g500-S shaft-mounted helical gearbox

Gearboxes

Efficient and slim.

Our slimline shaft-mounted helical gearboxes are characterized by high permissible radial forces, closely stepped ratios and a low backlash. They are available in two-stage and three-stage designs with a maximum torque of 168,164 lb-in (19,000 Nm) and ratios of up to i=500 depending on your individual requirements.

Features

- Compact design saves on installation space required for the machine
- Solid shaft, hollow shaft and shrink disc for direct integration into the machine
- Low backlash at axial output optimizes efficiency
- High center distance provides more free space in your application

Technical data

Gearbox size		g500-S130	g500-S220	g500-S400	g500-S660	g500-S950	g500-S2100	g500-S3100	g500-S4500	g500-S8000	g500-S14000	g500-S19000
Rated torque	lb-in	1200	2000	3500	5800	8400	19000	27000	40000	71000	124000	168000
	Nm	130	220	400	660	950	2100	3100	4500	8000	14000	19000
Ratio range		4 - 100	4 - 350	3 - 390	4 - 420	4 - 400	5 - 430	5 - 410	5 - 410	5 - 380	5 - 370	8 - 350
Solid shaft dimensions	in	1.00 x 2.00	1.00 x 2.00	1.25 x 2.50	1.375 x 2.75	1.625 x 3.25	2.00 x 4.00	2.375 x 4.75	2.875 x 5.75	3.625 x 6.69	4.375 x 8.27	4.75 x 8.27
	mm	25 x 50	25 x 50	30 x 60	35 x 70 40 x 80	40 x 80	50 x 100	60 x 120	70 x 140 80 x 160	90 x 170	110 x 210	120 x 210
Hollow shaft dimensions	in	1.00	1.25	1.375	1.50	1.50	2.00	2.375	2.75	3.625	4.00	4.50
	mm	25	25 30	30 35	40 45	40	50 55	60 70	70 80	90	100	120
Shrink disk dimensions	mm	25	25 30	35	40	40	50	65	75 80	95	105	125
Flange dimensions	mm	160	160	200	200 250	250	250 300	350	400 450	450	550	660

Lenze

g500-S shaft-mounted helical geared motors

Gearboxes

When used in conjunction with three-phase AC motors and servo motors, our shaft-mounted helical gearboxes form a compact, powerful drive unit. Numerous options at the input and output ends ensure that the drive can be easily and precisely adjusted to suit your application.

Designs

- With Lenze Smart Motor m300, rated torque of 15.5 and 44.3 lb-in (1.75 and 5 Nm)
- With IE1 and IE3 three-phase AC motors according to the ErP Directive: Power range 0.08 to 74 Hp (0.06 to 55 kW)
- With inverter-optimized MF three-phase AC motors: Power range 0.74 to 29.5 Hp (0.55 to 22 kW)
- With synchronous and asynchronous servo motors: Power range 0.34 to 51.5 Hp (0.25 to 38.4 kW)

Matched to your environmental conditions

Gearboxes with	Lenze Smart motor	Three-phase AC motors	Servo motors
Degree of protection			
EN 60529	IP55		IP54/IP65
Energy efficiency class			
		IE1 and IE3 or inverter-optimized	
Approvals			
	cURus, EAC, CCC and UkrSepro		
Climatic conditions			
Storage temperature	-30 °C to +60 °C (-22° to +140 °F)		
Operating temperature	-20 °C to +40 °C (-4° to +104 °F)		
Surface and corrosion protection			
OKS-G (primed)	1K primer coat		
OKS-S (small)	2K-PUR top coat		
OKS-M (medium)	1K primer coat, 2K-PUR top coat		
OKS-L (large)	2K-EP primer coat, 2K-PUR top coat		