

Toothed belt axis ELGR-TB-55-500-0H

Part number: 8083788

FESTO



Data sheet

Feature	Value
Effective diameter of drive pinion	28.65 mm
Working stroke	500 mm
Size	55
Toothed-belt stretch	0.21 %
Toothed-belt pitch	3 mm
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With toothed belt
Type of motor	Stepper motor Servo motor
Max. acceleration	50 m/s ²
Max. speed	0.35 m/s...3 m/s
Repetition accuracy	±0.1 mm
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364 zone III
Degree of protection	IP20
Ambient temperature	-10 °C...50 °C
2nd moment of area I _y	38300 mm ⁴
2nd moment of area I _z	41180 mm ⁴
Max. drive torque	5 Nm
Max. force F _y	300 N
Max. force F _z	300 N
Max. idle running transfer resistance	27.9 N
Max. feed force F _x	350 N
Frictional torque independent of load	0.4 Nm
Mass moment of inertia J _H per metre of stroke	0.19 kgcm ²
Mass moment of inertia J _L per kg of working load	2.05 kgcm ²
Feed constant	90 mm/U
Reference service life	5000 km
Additional moving mass per 10 mm stroke	0.92 g
Product weight	9340 g

Feature	Value
Additional weight per 10 mm stroke	78 g
Material profile	Wrought aluminium alloy Anodised
Note on materials	RoHS-compliant
Material drive cover	Wrought aluminium alloy Anodised
Material pulleys	High-alloy stainless steel
Material slide	Wrought aluminium alloy Anodised
Material toothed belt clamping piece	Beryllium bronze
Material toothed belt	Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating