g500-H helical gearbox

Robust and precise application.



Our efficient helical gearboxes boast high permissible radial forces, closely stepped ratios and low backlash.

They are available in 2-stage and 3-stage designs with a maximum torque of 450 Nm and ratios of up to i=370 depending on your individual requirements.

Highlights

- Precision scaling for size/torque ensures optimal machine adjustments
- Standardised shaft and flange dimensions for easy machine integration
- Exceptional efficiency of 94% or more

Technical data

| Gearbox size | | g500-H45 | g500-H100 | g500-H140 | g500-H210 | g500-H320 | g500-H450 |
|------------------------|------|--------------------|-------------------|--------------------------|------------|------------|--------------------|
| Rated torque | [Nm] | 45 | 100 | 140 | 210 | 320 | 450 |
| Ratio range | | 2.6 - 60 | 3.3 - 60 | 3.3 - 75 | 3.3 - 370 | 3.4 - 320 | 3.4 - 370 |
| Solid shaft dimensions | [mm] | 14 x 28 20 x 40 | 20 x 40 | 25 x 50 | 25 x 50 | 30 x 60 | 30 x 60 35 x 70 |
| Flange dimensions | [mm] | 120 140 160 | 120 140 160 | 120 140 160 200 | 160 200 | 200 250 | 250 300 |



Gearbox

When used in conjunction with three-phase AC motors and servo motors, our 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 1.75 Nm and 5 Nm
- With IE1 / IE2 three-phase AC motors according to the ErP Directive: Power range 0.06 to 9.2 kW
- With inverter-optimised MF three-phase AC motors: Power range 0.55 to 22 kW
- With synchronous servo motors and asynchronous servo motors Power range:0.25 to 9.1 kW

| Gearbox with | Lenze Smart Motor | Three-phase AC motors | Servo motors | | |
|-------------------------------------|---------------------------------|-----------------------------------|--------------|--|--|
| Enclosure | | | | | |
| EN 60529 | | IP54 / IP65 | | | |
| Energy efficiency class | | | | | |
| | | IE1, IE2 or inverter-optimised | | | |
| Approvals | | _ · · | | | |
| | cURus, GOST-R, CCC and UkrSepro | | | | |
| Climatic conditions | | | | | |
| Storage temperature | -30 to 60 °C | | | | |
| Operating temperature | -20 to 40 °C | | | | |
| Surface and corrosion protection | | | | | |
| OKS-G (primed) | 1K primer | | | | |
| OKS-S (small) | 2K PUR top coat | | | | |
| OKS-M (medium) | 1K primer, 2K PUR top coat | | | | |
| OKS-L (large) | 2K EP primer, 2K PUR top coat | | | | |

Tailored to your individual ambient conditions

Perfect mechatronic integration with the Lenze Smart Motor

- Covers a wide range of applications
- Reduces the number of different versions by up to 70 %
- Offers exceptional energy efficiency over a long service life
- Achieves greater productivity and maximum reliability

Lenze BlueGreen Solutions

g500: min. 94% efficiency