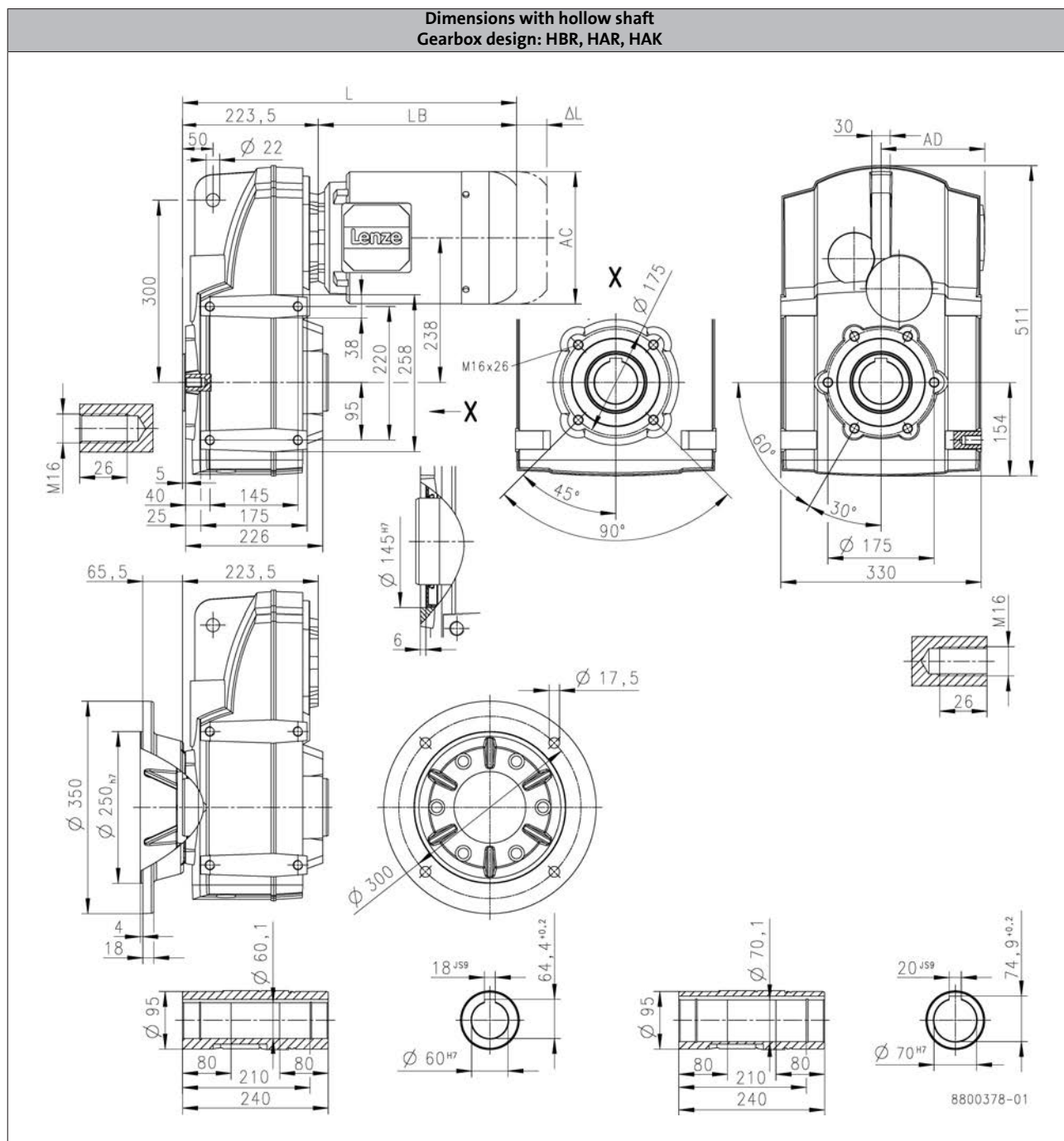
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	449	518		580		567		642
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



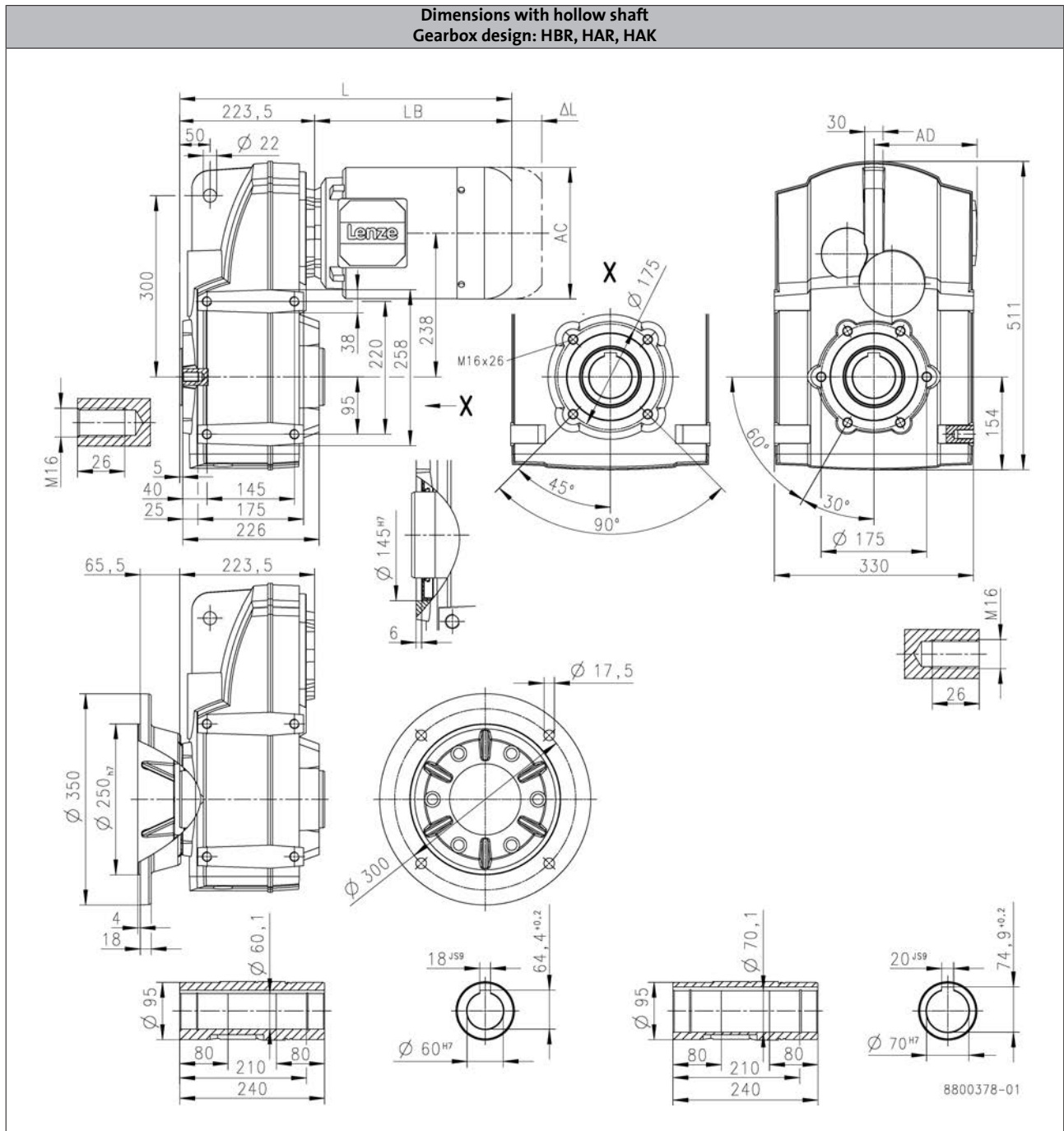
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]	793			893	
Motor length	LB [mm]	569			669	
Length of motor options	Δ L [mm]	146			107	
Motor diameter	AC [mm]	313			351	
Distance motor/connection	AD [mm]	231			282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

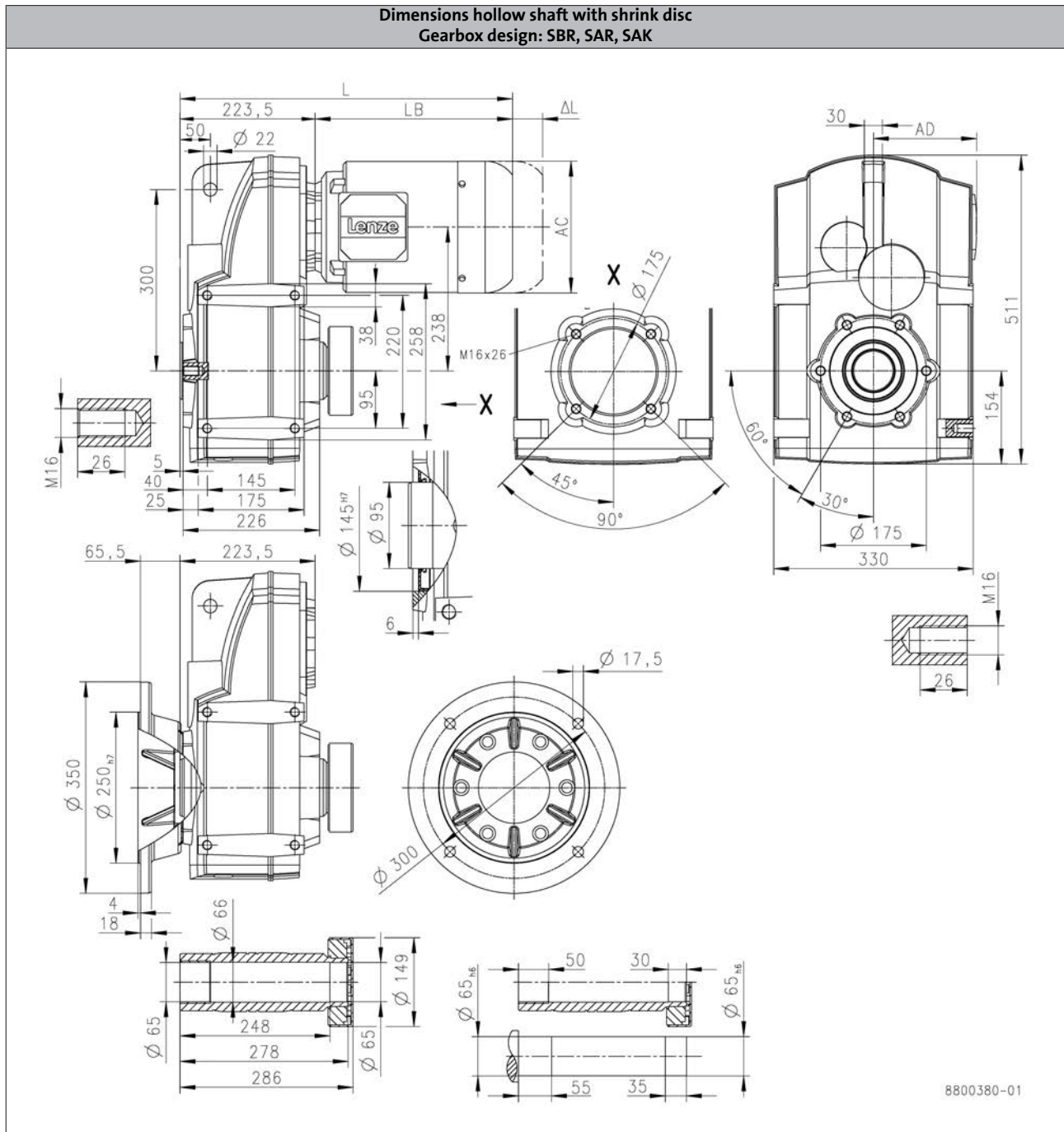
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	407		427
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

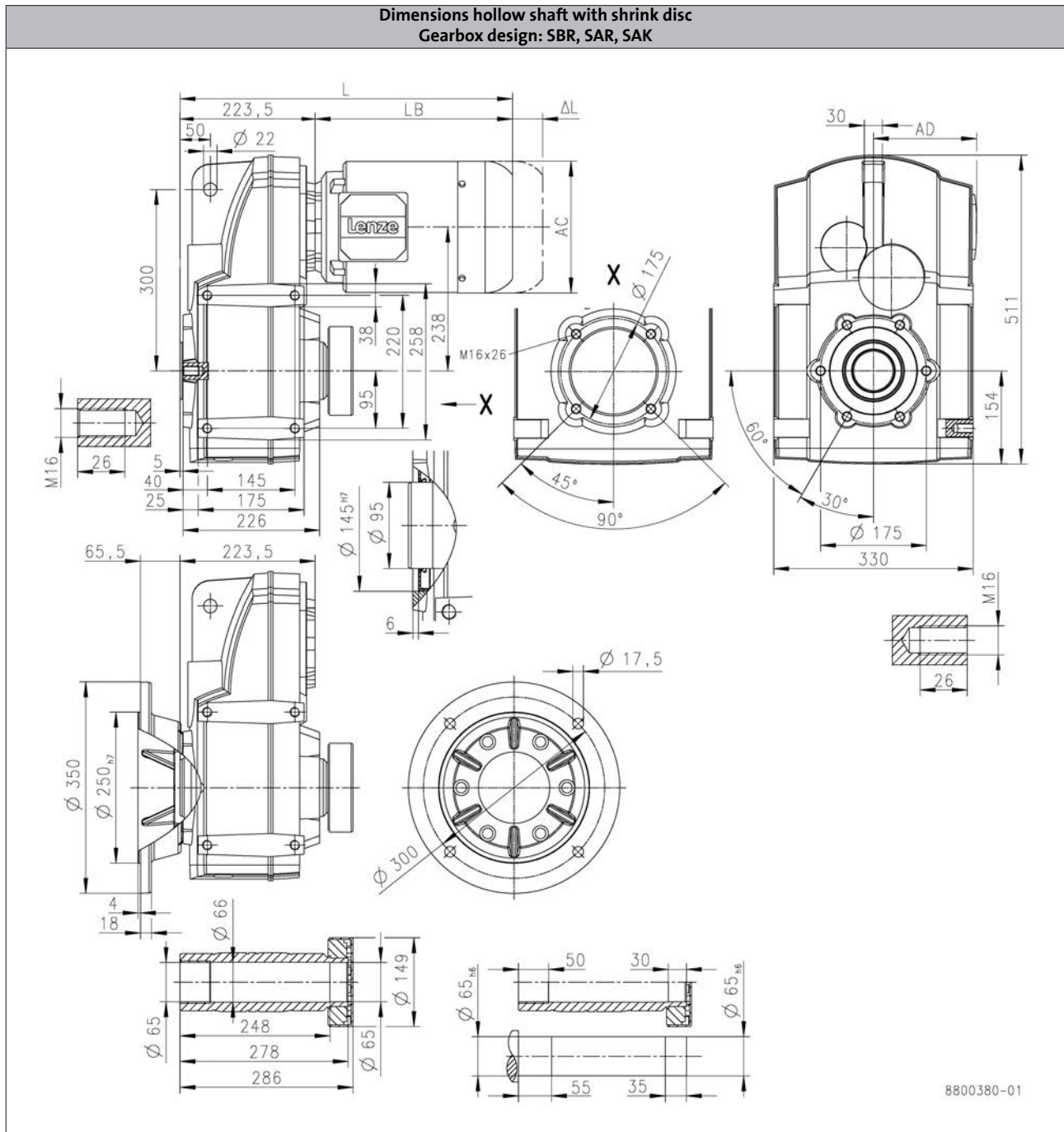
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	449	518		580		567		642
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

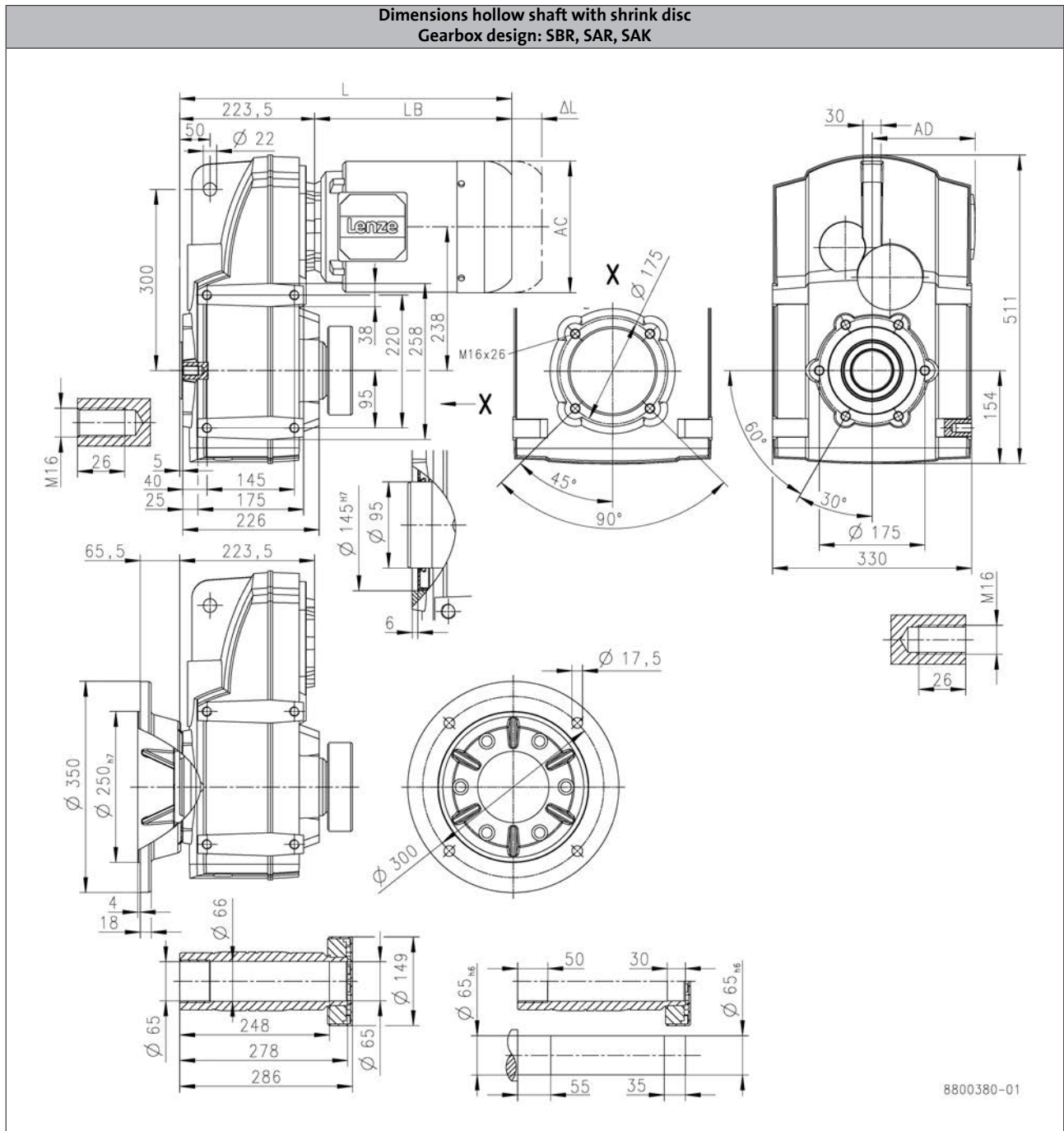
# g500-S shaft-mounted helical geared motors

Technical data





## Dimensions, 4-pole motors

g500-S3100



		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]		793		893	
Motor length	LB [mm]		569		669	
Length of motor options	Δ L [mm]		146		107	
Motor diameter	AC [mm]		313		351	
Distance motor/connection	AD [mm]		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

  184 - Shrink disc dimensions

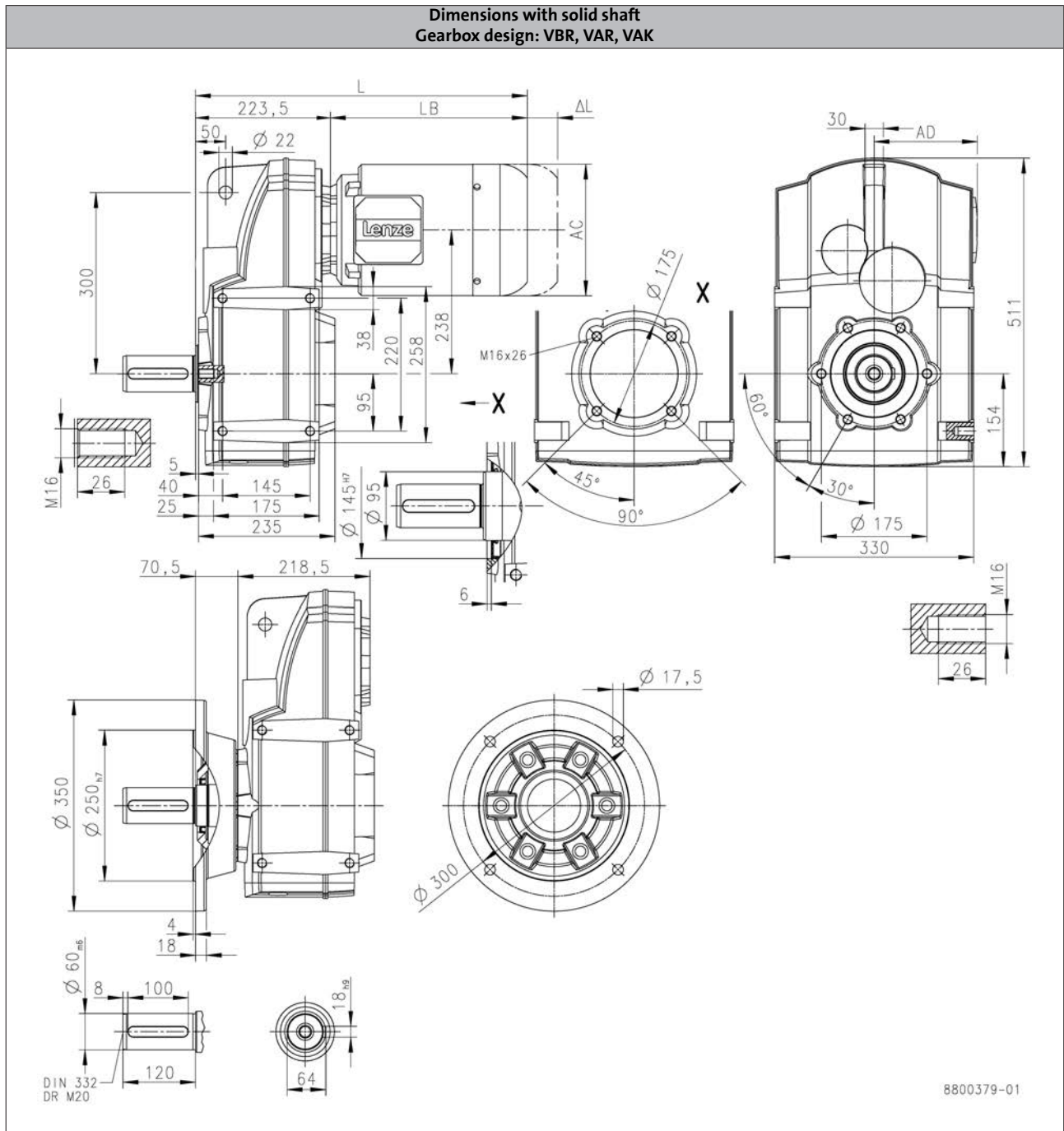
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	407		427
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

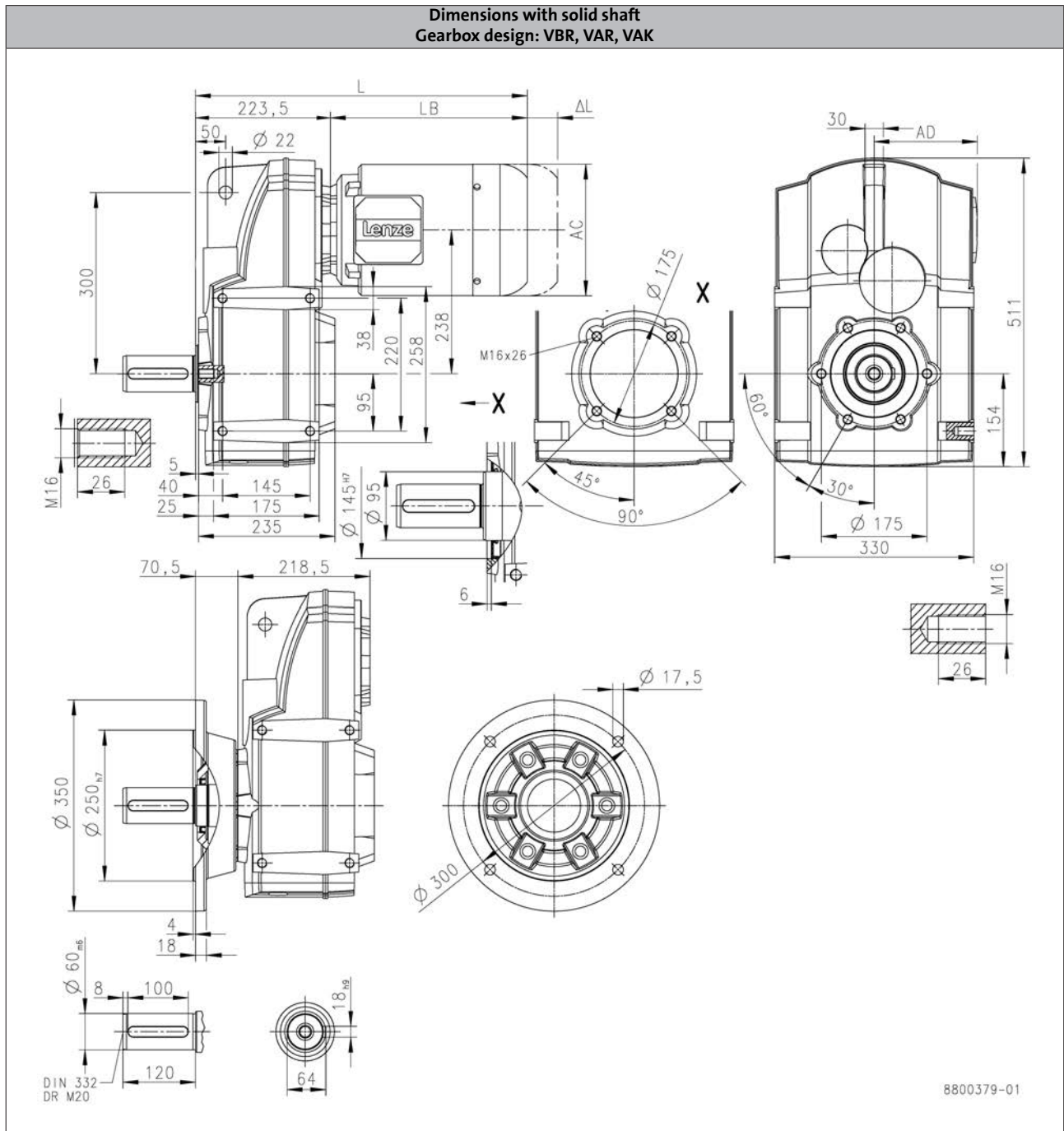
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	449	518		580		567		642
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

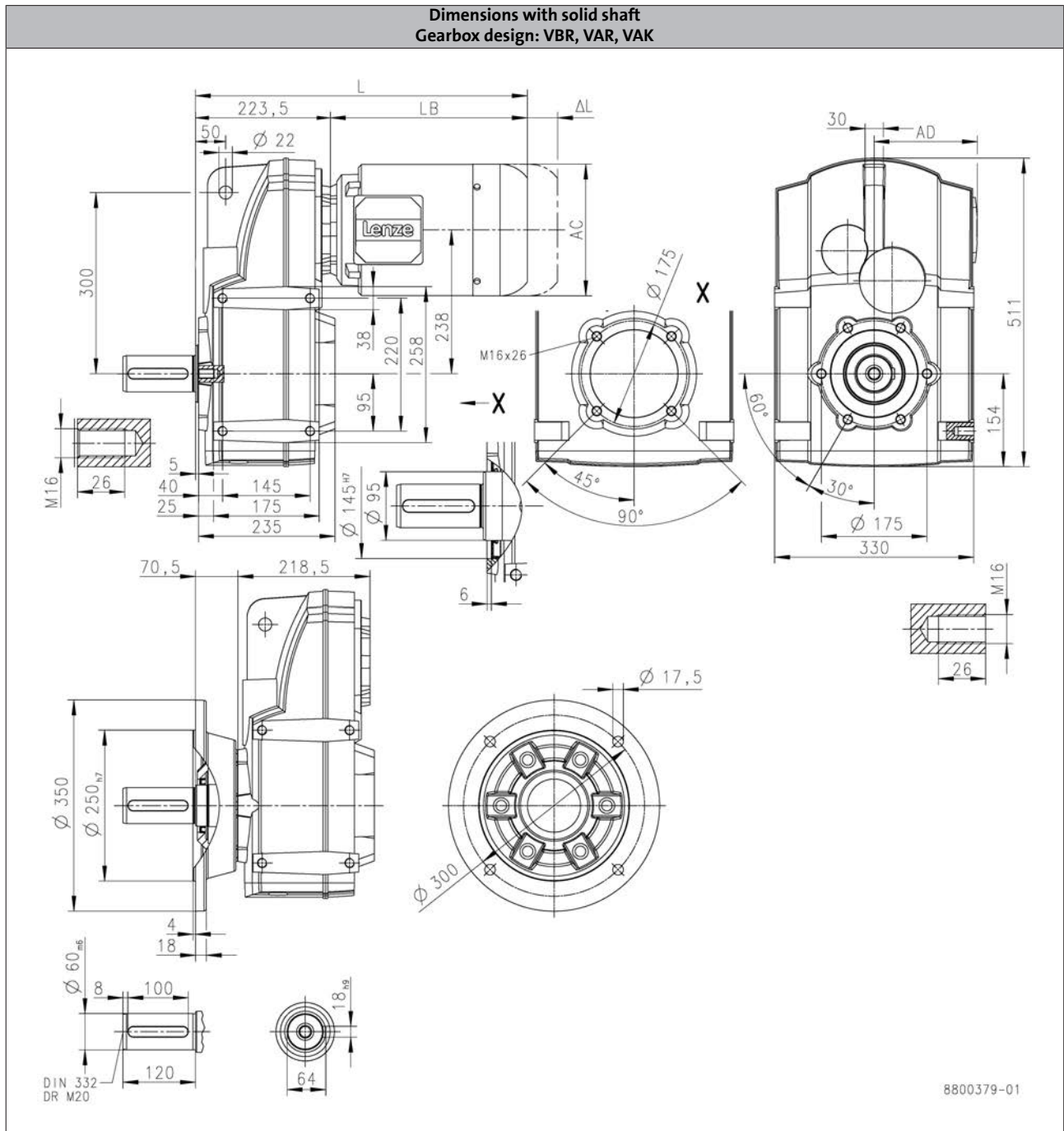
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S3100



		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]	793			893	
Motor length	LB [mm]	569			669	
Length of motor options	Δ L [mm]	146			107	
Motor diameter	AC [mm]	313			351	
Distance motor/connection	AD [mm]	231			282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

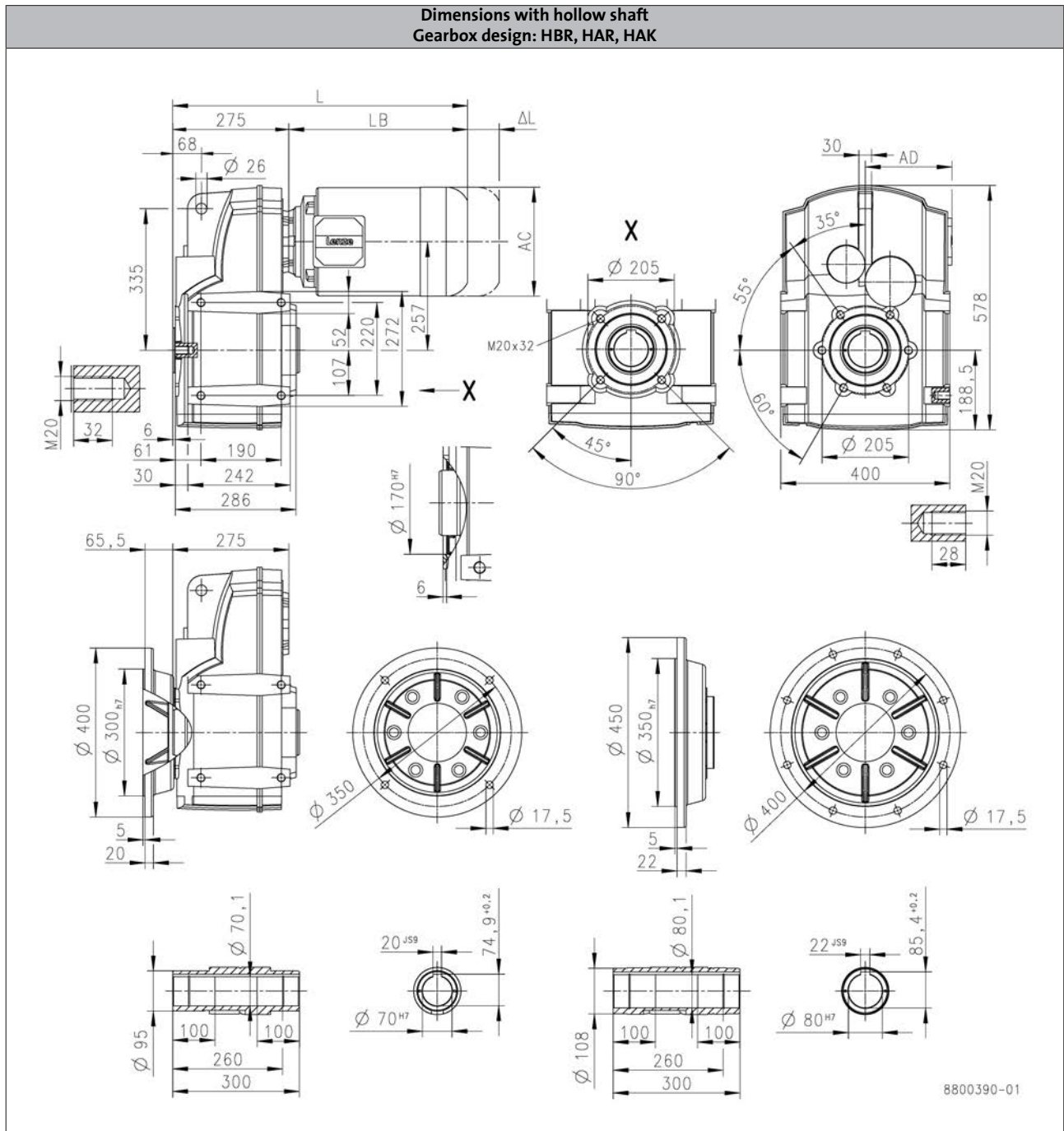
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S4500



		MD□MA□□		m240				
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]	478	500	569	631	618		
Motor length	LB [mm]	203	225	294	356	343		
Length of motor options	Δ L [mm]	52.0	107	92.0	103	111		
Motor diameter	AC [mm]	139	158	172	192	210		
Distance motor/connection	AD [mm]	118	148	155	164	171		

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



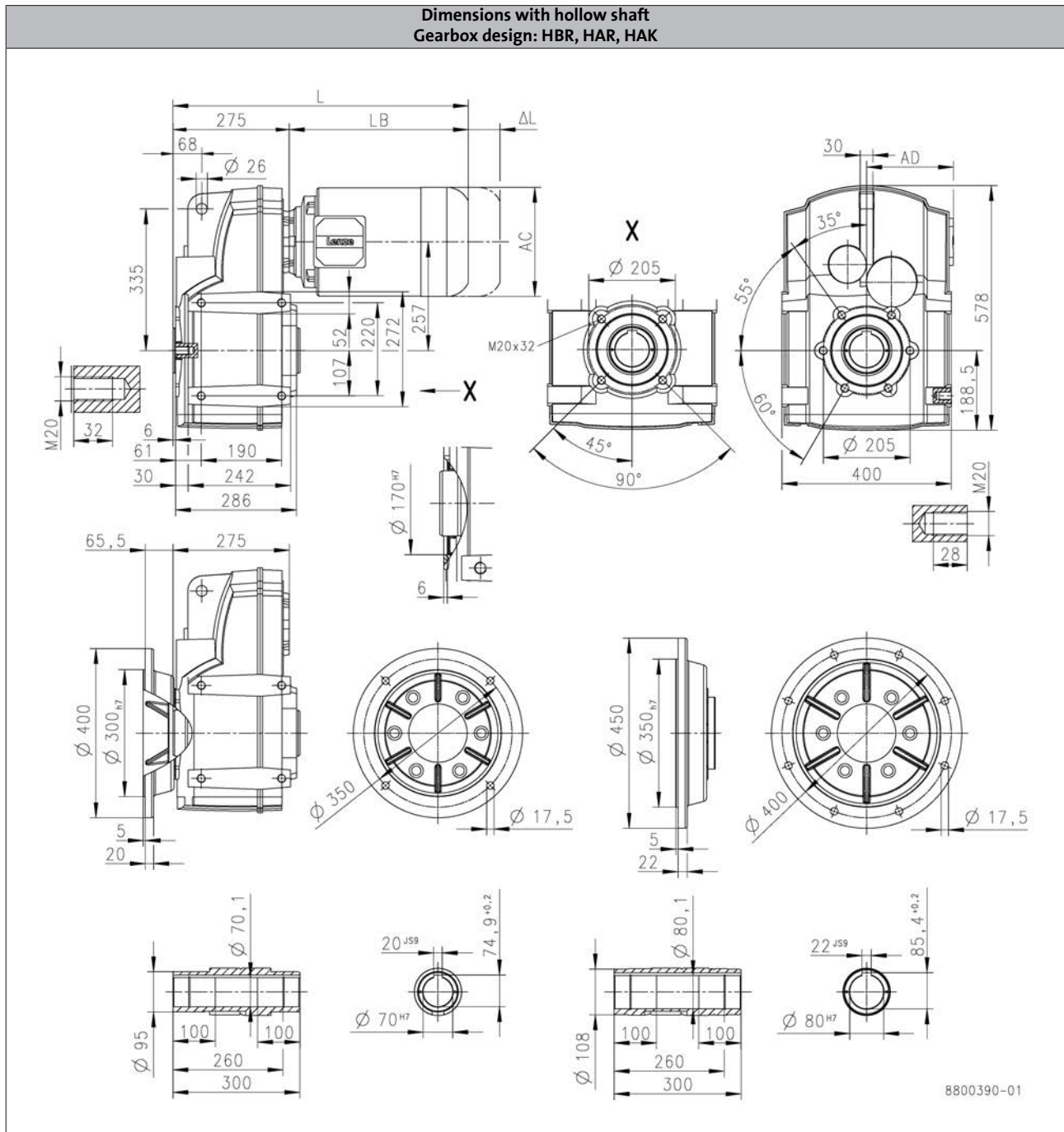
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S4500



		m240						
		-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]	693		844			944	
Motor length	LB [mm]	418		569			669	
Length of motor options	Δ L [mm]	118		146			107	
Motor diameter	AC [mm]	281		313			351	
Distance motor/connection	AD [mm]	182		231			282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

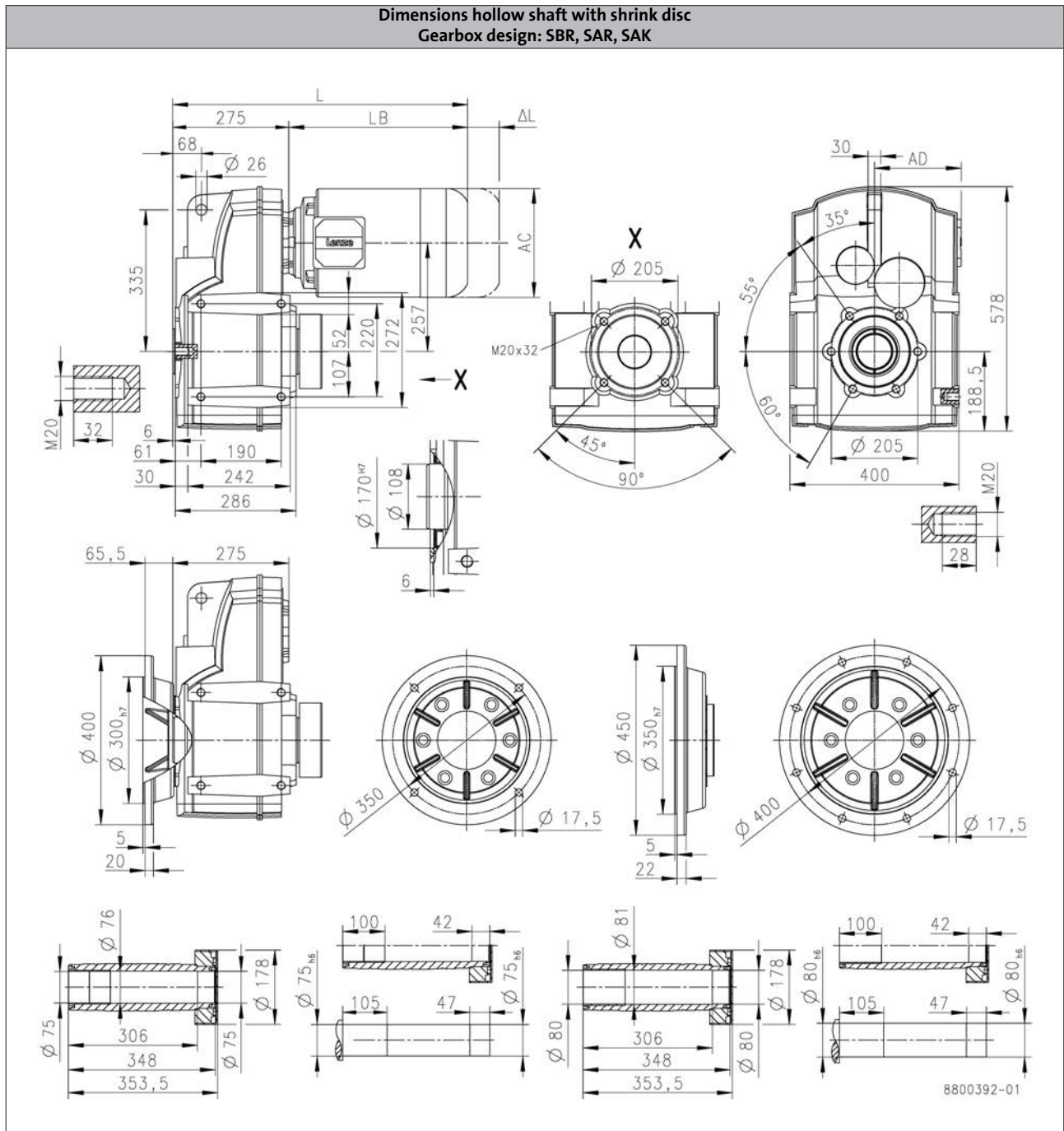
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S4500



		MD□MA□□		m240				
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]	478	500	569	631	618		
Motor length	LB [mm]	203	225	294	356	343		
Length of motor options	Δ L [mm]	52.0	107	92.0	103	111		
Motor diameter	AC [mm]	139	158	172	192	210		
Distance motor/connection	AD [mm]	118	148	155	164	171		

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

184 - Shrink disc dimensions

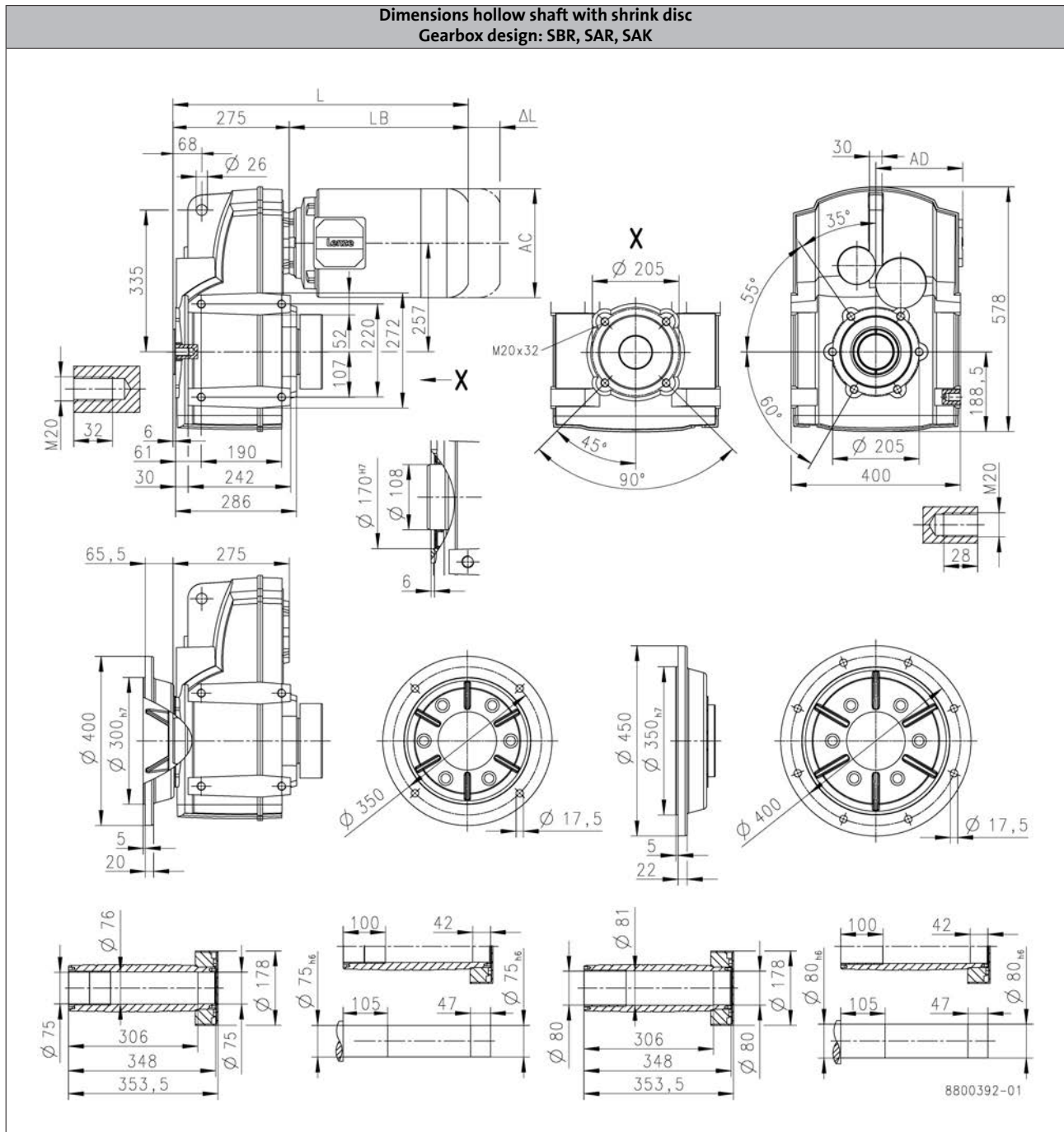
# g500-S shaft-mounted helical geared motors

Technical data





## Dimensions, 4-pole motors

g500-S4500



		m240						
		-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]	693		844			944	
Motor length	LB [mm]	418		569			669	
Length of motor options	Δ L [mm]	118		146			107	
Motor diameter	AC [mm]	281		313			351	
Distance motor/connection	AD [mm]	182		231			282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

  184 - Shrink disc dimensions

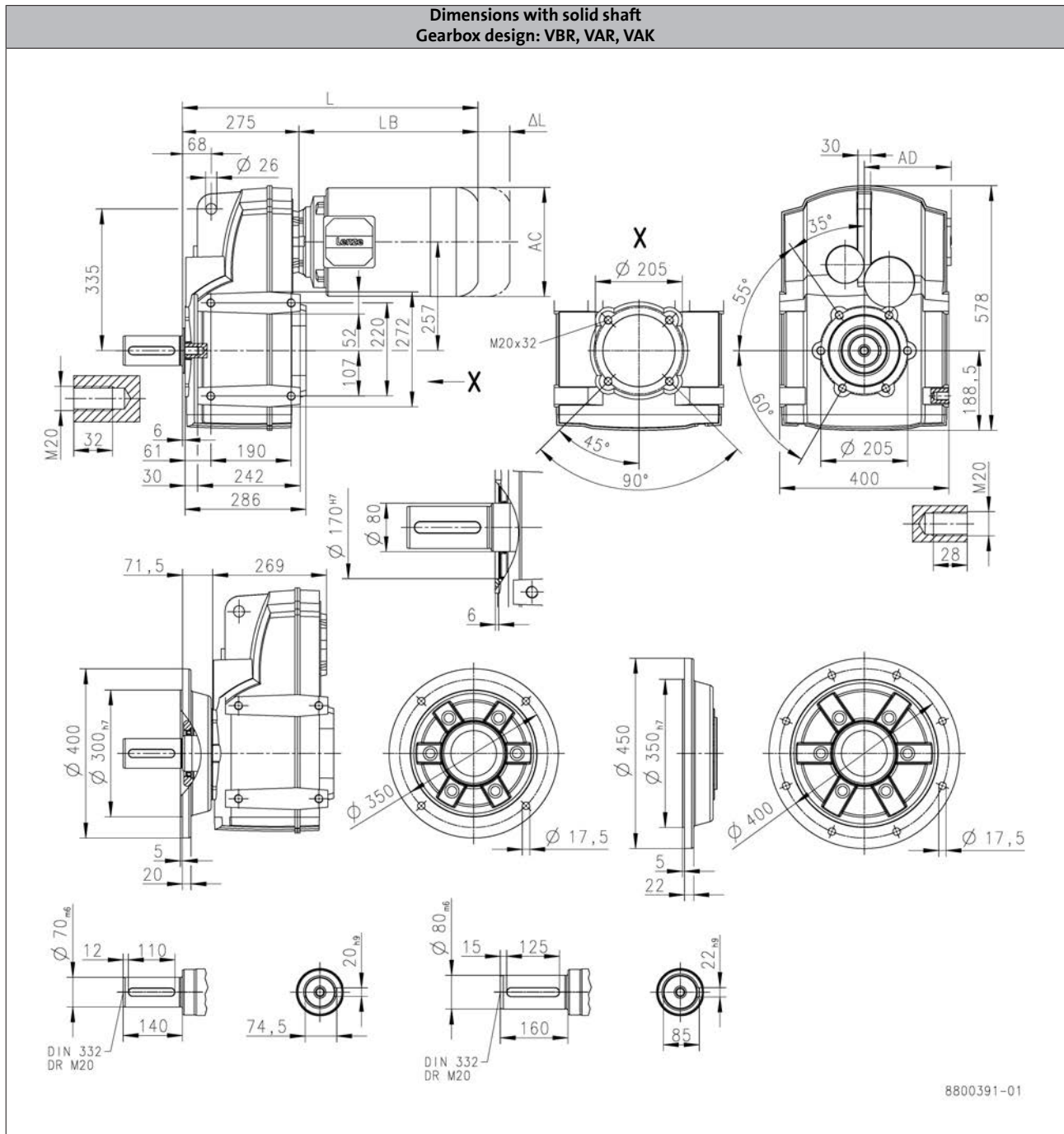
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S4500



		MD□MA□□		m240					
			071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L	[mm]	478	500	569		631		618
Motor length	LB	[mm]	203	225	294		356		343
Length of motor options	Δ L	[mm]	52.0	107	92.0		103		111
Motor diameter	AC	[mm]	139	158	172		192		210
Distance motor/connection	AD	[mm]	118	148	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

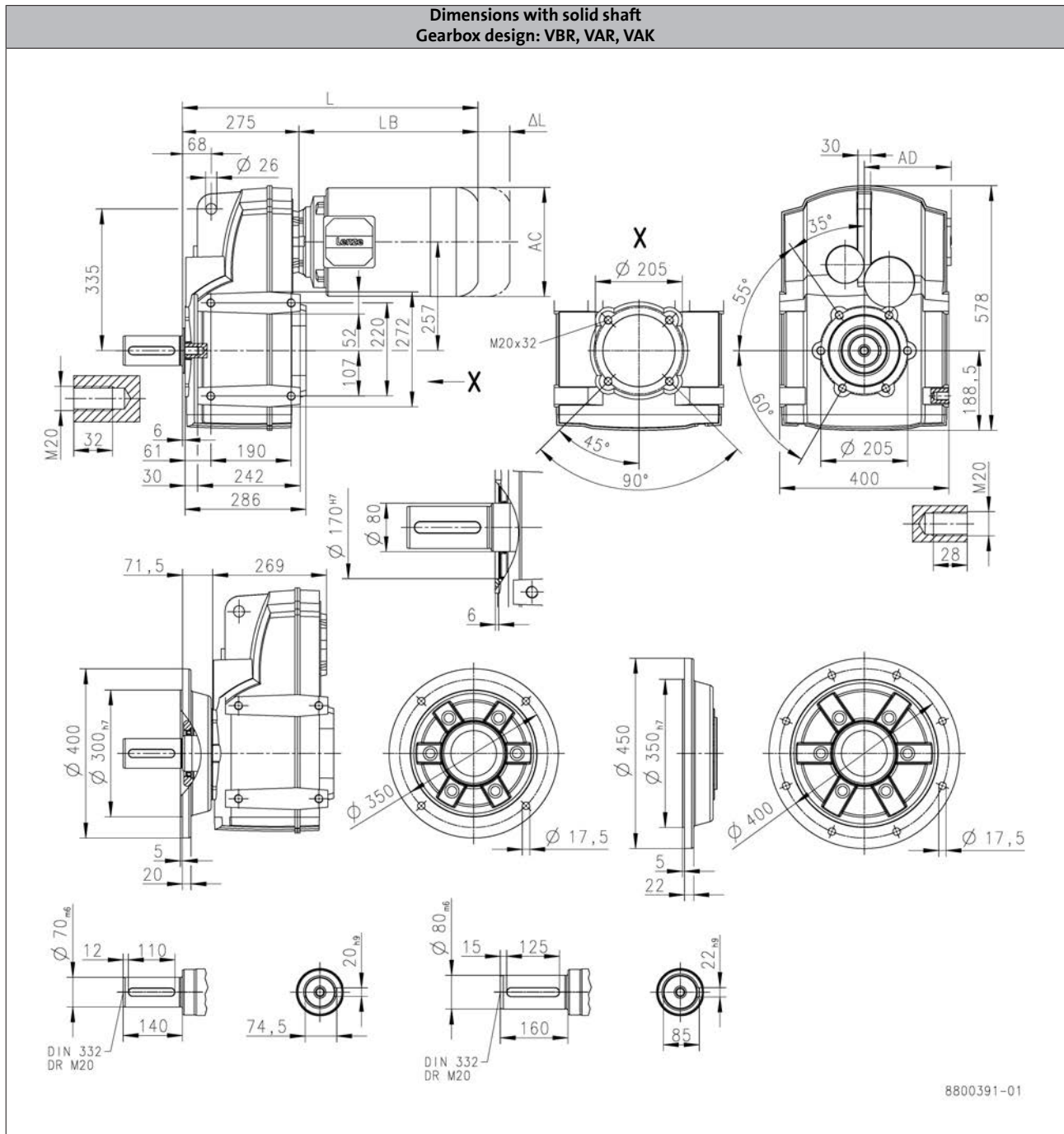
# g500-S shaft-mounted helical geared motors

Technical data



## Dimensions, 4-pole motors

g500-S4500



		m240						
		-P132/M4	-P132/L4	-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]	693		844			944	
Motor length	LB [mm]	418		569			669	
Length of motor options	Δ L [mm]	118		146			107	
Motor diameter	AC [mm]	281		313			351	
Distance motor/connection	AD [mm]	182		231			282	

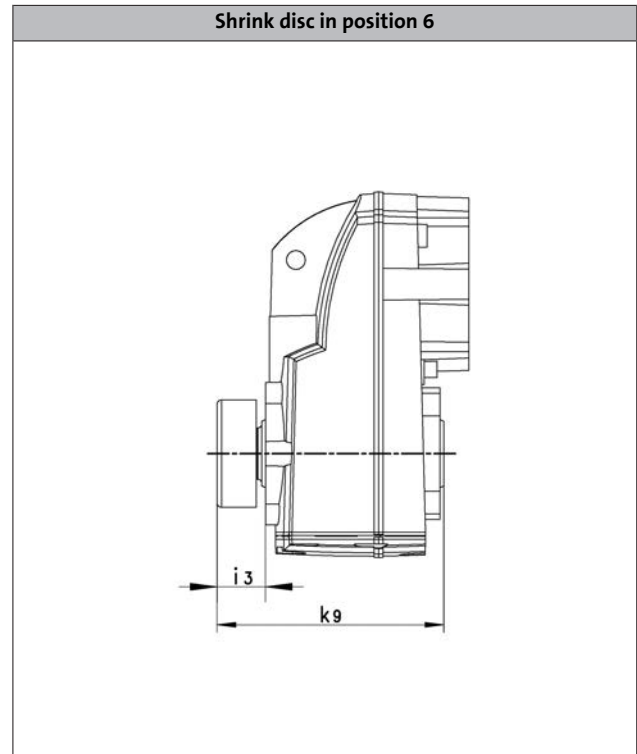
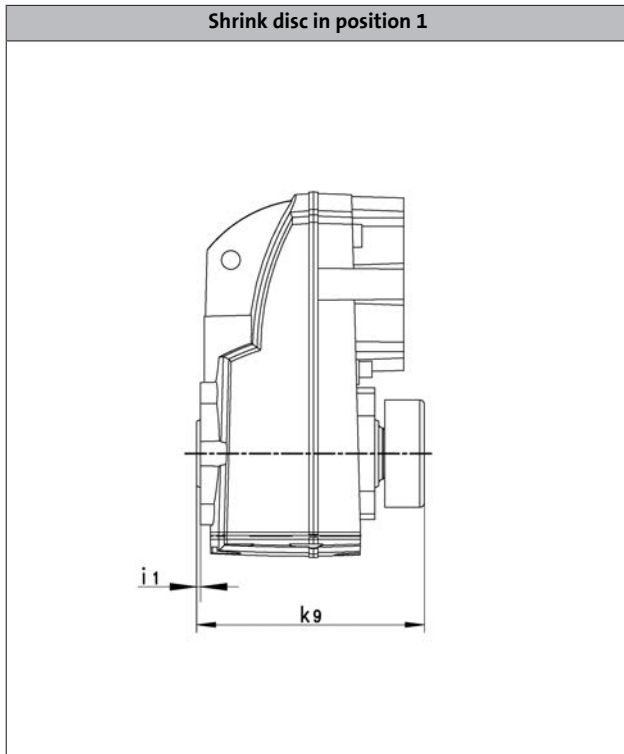
L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

# g500-S shaft-mounted helical geared motors

Technical data



## Shrink disc dimensions



Product	Dimensions		
	$i_1$ [mm]	$i_3$ [mm]	$k_9$ [mm]
g500-S130	2.50	28.0	130
g500-S220	2.50	32.0	150
g500-S400	4.00	33.0	179
g500-S660	5.00	33.0	198
g500-S950	5.00	41.5	217
g500-S2100	5.00	44.0	249
g500-S3100	5.00	48.0	286
g500-S4500	6.00	57.5	354

# g500-S shaft-mounted helical geared motors

## Technical data



### Weights, 4-pole motors

- Weights with oil capacity for mounting position A, all given as approximate values.  
The weights refer to the basic version, observe additional weights!

#### 2-stage gearboxes

Product		Mass
		m
		[kg]
g500-S130	MD□MA□□063-12	9.70
	MD□MA□□063-32	
	MD□MA□□063-42	10.0
	MD□MA□□071-32	11.4
	MD□MA□□071-42	12.0
	m240-P80/M4	20.5
	m240-P90/M4	24.5
	m240-P90/L4	25.5
g500-S220	MD□MA□□063-12	11.5
	MD□MA□□063-32	
	MD□MA□□063-42	11.8
	MD□MA□□071-32	13.2
	MD□MA□□071-42	13.8
	m240-P80/M4	22.3
	m240-P90/M4	26.3
	m240-P90/L4	27.3
	m240-P100/M4	33.3
	m240-P100/L4	38.3
g500-S400	MD□MA□□063-32	15.0
	MD□MA□□063-42	15.3
	MD□MA□□071-32	16.7
	MD□MA□□071-42	17.3
	m240-P80/M4	25.8
	m240-P90/M4	29.8
	m240-P90/L4	30.8
	m240-P100/M4	36.8
	m240-P100/L4	41.8
m240-P112/M4	44.8	
g500-S660	MD□MA□□063-42	20.5
	MD□MA□□071-32	21.9
	MD□MA□□071-42	22.5
	m240-P80/M4	31.0
	m240-P90/M4	35.0
	m240-P90/L4	36.0
	m240-P100/M4	42.0
	m240-P100/L4	47.0
	m240-P112/M4	50.0
	m240-P132/M4	71.0
m240-P132/L4	73.0	
g500-S950	MD□MA□□071-42	42.1
	m240-P80/M4	50.6

Product		Mass
		m
		[kg]
g500-S950	m240-P90/M4	54.6
	m240-P90/L4	55.6
	m240-P100/M4	61.6
	m240-P100/L4	66.6
	m240-P112/M4	69.6
	m240-P132/M4	90.6
	m240-P132/L4	92.6
	m240-P90/M4	86.9
g500-S2100	m240-P90/L4	87.9
	m240-P100/M4	93.9
	m240-P100/L4	98.9
	m240-P112/M4	102
	m240-P132/M4	123
	m240-P132/L4	125
	m240-P160/M4	160
	m240-P160/L4	167
	m240-P180/M4	194
	m240-P180/L4	203
g500-S3100	m240-P180/V4	251
	m240-P90/M4	126
	m240-P90/L4	127
	m240-P100/M4	133
	m240-P100/L4	138
	m240-P112/M4	141
	m240-P132/M4	162
	m240-P132/L4	164
	m240-P160/M4	199
	m240-P160/L4	206
	m240-P180/M4	233
	m240-P180/L4	242
g500-S4500	m240-P180/V4	290
	m240-P100/M4	206
	m240-P100/L4	211
	m240-P112/M4	214
	m240-P132/M4	235
	m240-P132/L4	237
	m240-P160/M4	272
	m240-P160/L4	279
	m240-P180/M4	306
	m240-P180/L4	315
m240-P180/V4	363	

# g500-S shaft-mounted helical geared motors

Technical data



## Weights, 4-pole motors

- Weights with oil capacity for mounting position A, all given as approximate values.  
The weights refer to the basic version, observe additional weights!

### 3-stage gearboxes

Product		Mass
		m
		[kg]
g500-S220	MD□MA□□063-12	11.7
	MD□MA□□063-32	
	MD□MA□□063-42	12.0
	MD□MA□□071-32	13.4
	MD□MA□□071-42	14.0
	m240-P80/M4	22.5
g500-S400	MD□MA□□063-12	15.2
	MD□MA□□063-32	
	MD□MA□□063-42	15.5
	MD□MA□□071-32	16.9
	MD□MA□□071-42	17.5
	m240-P80/M4	26.0
g500-S660	MD□MA□□063-12	20.6
	MD□MA□□063-32	
	MD□MA□□063-42	20.9
	MD□MA□□071-32	22.3
	MD□MA□□071-42	22.9
	m240-P80/M4	31.4
	m240-P90/M4	35.4
	m240-P90/L4	36.4
g500-S950	MD□MA□□063-12	40.4
	MD□MA□□063-32	
	MD□MA□□063-42	40.7
	MD□MA□□071-32	42.1
	MD□MA□□071-42	42.7
	m240-P80/M4	51.2
	m240-P90/M4	55.2
	m240-P90/L4	56.2
	m240-P100/M4	62.2
	m240-P100/L4	67.2
g500-S2100	MD□MA□□063-42	72.9
	MD□MA□□071-32	74.3

Product		Mass
		m
		[kg]
g500-S2100	MD□MA□□071-42	74.9
	m240-P80/M4	83.4
	m240-P90/M4	87.4
	m240-P90/L4	88.4
	m240-P100/M4	94.4
	m240-P100/L4	99.4
	m240-P112/M4	102
	m240-P132/M4	123
g500-S3100	MD□MA□□063-42	112
	MD□MA□□071-32	114
	MD□MA□□071-42	
	m240-P80/M4	123
	m240-P90/M4	127
	m240-P90/L4	128
	m240-P100/M4	134
	m240-P100/L4	139
g500-S4500	m240-P112/M4	142
	m240-P132/M4	163
	m240-P132/L4	165
	MD□MA□□071-42	190
	m240-P80/M4	198
	m240-P90/M4	202
	m240-P90/L4	203
	m240-P100/M4	209
	m240-P100/L4	214
	m240-P112/M4	217
m240-P132/M4	238	
m240-P132/L4	240	
m240-P160/M4	275	
m240-P160/L4	282	
m240-P180/M4	309	



# g500-S shaft-mounted helical geared motors

Technical data



## Additional weights for gearboxes

Product			g500-S130	g500-S220	g500-S400	g500-S660
<b>Mass</b>						
Solid shaft	m	[kg]	0.5	0.5	1.7	2.5
Shrink disc	m	[kg]	0.2	0.4	0.6	0.6
Foot	m	[kg]	1.7	1.8	3.3	4.3
Flange	m	[kg]	0.4	0.4	0.9	1.7

Product			g500-S950	g500-S2100	g500-S3100	g500-S4500
<b>Mass</b>						
Solid shaft	m	[kg]	3.0	5.5	8.4	19.0
Shrink disc	m	[kg]	1.2	1.7	2.3	4.3
Foot	m	[kg]				
Flange	m	[kg]	6.0	11.5	15.0	29.0

## Additional weights for motors

### 4-pole motors

Product			MD□MA□□		m240		
			063-12 063-32 063-42	071-32 071-42	-P80/M4	-P90/M4 -P90/L4	-P100/M4 -P100/L4
Brake			06	06 08		08 10	10 12
	m	[kg]	0.9	0.9 1.5		1.5 2.6	2.6 4.2

Product			m240				
			-P112/M4	-P132/M4 -P132/L4	-P160/M4	-P160/L4	-P180/M4 -P180/L4 -P180/V4
Brake			12 14	14 16	16 18	18	18 20
	m	[kg]	4.2 5.8	5.8 8.7	8.7 12.6	12.6	12.6 19.5

# g500-S shaft-mounted helical geared motors

Technical data

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# g500-S shaft-mounted helical gearbox

Product extensions



## Overview

### Torque plate

The torque is usually supported via the foot or the flange. Another simple option is the integrated torque plate at the housing. Here, the torque is supported only via one point and is, among other things, suitable for shaft-mounted gearboxes. Moreover, the suitable rubber buffers provide for a low-tension installation and absorb slight shocks.

The rubber buffers can be ordered optionally.

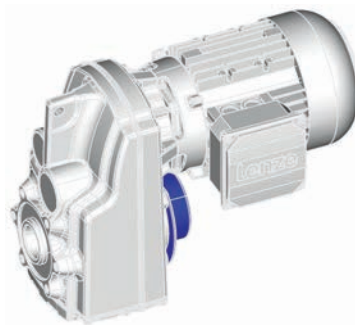
### Rubber buffer for torque plate



### Shaft cover

The optional shrink disc cover is provided for the shrink disc to be protected from contact.

### Shrink disc cover



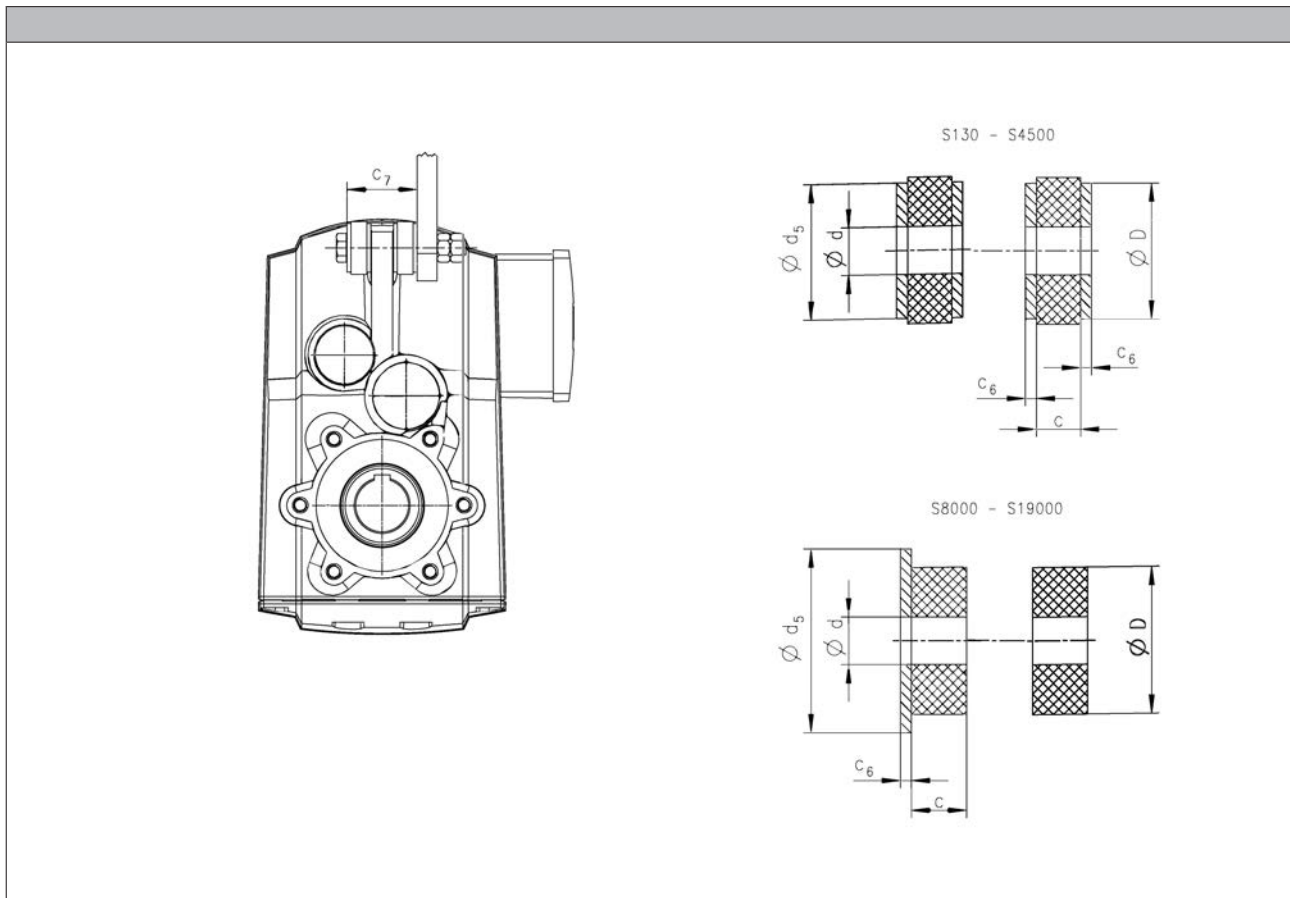
# g500-S shaft-mounted helical gearbox

Product extensions



## Torque plate

Rubber buffer for torque plate



Product	Dimensions						Mass m [kg]
	d [mm]	D [mm]	d <sub>5</sub> [mm]	c [mm]	c <sub>6</sub> [mm]	c <sub>7</sub> [mm]	
g500-S130	11.0	30.0	30	12.0	2.50	45.0	0.1
g500-S220	11.0	30.0	30	12.0	2.50	45.0	0.1
g500-S400	13.0	40.0	37	12.0	3.00	49.0	0.1
g500-S660	13.0	40.0	37	12.0	3.00	52.0	0.1
g500-S950	13.0	40.0	37	12.0	3.00	56.0	0.1
g500-S2100	17.0	50.0	50	24.0	3.00	85.0	0.5
g500-S3100	21.0	60.0	60	24.0	4.00	94.0	0.5
g500-S4500	26.0	72.0	72	24.0	5.00	98.0	0.5
g500-S8000	25.0	80.0	100	40.0	10.0	128	1.0
g500-S14000	31.0	120	140	50.0	12.0	152	1.0
g500-S19000	31.0	120	140	50.0	12.0	156	1.0

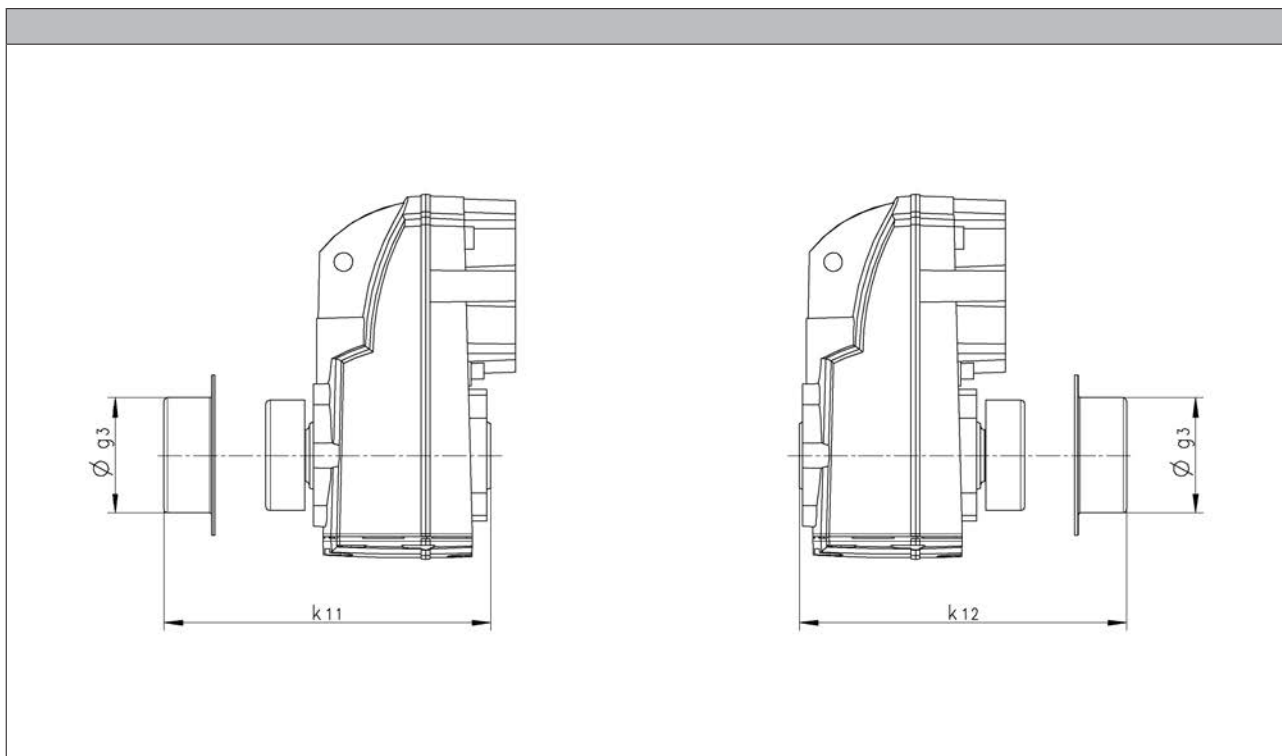
# g500-S shaft-mounted helical gearbox

Product extensions



## Shaft cover

Shrink disc cover



Product	Dimensions			Mass
	$g_3$ [mm]	$k_{11}$ [mm]	$k_{12}$ [mm]	m [kg]
g500-S130	63.0	132	132	0.1
g500-S220	76.0	152	152	0.1
g500-S400	90.0	182	182	0.1
g500-S660	90.0	200	202	0.1
g500-S950	110	219	219	0.1
g500-S2100	127	252	252	0.2
g500-S3100	155	290	290	0.3
g500-S4500	188	355	357	0.4
g500-S8000 <sup>1)</sup>	218		425	0.5
g500-S14000 <sup>1)</sup>	258		520	0.6
g500-S19000 <sup>1)</sup>	310		622	0.9

<sup>1)</sup> Shrink disc only available in position 1 (on the motor end).

# g500-S shaft-mounted helical geared motors

Product extensions



# g500-S shaft-mounted helical geared motors

## Appendix



### Gearbox code

Example		G	50	B	S	113	M	H	D	R	2	C	1B
Meaning	Variant												
Product family		G	50										
Generation				B									
Gearbox type	Shaft-mounted helical gearbox				S								
Output torque	130 Nm					113							
	220 Nm					122							
	400 Nm					140							
	660 Nm					166							
	950 Nm					195							
	2100 Nm					221							
	3100 Nm					231							
	4500 Nm					245							
	8000 Nm					280							
	14000 Nm					314							
	19000 Nm					319							
Type of construction	Geared motor						M						
	Gearboxes						N						
Shaft type	Solid shaft with feather key							V					
	Hollow shaft with keyway							H					
	Hollow shaft with shrink disc							S					
Housing type	Foot mounting + centering								A				
	Foot mounting								B				
	Centering								C				
	Threaded pitch circle								D				
Flange mounting	Without flange									R			
	Flange with through holes									k			
Number of stages	2-stage										2		
	3-stage										3		
Motor mounting	Integrated											C	
	IEC motor											N	
	NEMA motor											A	
	Servo motor											S	
Drive size												1A	
												...	
												□H	

# g500-S shaft-mounted helical geared motors

## Appendix



### Motor code

Example	M	D	E	MA	XX	063	-	4	2	C1	C
Meaning	Variant		Motor code								
Product family	M										
Efficiency class		D									
Cooling			S								
			E								
			F								
Internal key				MA							
Built-on accessories					XX						
					BR						
					BS						
					BI						
					BA						
					RS						
					IG						
					AG						
Size						063					
						071					
Overall length								0			
								1			
								2			
								3			
								4			
Number of pole pairs									2		
									1		
Internal key										C1	
Approval											C
											U
											3



# g500-S shaft-mounted helical geared motors

## Appendix



### Motor code

Meaning	Variant	Motor code												
Example		M	24	A	P	080	M	04	5	E	0	0	W	T
Product family		M	24											
Generation				A										
Efficiency class	Premium - IE3				P									
Size						080								
						090								
						100								
						112								
						132								
						160								
						180								
Overall length	Medium Long Very long												M	
													L	
													V	
Number of poles	4-pole									04				
Degree of protection	IP5□									5				
	IP6□									6				
Cooling	Integral fan										E			
Brake attachment	Without brake											0		
	Spring-applied brake											F		
Actual value encoder	Without encoder											0		
Approval	CE												C	
	Without												N	
Design type	Internal key													T

# g500-S shaft-mounted helical geared motors

Appendix



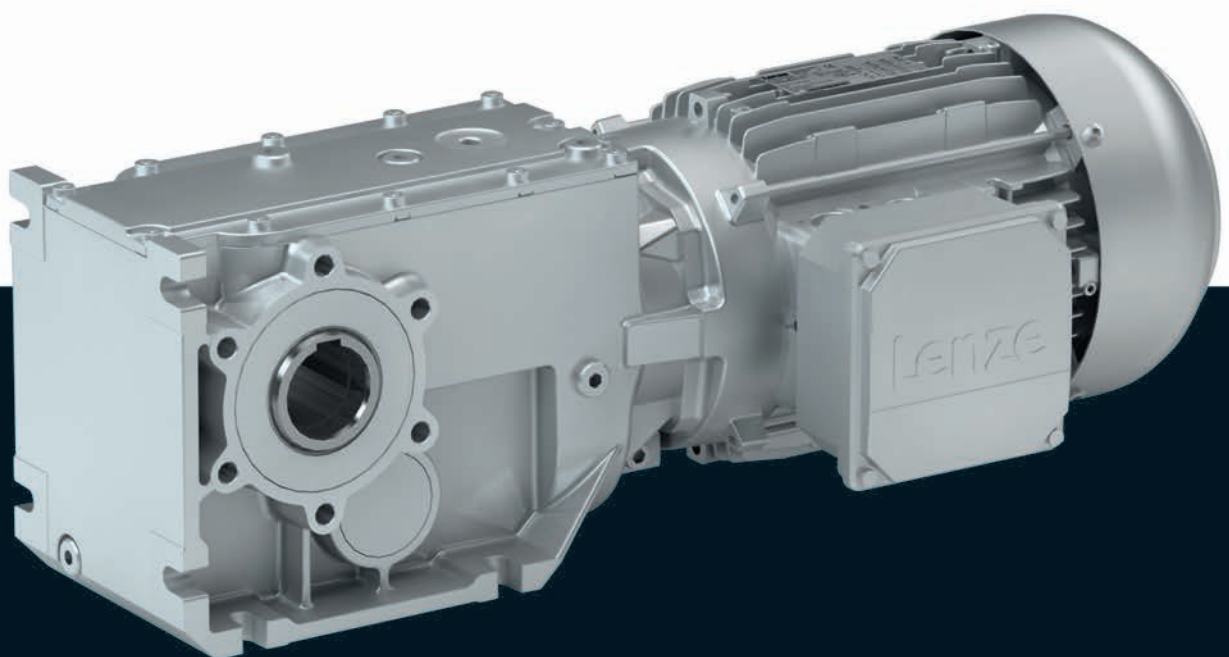
Gearboxes

# g500-B bevel geared motors

**Mains operation**

**0.06 ... 0.55 kW (efficiency class IE1)**

**0.75 ... 30 kW (efficiency class IE3)**





# g500-B bevel geared motors

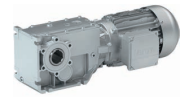


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# g500-B bevel geared motors

## General information



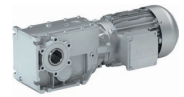
### List of abbreviations

$\alpha$	[rad/s <sup>2</sup> ]	Max. permissible angular acceleration
$\eta_{50\%}$	[%]	Efficiency
$\eta_{75\%}$	[%]	Efficiency
$\eta_{100\%}$	[%]	Efficiency
$\eta_a$		Efficiency
$\eta_{c=1}$		Efficiency
c		Load capacity
$\cos \phi$		Power factor
du/dt	[kV/ $\mu$ s]	Insulation resistance
$F_{ax,-}$	[N]	Min. axial force
$F_{ax,+}$	[N]	Max. axial force
$F_{ax,max}$	[N]	Max. axial force
$f_{in,max}$	[Hz]	Max. input frequency
$f_{max}$	[kHz]	Limit frequency
$f_{max}$	[kHz]	Max. switching frequency
$f_N$	[Hz]	Rated frequency
$F_{rad,max}$	[N]	Max. radial force
$f_z$		Additional radial force factor
$H_{max}$	[m]	Site altitude
$I_0$	[A]	Standstill current
i		Ratio
$I_{in,max}$	[A]	Max. input current
$I_{max}$	[A]	Max. current consumption
$I_{max}$	[A]	Max. current
$I_{max}$	[A]	Max. current consumption
$I_{max}$	[A]	Max. current
$I_{max}$	[A]	Max. short-time DC-bus current
$I_{max}$	[A]	Max. DC-bus current
$I_N$	[A]	Rated current
$I_{N,\Delta}$	[A]	Rated current
$I_{N,Y}$	[A]	Rated current
J	[kgcm <sup>2</sup> ]	Moment of inertia
$J_{MB}$	[kgcm <sup>2</sup> ]	Moment of inertia
$KE_{LL\ 150^\circ C}$	[V/(1000 r/min)]	Voltage constant
$Kt_{0\ 150^\circ C}$	[Nm/A]	Torque constant
$L_{10}$	[h]	Bearing service life
L	[mH]	Mutual inductance
$L_{1\sigma}$	[mH]	Stator leakage inductance
$L_{2\sigma}$	[mH]	Rotor leakage inductance
$L_N$	[mH]	Rated inductance
m	[kg]	Mass
$M_2$	[Nm]	Output torque
$M_{22}$	[Nm]	Output torque
$M_0$	[Nm]	Stall torque
$M_{0,max}$	[Nm]	Max. standstill torque
$M_{2,GM}$	[Nm]	Output torque
$M_{2,max}$	[Nm]	Max. output torque
$M_{2,not}$	[Nm]	Emergency off-torque

$M_a$	[Nm]	Starting torque
$M_{a,1}$	[Nm]	Starting torque
$M_{a,2}$	[Nm]	Starting torque
$M_{av}$	[Nm]	Average dynamic torque
$M_b$	[Nm]	Stalling torque
$M_B$	[Nm]	Braking torque
$M_k$	[Nm]	Rated torque
$M_{max}$	[Nm]	Max. torque
$M_N$	[Nm]	Rated torque
$n_2$	[r/min]	Output speed
$n_{21}$	[r/min]	Output speed
$n_{22}$	[r/min]	Output speed
$n_{1,max}$	[r/min]	Max. gearbox input speed
$n_{1,max\ 50\%}$	[r/min]	Max. gearbox input speed
$n_{eto}$	[r/min]	Transition speed
$n_k$	[r/min]	Speed
$n_{max}$	[r/min]	Max. speed
$n_N$	[r/min]	Rated speed
$P_{max}$	[kW]	Max. power input
$Q_{BW}$	[MJ]	Friction energy
$Q_E$	[J]	Maximum switching energy
$Q_E$	[kJ]	Maximum switching energy
$R_1$	[ $\Omega$ ]	Stator impedance
$R_2$	[ $\Omega$ ]	Rotor impedance
R	[ $\Omega$ ]	Insulation resistance
R	[ $\Omega$ ]	Min. insulation resistance
$R_{UV\ 150^\circ C}$	[ $\Omega$ ]	Stator impedance
$R_{UV\ 20^\circ C}$	[ $\Omega$ ]	Stator impedance
$S_{h\ddot{u}}$	[1/h]	Transition operating frequency
$t_1$	[ms]	Engagement time
$t_2$	[ms]	Disengagement time
$t_{11}$	[ms]	Delay time
$t_{12}$	[ms]	Rise time
T	[ $^\circ C$ ]	Max. surface temperature
T	[ $^\circ C$ ]	Min. ambient temperature for transport
T	[ $^\circ C$ ]	Max. ambient temperature for transport
T	[ $^\circ C$ ]	Max. ambient temperature of bearing
T	[ $^\circ C$ ]	Min. ambient storage temperature
T	[ $^\circ C$ ]	Ambient temperature
T	[ $^\circ C$ ]	Operating temperature
T	[ $^\circ C$ ]	Rated temperature
t	[h]	Service life
$T_{opr}$		Ambient operating temperature
$T_{opr,max}$	[ $^\circ C$ ]	Max. ambient operating temperature
$T_{opr,min}$	[ $^\circ C$ ]	Min. ambient operating temperature
$t_{re}$	[s]	Recovery time
$t_{\ddot{u}}$	[ms]	Overexcitation time
$U_{\Delta}$	[V]	Voltage range
$U_{AC}$	[V]	Mains voltage range

# g500-B bevel geared motors

## General information

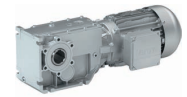


### List of abbreviations

$U_{AC}$	[V]	Mains voltage
$U_{in,max}$	[V]	Max. input voltage
$U_{in,min}$	[V]	Min. input voltage
$U_{max}$	[V]	Max. input voltage
$U_{max}$	[V]	Max. mains voltage
$U_{min}$	[V]	Min. mains voltage
$U_{N,\Delta}$	[V]	Rated voltage
$U_{N,AC}$	[V]	Rated voltage
$U_{N,DC}$	[V]	Rated voltage
$U_{N,Y}$	[V]	Rated voltage
$Z_g$		Number of teeth
$Z_{ro}$	[ $\Omega$ ]	Rotor impedance
$Z_{rs}$	[ $\Omega$ ]	Impedance
$Z_{so}$	[ $\Omega$ ]	Stator impedance
$Z_t$		Number of teeth

CCC	China Compulsory Certificate
CE	Communauté Européenne
CEL	China Energy Label
CSA	Canadian Standards Association
CSAULE	Energy Verified Certificate
cURus	Combined certification marks of UL for the USA and Canada
DIN	Deutsches Institut für Normung e.V.
EAC	Customs union Russia / Belarus / Kazakhstan certificate
EMC	Electromagnetic compatibility
EN	European standard
IM	International Mounting Code
IP	International Protection Code
NEMA	National Electrical Manufacturers Association
UkrSEPRO	Certificate for Ukraine
UL	Underwriters Laboratory Listed Product
UR	Underwriters Laboratory Recognized Product
VDE	Verband deutscher Elektrotechniker (Association of German Electrical Engineers)

# g500-B bevel geared motors



## General information

### Product information

In combination with three-phase AC motors, our bevel gearboxes form a compact and powerful drive unit. Numerous options at the input and output end provide for the drive to be exactly adapted to your application.

The efficient bevel gearboxes feature high reliable radial forces, closely stepped gear reductions and a low backlash. They are available in 2-stage and 3-stage design with a torque up to 4300 Nm and a ratio of up to  $i=360$ .

#### Three-phase AC motors as a basis for geared motors

In a power range of 0.06 to 30 kW, Lenze offers mains-operated three-phase AC motors for basic tasks. These drives come in different efficiency classes and can be used for the versions required for mains operation.

- IE1 motors up to a power of 0.55 kW
- IE3 motors from 0.75 kW to 30 kW

#### Versions

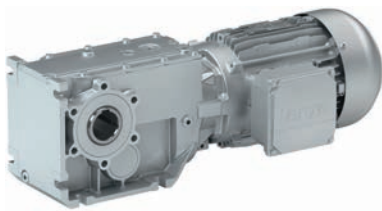
- High-efficient right-angle gearbox in a compact design for space-saving installation
- Standardised shaft and flange dimensions for an easy machine integration
- Low backlash and high torsional stiffness provide for exact results in positioning applications

#### Customer benefit

- Different efficiency classes for the greatest economic benefit
- Saving of space by compact direct mounting to Lenze gearboxes
- Optimum adaptation of the brake reaction by optional holding brakes and service brakes
- Optional overheat control by temperature monitoring

### The product name

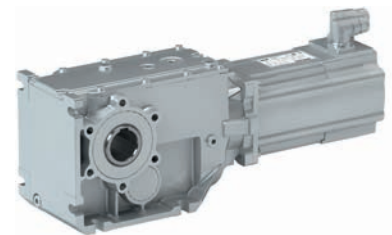
Gearbox type	Product range	Design	Rated torque [Nm]	Product	
Bevel gearbox	g500	-	B	45	g500-B45
				110	g500-B110
				240	g500-B240
				450	g500-B450
				600	g500-B600
				820	g500-B820
				1500	g500-B1500
				2700	g500-B2700
				4300	g500-B4300



g500-B bevel gearbox with m240-P three-phase AC motor



g500-B bevel gearbox with m550-P three-phase AC motor and motec



g500-B bevel gearbox with MCS servo motor



# g500-B bevel geared motors

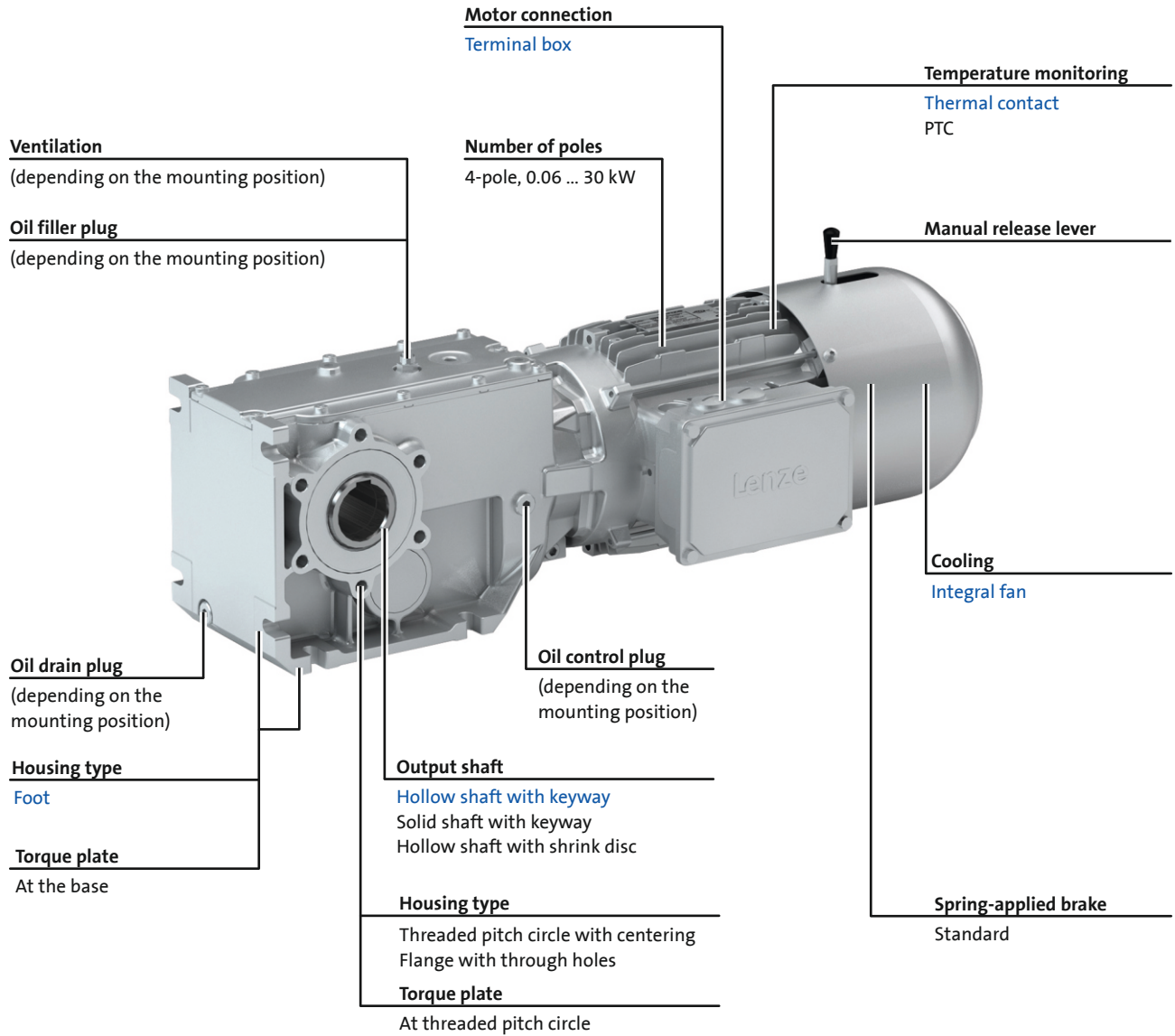
## General information



## Equipment

### Overview

The equipment includes all the options available as standard and all the built-on accessories of the product.

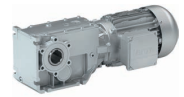


### Standard design

11 - Detailed information on housing type.

# g500-B bevel geared motors

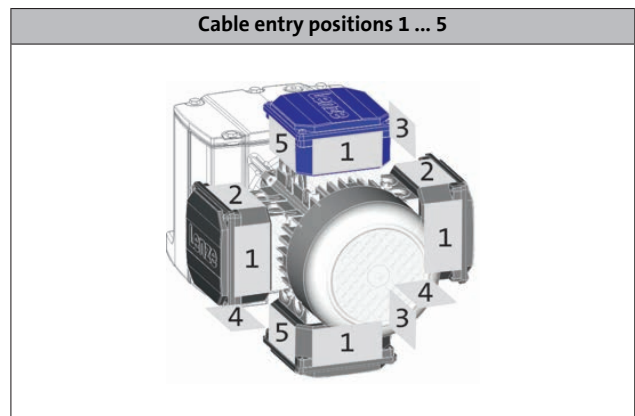
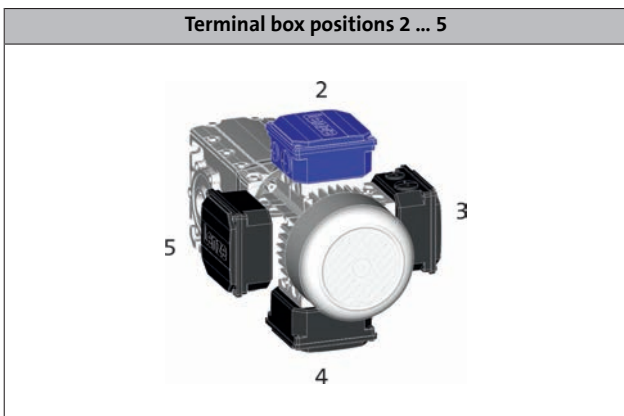
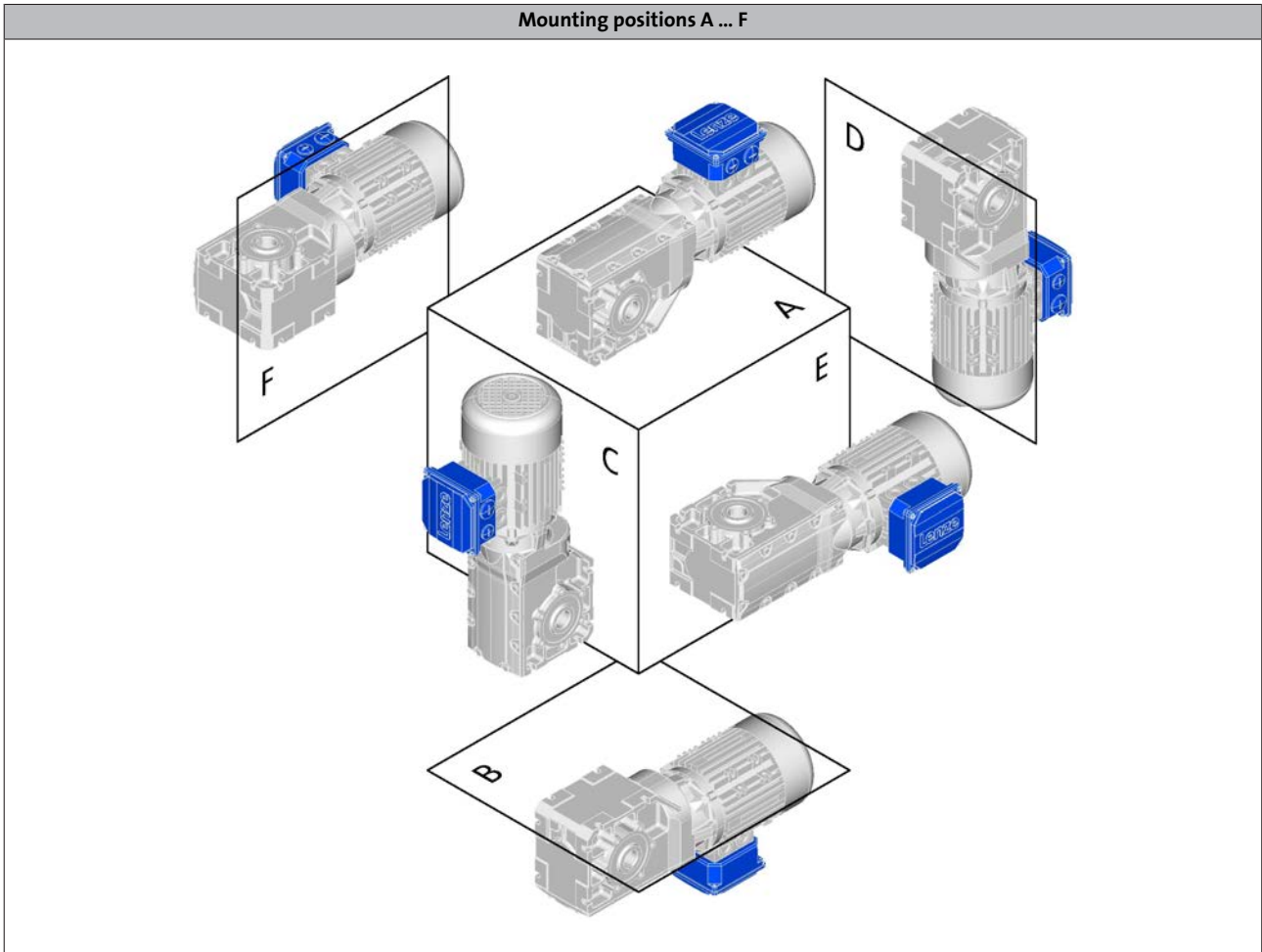
## General information



### Equipment

#### Mounting position, position of system components

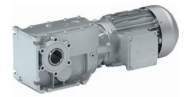
- ▶ In the following graphics, the terminal box in position 2 is colour-coded. If the mounting position (A ... F) changes, the terminal box positions 2 ... 5 are rotated accordingly.
- ▶ To reduce the number of different versions, the gearboxes can also be ordered with combined mounting positions:
  - g500-B45 in mounting position ABCDEF
  - g500-B110 ... B450 in mounting position AEF



- ▶ For details regarding the cable entry see motor chapter/product extensions.

# g500-B bevel geared motors

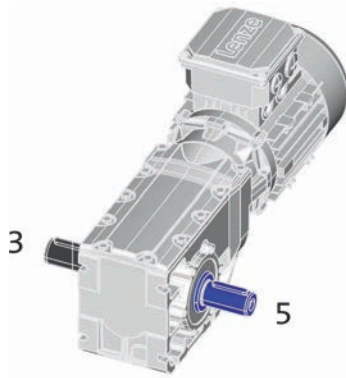
General information



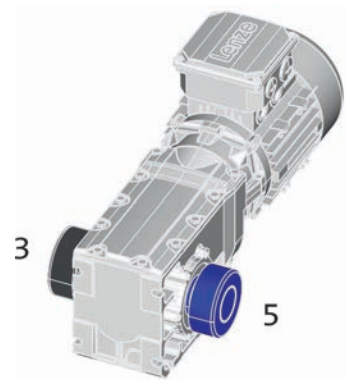
## Equipment

Mounting position, position of system components

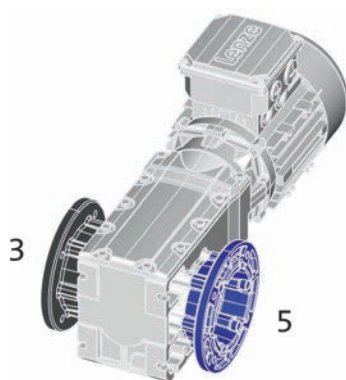
Solid shaft position 3 or 5



Shrink disc position 3 or 5

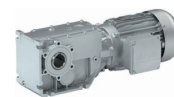


Flange position 3 or 5



# g500-B bevel geared motors

## General information



### The geared motor kit

#### g500-B45 ... B450

Product	g500-B45	g500-B110	g500-B240	g500-B450
Gearbox				
Motor assignment min.	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063	MD□MA□□-063
Motor assignment max.	MD□MA□□-071	m240-P90	m240-P100	m240-P132
Technical data				
Output torque max.	45 Nm	110 Nm	240 Nm	450 Nm
Drive power min.	0.06 kW	0.12 kW	0.12 kW	0.12 kW
Drive power max.	0.55 kW	1.5 kW	3.0 kW	7.5 kW
Dimensions [mm]				
Solid shaft with featherkey	20 x 40	20 x 40	30 x 60	30 x 60
Hollow shaft with keyway	18/20	20/25	30/35	35/40
Hollow shaft with shrink disc	20	20	30/35	35
Output flange	110/120	120/160	160/200	200

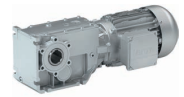
- Values printed in bold are standard versions.  
 Values not printed in bold are possible extensions, some for an additional charge.

Design	
Conformity	<b>CE</b> EAC
Approval	<b>Without</b>
Degree of protection	<b>IP55</b> IP65/IP66
Surface and corrosion protection	<b>Without</b> Different types of OKS
Colour	<b>Not coated</b> Primed/RAL colours
Hollow shaft	<b>With keyway (H□□)</b>
Hollow shaft with shrink disc	Without keyway (S□□)
Solid shaft	With featherkey (V□□)
Shaft material	<b>Steel</b> stainless steel
Shaft sealing ring material	<b>NBR</b> FKM (Viton)
Driven shaft bearing	<b>Normal</b>
Paste for shaft mounting	<b>Without</b> Enclosed
Gearbox type	<b>With foot (□BR)</b> With foot and centering (□AR) With foot and output flange (□AK)
Lubricant	<b>Mineral oil</b> Synthetic oil Food-compatible oil

Design	
Mounting position	<b>A/B/C/D/E/F</b> Combined
Power connection	<b>Terminal box</b>
Spring-applied brake	<b>Without</b> Brake design: Standard brake version: Standard
Feedback	<b>Without</b>
Cooling	<b>Integral fan</b>
Temperature monitoring	<b>TKO thermal contact</b> PTC thermistor

# g500-B bevel geared motors

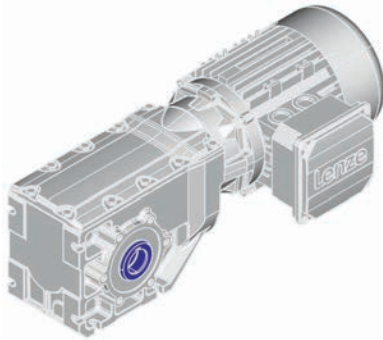
General information



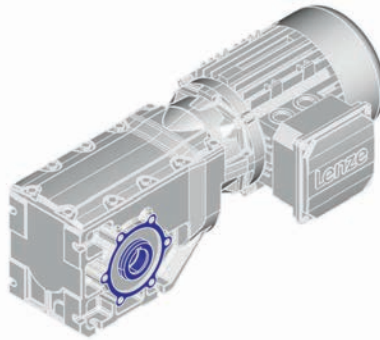
## The geared motor kit

g500-B45 ... B450

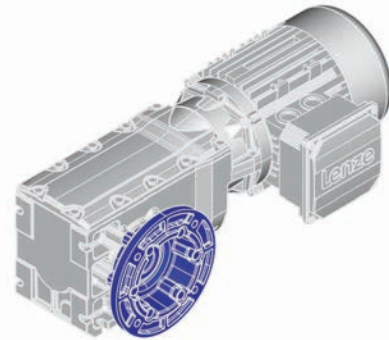
### Gearbox design: hollow shaft, with foot



Without centring (HBR)

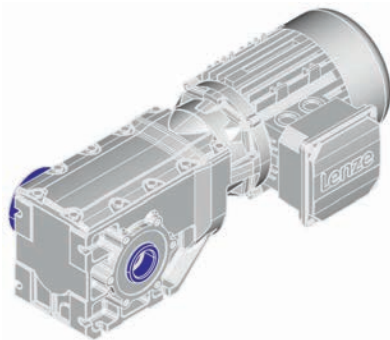


With centring (HAR)

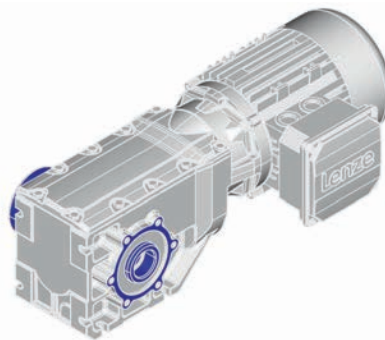


Flange with through holes (HAK)

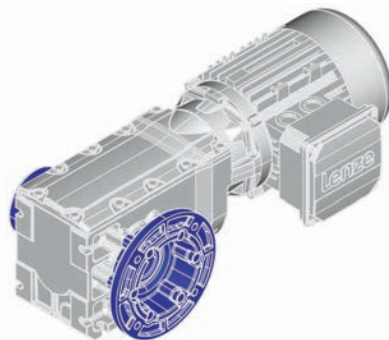
### Gearbox design: hollow shaft with shrink disc, with foot



Without centring (SBR)

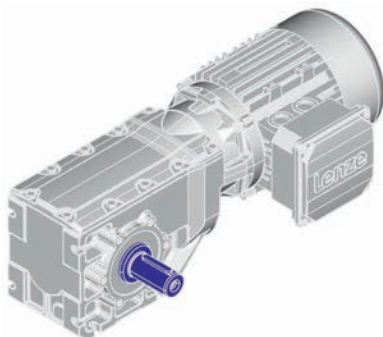


With centring (SAR)

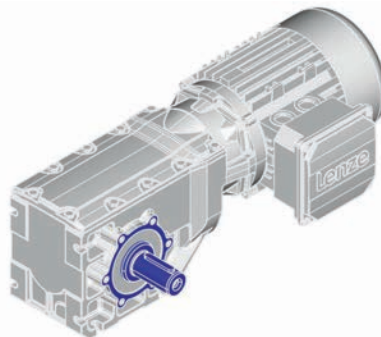


Flange with through holes (SAK)

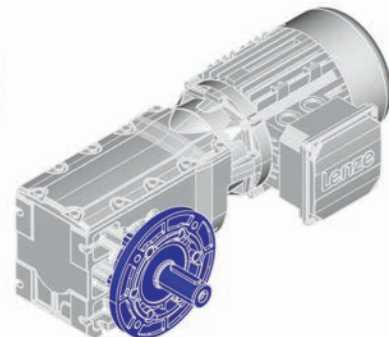
### Gearbox design: solid shaft, with foot



Without centring (VBR)



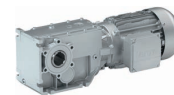
With centring (VAR)



Flange with through holes (VAK)

# g500-B bevel geared motors

## General information



### The geared motor kit

#### g500-B600 ... B4300

Product	g500-B600	g500-B820	g500-B1500	g500-B2700	g500-B4300
Gearbox	g500-B600	g500-B820	g500-B1500	g500-B2700	g500-B4300
Motor assignment min.	MD□MA□□-063	MD□MA□□-063	MD□MA□□-071	m240-P90	m240-P90
Motor assignment max.	m240-P132	m240-P132	m240-P160	m240-P160	m240-P180
Technical data					
Output torque max.	600 Nm	820 Nm	1500 Nm	2700 Nm	4300 Nm
Drive power min.	0.25 kW	0.25 kW	0.55 kW	1.1 kW	1.1 kW
Drive power max.	7.5 kW	7.5 kW	15 kW	15 kW	30 kW
Dimensions [mm]					
Solid shaft with featherkey	40 x 80	40 x 80	50 x 100	60 x 120	70 x 140
Hollow shaft with keyway	40/45	40/45	50/55	60/70	70/80
Hollow shaft with shrink disc	40	40	50	65	75/80
Output flange	200/250	200/250	250/300	350	400/450

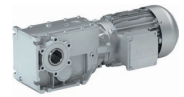
- Values printed in bold are standard versions.  
 Values not printed in bold are possible extensions, some for an additional charge.

Design	
Conformity	<b>CE</b> EAC
Approval	<b>Without</b>
Degree of protection	<b>IP55</b> IP65/IP66
Surface and corrosion protection	<b>OKS-S</b> Different types of OKS
Colour	<b>Painted in RAL colours</b> Primed
Hollow shaft	<b>With keyway (H□□)</b>
Hollow shaft with shrink disc	Without keyway (S□□)
Solid shaft	With featherkey (V□□)
Shaft material	<b>Steel</b> stainless steel
Shaft sealing ring material	<b>NBR</b> FKM (Viton)
Driven shaft bearing	<b>Normal</b>
Paste for shaft mounting	<b>Without</b> Enclosed
Gearbox type	<b>With foot (□BR)</b> With foot and centering (□AR) With foot and output flange (□AK)
Lubricant	<b>Mineral oil</b> Synthetic oil Food-compatible oil

Design	
Mounting position	<b>A/B/C/D/E/F</b>
Power connection	<b>Terminal box</b>
Spring-applied brake	<b>Without</b> Brake design: Standard brake version: Standard
Feedback	<b>Without</b>
Cooling	<b>Integral fan</b>
Temperature monitoring	<b>TKO thermal contact</b> PTC thermistor

# g500-B bevel geared motors

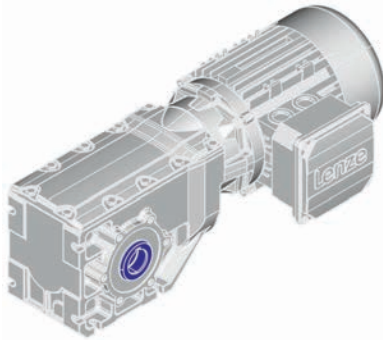
General information



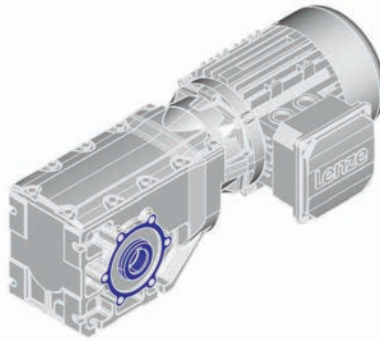
## The geared motor kit

g500-B600 ... B4300

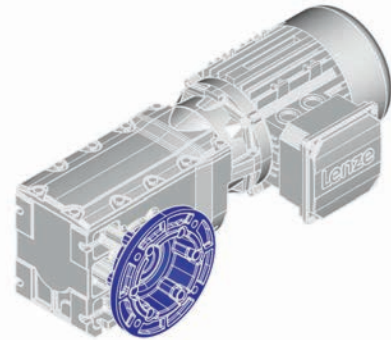
### Gearbox design: hollow shaft, with foot



Without centring (HBR)

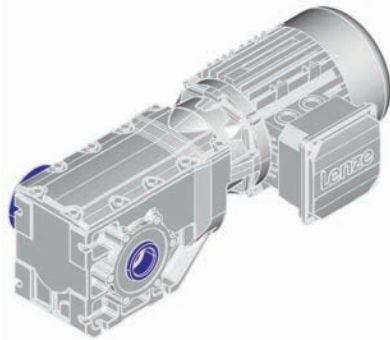


With centering (HAR)

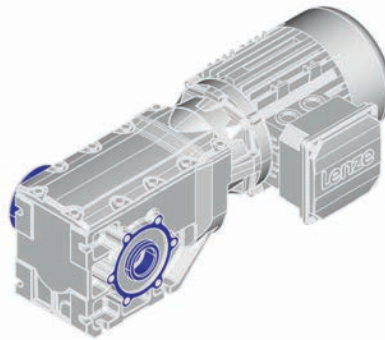


Flange with through holes (HAK)

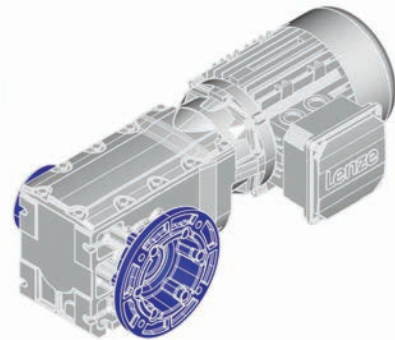
### Gearbox design: hollow shaft with shrink disc, with foot



Without centring (SBR)

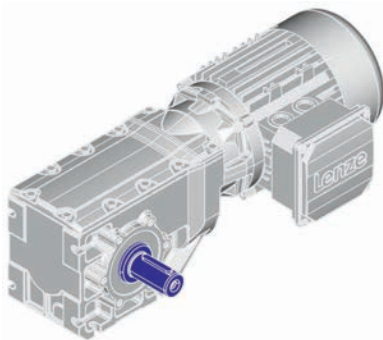


With centering (SAR)

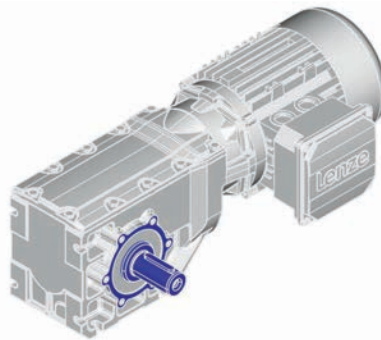


Flange with through holes (SAK)

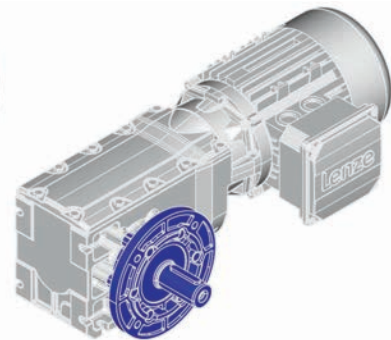
### Gearbox design: solid shaft, with foot



Without centring (VBR)



With centering (VAR)

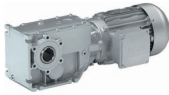


Flange with through holes (VAK)

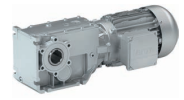
# g500-B bevel geared motors

General information

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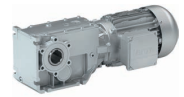
### General information about the data provided in this catalogue

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

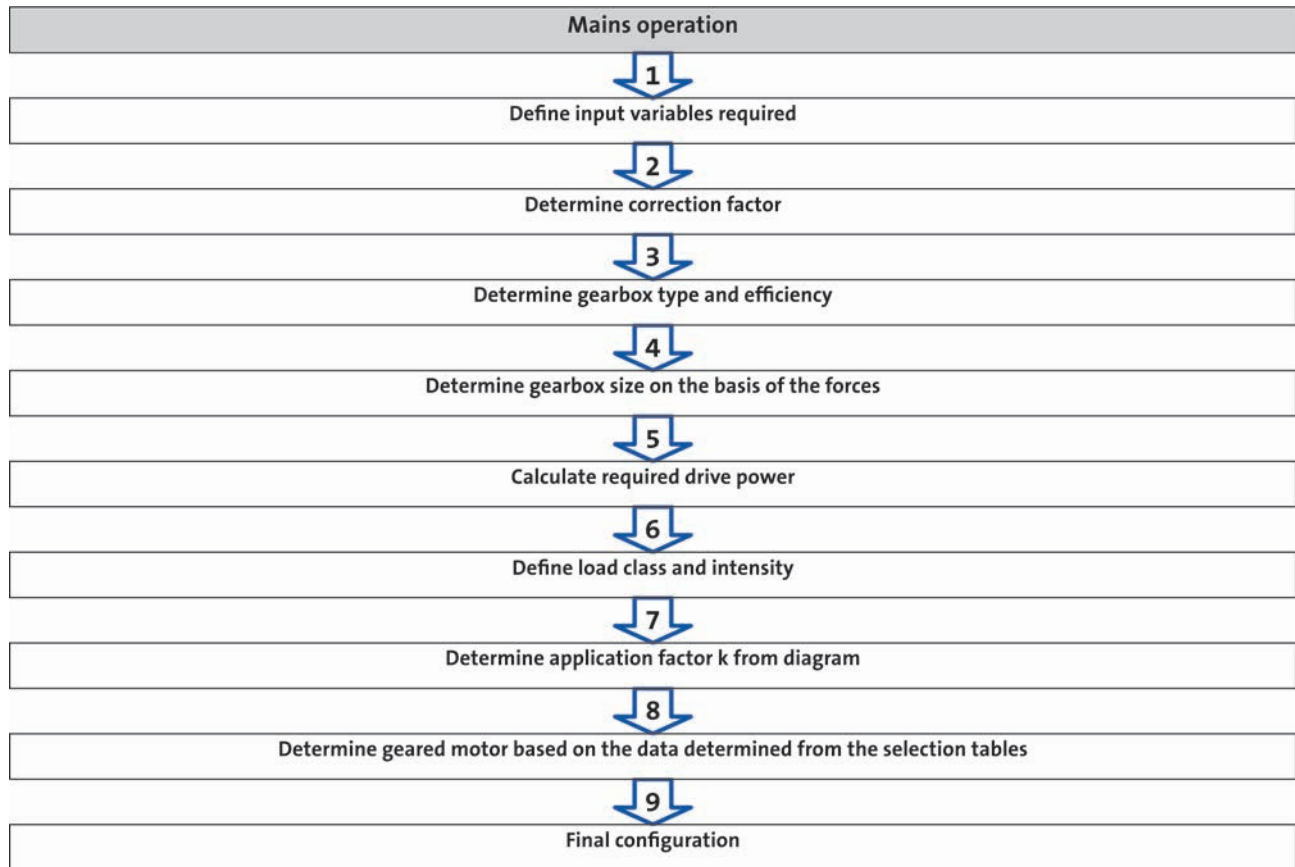
- Operating time/day = 8 h (100% OT)
- Duty class I for up to 10 switching operations/h
- Mounting positions and designs in this catalogue
- Standard lubricant
- $T_{amb} = 20\text{ °C}$  for gearboxes,  
 $T_{amb} = 40\text{ °C}$  for motors (in accordance with EN 60034)
- Site altitude  $\leq 1000\text{ m amsl}$
- The selection tables provide the permissible mechanical powers and torques. For notes on the thermal power limit, see chapter drive dimensioning.
- The rated power specified for motors and geared motors applies to operating mode S1 (in accordance with EN 60034).

Under different operating conditions, the values obtained may vary from those listed here.

In the case of extreme operating conditions, please consult your Lenze sales office.



## Procedure of a configuration process





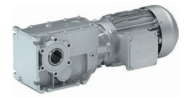
### Procedure of a configuration process

#### 1 required input variables

Load torque		$M_{L,max} =$	[Nm]
Load speed		$n_{L,max} =$	[r/min]
External moments of inertia		$J_{ext} =$	[kgcm <sup>2</sup> ]
Operating time / day		BD =	[h]
Switching operations per h		$S_h =$	[1/h]

#### 2 determine correction factor

Operating modes and operating time						
S1	ED	[%]	100			
	$k_L =$		1.0			
S2	ED	[%]	10	30	60	90
	$k_L =$		1.4 - 1.5	1.15 - 1.2	1.07 - 1.1	1.0 - 1.05
S3	ED	[%]	15	25	40	60
	$k_L =$		1.4 - 1.5	1.3 - 1.4	1.15 - 1.2	1.05 - 1.1
S6	ED	[%]	15	25	40	60
	$k_L =$		1.5 - 1.6	1.4 - 1.5	1.3 - 1.4	1.15 - 1.2
Site altitude						
	H	[m]	≤ 1000	≤ 2000	≤ 3000	≤ 4000
	$k_H =$		1	0.95	0.9	0.85
Ambient temperature						
	$T_U =$	[°C]	≤ 40	≤ 45	≤ 50	≤ 55
	$k_{TU} =$		1	0.95	0.9	0.8



### Procedure of a configuration process

#### 3 determine gearbox type and efficiency

Gearbox type			Axial gearboxes		Right-angle gearboxes
			Helical gearbox	Shaft-mounted	Bevel gearbox
Product			g500-H	g500-S	g500-B
Gearbox efficiency	2-stage gearboxes	$\eta_G$	0.96	0.96	0.96
	3-stage gearboxes	$\eta_G$	0.95	0.95	0.95

#### 4 determine gearbox size based on the forces on the output

Transmission element		Gear wheels	Sprockets	Toothed belt pulleys (depending on the initial stress)	Narrow V-belt (depending on the initial stress)
Additional radial force factor	$f_z =$	$\geq 17$ teeth = 1.0 $< 17$ teeth = 1.15	$\geq 20$ teeth = 1.0 $< 20$ teeth = 1.25 $< 13$ teeth = 1.4	With belt tightener = 2.0 - 2.5 Without belt tightener = 2.5 - 3.0	1.5 - 2.0
		Calculation		Check	
Radial force	[N]	$F_{rad} = 2000 \times \frac{M_{L,max} \times f_z}{d_w}$		$F_{rad} \leq f_w \times F_{rad,max}$	
Axial force	[N]			$F_{ax} \leq F_{rad,max} \times 0.5$	

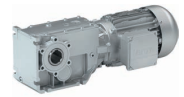
$d_w$  = effective diameter [mm] transmission element  
 $f_w$  = additional load factor

- For permissible radial and axial forces and additional load factor see the "Technical data" chapter

#### 5 calculate drive power

		Calculation	
Drive power required	[kW]	$P_1 = \frac{M_{L,max} \times \eta_{L,max}}{9549 \times k_L \times k_H \times k_{Tu} \times \eta_g}$	

$k_L$  = Correction factor - operating mode  
 $k_H$  = correction factor - installation height  
 $k_{Tu}$  = correction factor - ambient temperature



### Procedure of a configuration process

#### 6 calculate intensity and determine duty class

Load class	Load type	Intensity
I	Smooth operation, small or light jolts	$F_I \leq 1.25$
II	Uneven operation, average jolts	$1.25 < F_I \leq 4$
III	Uneven operation, severe jolts and/or <b>alternating load</b>	$F_I > 4$

#### 23 - Duty classes

	Calculation	
Intensity	$F_I = \frac{\frac{J_L + J_M + J_B + J_Z}{i^2}}{J_M + J_B + J_Z}$	

$i$  = gearbox ratio

$J_L$  = moment of inertia of the load

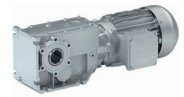
$J_M$  = moment of inertia of the motor

$J_B$  = moment of inertia of the brake

$J_Z$  = additional moment of inertia (handwheel, 2nd shaft end ...)

#### 7 determine application factor $k$ from diagram

#### 25 - Load capacity and application factor



### Procedure of a configuration process

8 determine geared motor based on the data determined from the selection tables

Selection table		Check
Drive power $P_N$	[kW]	$P_1 \leq P_N$
Output speed $n_2$	[r/min]	$n_{L,max} \approx n_2$
Output torque $M_2$	[Nm]	$M_{L,max} \leq M_2$
Load factor $c$		$k \leq c$
Order information		Example
Number of stages		2
Ratio $i$		3.267
Product gearbox		g500-H140
Product motor		m240-P80/M4

25 - Load capacity and application factor

#### Example: structure of a selection table

50 Hz:  $P_N = 0.75$  kW ← Rated power  $P_N$

2-stage gearboxes ← Number of the gear stage

Mains operation 400 V, 50 Hz			$i$	Product		
$n_2$ [r/min]	$M_2$ [Nm]	$c$		g500	m240	
627	11	5.2	4.600	-H100	-P80/M2	
558	12	4.9	5.167	-H100	-P80/M2	

↑  
Output speed  $n_2$

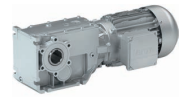
↑  
Output torque  $M_2$

↑  
Load capacity  $c$

↑  
Ratio  $i$

↑  
Product  
Gearbox

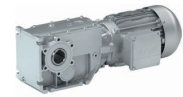
↑  
Product  
Motor



### Procedure of a configuration process

#### 9 Final configuration

More information regarding the final configuration can be found under:	
- The modular geared motor system - Product extensions for gearboxes, motors	
Check operating conditions	<ul style="list-style-type: none"><li>- Operating temperature (observe lubricant, material of shaft sealing ring)</li><li>- Degree of protection</li><li>- Supply voltage</li><li>- Surface protection required</li><li>- Approvals</li><li>- Conformity</li></ul>
Check and define connection dimensions	<ul style="list-style-type: none"><li>- Driven shaft</li><li>- Foot, output flange, centering with threaded pitch circle</li></ul>
Determine mounting position and position of the system blocks	<ul style="list-style-type: none"><li>- Mounting position A/B/C/D/E/F or combined</li><li>- Terminal box position, shaft position, flange position</li></ul>
Select product extensions at the gearbox (differing depending on the gearbox type)	<ul style="list-style-type: none"><li>- Torque plate at the base, threaded pitch circle, rubber buffer</li><li>- Hollow shaft cover, shrink disc cover</li></ul>
Select product extensions at the motor	<ul style="list-style-type: none"><li>- Connection type (terminal box, connector)</li><li>- Brake</li></ul>



### Standards

#### Operating modes

Operating modes S1 ... S10 as specified by EN 60034-1 describe the basic stress of an electrical machine.

In continuous operation a motor reaches its permissible temperature limit if it outputs the rated power dimensioned for continuous operation. However, if the motor is only subjected to load for a short time, the power output by the motor may be greater without the motor reaching its permissible temperature limit. This behaviour is referred to as overload capacity.

Depending on the duration of the load and the resulting temperature rise, the required motor can be selected reduced by the overload capacity.

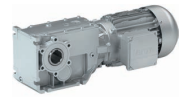
#### The most important operating modes

Continuous operation S1	Short-time operation S2
<p>Operation with a constant load until the motor reaches the thermal steady state. The motor may be actuated continuously with its rated power.</p>	<p>Operation with constant load; however, the motor does not reach the thermal steady state. During the following standstill, the motor winding cools down to the ambient temperature again. The increase in power depends on the load duration.</p>
Intermittent operation S3	Non-intermittent periodic operation S6
<p>Sequence of identical duty cycles comprising operation with a constant load and subsequent standstill. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/downtime ratio.</p>	<p>Sequence of identical duty cycles comprising operation with a constant load and subsequent no-load operation. The motor cools down during the no-load phase. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/idle time ratio.</p>



# g500-B bevel geared motors

## Project planning



### Standards

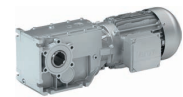
#### Duty classes

Depending on the load type, the duty classes or impacts are divided as follows:

Duty class	Load type
I	Smooth operation, small or light jolts
II	Uneven operation, average jolts
III	Uneven operation, severe jolts and/or alternating load

In order to support you in classifying your driven machine regarding the right duty class, the following shows sample applications with the corresponding duty class. Depending on, for instance, the operating frequency, driven machines can also have a higher impact. In case of uncertainties, please contact your Lenze sales office.

Drive	Duty class
Construction machines	II
Chemical industry	II
Conveyors	II
Fans	II
Plastics industry	II
Wood working	III
Hoists	III
Metal working	III
Food	II
Paper industry	III
Stones	III
Textile industry	II



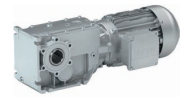
### Standards

#### Degrees of protection

The degree of protection indicates the suitability of a motor for specific ambient conditions with regard to humidity as well as the protection against contact and the ingress of foreign particles. The degrees of protection are classified by EN 60529.

The first code number after the code letters IP indicates the protection against the ingress of foreign particles and dust.  
The second code number refers to the protection against the ingress of humidity.

Code number	Degree of protection	Code number	Degree of protection
0	No protection	0	No protection
1	Protection against the ingress of foreign particles $d > 50$ mm. No protection in the case of deliberate access	1	Protection against vertically dripping water (dripping water).
2	Protection against medium-sized foreign particles, $d > 12$ mm, keeping away fingers or similar	2	Protection against diagonally falling water (dripping water), $15^\circ$ compared to normal service position.
3	Protection against small foreign particles $d > 2.5$ mm. Keeping away tools, wires and the like	3	Protection against spraying water, up to $60^\circ$ to the vertical
4	Protection against granular foreign particles, $d > 1$ mm, keeping away tools, wires and the like	4	Protection against spraying water from all directions.
5	Protection against dust deposits (dust-protected), complete protection against contact.	5	Protection against water jets from all directions.
6	Protection against the ingress of dust (dust-proof), complete protection against contact.	6	Protection against choppy seas or heavy water jets (flood protection).



### Load capacity and application factor

#### Load capacity $c$ of gearboxes

Rated value for the load capacity of Lenze geared motors.

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

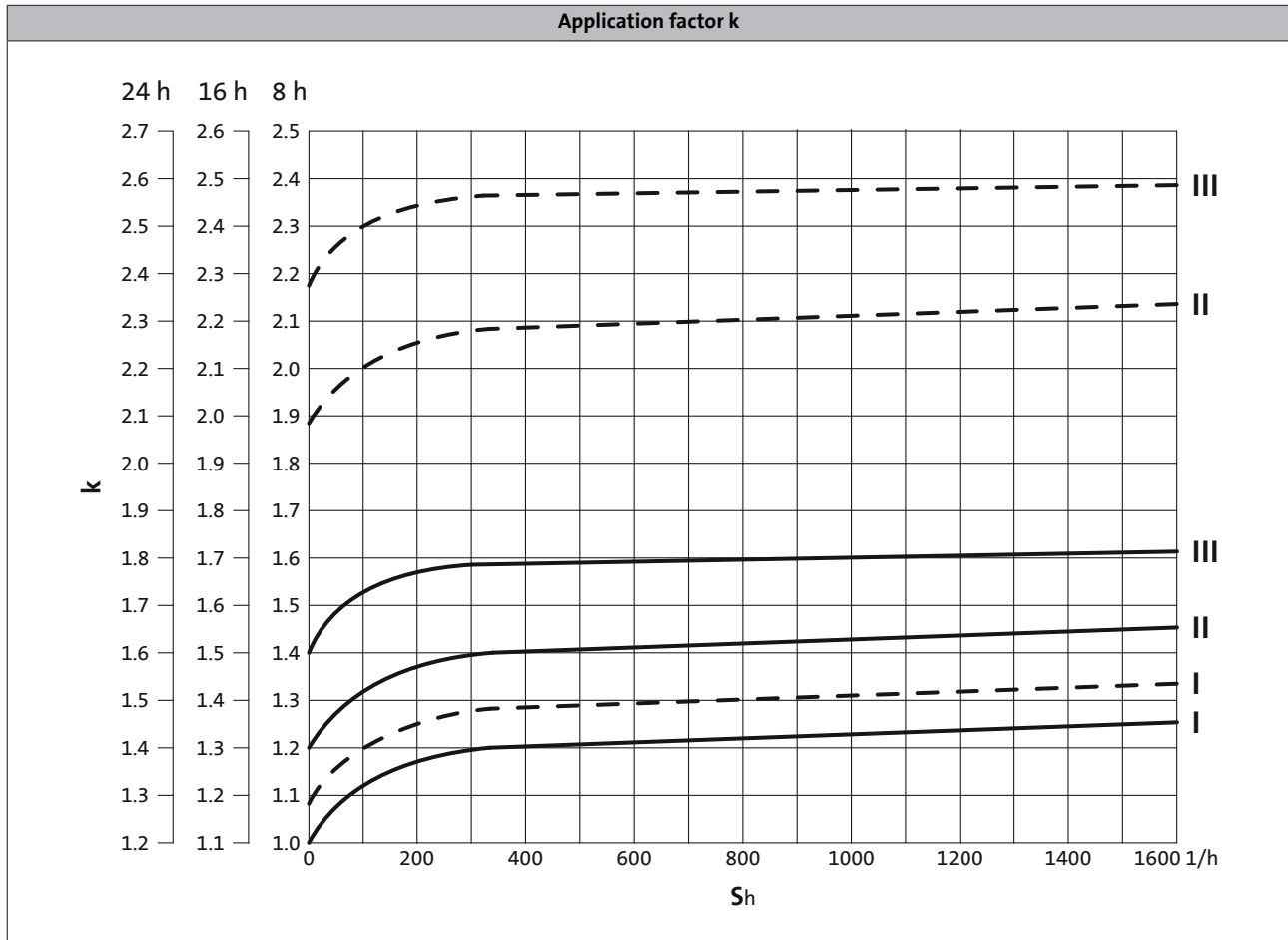
Required:  $c \geq k$

#### Application factor $k$ (according to DIN 3990)

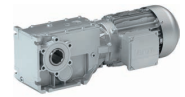
Takes into account the influence of temporally variable loads which are actually present during the anticipated operating time of gearboxes and geared motors.

$k$  is determined by:

- the type of load
- the load intensity
- temporal influences



- ▶  $S_h$  = switchings/h
- ▶ — Three-phase AC motors MD□MA
- ▶ - - - Three-phase AC motors m240/m540/m550

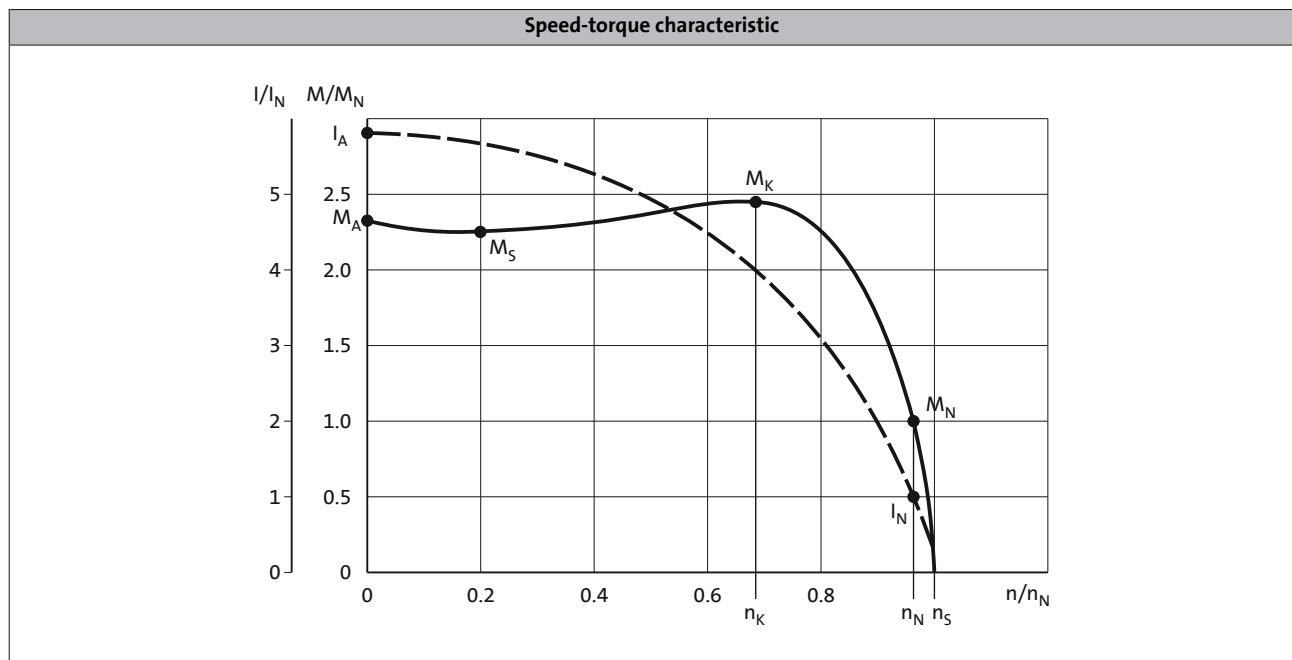


### Operational performance of three-phase AC geared motors

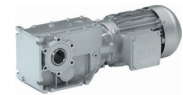
The g500 geared motors can be actuated directly on the mains or via an inverter. When actuated in mains operation, the motor runs at a fixed speed, for inverter operation the speed is variable. Thanks to their high degree of protection, the robust three-phase drives can be basically used in a variety of applications.

#### Mains operation

During mains operation, when switched on, the three-phase AC motor starts up according to the speed-torque characteristic. It passes through this characteristic until it reaches its stable operating point. This operating point has been reached if the load torque or rated torque ( $M_{rated}$ ) is lower than the starting torque ( $M_A$ ) and pull-up torque ( $M_S$ ). The rated speed ( $n_{rated}$ ) of the drive is always lower than the calculated synchronous speed ( $n_S$ ). The difference between rated speed and synchronous speed relating to the synchronous speed is referred to as the "slip".



# g500-B bevel geared motors



## Project planning

### Technical data at a glance

The following tables contain the most important data of the gearbox with the motors that can be attached for an approximate dimensioning process of a geared motor. Detailed information can be found in the following chapters.

The data given in the tables apply to

- input speed  $n_1 = 1400$  r/min
- application factor  $c = 1.0$

In order to calculate the exact ratio, the number of teeth  $z_g$  (driven) can be divided by the number of teeth  $z_t$  (driving). These are rounded values.

The data for the max. radial force refer to

- solid shaft without flange
- normal storage
- application factor  $c = 1.3$

For further designs see the "Technical data" chapter.

- The rated torque can be gathered from the last digits of the product name e.g. g500-B45 (45 Nm).

### g500-B45, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$		$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	$\pm 20\%$	[kW]	[kW]
							[arcmin]		
260	39	1.12	5.411	207	1120	2080	27	0.18	0.55
226	41	1.01	6.222	9	56	2180	26	0.18	0.55
198	43	0.94	7.111	9	64	2280	26	0.18	0.55
172	44	0.83	8.178	45	368	2360	25	0.18	0.55
154	45	0.77	9.101	189	1720	2440	25	0.18	0.55
134	45	0.67	10.466	189	1978	2580	24	0.12	0.55
121	45	0.60	11.640	189	2200	2660	24	0.12	0.55
105	45	0.52	13.386	189	2530	2770	23	0.09	0.55
93.0	45	0.46	15.111	9	136	2840	24	0.09	0.55
81.0	45	0.40	17.378	45	782	2900	23	0.09	0.37
73.0	45	0.36	19.365	63	1220	2950	24	0.09	0.37
63.0	45	0.31	22.270	63	1403	3000	23	0.06	0.37
55.0	45	0.27	25.051	99	2480	3000	23	0.06	0.25
48.0	45	0.24	28.808	99	2852	3000	22	0.06	0.25
42.0	45	0.21	32.593	27	880	3000	23	0.06	0.25
36.0	45	0.18	37.481	27	1012	3000	23	0.06	0.18
32.0	45	0.16	42.222	9	380	3000	23	0.06	0.18
29.0	45	0.15	48.556	9	437	3000	22	0.06	0.12
26.0	45	0.13	53.889	9	485	3000	23	0.06	0.12
23.0	45	0.11	61.972	36	2231	3000	22	0.06	0.12

# g500-B bevel geared motors

Project planning



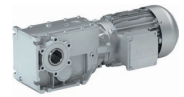
## Technical data at a glance

### g500-B110, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
278	69	2.12	5.185	27	140	2450	21	0.25	1.50
242	72	1.92	5.963	27	161	2530	21	0.25	1.50
203	77	1.72	7.111	9	64	2620	20	0.25	1.50
176	81	1.57	8.178	45	368	2670	20	0.25	1.50
158	84	1.47	9.101	189	1720	2730	20	0.25	1.50
138	89	1.35	10.466	189	1978	2830	20	0.25	1.50
126	90	1.25	11.449	225	2576	2890	20	0.18	1.50
114	90	1.13	12.698	63	800	2950	20	0.18	1.10
99.0	90	0.98	14.603	63	920	3000	20	0.18	1.10
93.0	92	0.94	15.556	9	140	3000	20	0.25	1.10
81.0	96	0.86	17.889	9	161	3000	20	0.25	0.75
74.0	100	0.82	19.556	9	176	3000	20	0.12	0.75
64.0	104	0.74	22.489	45	1012	3000	19	0.12	0.75
58.0	108	0.69	25.185	27	680	3000	20	0.12	0.75
50.0	110	0.61	28.963	27	782	3000	19	0.12	0.75
44.0	108	0.53	31.919	99	3160	3000	19	0.12	0.37
38.0	110	0.47	36.707	99	3634	3000	19	0.12	0.37
38.0	106	0.44	37.400	5	187	3000	19	0.12	0.37
35.0	100	0.39	40.000	1	40	3000	19	0.12	0.37
31.0	110	0.37	46.000	1	46	3000	19	0.12	0.37
29.0	110	0.36	48.167	6	289	3000	18	0.12	0.37
26.0	69	0.20	52.698	63	3320	3000	19	0.12	0.18
22.0	79	0.20	60.603	63	3818	3000	18	0.12	0.18
22.0	110	0.27	61.045	22	1343	3000	18	0.12	0.25
18.0	110	0.22	76.500	2	153	3000	18	0.12	0.25
14.0	110	0.16	100.786	14	1411	3000	18	0.12	0.18

# g500-B bevel geared motors

Project planning



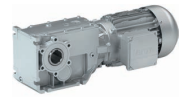
## Technical data at a glance

### g500-B240, 2-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
406	138	6.18	3.565	108	385	3030	17	0.55	3.00
296	147	4.80	4.889	9	44	3450	17	1.10	3.00
232	156	3.98	6.257	378	2365	3860	17	0.55	3.00
210	179	4.15	6.883	60	413	4070	13	0.55	3.00
185	187	3.82	7.817	60	469	4300	13	0.55	3.00
154	191	3.23	9.440	25	236	4600	13	1.10	3.00
135	204	3.04	10.720	25	268	4740	13	1.10	3.00
120	208	2.75	12.081	210	2537	4860	13	0.55	3.00
106	217	2.53	13.719	210	2881	4980	13	0.55	3.00
97.0	223	2.38	15.008	125	1876	5180	13	0.25	2.20
86.0	240	2.28	16.857	7	118	5440	13	0.25	2.20
76.0	240	2.01	19.143	7	134	5710	12	0.25	2.20
70.0	240	1.86	20.650	20	413	5860	13	0.55	2.20
62.0	240	1.63	23.450	20	469	6070	12	0.55	1.50
54.0	240	1.42	26.878	90	2419	6230	13	0.25	1.50
47.0	240	1.25	30.522	90	2747	6370	12	0.25	1.50
43.0	240	1.14	33.433	30	1003	6500	13	0.25	1.10
38.0	240	1.01	37.967	30	1139	6500	12	0.25	1.10
34.0	240	0.89	43.267	15	649	6500	12	0.12	0.75
30.0	240	0.78	49.133	15	737	6500	12	0.12	0.75
27.0	233	0.69	52.510	100	5251	6500	12	0.12	0.55
24.0	240	0.62	59.630	100	5963	6500	12	0.12	0.55
21.0	178	0.41	67.113	80	5369	6500	12	0.12	0.37
18.0	202	0.41	76.213	80	6097	6500	12	0.12	0.37

# g500-B bevel geared motors

Project planning



## Technical data at a glance

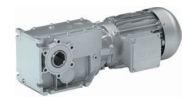
### g500-B240, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$			Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$	Standard	$P_{N, \min}$	$P_{N, \max}$
							$\pm 20\%$		
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
20.0	240	0.56	68.459	630	43129	6500	13	0.12	0.55
18.0	240	0.49	77.741	630	48977	6500	13	0.12	0.55
16.0	240	0.44	87.563	126	11033	6500	13	0.12	0.37
14.0	240	0.39	99.437	126	12529	6500	13	0.12	0.37
12.0	240	0.34	113.673	150	17051	6500	13	0.12	0.37
11.0	240	0.30	129.087	150	19363	6500	13	0.12	0.37
9.00	240	0.26	145.674	420	61183	6500	13	0.12	0.25
8.00	240	0.23	165.426	420	69479	6500	13	0.12	0.25
7.00	240	0.20	188.442	165	31093	6500	13	0.12	0.18
6.00	240	0.17	213.994	165	35309	6500	13	0.12	0.18
6.00	240	0.15	245.178	45	11033	6500	13	0.12	0.18
5.00	240	0.14	278.422	45	12529	6500	13	0.12	0.12
4.00	240	0.12	317.617	60	19057	6500	13	0.12	0.12
4.00	240	0.11	360.683	60	21641	6500	13	0.12	0.12



# g500-B bevel geared motors

Project planning



## Technical data at a glance

### g500-B450, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
295	280	9.12	5.002	480	2401	3760	21	0.55	7.50
215	308	7.31	6.860	50	343	4030	21	1.10	7.50
159	368	6.43	9.315	384	3577	4370	15	0.55	7.50
143	384	6.05	10.328	204	2107	4500	14	0.55	7.50
114	404	5.09	12.775	40	511	4830	15	1.10	5.50
103	422	4.80	14.165	85	1204	5010	14	1.10	5.50
89.0	434	4.25	16.349	192	3139	5280	15	0.55	4.00
81.0	446	3.99	17.885	200	3577	5470	15	0.25	4.00
73.0	450	3.64	19.831	425	8428	5710	14	0.25	4.00
64.0	450	3.15	22.813	16	365	6060	15	0.25	3.00
57.0	450	2.84	25.294	17	430	6340	14	0.25	3.00
52.0	450	2.57	27.945	128	3577	6640	15	0.55	3.00
47.0	450	2.33	30.985	68	2107	6960	14	0.55	2.20
40.0	450	1.96	36.373	576	20951	7520	14	0.25	1.50
36.0	450	1.78	40.330	306	12341	7800	14	0.25	1.50
32.0	450	1.58	45.245	192	8687	7800	14	0.25	1.50
29.0	450	1.42	50.167	6	301	7800	14	0.25	1.50
26.0	450	1.28	56.154	13	730	7800	13	0.25	1.50
23.0	450	1.15	62.262	221	13760	7800	12	0.25	1.10
21.0	450	1.04	68.788	52	3577	7800	13	0.55	1.10
19.0	450	0.94	76.271	221	16856	7800	12	0.55	1.10
16.0	450	0.80	89.534	234	20951	7800	13	0.25	0.75
15.0	450	0.72	99.274	1989	197456	7800	12	0.25	0.75
13.0	450	0.64	111.372	78	8687	7800	13	0.25	0.75
11.0	450	0.57	123.487	39	4816	7800	12	0.25	0.55
10.0	450	0.48	144.128	39	5621	7800	13	0.12	0.55
9.00	450	0.44	159.807	663	105952	7800	12	0.12	0.37
8.00	450	0.40	174.919	260	45479	7800	13	0.12	0.37
7.00	450	0.36	193.948	1105	214312	7800	12	0.12	0.37
6.00	450	0.31	223.563	16	3577	7800	13	0.12	0.37
6.00	450	0.27	247.882	17	4214	7800	12	0.12	0.25

# g500-B bevel geared motors

Project planning



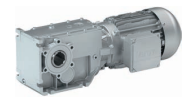
## Technical data at a glance

### g500-B600, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
292	376	12.1	5.067	1242	6293	4600	21	2.20	7.50
213	398	9.33	6.949	1035	7192	5000	19	2.20	7.50
194	462	9.88	7.617	2052	15631	5100	17	2.20	7.50
138	542	8.21	10.741	27	290	5600	15	2.20	7.50
110	553	6.73	13.369	1026	13717	6500	17	1.10	7.50
100	600	6.63	14.730	63	928	6900	14	2.20	7.50
77.0	600	5.12	18.851	1323	24940	7500	14	1.10	5.50
71.0	600	4.68	20.622	45	928	7800	14	1.10	5.50
64.0	600	4.21	22.852	684	15631	8100	16	1.10	4.00
57.0	600	3.79	25.347	95	2408	8300	14	2.20	4.00
56.0	600	3.69	26.061	33	860	8400	13	2.20	4.00
49.0	600	3.23	29.744	3078	91553	8700	16	0.55	4.00
45.0	600	2.96	32.439	57	1849	8900	14	1.10	3.00
40.0	600	2.68	35.740	77	2752	9000	13	2.20	3.00
39.0	600	2.59	36.999	1026	37961	9000	16	0.55	3.00
35.0	600	2.29	41.940	567	23780	9000	14	0.55	2.20
32.0	600	2.10	45.739	1617	73960	9000	13	1.10	2.20
29.0	600	1.92	50.036	55	2752	9000	13	1.10	2.20
26.0	600	1.72	55.447	38	2107	9000	14	1.10	1.50
23.0	600	1.49	63.822	539	34400	9000	13	0.55	1.50
21.0	600	1.42	67.513	189	12760	9000	14	0.25	1.50
20.0	600	1.32	72.170	171	12341	9000	14	0.55	1.50
18.0	600	1.22	78.182	11	860	9000	13	1.10	1.50
18.0	600	1.16	81.937	63	5162	9000	14	0.25	1.10
16.0	600	1.06	89.772	57	5117	9000	14	0.55	1.10
14.0	600	0.94	101.760	693	70520	9000	13	0.55	1.10
12.0	600	0.83	116.175	57	6622	9000	14	0.25	0.75
12.0	600	0.76	126.580	231	29240	9000	12	0.55	0.75
10.0	600	0.68	140.995	190	26789	9000	14	0.25	0.75
9.00	600	0.57	163.810	21	3440	9000	12	0.25	0.55
8.00	600	0.52	178.224	76	13545	9000	14	0.25	0.55
7.00	600	0.47	198.805	77	15308	9000	12	0.25	0.55
6.00	600	0.37	251.299	77	19350	9000	12	0.25	0.37

# g500-B bevel geared motors

Project planning



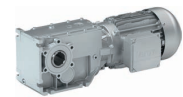
## Technical data at a glance

### g500-B820, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
298	312	10.2	4.958	24	119	9800	21	2.20	7.50
217	391	9.37	6.800	5	34	10200	20	2.20	7.50
194	424	9.07	7.618	34	259	10700	17	2.20	7.50
173	459	8.78	8.517	60	511	11000	16	2.20	7.50
155	496	8.48	9.520	25	238	11000	20	1.10	7.50
141	528	8.24	10.447	85	888	11000	16	2.20	7.50
126	569	7.93	11.680	25	292	11000	15	2.20	7.50
122	544	7.30	12.143	7	85	11000	19	0.55	7.50
110	619	7.54	13.370	119	1591	11000	16	1.10	7.50
101	653	7.27	14.626	425	6216	11000	16	1.10	7.50
90.0	708	7.05	16.352	125	2044	11000	16	1.10	7.50
79.0	747	6.52	18.655	119	2220	11000	16	0.55	7.50
71.0	820	6.40	20.857	7	146	11000	16	0.55	7.50
64.0	820	5.78	22.853	34	777	11000	15	1.10	5.50
57.0	820	5.16	25.550	20	511	11000	15	1.10	5.50
56.0	820	5.02	26.324	330	8687	11000	12	2.20	5.50
49.0	820	4.41	29.745	51	1517	11000	15	0.55	4.00
45.0	820	4.07	32.291	55	1776	11000	13	2.20	4.00
40.0	820	3.63	36.102	275	9928	11000	14	2.20	4.00
39.0	820	3.54	37.000	1	37	11000	12	0.55	3.00
35.0	820	3.17	41.325	77	3182	11000	13	1.10	3.00
32.0	820	2.90	45.207	275	12432	11000	13	1.10	3.00
29.0	820	2.59	50.543	1375	69496	11000	12	1.10	3.00
25.0	820	2.28	57.662	77	4440	11000	13	0.55	2.20
22.0	820	2.03	64.468	77	4964	11000	12	0.55	2.20
21.0	820	1.86	70.636	11	777	11000	13	1.10	2.20
18.0	820	1.65	78.973	110	8687	11000	12	1.10	1.50
16.0	820	1.42	91.939	33	3034	11000	13	0.55	1.50
14.0	820	1.27	102.790	495	50881	11000	12	0.55	1.50
13.0	820	1.14	114.364	11	1258	11000	13	0.55	1.10
11.0	820	1.02	127.861	165	21097	11000	12	0.55	1.10
10.0	820	0.89	148.000	1	148	11000	13	0.25	1.10
9.00	820	0.80	165.467	15	2482	11000	12	0.25	0.75
8.00	820	0.73	179.618	55	9879	11000	13	0.25	0.75
7.00	820	0.65	200.816	550	110449	11000	12	0.25	0.75
6.00	820	0.56	227.045	22	4995	11000	12	0.25	0.55
6.00	820	0.50	253.841	44	11169	11000	12	0.25	0.55

# g500-B bevel geared motors

Project planning



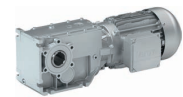
## Technical data at a glance

### g500-B1500, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$			$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
216	837	19.9	6.866	261	1792	12000	16	4.00	22.00
156	1006	17.3	9.516	153	1456	13000	15	4.00	18.50
136	1330	19.9	10.902	3393	36992	14000	12	4.00	22.00
124	1461	19.9	11.985	261	3128	15000	12	4.00	22.00
112	1118	13.8	13.118	3825	50176	15500	15	2.20	15.00
98.0	1500	16.2	15.111	9	136	16000	12	4.00	18.50
88.0	1500	14.6	16.611	18	299	16000	11	4.00	15.00
79.0	1500	13.1	18.598	117	2176	16000	12	2.20	15.00
72.0	1500	12.0	20.444	9	184	16000	11	2.20	11.00
64.0	1500	10.7	22.898	225	5152	16000	11	2.20	11.00
62.0	1500	10.2	23.973	4147	99416	16000	11	4.00	11.00
56.0	1500	9.28	26.353	638	16813	16000	10	4.00	11.00
51.0	1500	8.37	29.206	63	1840	16000	11	1.10	7.50
45.0	1500	7.51	32.547	117	3808	16000	11	2.20	7.50
41.0	1500	6.83	35.778	9	322	16000	11	2.20	7.50
40.0	1500	6.68	36.526	352	12857	16000	10	4.00	7.50
36.0	1500	5.90	40.895	143	5848	16000	11	2.20	5.50
32.0	1500	5.37	44.955	22	989	16000	10	2.20	5.50
31.0	1500	5.19	46.568	81	3772	16000	11	1.10	5.50
28.0	1500	4.63	51.920	351	18224	16000	11	1.10	4.00
26.0	1500	4.22	57.074	27	1541	16000	11	1.10	4.00
25.0	1500	4.12	58.422	1001	58480	16000	10	1.10	4.00
23.0	1500	3.74	64.221	77	4945	16000	10	1.10	4.00
20.0	1500	3.36	71.566	143	10234	16000	10	2.20	4.00
19.0	1500	3.19	74.963	27	2024	16000	11	0.55	3.00
18.0	1500	2.89	82.762	585	48416	16000	11	0.55	2.20
16.0	1500	2.65	90.978	45	4094	16000	11	0.55	2.20
16.0	1500	2.58	93.150	1287	119884	16000	10	1.10	3.00
14.0	1500	2.35	102.396	396	40549	16000	10	1.10	2.20
13.0	1500	2.10	114.166	429	48977	16000	10	1.10	2.20
12.0	1500	1.92	125.498	528	66263	16000	10	1.10	2.20
10.0	1500	1.59	149.949	39	5848	16000	10	0.55	1.50
9.00	1500	1.44	164.833	6	989	16000	10	0.55	1.50
8.00	1500	1.31	181.983	715	130118	16000	10	0.55	1.50
7.00	1500	1.19	200.048	440	88021	16000	10	0.55	1.10
6.00	1500	1.04	230.035	143	32895	16000	10	0.55	1.10
6.00	1500	0.94	252.869	176	44505	16000	10	0.55	1.10

# g500-B bevel geared motors

Project planning



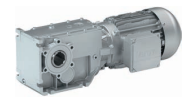
## Technical data at a glance

### g500-B2700, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad}, \max}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
214	1446	34.0	6.918	4180	28917	13000	15	7.50	30.00
168	1528	28.3	8.793	4750	41769	14000	14	5.50	30.00
126	2212	30.8	11.713	209	2448	16000	10	5.50	30.00
115	2262	28.6	12.863	1463	18819	16500	10	5.50	30.00
99.0	2380	26.1	14.888	475	7072	17000	10	5.50	30.00
90.0	2429	24.2	16.351	3325	54366	18000	9	5.50	30.00
76.0	2579	21.5	19.542	1197	23392	19000	10	4.00	22.00
66.0	2684	19.7	22.269	171	3808	20100	10	4.00	22.00
60.0	2700	18.0	24.456	57	1394	20500	9	4.00	22.00
55.0	2700	16.5	26.814	1197	32096	21000	10	2.20	18.50
50.0	2700	15.0	29.447	2793	82246	21500	9	2.20	18.50
45.0	2700	13.3	32.873	513	16864	22000	10	4.00	15.00
41.0	2700	12.1	36.102	1197	43214	22700	9	4.00	15.00
35.0	2700	10.3	42.772	189	8084	23000	9	4.00	11.00
32.0	2700	9.38	46.973	1764	82861	24000	8	4.00	11.00
30.0	2700	8.99	48.912	57	2788	25000	9	2.20	7.50
27.0	2700	8.13	54.082	171	9248	26000	10	2.20	7.50
25.0	2700	7.41	59.393	399	23698	27500	9	2.20	7.50
23.0	2700	6.82	64.452	1764	113693	27500	8	2.20	7.50
20.0	2700	6.10	71.951	81	5828	27500	9	4.00	7.50
19.0	2700	5.63	76.862	399	30668	27500	9	1.10	4.00
17.0	2700	5.09	84.940	285	24208	27500	10	1.10	4.00
16.0	2700	4.64	93.283	665	62033	27500	9	1.10	4.00
15.0	2700	4.47	97.481	27	2632	27500	9	2.20	5.50
14.0	2700	4.05	107.056	18	1927	27500	8	2.20	4.00
12.0	2700	3.66	118.370	27	3196	27500	9	2.20	4.00
11.0	2700	3.33	129.996	252	32759	27500	8	2.20	4.00
10.0	2700	2.83	153.185	27	4136	27500	9	1.10	3.00
9.00	2700	2.56	168.230	126	21197	27500	8	1.10	3.00
8.00	2700	2.32	185.911	45	8366	27500	9	1.10	2.20
7.00	2700	2.11	204.170	840	171503	27500	8	1.10	2.20
6.00	2700	1.85	235.000	1	235	27500	9	1.10	2.20
6.00	2700	1.67	258.080	112	28905	27500	8	1.10	1.50

# g500-B bevel geared motors

Project planning



## Technical data at a glance

### g500-B4300, 3-stage gearboxes

Output speed	Max. output torque	Max. drive power	Ratio	Number of teeth		Max. radial force	Backlash	Rated power	
				$z_g$	$z_t$		Standard	Motor	
$n_2$	$M_{2, \max}$	$P_{1, \max}$	$i$	$z_g$	$z_t$	$F_{\text{rad, max}}$	$\pm 20\%$	$P_{N, \min}$	$P_{N, \max}$
[r/min]	[Nm]	[kW]				[N]	[arcmin]	[kW]	[kW]
269	2160	64.1	5.488	209	1147	13200	14	7.50	30.00
212	2400	56.1	6.976	4275	29822	14000	14	7.50	30.00
161	2700	48.0	9.156	10773	98642	15100	14	4.00	30.00
146	3950	63.5	10.137	6688	67797	15500	9	7.50	30.00
133	4250	62.5	11.080	2090	23157	16000	9	7.50	30.00
115	4300	54.4	12.885	7600	97929	16800	9	7.50	30.00
105	4300	49.7	14.084	2375	33449	17300	9	7.50	30.00
87.0	4300	41.4	16.913	2128	35991	18600	9	4.00	30.00
80.0	4300	37.9	18.486	5985	110639	19300	9	4.00	30.00
70.0	4300	33.3	21.065	855	18011	20400	9	4.00	30.00
64.0	4300	30.3	23.206	2128	49383	21200	9	2.20	22.00
58.0	4300	27.6	25.365	5985	151807	22100	9	2.20	22.00
53.0	4300	25.0	28.013	80	2241	23100	8	5.50	30.00
48.0	4300	22.6	31.097	2565	79763	24300	9	4.00	22.00
42.0	4300	19.7	35.607	1000	35607	25900	8	5.50	22.00
38.0	4300	18.2	38.546	152	5859	26900	9	2.20	7.50
35.0	4300	16.4	42.760	896	38313	28300	8	4.00	18.50
32.0	4300	15.0	46.737	840	39259	29500	8	4.00	18.50
28.0	4300	13.1	53.258	120	6391	31500	8	4.00	15.00
25.0	4300	11.9	58.671	896	52569	33000	8	2.20	11.00
23.0	4300	10.9	64.127	840	53867	34400	8	2.20	11.00
20.0	4300	9.72	71.930	128	9207	36400	8	4.00	11.00
19.0	4300	8.91	78.619	360	28303	37900	8	4.00	11.00
15.0	4300	7.21	97.453	64	6237	40000	8	2.20	7.50
14.0	4300	6.59	106.517	60	6391	40000	8	2.20	7.50
12.0	4300	5.83	118.336	128	15147	40000	8	2.20	5.50
11.0	4300	5.36	129.342	120	15521	40000	8	2.20	5.50
10.0	4300	4.50	153.141	64	9801	40000	8	1.10	4.00
9.00	4300	4.12	167.383	60	10043	40000	8	1.10	4.00
8.00	4300	3.70	185.857	1280	237897	40000	8	1.10	4.00
7.00	4300	3.41	203.143	400	81257	40000	8	1.10	4.00
6.00	4300	2.94	234.932	512	120285	40000	8	1.10	2.20
6.00	4300	2.70	256.781	32	8217	40000	8	1.10	2.20



### Surface and corrosion protection

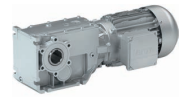
For optimum protection of geared motors against ambient conditions, the surface and corrosion protection system (OKS) offers tailor-made solutions.

Various surface coatings combined with other protective measures ensure that the geared motors operate reliably even at high air humidity, in outdoor installations or in the presence of atmospheric impurities. Any colour from the RAL Classic collection can be chosen for the top coat. The geared motors are also available unpainted (no surface and corrosion protection).

Surface and corrosion protection	Applications	Product	
		g500-H45 ... H450 g500-S130 ... S660 g500-B45 ... B450	g500-H600 ... H3000 g500-S950 ... S4500 g500-B600 ... B4300
Without OKS(uncoated) <sup>1)</sup>	<ul style="list-style-type: none"> <li>Interior installation, no special corrosion protection required</li> <li>Paint provided by the customer</li> </ul>	Standard	
OKS-G (primed)	<ul style="list-style-type: none"> <li>Dependent on subsequent top coat applied</li> </ul>	Optional	Optional
OKS-S (small)	<ul style="list-style-type: none"> <li>Standard applications</li> <li>Internal installation in heated buildings</li> <li>Air humidity up to 90%</li> </ul>		Standard
OKS-M (medium)	<ul style="list-style-type: none"> <li>Internal installation in non-heated buildings</li> <li>Covered, protected external installation</li> <li>Air humidity up to 95%</li> </ul>		Optional
OKS-L (large)	<ul style="list-style-type: none"> <li>External installation</li> <li>Air humidity above 95%</li> <li>Chemical industry plants</li> <li>Food industry</li> </ul>		Optional
OKS-XL (extra Large) <sup>2)</sup>	<ul style="list-style-type: none"> <li>External installation</li> <li>Air humidity above 95 %</li> <li>Chemical industry plants</li> <li>Food industry</li> <li>Coastal areas with moderate salinity</li> </ul>		Optional

<sup>1)</sup> Aluminium parts are uncoated, fan covers are zinc-coated or primed in grey, cast iron parts primed in grey.  
Light colour deviations of the components are possible.

<sup>2)</sup> On request



### Surface and corrosion protection

#### Structure of surface coating

Surface and corrosion protection	Corrosivity category	Surface coating	Colour	Coating thickness
	DIN EN ISO 12944-2	Structure		
Without OKS(uncoated)		<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> </ul>		30 ... 50 µm
OKS-G (primed)		<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> <li>2K PUR priming coat</li> </ul>		60 ... 90 µm
OKS-S (small)	Comparable to C1	<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> <li>2K-PUR top coat</li> </ul>	<ul style="list-style-type: none"> <li>Standard: RAL 7012</li> <li>Optional: RAL Classic</li> </ul>	80 ... 120 µm
OKS-M (medium)	Comparable to C2	<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> </ul>		110 ... 160 µm
OKS-L (large)	Comparable to C3	<ul style="list-style-type: none"> <li>2K PUR priming coat</li> <li>2K-PUR top coat</li> </ul>		140 ... 200 µm
OKS-XL (extra Large) <sup>1)</sup>	Comparable to C4	<ul style="list-style-type: none"> <li>Dipping primer of the grey iron parts</li> <li>2K-EP priming coat (two times)</li> <li>2K-PUR top coat</li> </ul>		160 ... 240 µm

<sup>1)</sup> On request



# g500-B bevel geared motors

## Project planning



### Lubricants

Lenze gearboxes and geared motors are ready for operation on delivery and are filled with lubricants specific to both the drive and the design. The mounting position and design specified in the order are key factors in choosing the volume of lubricant.

The amount and type of lubricant contained in the gearbox are given on the nameplate.

The following gearboxes are lubricated for life:

- Helical gearbox g500-H45 ... 140
- Shaft-mounted helical gearbox g500-S130
- Bevel gearbox g500-B45 ... 240

### Lubricant table

The following lubricants are recommended:

Mode	CLP 220	CLP 460	CLP HC 220
Ambient temperature [°C]	0 ... +40		-25 ... +50
Specification	Mineral oil with EP additives		Synthetic oil (polyalphaolefins basis)
Changing interval	16000 operating hours After 3 years at the latest Oil temperature 70 °C		25000 operating hours After 4 years at the latest Oil temperature 70 °C
Fuchs	Renolin CLP 220 CLP Plus 220	Renolin CLP 460 CLP Plus 460	Renolin Unisyn CLP 220 XT220
Klüber	Klüberoil GEM 1-220 N	Klüberoil GEM 1-460 N	Klübersynth GEM 4-220 N
Shell	Shell Omala S2 G 220 S2 GX 220	Shell Omala S2 G 460 S2 GX 460	Shell Omala S4 GX HD 220

Mode	CLP HC 320	CLP HC 220 USDA H1	CLP PG 460 USDA H1
Ambient temperature [°C]	-25 ... +50	-20 ... +40	
Specification	Synthetic oil (polyalphaolefins basis)		Synthetic oil (polyglycol basis)
Changing interval	25000 operating hours After 4 years at the latest Oil temperature 70 °C	16000 operating hours After 3 years at the latest Oil temperature 70 °C	
Fuchs	Renolin Unisyn CLP 320 XT 320	Cassida Fluid GL 220	Cassida Fluid WG 460
Klüber	Klübersynth GEM 4-320 N	Klüberoil 4 UH1-220 N	Klüberoil UH1 6-460
Shell	Shell Omala S4 GX HD 320		

- Please contact your Lenze sales office if you are operating at ambient temperatures in areas up to < -20 °C bzw. > or up to +40°C.

### Shaft sealing rings

By default, the gearboxes come with NBR shaft sealing rings at the output end. At high speed and unfavourable ambient conditions such as high temperature, reduced circulation of air etc., Lenze recommends the use of FKM (Viton) shaft sealing rings.

Please consider this in your order.

# g500-B bevel geared motors

## Project planning

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### Ventilation

#### Non-ventilated gearboxes

No ventilation is required for the gearboxes g500-B45 ... B240.

#### Ventilated gearboxes

The gearbox g500-B240 can be optionally ordered with breather elements.

From g500-B450 onwards, the gearboxes are supplied with a breather element as standard.

#### Gearbox in combined mounting position

For reducing the number of versions, the gearboxes can also be ordered in a combined mounting position:

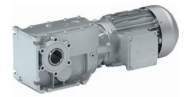
- g500-B45 in mounting position ABCDEF
- g500-B110 ... B450 in mounting position AEF

In these gearboxes, the lubricant amount has been optimised for the use in different mounting positions. If required, the breather elements are loosely enclosed and have to be mounted before commissioning depending on the mounting position.

A gearbox can be used for several mounting positions.

# g500-B bevel geared motors





## Project planning



### Ventilation

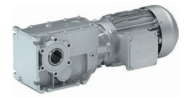
Position of ventilation, sealing elements and oil level check

g500-B240

Mounting position A	Mounting position B	Mounting position C
 Filling  Breathing	 Drain  Control	

# g500-B bevel geared motors





## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

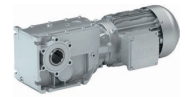
g500-B240

Mounting position D	Mounting position E	Mounting position F
 Filling	 Drain	
 Breathing	 Control	

6.5

# g500-B bevel geared motors





## Project planning



### Ventilation

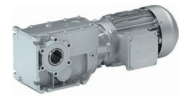
Position of ventilation, sealing elements and oil level check

g500-B450

Mounting position A	Mounting position B	Mounting position C	
 Filling		 Drain	
 Breathing		 Control	

# g500-B bevel geared motors

## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-B450

Mounting position D	Mounting position E	Mounting position F
<p>Filling</p>	<p>Drain</p>	<p>Breathing</p>
<p>Breathing</p>	<p>Control</p>	<p>Drain</p>

# g500-B bevel geared motors

## Project planning



### Ventilation

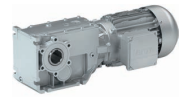
Position of ventilation, sealing elements and oil level check

g500-B600 ... B4300

Mounting position A		Mounting position B		Mounting position C	
	Filling		Drain		
	Breathing		Control		

# g500-B bevel geared motors

## Project planning



### Ventilation

Position of ventilation, sealing elements and oil level check

g500-B600 ... B4300

Mounting position D	Mounting position E	Mounting position F
	<p>G50BB215</p>	<p>G50BB227 G50BB243</p> <p>G50BB160 G50BB185 G50BB215</p>
	<p>G50BB215</p>	
<p>G50BB160 G50BB182</p> <p>G50BB227 G50BB243</p> <p>G50BB215</p>		
Filling	Drain	Control
Breathing		



# g500-B bevel geared motors

Technical data



## Standards and operating conditions

### Geared motor data

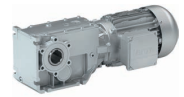
Product			MD□MA□□	m240
Motor				
Degree of protection			IP55 <sup>1)</sup> IP65 <sup>1, 3)</sup> IP66 <sup>1, 3)</sup>	
EN 60529				
Energy efficiency class			IE1	IE3
IEC 60034-30			Methodology for measuring efficiency	
IEC 60034-2-1				
Conformity			Low-Voltage Directive	
CE			2006/95/EC	2014/35/EU
EAC			TP TC 004/2011 (TR CU 004/2011)	
Approval			GB Standard 12350-2009	
CCC			CSA 22.2 No. 100	
CSA			UL 1004-1 UL 1004-8 File-No. E210321	
cURus				
Temperature class			B	
IEC/EN 60034-1; utilisation			F	
IEC/EN 60034-1; insulation system (enamel-insulated wire)				
Min. ambient operating temperature			-20	
	$T_{opr,min}$	[°C]		
Max. ambient temperature for operation			40	
	$T_{opr,max}$	[°C]		
With power reduction			60 <sup>2)</sup>	
	$T_{opr,max}$	[°C]		
Site altitude			5.00	
Current derating at over 1000 m			[%/1000 m]	
Amsl			4000	
	$H_{max}$	[m]		

<sup>1)</sup> Types with deviating degrees of protection:  
IP55 with brake (IP54 with manual release lever).

<sup>2)</sup> In case of cURus max. 40 °C are permissible.

<sup>3)</sup> m240 on request.

- In the European Union, the ErP Directive stipulates minimum efficiency levels for three-phase AC motors. Geared three-phase AC motors that do not conform with this Directive do not meet CE requirements and must not be marketed in the European Economic Area. For further information about the ErP Directive, the efficiency regulations in other countries and the Lenze products concerned, please refer to the brochure "International efficiency directives for three-phase AC motors".



### Permissible radial and axial forces at output

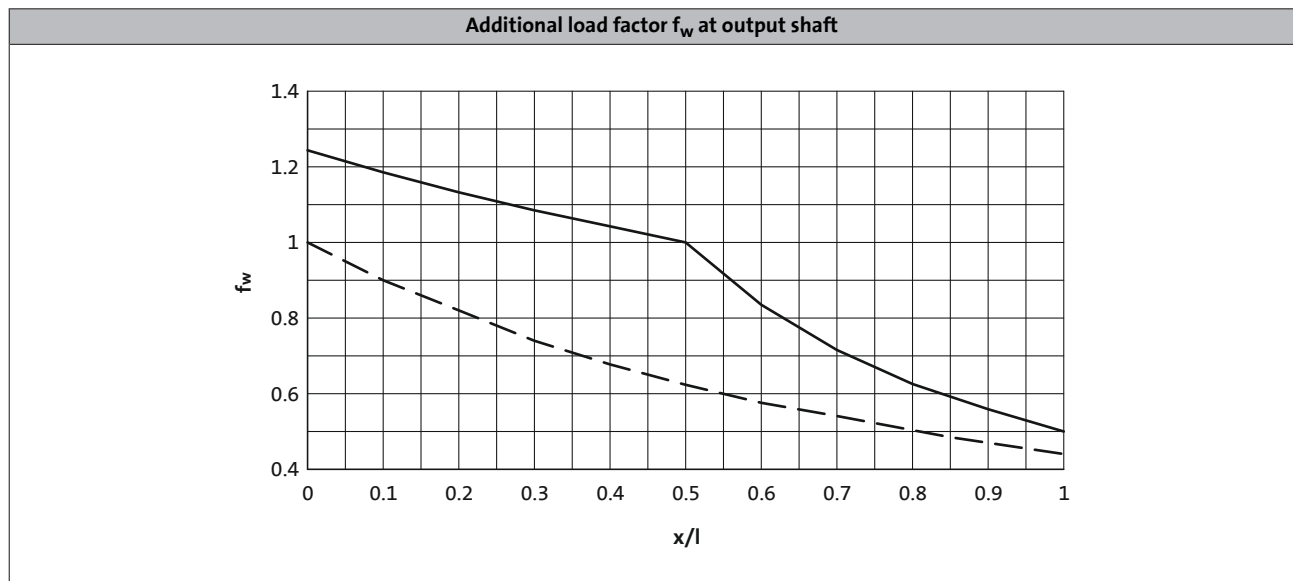
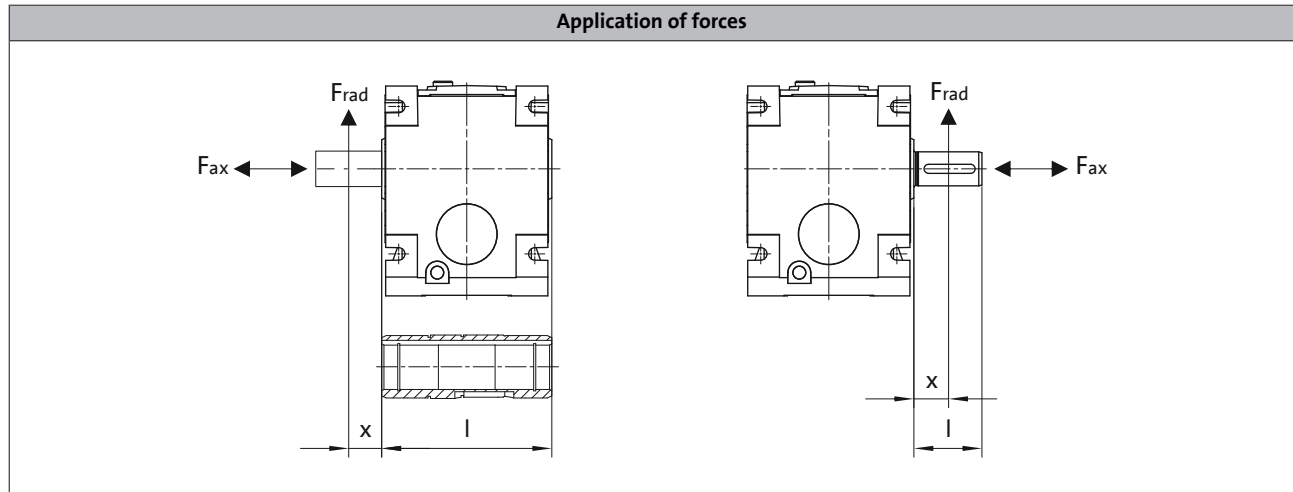
#### Permissible radial force

$$F_{rad,perm} = f_w \times F_{rad,max}$$

► If  $F_{rad}$  and  $F_{ax} \neq 0$ , please contact Lenze.

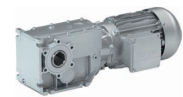
#### Permissible axial force

If there is no radial force, the maximum permissible axial force is 50 % of the table value  $F_{rad,max}$



— Solid shaft  
 - - - Hollow shaft

# g500-B bevel geared motors



## Technical data

### Permissible radial and axial forces at output

The values given in the table refer to the center shaft end force application point and are minimum values calculated according to the most unfavourable conditions (force application angle, mounting position, direction of rotation). The values were calculated for the motor/gear-box combination with a load capacity of  $c= 1.3$  and an input speed of 1400 rpm.

In case of different operating conditions, considerably higher forces can be transmitted. Please contact Lenze.

- ▶ A hollow shaft with shrink disc requires a check by Lenze.

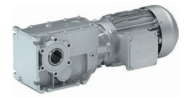
Product	$n_2$ [r/min]						
	250	160	100	63	40	25	≤16

	Max. radial force, Hollow shaft						
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]
g500-B45	2500	2800	3000	3000	3000	3000	3000
g500-B110	3000	3300	3600	3600	3600	3600	3600
g500-B240	4500	5100	6200	7400	7800	7800	7800
g500-B450	5200	5200	5500	7000	9000	9000	9000
g500-B600	5400	5600	6000	8000	9400	9500	9500
g500-B820	5800	6000	7000	9000	9800	10200	10200
g500-B1500	7000	8000	9000	10500	13000	16000	16000
g500-B2700	8200	9400	10600	12200	15000	18000	21900
g500-B4300	9000	10500	12000	15500	21000	27900	35100

	Max. radial force, Solid shaft without flange						
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]
g500-B45	2100	2400	2800	3000	3000	3000	3000
g500-B110	2500	2700	3000	3000	3000	3000	3000
g500-B240	3600	4500	5000	6000	6500	6500	6500
g500-B450	3900	4300	5000	6000	7600	7800	7800
g500-B600	4700	5400	6700	8300	9000	9000	9000
g500-B820	9800	11000	11000	11000	11000	11000	11000
g500-B1500	11500	13000	16000	16000	16000	16000	16000
g500-B2700	12000	14000	16500	20100	22700	25500	27500
g500-B4300	13300	14900	17300	20800	25700	32200	40000

# g500-B bevel geared motors

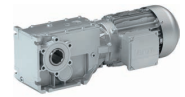
Technical data



## Permissible radial and axial forces at output

Product	$n_2$ [r/min]						
	250	160	100	63	40	25	≤16
<b>Max. radial force, Solid shaft with flange</b>							
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]
g500-B45	2100	2400	2800	3000	3000	3000	3000
g500-B110	2500	2700	3000	3000	3000	3000	3000
g500-B240	6000	6500	6500	6500	6500	6500	6500
g500-B450	5100	5600	6400	7700	7800	7800	7800
g500-B600	5300	6000	7300	9000	9000	9000	9000
g500-B820	10200	11000	11000	11000	11000	11000	11000
g500-B1500	12000	13000	15000	16000	16000	16000	16000
g500-B2700	14400	15800	17700	20100	22700	25500	27500
g500-B4300	15800	17800	20800	24800	29500	35100	40000

# g500-B bevel geared motors



## Technical data

### Selection tables, notes

The selection tables show the available combinations of gearbox type, number of stages, ratio and motor. They are used only to provide basic orientation.  
The following legend indicates the structure of the selection tables.

Rated power  $P_{rated}$  of the drive motor depending on the rated frequency

↓

50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes ← Number of the gear stage of the gearbox

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
405	17	4.8	3.565	-B240	40-P80/M4	
278	24	2.8	5.185	-B110	40-P80/M4	

↑ ↑ ↑ ↑ ↑

Mains operation  
Output speed  $n_2$   
Output torque  $M_2$

Ratio i

Product Gearbox

Product Motor

Page number for dimensions

**Load capacity c of the gearbox**  
c is the ratio between the permissible rated torque of the gearbox and the rated torque of the three-phase AC motor (converted to the driven shaft).  
c must be always higher than the service factor k determined for the application k.

$$c = \frac{M_{2,zul}}{M_{1N} \cdot i \cdot \eta_{Getr}} > k$$

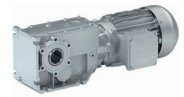
### Motor voltages

At 50 Hz, the power and torque values indicated in the selection tables relate to the following motor voltages:

- Up to 3 kW:  $\Delta$  230 V / Y 400 V
- FROM 4 kW:  $\Delta$  400 V

# g500-B bevel geared motors

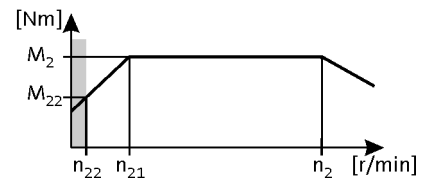
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.06$  kW  
 87 Hz:  $P_N = 0.11$  kW

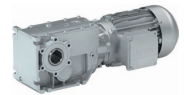
2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c					
64	9.0	5.3	6.5	8.5	27	9.0	64	9.0	5.3	114	9.0	4.3	22.270	-B45	063-02		
57	10	4.7	5.8	9.6	24	10	57	10	4.7	101	10	4.4	25.051	-B45	063-02		
50	11	4.1	5.0	11	21	11	50	11	4.1	88	11	3.8	28.808	-B45	063-02		
44	12	3.6	4.4	12	18	12	44	12	3.6	78	13	3.4	32.593	-B45	063-02		
38	14	3.1	3.9	14	16	14	38	14	3.1	68	15	2.9	37.481	-B45	063-02		
34	16	2.8	3.4	16	14	16	34	16	2.8	60	17	2.7	42.222	-B45	063-02		
29	19	2.4	3.0	19	12	19	29	19	2.4	52	19	2.4	48.556	-B45	063-02		
26	21	2.2	2.7	21	11	21	26	21	2.2	47	21	2.1	53.889	-B45	063-02		
23	24	1.9	2.3	24	9.7	24	23	24	1.9	41	24	1.8	61.972	-B45	063-02		

# g500-B bevel geared motors

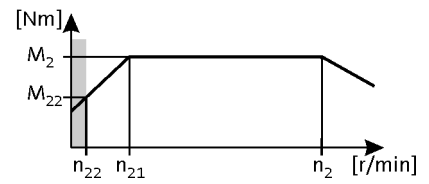
Technical data



## Selection tables, 4-pole motors

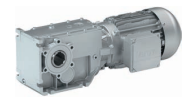
50 Hz:  $P_N = 0.09$  kW  
87 Hz:  $P_N = 0.16$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
103	8.0	5.7	11	7.8	45	8.0	103	8.0	5.7	186	8.0	4.9	13.386	-B45	063-22	
91	9.0	5.0	9.6	8.8	40	9.0	91	9.0	5.0	164	9.0	4.3	15.111	-B45	063-22	
79	10	4.4	8.3	10	35	10	79	10	4.4	143	10	3.8	17.378	-B45	063-22	
71	11	3.9	7.5	11	31	11	71	11	3.9	128	11	3.4	19.365	-B45	063-22	
62	13	3.4	6.5	13	27	13	62	13	3.4	112	13	2.9	22.270	-B45	063-22	
55	15	3.0	5.8	15	24	15	55	15	3.0	99	15	3.0	25.051	-B45	063-22	
48	17	2.6	5.0	17	21	17	48	17	2.6	86	17	2.6	28.808	-B45	063-22	
42	19	2.3	4.4	19	18	19	42	19	2.3	76	19	2.3	32.593	-B45	063-22	
37	22	2.0	3.9	22	16	22	37	22	2.0	66	22	2.0	37.481	-B45	063-22	
33	25	1.8	3.4	25	14	25	33	25	1.8	59	25	1.8	42.222	-B45	063-22	
28	29	1.6	3.0	28	12	28	28	29	1.6	51	28	1.6	48.556	-B45	063-22	
26	32	1.4	2.7	32	11	31	26	32	1.4	46	31	1.4	53.889	-B45	063-22	
22	37	1.2	2.3	36	9.7	36	22	37	1.2	40	36	1.2	61.972	-B45	063-22	

# g500-B bevel geared motors

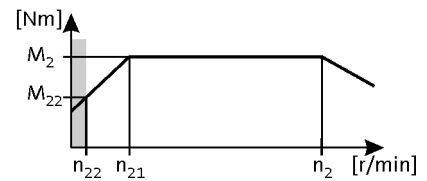


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.12$  kW  
 87 Hz:  $P_N = 0.21$  kW

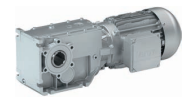
2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
136	8.0	5.6	14	6.2	57	8.0	136	8.0	5.6	242	8.0	4.8	10.466	-B45	063-12	
122	9.0	5.1	13	6.8	52	9.0	122	9.0	5.1	218	9.0	4.3	11.640	-B45	063-12	
107	10	4.4	11	7.9	45	10	107	10	4.4	189	10	3.8	13.386	-B45	063-12	
94	12	3.9	9.6	8.9	40	11	94	12	3.9	168	11	3.3	15.111	-B45	063-12	
82	13	3.4	8.3	10	35	13	82	13	3.4	146	13	2.9	17.378	-B45	063-12	
74	15	3.0	7.5	11	31	15	74	15	3.0	131	15	2.6	19.365	-B45	063-12	
73	15	5.5	7.4	12	31	15	73	15	5.5	130	15	4.7	19.556	-B110	063-12	
64	17	2.6	6.5	13	27	17	64	17	2.6	114	17	2.3	22.270	-B45	063-12	
63	17	5.5	6.4	13	27	17	63	17	5.5	113	17	4.7	22.489	-B110	063-12	
57	19	2.4	5.8	15	24	19	57	19	2.4	101	19	2.3	25.051	-B45	063-12	
57	19	4.6	5.8	15	24	19	57	19	4.6	101	19	3.9	25.185	-B110	063-12	
50	22	2.0	5.0	17	21	22	50	22	2.0	88	22	2.0	28.808	-B45	063-12	
49	22	4.6	5.0	17	21	22	49	22	4.6	88	22	3.9	28.963	-B110	063-12	
45	24	4.0	4.5	19	19	24	45	24	4.0	79	24	3.4	31.919	-B110	063-12	
44	25	1.8	4.4	19	18	24	44	25	1.8	78	24	1.8	32.593	-B45	063-12	
39	28	3.9	4.0	22	16	28	39	28	3.9	69	28	3.4	36.707	-B110	063-12	
38	29	3.7	3.9	22	16	28	38	29	3.7	68	28	3.2	37.400	-B110	063-12	
38	29	1.6	3.9	22	16	28	38	29	1.6	68	28	1.5	37.481	-B45	063-12	
36	31	3.3	3.6	24	15	30	36	31	3.3	63	30	3.2	40.000	-B110	063-12	
34	32	1.4	3.4	25	14	32	34	32	1.4	60	32	1.4	42.222	-B45	063-12	
33	33	4.6	3.4	26	14	33	33	33	4.6	59	33	4.5	43.267	-B240	063-12	
31	35	3.1	3.2	27	13	35	31	35	3.1	55	35	3.0	46.000	-B110	063-12	
30	37	3.0	3.0	28	13	36	30	37	3.0	53	36	2.9	48.167	-B110	063-12	
29	37	1.2	3.0	29	12	36	29	37	1.2	52	36	1.2	48.556	-B45	063-12	
29	38	4.6	3.0	29	12	37	29	38	4.6	52	37	4.5	49.133	-B240	063-12	
27	40	4.0	2.8	31	11	39	27	40	4.0	48	39	3.9	52.510	-B240	063-12	
27	40	1.7	2.8	31	11	40	27	40	1.7	48	40	1.7	52.698	-B110	063-12	
26	41	1.1	2.7	32	11	40	26	41	1.1	47	40	1.1	53.889	-B45	063-12	
24	46	4.0	2.4	35	10	45	24	46	4.0	43	45	3.9	59.630	-B240	063-12	
24	46	1.7	2.4	36	9.9	46	24	46	1.7	42	46	1.7	60.603	-B110	063-12	
23	47	2.4	2.4	36	9.8	46	23	47	2.4	42	46	2.4	61.045	-B110	063-12	
23	47	1.0	2.3	37	9.7	47	23	47	1.0	41	47	1.0	61.972	-B45	063-12	
21	51	3.1	2.2	40	8.9	50	21	51	3.1	38	50	3.2	67.113	-B240	063-12	
19	58	3.1	1.9	45	7.9	57	19	58	3.1	33	57	3.2	76.213	-B240	063-12	
19	58	1.9	1.9	45	7.8	57	19	58	1.9	33	57	1.9	76.500	-B110	063-12	



# g500-B bevel geared motors

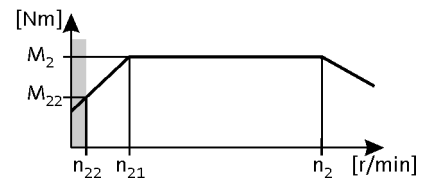


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.12$  kW  
 87 Hz:  $P_N = 0.21$  kW

2-stage gearboxes

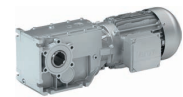


Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c					
14	77	1.4	1.4	59	6.0	76	14	77	1.4	25	76	1.5	100.786	-B110	063-12		

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c					
21	51	4.7	2.1	39	8.8	50	21	51	4.7	37	50	4.6	68.459	-B240	063-12		
18	58	4.2	1.9	45	7.7	57	18	58	4.2	33	57	4.0	77.741	-B240	063-12		
16	65	3.7	1.7	50	6.9	64	16	65	3.7	29	64	3.6	87.563	-B240	063-12		
14	74	3.2	1.5	57	6.0	73	14	74	3.2	26	73	3.1	99.437	-B240	063-12		
13	85	2.8	1.3	65	5.3	83	13	85	2.8	22	83	2.9	113.673	-B240	063-12		
11	96	2.5	1.1	74	4.6	95	11	96	2.5	20	95	2.5	129.087	-B240	063-12		
9.9	110	4.1	1.0	85	4.2	108	9.9	110	4.1	18	108	4.2	144.128	-B450	063-12		
9.8	108	2.2	1.0	84	4.1	107	9.8	108	2.2	17	107	2.3	145.674	-B240	063-12		
8.9	122	3.7	0.9	94	3.8	120	8.9	122	3.7	16	120	3.8	159.807	-B450	063-12		
8.6	123	2.0	0.9	95	3.6	121	8.6	123	2.0	15	121	2.0	165.426	-B240	063-12		
8.1	134	3.4	0.8	103	3.4	131	8.1	134	3.4	15	131	3.4	174.919	-B450	063-12		
7.6	140	1.7	0.8	108	3.2	138	7.6	140	1.7	14	138	1.7	188.442	-B240	063-12		
7.3	148	3.0	0.7	114	3.1	146	7.3	148	3.0	13	146	3.1	193.948	-B450	063-12		
6.7	159	1.5	0.7	123	2.8	157	6.7	159	1.5	12	157	1.5	213.994	-B240	063-12		
6.4	171	2.6	0.6	132	2.7	168	6.4	171	2.6	11	168	2.7	223.563	-B450	063-12		
5.8	183	1.3	0.6	141	2.4	180	5.8	183	1.3	10	180	1.3	245.178	-B240	063-12		
5.7	189	2.4	0.6	146	2.4	186	5.7	189	2.4	10	186	2.4	247.882	-B450	063-12		
5.1	207	1.2	0.5	160	2.2	204	5.1	207	1.2	9.1	204	1.2	278.422	-B240	063-12		
4.5	237	1.0	0.5	182	1.9	233	4.5	237	1.0	8.0	233	1.0	317.617	-B240	063-12		
4.0	269	0.9	0.4	207	1.7	264	4.0	269	0.9	7.0	264	0.9	360.683	-B240	063-12		

# g500-B bevel geared motors

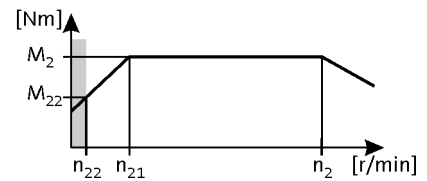


## Technical data

### Selection tables, 4-pole motors

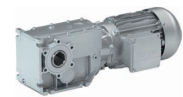
50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c		
252	6.0	4.7	27	5.0	111	6.0	252	6.0	4.7	457	7.0	3.9	5.411	-B45	063-32		
219	7.0	4.7	23	5.7	96	7.0	219	7.0	4.7	398	8.0	3.9	6.222	-B45	063-32		
192	9.0	4.5	20	6.6	84	9.0	192	9.0	4.5	348	9.0	3.7	7.111	-B45	063-32		
167	10	4.5	18	7.5	73	10	167	10	4.5	303	10	3.7	8.178	-B45	063-32		
150	11	4.1	16	8.4	66	11	150	11	4.1	272	11	3.5	9.101	-B45	063-32		
130	13	3.6	14	9.6	57	13	130	13	3.6	237	13	3.0	10.466	-B45	063-32		
119	14	4.5	13	11	52	14	119	14	4.5	216	14	3.7	11.449	-B110	063-32		
117	14	3.2	13	11	52	14	117	14	3.2	213	14	2.7	11.640	-B45	063-32		
108	15	4.1	11	12	47	15	108	15	4.1	195	15	3.5	12.698	-B110	063-32		
102	16	2.8	11	12	45	16	102	16	2.8	185	16	2.4	13.386	-B45	063-32		
94	17	4.1	9.9	14	41	17	94	17	4.1	170	18	3.5	14.603	-B110	063-32		
90	18	2.5	9.6	14	40	18	90	18	2.5	164	18	2.1	15.111	-B45	063-32		
79	21	2.2	8.3	16	35	21	79	21	2.2	142	21	1.8	17.378	-B45	063-32		
71	23	1.9	7.5	18	31	23	71	23	1.9	128	23	1.6	19.365	-B45	063-32		
70	23	3.5	7.4	18	31	23	70	23	3.5	127	24	2.9	19.556	-B110	063-32		
61	27	1.7	6.5	21	27	27	61	27	1.7	111	27	1.4	22.270	-B45	063-32		
61	27	3.5	6.4	21	27	27	61	27	3.5	110	27	2.9	22.489	-B110	063-32		
55	30	1.5	5.8	23	24	30	55	30	1.5	99	30	1.4	25.051	-B45	063-32		
54	30	2.9	5.8	23	24	30	54	30	2.9	98	30	2.5	25.185	-B110	063-32		
47	34	1.3	5.0	27	21	34	47	34	1.3	86	35	1.2	28.808	-B45	063-32		
47	35	2.9	5.0	27	21	35	47	35	2.9	86	35	2.5	28.963	-B110	063-32		
43	38	2.6	4.5	29	19	38	43	38	2.6	78	39	2.2	31.919	-B110	063-32		
42	39	1.2	4.4	30	18	39	42	39	1.2	76	39	1.1	32.593	-B45	063-32		
37	44	2.5	4.0	34	16	44	37	44	2.5	67	44	2.1	36.707	-B110	063-32		
37	45	2.4	3.9	35	16	45	37	45	2.4	66	45	2.0	37.400	-B110	063-32		
36	45	1.0	3.9	35	16	45	36	45	1.0	66	45	1.0	37.481	-B45	063-32		
34	48	2.1	3.6	37	15	48	34	48	2.1	62	48	2.0	40.000	-B110	063-32		
32	51	0.9	3.4	39	14	51	32	51	0.9	59	51	0.9	42.222	-B45	063-32		
32	52	2.9	3.4	40	14	52	32	52	2.9	57	52	2.8	43.267	-B240	063-32		
30	55	2.0	3.2	42	13	55	30	55	2.0	54	56	1.9	46.000	-B110	063-32		
28	58	1.9	3.0	44	13	58	28	58	1.9	51	58	1.8	48.167	-B110	063-32		
28	59	2.9	3.0	45	12	59	28	59	2.9	50	59	2.8	49.133	-B240	063-32		
26	63	2.6	2.8	48	11	63	26	63	2.6	47	64	2.4	52.510	-B240	063-32		
26	63	1.1	2.8	49	11	63	26	63	1.1	47	64	1.0	52.698	-B110	063-32		
23	71	2.6	2.4	55	10	71	23	71	2.6	42	72	2.4	59.630	-B240	063-32		

# g500-B bevel geared motors

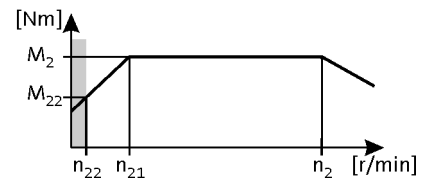


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.18$  kW  
 87 Hz:  $P_N = 0.33$  kW

2-stage gearboxes

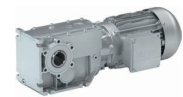


Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
23	73	1.1	2.4	56	9.9	73	23	73	1.1	41	73	1.1	60.603	-B110	063-32	
22	73	1.5	2.4	56	9.8	73	22	73	1.5	41	74	1.5	61.045	-B110	063-32	
20	80	2.0	2.2	62	8.9	80	20	80	2.0	37	81	2.0	67.113	-B240	063-32	
18	91	2.0	1.9	70	7.9	91	18	91	2.0	33	92	2.0	76.213	-B240	063-32	
18	92	1.2	1.9	71	7.8	92	18	92	1.2	32	93	1.2	76.500	-B110	063-32	
14	121	0.9	1.4	93	6.0	121	14	121	0.9	25	122	0.9	100.786	-B110	063-32	

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
20	80	3.0	2.1	62	8.8	80	20	80	3.0	36	81	2.9	68.459	-B240	063-32	
18	91	2.7	1.9	70	7.7	91	18	91	2.7	32	92	2.5	77.741	-B240	063-32	
16	102	2.4	1.7	79	6.9	102	16	102	2.4	28	103	2.2	87.563	-B240	063-32	
14	116	2.1	1.5	89	6.0	116	14	116	2.1	25	117	2.0	99.437	-B240	063-32	
12	133	1.8	1.3	102	5.3	133	12	133	1.8	22	134	1.8	113.673	-B240	063-32	
11	151	1.6	1.1	116	4.6	151	11	151	1.6	19	152	1.6	129.087	-B240	063-32	
9.5	172	2.6	1.0	133	4.2	172	9.5	172	2.6	17	174	2.6	144.128	-B450	063-32	
9.4	170	1.4	1.0	131	4.1	170	9.4	170	1.4	17	172	1.4	145.674	-B240	063-32	
8.5	191	2.4	0.9	147	3.8	191	8.5	191	2.4	16	193	2.3	159.807	-B450	063-32	
8.3	193	1.2	0.9	149	3.6	193	8.3	193	1.2	15	195	1.2	165.426	-B240	063-32	
7.8	209	2.2	0.8	161	3.4	209	7.8	209	2.2	14	212	2.1	174.919	-B450	063-32	
7.2	220	1.1	0.8	169	3.2	220	7.2	220	1.1	13	222	1.1	188.442	-B240	063-32	
7.0	232	1.9	0.7	179	3.1	232	7.0	232	1.9	13	235	1.9	193.948	-B450	063-32	
6.4	250	1.0	0.7	192	2.8	250	6.4	250	1.0	12	252	1.0	213.994	-B240	063-32	
6.1	267	1.7	0.6	206	2.7	267	6.1	267	1.7	11	270	1.7	223.563	-B450	063-32	
5.6	286	0.8	0.6	220	2.4	286	5.6	286	0.8	10	289	0.8	245.178	-B240	063-32	
5.5	296	1.5	0.6	228	2.4	296	5.5	296	1.5	10	300	1.5	247.882	-B450	063-32	

# g500-B bevel geared motors

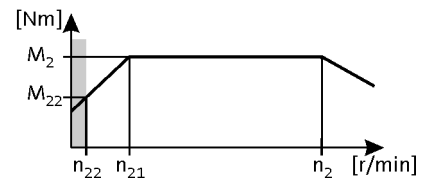


## Technical data

### Selection tables, 4-pole motors

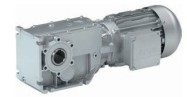
50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation											i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)			g500		MD□MA□□		
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c					
264	9.0	5.6	28	6.6	116	9.0	264	9.0	5.6	478	9.0	4.8	5.185	-B110	063-42		
253	9.0	4.4	27	6.9	111	9.0	253	9.0	4.4	458	9.0	3.7	5.411	-B45	063-42		
230	10	5.6	24	7.6	101	10	230	10	5.6	416	10	4.8	5.963	-B110	063-42		
220	10	3.9	23	7.9	96	10	220	10	3.9	399	10	3.3	6.222	-B45	063-42		
193	12	3.7	20	9.1	84	12	193	12	3.7	349	12	3.1	7.111	-B45	063-42		
193	12	5.6	20	9.1	84	12	193	12	5.6	349	12	4.8	7.111	-B110	063-42		
168	14	3.3	18	10	73	13	168	14	3.3	303	13	2.8	8.178	-B45	063-42		
168	14	5.6	18	10	73	13	168	14	5.6	303	13	4.8	8.178	-B110	063-42		
151	15	3.0	16	12	66	15	151	15	3.0	273	15	2.5	9.101	-B45	063-42		
151	15	5.2	16	12	66	15	151	15	5.2	273	15	4.4	9.101	-B110	063-42		
131	17	2.6	14	13	57	17	131	17	2.6	237	17	2.2	10.466	-B45	063-42		
131	17	5.1	14	13	57	17	131	17	5.1	237	17	4.4	10.466	-B110	063-42		
120	19	4.8	13	15	52	19	120	19	4.8	217	19	4.0	11.449	-B110	063-42		
118	19	2.3	13	15	52	19	118	19	2.3	213	19	2.0	11.640	-B45	063-42		
108	21	4.3	11	16	47	21	108	21	4.3	195	21	3.6	12.698	-B110	063-42		
102	22	2.0	11	17	45	22	102	22	2.0	185	22	1.7	13.386	-B45	063-42		
94	24	3.7	9.9	19	41	24	94	24	3.7	170	24	3.2	14.603	-B110	063-42		
91	25	5.6	9.7	19	40	25	91	25	5.6	165	25	4.8	15.008	-B240	063-42		
91	25	1.8	9.6	19	40	25	91	25	1.8	164	25	1.5	15.111	-B45	063-42		
88	26	3.6	9.3	20	39	26	88	26	3.6	159	26	3.0	15.556	-B110	063-42		
81	28	5.2	8.6	22	36	28	81	28	5.2	147	28	4.4	16.857	-B240	063-42		
79	29	1.6	8.3	22	35	29	79	29	1.6	143	29	1.3	17.378	-B45	063-42		
77	30	3.2	8.1	23	34	29	77	30	3.2	139	29	2.8	17.889	-B110	063-42		
72	32	5.2	7.6	24	31	32	72	32	5.2	130	32	4.4	19.143	-B240	063-42		
71	32	1.4	7.5	25	31	32	71	32	1.4	128	32	1.2	19.365	-B45	063-42		
70	32	3.1	7.4	25	31	32	70	32	3.1	127	32	2.6	19.556	-B110	063-42		
62	37	1.2	6.5	28	27	37	62	37	1.2	111	37	1.0	22.270	-B45	063-42		
61	37	2.8	6.4	29	27	37	61	37	2.8	110	37	2.4	22.489	-B110	063-42		
55	41	1.1	5.8	32	24	41	55	41	1.1	99	41	1.1	25.051	-B45	063-42		
54	42	2.6	5.8	32	24	41	54	42	2.6	99	41	2.2	25.185	-B110	063-42		
51	44	4.3	5.4	34	22	44	51	44	4.3	92	44	3.7	26.878	-B240	063-42		
48	48	0.9	5.0	37	21	47	48	48	0.9	86	47	0.9	28.808	-B45	063-42		
47	48	2.3	5.0	37	21	48	47	48	2.3	86	48	2.0	28.963	-B110	063-42		
45	51	4.3	4.8	39	20	50	45	51	4.3	81	50	3.7	30.522	-B240	063-42		
43	53	2.0	4.5	41	19	53	43	53	2.0	78	53	1.7	31.919	-B110	063-42		

# g500-B bevel geared motors

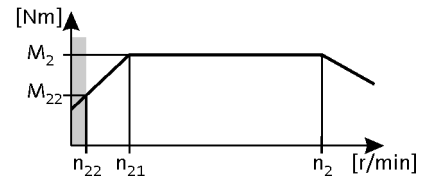


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

2-stage gearboxes

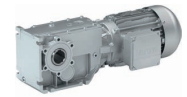


Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]		n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c		
42	54	0.8	4.4	42	18	54	42	54	0.8	76	54	0.8	32.593	-B45	063-42		
41	55	3.7	4.3	43	18	55	41	55	3.7	74	55	3.1	33.433	-B240	063-42		
37	61	1.8	4.0	47	16	60	37	61	1.8	68	60	1.5	36.707	-B110	063-42		
37	62	1.7	3.9	48	16	62	37	62	1.7	66	62	1.5	37.400	-B110	063-42		
36	63	3.7	3.8	48	16	62	36	63	3.7	65	62	3.1	37.967	-B240	063-42		
34	66	1.2	3.6	51	15	66	34	66	1.2	62	66	1.2	40.000	-B110	063-42		
32	72	3.3	3.4	55	14	71	32	72	3.3	57	71	3.2	43.267	-B240	063-42		
30	76	1.2	3.2	59	13	76	30	76	1.2	54	76	1.2	46.000	-B110	063-42		
28	80	1.4	3.0	61	13	79	28	80	1.4	52	79	1.3	48.167	-B110	063-42		
28	81	3.0	3.0	63	12	81	28	81	3.0	51	81	2.9	49.133	-B240	063-42		
26	87	2.7	2.8	67	11	86	26	87	2.7	47	86	2.6	52.510	-B240	063-42		
23	99	2.4	2.4	76	10	98	23	99	2.4	42	98	2.4	59.630	-B240	063-42		
22	101	1.1	2.4	78	9.8	100	22	101	1.1	41	100	1.1	61.045	-B110	063-42		
20	111	1.4	2.2	86	8.9	110	20	111	1.4	37	110	1.4	67.113	-B240	063-42		
18	126	1.4	1.9	97	7.9	125	18	126	1.4	33	125	1.4	76.213	-B240	063-42		
18	127	0.9	1.9	98	7.8	126	18	127	0.9	32	126	0.9	76.500	-B110	063-42		

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]		n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c		
77	30	5.6	8.1	23	34	29	77	30	5.6	139	29	4.8	17.885	-B450	063-42		
69	33	5.6	7.3	25	30	33	69	33	5.6	125	33	4.8	19.831	-B450	063-42		
60	38	5.2	6.4	29	26	38	60	38	5.2	109	38	4.4	22.813	-B450	063-42		
54	42	5.2	5.7	32	24	42	54	42	5.2	98	42	4.4	25.294	-B450	063-42		
38	60	4.3	4.0	46	17	60	38	60	4.3	68	60	3.7	36.373	-B450	063-42		
34	67	4.3	3.6	51	15	66	34	67	4.3	62	66	4.2	40.330	-B450	063-42		
30	75	3.7	3.2	58	13	74	30	75	3.7	55	74	3.5	45.245	-B450	063-42		
27	83	3.7	2.9	64	12	83	27	83	3.7	49	83	3.5	50.167	-B450	063-42		
24	93	4.8	2.6	72	11	92	24	93	4.8	44	92	4.7	56.154	-B450	063-42		
22	103	4.4	2.3	79	9.6	102	22	103	4.4	40	102	4.2	62.262	-B450	063-42		
20	112	3.7	2.1	86	8.9	111	20	112	3.7	37	111	3.5	67.513	-B600	063-42		
20	110	2.2	2.1	85	8.8	110	20	110	2.2	36	110	2.1	68.459	-B240	063-42		
18	125	1.9	1.9	97	7.7	125	18	125	1.9	32	125	1.9	77.741	-B240	063-42		
17	136	3.2	1.8	104	7.3	135	17	136	3.2	30	135	3.1	81.937	-B600	063-42		
16	141	1.7	1.7	109	6.9	140	16	141	1.7	28	140	1.6	87.563	-B240	063-42		
15	148	3.0	1.6	114	6.7	147	15	148	3.0	28	147	2.9	89.534	-B450	063-42		
14	164	2.7	1.5	127	6.0	163	14	164	2.7	25	163	2.7	99.274	-B450	063-42		
14	160	1.5	1.5	124	6.0	160	14	160	1.5	25	160	1.5	99.437	-B240	063-42		
12	184	2.4	1.3	142	5.4	183	12	184	2.4	22	183	2.5	111.372	-B450	063-42		

# g500-B bevel geared motors

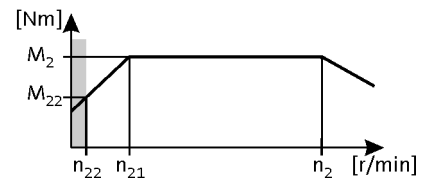


Technical data

## Selection tables, 4-pole motors

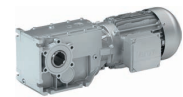
50 Hz:  $P_N = 0.25$  kW  
 87 Hz:  $P_N = 0.45$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
12	183	1.3	1.3	141	5.3	182	12	183	1.3	22	182	1.3	113.673	-B240	063-42	
12	192	3.1	1.2	148	5.2	191	12	192	3.1	21	191	3.1	116.175	-B600	063-42	
11	204	2.2	1.2	157	4.9	203	11	204	2.2	20	203	2.2	123.487	-B450	063-42	
11	208	1.2	1.1	160	4.6	207	11	208	1.2	19	207	1.2	129.087	-B240	063-42	
9.7	233	2.6	1.0	180	4.3	232	9.7	233	2.6	18	232	2.6	140.995	-B600	063-42	
9.5	239	1.9	1.0	184	4.2	237	9.5	239	1.9	17	237	1.9	144.128	-B450	063-42	
9.4	235	1.0	1.0	181	4.1	234	9.4	235	1.0	17	234	1.0	145.674	-B240	063-42	
9.3	245	3.4	1.0	189	4.1	244	9.3	245	3.4	17	244	3.4	148.000	-B820	063-42	
8.6	265	1.7	0.9	204	3.8	263	8.6	265	1.7	16	263	1.7	159.807	-B450	063-42	
8.4	271	2.2	0.9	209	3.7	270	8.4	271	2.2	15	270	2.2	163.810	-B600	063-42	
8.3	267	0.9	0.9	206	3.6	265	8.3	267	0.9	15	265	0.9	165.426	-B240	063-42	
8.3	274	3.0	0.9	211	3.6	272	8.3	274	3.0	15	272	3.0	165.467	-B820	063-42	
7.8	290	1.6	0.8	223	3.4	288	7.8	290	1.6	14	288	1.6	174.919	-B450	063-42	
7.7	295	2.0	0.8	227	3.4	293	7.7	295	2.0	14	293	2.1	178.224	-B600	063-42	
7.6	297	2.8	0.8	229	3.3	296	7.6	297	2.8	14	296	2.8	179.618	-B820	063-42	
7.1	321	1.4	0.7	247	3.1	319	7.1	321	1.4	13	319	1.4	193.948	-B450	063-42	
6.9	329	1.8	0.7	253	3.0	327	6.9	329	1.8	13	327	1.8	198.805	-B600	063-42	
6.8	332	2.5	0.7	256	3.0	331	6.8	332	2.5	12	331	2.5	200.816	-B820	063-42	
6.1	370	1.2	0.6	285	2.7	368	6.1	370	1.2	11	368	1.2	223.563	-B450	063-42	
6.0	376	2.2	0.6	289	2.6	374	6.0	376	2.2	11	374	2.2	227.045	-B820	063-42	
5.5	410	1.1	0.6	316	2.4	408	5.5	410	1.1	10	408	1.1	247.882	-B450	063-42	
5.5	416	1.4	0.6	320	2.4	414	5.5	416	1.4	9.9	414	1.5	251.299	-B600	063-42	
5.4	420	2.0	0.6	324	2.4	418	5.4	420	2.0	9.8	418	2.0	253.841	-B820	063-42	

# g500-B bevel geared motors

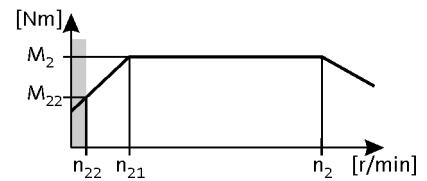


## Technical data

### Selection tables, 4-pole motors

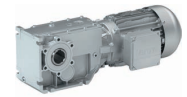
50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
272	12	4.9	28	9.5	116	12	272	12	4.9	486	12	4.1	5.185	-B110	071-32	
261	13	3.0	27	9.9	111	13	261	13	3.0	466	13	2.6	5.411	-B45	071-32	
237	14	4.9	24	11	101	14	237	14	4.9	423	14	4.1	5.963	-B110	071-32	
227	15	2.7	23	11	96	15	227	15	2.7	405	15	2.3	6.222	-B45	071-32	
198	17	2.5	20	13	84	17	198	17	2.5	354	17	2.1	7.111	-B45	071-32	
198	17	4.6	20	13	84	17	198	17	4.6	354	17	3.8	7.111	-B110	071-32	
172	19	2.3	18	15	73	19	172	19	2.3	308	19	1.9	8.178	-B45	071-32	
172	19	4.2	18	15	73	19	172	19	4.2	308	19	3.5	8.178	-B110	071-32	
155	22	2.1	16	17	66	22	155	22	2.1	277	22	1.8	9.101	-B45	071-32	
155	22	3.9	16	17	66	22	155	22	3.9	277	22	3.3	9.101	-B110	071-32	
135	25	1.8	14	19	57	25	135	25	1.8	241	25	1.5	10.466	-B45	071-32	
135	25	3.6	14	19	57	25	135	25	3.6	241	25	3.0	10.466	-B110	071-32	
123	27	3.3	13	21	52	27	123	27	3.3	220	27	2.8	11.449	-B110	071-32	
121	28	1.6	13	21	52	28	121	28	1.6	217	28	1.4	11.640	-B45	071-32	
111	30	3.0	11	23	47	30	111	30	3.0	198	30	2.5	12.698	-B110	071-32	
105	32	1.4	11	25	45	32	105	32	1.4	188	32	1.2	13.386	-B45	071-32	
97	35	2.6	9.9	27	41	35	97	35	2.6	173	35	2.2	14.603	-B110	071-32	
94	36	4.9	9.7	28	40	36	94	36	4.9	168	36	4.1	15.008	-B240	071-32	
93	36	1.3	9.6	28	40	36	93	36	1.3	167	36	1.1	15.111	-B45	071-32	
91	37	2.5	9.3	29	39	37	91	37	2.5	162	37	2.1	15.556	-B110	071-32	
84	40	4.5	8.6	31	36	40	84	40	4.5	150	40	3.8	16.857	-B240	071-32	
81	41	1.1	8.3	32	35	41	81	41	1.1	145	41	0.9	17.378	-B45	071-32	
79	43	2.3	8.1	33	34	43	79	43	2.3	141	43	1.9	17.889	-B110	071-32	
74	46	4.5	7.6	35	31	45	74	46	4.5	132	45	3.8	19.143	-B240	071-32	
73	46	1.0	7.5	36	31	46	73	46	1.0	130	46	0.8	19.365	-B45	071-32	
72	47	2.2	7.4	36	31	46	72	47	2.2	129	46	1.8	19.556	-B110	071-32	
63	53	0.9	6.5	41	27	53	63	53	0.9				22.270	-B45	071-32	
63	54	1.9	6.4	41	27	53	63	54	1.9	112	53	1.6	22.489	-B110	071-32	
56	60	1.8	5.8	46	24	60	56	60	1.8	100	60	1.5	25.185	-B110	071-32	
53	64	3.7	5.4	49	22	64	53	64	3.7	94	64	3.2	26.878	-B240	071-32	
49	69	1.6	5.0	53	21	69	49	69	1.6	87	69	1.3	28.963	-B110	071-32	
46	73	3.3	4.8	56	20	73	46	73	3.3	83	73	2.8	30.522	-B240	071-32	
44	76	1.4	4.5	59	19	76	44	76	1.4	79	76	1.2	31.919	-B110	071-32	
42	80	3.0	4.3	61	18	79	42	80	3.0	75	79	2.5	33.433	-B240	071-32	
38	87	1.3	4.0	67	16	87	38	87	1.3	69	87	1.1	36.707	-B110	071-32	

# g500-B bevel geared motors

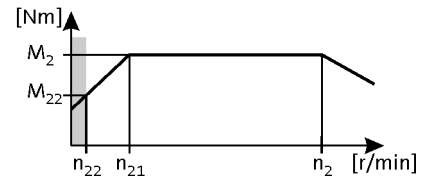


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

2-stage gearboxes



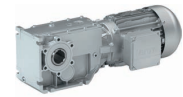
Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c		
38	89	1.2	3.9	69	16	89	38	89	1.2	67	89	1.0	37.400	-B110	071-32		
37	90	2.7	3.8	70	16	90	37	90	2.7	66	90	2.2	37.967	-B240	071-32		
35	95	1.1	3.6	73	15	95	35	95	1.1	63	95	1.0	40.000	-B110	071-32		
33	103	2.3	3.4	79	14	103	33	103	2.3	58	103	2.2	43.267	-B240	071-32		
31	110	1.0	3.2	84	13	109	31	110	1.0	55	109	1.0	46.000	-B110	071-32		
29	115	1.0	3.0	88	13	114	29	115	1.0	52	114	0.9	48.167	-B110	071-32		
29	117	2.1	3.0	90	12	117	29	117	2.1	51	117	2.0	49.133	-B240	071-32		
27	125	1.9	2.8	96	11	125	27	125	1.9	48	125	1.8	52.510	-B240	071-32		
24	142	1.7	2.4	109	10	142	24	142	1.7	42	142	1.6	59.630	-B240	071-32		
21	160	1.1	2.2	123	8.9	159	21	160	1.1	38	159	1.1	67.113	-B240	071-32		
19	181	1.1	1.9	140	7.9	181	19	181	1.1	33	181	1.1	76.213	-B240	071-32		

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product			
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□		
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c		
79	43	4.9	8.1	33	34	42	79	43	4.9	141	42	4.1	17.885	-B450	071-32		
71	47	4.9	7.3	36	30	47	71	47	4.9	127	47	4.1	19.831	-B450	071-32		
62	54	4.5	6.4	42	26	54	62	54	4.5	111	54	3.8	22.813	-B450	071-32		
56	60	4.5	5.7	46	24	60	56	60	4.5	100	60	3.8	25.294	-B450	071-32		
39	87	3.7	4.0	67	17	86	39	87	3.7	69	86	3.2	36.373	-B450	071-32		
35	96	3.7	3.6	74	15	96	35	96	3.7	63	96	3.6	40.330	-B450	071-32		
31	108	3.2	3.2	83	13	107	31	108	3.2	56	107	3.0	45.245	-B450	071-32		
28	119	3.2	2.9	92	12	119	28	119	3.2	50	119	3.0	50.167	-B450	071-32		
25	134	3.4	2.6	103	11	133	25	134	3.4	45	133	3.2	56.154	-B450	071-32		
23	148	3.0	2.3	114	9.6	148	23	148	3.0	41	148	2.9	62.262	-B450	071-32		
21	161	3.2	2.1	124	8.9	160	21	161	3.2	37	160	3.0	67.513	-B600	071-32		
21	159	1.5	2.1	122	8.8	159	21	159	1.5	37	159	1.5	68.459	-B240	071-32		
18	180	1.3	1.9	139	7.7	180	18	180	1.3	32	180	1.3	77.741	-B240	071-32		
17	195	2.8	1.8	150	7.3	195	17	195	2.8	31	195	2.7	81.937	-B600	071-32		
16	203	1.2	1.7	157	6.9	203	16	203	1.2	29	203	1.1	87.563	-B240	071-32		
16	213	2.1	1.6	164	6.7	213	16	213	2.1	28	213	2.0	89.534	-B450	071-32		
14	236	1.9	1.5	182	6.0	236	14	236	1.9	25	236	1.8	99.274	-B450	071-32		
14	231	1.0	1.5	178	6.0	230	14	231	1.0	25	230	1.0	99.437	-B240	071-32		
13	265	1.7	1.3	204	5.4	265	13	265	1.7	23	265	1.7	111.372	-B450	071-32		
12	264	0.9	1.3	203	5.3	263	12	264	0.9	22	263	0.9	113.673	-B240	071-32		
12	277	2.2	1.2	213	5.2	276	12	277	2.2	22	276	2.2	116.175	-B600	071-32		
11	294	1.5	1.2	226	4.9	293	11	294	1.5	20	293	1.5	123.487	-B450	071-32		
10	336	1.8	1.0	258	4.3	335	10	336	1.8	18	335	1.8	140.995	-B600	071-32		
9.8	343	1.3	1.0	264	4.2	342	9.8	343	1.3	18	342	1.3	144.128	-B450	071-32		



# g500-B bevel geared motors

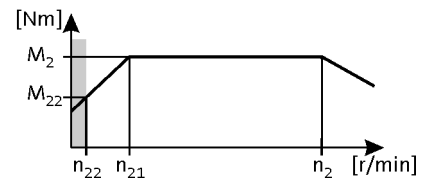


Technical data

## Selection tables, 4-pole motors

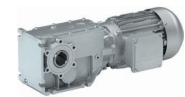
50 Hz:  $P_N = 0.37$  kW  
 87 Hz:  $P_N = 0.66$  kW

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
9.5	352	2.3	1.0	271	4.1	352	9.5	352	2.3	17	352	2.3	148.000	-B820	071-32	
8.8	380	1.2	0.9	293	3.8	380	8.8	380	1.2	16	380	1.2	159.807	-B450	071-32	
8.6	390	1.5	0.9	300	3.7	389	8.6	390	1.5	15	389	1.5	163.810	-B600	071-32	
8.5	394	2.1	0.9	303	3.6	393	8.5	394	2.1	15	393	2.1	165.467	-B820	071-32	
8.1	416	1.1	0.8	321	3.4	416	8.1	416	1.1	14	416	1.1	174.919	-B450	071-32	
7.9	424	1.4	0.8	327	3.4	423	7.9	424	1.4	14	423	1.4	178.224	-B600	071-32	
7.8	428	1.9	0.8	329	3.3	427	7.8	428	1.9	14	427	1.9	179.618	-B820	071-32	
7.3	462	1.0	0.7	356	3.1	461	7.3	462	1.0	13	461	1.0	193.948	-B450	071-32	
7.1	473	1.3	0.7	364	3.0	472	7.1	473	1.3	13	472	1.3	198.805	-B600	071-32	
7.0	478	1.7	0.7	368	3.0	477	7.0	478	1.7	13	477	1.7	200.816	-B820	071-32	
6.3	532	0.9	0.6	410	2.7	531	6.3	532	0.9	11	531	0.9	223.563	-B450	071-32	
6.2	540	1.5	0.6	416	2.6	539	6.2	540	1.5	11	539	1.5	227.045	-B820	071-32	
5.6	598	1.0	0.6	461	2.4	597	5.6	598	1.0	10	597	1.0	251.299	-B600	071-32	
5.6	604	1.4	0.6	465	2.4	603	5.6	604	1.4	9.9	603	1.4	253.841	-B820	071-32	

# g500-B bevel geared motors

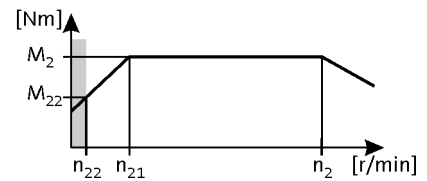


## Technical data

### Selection tables, 4-pole motors

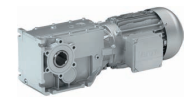
50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
394	13	5.1	41	9.7	168	13	394	13	5.1	706	13	4.3	3.565	-B240	071-42	
271	18	3.8	28	14	116	18	271	18	3.8	485	19	3.1	5.185	-B110	071-42	
260	19	2.0	27	15	111	19	260	19	2.0	465	20	1.7	5.411	-B45	071-42	
236	21	3.4	24	16	101	21	236	21	3.4	422	22	2.8	5.963	-B110	071-42	
226	22	1.8	23	17	96	22	226	22	1.8	404	22	1.5	6.222	-B45	071-42	
225	22	4.5	23	17	96	22	225	22	4.5	402	23	3.7	6.257	-B240	071-42	
204	24	5.1	21	19	87	24	204	24	5.1	365	25	4.3	6.883	-B240	071-42	
198	25	1.7	20	19	84	25	198	25	1.7	354	26	1.4	7.111	-B45	071-42	
198	25	3.1	20	19	84	25	198	25	3.1	354	26	2.5	7.111	-B110	071-42	
180	28	5.1	19	21	77	28	180	28	5.1	322	28	4.3	7.817	-B240	071-42	
172	29	1.5	18	22	73	29	172	29	1.5	308	29	1.3	8.178	-B45	071-42	
172	29	2.8	18	22	73	29	172	29	2.8	308	29	2.3	8.178	-B110	071-42	
154	32	1.4	16	25	66	32	154	32	1.4	276	33	1.2	9.101	-B45	071-42	
154	32	2.6	16	25	66	32	154	32	2.6	276	33	2.2	9.101	-B110	071-42	
134	37	1.2	14	29	57	37	134	37	1.2	240	38	1.0	10.466	-B45	071-42	
134	37	2.4	14	29	57	37	134	37	2.4	240	38	2.0	10.466	-B110	071-42	
123	41	2.2	13	31	52	41	123	41	2.2	220	41	1.8	11.449	-B110	071-42	
121	41	1.1	13	32	52	41	121	41	1.1	216	42	0.9	11.640	-B45	071-42	
116	43	4.5	12	33	50	43	116	43	4.5	208	44	3.7	12.081	-B240	071-42	
111	45	2.0	11	35	47	45	111	45	2.0	198	46	1.7	12.698	-B110	071-42	
105	48	1.0	11	37	45	48	105	48	1.0				13.386	-B45	071-42	
102	49	4.5	11	38	44	49	102	49	4.5	183	49	3.7	13.719	-B240	071-42	
96	52	1.7	9.9	40	41	52	96	52	1.7	172	53	1.4	14.603	-B110	071-42	
94	53	4.2	9.7	41	40	53	94	53	4.2	168	54	3.5	15.008	-B240	071-42	
93	54	0.8	9.6	41	40	54	93	54	0.8				15.111	-B45	071-42	
90	55	1.7	9.3	43	39	55	90	55	1.7	162	56	1.4	15.556	-B110	071-42	
83	60	4.0	8.6	46	36	60	83	60	4.0	149	61	3.3	16.857	-B240	071-42	
79	64	1.5	8.1	49	34	64	79	64	1.5	141	65	1.3	17.889	-B110	071-42	
73	68	3.5	7.6	52	31	68	73	68	3.5	131	69	2.9	19.143	-B240	071-42	
72	69	1.4	7.4	54	31	69	72	69	1.4	129	71	1.2	19.556	-B110	071-42	
68	73	3.3	7.0	57	29	73	68	73	3.3	122	74	2.7	20.650	-B240	071-42	
63	80	1.3	6.4	62	27	80	63	80	1.3	112	81	1.1	22.489	-B110	071-42	
60	83	2.9	6.2	64	26	83	60	83	2.9	107	85	2.4	23.450	-B240	071-42	
56	89	1.2	5.8	69	24	89	56	89	1.2	100	91	1.0	25.185	-B110	071-42	
52	95	2.5	5.4	74	22	95	52	95	2.5	94	97	2.1	26.878	-B240	071-42	

# g500-B bevel geared motors

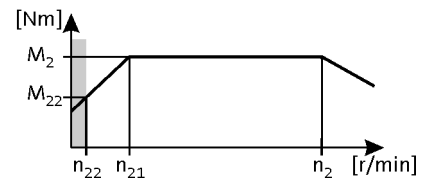


## Technical data

### Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

2-stage gearboxes



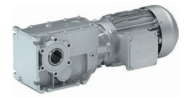
Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
49	103	1.1	5.0	79	21	103	49	103	1.1	87	104	0.9	28.963	-B110	071-42	
46	108	2.2	4.8	84	20	108	46	108	2.2	82	110	1.8	30.522	-B240	071-42	
42	119	2.0	4.3	91	18	119	42	119	2.0	75	121	1.7	33.433	-B240	071-42	
37	135	1.8	3.8	104	16	135	37	135	1.8	66	137	1.5	37.967	-B240	071-42	
33	154	1.6	3.4	118	14	154	33	154	1.6	58	156	1.5	43.267	-B240	071-42	
29	174	1.4	3.0	134	12	174	29	174	1.4	51	177	1.3	49.133	-B240	071-42	
27	186	1.3	2.8	144	11	186	27	186	1.3	48	189	1.2	52.510	-B240	071-42	
24	212	1.1	2.4	163	10	212	24	212	1.1	42	215	1.1	59.630	-B240	071-42	

3-stage gearboxes

Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
			n <sub>22</sub> [r/min]	M <sub>22</sub> [Nm]	n <sub>21</sub> [r/min]	M <sub>2</sub> [Nm]	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]	M <sub>2</sub> [Nm]	c	n <sub>2</sub> [r/min]			M <sub>2</sub> [Nm]
281	18	5.1	29	14	120	18	281	18	5.1	503	18	4.3	5.002	-B450	071-42	
151	33	5.1	16	26	64	33	151	33	5.1	270	34	4.3	9.315	-B450	071-42	
136	37	5.1	14	28	58	37	136	37	5.1	244	37	4.3	10.328	-B450	071-42	
116	43	4.5	12	33	49	43	116	43	4.5	207	44	3.7	12.143	-B820	071-42	
86	58	4.5	8.9	45	37	58	86	58	4.5	154	59	3.7	16.349	-B450	071-42	
79	64	4.5	8.1	49	34	64	79	64	4.5	141	65	3.8	17.885	-B450	071-42	
75	66	4.5	7.8	51	32	66	75	66	4.5	135	67	3.7	18.655	-B820	071-42	
71	70	4.5	7.3	54	30	70	71	70	4.5	127	72	3.8	19.831	-B450	071-42	
67	74	4.5	7.0	57	29	74	67	74	4.5	121	75	3.7	20.857	-B820	071-42	
62	81	4.2	6.4	62	26	81	62	81	4.2	110	82	3.5	22.813	-B450	071-42	
56	90	4.2	5.7	69	24	90	56	90	4.2	99	91	3.5	25.294	-B450	071-42	
50	99	3.7	5.2	76	22	101	50	99	3.7	90	101	3.1	27.945	-B450	071-42	
47	106	3.7	4.9	81	20	106	47	106	3.7	85	107	3.1	29.744	-B600	071-42	
47	106	3.7	4.9	81	20	106	47	106	3.7	85	107	3.1	29.745	-B820	071-42	
45	110	3.7	4.7	85	19	110	45	110	3.7	81	112	3.1	30.985	-B450	071-42	
39	129	3.4	4.0	99	17	129	39	129	3.4	69	131	2.8	36.373	-B450	071-42	
38	131	3.2	3.9	101	16	131	38	131	3.2	68	133	2.6	36.999	-B600	071-42	
38	131	3.2	3.9	101	16	131	38	131	3.2	68	133	2.6	37.000	-B820	071-42	
35	143	3.1	3.6	110	15	143	35	143	3.1	62	145	3.0	40.330	-B450	071-42	
34	149	3.7	3.5	115	14	149	34	149	3.7	60	151	3.5	41.940	-B600	071-42	
31	161	2.8	3.2	124	13	161	31	161	2.8	56	163	2.6	45.245	-B450	071-42	
28	178	2.5	2.9	137	12	178	28	178	2.5	50	181	2.4	50.167	-B450	071-42	
25	199	2.3	2.6	154	11	199	25	199	2.3	45	203	2.1	56.154	-B450	071-42	
24	205	4.0	2.5	158	10	205	24	205	4.0	44	208	3.8	57.662	-B820	071-42	
23	221	2.0	2.3	170	9.6	221	23	221	2.0	40	225	1.9	62.262	-B450	071-42	
22	227	2.7	2.3	175	9.4	227	22	227	2.7	39	230	2.5	63.822	-B600	071-42	
22	229	3.6	2.2	176	9.3	229	22	229	3.6	39	233	3.4	64.468	-B820	071-42	

# g500-B bevel geared motors

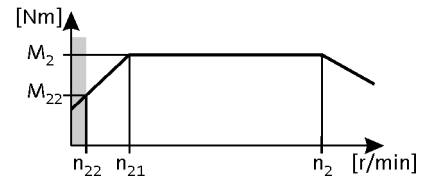
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

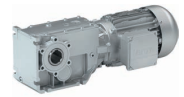
3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_{22}$ [r/min]	$M_{22}$ [Nm]		$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
21	240	2.5	2.1	185	8.9	240	21	240	2.5	37	243	2.4	67.513	-B600	071-42	
21	237	1.0	2.1	183	8.8	237	21	237	1.0	37	241	1.0	68.459	-B240	071-42	
20	244	1.8	2.1	188	8.7	244	20	244	1.8	37	248	1.7	68.788	-B450	071-42	
20	256	2.3	2.0	197	8.3	256	20	256	2.3	35	260	2.2	72.170	-B600	071-42	
19	266	3.2	1.9	205	8.0	266	19	266	3.2	34	270	3.0	74.963	-B1500	071-42	
18	271	1.7	1.9	209	7.9	271	18	271	1.7	33	275	1.6	76.271	-B450	071-42	
18	269	0.9	1.9	207	7.7	269	18	269	0.9	32	273	0.8	77.741	-B240	071-42	
17	291	2.1	1.8	224	7.3	291	17	291	2.1	31	296	1.9	81.937	-B600	071-42	
17	294	2.8	1.8	226	7.2	294	17	294	2.8	30	298	2.6	82.762	-B1500	071-42	
16	318	1.4	1.6	245	6.7	318	16	318	1.4	28	323	1.3	89.534	-B450	071-42	
16	319	1.9	1.6	245	6.7	319	16	319	1.9	28	324	1.8	89.772	-B600	071-42	
15	323	2.8	1.6	249	6.6	323	15	323	2.8	28	328	2.6	90.978	-B1500	071-42	
15	326	2.5	1.6	251	6.5	326	15	326	2.5	27	332	2.4	91.939	-B820	071-42	
14	352	1.3	1.5	271	6.0	352	14	352	1.3	25	358	1.2	99.274	-B450	071-42	
14	361	1.7	1.4	278	5.9	361	14	361	1.7	25	367	1.6	101.760	-B600	071-42	
14	365	2.3	1.4	281	5.8	365	14	365	2.3	25	371	2.1	102.790	-B820	071-42	
13	395	1.1	1.3	305	5.4	395	13	395	1.1	23	402	1.1	111.372	-B450	071-42	
12	406	2.0	1.3	313	5.2	406	12	406	2.0	22	412	2.0	114.364	-B820	071-42	
12	413	1.5	1.2	318	5.2	413	12	413	1.5	22	419	1.4	116.175	-B600	071-42	
11	438	1.0	1.2	338	4.9	438	11	438	1.0	20	445	1.0	123.487	-B450	071-42	
11	449	1.3	1.1	346	4.7	449	11	449	1.3	20	457	1.3	126.580	-B600	071-42	
11	454	1.8	1.1	350	4.7	454	11	454	1.8	20	461	1.8	127.861	-B820	071-42	
10	501	1.2	1.0	386	4.3	501	10	501	1.2	18	509	1.2	140.995	-B600	071-42	
9.7	512	0.9	1.0	394	4.2	512	9.7	512	0.9	17	520	0.9	144.128	-B450	071-42	
9.5	526	1.6	1.0	405	4.1	526	9.5	526	1.6	17	534	1.5	148.000	-B820	071-42	
9.4	532	2.8	1.0	410	4.0	532	9.4	532	2.8	17	541	2.8	149.949	-B1500	071-42	
8.6	582	1.0	0.9	448	3.7	582	8.6	582	1.0	15	591	1.0	163.810	-B600	071-42	
8.5	585	2.6	0.9	451	3.6	585	8.5	585	2.6	15	594	2.5	164.833	-B1500	071-42	
8.5	588	1.4	0.9	452	3.6	588	8.5	588	1.4	15	597	1.4	165.467	-B820	071-42	
7.9	633	1.0	0.8	487	3.4	633	7.9	633	1.0	14	643	0.9	178.224	-B600	071-42	
7.8	638	1.3	0.8	491	3.3	638	7.8	638	1.3	14	648	1.3	179.618	-B820	071-42	
7.7	646	2.3	0.8	498	3.3	646	7.7	646	2.3	14	656	2.3	181.983	-B1500	071-42	
7.1	706	0.9	0.7	544	3.0	706	7.1	706	0.9	13	717	0.8	198.805	-B600	071-42	
7.0	710	2.1	0.7	547	3.0	710	7.0	710	2.1	13	721	2.1	200.048	-B1500	071-42	
7.0	713	1.2	0.7	549	3.0	713	7.0	713	1.2	13	724	1.1	200.816	-B820	071-42	

# g500-B bevel geared motors

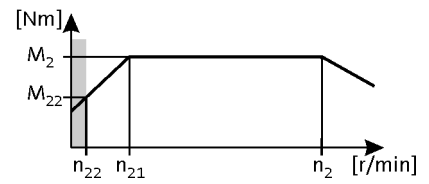
Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.55 \text{ kW}$   
 87 Hz:  $P_N = 1.0 \text{ kW}$

3-stage gearboxes



Mains operation 400 V, 50 Hz			Inverter operation										i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c	5 Hz -		- 20 Hz		- 50 Hz (1:10)			- 87 Hz (1:17.4)				g500	MD□MA□□	
$n_2$ [r/min]	$M_2$ [Nm]	c	$n_{22}$ [r/min]	$M_{22}$ [Nm]	$n_{21}$ [r/min]	$M_2$ [Nm]	$n_2$ [r/min]	$M_2$ [Nm]	c	$n_2$ [r/min]	$M_2$ [Nm]	c				
6.2	806	1.0	0.6	621	2.6	806	6.2	806	1.0	11	819	1.0	227.045	-B820	071-42	
6.1	817	1.8	0.6	629	2.6	817	6.1	817	1.8	11	830	1.8	230.035	-B1500	071-42	
5.6	898	1.7	0.6	691	2.4	898	5.6	898	1.7	9.9	912	1.6	252.869	-B1500	071-42	
5.5	901	0.9	0.6	694	2.4	901	5.5	901	0.9	9.9	915	0.9	253.841	-B820	071-42	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

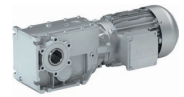
50 Hz:  $P_N = 0.75$  kW

2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
405	17	4.8	3.565	-B240	40-P80/M4	
278	24	2.8	5.185	-B110	40-P80/M4	
242	28	2.6	5.963	-B110	40-P80/M4	
231	30	4.2	6.257	-B240	40-P80/M4	
210	32	4.8	6.883	-B240	40-P80/M4	
203	34	2.3	7.111	-B110	40-P80/M4	
185	37	4.8	7.817	-B240	40-P80/M4	
177	39	2.1	8.178	-B110	40-P80/M4	
159	43	2.0	9.101	-B110	40-P80/M4	
138	49	1.8	10.466	-B110	40-P80/M4	
126	54	1.7	11.449	-B110	40-P80/M4	
119	57	3.7	12.081	-B240	40-P80/M4	
114	60	1.5	12.698	-B110	40-P80/M4	
105	65	3.4	13.719	-B240	40-P80/M4	
99	69	1.3	14.603	-B110	40-P80/M4	
96	71	3.2	15.008	-B240	40-P80/M4	
93	73	1.3	15.556	-B110	40-P80/M4	
86	79	3.0	16.857	-B240	40-P80/M4	
81	84	1.1	17.889	-B110	40-P80/M4	
75	90	2.7	19.143	-B240	40-P80/M4	
74	92	1.1	19.556	-B110	40-P80/M4	
70	97	2.5	20.650	-B240	40-P80/M4	
64	106	1.0	22.489	-B110	40-P80/M4	
62	111	2.2	23.450	-B240	40-P80/M4	
57	119	0.9	25.185	-B110	40-P80/M4	
54	127	1.9	26.878	-B240	40-P80/M4	
50	137	0.8	28.963	-B110	40-P80/M4	
47	144	1.7	30.522	-B240	40-P80/M4	
43	158	1.5	33.433	-B240	40-P80/M4	
38	179	1.3	37.967	-B240	40-P80/M4	
33	204	1.2	43.267	-B240	40-P80/M4	
29	232	1.0	49.133	-B240	40-P80/M4	
28	248	0.9	52.510	-B240	40-P80/M4	
24	281	0.9	59.630	-B240	40-P80/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

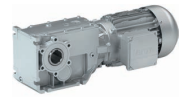
50 Hz:  $P_N = 0.75$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
289	24	4.8	5.002	-B450	40-P80/M4	
155	44	4.8	9.315	-B450	40-P80/M4	
140	49	4.8	10.328	-B450	40-P80/M4	
119	57	4.2	12.143	-B820	40-P80/M4	
88	77	4.2	16.349	-B450	40-P80/M4	
81	84	4.3	17.885	-B450	40-P80/M4	
77	88	4.2	18.655	-B820	40-P80/M4	
73	93	4.3	19.831	-B450	40-P80/M4	
69	98	4.2	20.857	-B820	40-P80/M4	
63	108	4.0	22.813	-B450	40-P80/M4	
57	119	3.8	25.294	-B450	40-P80/M4	
52	132	3.4	27.945	-B450	40-P80/M4	
49	140	3.5	29.744	-B600	40-P80/M4	
49	140	3.5	29.745	-B820	40-P80/M4	
47	146	3.1	30.985	-B450	40-P80/M4	
40	171	2.6	36.373	-B450	40-P80/M4	
39	174	3.0	36.999	-B600	40-P80/M4	
39	174	3.0	37.000	-B820	40-P80/M4	
36	190	2.4	40.330	-B450	40-P80/M4	
34	198	3.0	41.940	-B600	40-P80/M4	
32	213	2.1	45.245	-B450	40-P80/M4	
29	237	1.9	50.167	-B450	40-P80/M4	
26	265	1.7	56.154	-B450	40-P80/M4	
25	272	3.0	57.662	-B820	40-P80/M4	
23	294	1.5	62.262	-B450	40-P80/M4	
23	301	2.0	63.822	-B600	40-P80/M4	
22	304	2.7	64.468	-B820	40-P80/M4	
21	318	1.9	67.513	-B600	40-P80/M4	
21	324	1.4	68.788	-B450	40-P80/M4	
20	340	1.8	72.170	-B600	40-P80/M4	
19	353	3.0	74.963	-B1500	40-P80/M4	
19	360	1.3	76.271	-B450	40-P80/M4	
18	386	1.6	81.937	-B600	40-P80/M4	
17	390	2.6	82.762	-B1500	40-P80/M4	
16	422	1.1	89.534	-B450	40-P80/M4	
16	423	1.4	89.772	-B600	40-P80/M4	
16	429	2.6	90.978	-B1500	40-P80/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 0.75$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
16	433	1.9	91.939	-B820	40-P80/M4	
15	468	1.0	99.274	-B450	40-P80/M4	
14	480	1.3	101.760	-B600	40-P80/M4	
14	485	1.7	102.790	-B820	40-P80/M4	
13	525	0.9	111.372	-B450	40-P80/M4	
13	539	1.5	114.364	-B820	40-P80/M4	
12	548	1.1	116.175	-B600	40-P80/M4	
11	597	1.0	126.580	-B600	40-P80/M4	
11	603	1.4	127.861	-B820	40-P80/M4	
10	665	0.9	140.995	-B600	40-P80/M4	
9.8	698	1.2	148.000	-B820	40-P80/M4	
9.6	707	2.1	149.949	-B1500	40-P80/M4	
8.8	777	1.9	164.833	-B1500	40-P80/M4	
8.7	780	1.1	165.467	-B820	40-P80/M4	
8.0	847	1.0	179.618	-B820	40-P80/M4	
7.9	858	1.8	181.983	-B1500	40-P80/M4	
7.2	943	1.6	200.048	-B1500	40-P80/M4	
7.2	947	0.9	200.816	-B820	40-P80/M4	
6.3	1084	1.4	230.035	-B1500	40-P80/M4	
5.7	1192	1.3	252.869	-B1500	40-P80/M4	



# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

2-stage gearboxes

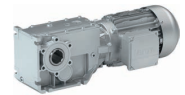
Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
405	25	5.6	3.565	-B240	40-P90/M4	
296	34	4.4	4.889	-B240	40-P90/M4	
279	36	1.9	5.185	-B110	40-P90/M4	
242	41	1.8	5.963	-B110	40-P90/M4	
231	43	3.6	6.257	-B240	40-P90/M4	
210	48	3.8	6.883	-B240	40-P90/M4	
203	49	1.6	7.111	-B110	40-P90/M4	
185	54	3.5	7.817	-B240	40-P90/M4	
177	56	1.4	8.178	-B110	40-P90/M4	
159	63	1.3	9.101	-B110	40-P90/M4	
153	65	2.9	9.440	-B240	40-P90/M4	
138	72	1.2	10.466	-B110	40-P90/M4	
135	74	2.8	10.720	-B240	40-P90/M4	
126	79	1.1	11.449	-B110	40-P90/M4	
120	83	2.5	12.081	-B240	40-P90/M4	
114	88	1.0	12.698	-B110	40-P90/M4	
105	95	2.3	13.719	-B240	40-P90/M4	
99	101	0.9	14.603	-B110	40-P90/M4	
96	104	2.2	15.008	-B240	40-P90/M4	
93	107	0.9	15.556	-B110	40-P90/M4	
86	116	2.1	16.857	-B240	40-P90/M4	
76	132	1.8	19.143	-B240	40-P90/M4	
70	143	1.7	20.650	-B240	40-P90/M4	
62	162	1.5	23.450	-B240	40-P90/M4	
54	186	1.3	26.878	-B240	40-P90/M4	
47	211	1.1	30.522	-B240	40-P90/M4	
43	231	1.0	33.433	-B240	40-P90/M4	
38	262	0.9	37.967	-B240	40-P90/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
289	35	5.9	5.002	-B450	40-P90/M4	
211	47	5.9	6.860	-B450	40-P90/M4	
155	64	5.7	9.315	-B450	40-P90/M4	
152	66	5.9	9.520	-B820	40-P90/M4	
140	71	5.4	10.328	-B450	40-P90/M4	
119	84	5.5	12.143	-B820	40-P90/M4	
113	88	4.6	12.775	-B450	40-P90/M4	
108	92	5.8	13.369	-B600	40-P90/M4	
108	92	5.8	13.370	-B820	40-P90/M4	

# g500-B bevel geared motors

Technical data



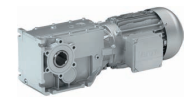
## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.1 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
102	98	4.3	14.165	-B450	40-P90/M4	
99	101	5.9	14.626	-B820	40-P90/M4	
88	113	3.8	16.349	-B450	40-P90/M4	
88	113	5.9	16.352	-B820	40-P90/M4	
81	123	3.6	17.885	-B450	40-P90/M4	
78	129	5.5	18.655	-B820	40-P90/M4	
77	130	4.6	18.851	-B600	40-P90/M4	
73	137	3.3	19.831	-B450	40-P90/M4	
70	142	4.2	20.622	-B600	40-P90/M4	
69	144	5.5	20.857	-B820	40-P90/M4	
63	158	2.9	22.813	-B450	40-P90/M4	
63	158	3.8	22.852	-B600	40-P90/M4	
63	158	4.8	22.853	-B820	40-P90/M4	
57	175	2.6	25.294	-B450	40-P90/M4	
57	176	4.7	25.550	-B820	40-P90/M4	
52	193	2.3	27.945	-B450	40-P90/M4	
50	202	5.8	29.206	-B1500	40-P90/M4	
49	205	2.9	29.744	-B600	40-P90/M4	
49	205	4.0	29.745	-B820	40-P90/M4	
47	214	2.1	30.985	-B450	40-P90/M4	
45	224	2.7	32.439	-B600	40-P90/M4	
40	251	1.8	36.373	-B450	40-P90/M4	
39	255	2.4	36.999	-B600	40-P90/M4	
39	255	3.2	37.000	-B820	40-P90/M4	
36	278	1.6	40.330	-B450	40-P90/M4	
35	285	2.9	41.325	-B820	40-P90/M4	
35	290	2.1	41.940	-B600	40-P90/M4	
32	312	2.6	45.207	-B820	40-P90/M4	
32	312	1.4	45.245	-B450	40-P90/M4	
32	316	1.9	45.739	-B600	40-P90/M4	
31	322	4.7	46.568	-B1500	40-P90/M4	
29	345	1.7	50.036	-B600	40-P90/M4	
29	346	1.3	50.167	-B450	40-P90/M4	
29	349	2.4	50.543	-B820	40-P90/M4	
28	359	4.0	51.920	-B1500	40-P90/M4	
26	383	1.6	55.447	-B600	40-P90/M4	
26	388	1.2	56.154	-B450	40-P90/M4	

# g500-B bevel geared motors



Technical data

## Selection tables, 4-pole motors

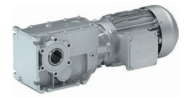
50 Hz:  $P_N = 1.1 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
25	394	3.8	57.074	-B1500	40-P90/M4	
25	398	2.1	57.662	-B820	40-P90/M4	
25	403	3.7	58.422	-B1500	40-P90/M4	
23	430	1.1	62.262	-B450	40-P90/M4	
23	441	1.4	63.822	-B600	40-P90/M4	
23	443	3.4	64.221	-B1500	40-P90/M4	
22	445	1.8	64.468	-B820	40-P90/M4	
21	466	1.3	67.513	-B600	40-P90/M4	
21	475	1.0	68.788	-B450	40-P90/M4	
21	488	1.7	70.636	-B820	40-P90/M4	
20	498	1.2	72.170	-B600	40-P90/M4	
19	518	2.9	74.963	-B1500	40-P90/M4	
19	527	0.9	76.271	-B450	40-P90/M4	
19	531	4.0	76.862	-B2700	40-P90/M4	
19	540	1.1	78.182	-B600	40-P90/M4	
18	545	1.5	78.973	-B820	40-P90/M4	
18	566	1.1	81.937	-B600	40-P90/M4	
18	571	2.6	82.762	-B1500	40-P90/M4	
17	587	3.5	84.940	-B2700	40-P90/M4	
16	620	1.0	89.772	-B600	40-P90/M4	
16	628	2.4	90.978	-B1500	40-P90/M4	
16	635	1.3	91.939	-B820	40-P90/M4	
16	643	2.3	93.150	-B1500	40-P90/M4	
16	644	3.5	93.283	-B2700	40-P90/M4	
14	703	0.9	101.760	-B600	40-P90/M4	
14	707	2.1	102.396	-B1500	40-P90/M4	
14	710	1.2	102.790	-B820	40-P90/M4	
13	788	1.9	114.166	-B1500	40-P90/M4	
13	790	1.0	114.364	-B820	40-P90/M4	
12	867	1.7	125.498	-B1500	40-P90/M4	
11	883	0.9	127.861	-B820	40-P90/M4	
9.6	1035	1.5	149.949	-B1500	40-P90/M4	
9.4	1057	4.0	153.141	-B4300	40-P90/M4	
9.4	1058	2.6	153.185	-B2700	40-P90/M4	
8.8	1138	1.3	164.833	-B1500	40-P90/M4	
8.6	1156	3.7	167.383	-B4300	40-P90/M4	
8.6	1162	2.3	168.230	-B2700	40-P90/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

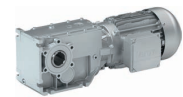
50 Hz:  $P_N = 1.1 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
7.9	1257	1.2	181.983	-B1500	40-P90/M4	
7.8	1283	3.4	185.857	-B4300	40-P90/M4	
7.8	1284	2.1	185.911	-B2700	40-P90/M4	
7.2	1381	1.1	200.048	-B1500	40-P90/M4	
7.1	1403	3.1	203.143	-B4300	40-P90/M4	
7.1	1410	1.9	204.170	-B2700	40-P90/M4	
6.3	1588	0.9	230.035	-B1500	40-P90/M4	
6.2	1622	2.7	234.932	-B4300	40-P90/M4	
6.1	1623	1.7	235.000	-B2700	40-P90/M4	
5.7	1746	0.9	252.869	-B1500	40-P90/M4	
5.6	1773	2.4	256.781	-B4300	40-P90/M4	
5.6	1782	1.5	258.080	-B2700	40-P90/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 1.5 \text{ kW}$

2-stage gearboxes

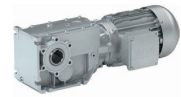
Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
403	34	4.1	3.565	-B240	40-P90/L4	
294	46	3.2	4.889	-B240	40-P90/L4	
277	49	1.4	5.185	-B110	40-P90/L4	
241	57	1.3	5.963	-B110	40-P90/L4	
229	59	2.6	6.257	-B240	40-P90/L4	
209	65	2.7	6.883	-B240	40-P90/L4	
202	67	1.1	7.111	-B110	40-P90/L4	
184	74	2.5	7.817	-B240	40-P90/L4	
176	78	1.0	8.178	-B110	40-P90/L4	
158	86	1.0	9.101	-B110	40-P90/L4	
152	90	2.1	9.440	-B240	40-P90/L4	
137	99	0.9	10.466	-B110	40-P90/L4	
134	102	2.0	10.720	-B240	40-P90/L4	
125	109	0.8	11.449	-B110	40-P90/L4	
119	115	1.8	12.081	-B240	40-P90/L4	
105	130	1.7	13.719	-B240	40-P90/L4	
96	142	1.6	15.008	-B240	40-P90/L4	
85	160	1.5	16.857	-B240	40-P90/L4	
75	182	1.3	19.143	-B240	40-P90/L4	
70	196	1.2	20.650	-B240	40-P90/L4	
61	222	1.1	23.450	-B240	40-P90/L4	
53	255	0.9	26.878	-B240	40-P90/L4	
47	289	0.8	30.522	-B240	40-P90/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
287	47	4.3	5.002	-B450	40-P90/L4	
209	65	4.3	6.860	-B450	40-P90/L4	
154	88	4.2	9.315	-B450	40-P90/L4	
151	90	4.3	9.520	-B820	40-P90/L4	
139	98	3.9	10.328	-B450	40-P90/L4	
118	115	4.0	12.143	-B820	40-P90/L4	
112	121	3.3	12.775	-B450	40-P90/L4	
107	127	4.2	13.369	-B600	40-P90/L4	
107	127	4.2	13.370	-B820	40-P90/L4	
101	134	3.1	14.165	-B450	40-P90/L4	
98	139	4.3	14.626	-B820	40-P90/L4	
88	155	2.8	16.349	-B450	40-P90/L4	
88	155	4.3	16.352	-B820	40-P90/L4	
80	170	2.6	17.885	-B450	40-P90/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

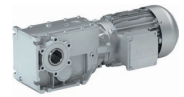
50 Hz:  $P_N = 1.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
77	177	4.0	18.655	-B820	40-P90/L4	
76	179	3.4	18.851	-B600	40-P90/L4	
72	188	2.4	19.831	-B450	40-P90/L4	
70	196	3.1	20.622	-B600	40-P90/L4	
69	198	4.0	20.857	-B820	40-P90/L4	
63	216	2.1	22.813	-B450	40-P90/L4	
63	217	2.8	22.852	-B600	40-P90/L4	
63	217	3.5	22.853	-B820	40-P90/L4	
57	240	1.9	25.294	-B450	40-P90/L4	
56	242	3.4	25.550	-B820	40-P90/L4	
51	265	1.7	27.945	-B450	40-P90/L4	
49	277	4.2	29.206	-B1500	40-P90/L4	
48	282	2.1	29.744	-B600	40-P90/L4	
48	282	2.9	29.745	-B820	40-P90/L4	
46	294	1.5	30.985	-B450	40-P90/L4	
44	308	2.0	32.439	-B600	40-P90/L4	
40	345	1.3	36.373	-B450	40-P90/L4	
39	351	1.7	36.999	-B600	40-P90/L4	
39	351	2.3	37.000	-B820	40-P90/L4	
36	382	1.2	40.330	-B450	40-P90/L4	
35	392	2.1	41.325	-B820	40-P90/L4	
34	398	1.5	41.940	-B600	40-P90/L4	
32	429	1.9	45.207	-B820	40-P90/L4	
32	429	1.1	45.245	-B450	40-P90/L4	
31	434	1.4	45.739	-B600	40-P90/L4	
31	442	3.4	46.568	-B1500	40-P90/L4	
29	474	1.3	50.036	-B600	40-P90/L4	
29	476	1.0	50.167	-B450	40-P90/L4	
28	479	1.7	50.543	-B820	40-P90/L4	
28	492	2.9	51.920	-B1500	40-P90/L4	
26	526	1.1	55.447	-B600	40-P90/L4	
26	532	0.9	56.154	-B450	40-P90/L4	
25	541	2.8	57.074	-B1500	40-P90/L4	
25	547	1.5	57.662	-B820	40-P90/L4	
25	554	2.7	58.422	-B1500	40-P90/L4	
23	605	1.0	63.822	-B600	40-P90/L4	
22	609	2.5	64.221	-B1500	40-P90/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

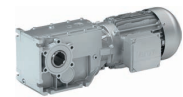
50 Hz:  $P_N = 1.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
22	611	1.3	64.468	-B820	40-P90/L4	
21	640	0.9	67.513	-B600	40-P90/L4	
20	670	1.2	70.636	-B820	40-P90/L4	
20	684	0.9	72.170	-B600	40-P90/L4	
19	711	2.1	74.963	-B1500	40-P90/L4	
19	729	2.9	76.862	-B2700	40-P90/L4	
18	741	0.8	78.182	-B600	40-P90/L4	
18	749	1.1	78.973	-B820	40-P90/L4	
17	785	1.9	82.762	-B1500	40-P90/L4	
17	805	2.6	84.940	-B2700	40-P90/L4	
16	863	1.7	90.978	-B1500	40-P90/L4	
16	872	0.9	91.939	-B820	40-P90/L4	
15	883	1.7	93.150	-B1500	40-P90/L4	
15	884	2.6	93.283	-B2700	40-P90/L4	
14	971	1.6	102.396	-B1500	40-P90/L4	
14	975	0.8	102.790	-B820	40-P90/L4	
13	1082	1.4	114.166	-B1500	40-P90/L4	
11	1190	1.3	125.498	-B1500	40-P90/L4	
9.6	1422	1.1	149.949	-B1500	40-P90/L4	
9.4	1452	2.9	153.141	-B4300	40-P90/L4	
9.4	1452	1.9	153.185	-B2700	40-P90/L4	
8.7	1563	1.0	164.833	-B1500	40-P90/L4	
8.6	1587	2.7	167.383	-B4300	40-P90/L4	
8.5	1595	1.7	168.230	-B2700	40-P90/L4	
7.9	1725	0.9	181.983	-B1500	40-P90/L4	
7.7	1762	2.4	185.857	-B4300	40-P90/L4	
7.7	1763	1.5	185.911	-B2700	40-P90/L4	
7.1	1926	2.2	203.143	-B4300	40-P90/L4	
7.0	1936	1.4	204.170	-B2700	40-P90/L4	
6.1	2227	1.9	234.932	-B4300	40-P90/L4	
6.1	2228	1.2	235.000	-B2700	40-P90/L4	
5.6	2435	1.8	256.781	-B4300	40-P90/L4	
5.6	2447	1.1	258.080	-B2700	40-P90/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

2-stage gearboxes

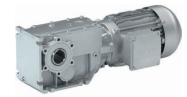
Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
406	49	2.8	3.565	-B240	40-P100/M4	
296	67	2.2	4.889	-B240	40-P100/M4	
231	86	1.8	6.257	-B240	40-P100/M4	
210	95	1.9	6.883	-B240	40-P100/M4	
185	108	1.7	7.817	-B240	40-P100/M4	
153	130	1.5	9.440	-B240	40-P100/M4	
135	148	1.4	10.720	-B240	40-P100/M4	
120	167	1.3	12.081	-B240	40-P100/M4	
105	189	1.2	13.719	-B240	40-P100/M4	
96	207	1.1	15.008	-B240	40-P100/M4	
86	233	1.0	16.857	-B240	40-P100/M4	
76	264	0.9	19.143	-B240	40-P100/M4	
70	285	0.8	20.650	-B240	40-P100/M4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
292	68	4.6	4.958	-B820	40-P100/M4	
289	69	4.1	5.002	-B450	40-P100/M4	
285	70	5.4	5.067	-B600	40-P100/M4	
213	94	4.2	6.800	-B820	40-P100/M4	
211	95	3.3	6.860	-B450	40-P100/M4	
208	96	4.2	6.949	-B600	40-P100/M4	
190	105	4.4	7.617	-B600	40-P100/M4	
190	105	4.0	7.618	-B820	40-P100/M4	
170	118	3.9	8.517	-B820	40-P100/M4	
155	129	2.9	9.315	-B450	40-P100/M4	
152	131	3.8	9.520	-B820	40-P100/M4	
140	143	2.7	10.328	-B450	40-P100/M4	
138	144	3.7	10.447	-B820	40-P100/M4	
135	148	3.7	10.741	-B600	40-P100/M4	
124	161	3.5	11.680	-B820	40-P100/M4	
119	168	3.3	12.143	-B820	40-P100/M4	
113	176	2.3	12.775	-B450	40-P100/M4	
110	181	5.6	13.118	-B1500	40-P100/M4	
108	185	3.0	13.369	-B600	40-P100/M4	
108	185	3.4	13.370	-B820	40-P100/M4	
102	195	2.2	14.165	-B450	40-P100/M4	
99	202	3.2	14.626	-B820	40-P100/M4	
98	203	3.0	14.730	-B600	40-P100/M4	
88	226	1.9	16.349	-B450	40-P100/M4	



# g500-B bevel geared motors



Technical data

## Selection tables, 4-pole motors

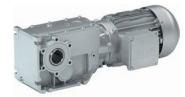
50 Hz:  $P_N = 2.2 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
88	226	3.1	16.352	-B820	40-P100/M4	
81	247	1.8	17.885	-B450	40-P100/M4	
78	257	5.7	18.598	-B1500	40-P100/M4	
78	257	2.9	18.655	-B820	40-P100/M4	
77	260	2.3	18.851	-B600	40-P100/M4	
73	274	1.6	19.831	-B450	40-P100/M4	
71	282	5.3	20.444	-B1500	40-P100/M4	
70	285	2.1	20.622	-B600	40-P100/M4	
69	288	2.9	20.857	-B820	40-P100/M4	
63	315	1.4	22.813	-B450	40-P100/M4	
63	315	1.9	22.852	-B600	40-P100/M4	
63	315	2.6	22.853	-B820	40-P100/M4	
63	316	4.8	22.898	-B1500	40-P100/M4	
62	320	5.7	23.206	-B4300	40-P100/M4	
57	349	1.3	25.294	-B450	40-P100/M4	
57	350	1.7	25.347	-B600	40-P100/M4	
57	350	5.7	25.365	-B4300	40-P100/M4	
57	353	2.3	25.550	-B820	40-P100/M4	
56	360	1.7	26.061	-B600	40-P100/M4	
55	363	2.3	26.324	-B820	40-P100/M4	
54	370	5.7	26.814	-B2700	40-P100/M4	
52	386	1.2	27.945	-B450	40-P100/M4	
50	403	3.7	29.206	-B1500	40-P100/M4	
49	406	5.7	29.447	-B2700	40-P100/M4	
49	410	1.5	29.744	-B600	40-P100/M4	
49	410	2.0	29.745	-B820	40-P100/M4	
47	428	1.1	30.985	-B450	40-P100/M4	
45	446	1.8	32.291	-B820	40-P100/M4	
45	448	1.3	32.439	-B600	40-P100/M4	
44	449	3.3	32.547	-B1500	40-P100/M4	
41	493	1.2	35.740	-B600	40-P100/M4	
40	494	3.0	35.778	-B1500	40-P100/M4	
40	498	1.7	36.102	-B820	40-P100/M4	
39	511	1.2	36.999	-B600	40-P100/M4	
39	511	1.6	37.000	-B820	40-P100/M4	
38	532	4.1	38.546	-B4300	40-P100/M4	
35	564	2.7	40.895	-B1500	40-P100/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

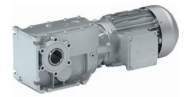
50 Hz:  $P_N = 2.2 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
35	570	1.4	41.325	-B820	40-P100/M4	
35	579	1.0	41.940	-B600	40-P100/M4	
32	620	2.4	44.955	-B1500	40-P100/M4	
32	624	1.3	45.207	-B820	40-P100/M4	
32	631	1.0	45.739	-B600	40-P100/M4	
31	643	2.3	46.568	-B1500	40-P100/M4	
30	675	4.0	48.912	-B2700	40-P100/M4	
29	691	0.9	50.036	-B600	40-P100/M4	
29	697	1.2	50.543	-B820	40-P100/M4	
28	717	2.1	51.920	-B1500	40-P100/M4	
27	746	3.5	54.082	-B2700	40-P100/M4	
25	788	1.9	57.074	-B1500	40-P100/M4	
25	796	1.0	57.662	-B820	40-P100/M4	
25	806	1.9	58.422	-B1500	40-P100/M4	
25	810	5.3	58.671	-B4300	40-P100/M4	
24	820	3.3	59.393	-B2700	40-P100/M4	
23	885	4.9	64.127	-B4300	40-P100/M4	
23	886	1.7	64.221	-B1500	40-P100/M4	
22	889	3.0	64.452	-B2700	40-P100/M4	
22	890	0.9	64.468	-B820	40-P100/M4	
21	975	0.8	70.636	-B820	40-P100/M4	
20	988	1.5	71.566	-B1500	40-P100/M4	
19	1035	1.5	74.963	-B1500	40-P100/M4	
19	1061	2.6	76.862	-B2700	40-P100/M4	
18	1142	1.3	82.762	-B1500	40-P100/M4	
17	1172	2.3	84.940	-B2700	40-P100/M4	
16	1256	1.2	90.978	-B1500	40-P100/M4	
16	1285	1.2	93.150	-B1500	40-P100/M4	
16	1287	2.1	93.283	-B2700	40-P100/M4	
15	1345	3.2	97.453	-B4300	40-P100/M4	
15	1345	2.0	97.481	-B2700	40-P100/M4	
14	1413	1.1	102.396	-B1500	40-P100/M4	
14	1470	2.9	106.517	-B4300	40-P100/M4	
14	1477	1.8	107.056	-B2700	40-P100/M4	
13	1576	1.0	114.166	-B1500	40-P100/M4	
12	1633	2.6	118.336	-B4300	40-P100/M4	
12	1634	1.7	118.370	-B2700	40-P100/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 2.2 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
12	1732	0.9	125.498	-B1500	40-P100/M4	
11	1785	2.4	129.342	-B4300	40-P100/M4	
11	1794	1.5	129.996	-B2700	40-P100/M4	
9.4	2113	2.0	153.141	-B4300	40-P100/M4	
9.4	2114	1.3	153.185	-B2700	40-P100/M4	
8.6	2310	1.9	167.383	-B4300	40-P100/M4	
8.6	2322	1.2	168.230	-B2700	40-P100/M4	
7.8	2565	1.7	185.857	-B4300	40-P100/M4	
7.8	2566	1.1	185.911	-B2700	40-P100/M4	
7.1	2803	1.5	203.143	-B4300	40-P100/M4	
7.1	2818	1.0	204.170	-B2700	40-P100/M4	
6.2	3242	1.3	234.932	-B4300	40-P100/M4	
6.2	3243	0.8	235.000	-B2700	40-P100/M4	
5.6	3544	1.2	256.781	-B4300	40-P100/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

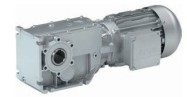
2-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
408	67	2.1	3.565	-B240	40-P100/L4	
297	92	1.6	4.889	-B240	40-P100/L4	
232	117	1.3	6.257	-B240	40-P100/L4	
211	129	1.4	6.883	-B240	40-P100/L4	
186	146	1.3	7.817	-B240	40-P100/L4	
154	177	1.1	9.440	-B240	40-P100/L4	
136	201	1.0	10.720	-B240	40-P100/L4	
120	226	0.9	12.081	-B240	40-P100/L4	
106	257	0.8	13.719	-B240	40-P100/L4	

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
293	93	3.4	4.958	-B820	40-P100/L4	
291	94	3.0	5.002	-B450	40-P100/L4	
287	95	4.0	5.067	-B600	40-P100/L4	
214	127	3.1	6.800	-B820	40-P100/L4	
212	128	2.4	6.860	-B450	40-P100/L4	
209	130	3.1	6.949	-B600	40-P100/L4	
191	143	3.2	7.617	-B600	40-P100/L4	
191	143	3.0	7.618	-B820	40-P100/L4	
171	159	2.9	8.517	-B820	40-P100/L4	
156	174	2.1	9.315	-B450	40-P100/L4	
153	178	2.8	9.520	-B820	40-P100/L4	
141	193	2.0	10.328	-B450	40-P100/L4	
139	196	2.7	10.447	-B820	40-P100/L4	
135	201	2.7	10.741	-B600	40-P100/L4	
124	219	2.6	11.680	-B820	40-P100/L4	
120	227	2.4	12.143	-B820	40-P100/L4	
114	239	1.7	12.775	-B450	40-P100/L4	
111	246	4.1	13.118	-B1500	40-P100/L4	
109	250	2.2	13.369	-B600	40-P100/L4	
109	250	2.5	13.370	-B820	40-P100/L4	
103	265	1.6	14.165	-B450	40-P100/L4	
99	274	2.4	14.626	-B820	40-P100/L4	
99	276	2.2	14.730	-B600	40-P100/L4	
89	306	1.4	16.349	-B450	40-P100/L4	
89	306	2.3	16.352	-B820	40-P100/L4	
81	335	1.3	17.885	-B450	40-P100/L4	
78	348	4.2	18.598	-B1500	40-P100/L4	
78	349	2.1	18.655	-B820	40-P100/L4	

# g500-B bevel geared motors



Technical data

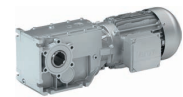
## Selection tables, 4-pole motors

50 Hz:  $P_N = 3.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
77	353	1.7	18.851	-B600	40-P100/L4	
73	371	1.2	19.831	-B450	40-P100/L4	
71	383	3.9	20.444	-B1500	40-P100/L4	
71	386	1.6	20.622	-B600	40-P100/L4	
70	391	2.1	20.857	-B820	40-P100/L4	
64	427	1.1	22.813	-B450	40-P100/L4	
64	428	1.4	22.852	-B600	40-P100/L4	
64	428	1.9	22.853	-B820	40-P100/L4	
64	429	3.5	22.898	-B1500	40-P100/L4	
63	435	4.2	23.206	-B4300	40-P100/L4	
57	474	1.0	25.294	-B450	40-P100/L4	
57	475	1.3	25.347	-B600	40-P100/L4	
57	475	4.2	25.365	-B4300	40-P100/L4	
57	478	1.7	25.550	-B820	40-P100/L4	
56	488	1.2	26.061	-B600	40-P100/L4	
55	493	1.7	26.324	-B820	40-P100/L4	
54	502	4.2	26.814	-B2700	40-P100/L4	
52	523	0.9	27.945	-B450	40-P100/L4	
50	547	2.7	29.206	-B1500	40-P100/L4	
49	551	4.2	29.447	-B2700	40-P100/L4	
49	557	1.1	29.744	-B600	40-P100/L4	
49	557	1.5	29.745	-B820	40-P100/L4	
45	605	1.4	32.291	-B820	40-P100/L4	
45	608	1.0	32.439	-B600	40-P100/L4	
45	610	2.5	32.547	-B1500	40-P100/L4	
41	669	0.9	35.740	-B600	40-P100/L4	
41	670	2.2	35.778	-B1500	40-P100/L4	
40	676	1.2	36.102	-B820	40-P100/L4	
39	693	0.9	36.999	-B600	40-P100/L4	
39	693	1.2	37.000	-B820	40-P100/L4	
38	722	3.0	38.546	-B4300	40-P100/L4	
36	766	2.0	40.895	-B1500	40-P100/L4	
35	774	1.1	41.325	-B820	40-P100/L4	
32	842	1.8	44.955	-B1500	40-P100/L4	
32	847	1.0	45.207	-B820	40-P100/L4	
31	872	1.7	46.568	-B1500	40-P100/L4	
30	916	3.0	48.912	-B2700	40-P100/L4	

# g500-B bevel geared motors



Technical data

## Selection tables, 4-pole motors

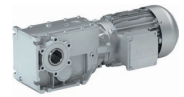
50 Hz:  $P_N = 3.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
29	947	0.9	50.543	-B820	40-P100/L4	
28	972	1.5	51.920	-B1500	40-P100/L4	
27	1013	2.6	54.082	-B2700	40-P100/L4	
26	1069	1.4	57.074	-B1500	40-P100/L4	
25	1094	1.4	58.422	-B1500	40-P100/L4	
25	1099	3.9	58.671	-B4300	40-P100/L4	
25	1112	2.4	59.393	-B2700	40-P100/L4	
23	1201	3.6	64.127	-B4300	40-P100/L4	
23	1203	1.3	64.221	-B1500	40-P100/L4	
23	1207	2.2	64.452	-B2700	40-P100/L4	
20	1340	1.1	71.566	-B1500	40-P100/L4	
19	1404	1.1	74.963	-B1500	40-P100/L4	
19	1439	1.9	76.862	-B2700	40-P100/L4	
18	1550	1.0	82.762	-B1500	40-P100/L4	
17	1591	1.7	84.940	-B2700	40-P100/L4	
16	1704	0.9	90.978	-B1500	40-P100/L4	
16	1744	0.9	93.150	-B1500	40-P100/L4	
16	1747	1.6	93.283	-B2700	40-P100/L4	
15	1825	2.4	97.453	-B4300	40-P100/L4	
15	1826	1.5	97.481	-B2700	40-P100/L4	
14	1995	2.2	106.517	-B4300	40-P100/L4	
14	2005	1.4	107.056	-B2700	40-P100/L4	
12	2216	1.9	118.336	-B4300	40-P100/L4	
12	2217	1.2	118.370	-B2700	40-P100/L4	
11	2422	1.8	129.342	-B4300	40-P100/L4	
11	2435	1.1	129.996	-B2700	40-P100/L4	
9.5	2868	1.5	153.141	-B4300	40-P100/L4	
9.5	2869	0.9	153.185	-B2700	40-P100/L4	
8.7	3135	1.4	167.383	-B4300	40-P100/L4	
8.6	3151	0.9	168.230	-B2700	40-P100/L4	
7.8	3481	1.2	185.857	-B4300	40-P100/L4	
7.2	3804	1.1	203.143	-B4300	40-P100/L4	
6.2	4400	1.0	234.932	-B4300	40-P100/L4	
5.7	4809	0.9	256.781	-B4300	40-P100/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 4.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
289	125	2.5	4.958	-B820	40-P112/M4	
287	126	2.2	5.002	-B450	40-P112/M4	
283	128	2.9	5.067	-B600	40-P112/M4	
211	172	2.3	6.800	-B820	40-P112/M4	
209	173	1.8	6.860	-B450	40-P112/M4	
209	174	4.2	6.866	-B1500	40-P112/M4	
207	176	2.3	6.949	-B600	40-P112/M4	
188	193	2.4	7.617	-B600	40-P112/M4	
188	193	2.2	7.618	-B820	40-P112/M4	
169	215	2.1	8.517	-B820	40-P112/M4	
157	232	4.7	9.156	-B4300	40-P112/M4	
154	236	1.6	9.315	-B450	40-P112/M4	
151	241	4.2	9.516	-B1500	40-P112/M4	
151	241	2.1	9.520	-B820	40-P112/M4	
139	261	1.5	10.328	-B450	40-P112/M4	
137	264	2.0	10.447	-B820	40-P112/M4	
134	272	2.0	10.741	-B600	40-P112/M4	
132	276	4.2	10.902	-B1500	40-P112/M4	
123	295	1.9	11.680	-B820	40-P112/M4	
120	303	4.2	11.985	-B1500	40-P112/M4	
118	307	1.8	12.143	-B820	40-P112/M4	
112	323	1.3	12.775	-B450	40-P112/M4	
109	332	3.4	13.118	-B1500	40-P112/M4	
107	338	1.6	13.369	-B600	40-P112/M4	
107	338	1.8	13.370	-B820	40-P112/M4	
101	358	1.2	14.165	-B450	40-P112/M4	
98	370	1.8	14.626	-B820	40-P112/M4	
97	372	1.6	14.730	-B600	40-P112/M4	
95	382	3.9	15.111	-B1500	40-P112/M4	
88	413	1.1	16.349	-B450	40-P112/M4	
88	413	1.7	16.352	-B820	40-P112/M4	
86	420	3.6	16.611	-B1500	40-P112/M4	
85	428	4.7	16.913	-B4300	40-P112/M4	
80	452	1.0	17.885	-B450	40-P112/M4	
78	467	4.7	18.486	-B4300	40-P112/M4	
77	470	3.2	18.598	-B1500	40-P112/M4	
77	472	1.6	18.655	-B820	40-P112/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

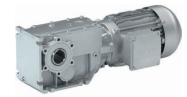
50 Hz:  $P_N = 4.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
76	477	1.3	18.851	-B600	40-P112/M4	
73	494	4.7	19.542	-B2700	40-P112/M4	
72	501	0.9	19.831	-B450	40-P112/M4	
70	517	2.9	20.444	-B1500	40-P112/M4	
70	521	1.2	20.622	-B600	40-P112/M4	
69	527	1.6	20.857	-B820	40-P112/M4	
68	533	4.3	21.065	-B4300	40-P112/M4	
64	563	4.3	22.269	-B2700	40-P112/M4	
63	578	1.0	22.852	-B600	40-P112/M4	
63	578	1.4	22.853	-B820	40-P112/M4	
63	579	2.6	22.898	-B1500	40-P112/M4	
62	587	3.8	23.206	-B4300	40-P112/M4	
60	606	2.5	23.973	-B1500	40-P112/M4	
59	618	4.3	24.456	-B2700	40-P112/M4	
57	641	0.9	25.347	-B600	40-P112/M4	
57	641	3.8	25.365	-B4300	40-P112/M4	
56	646	1.3	25.550	-B820	40-P112/M4	
55	666	1.2	26.324	-B820	40-P112/M4	
55	666	2.3	26.353	-B1500	40-P112/M4	
54	678	3.8	26.814	-B2700	40-P112/M4	
49	738	2.0	29.206	-B1500	40-P112/M4	
49	745	3.6	29.447	-B2700	40-P112/M4	
48	752	1.1	29.745	-B820	40-P112/M4	
46	786	3.2	31.097	-B4300	40-P112/M4	
44	816	1.0	32.291	-B820	40-P112/M4	
44	823	1.8	32.547	-B1500	40-P112/M4	
44	831	3.2	32.873	-B2700	40-P112/M4	
40	905	1.7	35.778	-B1500	40-P112/M4	
40	913	3.0	36.102	-B2700	40-P112/M4	
40	913	0.9	36.102	-B820	40-P112/M4	
39	924	1.6	36.526	-B1500	40-P112/M4	
37	975	2.5	38.546	-B4300	40-P112/M4	
35	1034	1.5	40.895	-B1500	40-P112/M4	
34	1081	4.0	42.760	-B4300	40-P112/M4	
34	1081	2.5	42.772	-B2700	40-P112/M4	
32	1137	1.3	44.955	-B1500	40-P112/M4	
31	1177	1.3	46.568	-B1500	40-P112/M4	



# g500-B bevel geared motors



Technical data

## Selection tables, 4-pole motors

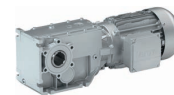
50 Hz:  $P_N = 4.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
31	1182	3.6	46.737	-B4300	40-P112/M4	
31	1188	2.3	46.973	-B2700	40-P112/M4	
29	1237	2.2	48.912	-B2700	40-P112/M4	
28	1313	1.1	51.920	-B1500	40-P112/M4	
27	1347	3.2	53.258	-B4300	40-P112/M4	
27	1367	2.0	54.082	-B2700	40-P112/M4	
25	1443	1.0	57.074	-B1500	40-P112/M4	
25	1477	1.0	58.422	-B1500	40-P112/M4	
25	1483	2.9	58.671	-B4300	40-P112/M4	
24	1502	1.8	59.393	-B2700	40-P112/M4	
22	1621	2.7	64.127	-B4300	40-P112/M4	
22	1624	0.9	64.221	-B1500	40-P112/M4	
22	1630	1.7	64.452	-B2700	40-P112/M4	
20	1809	0.8	71.566	-B1500	40-P112/M4	
20	1819	2.4	71.930	-B4300	40-P112/M4	
20	1819	1.5	71.951	-B2700	40-P112/M4	
19	1943	1.4	76.862	-B2700	40-P112/M4	
18	1988	2.2	78.619	-B4300	40-P112/M4	
17	2148	1.3	84.940	-B2700	40-P112/M4	
15	2359	1.1	93.283	-B2700	40-P112/M4	
15	2464	1.8	97.453	-B4300	40-P112/M4	
15	2465	1.1	97.481	-B2700	40-P112/M4	
14	2693	1.6	106.517	-B4300	40-P112/M4	
13	2707	1.0	107.056	-B2700	40-P112/M4	
12	2992	1.4	118.336	-B4300	40-P112/M4	
12	2993	0.9	118.370	-B2700	40-P112/M4	
11	3270	1.3	129.342	-B4300	40-P112/M4	
11	3287	0.8	129.996	-B2700	40-P112/M4	
9.4	3872	1.1	153.141	-B4300	40-P112/M4	
8.6	4232	1.0	167.383	-B4300	40-P112/M4	
7.7	4699	0.9	185.857	-B4300	40-P112/M4	
7.1	5136	0.8	203.143	-B4300	40-P112/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

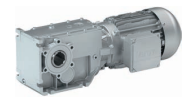
50 Hz:  $P_N = 5.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
296	169	1.9	4.958	-B820	40-P132/M4	
293	170	1.6	5.002	-B450	40-P132/M4	
289	173	2.2	5.067	-B600	40-P132/M4	
215	232	1.7	6.800	-B820	40-P132/M4	
214	234	1.3	6.860	-B450	40-P132/M4	
213	234	3.6	6.866	-B1500	40-P132/M4	
211	237	1.7	6.949	-B600	40-P132/M4	
192	259	1.8	7.617	-B600	40-P132/M4	
192	259	1.6	7.618	-B820	40-P132/M4	
172	290	1.6	8.517	-B820	40-P132/M4	
167	299	5.1	8.793	-B2700	40-P132/M4	
157	317	1.2	9.315	-B450	40-P132/M4	
154	324	3.1	9.516	-B1500	40-P132/M4	
154	324	1.5	9.520	-B820	40-P132/M4	
142	352	1.1	10.328	-B450	40-P132/M4	
140	356	1.5	10.447	-B820	40-P132/M4	
136	366	1.5	10.741	-B600	40-P132/M4	
134	371	3.6	10.902	-B1500	40-P132/M4	
125	398	1.4	11.680	-B820	40-P132/M4	
125	399	5.6	11.713	-B2700	40-P132/M4	
122	408	3.6	11.985	-B1500	40-P132/M4	
121	414	1.3	12.143	-B820	40-P132/M4	
115	435	0.9	12.775	-B450	40-P132/M4	
114	438	5.2	12.863	-B2700	40-P132/M4	
112	447	2.5	13.118	-B1500	40-P132/M4	
110	455	1.2	13.369	-B600	40-P132/M4	
110	455	1.4	13.370	-B820	40-P132/M4	
103	482	0.9	14.165	-B450	40-P132/M4	
100	498	1.3	14.626	-B820	40-P132/M4	
100	502	1.2	14.730	-B600	40-P132/M4	
98	507	4.7	14.888	-B2700	40-P132/M4	
97	515	2.9	15.111	-B1500	40-P132/M4	
90	557	4.4	16.351	-B2700	40-P132/M4	
90	557	1.3	16.352	-B820	40-P132/M4	
88	566	2.7	16.611	-B1500	40-P132/M4	
79	633	2.4	18.598	-B1500	40-P132/M4	
79	635	1.2	18.655	-B820	40-P132/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

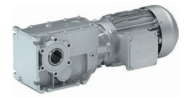
50 Hz:  $P_N = 5.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
78	642	0.9	18.851	-B600	40-P132/M4	
75	665	3.9	19.542	-B2700	40-P132/M4	
72	696	2.2	20.444	-B1500	40-P132/M4	
71	702	0.9	20.622	-B600	40-P132/M4	
70	710	1.2	20.857	-B820	40-P132/M4	
70	717	6.0	21.065	-B4300	40-P132/M4	
66	758	3.5	22.269	-B2700	40-P132/M4	
64	778	1.1	22.853	-B820	40-P132/M4	
64	780	1.9	22.898	-B1500	40-P132/M4	
63	790	5.4	23.206	-B4300	40-P132/M4	
61	816	1.8	23.973	-B1500	40-P132/M4	
60	833	3.2	24.456	-B2700	40-P132/M4	
58	864	5.0	25.365	-B4300	40-P132/M4	
57	870	0.9	25.550	-B820	40-P132/M4	
56	897	1.7	26.353	-B1500	40-P132/M4	
55	913	3.0	26.814	-B2700	40-P132/M4	
52	954	4.5	28.013	-B4300	40-P132/M4	
50	995	1.5	29.206	-B1500	40-P132/M4	
50	1003	2.7	29.447	-B2700	40-P132/M4	
47	1059	4.1	31.097	-B4300	40-P132/M4	
45	1108	1.4	32.547	-B1500	40-P132/M4	
45	1119	2.4	32.873	-B2700	40-P132/M4	
41	1213	3.6	35.607	-B4300	40-P132/M4	
41	1218	1.2	35.778	-B1500	40-P132/M4	
41	1229	2.2	36.102	-B2700	40-P132/M4	
40	1244	1.2	36.526	-B1500	40-P132/M4	
38	1313	3.3	38.546	-B4300	40-P132/M4	
36	1393	1.1	40.895	-B1500	40-P132/M4	
34	1456	3.0	42.760	-B4300	40-P132/M4	
34	1457	1.9	42.772	-B2700	40-P132/M4	
33	1531	1.0	44.955	-B1500	40-P132/M4	
32	1586	1.0	46.568	-B1500	40-P132/M4	
31	1592	2.7	46.737	-B4300	40-P132/M4	
31	1600	1.7	46.973	-B2700	40-P132/M4	
30	1666	1.6	48.912	-B2700	40-P132/M4	
28	1814	2.4	53.258	-B4300	40-P132/M4	
27	1842	1.5	54.082	-B2700	40-P132/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

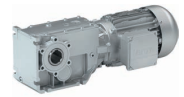
50 Hz:  $P_N = 5.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
25	1998	2.2	58.671	-B4300	40-P132/M4	
25	2023	1.3	59.393	-B2700	40-P132/M4	
23	2184	2.0	64.127	-B4300	40-P132/M4	
23	2195	1.2	64.452	-B2700	40-P132/M4	
20	2449	1.8	71.930	-B4300	40-P132/M4	
20	2450	1.1	71.951	-B2700	40-P132/M4	
19	2677	1.6	78.619	-B4300	40-P132/M4	
15	3319	1.3	97.453	-B4300	40-P132/M4	
15	3320	0.8	97.481	-B2700	40-P132/M4	
14	3627	1.2	106.517	-B4300	40-P132/M4	
12	4030	1.1	118.336	-B4300	40-P132/M4	
11	4404	1.0	129.342	-B4300	40-P132/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

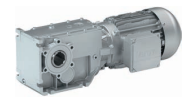
50 Hz:  $P_N = 7.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
295	231	1.4	4.958	-B820	40-P132/L4	
292	233	1.2	5.002	-B450	40-P132/L4	
288	236	1.6	5.067	-B600	40-P132/L4	
266	256	5.5	5.488	-B4300	40-P132/L4	
215	317	1.2	6.800	-B820	40-P132/L4	
213	320	1.0	6.860	-B450	40-P132/L4	
213	320	2.6	6.866	-B1500	40-P132/L4	
211	322	4.5	6.918	-B2700	40-P132/L4	
210	324	1.2	6.949	-B600	40-P132/L4	
209	325	5.1	6.976	-B4300	40-P132/L4	
192	355	1.3	7.617	-B600	40-P132/L4	
192	355	1.2	7.618	-B820	40-P132/L4	
171	397	1.2	8.517	-B820	40-P132/L4	
166	410	3.7	8.793	-B2700	40-P132/L4	
160	427	4.8	9.156	-B4300	40-P132/L4	
157	434	0.9	9.315	-B450	40-P132/L4	
153	443	2.3	9.516	-B1500	40-P132/L4	
153	444	1.1	9.520	-B820	40-P132/L4	
144	472	5.5	10.137	-B4300	40-P132/L4	
140	487	1.1	10.447	-B820	40-P132/L4	
136	500	1.1	10.741	-B600	40-P132/L4	
134	508	2.6	10.902	-B1500	40-P132/L4	
132	516	5.5	11.080	-B4300	40-P132/L4	
125	544	1.1	11.680	-B820	40-P132/L4	
125	546	4.1	11.713	-B2700	40-P132/L4	
122	558	2.6	11.985	-B1500	40-P132/L4	
120	566	1.0	12.143	-B820	40-P132/L4	
114	599	3.8	12.863	-B2700	40-P132/L4	
113	600	5.1	12.885	-B4300	40-P132/L4	
111	611	1.8	13.118	-B1500	40-P132/L4	
109	623	0.9	13.369	-B600	40-P132/L4	
109	623	1.0	13.370	-B820	40-P132/L4	
104	656	5.1	14.084	-B4300	40-P132/L4	
100	681	1.0	14.626	-B820	40-P132/L4	
99	686	0.9	14.730	-B600	40-P132/L4	
98	694	3.4	14.888	-B2700	40-P132/L4	
97	704	2.1	15.111	-B1500	40-P132/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

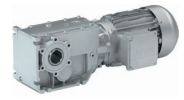
50 Hz:  $P_N = 7.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
89	762	3.2	16.351	-B2700	40-P132/L4	
89	762	0.9	16.352	-B820	40-P132/L4	
88	774	1.9	16.611	-B1500	40-P132/L4	
86	788	4.8	16.913	-B4300	40-P132/L4	
79	861	4.8	18.486	-B4300	40-P132/L4	
79	867	1.7	18.598	-B1500	40-P132/L4	
78	869	0.9	18.655	-B820	40-P132/L4	
75	911	2.8	19.542	-B2700	40-P132/L4	
71	953	1.6	20.444	-B1500	40-P132/L4	
70	972	0.8	20.857	-B820	40-P132/L4	
69	982	4.4	21.065	-B4300	40-P132/L4	
66	1038	2.6	22.269	-B2700	40-P132/L4	
64	1067	1.4	22.898	-B1500	40-P132/L4	
63	1081	4.0	23.206	-B4300	40-P132/L4	
60	1140	2.4	24.456	-B2700	40-P132/L4	
58	1182	3.6	25.365	-B4300	40-P132/L4	
54	1249	2.2	26.814	-B2700	40-P132/L4	
52	1305	3.3	28.013	-B4300	40-P132/L4	
50	1361	1.1	29.206	-B1500	40-P132/L4	
50	1372	2.0	29.447	-B2700	40-P132/L4	
47	1449	3.0	31.097	-B4300	40-P132/L4	
45	1517	1.0	32.547	-B1500	40-P132/L4	
44	1532	1.8	32.873	-B2700	40-P132/L4	
41	1659	2.6	35.607	-B4300	40-P132/L4	
41	1667	0.9	35.778	-B1500	40-P132/L4	
40	1682	1.6	36.102	-B2700	40-P132/L4	
38	1796	2.4	38.546	-B4300	40-P132/L4	
34	1992	2.2	42.760	-B4300	40-P132/L4	
34	1993	1.4	42.772	-B2700	40-P132/L4	
31	2178	2.0	46.737	-B4300	40-P132/L4	
30	2279	1.2	48.912	-B2700	40-P132/L4	
27	2482	1.7	53.258	-B4300	40-P132/L4	
27	2520	1.1	54.082	-B2700	40-P132/L4	
25	2734	1.6	58.671	-B4300	40-P132/L4	
25	2767	1.0	59.393	-B2700	40-P132/L4	
23	2988	1.4	64.127	-B4300	40-P132/L4	
20	3352	1.3	71.930	-B4300	40-P132/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

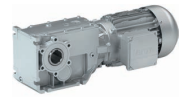
50 Hz:  $P_N = 7.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
20	3353	0.8	71.951	-B2700	40-P132/L4	
19	3663	1.2	78.619	-B4300	40-P132/L4	
15	4541	1.0	97.453	-B4300	40-P132/L4	
14	4963	0.9	106.517	-B4300	40-P132/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

50 Hz:  $P_N = 11.0$  kW

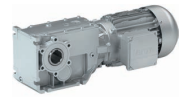
3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
268	372	5.8	5.488	-B4300	40-P160/M4	
214	466	1.8	6.866	-B1500	40-P160/M4	
213	470	3.1	6.918	-B2700	40-P160/M4	
211	473	5.1	6.976	-B4300	40-P160/M4	
167	597	2.6	8.793	-B2700	40-P160/M4	
161	621	4.3	9.156	-B4300	40-P160/M4	
155	646	1.6	9.516	-B1500	40-P160/M4	
145	688	5.7	10.137	-B4300	40-P160/M4	
135	740	1.8	10.902	-B1500	40-P160/M4	
133	752	5.7	11.080	-B4300	40-P160/M4	
126	795	2.8	11.713	-B2700	40-P160/M4	
123	813	1.8	11.985	-B1500	40-P160/M4	
114	873	2.6	12.863	-B2700	40-P160/M4	
114	875	4.9	12.885	-B4300	40-P160/M4	
112	890	1.3	13.118	-B1500	40-P160/M4	
104	956	4.5	14.084	-B4300	40-P160/M4	
99	1011	2.4	14.888	-B2700	40-P160/M4	
97	1026	1.5	15.111	-B1500	40-P160/M4	
90	1110	2.2	16.351	-B2700	40-P160/M4	
89	1127	1.3	16.611	-B1500	40-P160/M4	
87	1148	3.8	16.913	-B4300	40-P160/M4	
80	1255	3.4	18.486	-B4300	40-P160/M4	
79	1262	1.2	18.598	-B1500	40-P160/M4	
75	1326	1.9	19.542	-B2700	40-P160/M4	
72	1388	1.1	20.444	-B1500	40-P160/M4	
70	1430	3.0	21.065	-B4300	40-P160/M4	
66	1511	1.8	22.269	-B2700	40-P160/M4	
64	1554	1.0	22.898	-B1500	40-P160/M4	
63	1575	2.7	23.206	-B4300	40-P160/M4	
60	1660	1.6	24.456	-B2700	40-P160/M4	
58	1722	2.5	25.365	-B4300	40-P160/M4	
55	1820	1.5	26.814	-B2700	40-P160/M4	
53	1901	2.3	28.013	-B4300	40-P160/M4	
50	1999	1.4	29.447	-B2700	40-P160/M4	
47	2111	2.0	31.097	-B4300	40-P160/M4	
45	2231	1.2	32.873	-B2700	40-P160/M4	
41	2417	1.8	35.607	-B4300	40-P160/M4	



# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

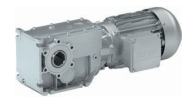
50 Hz:  $P_N = 11.0$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
41	2450	1.1	36.102	-B2700	40-P160/M4	
34	2902	1.5	42.760	-B4300	40-P160/M4	
32	3172	1.4	46.737	-B4300	40-P160/M4	
28	3615	1.2	53.258	-B4300	40-P160/M4	
25	3982	1.1	58.671	-B4300	40-P160/M4	
23	4353	1.0	64.127	-B4300	40-P160/M4	
20	4882	0.9	71.930	-B4300	40-P160/M4	
19	5336	0.8	78.619	-B4300	40-P160/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

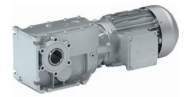
50 Hz:  $P_N = 15.0$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
268	508	4.3	5.488	-B4300	40-P160/L4	
213	640	2.3	6.918	-B2700	40-P160/L4	
211	646	3.7	6.976	-B4300	40-P160/L4	
167	814	1.9	8.793	-B2700	40-P160/L4	
161	847	3.2	9.156	-B4300	40-P160/L4	
155	881	1.1	9.516	-B1500	40-P160/L4	
145	938	4.2	10.137	-B4300	40-P160/L4	
133	1026	4.1	11.080	-B4300	40-P160/L4	
114	1193	3.6	12.885	-B4300	40-P160/L4	
112	1214	0.9	13.118	-B1500	40-P160/L4	
104	1304	3.3	14.084	-B4300	40-P160/L4	
99	1378	1.7	14.888	-B2700	40-P160/L4	
87	1565	2.8	16.913	-B4300	40-P160/L4	
80	1711	2.5	18.486	-B4300	40-P160/L4	
75	1809	1.4	19.542	-B2700	40-P160/L4	
70	1950	2.2	21.065	-B4300	40-P160/L4	
66	2061	1.3	22.269	-B2700	40-P160/L4	
63	2148	2.0	23.206	-B4300	40-P160/L4	
60	2264	1.2	24.456	-B2700	40-P160/L4	
58	2348	1.8	25.365	-B4300	40-P160/L4	
55	2482	1.1	26.814	-B2700	40-P160/L4	
50	2726	1.0	29.447	-B2700	40-P160/L4	
47	2878	1.5	31.097	-B4300	40-P160/L4	
45	3043	0.9	32.873	-B2700	40-P160/L4	
41	3341	0.8	36.102	-B2700	40-P160/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

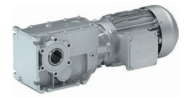
50 Hz:  $P_N = 18.5 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
266	631	3.4	5.488	-B4300	40-P180/M4	
209	802	3.0	6.976	-B4300	40-P180/M4	
160	1052	2.6	9.156	-B4300	40-P180/M4	
144	1165	3.4	10.137	-B4300	40-P180/M4	
132	1273	3.3	11.080	-B4300	40-P180/M4	
113	1481	2.9	12.885	-B4300	40-P180/M4	
104	1619	2.7	14.084	-B4300	40-P180/M4	
86	1944	2.2	16.913	-B4300	40-P180/M4	
79	2125	2.0	18.486	-B4300	40-P180/M4	
69	2421	1.8	21.065	-B4300	40-P180/M4	
63	2667	1.6	23.206	-B4300	40-P180/M4	
58	2915	1.5	25.365	-B4300	40-P180/M4	
47	3574	1.2	31.097	-B4300	40-P180/M4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

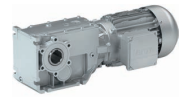
50 Hz:  $P_N = 22.0$  kW

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
267	748	2.9	5.488	-B4300	40-P180/L4	
210	950	2.5	6.976	-B4300	40-P180/L4	
160	1247	2.2	9.156	-B4300	40-P180/L4	
145	1381	2.9	10.137	-B4300	40-P180/L4	
132	1509	2.8	11.080	-B4300	40-P180/L4	
114	1755	2.5	12.885	-B4300	40-P180/L4	
104	1918	2.2	14.084	-B4300	40-P180/L4	
87	2304	1.9	16.913	-B4300	40-P180/L4	
79	2518	1.7	18.486	-B4300	40-P180/L4	
70	2869	1.5	21.065	-B4300	40-P180/L4	
63	3161	1.4	23.206	-B4300	40-P180/L4	
58	3455	1.2	25.365	-B4300	40-P180/L4	
47	4236	1.0	31.097	-B4300	40-P180/L4	

# g500-B bevel geared motors

Technical data



## Selection tables, 4-pole motors

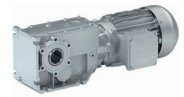
50 Hz:  $P_N = 30.0 \text{ kW}$

3-stage gearboxes

Mains operation 400 V, 50 Hz			i	Product		
$n_2$ [r/min]	$M_2$ [Nm]	c		g500	m2□□	
269	1012	2.1	5.488	-B4300	40-P180/V4	
211	1287	1.9	6.976	-B4300	40-P180/V4	
161	1689	1.6	9.156	-B4300	40-P180/V4	
146	1870	2.1	10.137	-B4300	40-P180/V4	
115	2377	1.8	12.885	-B4300	40-P180/V4	
87	3120	1.4	16.913	-B4300	40-P180/V4	
70	3886	1.1	21.065	-B4300	40-P180/V4	
64	4281	1.0	23.206	-B4300	40-P180/V4	

# g500-B bevel geared motors

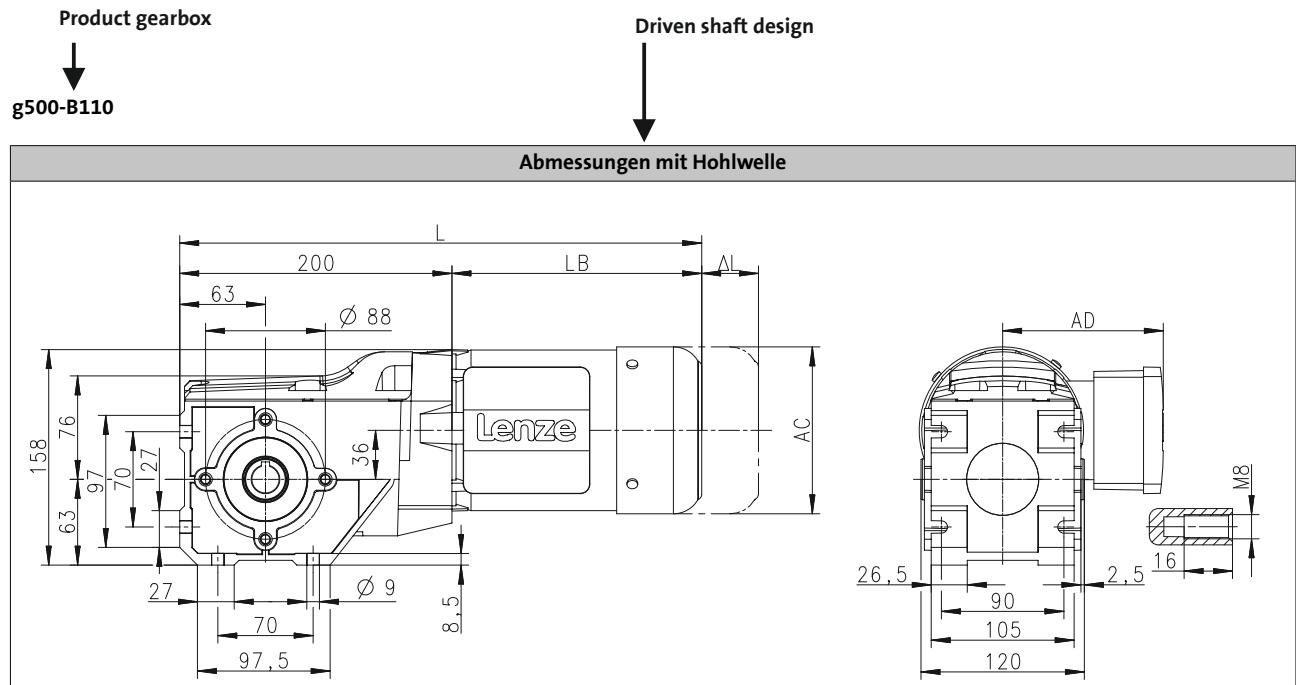
Technical data



## Dimensions, notes

### Notes on the dimensions

The following legend shows the layout of the dimension sheets.



### Product Motor

			MD□MA□□				
			063-12	063-32	063-42	071-32	071-42
Gesamtlänge	L	[mm]	←	383			403
Länge Motor	LB	[mm]	←	183			203
Länge Motoranbauten	ΔL	[mm]	←	170			165
Motordurchmesser	AC	[mm]	←	123			139
Abstand Motor/Anschluss	AD	[mm]	←	100			109

Distance of motor centre to the end of terminal box

Total length of the drive without built-on accessories

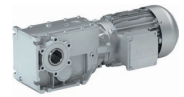
Motor diameter

Motor length without built-on accessories

Additional length of the built-on accessories (longest version)

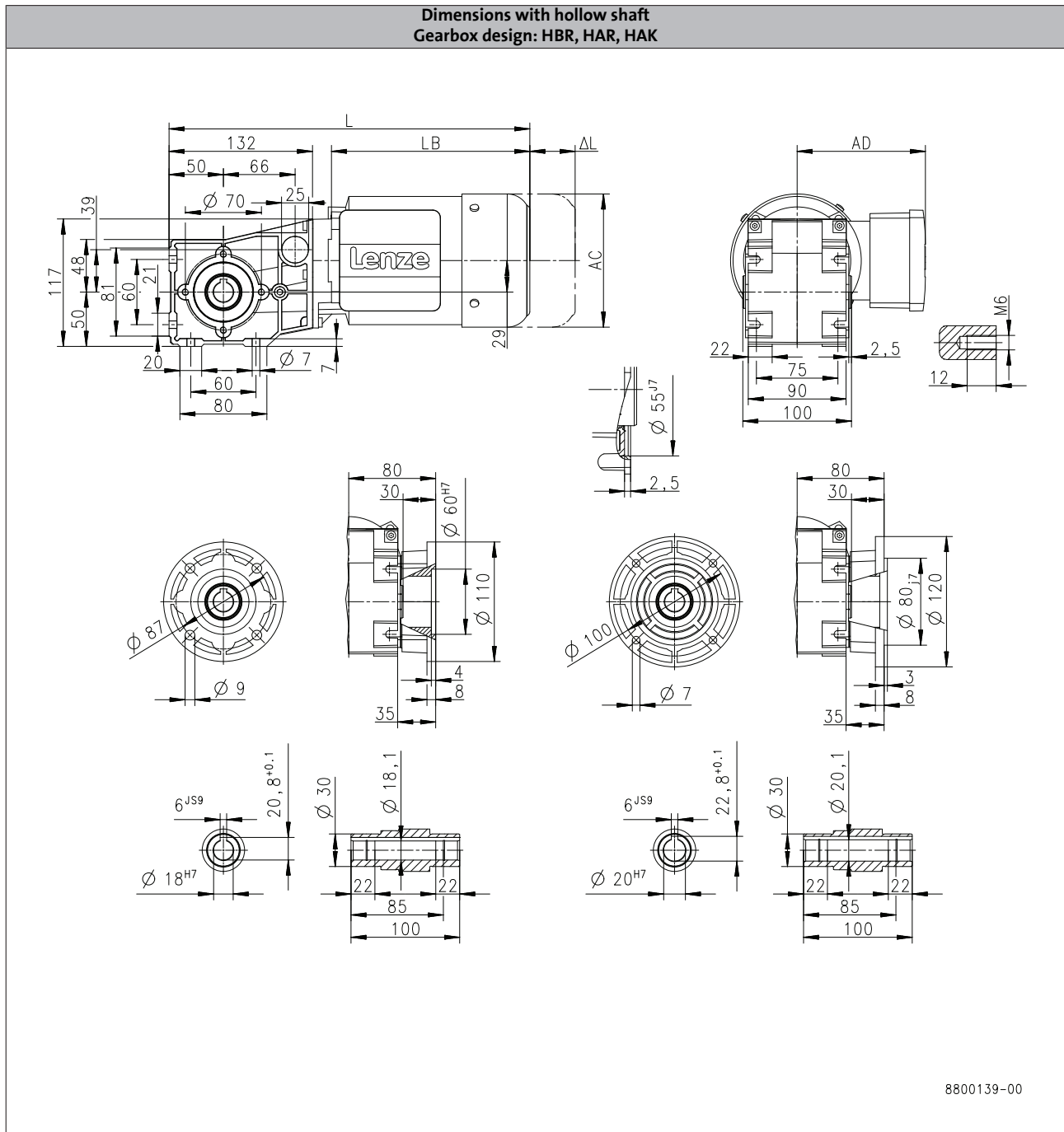
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B45

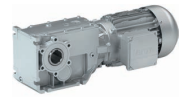


		MD□MA□□							
			063-02	063-12	063-22	063-32	063-42	071-32	071-42
Total length	L	[mm]	305	332	305	332		352	
Motor length	LB	[mm]	156	183	156	183		203	
Length of motor options	Δ L	[mm]	71.0	40.0	71.0	40.0		52.0	
Motor diameter	AC	[mm]				123			139
Distance motor/connection	AD	[mm]				107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

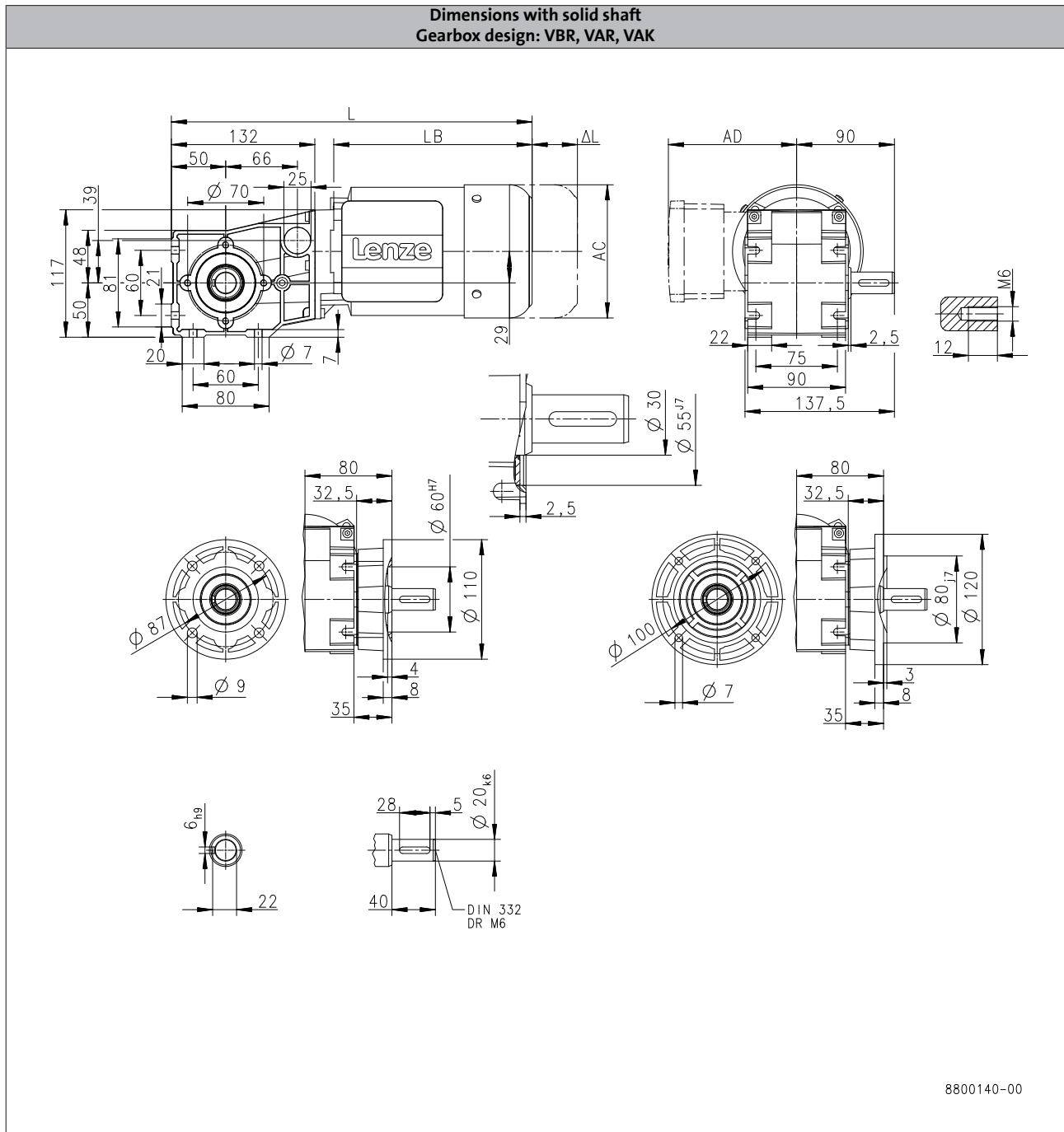
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B45



6.5

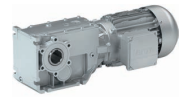
			MD□MA□□						
			063-02	063-12	063-22	063-32	063-42	071-32	071-42
Total length	L	[mm]	305	332	305	332		352	
Motor length	LB	[mm]	156	183	156	183		203	
Length of motor options	Δ L	[mm]	71.0	40.0	71.0	40.0		52.0	
Motor diameter	AC	[mm]			123			139	
Distance motor/connection	AD	[mm]			107			118	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



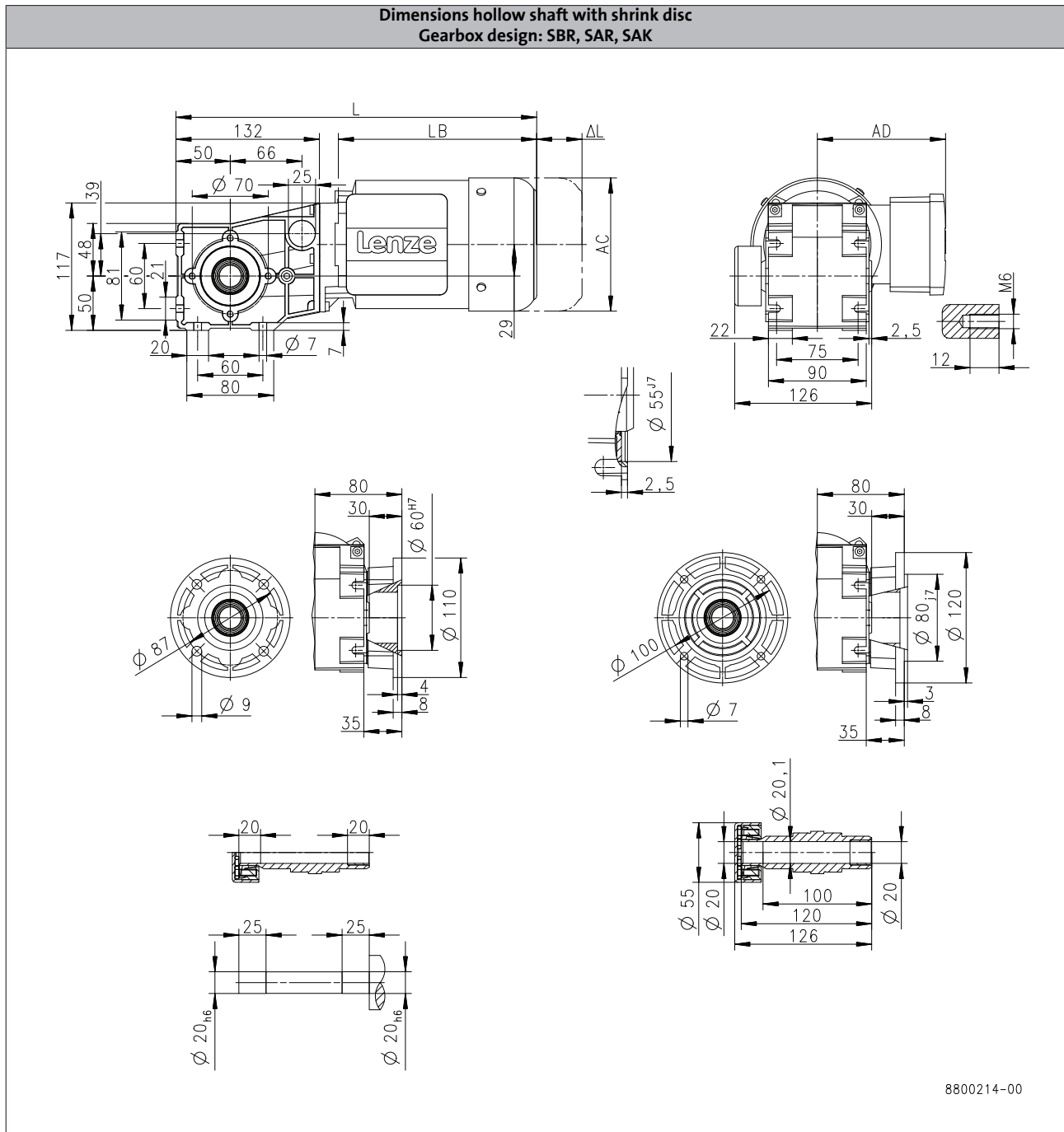
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B45



			MD□MA□□							
			063-02	063-12	063-22	063-32	063-42	071-32	071-42	
Total length	L	[mm]	305	332	305	332		352		
Motor length	LB	[mm]	156	183	156	183		203		
Length of motor options	Δ L	[mm]	71.0	40.0	71.0	40.0		52.0		
Motor diameter	AC	[mm]							139	
Distance motor/connection	AD	[mm]							118	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

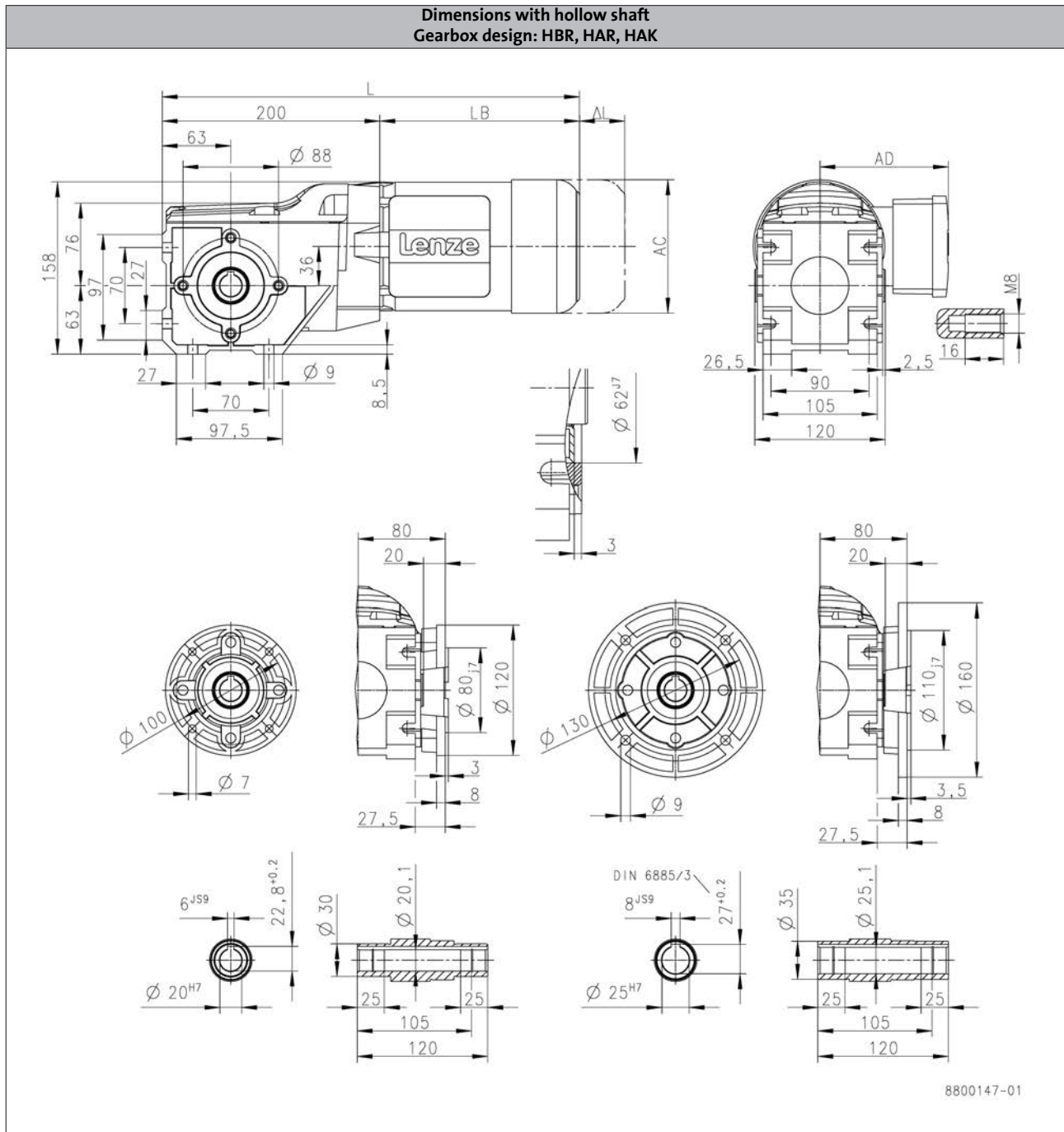
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B110

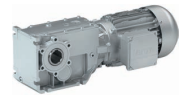


		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		383			403
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

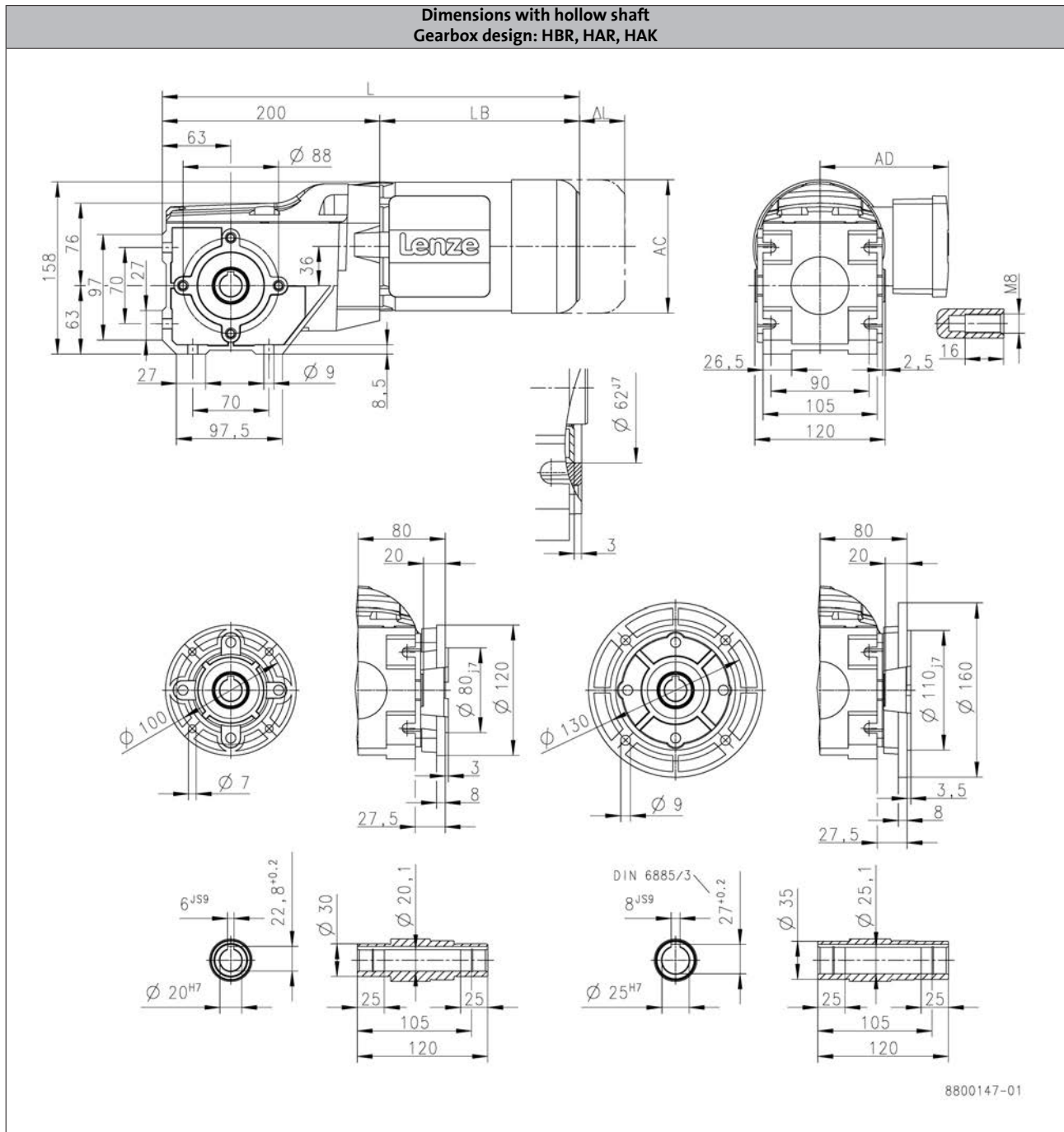
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B110

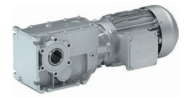


			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	425		494
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

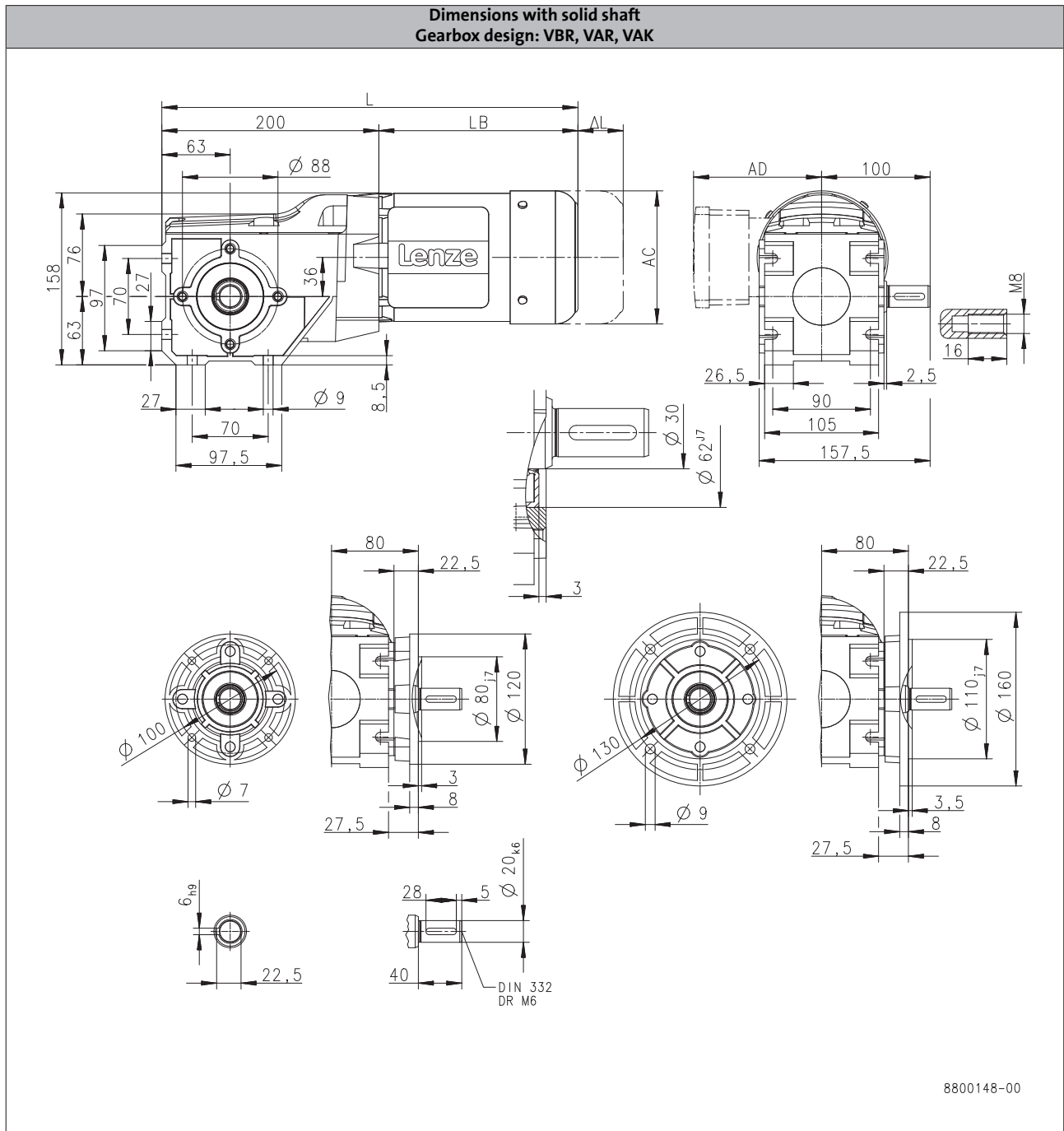
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B110



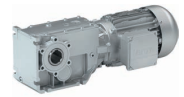
6.5

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		383			403
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

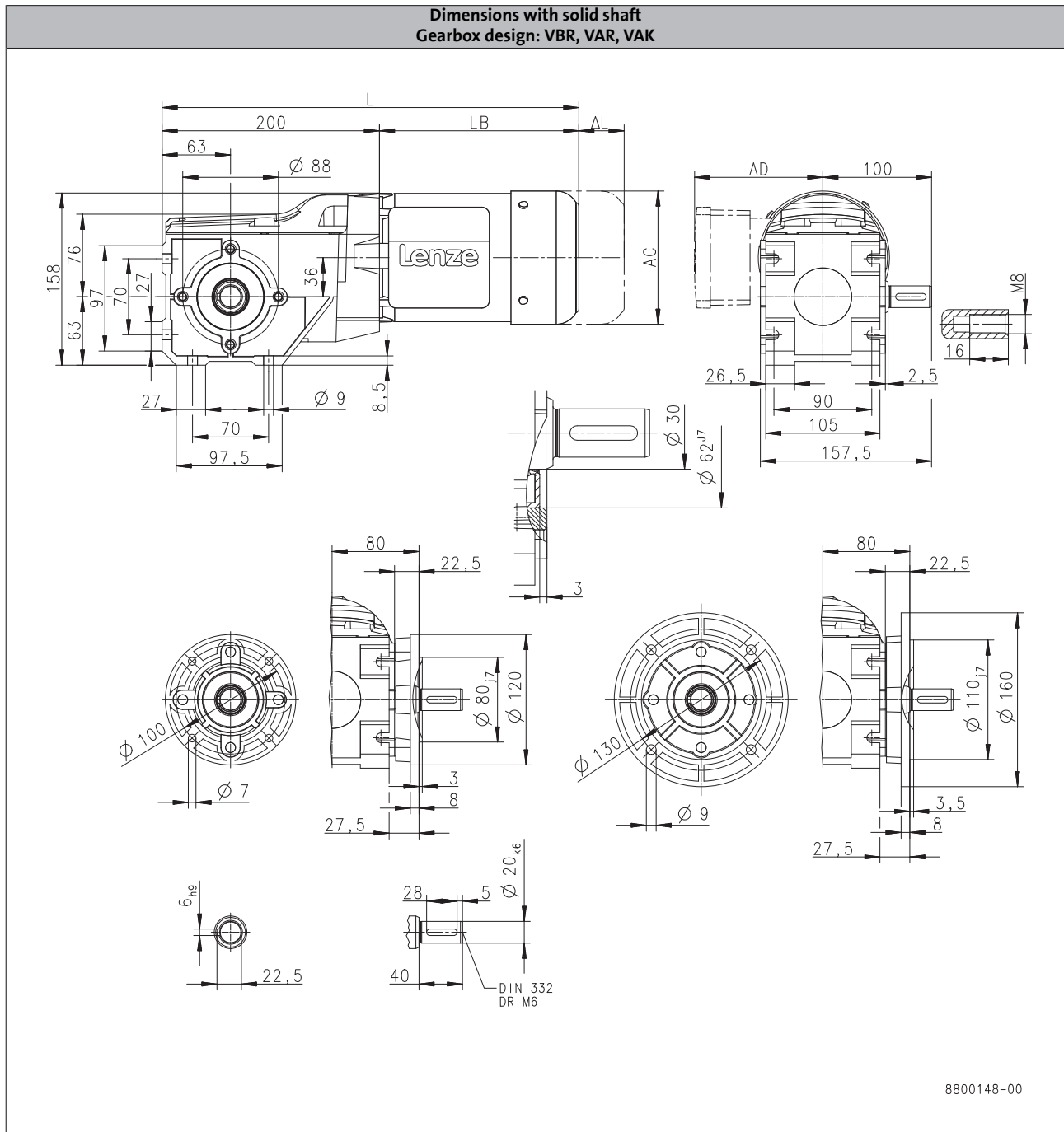
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B110

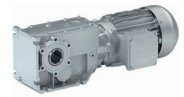


			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	425	494	
Motor length	LB	[mm]	225	294	
Length of motor options	Δ L	[mm]	107	92.0	
Motor diameter	AC	[mm]	158	172	
Distance motor/connection	AD	[mm]	148	155	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

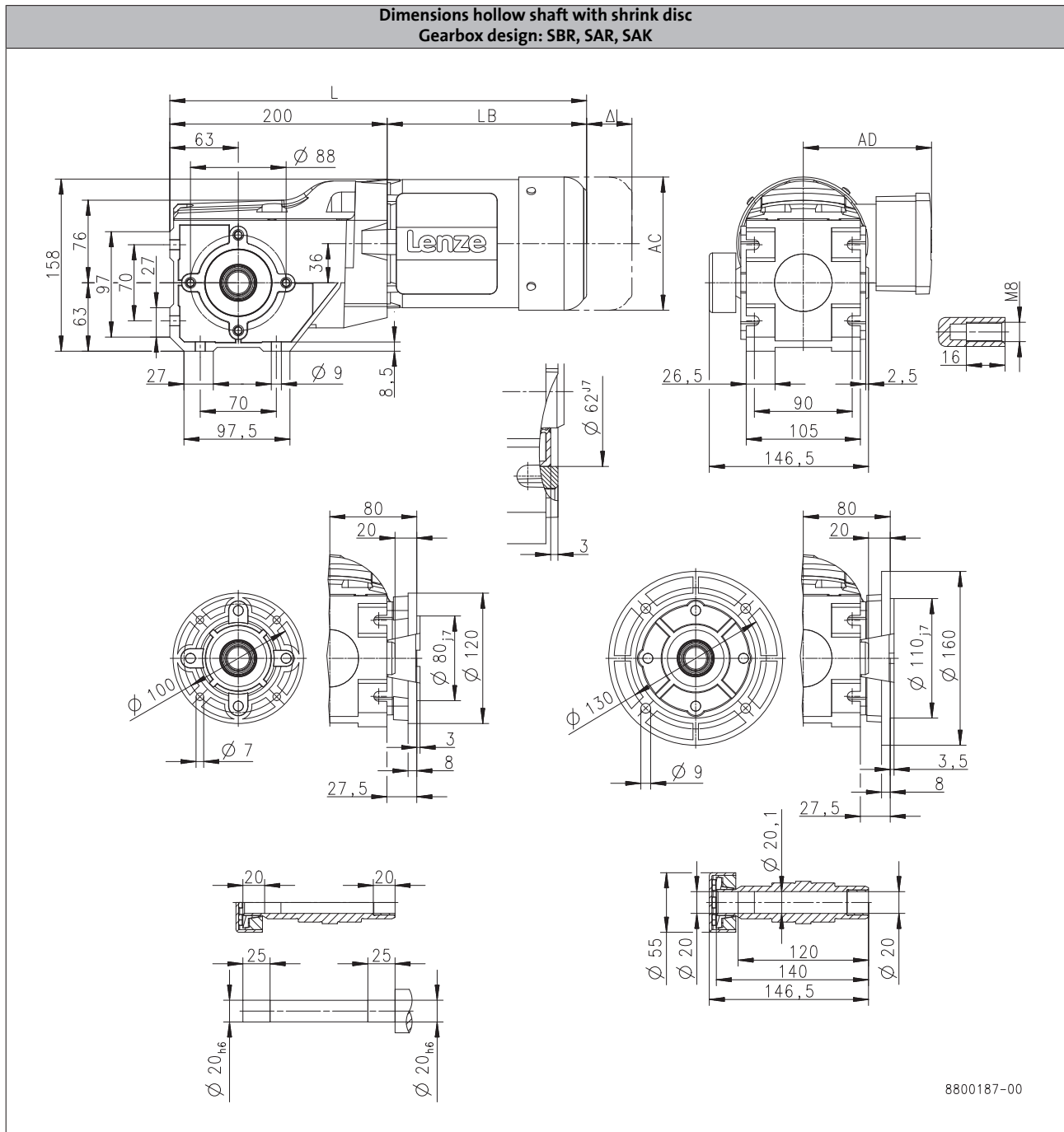
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B110

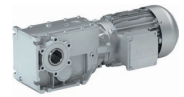


		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		383			403
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

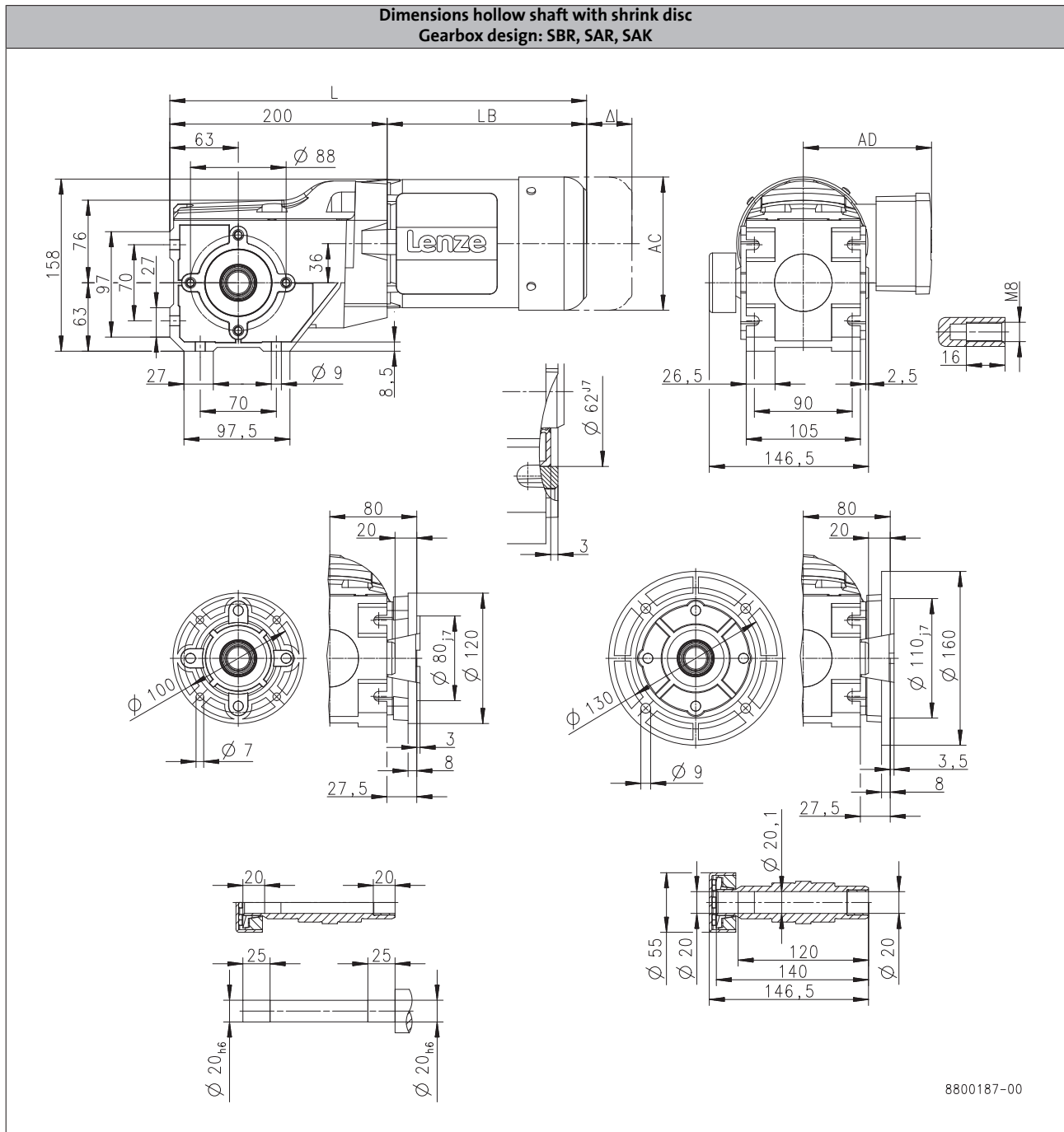
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B110

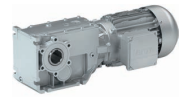


			m240		
			-P80/M4	-P90/M4	-P90/L4
Total length	L	[mm]	425		494
Motor length	LB	[mm]	225		294
Length of motor options	Δ L	[mm]	107		92.0
Motor diameter	AC	[mm]	158		172
Distance motor/connection	AD	[mm]	148		155

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

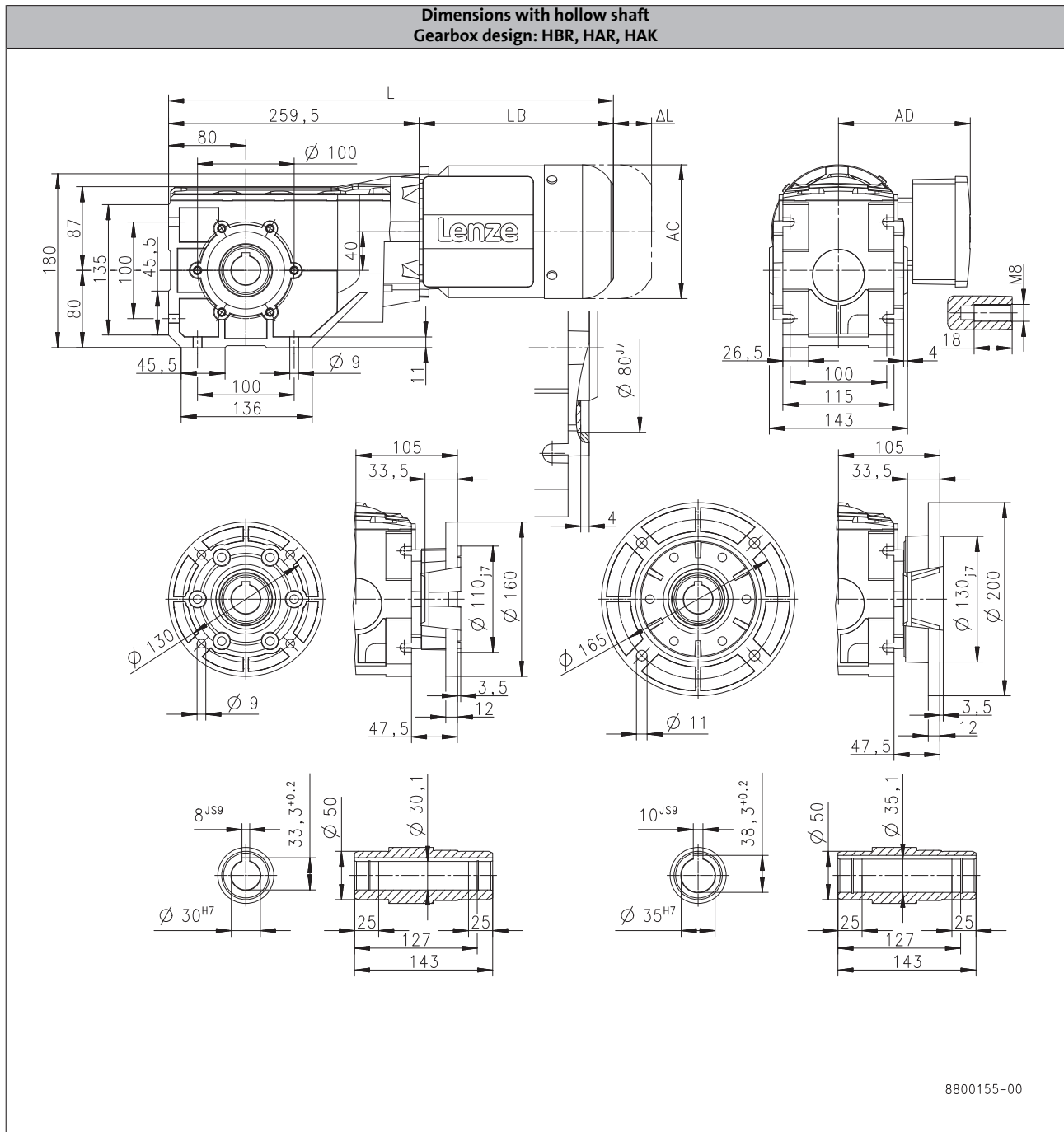
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B240



6.5

8800155-00

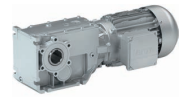
		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		443			463
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



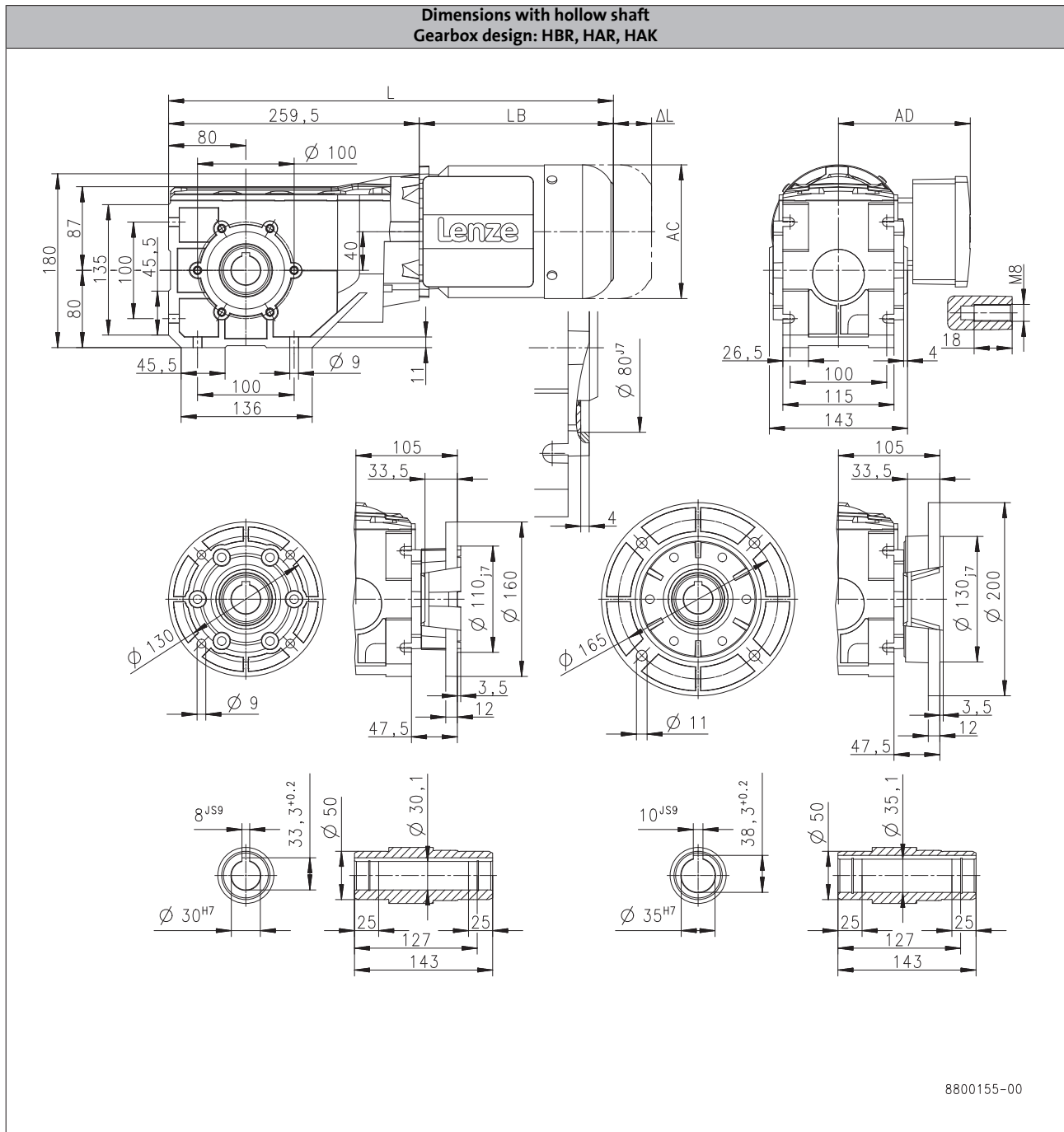
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B240

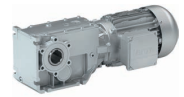


			m240				
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L	[mm]	485	554		616	
Motor length	LB	[mm]	225	294		356	
Length of motor options	Δ L	[mm]	107	92.0		103	
Motor diameter	AC	[mm]	158	172		192	
Distance motor/connection	AD	[mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

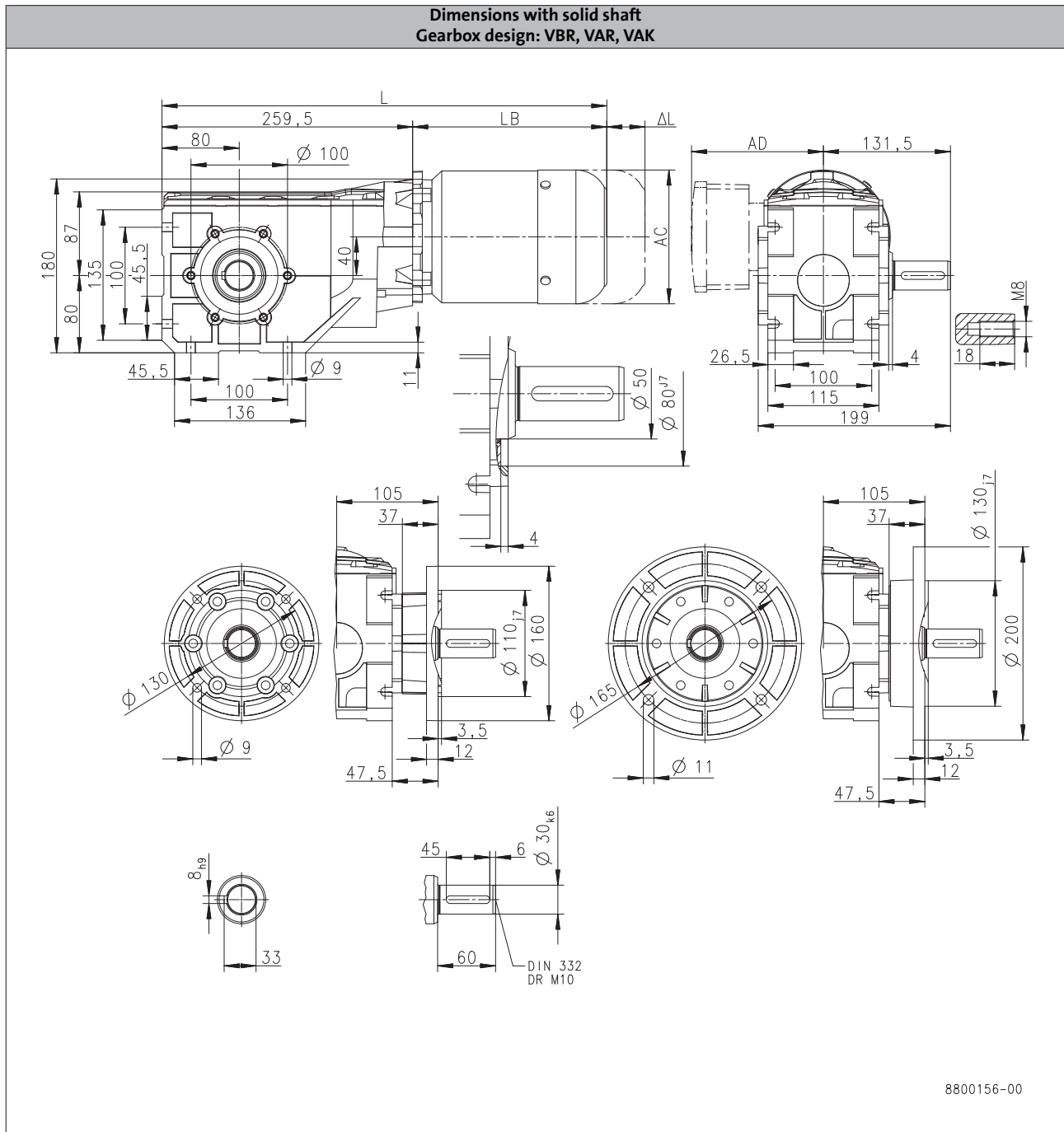
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B240



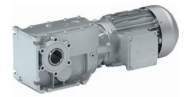
6.5

		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		443			463
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

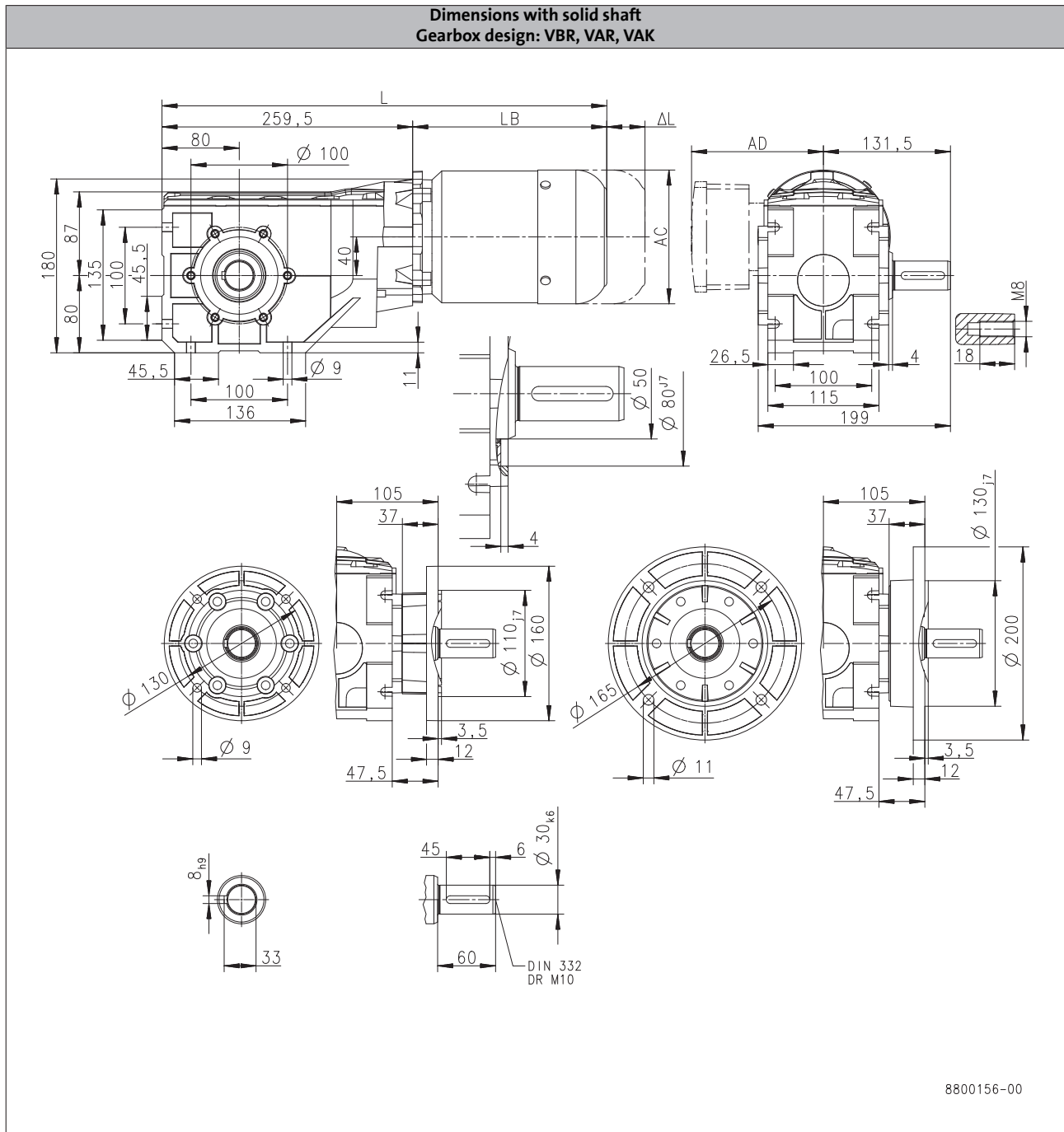
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B240

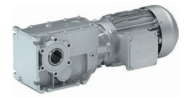


		m240				
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	485	554		616	
Motor length	LB [mm]	225	294		356	
Length of motor options	Δ L [mm]	107	92.0		103	
Motor diameter	AC [mm]	158	172		192	
Distance motor/connection	AD [mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

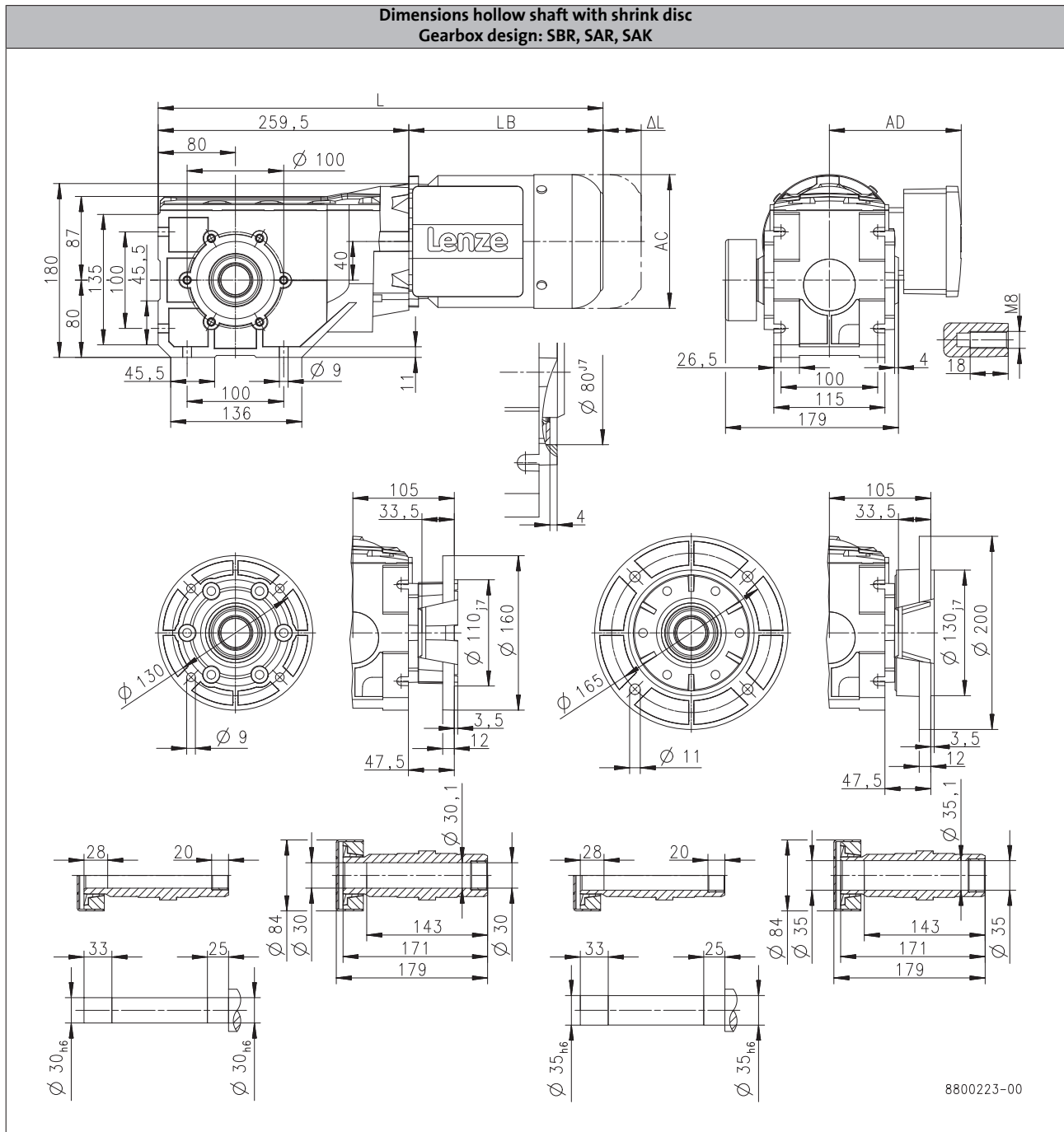
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B240

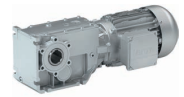


		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		443			463
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

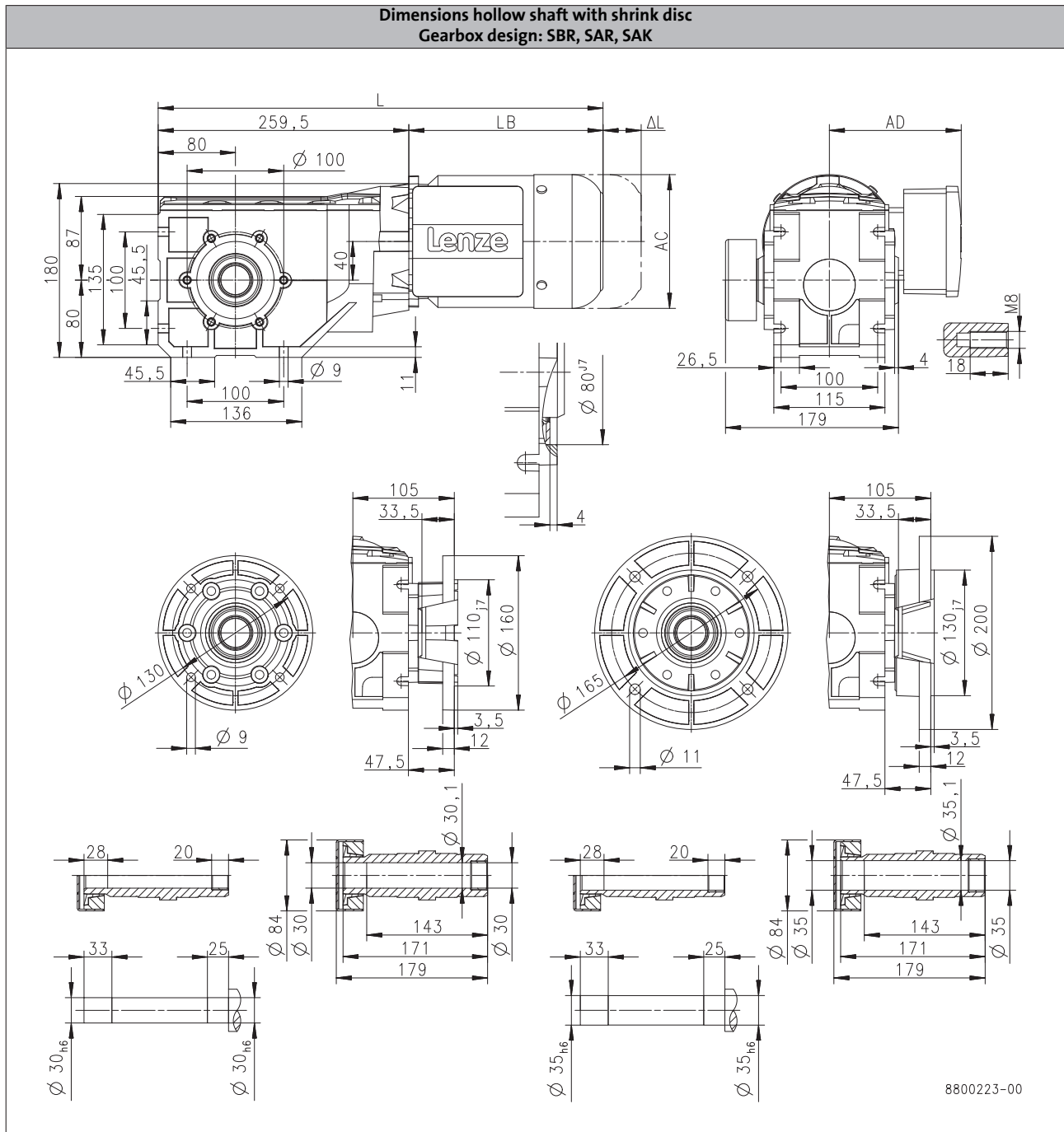
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B240

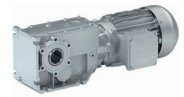


		m240				
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	485	554		616	
Motor length	LB [mm]	225	294		356	
Length of motor options	Δ L [mm]	107	92.0		103	
Motor diameter	AC [mm]	158	172		192	
Distance motor/connection	AD [mm]	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

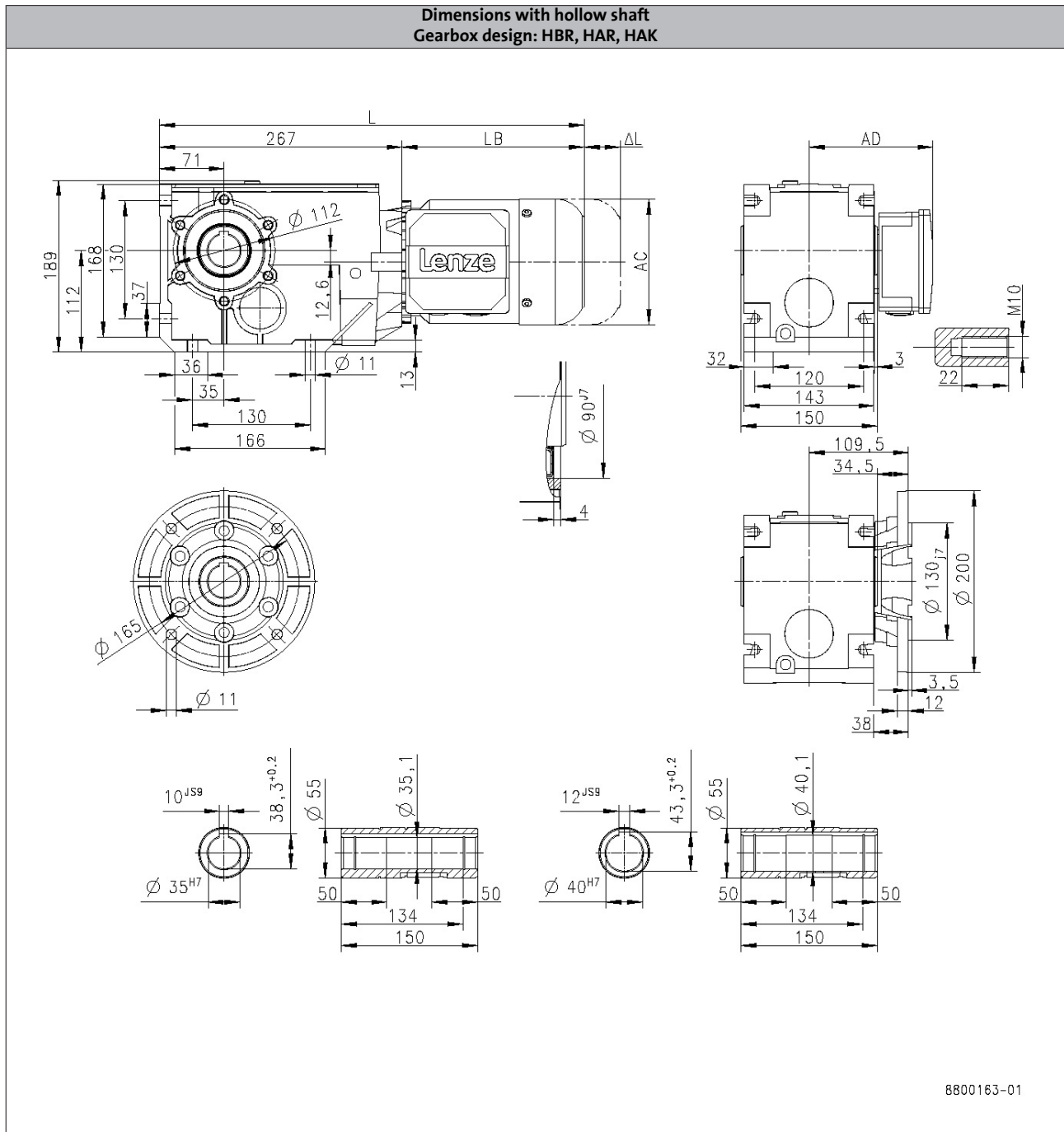
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B450



6.5

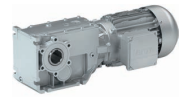
		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		450			470
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



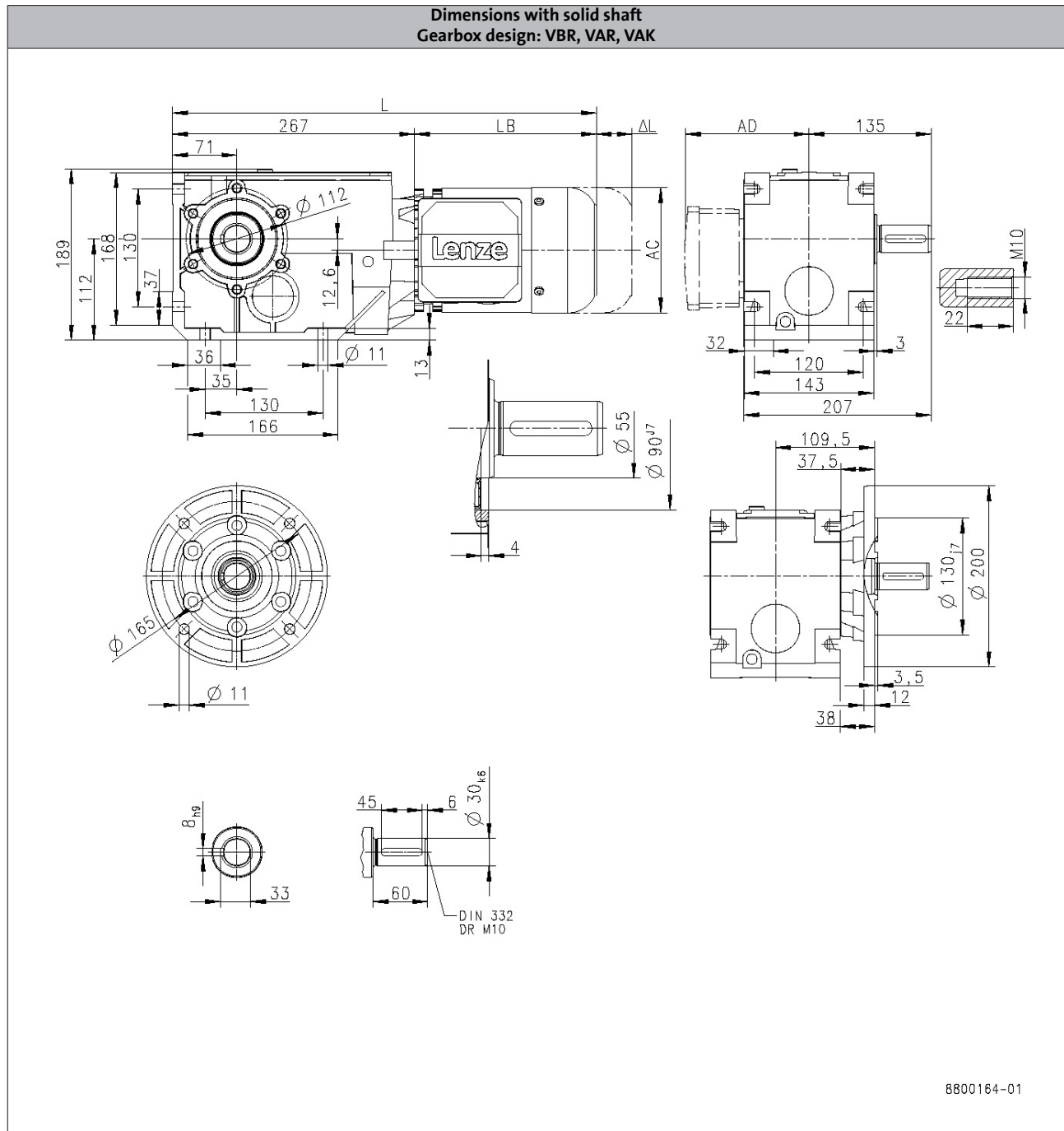
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B450



		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		450			470
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



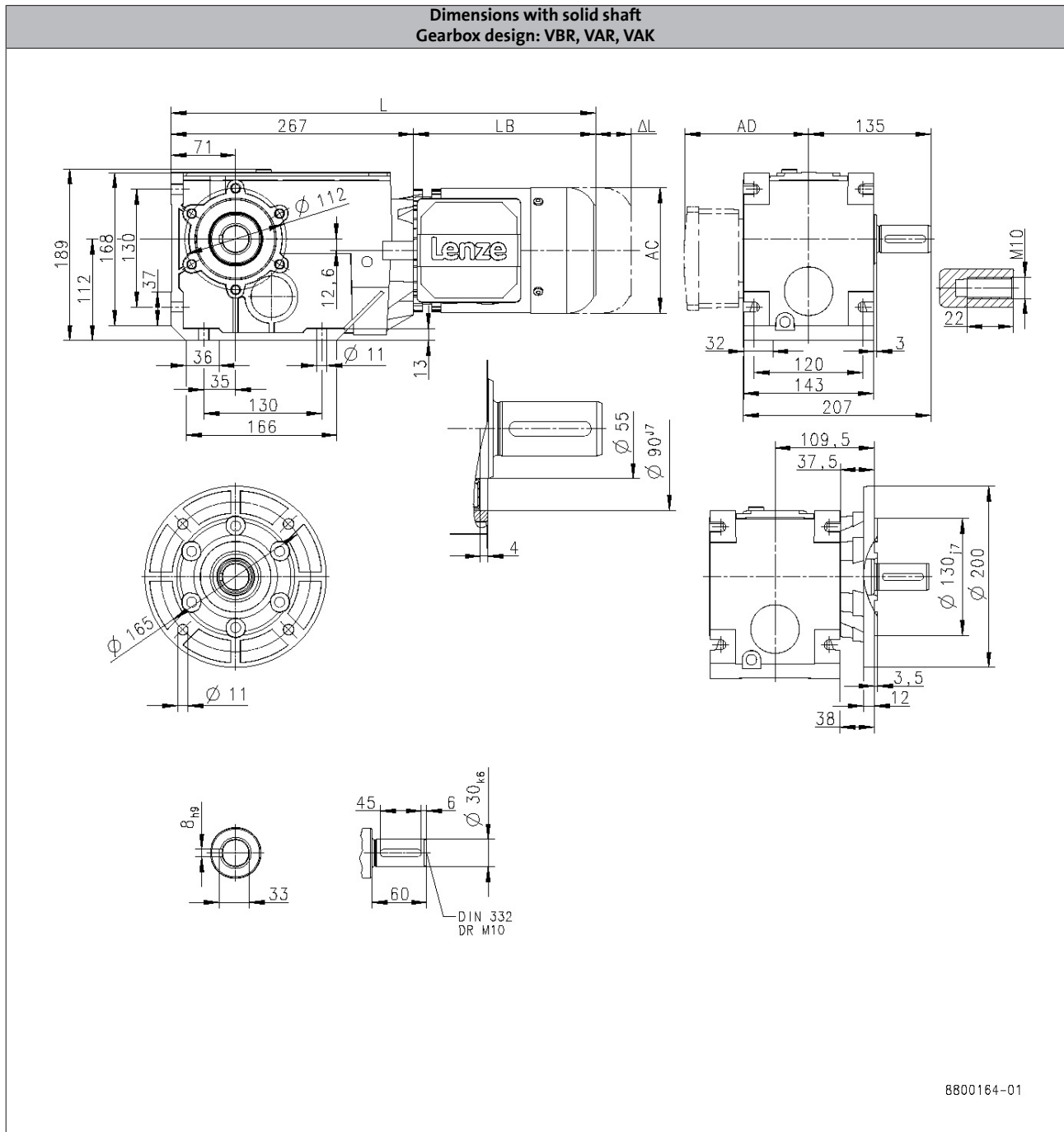
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B450

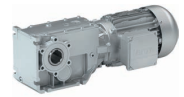


		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	492	561		623		610		685
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

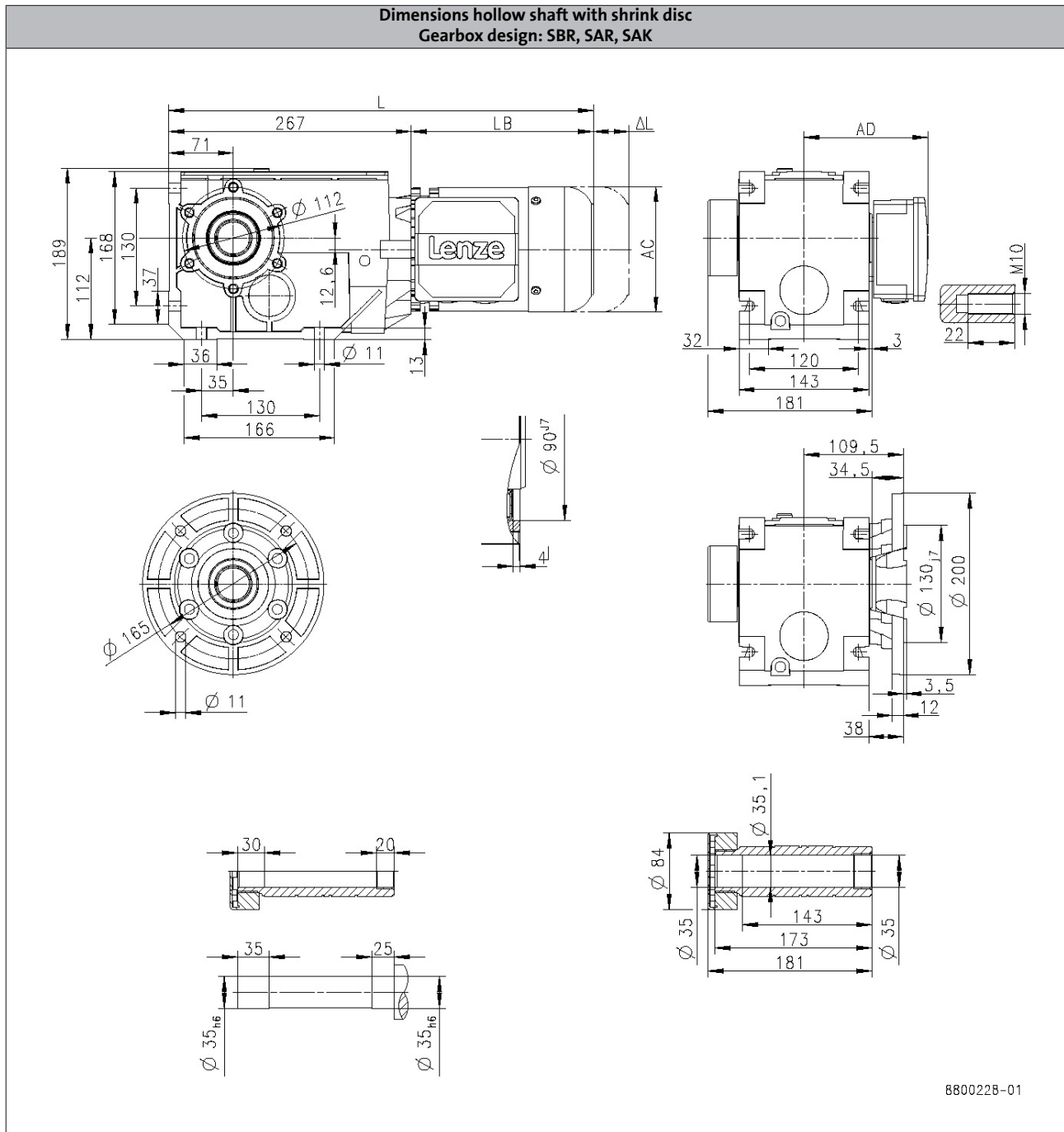
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B450

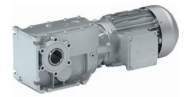


		MD□MA□□				
		063-12	063-32	063-42	071-32	071-42
Total length	L [mm]		450			470
Motor length	LB [mm]		183			203
Length of motor options	Δ L [mm]		40.0			52.0
Motor diameter	AC [mm]		123			139
Distance motor/connection	AD [mm]		107			118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

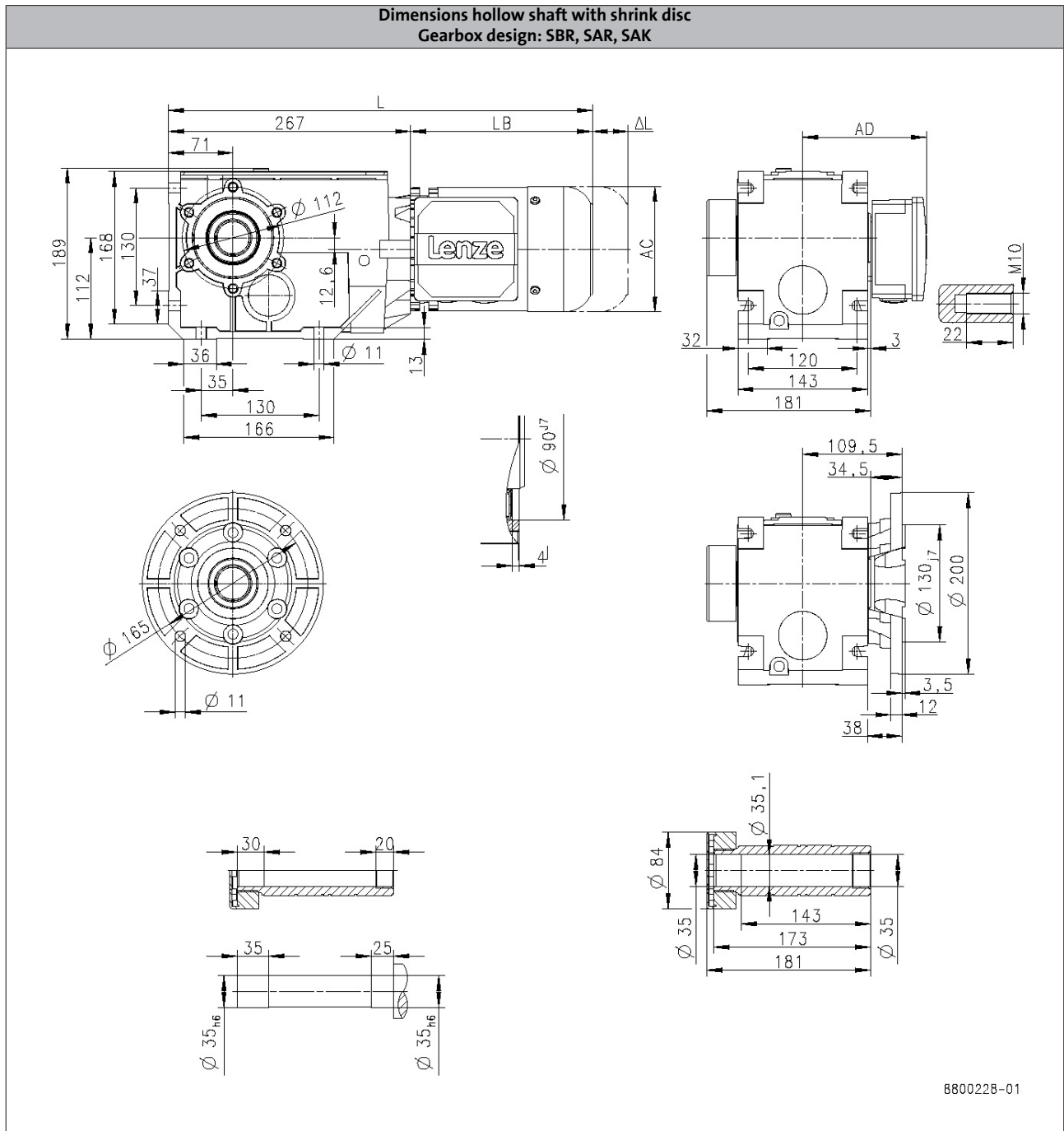
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B450

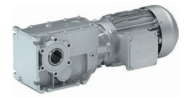


		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	492	561		623		610		685
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

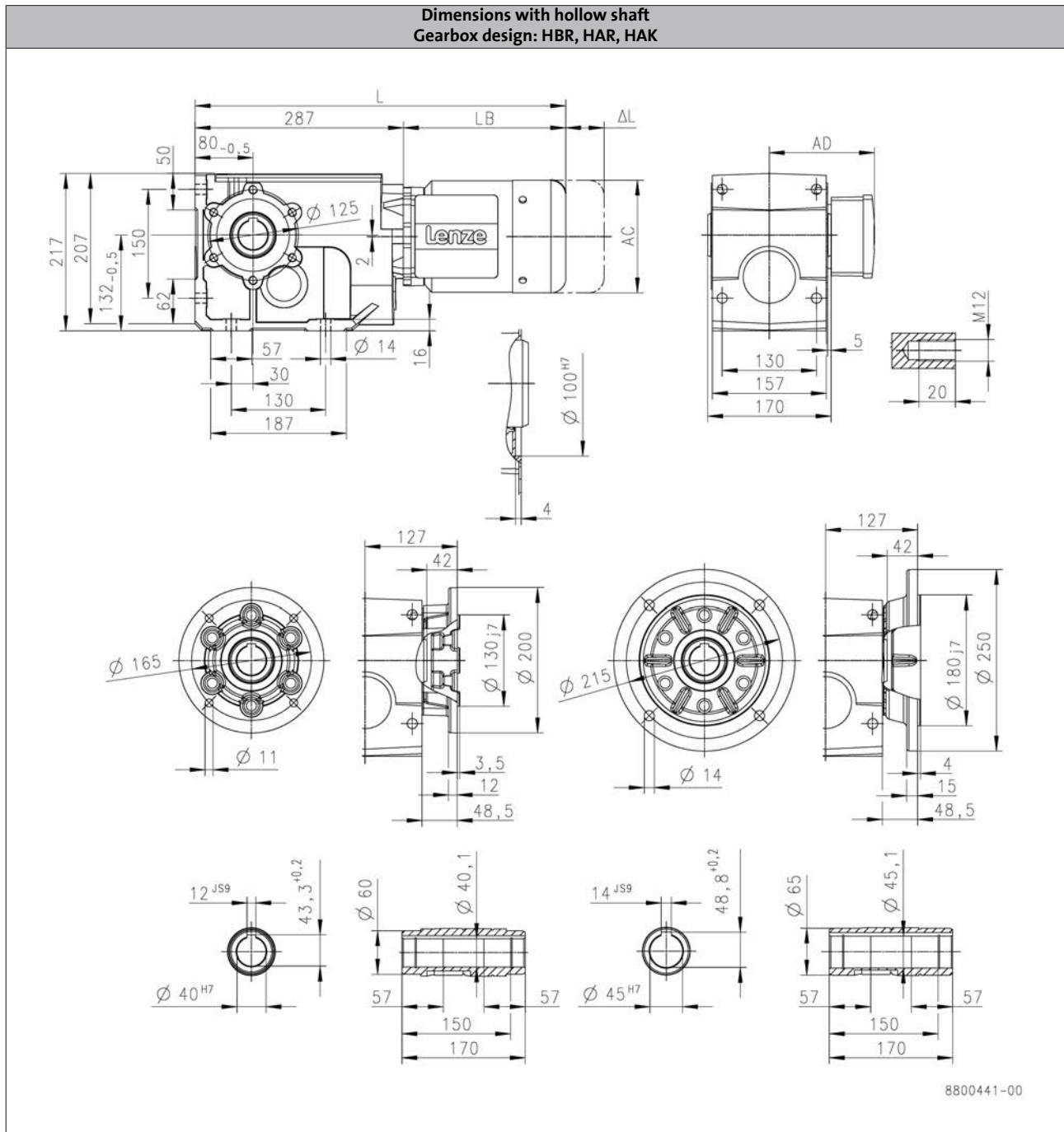
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B600



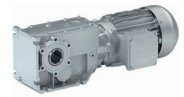
			MD□MA□□		
			063-42	071-32	071-42
Total length	L	[mm]	470		490
Motor length	LB	[mm]	183		203
Length of motor options	Δ L	[mm]	40.0		52.0
Motor diameter	AC	[mm]	123		139
Distance motor/connection	AD	[mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (longest type)



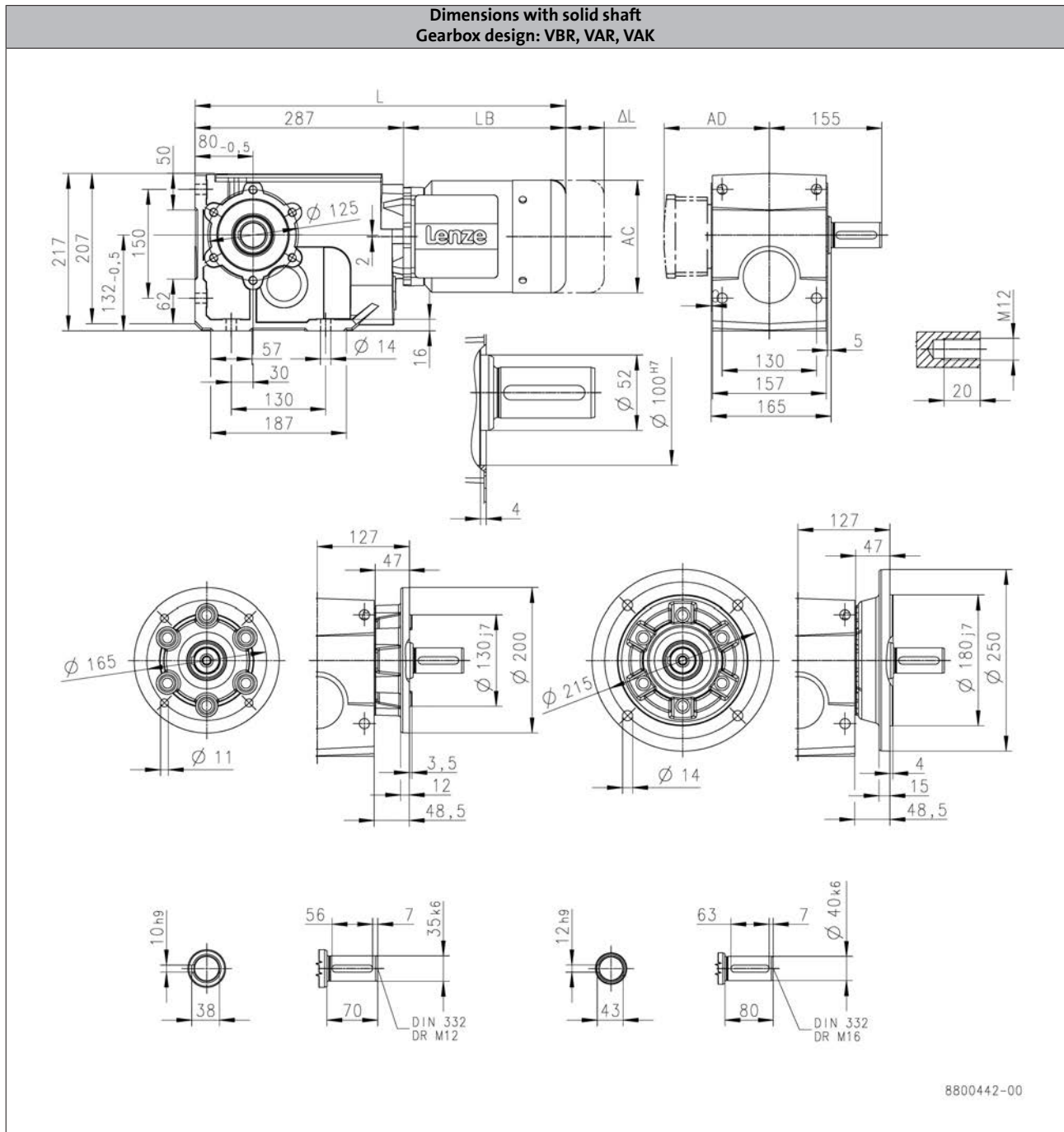
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B600



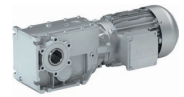
6.5

			MD□MA□□	
			063-42	071-32
				071-42
Total length	L	[mm]	470	490
Motor length	LB	[mm]	183	203
Length of motor options	Δ L	[mm]	40.0	52.0
Motor diameter	AC	[mm]	123	139
Distance motor/connection	AD	[mm]	107	118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

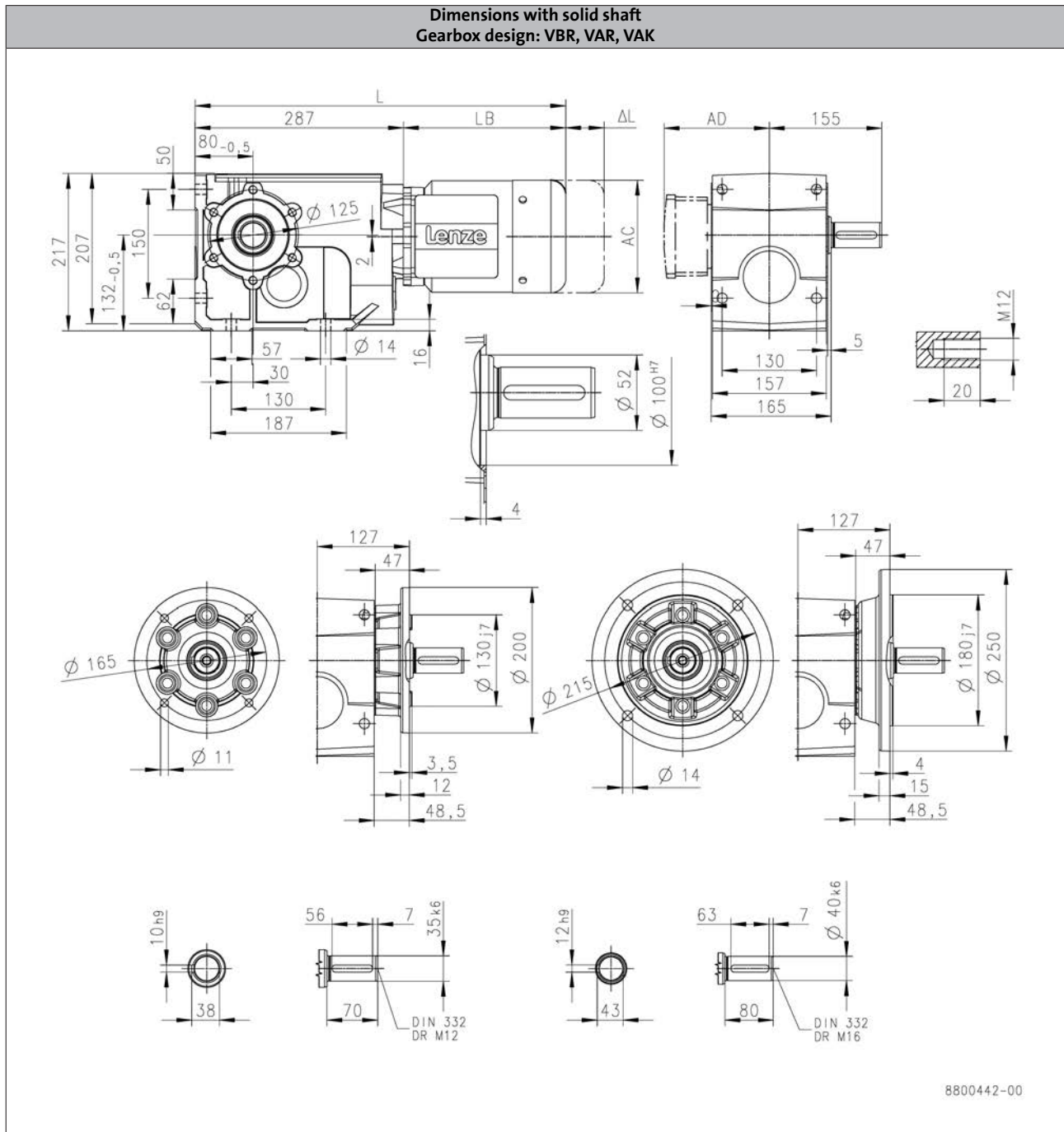
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B600

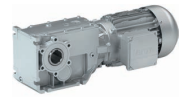


		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	512	581		643		630		705
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

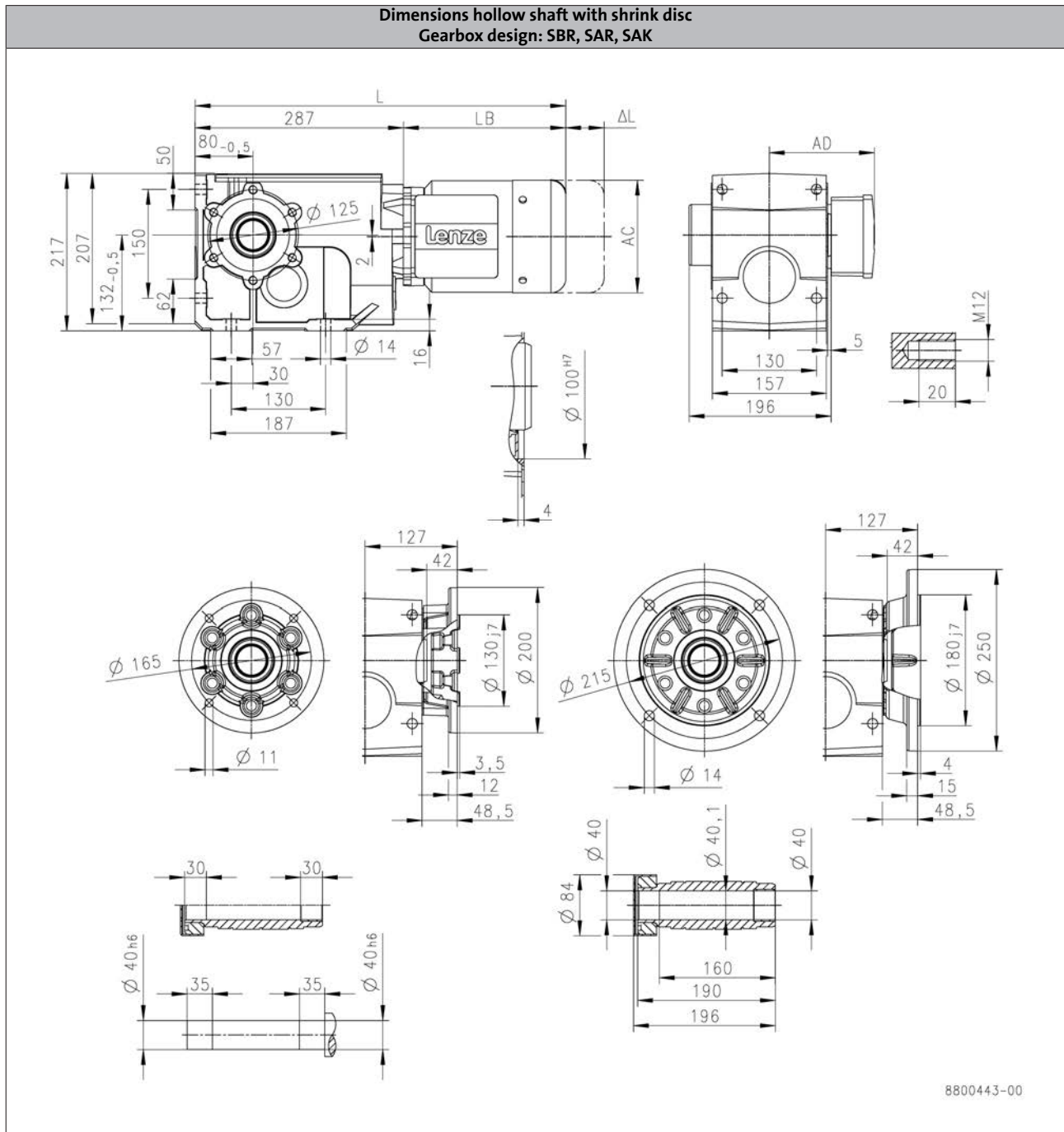
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B600



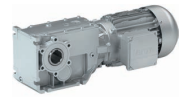
			MD□MA□□		
			063-42	071-32	071-42
Total length	L	[mm]	470		490
Motor length	LB	[mm]	183		203
Length of motor options	Δ L	[mm]	40.0		52.0
Motor diameter	AC	[mm]	123		139
Distance motor/connection	AD	[mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



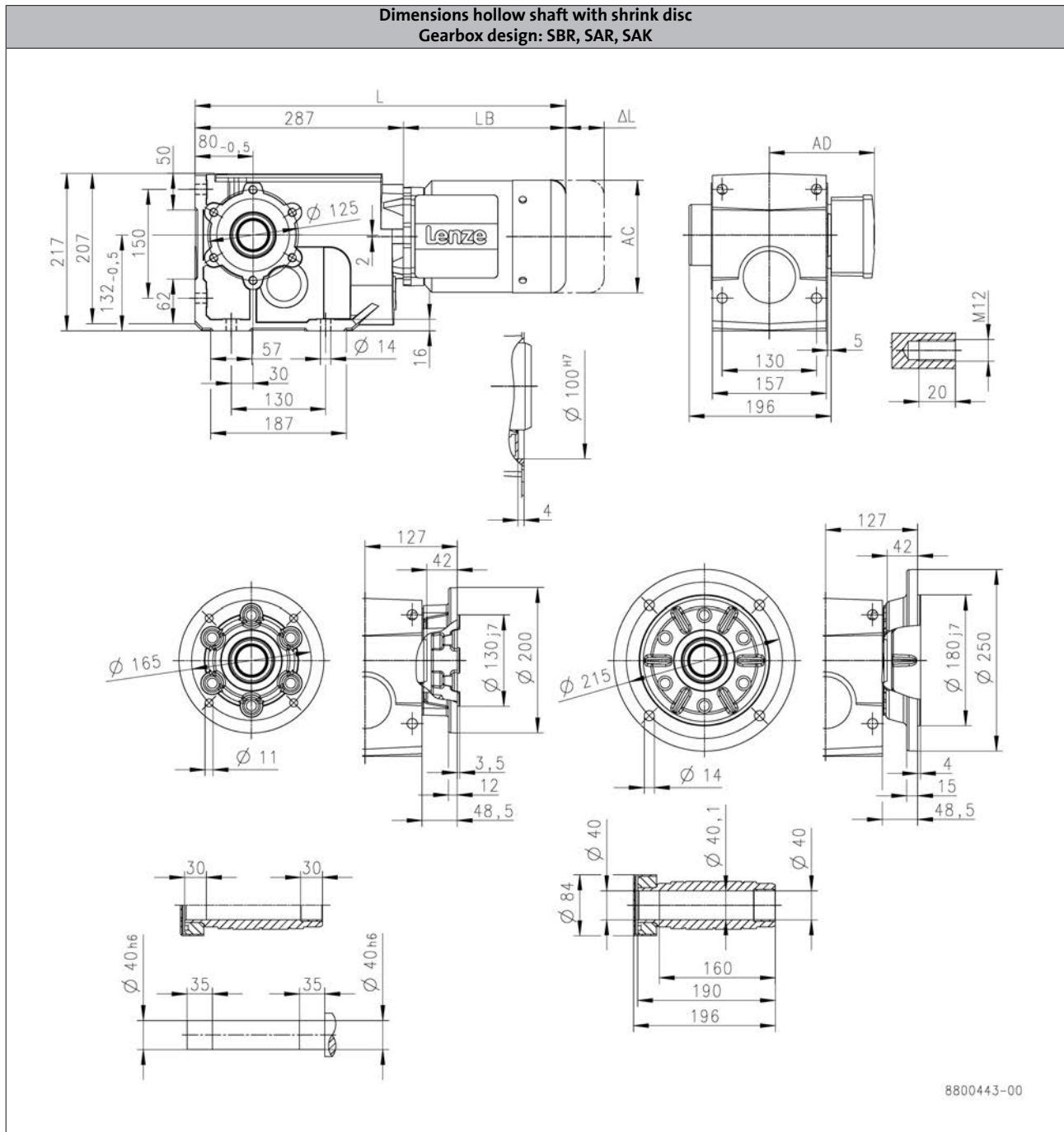
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B600

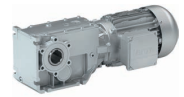


			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	512	581		643		630		705
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

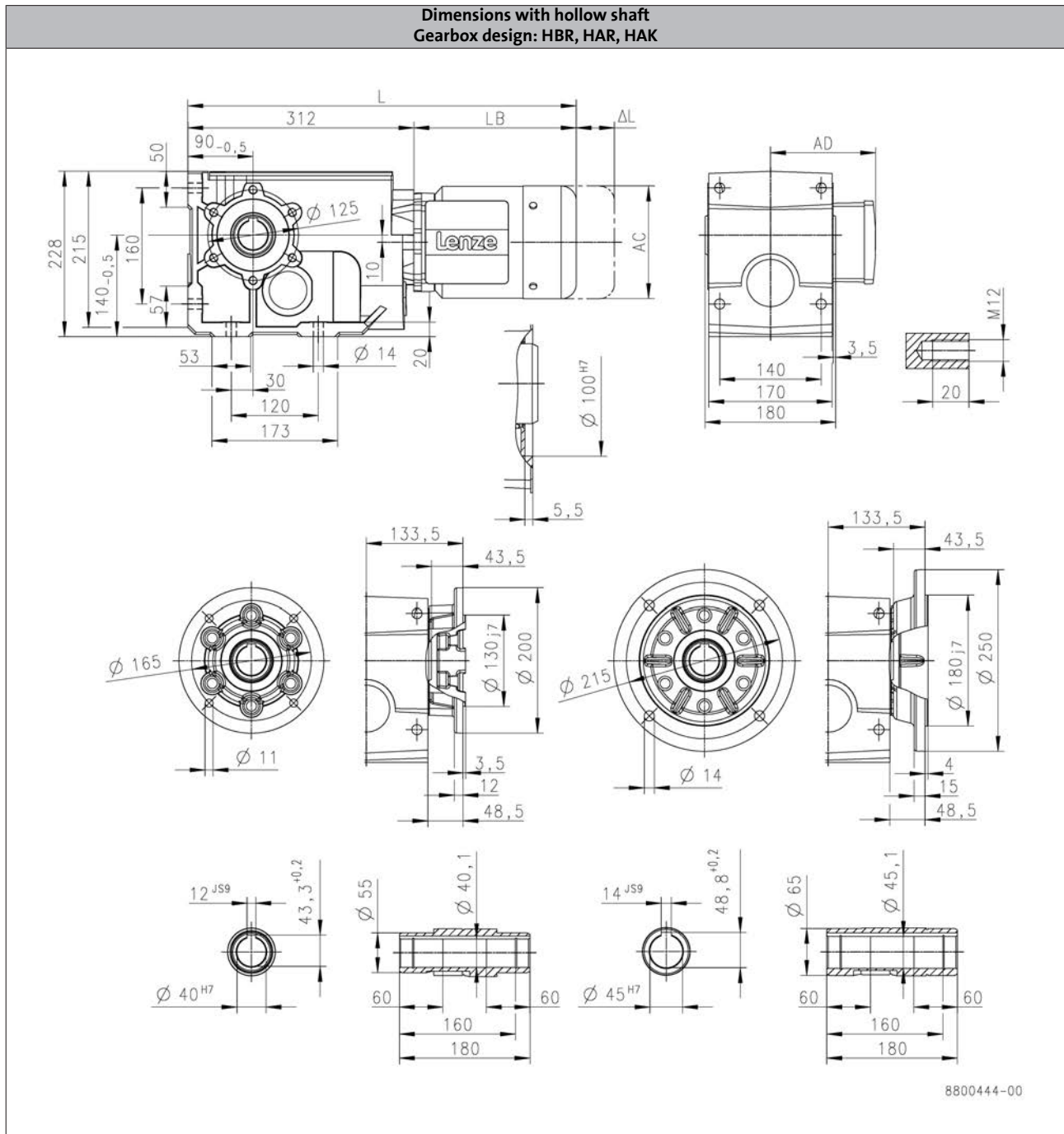
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B820

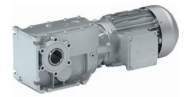


			MD□MA□□	
			063-42	071-32
				071-42
Total length	L	[mm]	495	515
Motor length	LB	[mm]	183	203
Length of motor options	Δ L	[mm]	40.0	52.0
Motor diameter	AC	[mm]	123	139
Distance motor/connection	AD	[mm]	107	118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

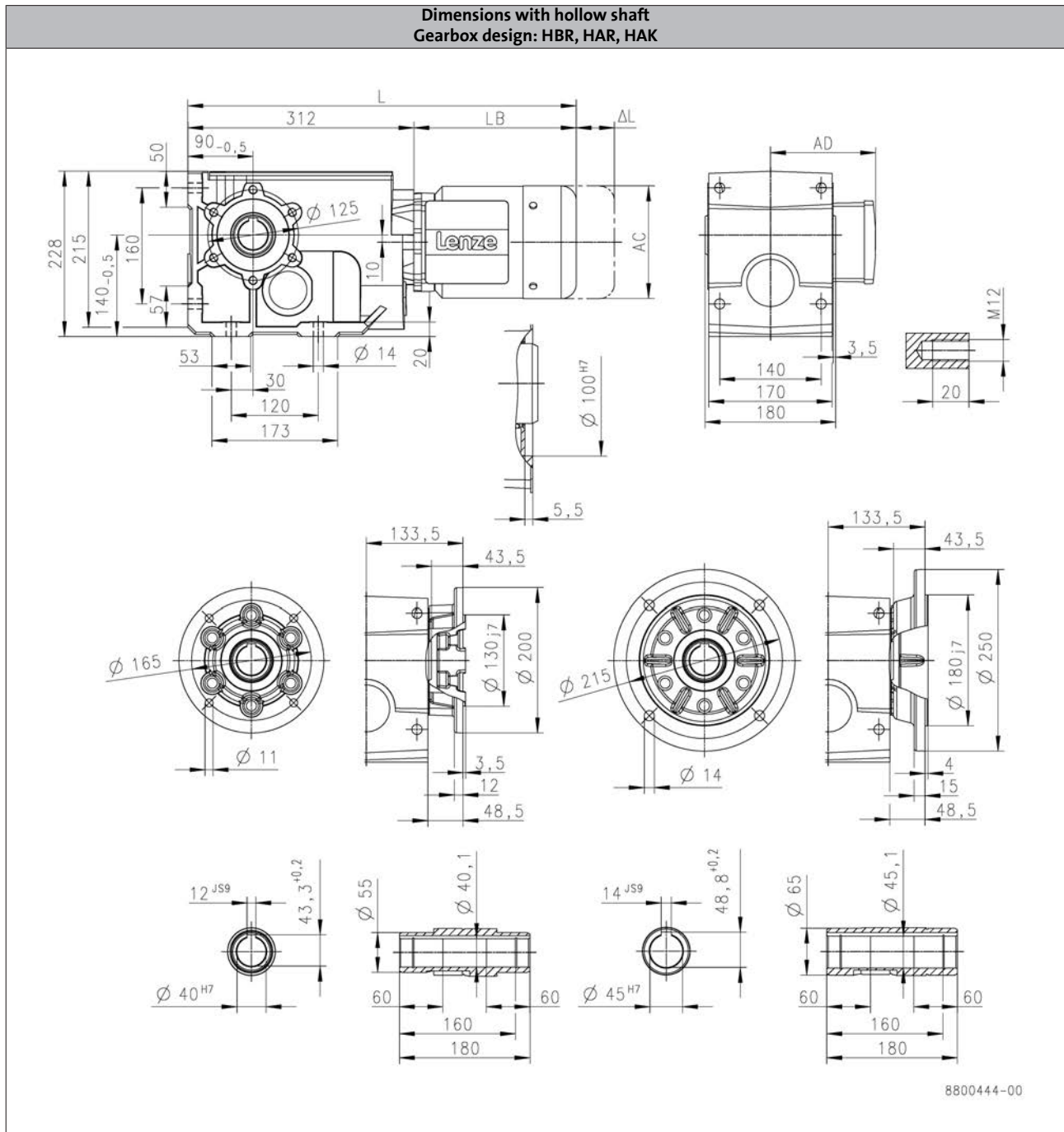
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B820

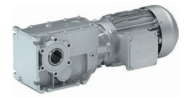


		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	537	606		668		655		730
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

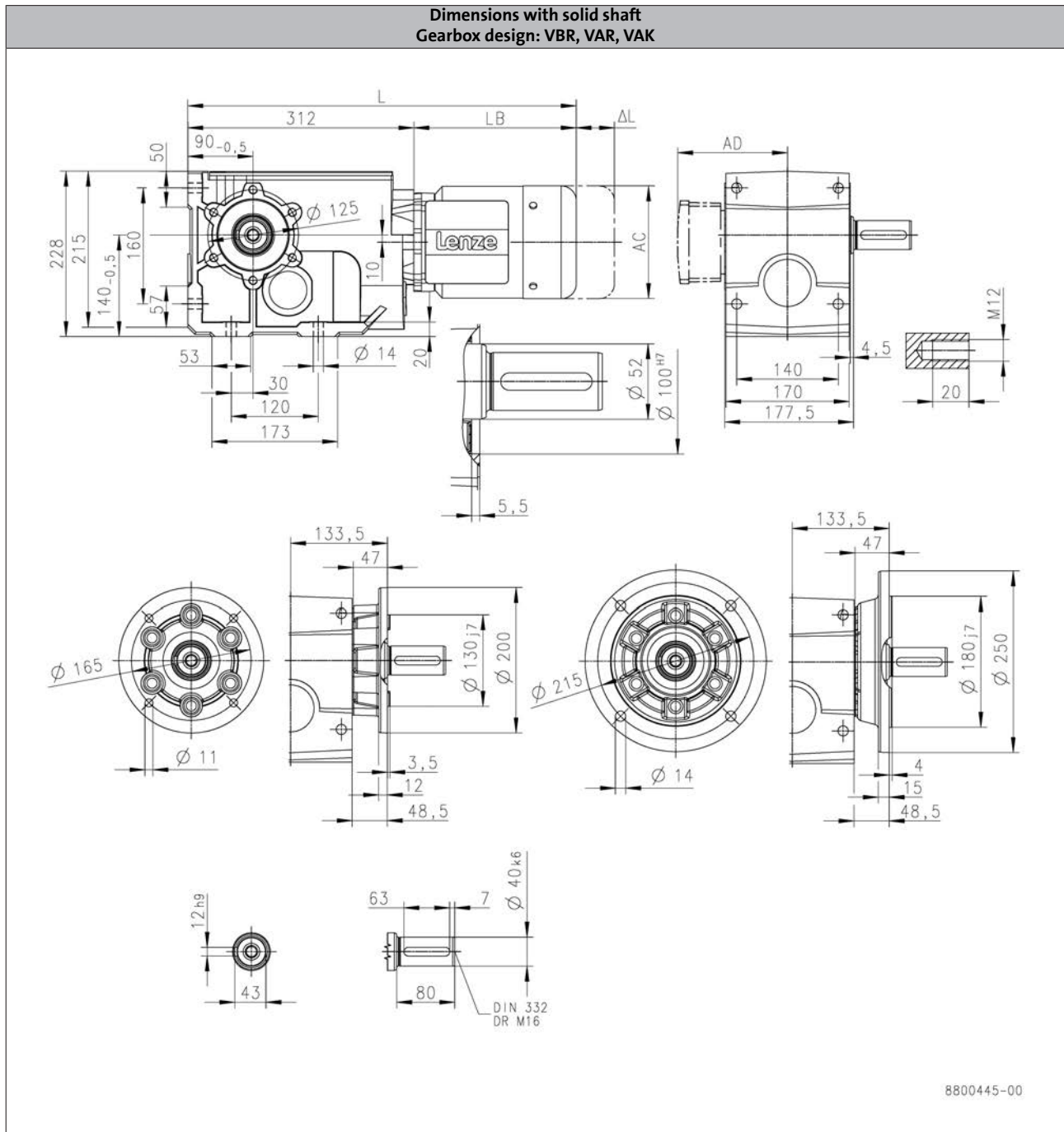
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B820



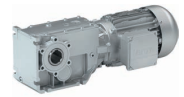
6.5

		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	495		515
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

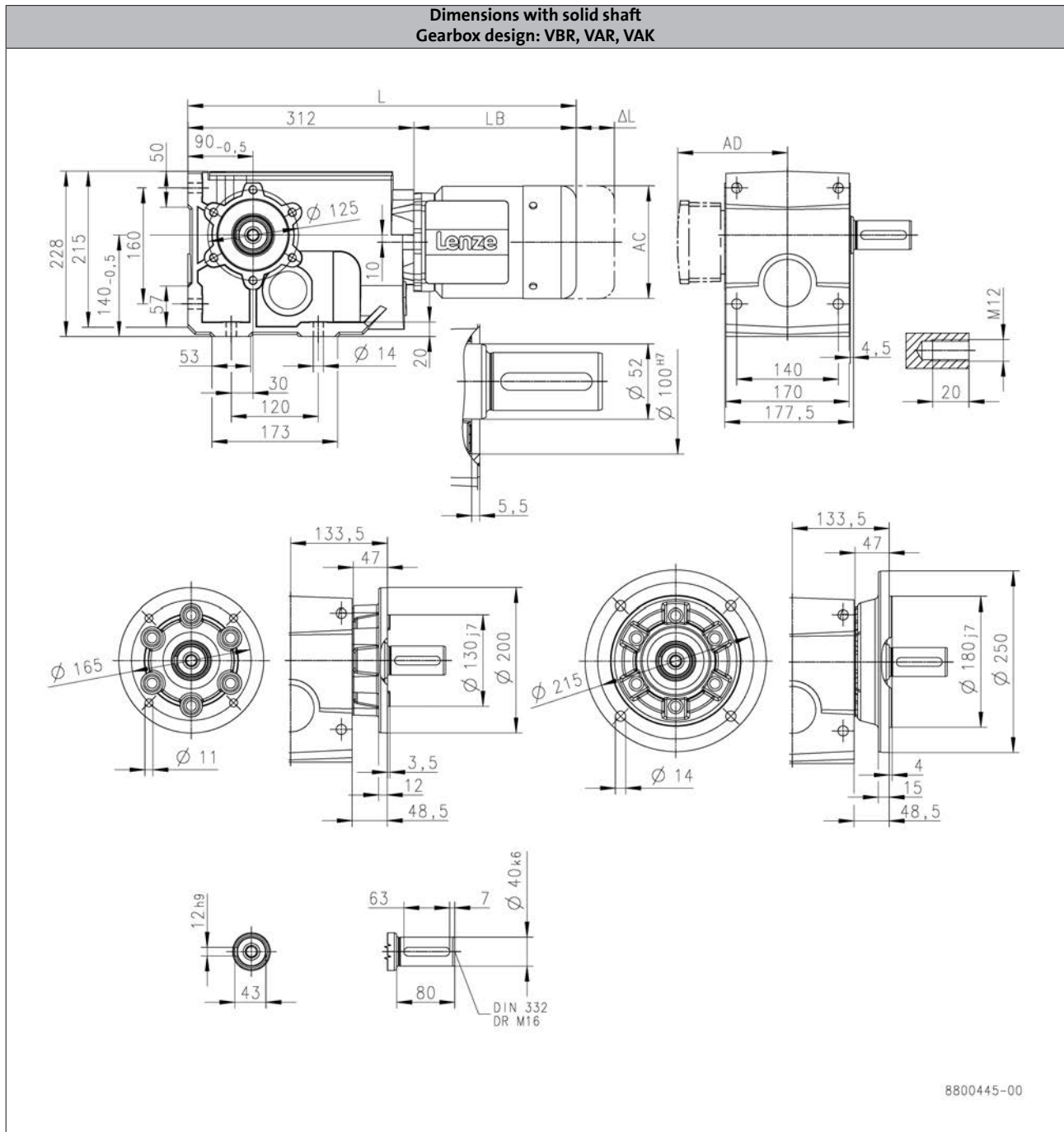
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B820

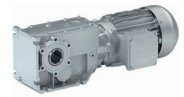


			m240							
			-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L	[mm]	537	606		668		655		730
Motor length	LB	[mm]	225	294		356		343		418
Length of motor options	Δ L	[mm]	107	92.0		103		111		118
Motor diameter	AC	[mm]	158	172		192		210		281
Distance motor/connection	AD	[mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

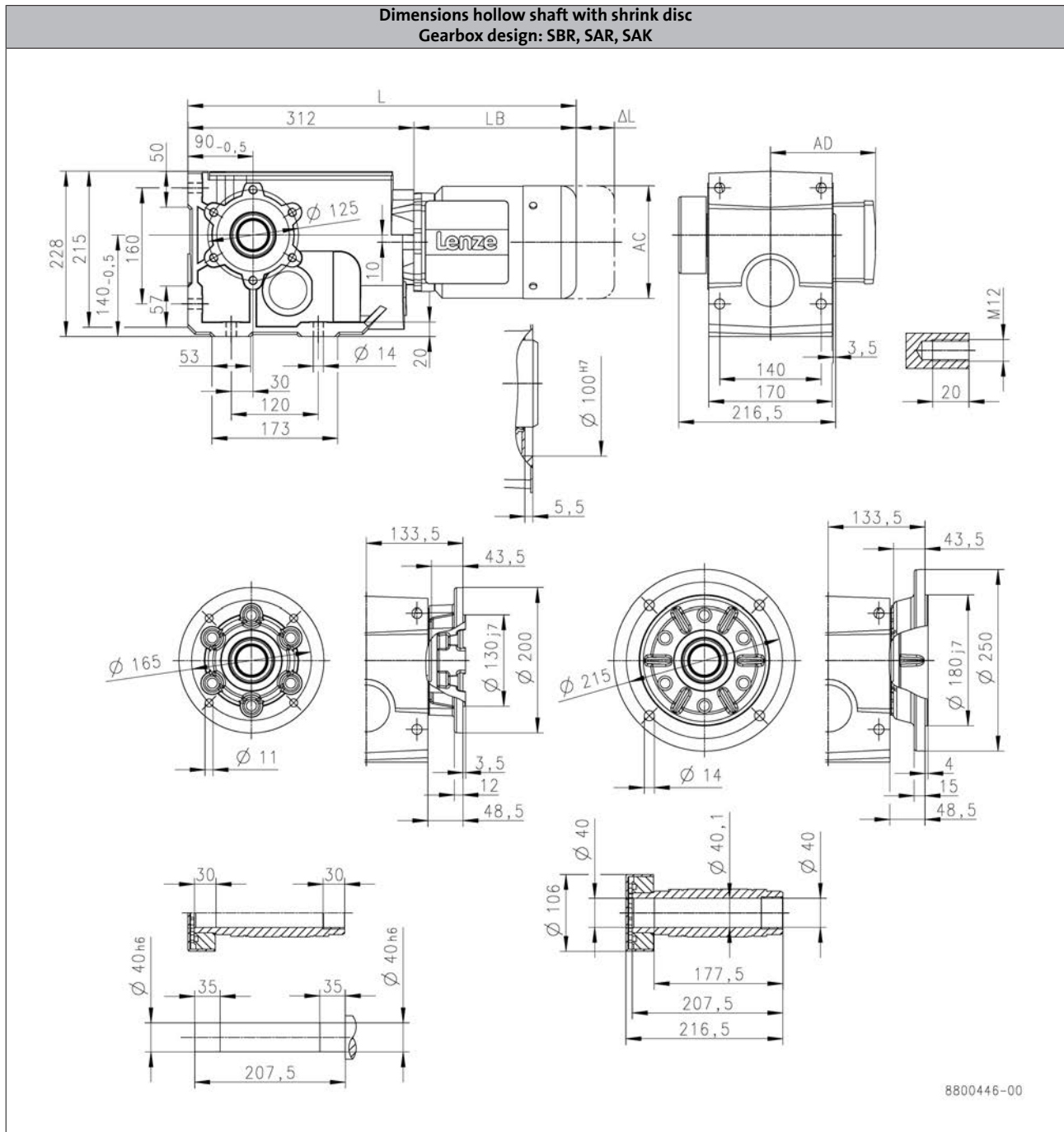
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B820

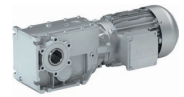


		MD□MA□□		
		063-42	071-32	071-42
Total length	L [mm]	495		515
Motor length	LB [mm]	183		203
Length of motor options	Δ L [mm]	40.0		52.0
Motor diameter	AC [mm]	123		139
Distance motor/connection	AD [mm]	107		118

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

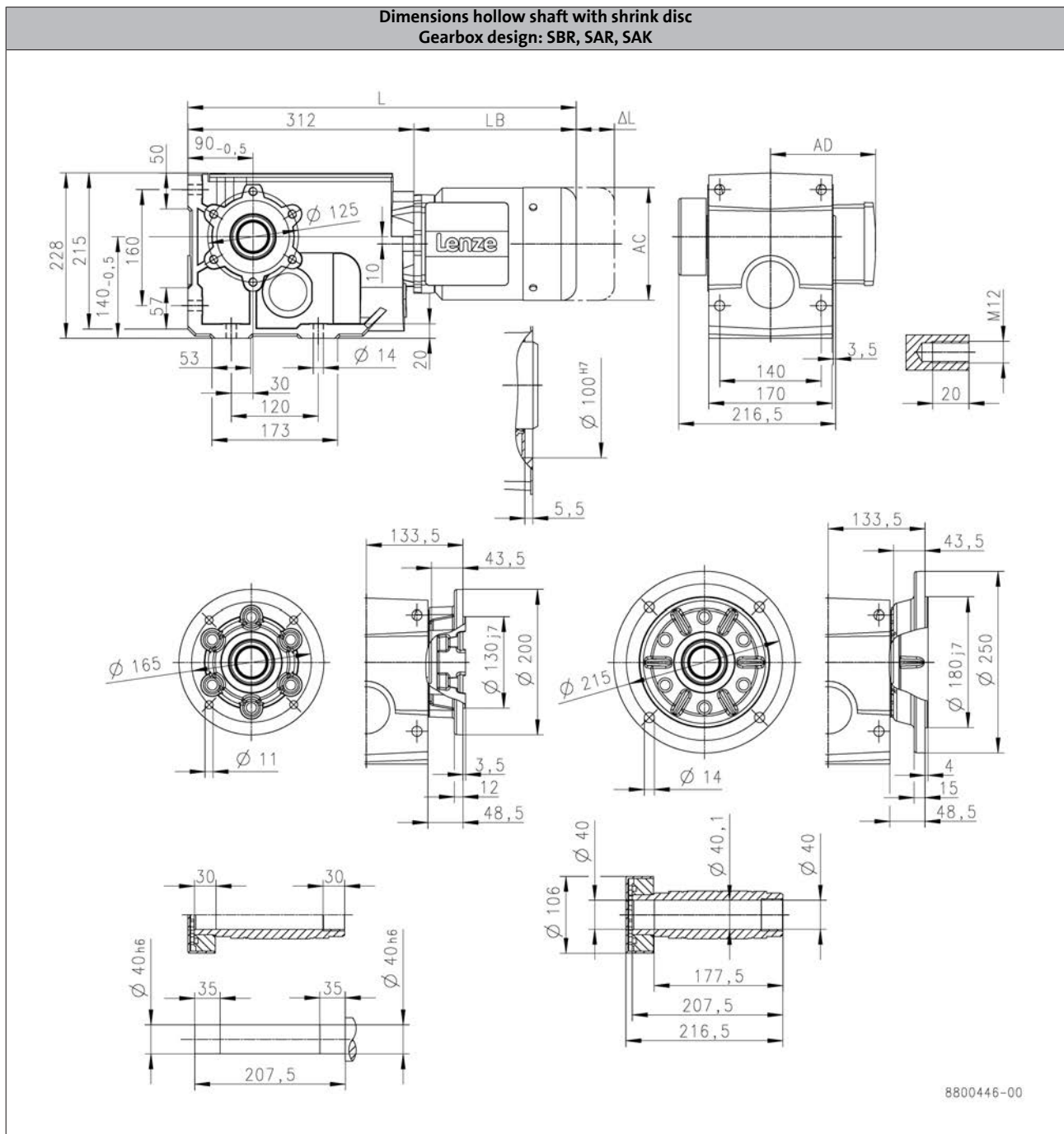
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B820

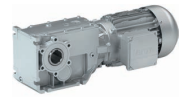


		m240							
		-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	537	606		668		655		730
Motor length	LB [mm]	225	294		356		343		418
Length of motor options	Δ L [mm]	107	92.0		103		111		118
Motor diameter	AC [mm]	158	172		192		210		281
Distance motor/connection	AD [mm]	148	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

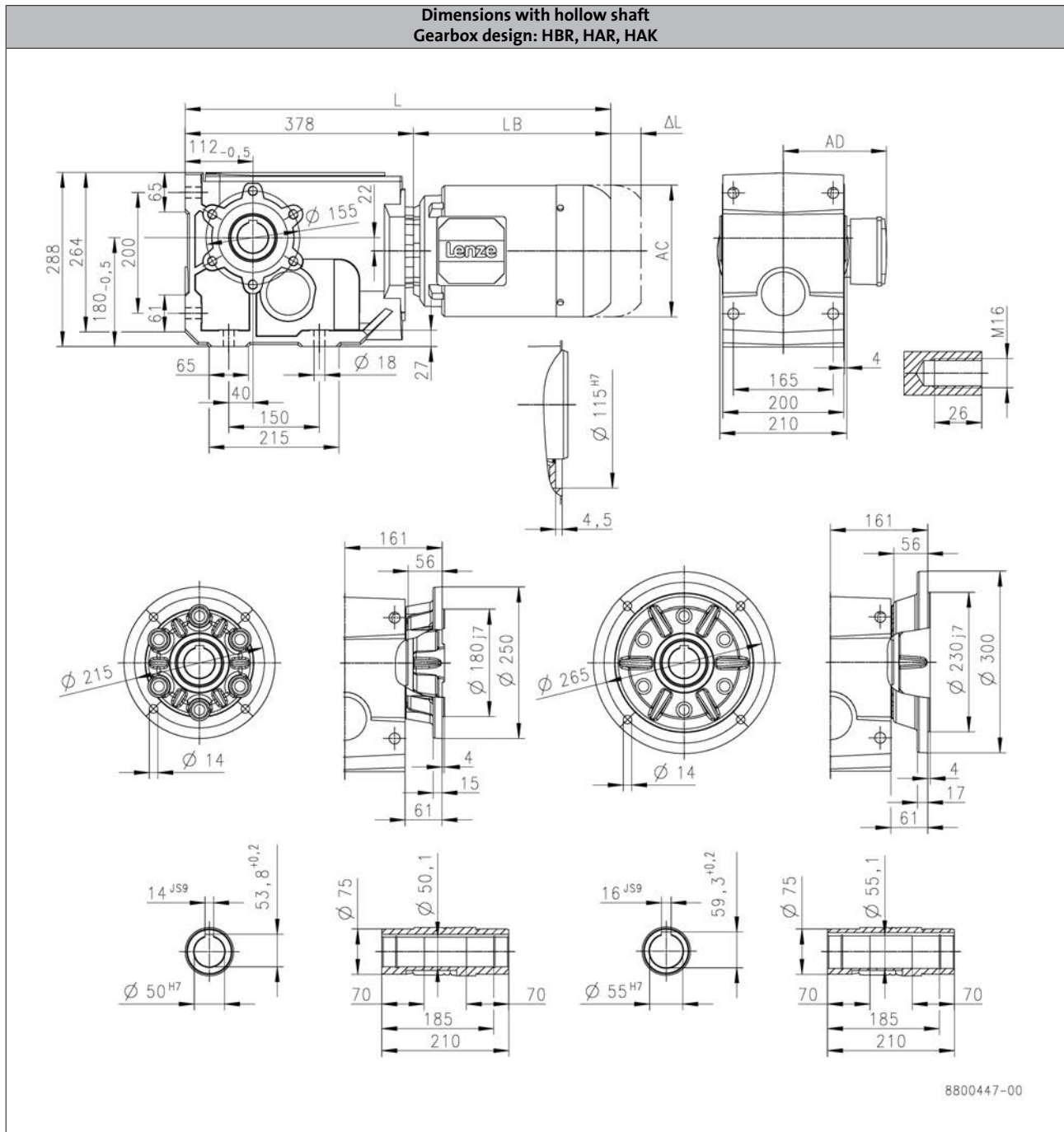
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B1500



		MD□MA□□			m240		
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	581	603	672		734	
Motor length	LB [mm]	203	225	294		356	
Length of motor options	Δ L [mm]	52.0	107	92.0		103	
Motor diameter	AC [mm]	139	158	172		192	
Distance motor/connection	AD [mm]	118	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



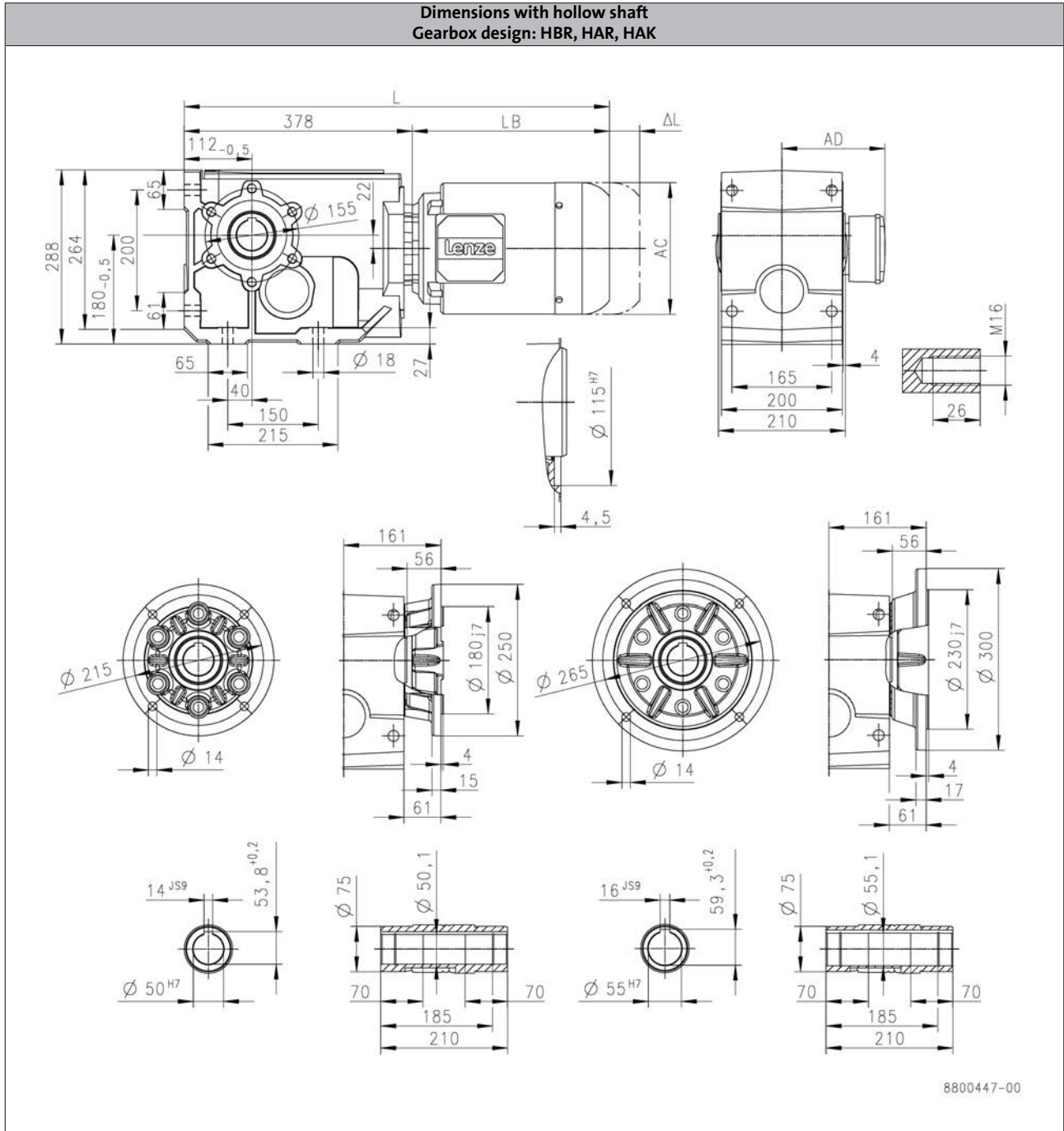
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B1500

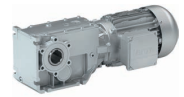


		m240				
		-P112/M4	-P132/M4	-P132/L4	-P160/M4	-P160/L4
Total length	L [mm]	721	796		947	
Motor length	LB [mm]	343	418		569	
Length of motor options	Δ L [mm]	111	118		146	
Motor diameter	AC [mm]	210	281		313	
Distance motor/connection	AD [mm]	171	182		231	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

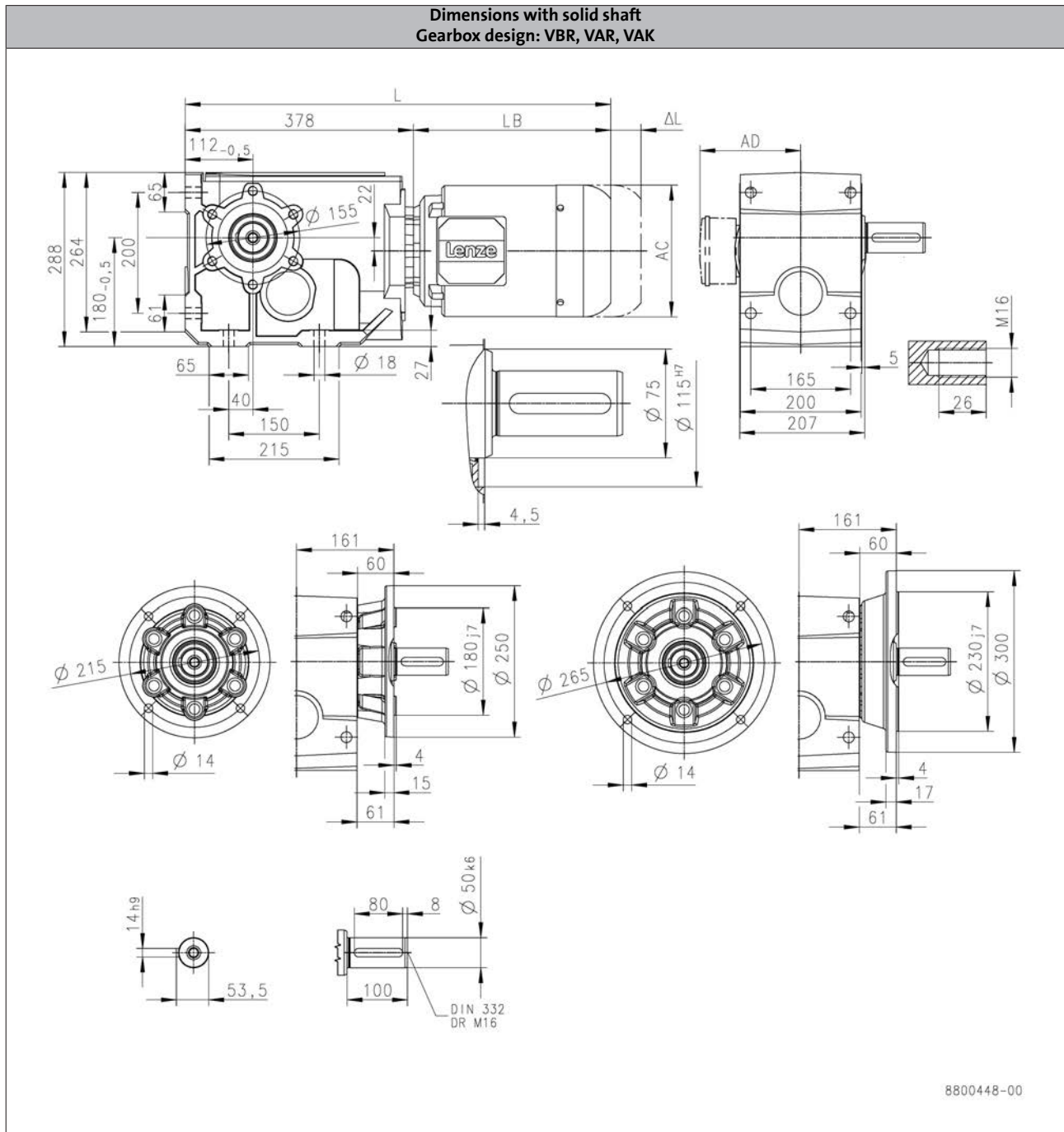
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B1500

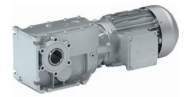


		MD□MA□□			m240		
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	581	603	672		734	
Motor length	LB [mm]	203	225	294		356	
Length of motor options	Δ L [mm]	52.0	107	92.0		103	
Motor diameter	AC [mm]	139	158	172		192	
Distance motor/connection	AD [mm]	118	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

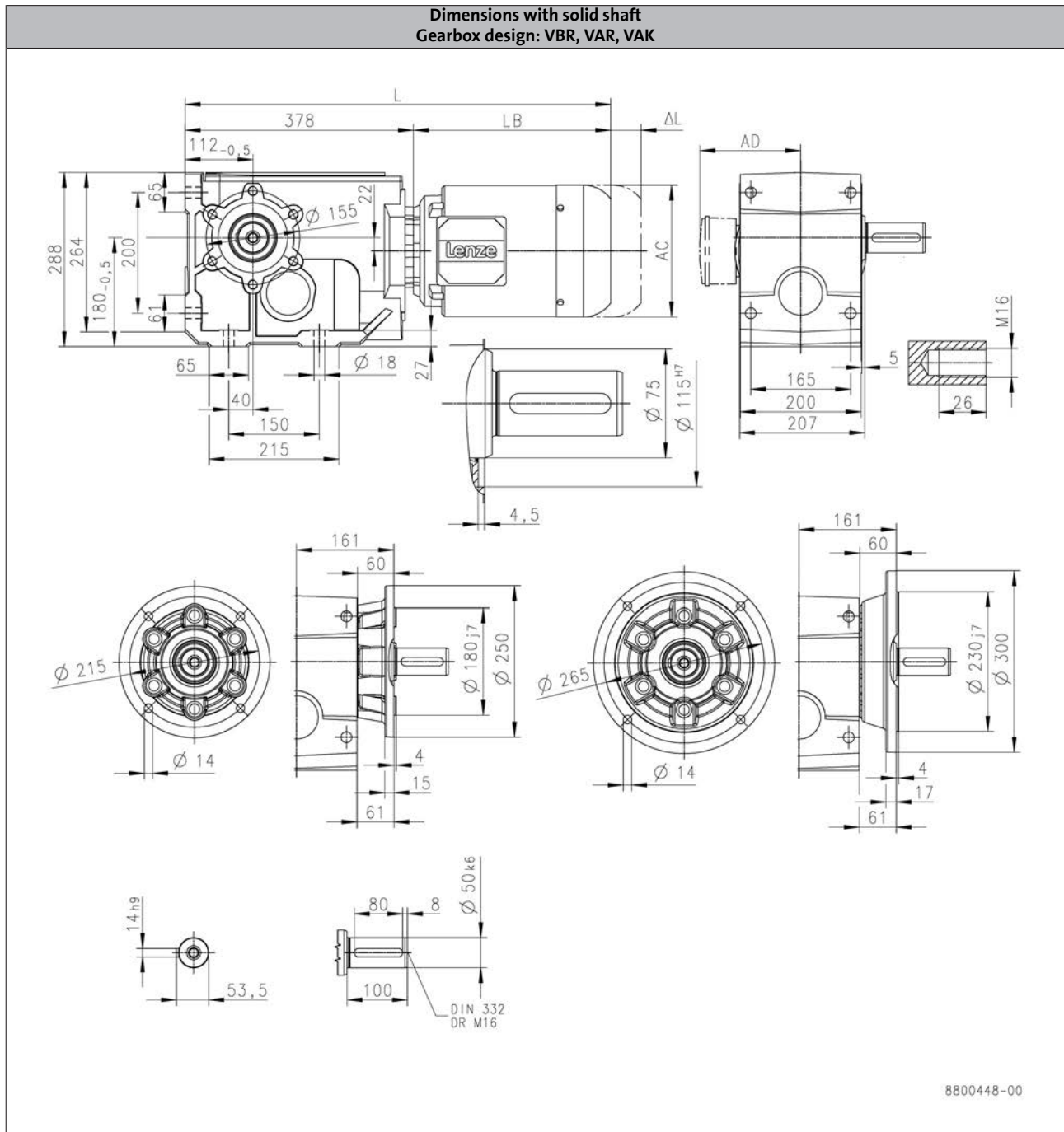
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B1500

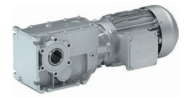


		m240				
		-P112/M4	-P132/M4	-P132/L4	-P160/M4	-P160/L4
Total length	L [mm]	721	796		947	
Motor length	LB [mm]	343	418		569	
Length of motor options	Δ L [mm]	111	118		146	
Motor diameter	AC [mm]	210	281		313	
Distance motor/connection	AD [mm]	171	182		231	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

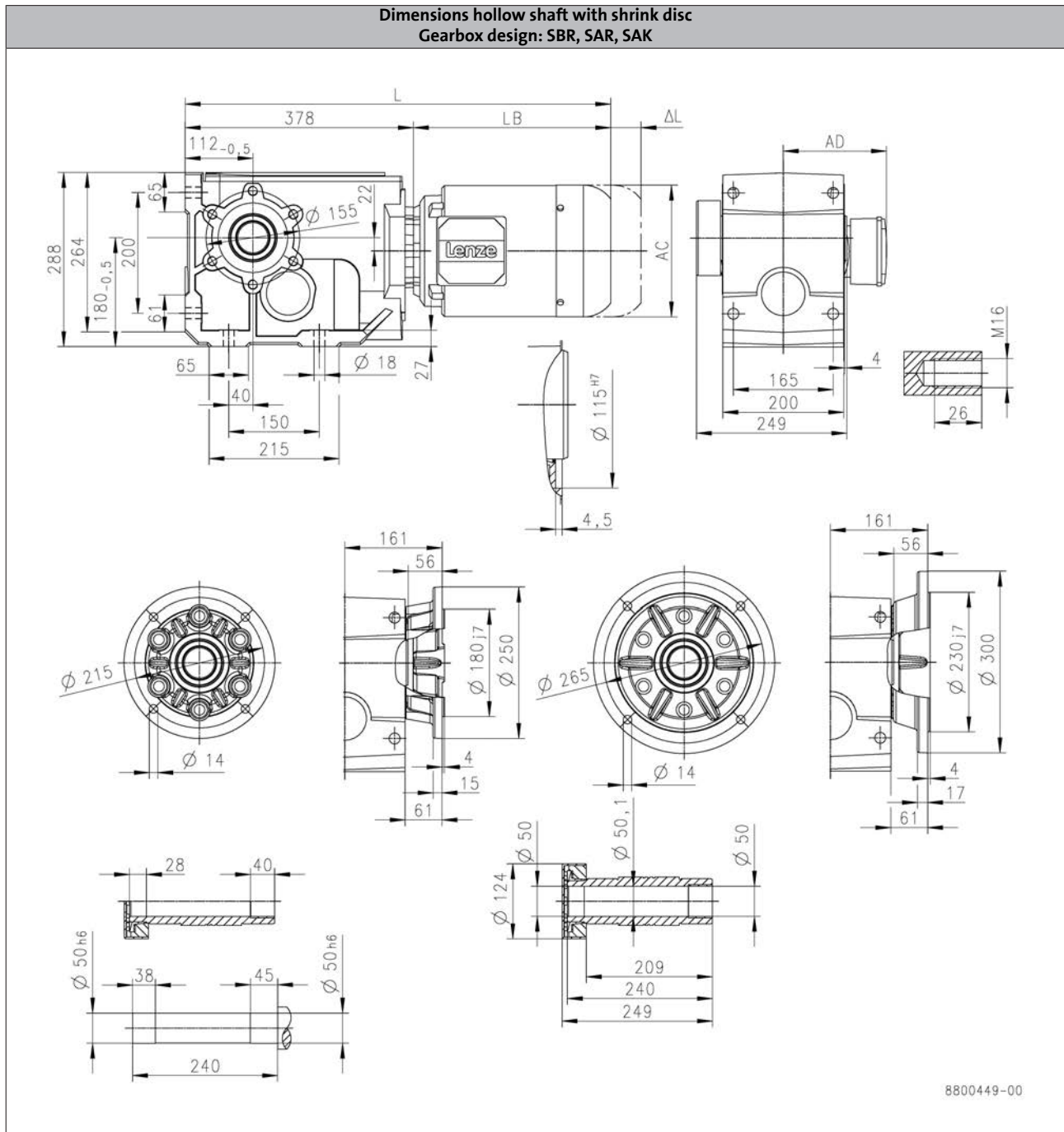
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B1500

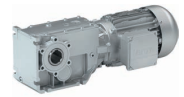


		MD□MA□□			m240		
		071-42	-P80/M4	-P90/M4	-P90/L4	-P100/M4	-P100/L4
Total length	L [mm]	581	603	672		734	
Motor length	LB [mm]	203	225	294		356	
Length of motor options	Δ L [mm]	52.0	107	92.0		103	
Motor diameter	AC [mm]	139	158	172		192	
Distance motor/connection	AD [mm]	118	148	155		164	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

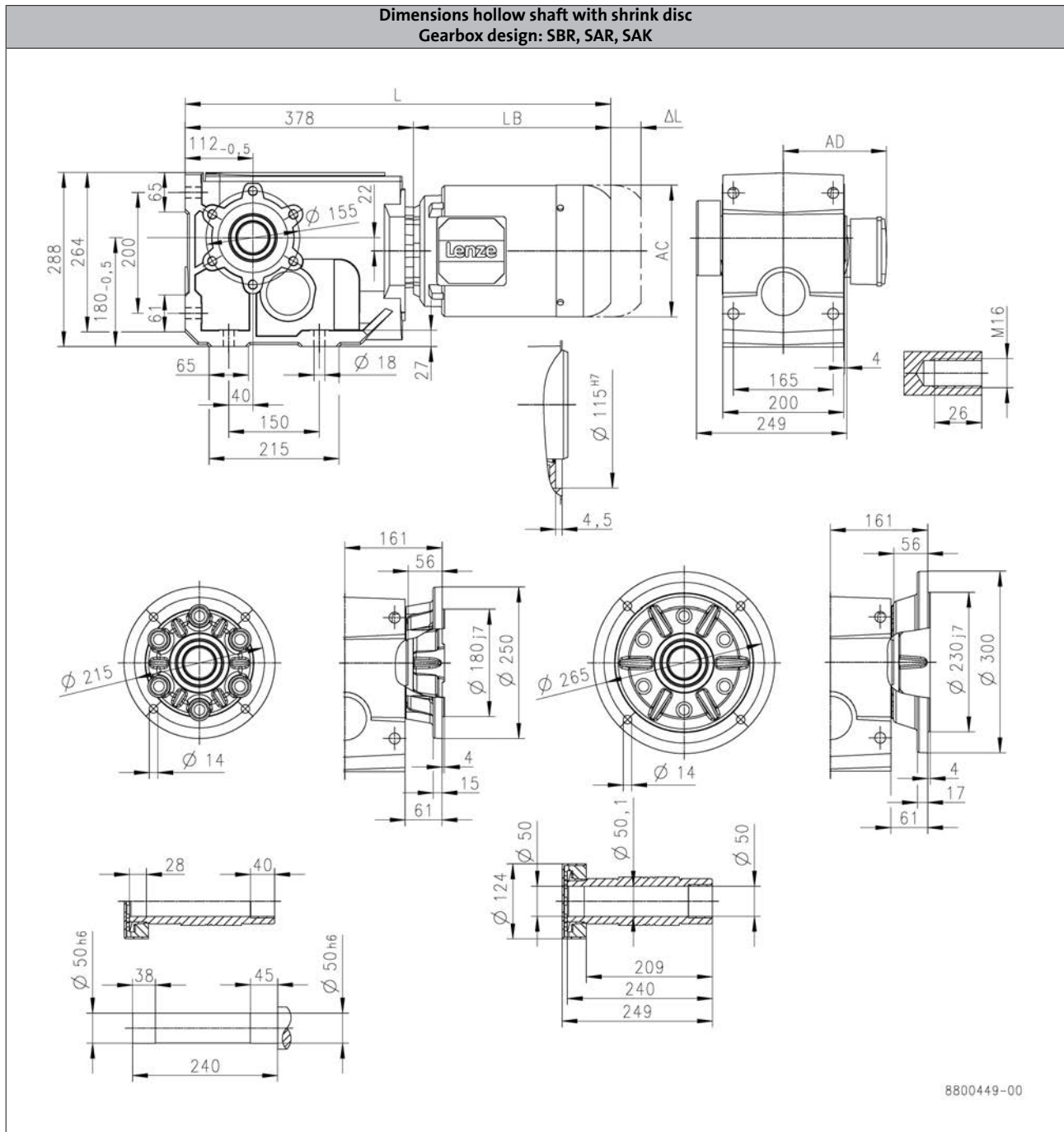
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B1500

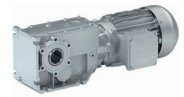


		m240				
		-P112/M4	-P132/M4	-P132/L4	-P160/M4	-P160/L4
Total length	L [mm]	721	796		947	
Motor length	LB [mm]	343	418		569	
Length of motor options	Δ L [mm]	111	118		146	
Motor diameter	AC [mm]	210	281		313	
Distance motor/connection	AD [mm]	171	182		231	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

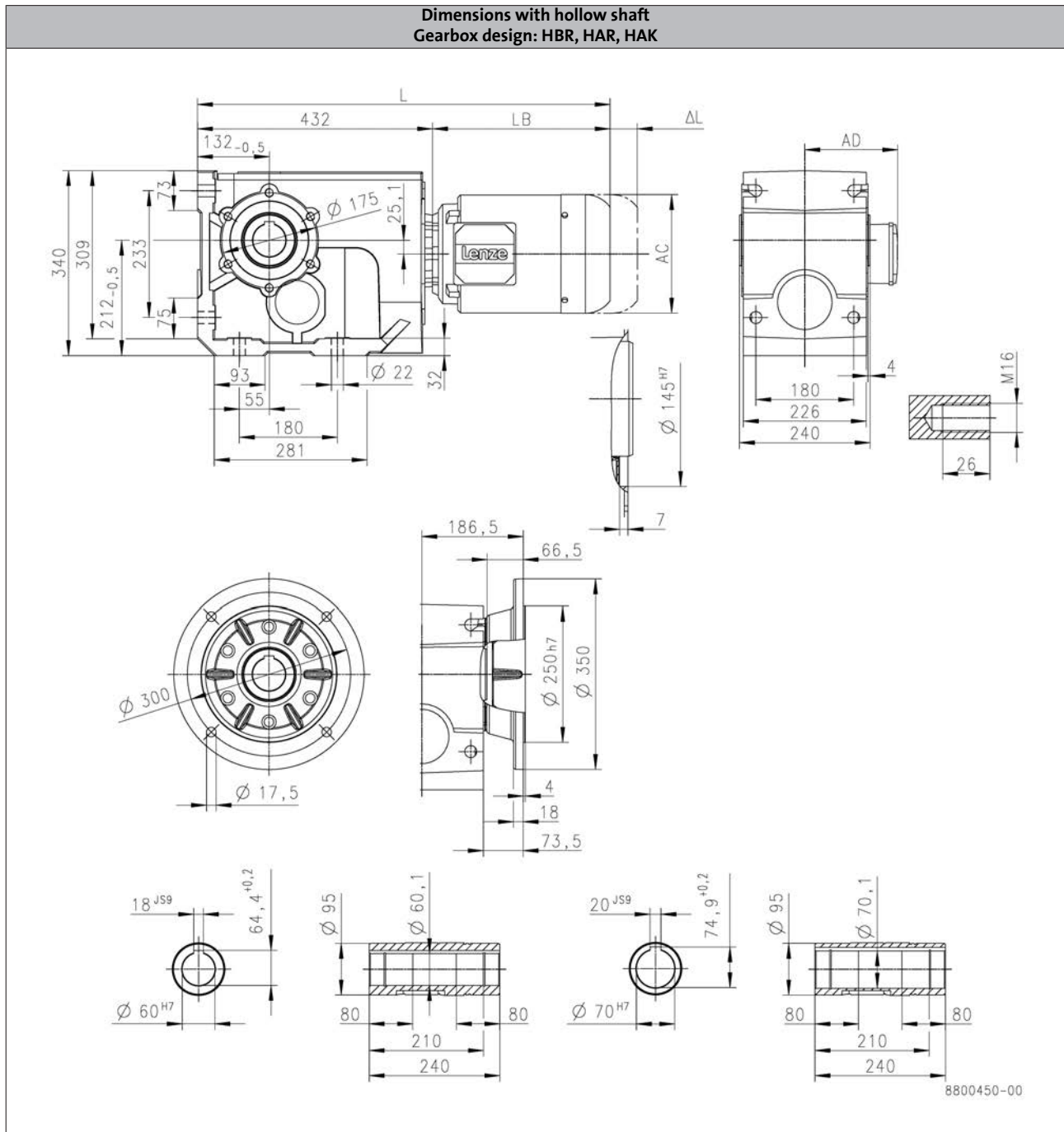
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B2700

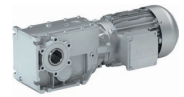


		m240				
		-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]	726		788		775
Motor length	LB [mm]	294		356		343
Length of motor options	Δ L [mm]	92.0		103		111
Motor diameter	AC [mm]	172		192		210
Distance motor/connection	AD [mm]	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

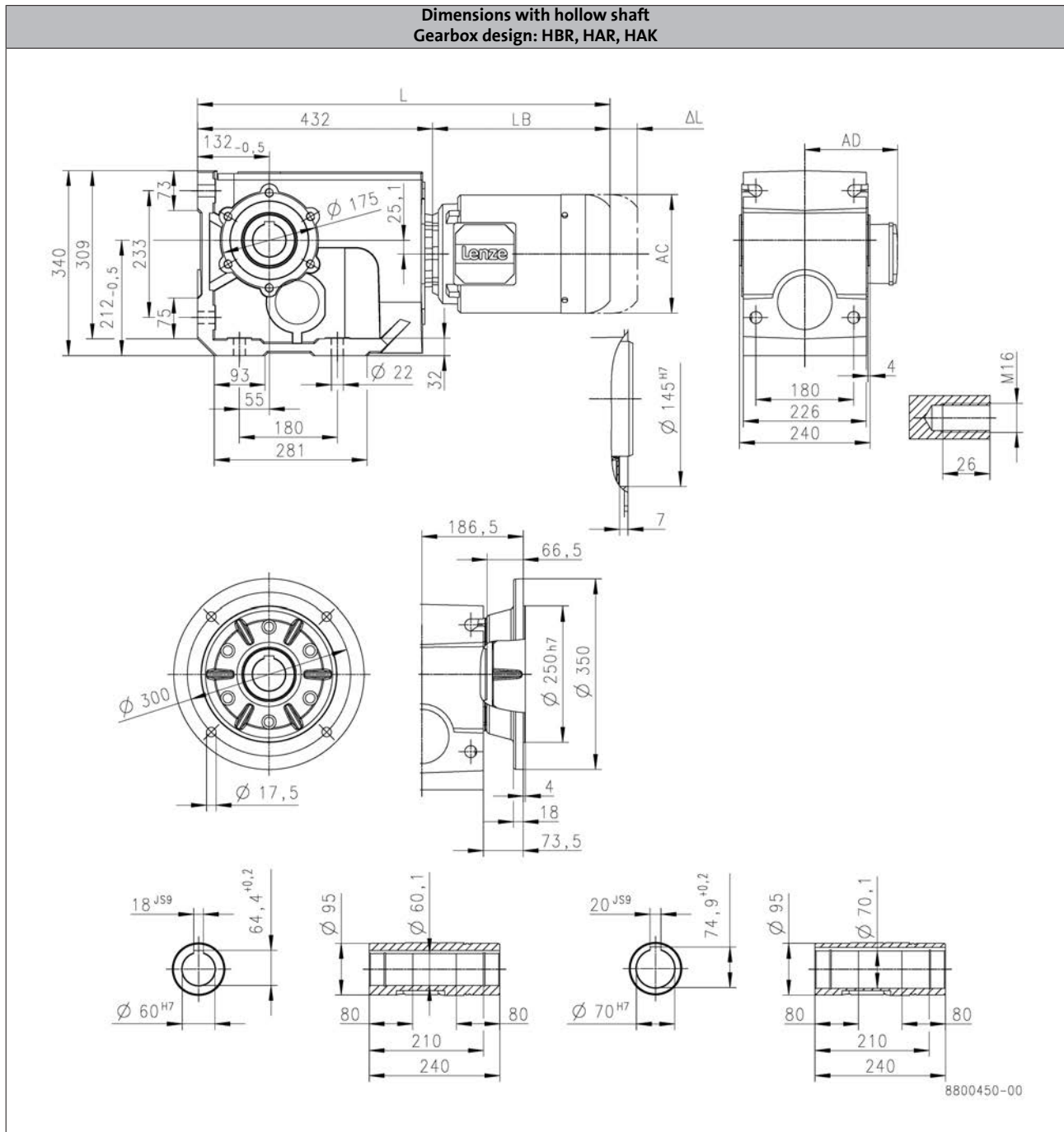
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B2700

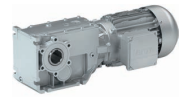


		m240			
		-P132/M4	-P132/L4	-P160/M4	-P160/L4
Total length	L [mm]		850		1001
Motor length	LB [mm]		418		569
Length of motor options	Δ L [mm]		118		146
Motor diameter	AC [mm]		281		313
Distance motor/connection	AD [mm]		182		231

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

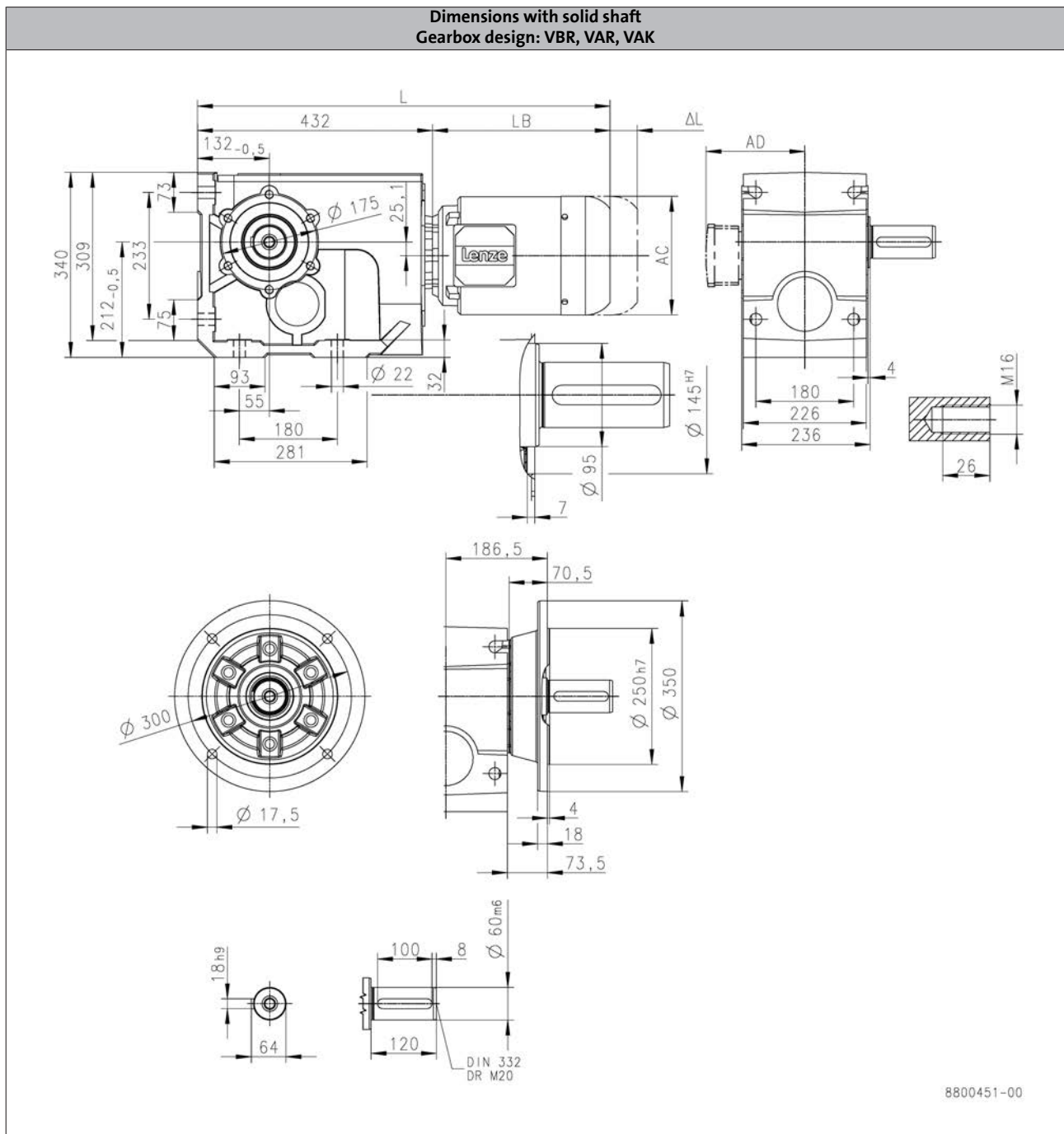
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B2700



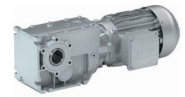
			m240				
			-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L	[mm]	726		788		775
Motor length	LB	[mm]	294		356		343
Length of motor options	Δ L	[mm]	92.0		103		111
Motor diameter	AC	[mm]	172		192		210
Distance motor/connection	AD	[mm]	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



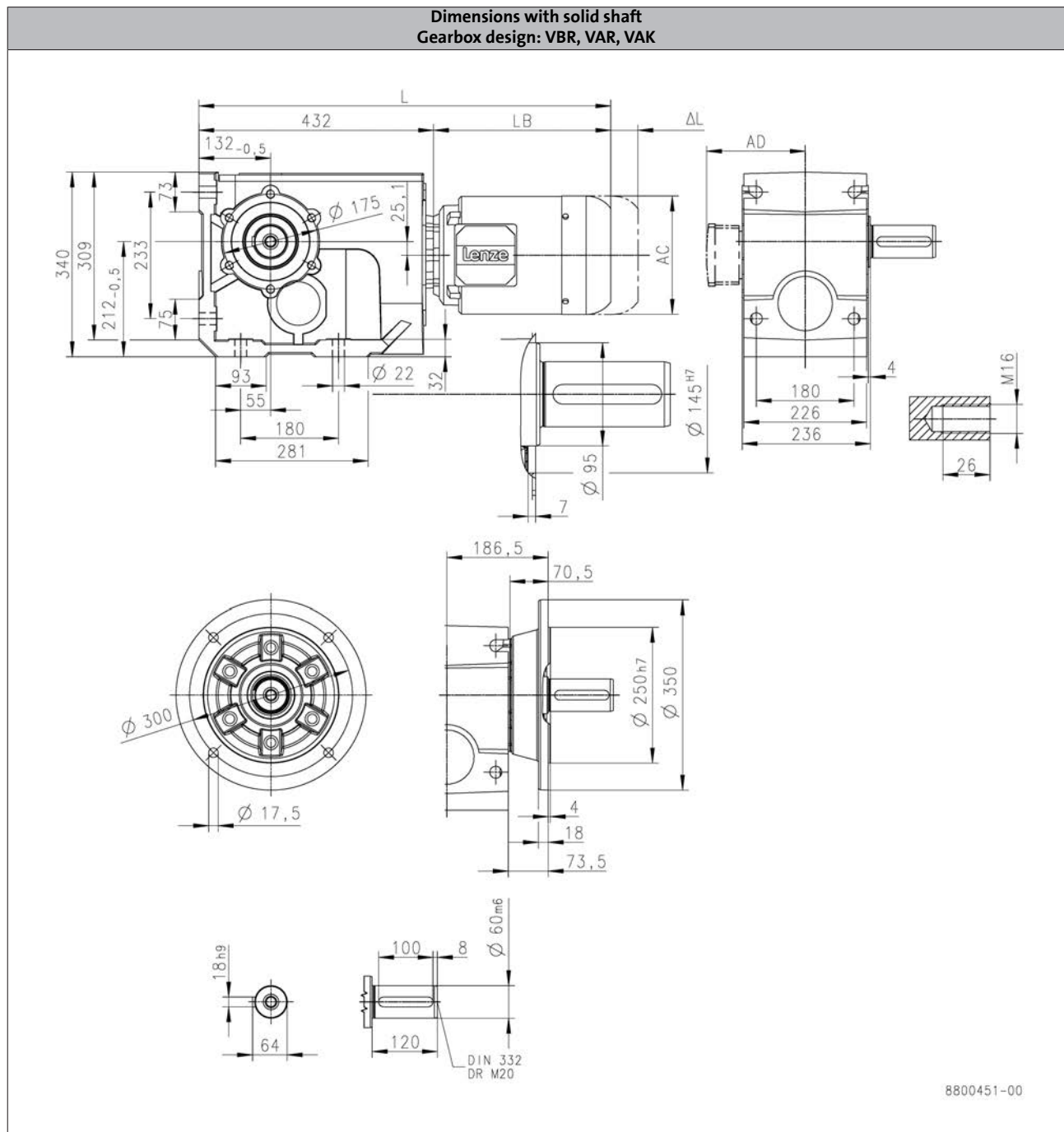
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B2700

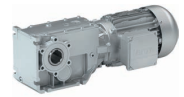


		m240			
		-P132/M4	-P132/L4	-P160/M4	-P160/L4
Total length	L [mm]	850	850	1001	1001
Motor length	LB [mm]	418	418	569	569
Length of motor options	Δ L [mm]	118	118	146	146
Motor diameter	AC [mm]	281	281	313	313
Distance motor/connection	AD [mm]	182	182	231	231

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

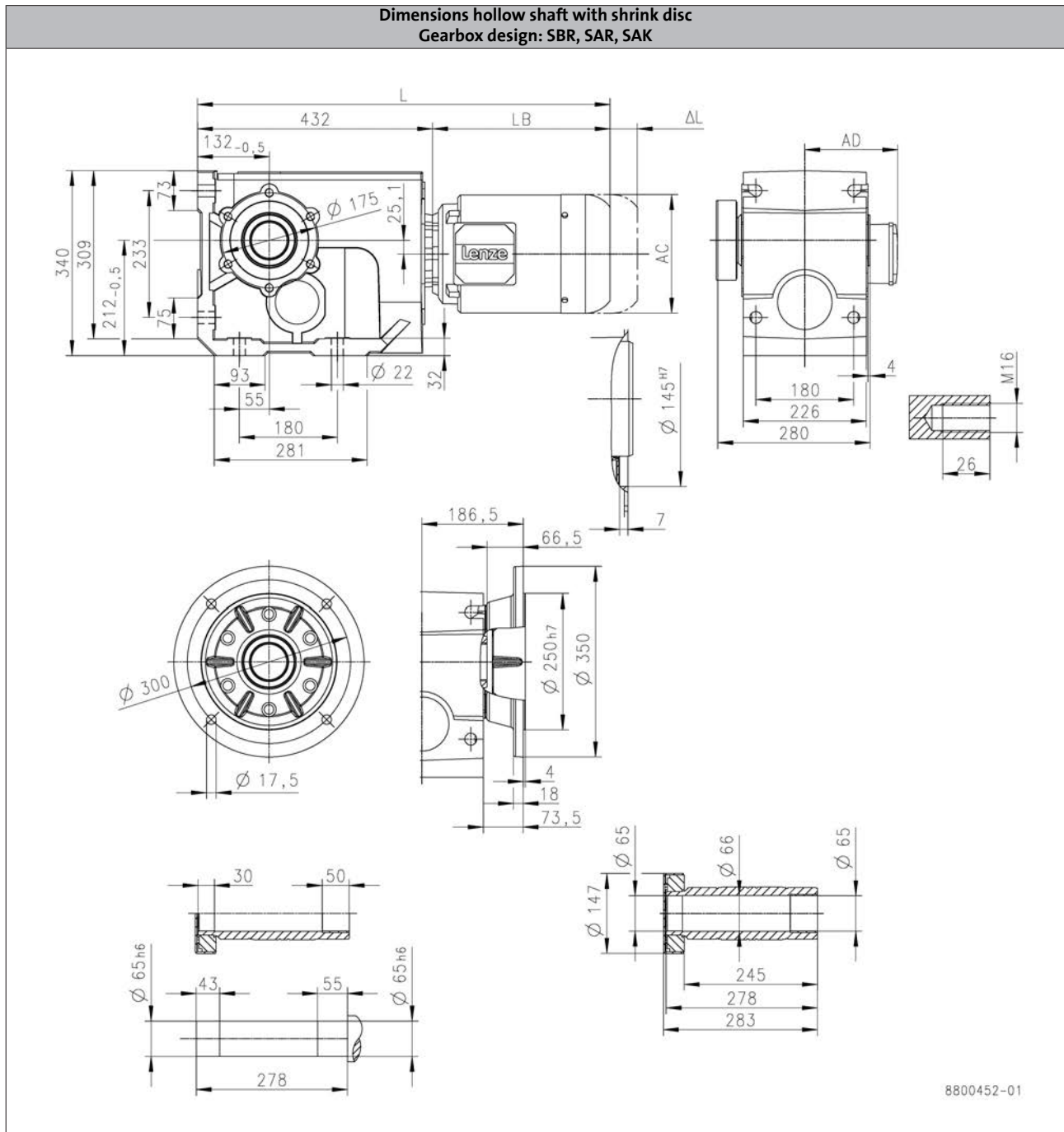
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B2700

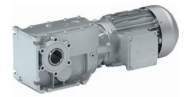


		m240				
		-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4
Total length	L [mm]	726		788		775
Motor length	LB [mm]	294		356		343
Length of motor options	Δ L [mm]	92.0		103		111
Motor diameter	AC [mm]	172		192		210
Distance motor/connection	AD [mm]	155		164		171

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

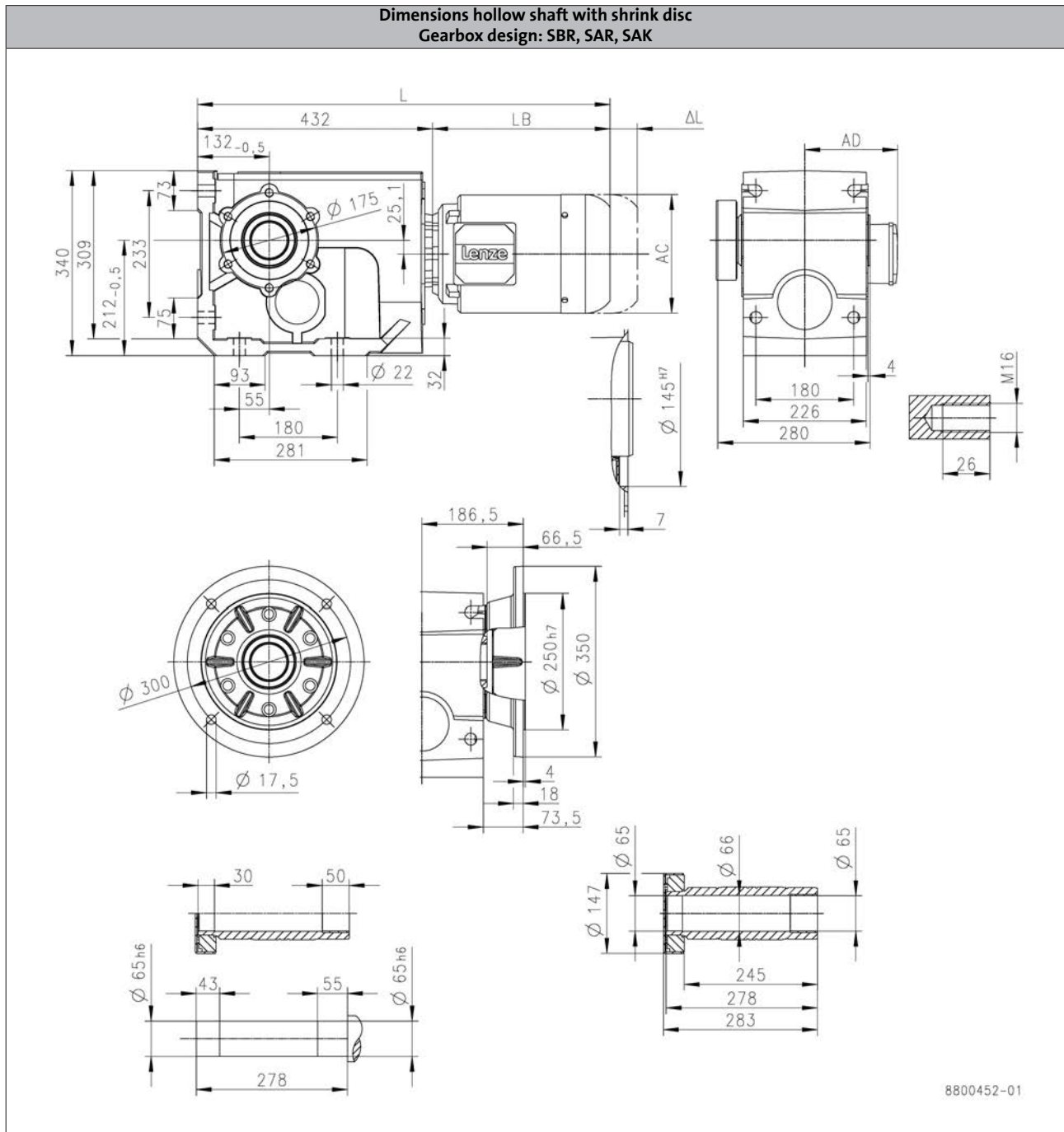
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B2700

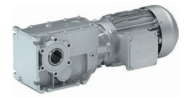


		m240			
		-P132/M4	-P132/L4	-P160/M4	-P160/L4
Total length	L [mm]	850			1001
Motor length	LB [mm]	418			569
Length of motor options	Δ L [mm]	118			146
Motor diameter	AC [mm]	281			313
Distance motor/connection	AD [mm]	182			231

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

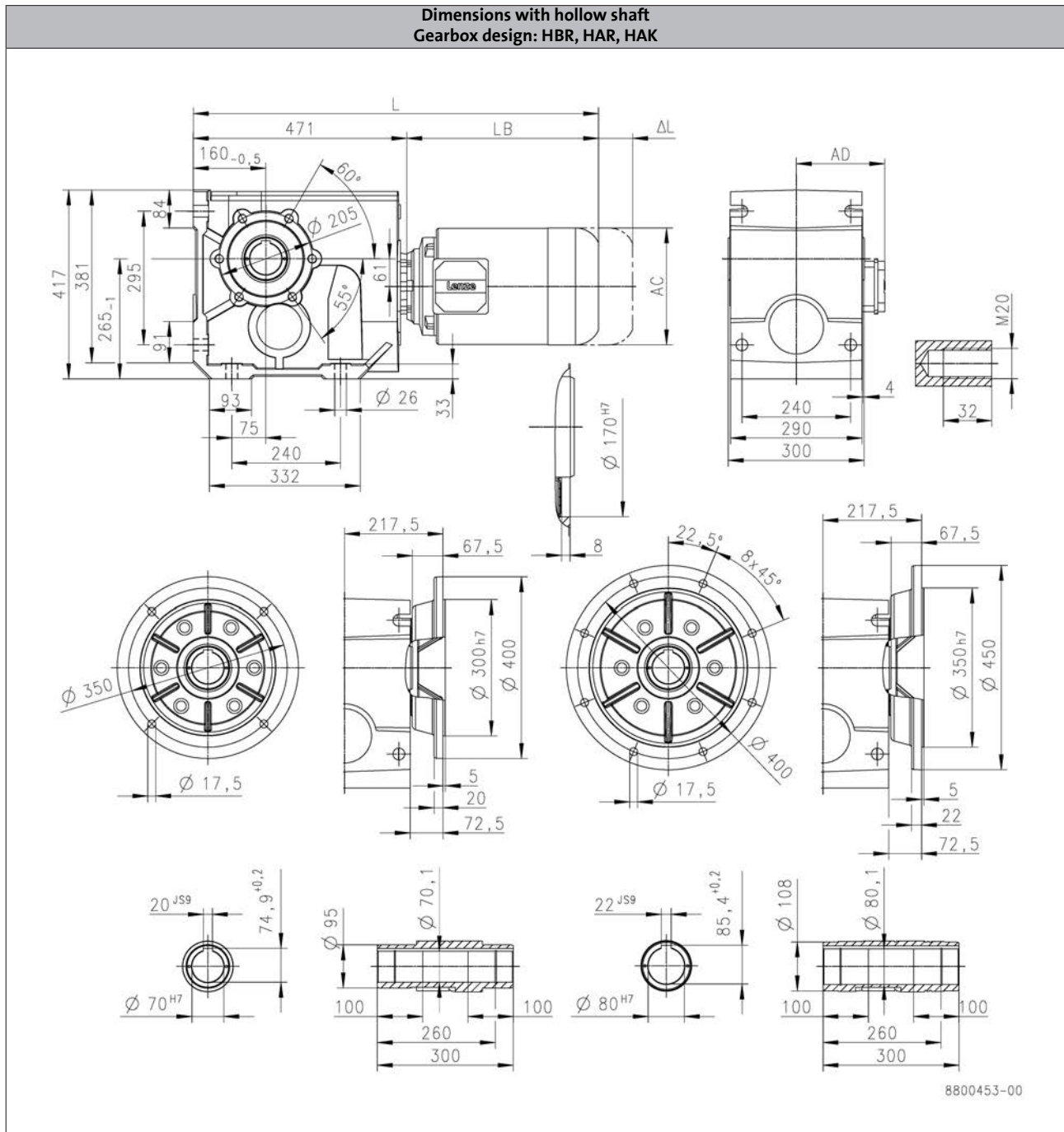
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B4300

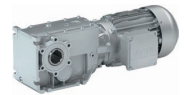


		m240						
		-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	765		827		814		889
Motor length	LB [mm]	294		356		343		418
Length of motor options	Δ L [mm]	92.0		103		111		118
Motor diameter	AC [mm]	172		192		210		281
Distance motor/connection	AD [mm]	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

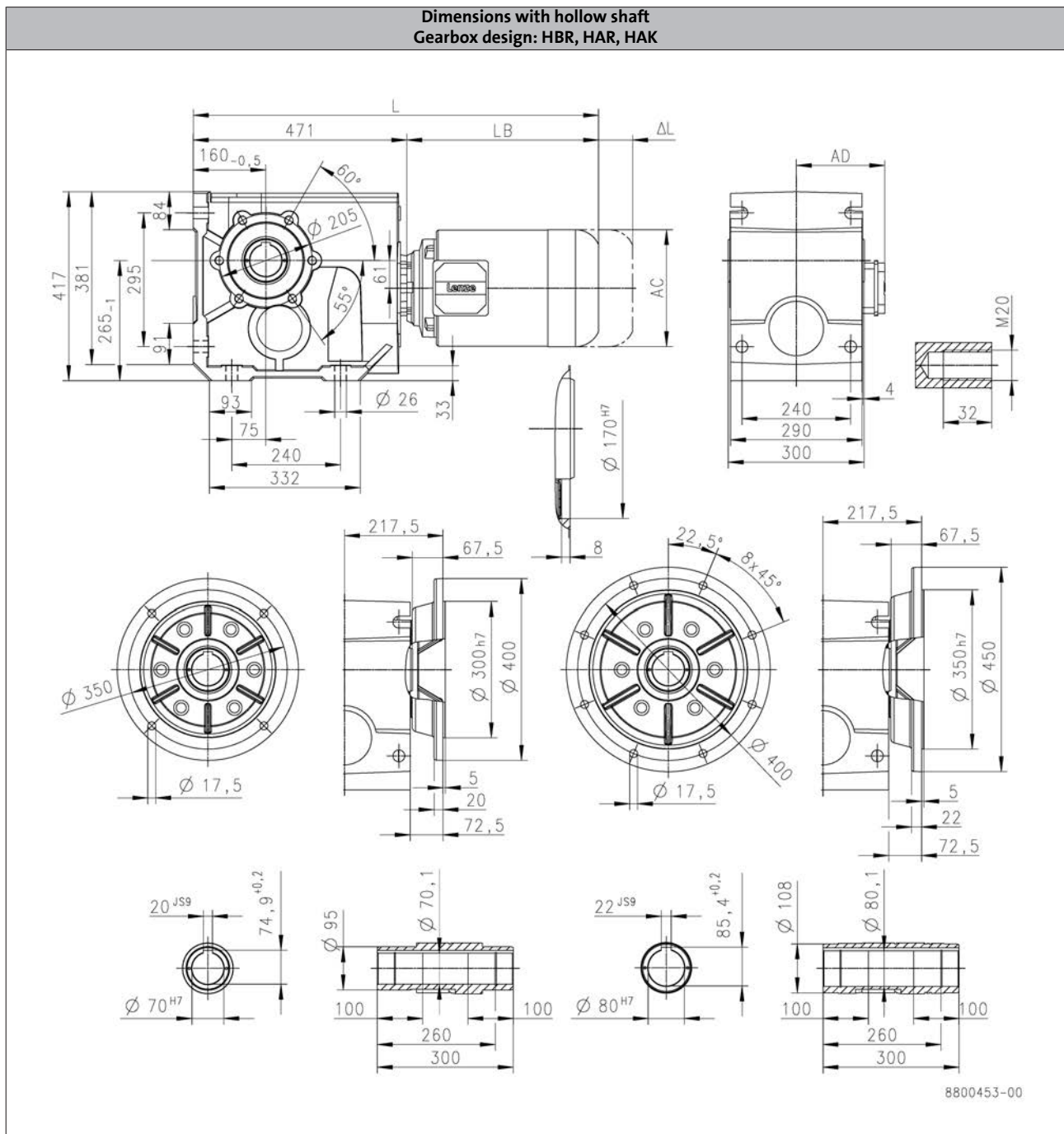
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B4300

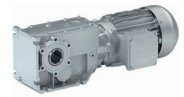


		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]	1040			1140	
Motor length	LB [mm]	569			669	
Length of motor options	Δ L [mm]	146			107	
Motor diameter	AC [mm]	313			351	
Distance motor/connection	AD [mm]	231			282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

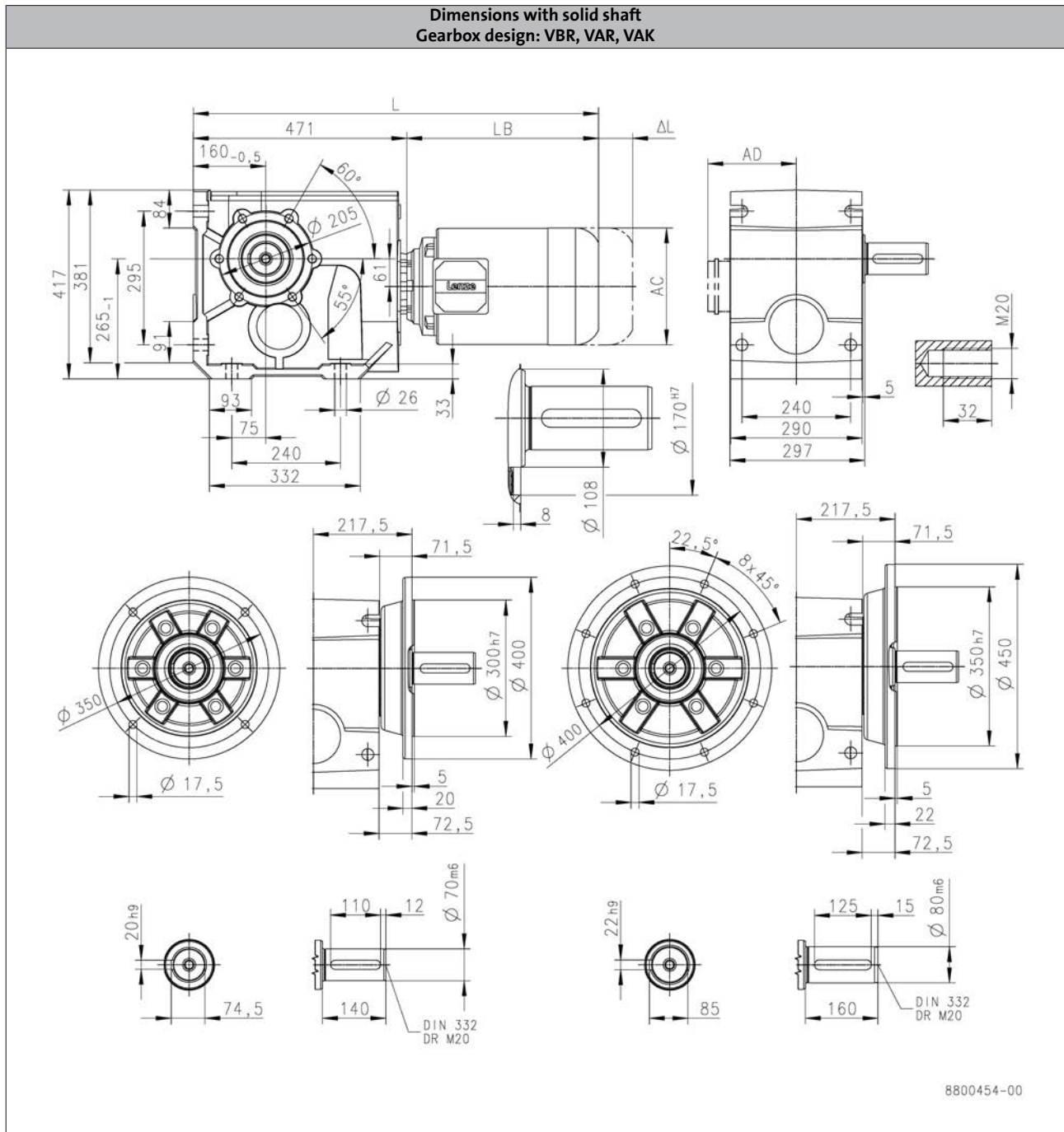
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B4300

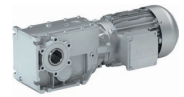


		m240						
		-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	765		827		814		889
Motor length	LB [mm]	294		356		343		418
Length of motor options	Δ L [mm]	92.0		103		111		118
Motor diameter	AC [mm]	172		192		210		281
Distance motor/connection	AD [mm]	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

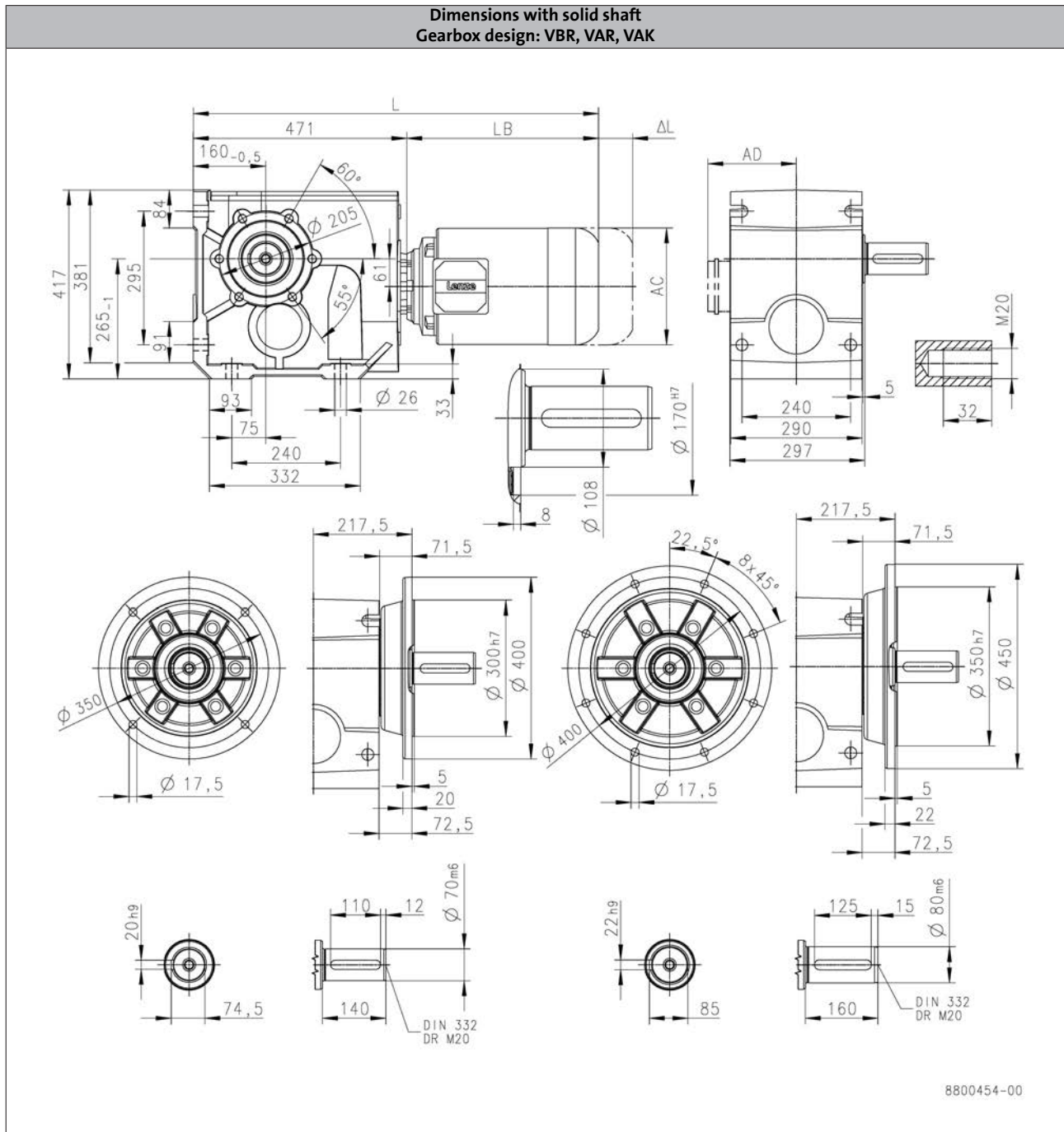
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B4300

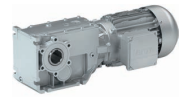


		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]		1040		1140	
Motor length	LB [mm]		569		669	
Length of motor options	Δ L [mm]		146		107	
Motor diameter	AC [mm]		313		351	
Distance motor/connection	AD [mm]		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

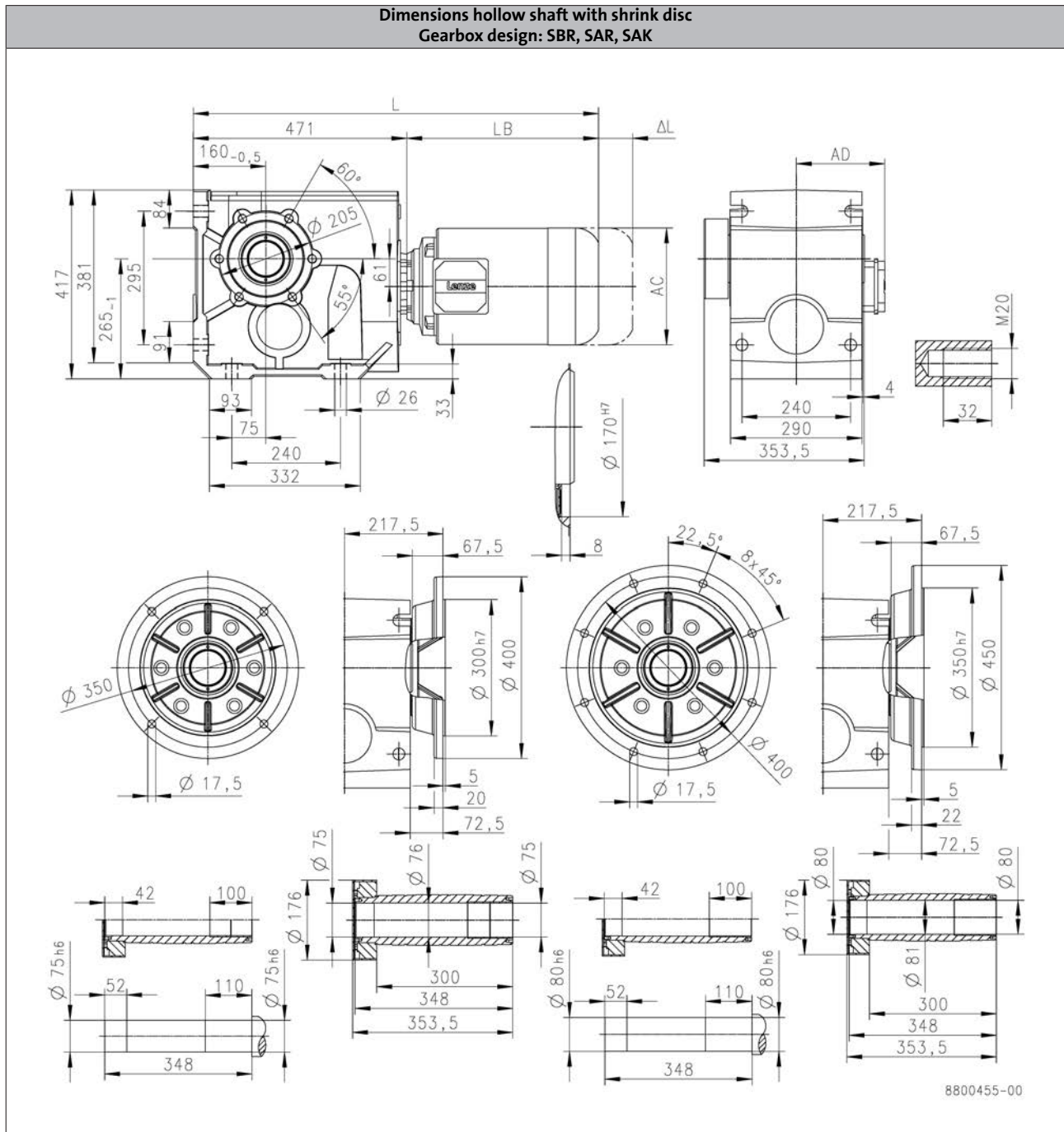
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B4300



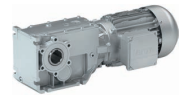
		m240						
		-P90/M4	-P90/L4	-P100/M4	-P100/L4	-P112/M4	-P132/M4	-P132/L4
Total length	L [mm]	765		827		814		889
Motor length	LB [mm]	294		356		343		418
Length of motor options	Δ L [mm]	92.0		103		111		118
Motor diameter	AC [mm]	172		192		210		281
Distance motor/connection	AD [mm]	155		164		171		182

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)



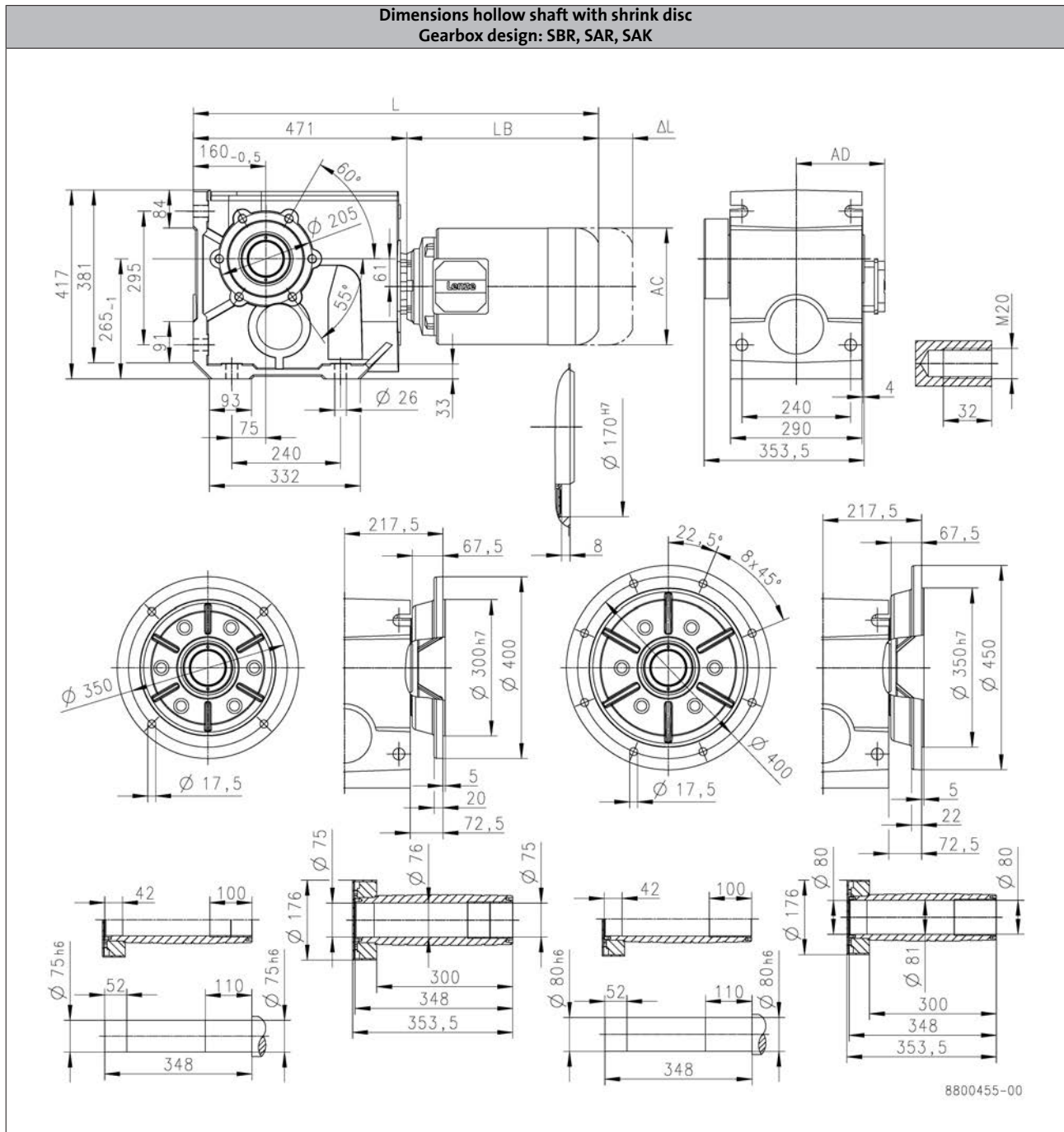
# g500-B bevel geared motors

Technical data



## Dimensions, 4-pole motors

g500-B4300

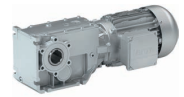


		m240				
		-P160/M4	-P160/L4	-P180/M4	-P180/L4	-P180/V4
Total length	L [mm]		1040		1140	
Motor length	LB [mm]		569		669	
Length of motor options	Δ L [mm]		146		107	
Motor diameter	AC [mm]		313		351	
Distance motor/connection	AD [mm]		231		282	

L = length of the motor without built-on accessories  
 ΔL = additional length of the built-on accessories (with brake)

# g500-B bevel geared motors

## Technical data



### Weights, 4-pole motors

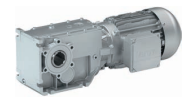
- Weights with oil capacity for mounting position A, all given as approximate values.  
The weights refer to the basic version, observe additional weights!

### 2-stage gearboxes

Product		Mass
		m
		[kg]
g500-B45	MD□MA□□063-02	6.70
	MD□MA□□063-12	7.30
	MD□MA□□063-22	6.70
	MD□MA□□063-32	7.30
	MD□MA□□063-42	7.60
	MD□MA□□071-32	9.00
	MD□MA□□071-42	9.60
g500-B110	MD□MA□□063-12	8.90
	MD□MA□□063-32	
	MD□MA□□063-42	9.20
	MD□MA□□071-32	10.6
	MD□MA□□071-42	11.2
	m240-P80/M4	19.7
	m240-P90/M4	23.7
m240-P90/L4	24.7	
g500-B240	MD□MA□□063-12	13.2
	MD□MA□□063-32	
	MD□MA□□063-42	13.5
	MD□MA□□071-32	14.9
	MD□MA□□071-42	15.5
	m240-P80/M4	24.0
	m240-P90/M4	28.0
	m240-P90/L4	29.0
	m240-P100/M4	35.0
	m240-P100/L4	40.0

# g500-B bevel geared motors

## Technical data



### Weights, 4-pole motors

- Weights with oil capacity for mounting position A, all given as approximate values.  
The weights refer to the basic version, observe additional weights!

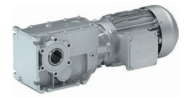
### 3-stage gearboxes

Product		Mass
		m
		[kg]
g500-B240	MD□MA□□063-12	13.4
	MD□MA□□063-32	
	MD□MA□□063-42	13.7
	MD□MA□□071-32	15.1
	MD□MA□□071-42	15.7
g500-B450	MD□MA□□063-12	16.4
	MD□MA□□063-32	
	MD□MA□□063-42	16.7
	MD□MA□□071-32	18.1
	MD□MA□□071-42	18.7
	m240-P80/M4	27.2
	m240-P90/M4	31.2
	m240-P90/L4	32.2
	m240-P100/M4	38.2
	m240-P100/L4	43.2
	m240-P112/M4	46.2
	m240-P132/M4	67.2
	m240-P132/L4	69.2
	g500-B600	MD□MA□□063-42
MD□MA□□071-32		36.2
MD□MA□□071-42		36.8
m240-P80/M4		45.3
m240-P90/M4		49.3
m240-P90/L4		50.3
m240-P100/M4		56.3
m240-P100/L4		61.3
m240-P112/M4		64.3
m240-P132/M4		85.3
g500-B820	MD□MA□□063-42	39.9
	MD□MA□□071-32	41.3
	MD□MA□□071-42	41.9
	m240-P80/M4	50.4
	m240-P90/M4	54.4
	m240-P90/L4	55.4
	m240-P100/M4	61.4

Product		Mass
		m
		[kg]
g500-B820	m240-P100/L4	66.4
	m240-P112/M4	69.4
	m240-P132/M4	90.4
	m240-P132/L4	92.4
g500-B1500	MD□MA□□071-42	72.2
	m240-P80/M4	80.7
	m240-P90/M4	84.7
	m240-P90/L4	85.7
	m240-P100/M4	91.7
	m240-P100/L4	96.7
	m240-P112/M4	99.7
	m240-P132/M4	121
	m240-P132/L4	123
	m240-P160/M4	158
	m240-P160/L4	165
g500-B2700	m240-P90/M4	126
	m240-P90/L4	127
	m240-P100/M4	133
	m240-P100/L4	138
	m240-P112/M4	141
	m240-P132/M4	162
	m240-P132/L4	164
	m240-P160/M4	199
	m240-P160/L4	206
	m240-P90/M4	188
g500-B4300	m240-P90/L4	189
	m240-P100/M4	195
	m240-P100/L4	200
	m240-P112/M4	203
	m240-P132/M4	224
	m240-P132/L4	226
	m240-P160/M4	261
	m240-P160/L4	268
	m240-P180/M4	295
	m240-P180/L4	304
m240-P180/V4	352	

# g500-B bevel geared motors

Technical data



## Additional weights for gearboxes

Product			g500-B45	g500-B110	g500-B240	g500-B450	g500-B600
<b>Mass</b>							
Solid shaft	m	[kg]	0.4	0.5	1.4	1.0	1.5
Shrink disc	m	[kg]	0.2	0.2	0.7	0.6	0.6
Flange	m	[kg]	0.3	0.4	0.7	0.9	6.1

Product			g500-B820	g500-B1500	g500-B2700	g500-B4300
<b>Mass</b>						
Solid shaft	m	[kg]	1.9	3.7	6.0	15.5
Shrink disc	m	[kg]	1.2	1.7	2.3	4.3
Flange	m	[kg]	6.1	11.5	15.0	29.0

## Additional weights for motors

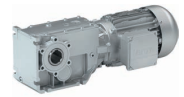
### 4-pole motors

Product			MD□MA□□		m240		
			063-12 063-32 063-42	071-32 071-42	-P80/M4	-P90/M4 -P90/L4	-P100/M4 -P100/L4
Brake			06	06 08		08 10	10 12
	m	[kg]	0.9	0.9 1.5		1.5 2.6	2.6 4.2

Product			m240				
			-P112/M4	-P132/M4 -P132/L4	-P160/M4	-P160/L4	-P180/M4 -P180/L4 -P180/V4
Brake			12 14	14 16	16 18	18	18 20
	m	[kg]	4.2 5.8	5.8 8.7	8.7 12.6	12.6	12.6 19.5

# g500-B bevel geared motors

Product extensions



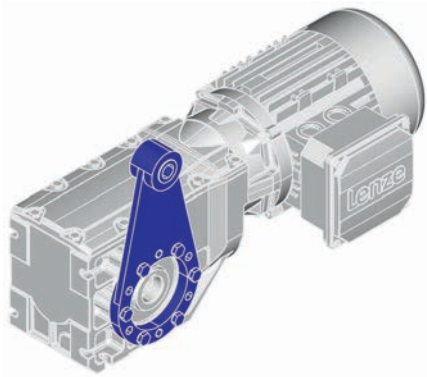
## Overview

### Torque plate

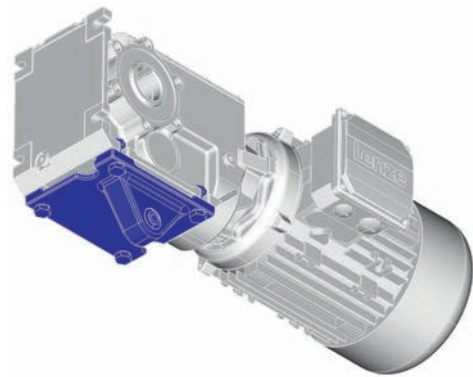
The torque is usually supported via the foot or the flange. Another simple option are the attachable torque plates. Here, the torque is supported only via one point and is, among other things, suitable for shaft-mounted gearboxes. The supplied rubber buffers provide for a low-tension installation and absorb slight shocks. The torque plates are available in two versions, for being installed at the existing threaded pitch circle or for the foot at the gearbox.

In addition, torque support for the g500-B45 gearbox can be effected via the holding fixture of the housing, which is integrated on both sides, by means of a rubber buffer. The rubber buffers can be ordered optionally.

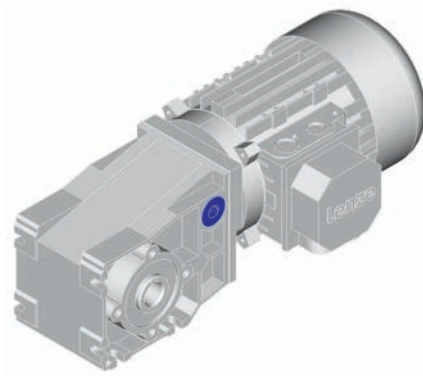
Torque plate on threaded pitch circle



Torque plate at housing foot

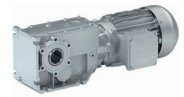


Rubber buffer for torque plate



# g500-B bevel geared motors

Product extensions



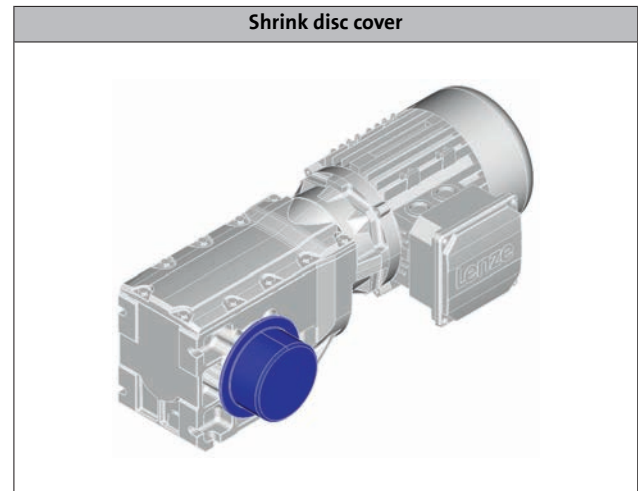
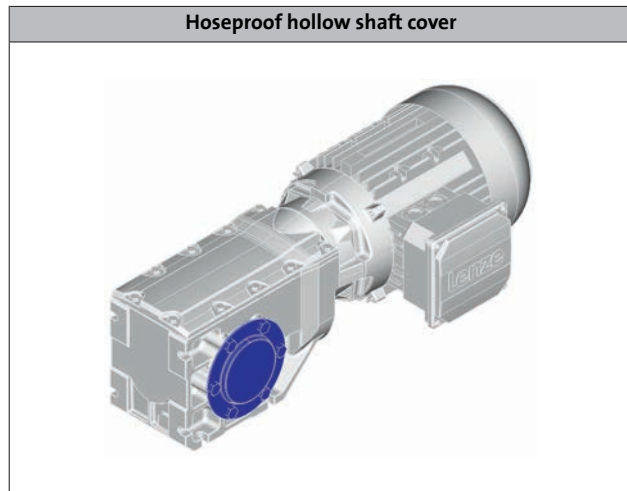
## Overview

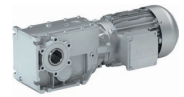
### Shaft cover

The hoseproof hollow shaft cover protects the hollow shaft from objects falling in. It is sealed by a flat gasket between cover and housing. Thus, the hollow shaft is protected from dust and water jets.

The cover is loosely enclosed and can be mounted on both sides of the hollow shaft bore.

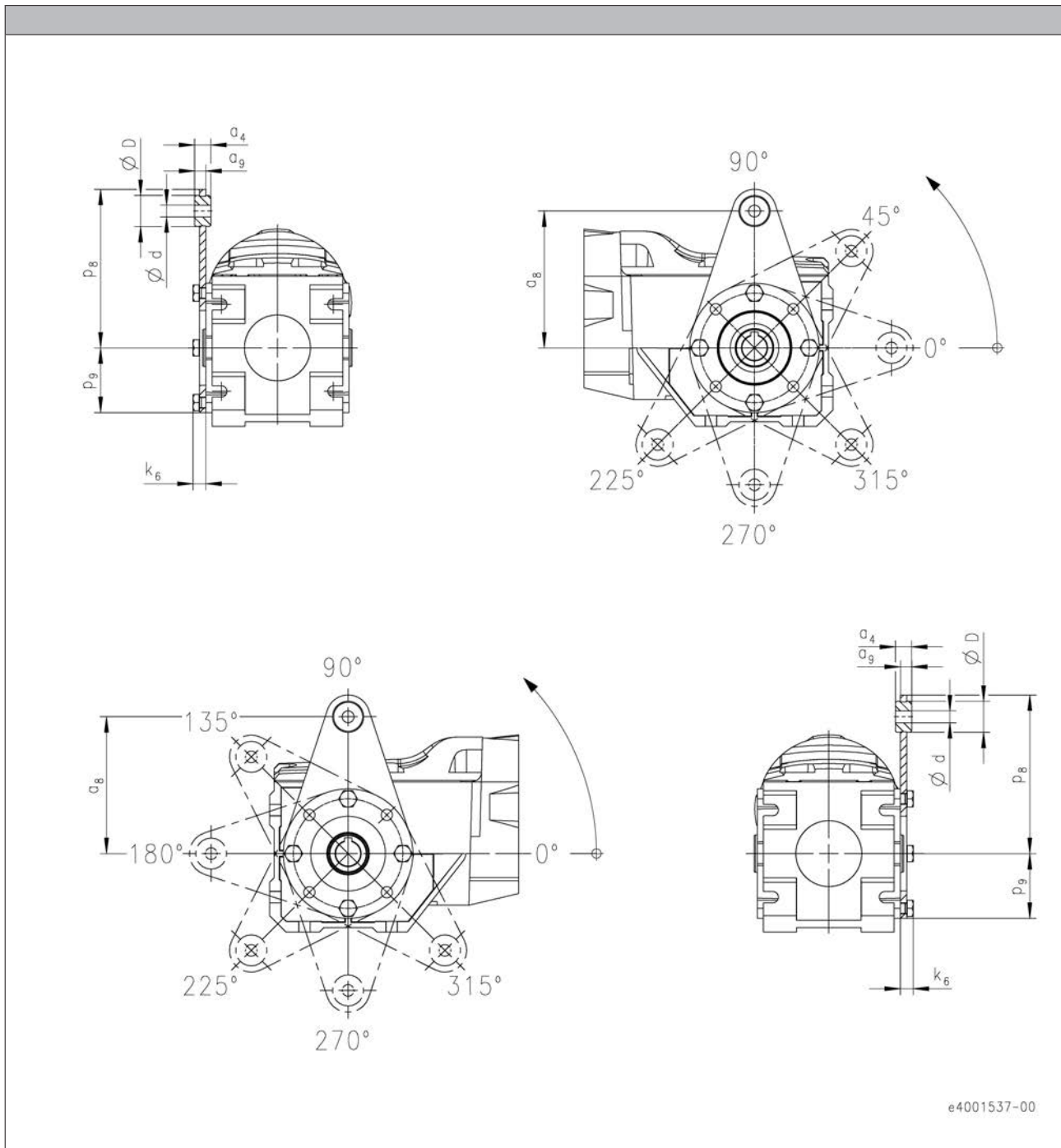
The optional shrink disc cover is provided for the shrink disc to be protected from contact.





### Torque plate

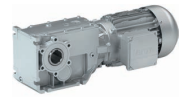
#### Torque plate on threaded pitch circle



Product	Dimensions								Mass
	a <sub>4</sub> [mm]	a <sub>8</sub> [mm]	a <sub>9</sub> [mm]	d [mm]	D [mm]	p <sub>8</sub> [mm]	p <sub>9</sub> [mm]	k <sub>6</sub> [mm]	m [kg]
g500-B45	12.0	100	8.0	8.0	20.0	115	42.0	9.0	0.3
g500-B110	13.0	110	9.0	10.0	25.0	128	54.0	11.0	0.5

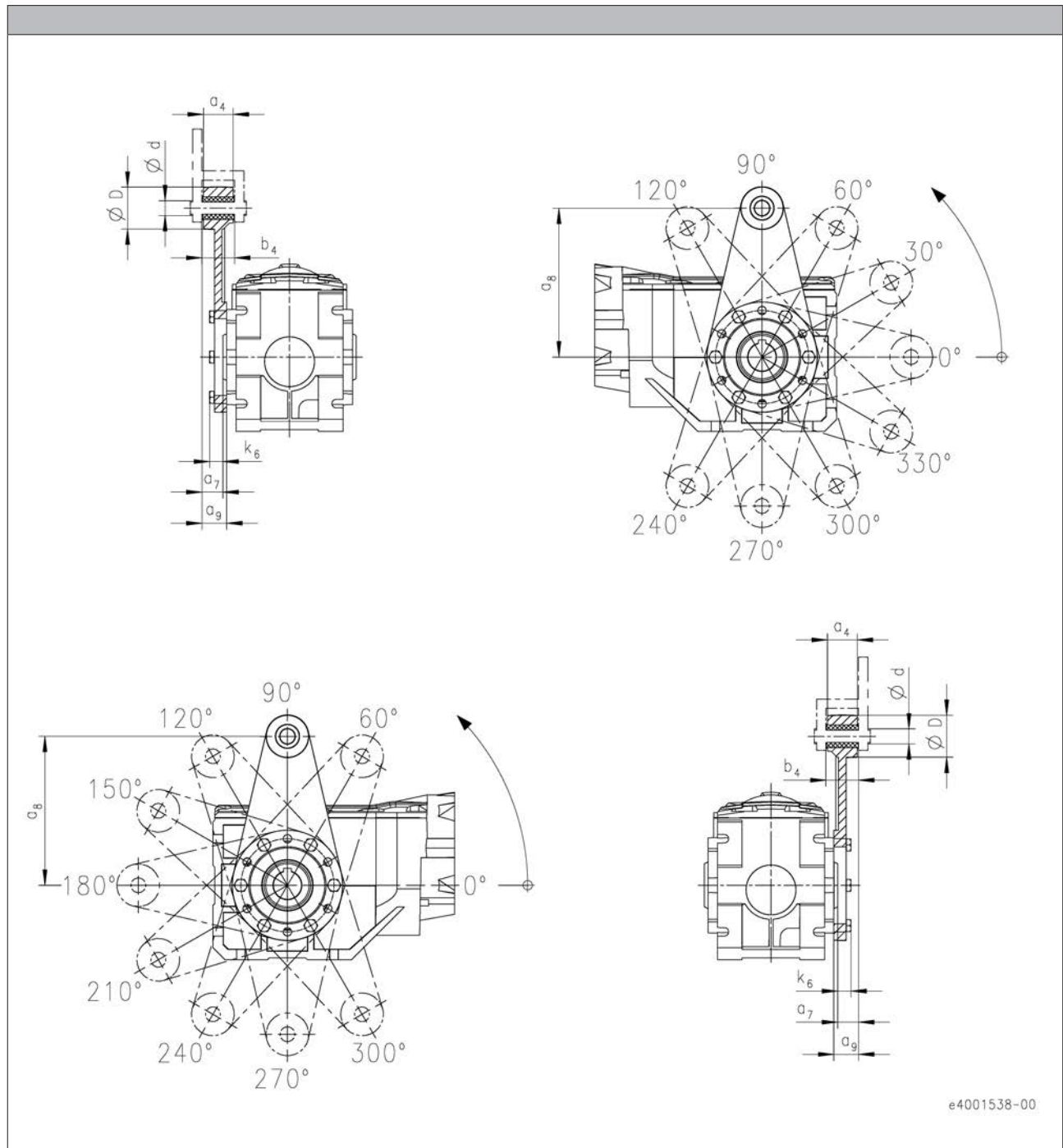
# g500-B bevel geared motors

Product extensions



## Torque plate

Torque plate on threaded pitch circle



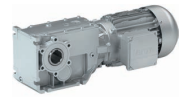
6.5

Product	Dimensions								Mass
	a <sub>4</sub>	a <sub>7</sub>	a <sub>8</sub>	a <sub>9</sub>	b <sub>4</sub>	d	D	k <sub>6</sub>	m
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
g500-B240	34.0	23.5	160	27.5	38.5	16.0	45.0	15.0	1.3
g500-B450	40.0	29.0	200	32.0	44.5	20.0	50.0	18.0	2.5
g500-B600	38.0	26.5	200	31.5	40.0	20.0	50.0	19.0	2.5



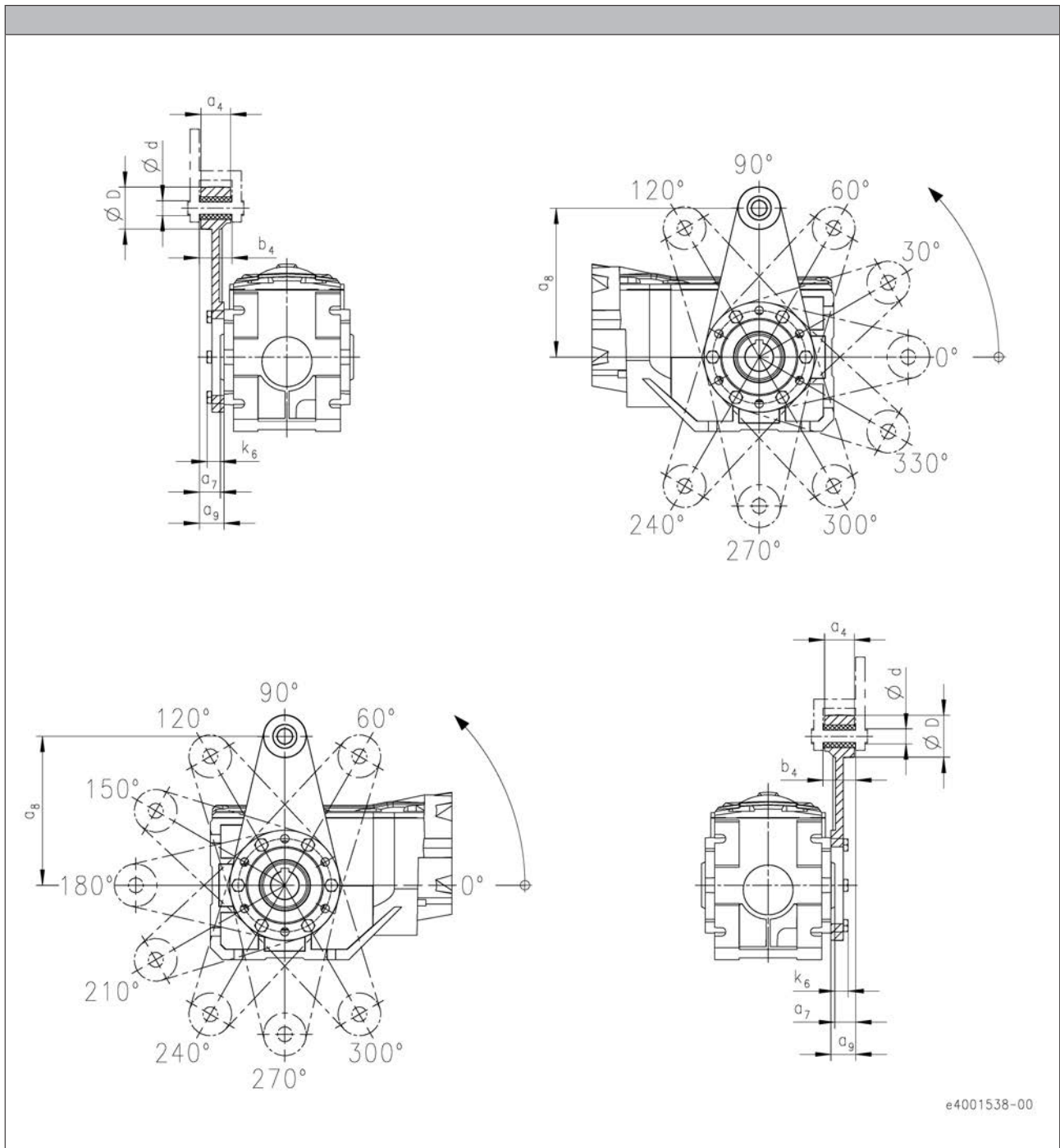
# g500-B bevel geared motors

Product extensions



## Torque plate

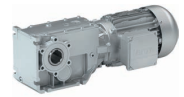
Torque plate on threaded pitch circle



Product	Dimensions								Mass
	a <sub>4</sub> [mm]	a <sub>7</sub> [mm]	a <sub>8</sub> [mm]	a <sub>9</sub> [mm]	b <sub>4</sub> [mm]	d [mm]	D [mm]	k <sub>6</sub> [mm]	m [kg]
g500-B820	38.0	28.0	200	31.5	40.0	20.0	50.0	20.5	2.5
g500-B1500	44.0	32.0	250	36.0	46.0	25.0	65.0	24.0	4.5

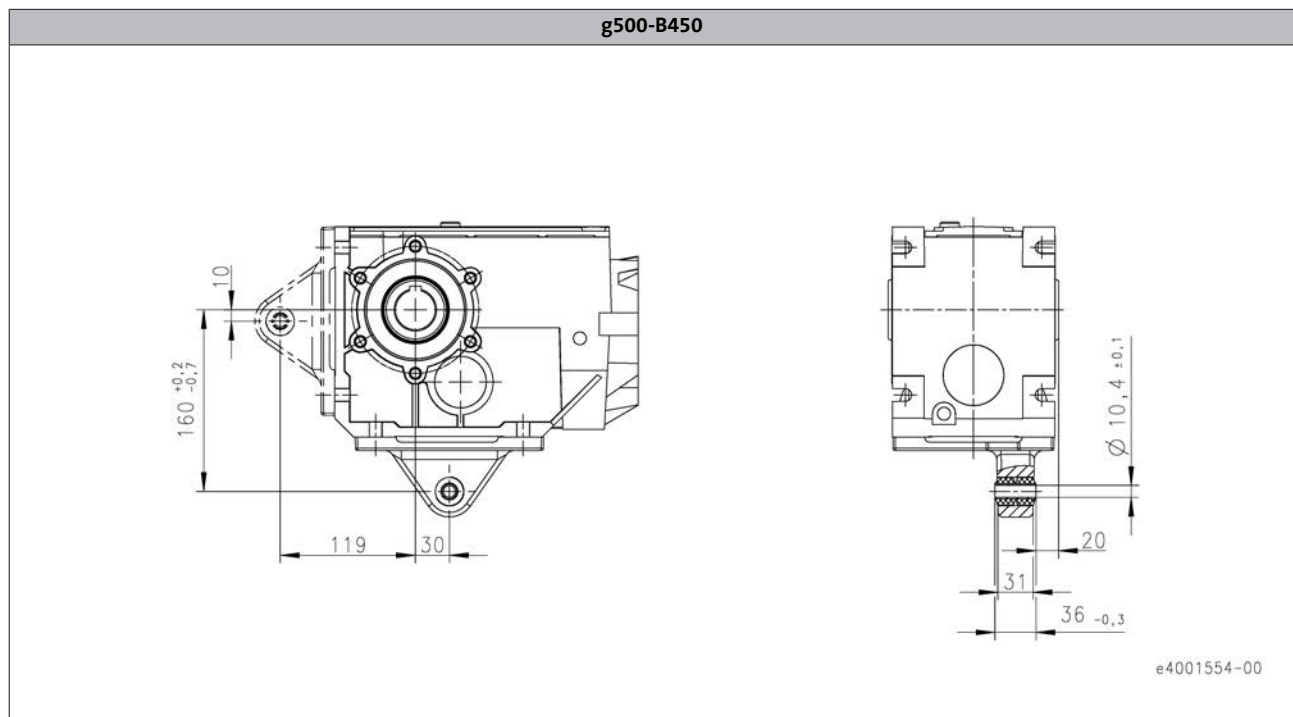
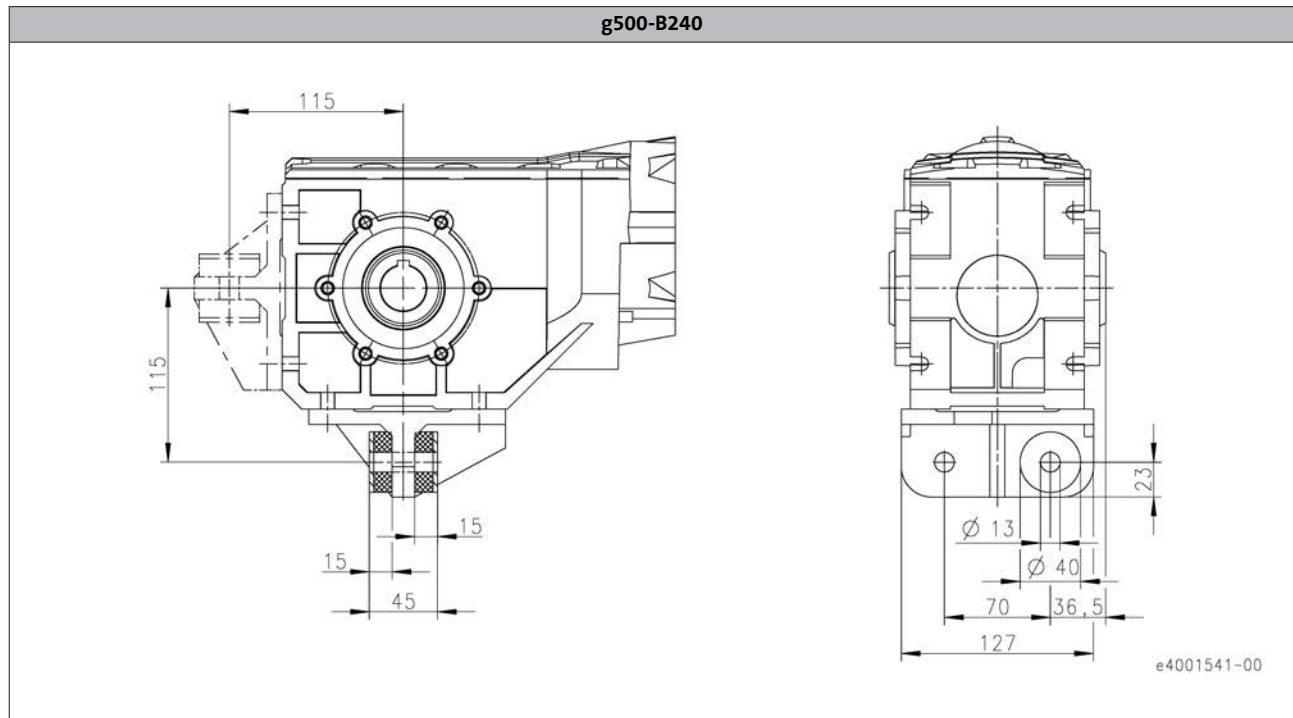
# g500-B bevel geared motors

Product extensions



## Torque plate

Torque plate at housing foot

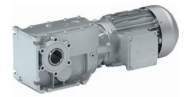


6.5

Product	Mass
	m
	[kg]
g500-B240	2.4
g500-B450	1.1

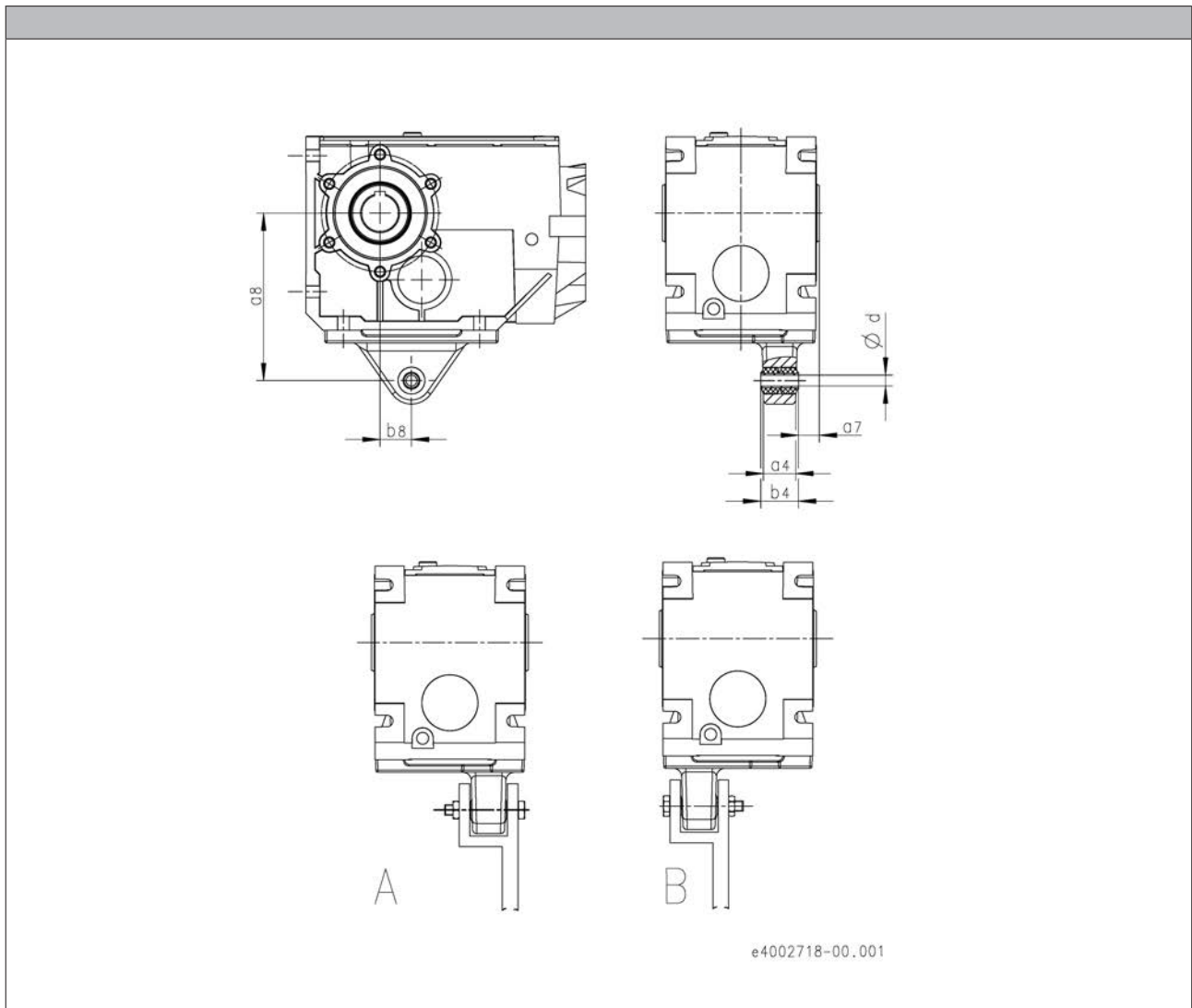
# g500-B bevel geared motors

Product extensions



## Torque plate

Torque plate at housing foot



Product	Dimensions						Mass m
	d [mm]	a <sub>8</sub> [mm]	b <sub>8</sub> [mm]	a <sub>4</sub> [mm]	b <sub>4</sub> [mm]	a <sub>7</sub> [mm]	
g500-B600	16.4	192	40.0	55.0	60.0	18.0	2.8
g500-B820	16.4	200	45.0	55.0	60.0	25.0	3.0
g500-B1500	16.4	250	52.5	55.0	60.0	25.0	4.3
g500-B2700	25.0	300	60.0	72.0	80.0	30.0	10.0
g500-B4300	25.0	350	70.0	92.0	100	40.0	13.0
g500-B8000	40.0	450	74.0	80.0	88.0	57.0	15.0
g500-B13000	40.0	550	60.0	80.0	88.0	7.00	25.0
g500-B20000	70.0	700	50.0	111	120	2.00	64.0

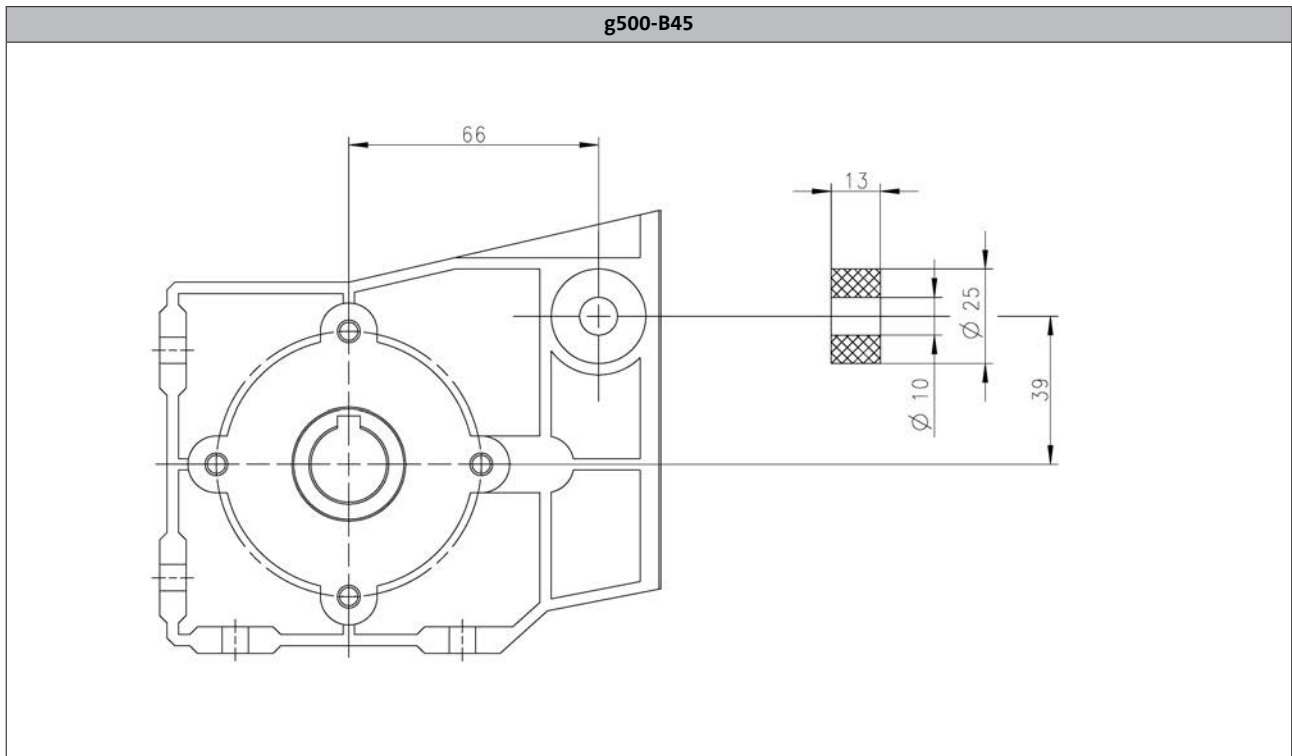
# g500-B bevel geared motors

Product extensions



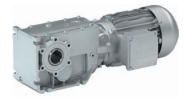
## Torque plate

Rubber buffer for torque plate



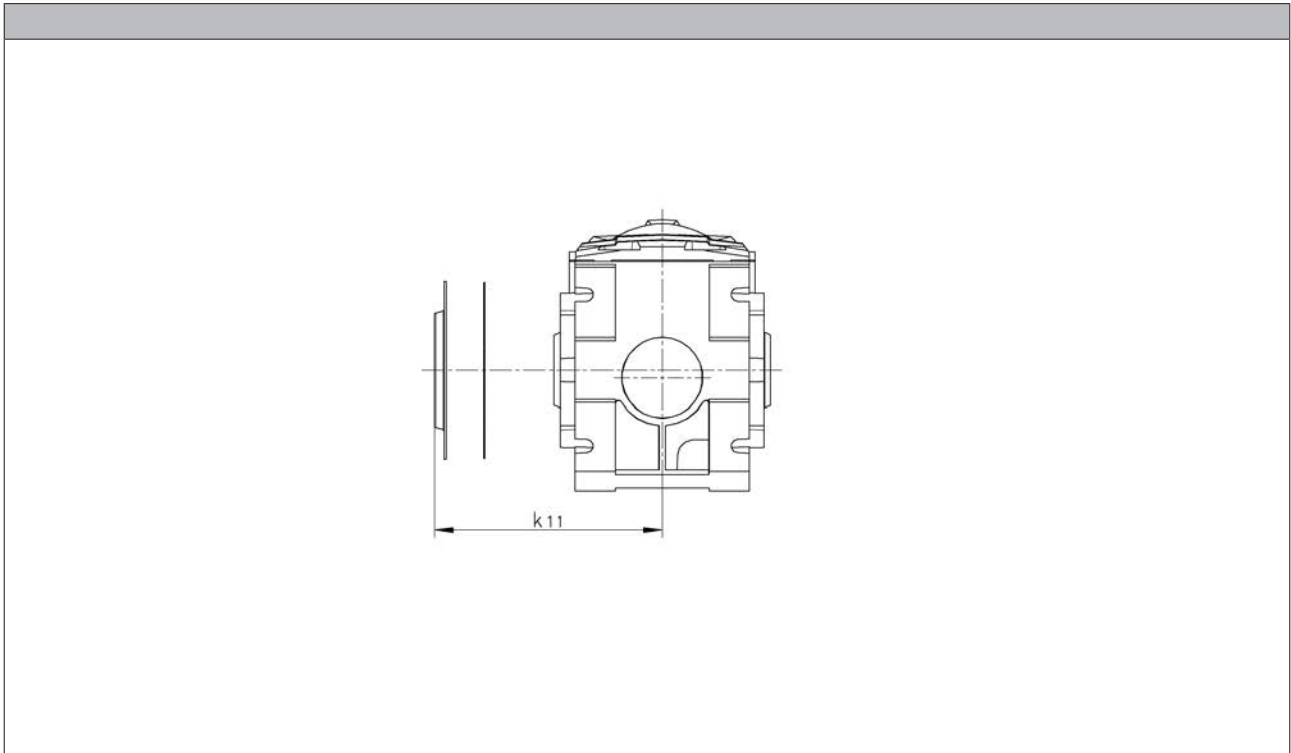
# g500-B bevel geared motors

Product extensions



## Shaft cover

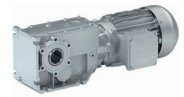
Hoseproof hollow shaft cover



Product	Dimensions	Mass
	$k_{11}$	m
	[mm]	[kg]
g500-B45	55.0	0.1
g500-B110	65.0	0.1
g500-B240	75.0	0.1
g500-B450	79.5	0.2
g500-B600	90.0	0.3
g500-B820	97.0	0.3
g500-B1500	113	0.6
g500-B2700	131	0.6
g500-B4300	161	0.8
g500-B8000	250	0.5
g500-B13000	313	0.6
g500-B20000	372	0.9

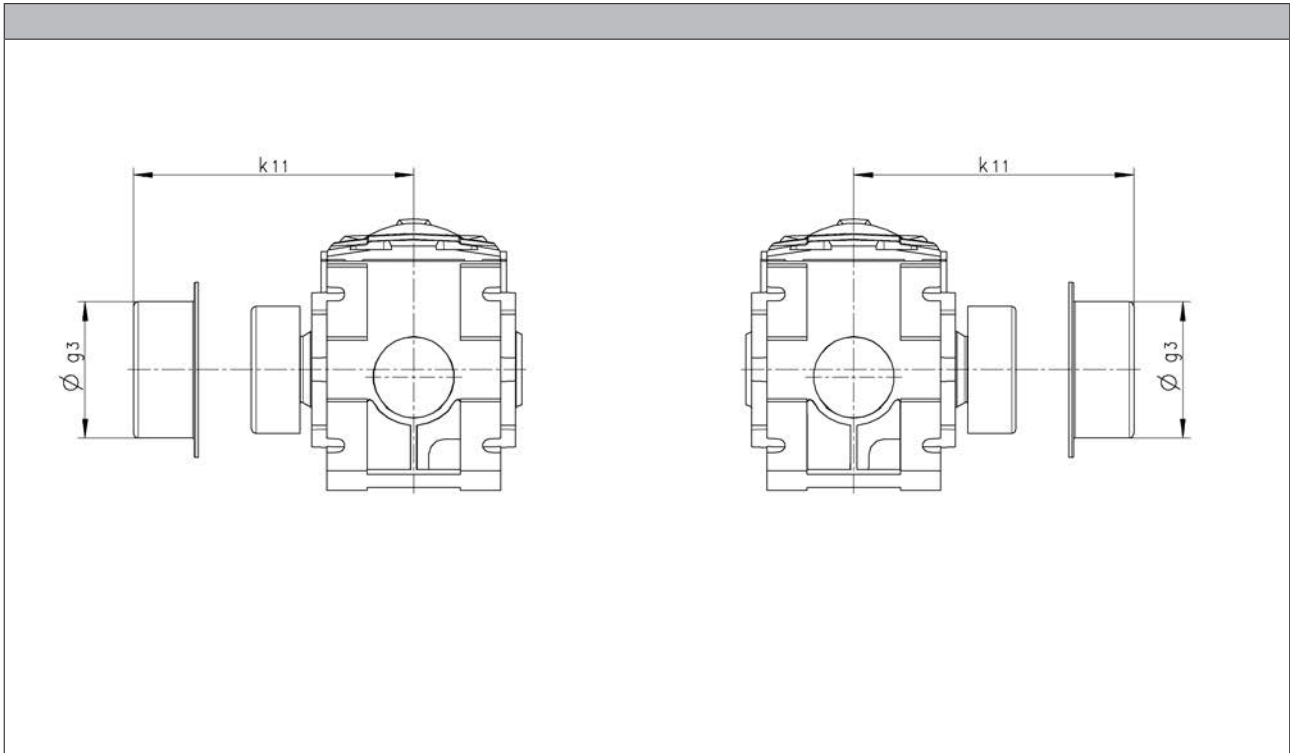
# g500-B bevel geared motors

Product extensions



## Shaft cover

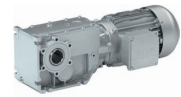
Shrink disc cover



Product	Dimensions		Mass
	$g_3$ [mm]	$k_{11}$ [mm]	m [kg]
g500-B45	65.0	87.5	0.1
g500-B110	79.0	97.5	0.1
g500-B240	90.0	111	0.1
g500-B450	90.0	108	0.1
g500-B600	110	124	0.1
g500-B820	110	131	0.1
g500-B1500	128	148	0.2
g500-B2700	155	171	0.3
g500-B4300	188	205	0.4
g500-B8000	218	250	0.5
g500-B13000	258	313	0.6
g500-B20000	310	372	0.9

# g500-B bevel geared motors

## Appendix

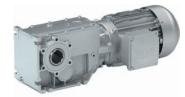


### Gearbox code

Example		G	50	A	B	045	M	H	B	R	2	C	1A
Meaning	Variant												
Product family		G	50										
Generation				A									
				B									
Gearbox type	Bevel gearbox				B								
Output torque	45 Nm					045							
	110 Nm					111							
	240 Nm					124							
	450 Nm					145							
	600 Nm					160							
	820 Nm					182							
	1500 Nm					215							
	2700 Nm					227							
	4300 Nm					243							
	8000 Nm					280							
	13000 Nm					313							
20000 Nm					320								
Type of construction	Geared motor						M						
	Gearboxes						N						
Shaft type	Solid shaft with feather key							V					
	Hollow shaft with keyway							H					
	Hollow shaft with shrink disc							S					
Housing type	Foot mounting + centering								A				
	Foot mounting								B				
	Centering								C				
Flange mounting	Without flange									R			
	Flange with through holes									k			
Number of stages	2-stage										2		
	3-stage										3		
Motor mounting	Integrated											C	
	IEC motor											N	
	NEMA motor											A	
	Servo motor											S	
Drive size												1A	
												...	
												□H	

# g500-B bevel geared motors

## Appendix



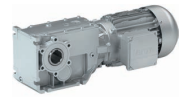
### Motor code

Example	M	D	E	MA	XX	063	-	4	2	C1	C
Meaning	Variant		Motor code								
Product family	M										
Efficiency class		D									
Cooling			S								
			E								
			F								
Internal key				MA							
Built-on accessories					XX						
					BR						
					BS						
					BI						
					BA						
					RS						
					IG						
					AG						
Size						063					
						071					
Overall length								0			
								1			
								2			
								3			
Number of pole pairs								4			
									2		
Internal key									1		
										C1	
Approval											C
											U
											3



# g500-B bevel geared motors

## Appendix



### Motor code

Example		M	24	A	P	080	M	04	5	E	0	0	W	T	
Meaning	Variant	Motor code													
Product family		M	24												
Generation				A											
Efficiency class	Premium - IE3				P										
Size						080									
						090									
						100									
						112									
						132									
						160									
						180									
Overall length	Medium						M								
	Long						L								
	Very long						V								
Number of poles	4-pole							04							
Degree of protection	IP5□								5						
	IP6□								6						
Cooling	Integral fan									E					
Brake attachment	Without brake										0				
	Spring-applied brake										F				
Actual value encoder	Without encoder											0			
Approval	CE												C		
	Without												N		
Design type	Internal key													T	

# g500-B bevel geared motors

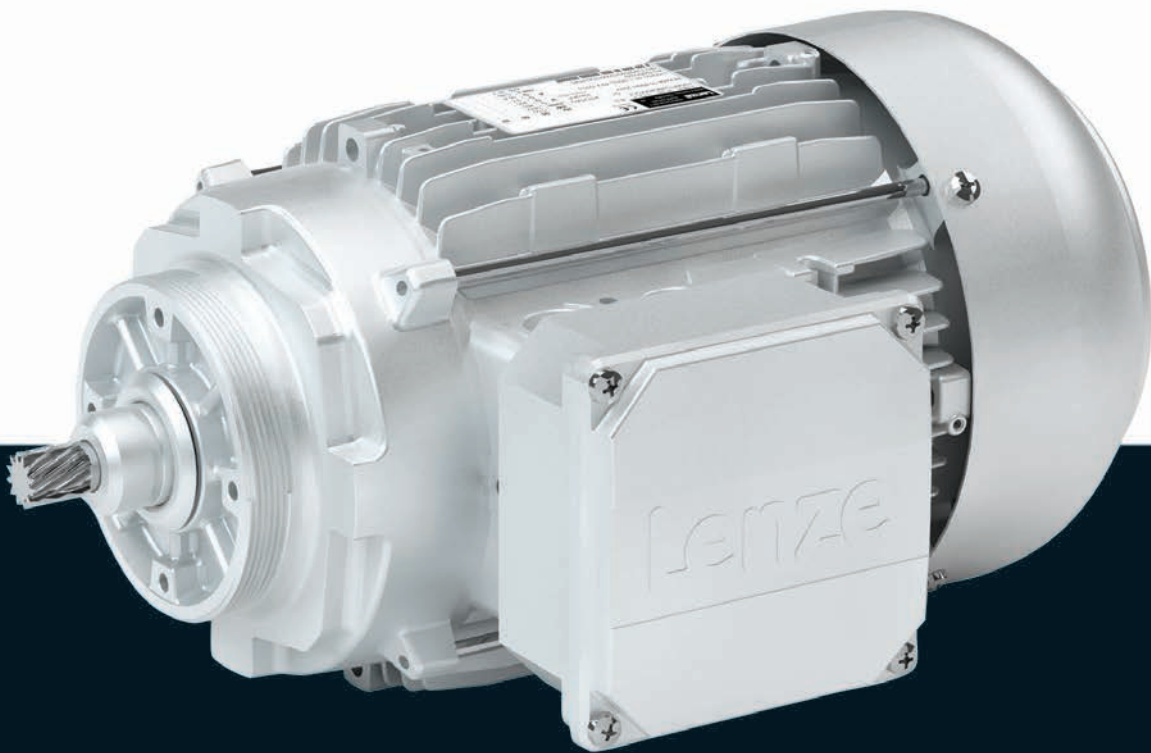
Appendix

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Geared motors

# Motor data





# Motor data

## Contents



<b>Motor data MD</b>	Technical data	Rated data for 50 Hz	6.6 - 4
	Product extensions	Motor connection	6.6 - 5
		Connection via terminal box	6.6 - 8
		Connections via ICN connectors	6.6 - 10
		Connections via HAN connectors	6.6 - 13
		Spring-applied brake	6.6 - 17
Temperature monitoring	6.6 - 26		
<b>Motor data m240</b>	Technical data	Rated data for 50 Hz	6.6 - 27
	Product extensions	Motor connection	6.6 - 29
		Connection via terminal box	6.6 - 31
		Spring-applied brake	6.6 - 34
		Temperature monitoring	6.6 - 44

# Motor data MD

Technical data



## Rated data for 50 Hz

### 4-pole motors

Product	$P_N$	$n_N$	$n_{max}$	$M_N$	$M_a$	$M_b$	$J^{1)}$	$m^{1)}$
	[kW]	[r/min]	[r/min]	[Nm]	[Nm]	[Nm]	[kgcm <sup>2</sup> ]	[kg]
MD□MA□□063-02	0.060	1425	4500	0.40	1.30	1.36	3.30	3.90
MD□MA□□063-22	0.090	1375	4500	0.63	1.30	1.39	3.30	3.90
MD□MA□□063-12	0.12	1425	4500	0.80	2.50	2.64	3.30	4.10
MD□MA□□063-32	0.18	1365	4500	1.26	2.50	2.61	3.30	4.10
MD□MA□□063-42	0.25	1370	4500	1.74	3.80	4.10	3.70	4.40
MD□MA□□071-32	0.37	1410	4500	2.51	4.76	5.81	10.7	5.80
MD□MA□□071-42	0.55	1405	4500	3.74	7.85	9.12	12.8	6.40

Product	$U_{N,\Delta}$	$I_{N,\Delta}$	$U_{N,\gamma}$	$I_{N,\gamma}$	$I_a/I_N$	$\cos \phi$	$\eta_{75\%}$	$\eta_{100\%}$
	$\pm 10\%$		$\pm 10\%$					
	[V]	[A]	[V]	[A]			[%]	[%]
MD□MA□□063-02	230	0.42	400	0.24	3.5	0.57	59.0	63.0
MD□MA□□063-22	230	0.48	400	0.28	2.9	0.71	63.0	65.0
MD□MA□□063-12	230	0.85	400	0.49	3.1	0.56	58.0	63.0
MD□MA□□063-32	230	1.00	400	0.58	2.7	0.70	63.0	64.0
MD□MA□□063-42	230	1.40	400	0.82	2.9	0.67	65.0	66.0
MD□MA□□071-32	230	1.60	400	0.95	3.3	0.77	73.0	73.0
MD□MA□□071-42	230	2.40	400	1.40	3.5	0.77	74.0	74.0

<sup>1)</sup> Without accessories

# Motor data MD

## Product extensions



### Motor connection

The three-phase AC motors are designed for operation at a constant mains.

For 50 Hz operation, the motors are operated in  $\Delta$  configuration at 230 V or in Y configuration at 400 V.

The standard connection is implemented via a terminal box. Furthermore ICN and HAN connectors are provided to quickly carry out commissioning or maintenance operations.

#### Overview of the connection options

Product	MD□MA□□063-02 MD□MA□□063-22 MD□MA□□063-12 MD□MA□□063-32 MD□MA□□063-42	MD□MA□□071-32 MD□MA□□071-42
<b>Power connection/brake connection</b>		
Terminal box	●	●
ICN connector M23	●	●
HAN 10E connector	●	●
HAN modular connector	●	●
<b>Temperature sensor connection</b>		
Terminal box	●	●
ICN connector M23 <sup>1)</sup>	●	●
HAN 10E connector	●	●
HAN modular connector	●	●

<sup>1)</sup> TKO connection or PTC in the power connection.

# Motor data MD

Product extensions



## Motor connection

### Assignment: motor terminal box - built-on accessories

- Depending on the motor version, terminal boxes of different sizes (KK1 ... KK2) are used.

Product	MD□MA□□063-02 MD□MA□□063-22 MD□MA□□063-12 MD□MA□□063-32 MD□MA□□063-42	MD□MA□□071-32 MD□MA□□071-42
<b>Built-on accessories with 1 thermal sensor</b>		
Without	KK1 KK1 + ICN HAN 10 E HAN modular	KK1 KK1 + ICN HAN 10 E HAN modular
Brake	KK2 KK2 + ICN HAN 10 E HAN modular	KK2 KK2 + ICN HAN 10 E HAN modular
<b>Built-on accessories with 2 thermal sensors</b>		
Without	KK2	KK2
Brake (2-pole terminal)	KK2	KK2
Brake (rectifier)	KK2	KK2

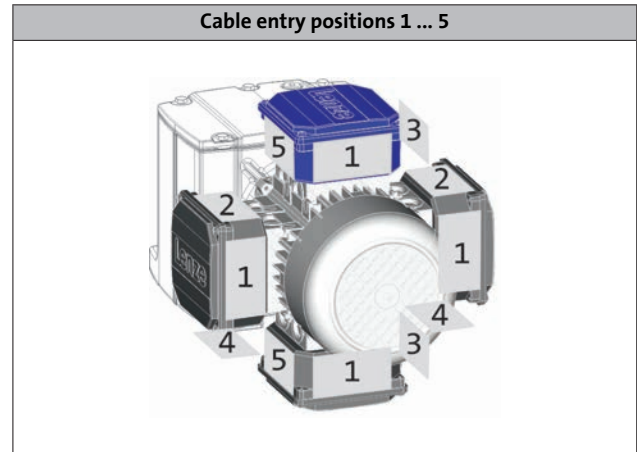
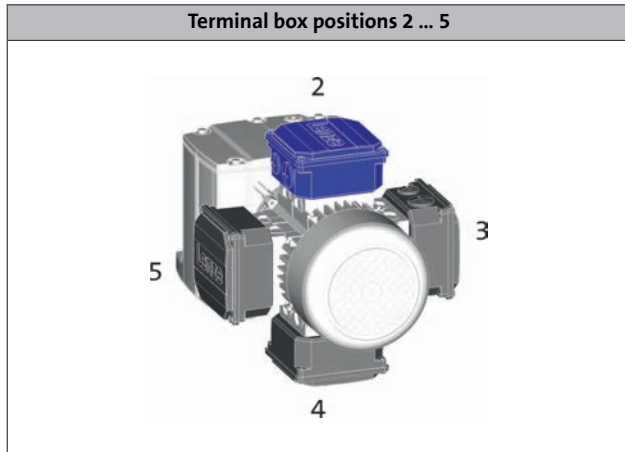




## Motor connection

### Position of cable entry/connector

For geared motors, the position of the cable entry must be selected as a function of the terminal box position.



Terminal box position	2	3	4	5
	Cable entry positions			
KK1	1/3/5*	1/2*/4	1/3*/5	1/2/4*
KK2	3+5	2+4	3+5	2+4
	Connector position			
HAN	1/3/5	1/2/4	1/3/5	1/2/4
KK1 + ICN	1/3/5*	1/2*/4	1/3*/5	1/2/4*
KK2 + ICN	3/5*	2*/4	3/5*	2/4*

- ▶ If preferred positions are not specified in the order, the cable entry will be positioned as indicated by \* on the diagram below.
- ▶ If preferred positions are not specified in the order, the connector will be positioned as indicated by \* on the diagram below.

# Motor data MD

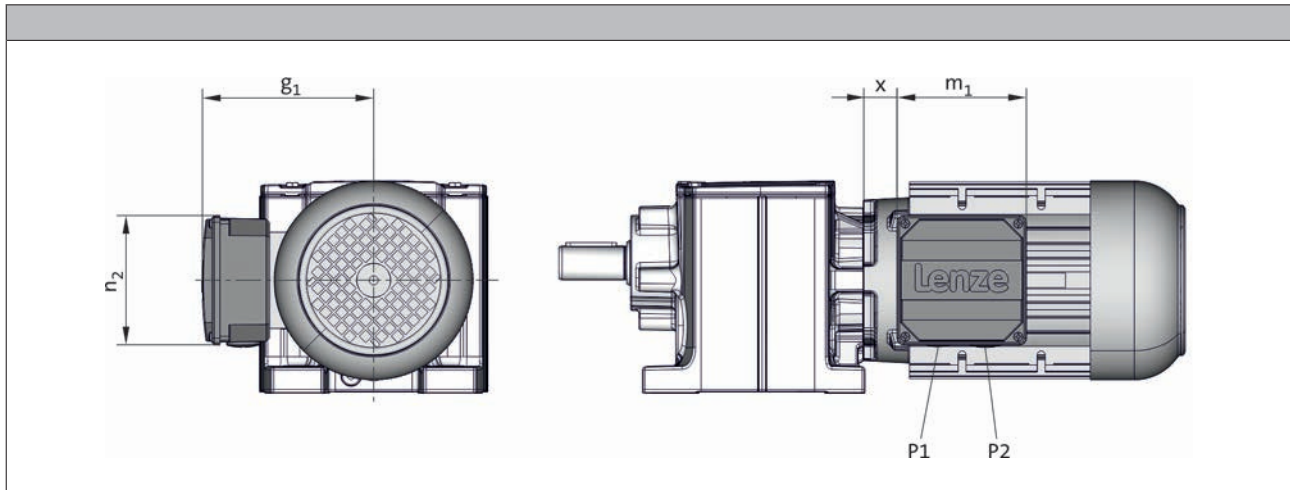
Product extensions



## Connection via terminal box

### Dimensions of KK1

The connection in the terminal box is implemented by means of conventional cable glands.



Product			MD□MA□□	
			063-02 063-12 063-22 063-32 063-42	071-42 071-32
Dimensions				
	x	[mm]	17	20
	g <sub>1</sub>	[mm]	100	109
	m <sub>1</sub>	[mm]		75.0
	n <sub>2</sub>	[mm]		75.0
	P <sub>1</sub>	[mm]		M16x1.5
	P <sub>2</sub>	[mm]		M20x1.5

# Motor data MD

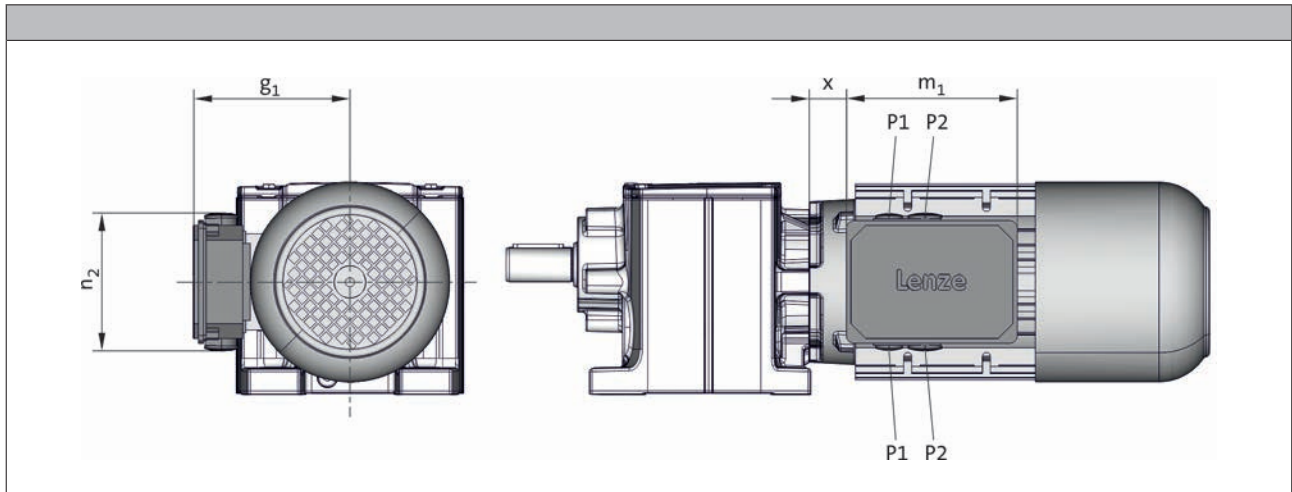
Product extensions



## Connection via terminal box

### Dimensions of KK2

The connection in the terminal box is implemented by means of conventional cable glands.



Product			MD□MA□□	
			063-02 063-12 063-22 063-32 063-42	071-42 071-32
Dimensions				
	x	[mm]	9	11
	g <sub>1</sub>	[mm]	107	118
	m <sub>1</sub>	[mm]	136	
	n <sub>2</sub>	[mm]	103	
	P <sub>1</sub>	[mm]	M16x1.5	
	P <sub>2</sub>	[mm]	M20x1.5	

# Motor data MD

## Product extensions



### Connections via ICN connectors

The power, brake and temperature monitoring are connected using a connector.

#### Connection for power, brake and temperature monitoring

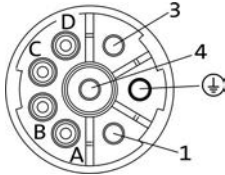
For the power connection of the connector, a max. rated motor current of 16 A is permissible.

The connectors can be rotated by 270° and are equipped with a bayonet catch for SpeedTec connectors. As the connector fixing is also compatible with conventional box nuts, existing mating connectors can still be used without difficulty. The motor connection is determined in the terminal box.



#### ICN M23 8-pole

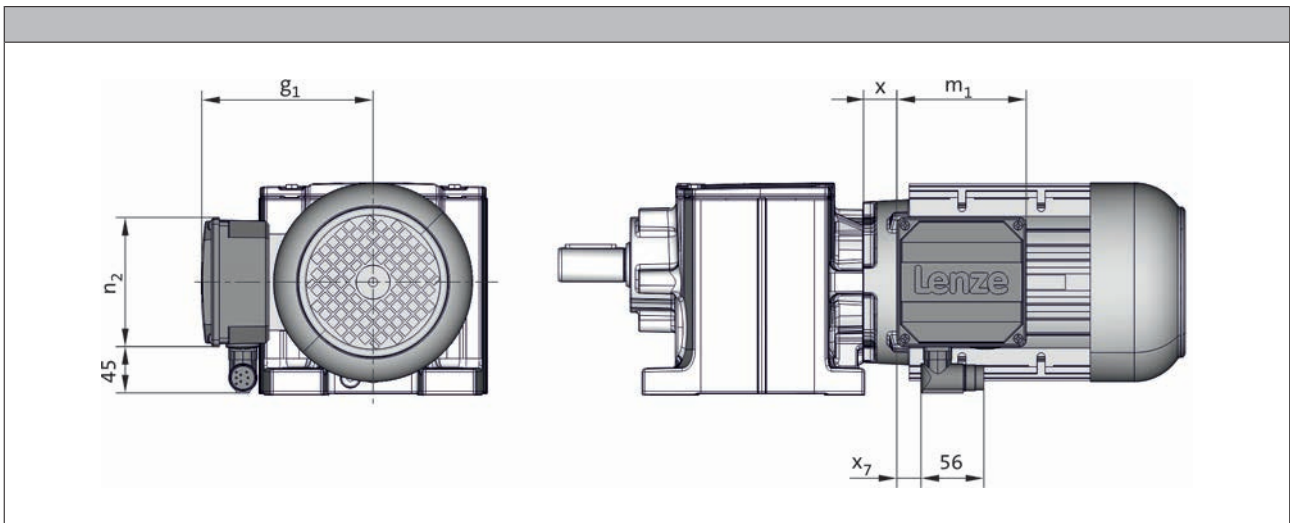
Pin assignment		
Contact	Designation	Meaning
1	U	Phase U power
PE	PE	PE conductor
3	W	Phase W power
4	V	Phase V power
A	TB1 / TP1 / R1	Thermal sensor: TKO/PTC/ +KTY
B	TB2 / TP2 / R2	Thermal sensor: TKO/PTC/-KTY
C	BD1 / BA1	Brake +/AC
D	BD2 / BA2	Brake -/AC





## Connections via ICN connectors

### Dimensions KK1+ICN

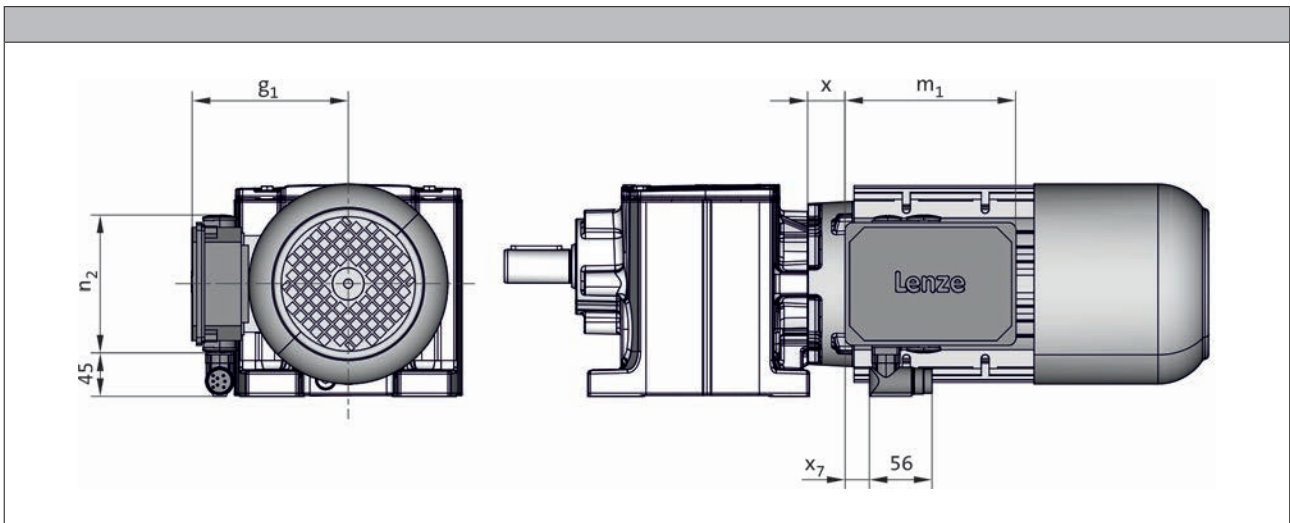


Product			MD□MA□□	
			063-02 063-12 063-22 063-32 063-42	071-42 071-32
Dimensions				
	x	[mm]	17	20
	g <sub>1</sub>	[mm]	100	109
	m <sub>1</sub>	[mm]		75.0
	n <sub>2</sub>	[mm]		75.0
	x <sub>7</sub>	[mm]		16



## Connections via ICN connectors

### Dimensions KK2+ICN



Product			MD□MA□□	
			063-02 063-12 063-22 063-32 063-42	071-42 071-32
Dimensions				
	x	[mm]	9	11
	g <sub>1</sub>	[mm]	107	118
	m <sub>1</sub>	[mm]		136
	n <sub>2</sub>	[mm]		103
	x <sub>7</sub>	[mm]		16

# Motor data MD

Product extensions



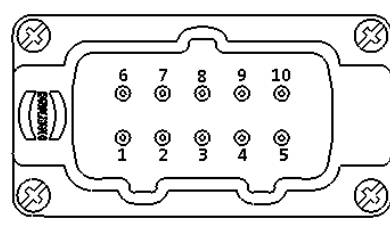
## Connections via HAN connectors

### HAN 10 E

In the case of the rectangular HAN 10E connectors, all six ends of the three winding phases are taken out to the power contacts. The motor circuit is therefore determined in the mating connector.



Pin assignment	
Contact	Meaning
1	Terminal board: U1
2	Terminal board: V1
3	Terminal board: W1
4	Brake +/AC
5	Brake -/AC
6	Terminal board: W2
7	Terminal board: U2
8	Terminal board: V2
9	Thermal sensor: +KTY/PTC/TKO
10	Thermal sensor: KTY/PTC/TKO



# Motor data MD

Product extensions



## Connections via HAN connectors

### HAN modular

The connector is available with two different power modules (16 A or 40 A), depending on the rated motor current. The motor connection is determined in the terminal box and must be checked before commissioning.



#### ► HAN modular 16 A

Pin assignment			
Module	Contact	Meaning	
A	1	Terminal board: U1	
	2	Terminal board: V1	
	3	Terminal board: W1	
B		Dummy module	
C	1	Thermal sensor: +KTY/PTC/TKO	
	2	Brake +/-AC	
	3	Brake -/AC	
	4	Rectifier: Switching contact	
	6	Thermal sensor: KTY/PTC/TKO	

#### ► HAN modular 40 A

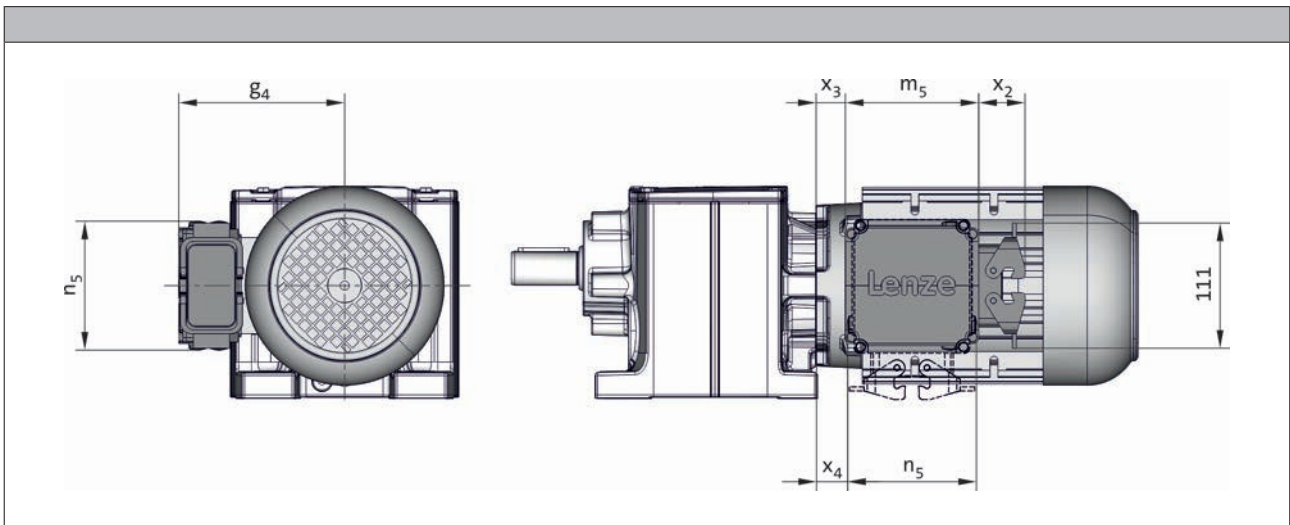
Pin assignment			
Module	Contact	Meaning	
A	1	Terminal board: U1	
	2	Terminal board: V1	
	3	Terminal board: W1	
B		Dummy module	
C	1	Thermal sensor: +KTY/PTC/TKO	
	2	Brake +/-AC	
	3	Brake -/AC	
	4	Rectifier: Switching contact	
	6	Thermal sensor: KTY/PTC/TKO	





## Connections via HAN connectors

### Dimensions



Product			MD□MA□□	
			063-02 063-12 063-22 063-32 063-42	071-42 071-32
Dimensions				
	g <sub>4</sub>	[mm]	120	129
	x <sub>3</sub>	[mm]	1	3
	x <sub>4</sub>	[mm]	2	4
	x <sub>2</sub>	[mm]		41
	m <sub>5</sub>	[mm]		118
	n <sub>5</sub>	[mm]		102

# Motor data MD

Product extensions





### Spring-applied brake

The three-phase AC motors can be equipped with a spring-applied brake which is active when the supply voltage has been switched off (closed-circuit principle). In the deenergised state, the brake is applied. This prevents possible movement of the motor shaft with regard to the load after switch-off or in the event of a power failure. For optimum adaptation of the brake motor to the application, several brake sizes and control variants are provided for each motor.

#### Versions

- **Standard**
  - $1 \times 10^6$  repeating switching cycles
  - $1 \times 10^6$  reversing switching cycles
- **LongLife**
  - $10 \times 10^6$  repeating switching cycles
  - $15 \times 10^6$  reversing switching cycles

#### Braking torques

In addition to the standard braking torque, depending on the brake size, the possibility of choosing between a reduced and an increased braking torque is provided.

- When the braking torque is reduced, great wear reserves can be attained. This is enabled by a reduction of the spring rate.
- In order to obtain a greater braking torque, the spring rate is increased. This is practical, for instance, for hoists, since here the gravity acts as an additional acceleration in the negative direction.

#### Manual release

By using the manual release lever, the brake can be released manually in deenergised operating state. The manual release makes positioning and maintenance work easier.



### Spring-applied brake

#### Direct connection without rectifier

If the brake is activated directly without a rectifier, a freewheeling diode or a spark suppressor is required for protection against induction peaks.

- Supply voltages  
DC 24 V

#### Connection via mains voltage with brake rectifier

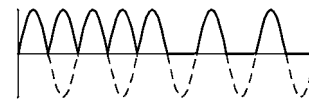
If the brake is not directly supplied with DC voltage, a rectifier is required. This is included in the scope of supply and is located in the terminal box of the motor. The rectifier converts the AC voltage of the connection into DC voltage. The following rectifiers are available:

##### Rectifier, 6-pole

- Approval UL / CSA
- Supply voltages  
AC 230 V  
AC 400 V  
AC 460 V

##### Bridge/half-wave rectifier, 6-pole

- Supply voltage / brake coil voltage ratio  
up to the overexcitation time = 1.11  
From the overexcitation time = 2.22
- Supply voltages  
AC 230 V  
AC 400 V



During the switching operation the bridge/half-wave rectifier functions as a bridge rectifier for the overexcitation time  $t_{ij}$  and then as a half-wave rectifier. This combination optimises the performance of the brake – depending on the assignment of brake coil voltage and supply voltage:

##### • Short-time overexcitation of the brake coil

Activating the brake coil for the overexcitation time  $t_{ij}$  with twice the rated voltage allows the disengagement time to be reduced. The brake opens more quickly and wear on the friction lining is reduced.

These features make this activation version particularly suitable for lifting applications. It is therefore only available in combination with a brake with increased braking torque.

##### • Holding current reduction (cold brake)

By reducing the holding current, the bridge/half-wave rectifier is able to reduce the power input to the open brake. As the brake heats up less, this type of activation is known as "cold brake".

# Motor data MD

Product extensions



## Spring-applied brake

Assignment of 4-pole motors and brakes

Design	Standard		LongLife	
Product	Size Brake	Rated torque $M_k$ [Nm]	Size Brake	Rated torque $M_k$ [Nm]
MD□MA□□063-02	06 06	2.50 4.00	06	4.00
MD□MA□□063-12				
MD□MA□□063-22				
MD□MA□□063-32				
MD□MA□□063-42				
MD□MA□□071-32	06 06 08	2.50 4.00 3.50	06 08	4.00 3.50
MD□MA□□071-42	06 06 08 08	2.50 4.00 3.50 8.00	06 08 08	4.00 3.50 8.00



## Spring-applied brake

### Rated data with reduced braking torque

- ▶ In case of the braking torque and the maximum switching energy, the unit for the values (100 ... 3600) is rpm.
- ▶ Please enquire for braking torques and maximum switching work values not listed here.

Size			06	08
<b>Power input</b>				
	$P_{in}$	[kW]	0.020	0.025
<b>Braking torque</b>				
100	$M_B$	[Nm]	2.50	3.50
1000	$M_B$	[Nm]	2.30	3.10
1200	$M_B$	[Nm]	2.30	3.10
1500	$M_B$	[Nm]	2.20	3.00
1800	$M_B$	[Nm]	2.10	2.90
3000	$M_B$	[Nm]	2.00	2.80
3600	$M_B$	[Nm]	2.00	2.70
<b>Maximum switching energy</b>				
100	$Q_E$	[KJ]	3.00	7.50
1000	$Q_E$	[KJ]	3.00	7.50
1200	$Q_E$	[KJ]	3.00	7.50
1500	$Q_E$	[KJ]	3.00	7.50
1800	$Q_E$	[KJ]	3.00	7.50
3000	$Q_E$	[KJ]	3.00	7.50
3600	$Q_E$	[KJ]	3.00	7.50
<b>Transition operating frequency</b>				
	$S_{h\ddot{u}}$	[1/h]	79.0	50.0
<b>Moment of inertia</b>				
	$J$	[kgcm <sup>2</sup> ]	0.15	0.61
<b>Mass</b>				
	$m$	[kg]	0.90	1.50



## Spring-applied brake

### Rated data with reduced braking torque

- Activation via half-wave or bridge rectifier

Size			06	08
<b>Friction energy</b>	$Q_{BW}$	[MJ]	113	210
<b>Delay time</b>				
Engaging	$t_{11}$	[ms]	11.0	14.0
<b>Rise time</b>				
Braking torque	$t_{12}$	[ms]	13.0	10.0
<b>Engagement time</b>			24.0	
	$t_1$	[ms]		
<b>Disengagement time</b>				
	$t_2$	[ms]	35.0	37.0

- Activation via bridge/half-wave rectifier

Design			Holding current reduction (cold brake)	
Size			06	08
<b>Friction energy</b>	$Q_{BW}$	[MJ]	113	210
<b>Overexcitation time</b>			300	
	$t_{\ddot{u}}$	[ms]		
<b>Min. rest time</b>			900	
	t	[ms]		
<b>Delay time</b>				
Engaging	$t_{11}$	[ms]	12.0	22.0
<b>Rise time</b>				
Braking torque	$t_{12}$	[ms]	14.0	16.0
<b>Engagement time</b>				
	$t_1$	[ms]	26.0	38.0
<b>Disengagement time</b>				
	$t_2$	[ms]	35.0	37.0

- The brake response and application times are guide values. The engagement time is 10 times longer with AC-side switching. With the maximum air gap the disengagement time  $t_2$  – depending on the brake and control – is up to 4 times longer than the disengagement time with the rated air gap.



## Spring-applied brake

### Rated data with standard braking torque

- ▶ In case of the braking torque and the maximum switching energy, the unit for the values (100 ... 3600) is rpm.
- ▶ Please enquire for braking torques and maximum switching work values not listed here.

Size			06	08
<b>Power input</b>				
	$P_{in}$	[kW]	0.020	0.025
<b>Braking torque</b>				
100	$M_B$	[Nm]	4.00	8.00
1000	$M_B$	[Nm]	3.70	7.20
1200	$M_B$	[Nm]	3.60	7.00
1500	$M_B$	[Nm]	3.50	6.80
1800	$M_B$	[Nm]	3.40	6.70
3000	$M_B$	[Nm]	3.20	6.30
3600	$M_B$	[Nm]	3.20	6.10
<b>Maximum switching energy</b>				
100	$Q_E$	[KJ]	3.00	7.50
1000	$Q_E$	[KJ]	3.00	7.50
1200	$Q_E$	[KJ]	3.00	7.50
1500	$Q_E$	[KJ]	3.00	7.50
1800	$Q_E$	[KJ]	3.00	7.50
3000	$Q_E$	[KJ]	3.00	7.50
3600	$Q_E$	[KJ]	3.00	7.50
<b>Transition operating frequency</b>				
	$S_{h\ddot{u}}$	[1/h]	79.0	50.0
<b>Moment of inertia</b>				
	$J$	[kgcm <sup>2</sup> ]	0.15	0.61
<b>Mass</b>				
	$m$	[kg]	0.90	1.50





## Spring-applied brake

### Rated data with standard braking torque

- Activation via half-wave or bridge rectifier

Size			06	08
<b>Friction energy</b>	$Q_{BW}$	[MJ]	85.0	158
<b>Delay time</b>			15.0	
Engaging	$t_{11}$	[ms]	15.0	
<b>Rise time</b>				
Braking torque	$t_{12}$	[ms]	13.0	16.0
<b>Engagement time</b>				
	$t_1$	[ms]	28.0	31.0
<b>Disengagement time</b>				
	$t_2$	[ms]	45.0	57.0

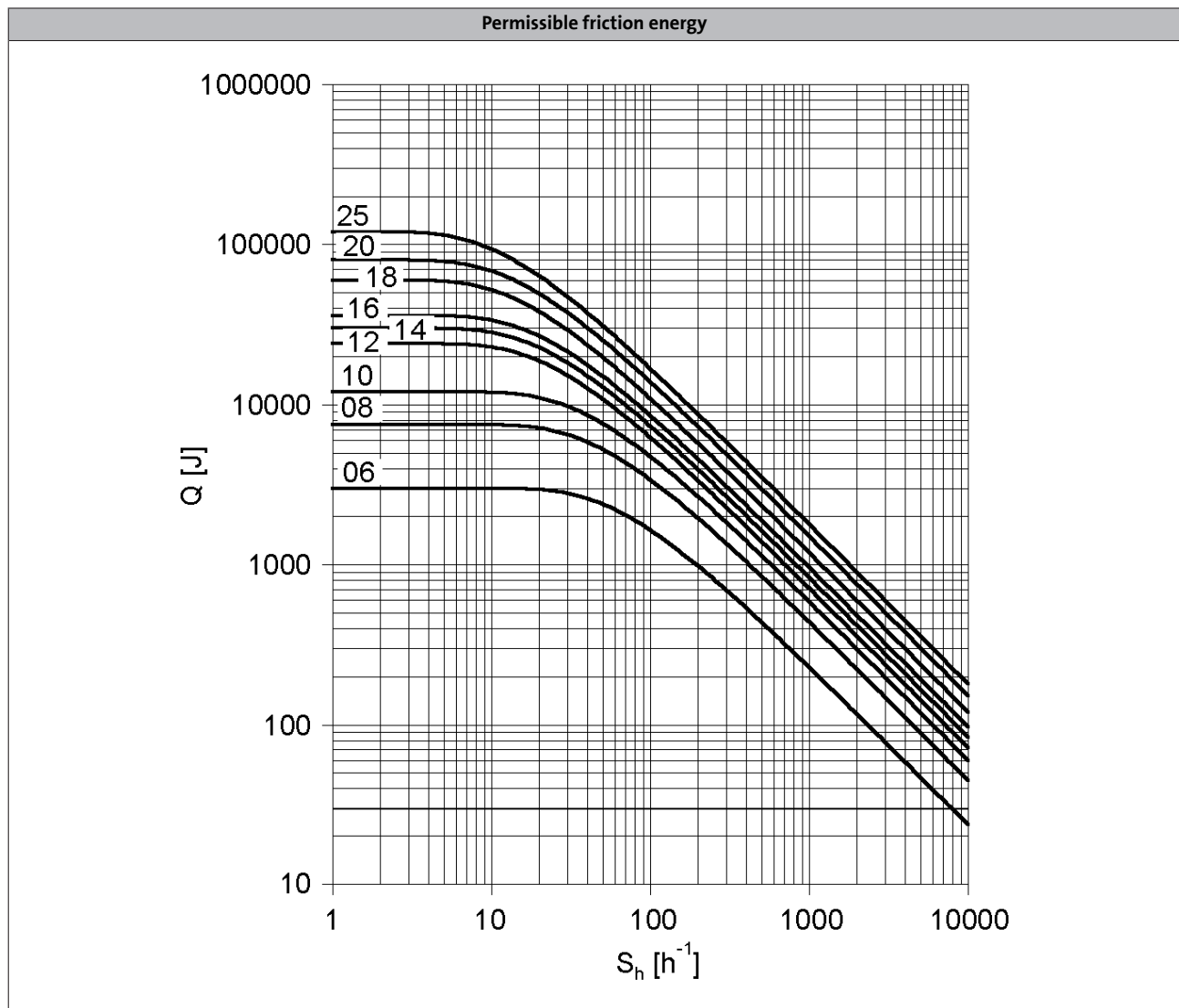
- Activation via bridge/half-wave rectifier

Design			Holding current reduction (cold brake)	
Size			06	08
<b>Friction energy</b>	$Q_{BW}$	[MJ]	85.0	158
<b>Overexcitation time</b>			300	
Min. rest time	$t_{\ddot{u}}$	[ms]	300	
	$t$	[ms]	900	
<b>Delay time</b>				
Engaging	$t_{11}$	[ms]	16.0	25.0
<b>Rise time</b>				
Braking torque	$t_{12}$	[ms]	14.0	27.0
<b>Engagement time</b>				
	$t_1$	[ms]	30.0	52.0
<b>Disengagement time</b>				
	$t_2$	[ms]	45.0	57.0

- The brake response and application times are guide values. The engagement time is 10 times longer with AC-side switching. With the maximum air gap the disengagement time  $t_2$  – depending on the brake and control – is up to 4 times longer than the disengagement time with the rated air gap.



## Spring-applied brake



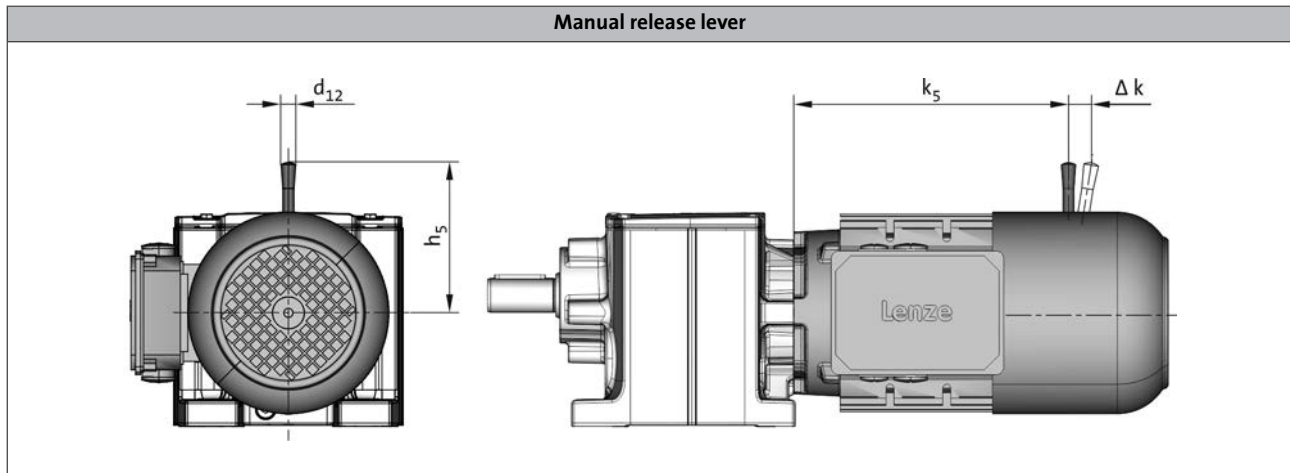
$Q$  = Switching energy per switching cycle  
 $S_h$  = Operating frequency  
 Brake size = 06 to 25



## Spring-applied brake

### Manual release

By using the manual release lever, the brake can be released manually in deenergised operating state. The manual release makes positioning and maintenance work easier.



Product	Size Brake	Dimensions			
		$k_5$ [mm]	$\Delta k$ [mm]	$h_5$ [mm]	$d_{12}$ [mm]
MD□MA□□063-02 MD□MA□□063-22	06	185	29	107	13.0
MD□MA□□063-12 MD□MA□□063-32 MD□MA□□063-42	06	169	29	107	13.0
MD□MA□□071-32 MD□MA□□071-42	06 08	182 183	29 27	107 116	13.0 13.0

The following combinations with manual release lever and motor connection in the same position are not possible:

- HAN connector with connection in position 1
- Terminal box of the motor size 071 for brake (M□□MA BR)



### Temperature monitoring

To protect the motor against overheating, the following thermal sensors are provided.

The thermal sensors are integrated into the windings. We recommend using an additional motor protection switch.

#### TKO thermal contacts

The TCO thermal contact (thermal NC contact) is a bimetallic-element switch. The TCO monitors the motor winding temperature; at too high temperatures, the motor relay switches. The motor is disconnected from the mains.

Function	Operating temperature	Min. reset temperature	Max. reset temperature	Max. input current	Max. input voltage
					AC
	T	$T_{min}$	$T_{max}$	$I_{in,max}$	$U_{in,max}$
	-5 ... 5				
	[°C]	[°C]	[°C]	[A]	[V]
NC contact	150	90.0	135	2.50	250

#### PTC thermistor

The PTC thermistor is actuated in connection with a tripping unit. If the motor gets too hot, the motor can be switched off by means of a contactor. In contrast to the thermal contact, quick restart is possible.

Function	Operating temperature	Rated resistance			Standard
		155 °C	-20 °C	140 °C	
	T	$R_N$	$R_N$	$R_N$	
	-5 ... 5				
	[°C]	[Ω]	[Ω]	[Ω]	
Sudden change in resistance	150	550	30.0	250	DIN 44080 DIN VDE 0660 Part 303

# Motor data m240

Technical data



## Rated data for 50 Hz

### 4-pole motors

Product	$P_N$	$n_N$	$M_N$	$M_a$	$M_b$	$J^{1)}$	$m^{1)}$
	[kW]	[r/min]	[Nm]	[Nm]	[Nm]	[kgcm <sup>2</sup> ]	[kg]
m240-P80/M4	0.75	1443	5.00	14.7	17.7	26.8	15.0
m240-P90/M4	1.10	1445	7.30	22.6	27.7	42.6	19.0
m240-P90/L4	1.50	1435	10.0	35.0	40.0	48.1	20.0
m240-P100/M4	2.20	1446	14.5	31.9	39.2	81.7	26.0
m240-P100/L4	3.00	1453	19.7	51.2	55.2	99.4	31.0
m240-P112/M4	4.00	1435	26.4	84.2	97.3	112	34.0
m240-P132/M4	5.50	1465	36.2	116	156	276	55.0
m240-P132/L4	7.50	1460	49.4	158	222	298	57.0
m240-P160/M4	11.0	1470	71.8	208	273	692	92.0
m240-P160/L4	15.0	1470	97.6	283	371	704	99.0
m240-P180/M4	18.5	1460	121	290	411	1122	126
m240-P180/L4	22.0	1465	143	372	501	1277	135
m240-P180/V4	30.0	1475	194	561	697	2645	183

Product	$U_{N,\Delta}$	$I_{N,\Delta}$	$U_{N,Y}$	$I_{N,Y}$	$I_a/I_N$	$\cos \phi$	$\eta_{50\%}$	$\eta_{75\%}$	$\eta_{100\%}$
	[V]	[A]	[V]	[A]			[%]	[%]	[%]
m240-P80/M4	230	2.90	400	1.70	6.9	0.78	80.2	82.4	82.5
m240-P90/M4	230	4.20	400	2.40	7.2	0.77	80.8	83.5	84.1
m240-P90/L4	230	5.80	400	3.30	7.5	0.77	81.5	84.2	85.3
m240-P100/M4	230	7.80	400	4.50	8.0	0.83	83.8	85.7	86.7
m240-P100/L4	230	10.9	400	6.30	9.5	0.80	83.9	86.2	87.7
m240-P112/M4	400	8.00			8.8	0.83	87.2	88.3	88.6
m240-P132/M4	400	11.1			8.7	0.79	86.9	89.1	89.6
m240-P132/L4	400	14.8			9.5	0.81	88.0	89.9	90.4
m240-P160/M4	400	22.0			8.1	0.81	90.1	91.6	91.4
m240-P160/L4	400	28.6			8.2	0.83	91.1	92.1	92.1
m240-P180/M4	400	34.1			7.7	0.87	91.3	92.9	92.6
m240-P180/L4	400	39.9			7.7	0.87	92.2	93.2	93.0
m240-P180/V4	400	55.3			8.0	0.86	92.7	93.5	93.6

<sup>1)</sup> Without accessories

# Motor data m240

Technical data

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# Motor data m240

## Product extensions



### Motor connection

The three-phase AC motors are designed for operation at a constant mains. They are connected via a terminal box.

For 50 Hz operation, the motors are operated in  $\Delta$  configuration at 230/400 V or in Y configuration at 400 V.

#### Assignment: motor terminal box - built-on accessories

- Depending on the motor version, terminal boxes of different sizes (KKA ... KK4) are used.

Product	m240-P80/M4	m240-P90/M4 m240-P90/L4	m240-P100/M4 m240-P100/L4	m240-P112/M4	m240-P132/M4 m240-P132/L4
<b>Built-on accessories with 1 thermal sensor</b>					
Without	KKA	KKA	KKA	KKA	KKA
Brake	KK2	KK2	KK2	KK2	KK3
<b>Built-on accessories with 2 thermal sensors</b>					
Without	KKA	KKA	KKA	KKA	KKA
Brake (2-pole terminal)	KK2	KK2	KK2	KK2	KK3
Brake (rectifier)	KK3	KK3	KK3	KK3	KK3

Product	m240-P160/M4 m240-P160/L4	m240-P180/M4 m240-P180/L4 m240-P180/V4
<b>Built-on accessories with 1 thermal sensor</b>		
Without	KKA	KKA
Brake	KK4	KK4
<b>Built-on accessories with 2 thermal sensors</b>		
Without	KKA	KKA
Brake (2-pole terminal)	KK4	KK4
Brake (rectifier)	KK4	KK4

# Motor data m240

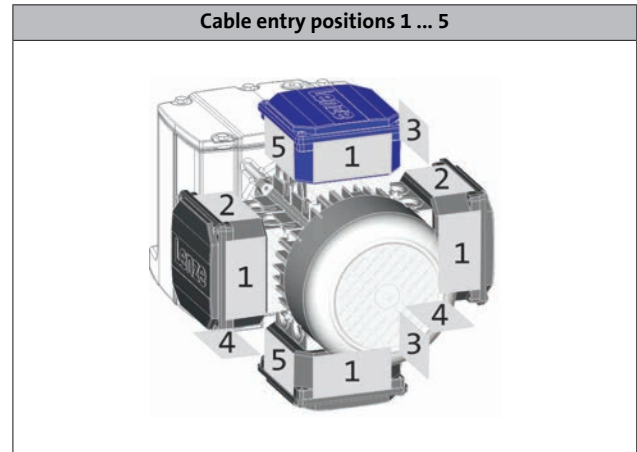
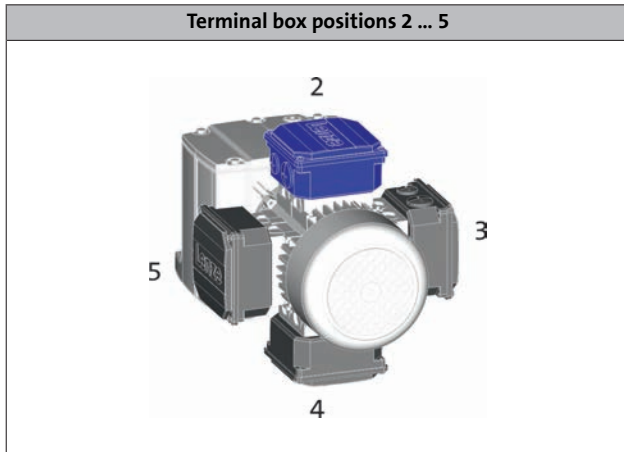
Product extensions



## Motor connection

### Position of the cable entry

For geared motors, the position of the cable entry must be selected as a function of the terminal box position.



Terminal box position	2	3	4	5
	Cable entry positions			
KK1	1/3/5*	1/2*/4	1/3*/5	1/2/4*
KK2	3+5	2+4	3+5	2+4
KK3	3+5	2+4	3+5	2+4
KK4	3+5	2+4	3+5	2+4

- If preferred positions are not specified in the order, the cable entry will be positioned as indicated by \* on the diagram below.



# Motor data m240

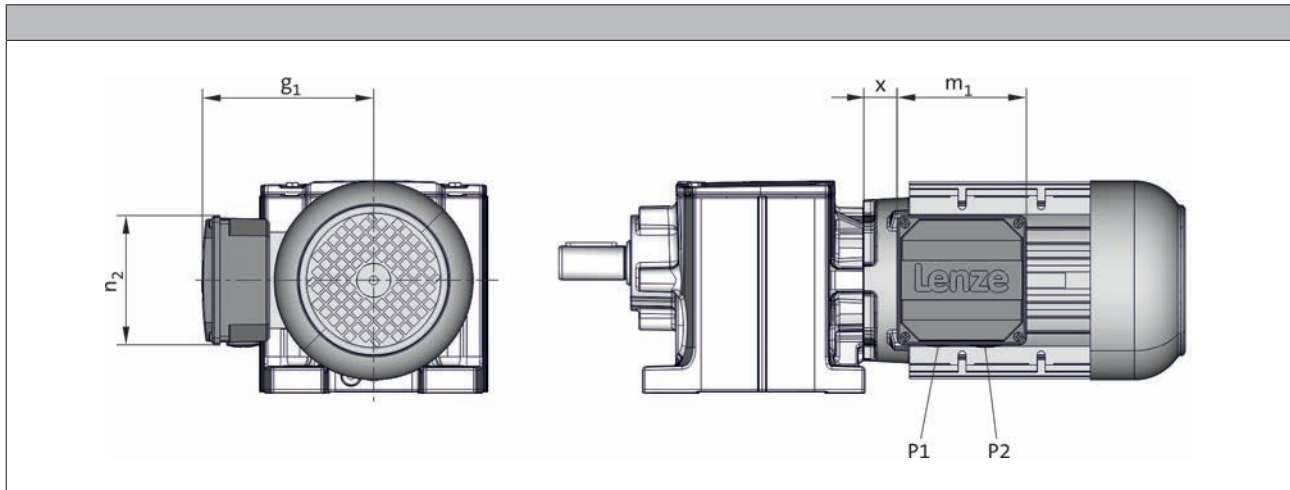
Product extensions



## Connection via terminal box

### KKA dimensions

The connection in the terminal box is implemented by means of conventional cable glands.



Product			m240						
			-P80/M4	-P90/L4 -P90/M4	-P100/L4 -P100/M4	-P112/M4	-P132/L4 -P132/M4	-P160/L4 -P160/M4	-P180/L4 -P180/M4 -P180/V4
Dimensions	x	[mm]	27	40	50	46	66	112	131
	g <sub>1</sub>	[mm]	136	146	143	163	180	197	271
	m <sub>1</sub>	[mm]	94.0	110			127		181
	n <sub>2</sub>	[mm]	94.0	110			127		181
	P <sub>1</sub>	[mm]	M20x1.5	M25x1.5			M32x1.5		M40x1.5
	P <sub>2</sub>	[mm]	M20x1.5	M25x1.5			M32x1.5		M40x1.5

# Motor data m240

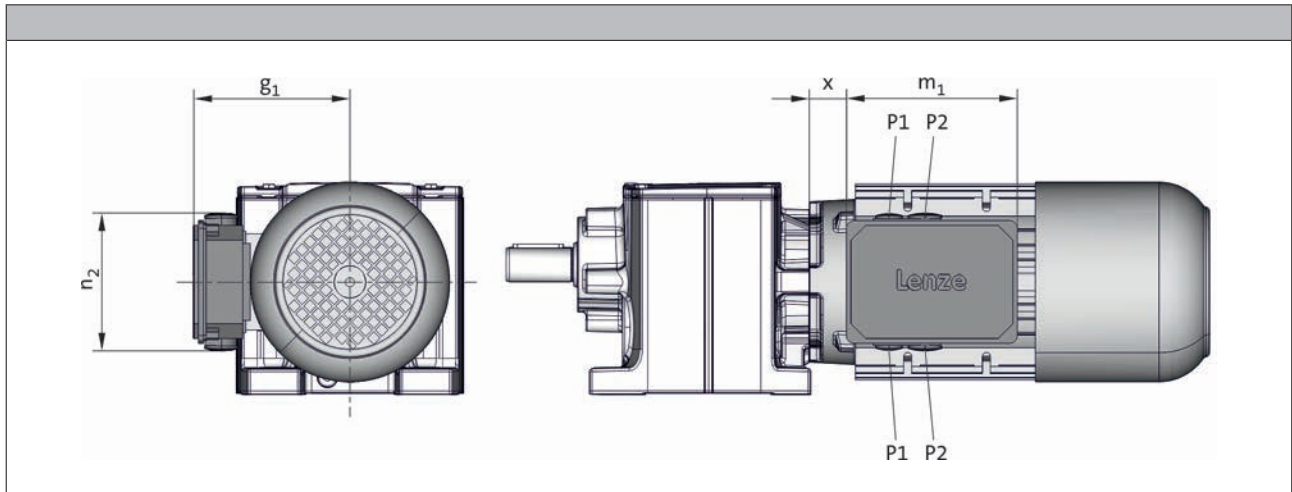
Product extensions



## Connection via terminal box

### Dimensions of KK2

The connection in the terminal box is implemented by means of conventional cable glands.



Product			m240			
			-P80/M4	-P90/L4 -P90/M4	-P100/L4 -P100/M4	-P112/M4
Dimensions	x	[mm]	20	41	51	47
	g <sub>1</sub>	[mm]	137	144	153	161
	m <sub>1</sub>	[mm]	152			
	n <sub>2</sub>	[mm]	121			
	P <sub>1</sub>	[mm]	M20x1.5			
	P <sub>2</sub>	[mm]	M25x1.5			

# Motor data m240

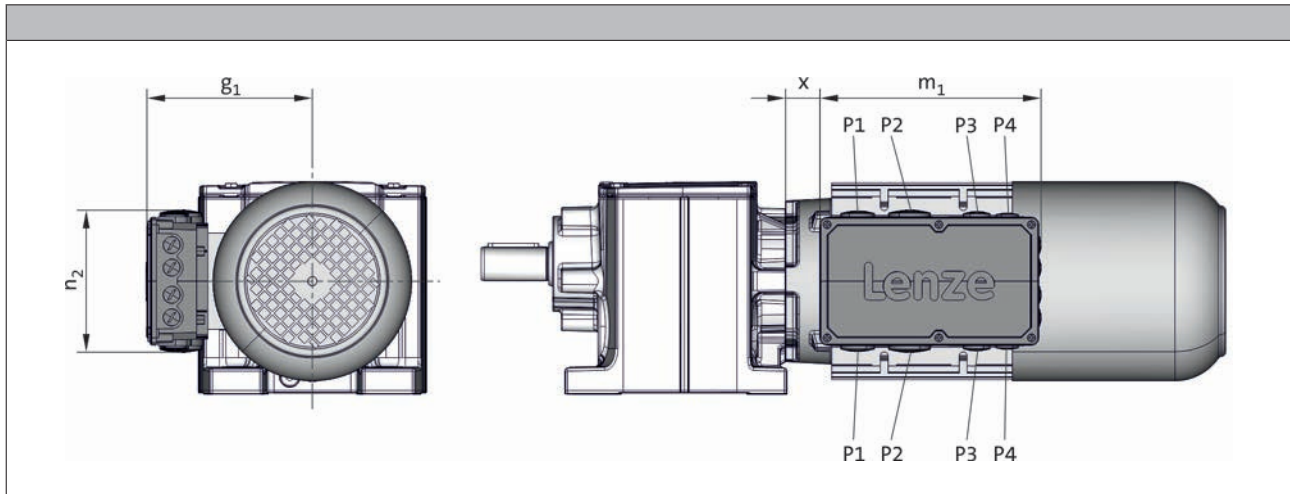
Product extensions



## Connection via terminal box

### Dimensions of KK4 and KK3

The connection in the terminal box is implemented by means of conventional cable glands.



Product		m240							
		-P80/M4	-P90/L4 -P90/M4	-P100/L4 -P100/M4	-P112/M4	-P132/L4 -P132/M4	-P160/L4 -P160/M4	-P180/L4 -P180/M4 -P180/V4	
Dimensions		x [mm]	19	40	50	46	76	104	134
	g <sub>1</sub> [mm]	147	154	163	171	182	231	282	
	m <sub>1</sub> [mm]	198					255		
	n <sub>2</sub> [mm]	125					152		
	P <sub>1</sub> [mm]	M25x1.5					M50x1.5		
	P <sub>2</sub> [mm]	M32x1.5					M40x1.5		
	P <sub>3</sub> [mm]	M20x1.5							
	P <sub>4</sub> [mm]	M20x1.5				M16x1.5			



### Spring-applied brake

The three-phase AC motors can be equipped with a spring-applied brake which is active when the supply voltage has been switched off (closed-circuit principle). In the deenergised state, the brake is applied. This prevents possible movement of the motor shaft with regard to the load after switch-off or in the event of a power failure.

For optimum adaptation of the brake motor to the application, several brake sizes and control variants are provided for each motor.

#### Types

- **Standard**
  - $1 \times 10^6$  repeating switching cycles
  - $1 \times 10^6$  reversing switching cycles

#### Control

- DC supply
- AC supply via rectifiers in the terminal box

#### Degree of protection

- Without manual release IP55
- With manual release IP54

#### Friction lining

- Asbestos-free, low-wear

#### Options

- Manual release

#### Braking torques

In addition to the standard braking torque, depending on the brake size, the possibility of choosing between a reduced and an increased braking torque is provided.

- When the braking torque is reduced, great wear reserves can be attained. This is enabled by a reduction of the spring rate.
- In order to obtain a greater braking torque, the spring rate is increased. This is practical, for instance, for hoists, since here the gravity acts as an additional acceleration in the negative direction.

#### Manual release

By using the manual release lever, the brake can be released manually in deenergised operating state. The manual release makes positioning and maintenance work easier.

# Motor data m240

## Product extensions

---



### Spring-applied brake

#### Direct connection without rectifier

If the brake is activated directly without a rectifier, a freewheeling diode or a spark suppressor is required for protection against induction peaks.

- Supply voltages  
DC 24 V

#### Connection via mains voltage with brake rectifier

If the brake is not directly supplied with DC voltage, a rectifier is required. This is included in the scope of supply and is located in the terminal box of the motor. The rectifier converts the AC voltage of the connection into DC voltage. The following rectifiers are available:

##### Rectifier, 6-pole

- Supply voltages  
AC 230 V  
AC 400 V

# Motor data m240

Product extensions



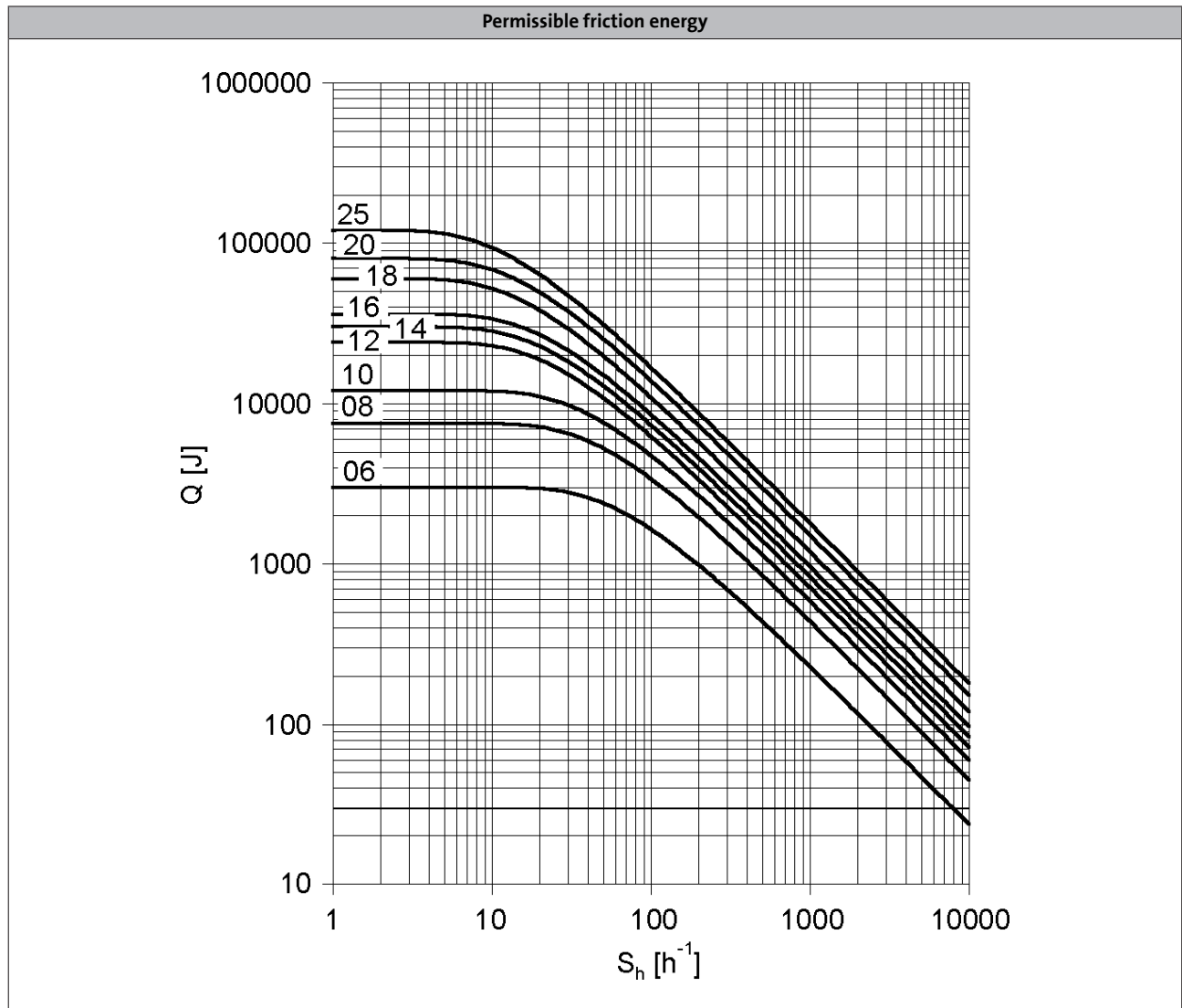
## Spring-applied brake

Assignment of 4-pole motors and brakes

Design		Standard		LongLife	
Product	Size	Rated torque		Size	Rated torque
	Brake			Brake	
		$M_k$			$M_k$
		[Nm]			[Nm]
m240-P80/M4	08	3.50			
	08	8.00			
	10	7.00			
m240-P90/M4 m240-P90/L4	08	3.50			
	08	8.00			
	10	7.00			
	10	16.0			
m240-P100/M4	10	7.00			
	10	16.0			
	12	14.0			
	12	32.0			
m240-P100/L4	10	7.00			
	10	16.0			
	12	14.0			
	12	32.0			
	12	46.0			
m240-P112/M4	12	14.0			
	12	32.0			
	14	35.0			
	14	60.0			
m240-P132/M4	14	35.0			
	14	60.0			
	16	60.0			
	16	80.0			
m240-P132/L4	14	35.0			
	14	60.0			
	16	60.0			
	16	80.0			
	16	100			
m240-P160/M4	16	60.0			
	16	80.0			
	18	80.0			
	18	150			
m240-P160/L4	18	80.0			
	18	150			
	18	200			
m240-P180/M4	18	80.0			
	18	150			
	20	145			
	20	260			
m240-P180/L4	18	80.0			
	18	150			
	20	145			
	20	260			
	20	315			
m240-P180/V4	18	80.0			
	18	150			
	20	145			
	20	260			
	20	315			
	20	400			



## Spring-applied brake



$Q$  = Switching energy per switching cycle

$S_h$  = Operating frequency

Brake size = 06 to 25

# Motor data m240

Product extensions



## Spring-applied brake

### Rated data with reduced braking torque

- ▶ In case of the braking torque and the maximum switching energy, the unit for the values (100 ... 3600) is rpm.
- ▶ Please enquire for braking torques and maximum switching work values not listed here.

Size			06	08	10	12	14	16	18	20	25
<b>Power input</b>											
	$P_{in}$	[kW]	0.020	0.025	0.030	0.040	0.050	0.055	0.085	0.10	0.11
<b>Braking torque</b>											
100	$M_B$	[Nm]	2.50	3.50	7.00	14.0	35.0	60.0	80.0	145	265
1000	$M_B$	[Nm]	2.30	3.10	6.10	12.0	30.0	50.0	65.0	115	203
1200	$M_B$	[Nm]	2.30	3.10	6.00	12.0	29.0	48.0	63.0	112	199
1500	$M_B$	[Nm]	2.20	3.00	5.80	11.0	28.0	47.0	61.0	109 <sup>1)</sup>	193 <sup>1)</sup>
1800	$M_B$	[Nm]	2.10	2.90	5.70	11.0	28.0	46.0	60.0 <sup>1)</sup>		
3000	$M_B$	[Nm]	2.00	2.80	5.30	10.0	26.0 <sup>1)</sup>	43.0 <sup>1)</sup>			
3600	$M_B$	[Nm]	2.00	2.70	5.20	10.0 <sup>1)</sup>					
<b>Maximum switching energy</b>											
100	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1000	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1200	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1500	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	24.0 <sup>1)</sup>	36.0 <sup>1)</sup>
1800	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	36.0 <sup>1)</sup>		
3000	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	18.0 <sup>1)</sup>	11.0 <sup>1)</sup>			
3600	$Q_E$	[KJ]	3.00	7.50	12.0	7.00 <sup>1)</sup>					
<b>Transition operating frequency</b>											
	$S_{h\ddot{u}}$	[1/h]	79.0	50.0	40.0	30.0	28.0	27.0	20.0	19.0	15.0
<b>Moment of inertia</b>											
	J	[kgcm <sup>2</sup> ]	0.15	0.61	2.00	4.50	6.30	15.0	29.0	73.0	200
<b>Mass</b>											
	m	[kg]	0.90	1.50	2.60	4.20	5.80	8.70	12.6	19.5	31.0

<sup>1)</sup> In the region of the load limit the value for friction energy  $Q_{BW}$  can be reduced to 40 %.



# Motor data m240

Product extensions



## Spring-applied brake

### Rated data with reduced braking torque

- Activation via half-wave or bridge rectifier

Size			06	08	10	12	14	16	18	20	25
<b>Friction energy</b>	$Q_{BW}$	[MJ]	113	210	264	706	761	966	1542	2322	3522
<b>Delay time</b>											
Engaging	$t_{11}$	[ms]	11.0	14.0	20.0	21.0	37.0	53.0	32.0	47.0	264
<b>Rise time</b>											
Braking torque	$t_{12}$	[ms]	13.0	10.0	17.0	19.0	22.0	30.0	20.0	100	120
<b>Engagement time</b>											
	$t_1$	[ms]	24.0		37.0	40.0	59.0	83.0	52.0	147	384
<b>Disengagement time</b>											
	$t_2$	[ms]	35.0	37.0	57.0	65.0	148	169	230	207	269

- The brake response and application times are guide values. The engagement time is 10 times longer with AC-side switching. With the maximum air gap the disengagement time  $t_2$  – depending on the brake and control – is up to 4 times longer than the disengagement time with the rated air gap.

# Motor data m240

Product extensions



## Spring-applied brake

### Rated data with standard braking torque

- ▶ In case of the braking torque and the maximum switching energy, the unit for the values (100 ... 3600) is rpm.
- ▶ Please enquire for braking torques and maximum switching work values not listed here.

Size			06	08	10	12	14	16	18	20	25
<b>Power input</b>											
	$P_{in}$	[kW]	0.020	0.025	0.030	0.040	0.050	0.055	0.085	0.10	0.11
<b>Braking torque</b>											
100	$M_B$	[Nm]	4.00	8.00	16.0	32.0	60.0	80.0	150	260	400
1000	$M_B$	[Nm]	3.70	7.20	14.0	27.0	51.0	66.0	121	206	307
1200	$M_B$	[Nm]	3.60	7.00	14.0	27.0	50.0	65.0	118	201	300
1500	$M_B$	[Nm]	3.50	6.80	13.0	26.0	48.0	63.0	115	195 <sup>1)</sup>	291 <sup>1)</sup>
1800	$M_B$	[Nm]	3.40	6.70	13.0	26.0	47.0	61.0	112 <sup>1)</sup>		
3000	$M_B$	[Nm]	3.20	6.30	12.0	24.0	44.0 <sup>1)</sup>	57.0 <sup>1)</sup>			
3600	$M_B$	[Nm]	3.20	6.10	12.0	23.0 <sup>1)</sup>					
<b>Maximum switching energy</b>											
100	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1000	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1200	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1500	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	24.0 <sup>1)</sup>	36.0 <sup>1)</sup>
1800	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	36.0 <sup>1)</sup>		
3000	$Q_E$	[KJ]	3.00	7.50	12.0	24.0	18.0 <sup>1)</sup>	11.0 <sup>1)</sup>			
3600	$Q_E$	[KJ]	3.00	7.50	12.0	7.00 <sup>1)</sup>					
<b>Transition operating frequency</b>											
	$S_{h\ddot{u}}$	[1/h]	79.0	50.0	40.0	30.0	28.0	27.0	20.0	19.0	15.0
<b>Moment of inertia</b>											
	J	[kgcm <sup>2</sup> ]	0.15	0.61	2.00	4.50	6.30	15.0	29.0	73.0	200
<b>Mass</b>											
	m	[kg]	0.90	1.50	2.60	4.20	5.80	8.70	12.6	19.5	31.0

<sup>1)</sup> In the region of the load limit the value for friction energy  $Q_{BW}$  can be reduced to 40 %.

# Motor data m240

Product extensions



## Spring-applied brake

### Rated data with standard braking torque

- Activation via half-wave or bridge rectifier

Size			06	08	10	12	14	16	18	20	25
<b>Friction energy</b>	$Q_{BW}$	[MJ]	85.0	158	264	530	571	966	1542	2322	3522
<b>Delay time</b>											
Engaging	$t_{11}$	[ms]	15.0		28.0		17.0	27.0	33.0	65.0	110
<b>Rise time</b>											
Braking torque	$t_{12}$	[ms]	13.0	16.0	19.0		25.0	30.0	45.0	100	120
<b>Engagement time</b>											
	$t_1$	[ms]	28.0	31.0	47.0	53.0	42.0	57.0	78.0	165	230
<b>Disengagement time</b>											
	$t_2$	[ms]	45.0	57.0	76.0	115	210	220	270	340	390

- The brake response and application times are guide values. The engagement time is 10 times longer with AC-side switching. With the maximum air gap the disengagement time  $t_2$  – depending on the brake and control – is up to 4 times longer than the disengagement time with the rated air gap.

# Motor data m240

Product extensions



## Spring-applied brake

### Rated data with increased braking torque

- ▶ In case of the braking torque and the maximum switching energy, the unit for the values (100 ... 3600) is rpm.
- ▶ Please enquire for braking torques and maximum switching work values not listed here.

Size			10	12	14	16	16	18	20	20	25	25
<b>Power input</b>												
	$P_{in}$	[kW]	0.030	0.040	0.050	0.055	0.055	0.085	0.10	0.10	0.11	0.11
<b>Braking torque</b>												
100	$M_B$	[Nm]	23.0	46.0	75.0	100	125	200	315	400	490	600
1000	$M_B$	[Nm]	20.0	39.0	64.0	83.0	103	162	249	317	376	461
1200	$M_B$	[Nm]	20.0	39.0	62.0	81.0	101	158	244	309	367	449
1500	$M_B$	[Nm]	19.0	38.0	60.0	78.0	98.0	153	237 <sup>1)</sup>	300 <sup>1)</sup>	356 <sup>1)</sup>	436 <sup>1)</sup>
1800	$M_B$	[Nm]	19.0	37.0	59.0	77.0	96.0	150 <sup>1)</sup>				
3000	$M_B$	[Nm]	17.0	34.0	55.0 <sup>1)</sup>	71.0 <sup>1)</sup>	89.0 <sup>1)</sup>					
3600	$M_B$	[Nm]	17.0	33.0 <sup>1)</sup>								
<b>Maximum switching energy</b>												
100	$Q_E$	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	80.0	80.0	120	120
1000	$Q_E$	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	80.0	80.0	120	120
1200	$Q_E$	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	80.0	80.0	120	120
1500	$Q_E$	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	24.0 <sup>1)</sup>	24.0 <sup>1)</sup>	36.0 <sup>1)</sup>	36.0 <sup>1)</sup>
1800	$Q_E$	[KJ]	12.0	24.0	30.0	36.0	36.0	36.0 <sup>1)</sup>				
3000	$Q_E$	[KJ]	12.0	24.0	18.0 <sup>1)</sup>	11.0 <sup>1)</sup>	11.0 <sup>1)</sup>					
3600	$Q_E$	[KJ]	12.0	7.00 <sup>1)</sup>								
<b>Transition operating frequency</b>												
	$S_{hü}$	[1/h]	40.0	30.0	28.0	27.0	27.0	20.0	19.0	19.0	15.0	15.0
<b>Moment of inertia</b>												
	J	[kgcm <sup>2</sup> ]	2.00	4.50	6.30	15.0	15.0	29.0	73.0	73.0	200	200
<b>Mass</b>												
	m	[kg]	2.60	4.20	5.80	8.70	8.70	12.6	19.5	19.5	31.0	31.0

<sup>1)</sup> In the region of the load limit the value for friction energy  $Q_{BW}$  can be reduced to 40 %.

- ▶ Activation via half-wave or bridge rectifier

Size			10	12	14	16	18	20	25			
<b>Friction energy</b>												
	$Q_{BW}$	[MJ]	198	353	253	563	241	578	1596	580	2465	1409
<b>Delay time</b>												
Engaging	$t_{11}$	[ms]	10.0	16.0	11.0	22.0	17.0	24.0	46.0	17.0	77.0	38.0
<b>Rise time</b>												
Braking torque	$t_{12}$	[ms]	19.0	25.0	30.0	45.0	100	120				
<b>Engagement time</b>												
	$t_1$	[ms]	29.0	41.0	36.0	52.0	47.0	69.0	146	117	197	158
<b>Disengagement time</b>												
	$t_2$	[ms]	109	193	308	297	435	356	378	470	451	532

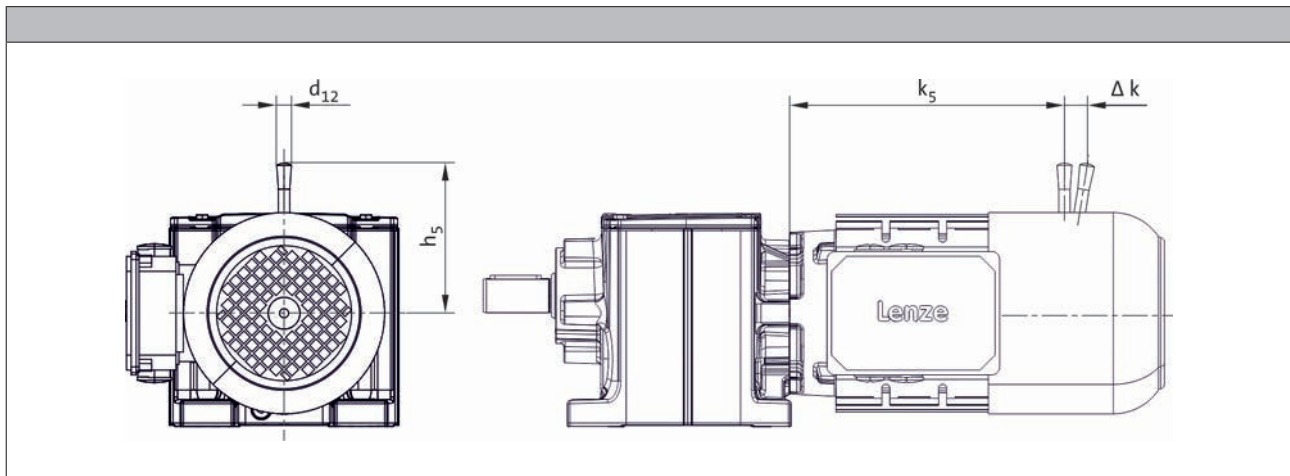
# Motor data m240

Product extensions



## Spring-applied brake

Manual release for 4-pole motors



Product	Size Brake	Dimensions			
		$k_5$ [mm]	$\Delta k$ [mm]	$h_5$ [mm]	$d_{12}$ [mm]
m240-P80/M4	08	243	27	116	13.0
	10	254	28	132	13.0
m240-P90/M4 m240-P90/L4	08	291	27	116	13.0
	10	302	28	132	13.0
m240-P100/M4 m240-P100/L4	10	355	28	132	13.0
	12	359	37	161	13.0
m240-P112/M4	12	366	37	161	13.0
	14	368	41	195	24.0
m240-P132/M4 m240-P132/L4	14	428	41	195	24.0
	16	431	55	240	24.0
m240-P160/M4 m240-P160/L4	16	512	55	240	24.0
	18	517	59	279	24.0
m240-P180/M4 m240-P180/L4 m240-P180/V4	18	574	59	279	24.0
	20	581	74	319	24.0

# Motor data m240



## Product extensions

### Temperature monitoring

To protect the motor against overheating, the following thermal sensors are provided.

The thermal sensors are integrated into the windings. We recommend using an additional motor protection switch.

#### TKO thermal contacts

The TCO thermal contact (thermal NC contact) is a bimetallic-element switch. The TCO monitors the motor winding temperature; at too high temperatures, the motor relay switches. The motor is disconnected from the mains.

Function	Operating temperature	Min. reset temperature	Max. reset temperature	Max. input current	Max. input voltage
					AC
	T	$T_{min}$	$T_{max}$	$I_{in,max}$	$U_{in,max}$
	-5 ... 5				
	[°C]	[°C]	[°C]	[A]	[V]
NC contact	150	90.0	135	2.50	250

#### PTC thermistor

The PTC thermistor is actuated in connection with a tripping unit. If the motor gets too hot, the motor can be switched off by means of a contactor. In contrast to the thermal contact, quick restart is possible.

Function	Operating temperature	Rated resistance			Standard
		155 °C	-20 °C	140 °C	
	T	$R_N$	$R_N$	$R_N$	
	-5 ... 5				
	[°C]	[Ω]	[Ω]	[Ω]	
Sudden change in resistance	150	550	30.0	250	DIN 44080 DIN VDE 0660 Part 303



13523381

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