

Belt driven linear actuator ELGR-TB-55-500-0H

Part number: 8083788

FESTO



Data sheet

Feature	Value
Drive pinion effective diameter	28.65 mm
Working stroke	500 mm
Size	55
Toothed belt elongation	0.21 %
Toothed belt pitch	3 mm
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Electromechanical linear axis with toothed belt
Motor type	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 Iy	38300 mm ⁴
2nd moment of area Iz	41180 mm ⁴
Max. driving torque	5 Nm
Max. force Fy	300 N
Max. force Fz	300 N
Max. no-load resistance to shifting	27.9 N
Max. feed force Fx	350 N
No-load driving torque	0.4 Nm
Mass moment of inertia JH per meter of stroke	0.19 kgcm ²
Mass moment of inertia JL per kg of payload	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
Profile material	Wrought aluminum alloy Anodized
Note on materials	RoHS-compliant
Drive cover material	Wrought aluminum alloy Anodized
Belt pulley material	High-alloy stainless steel
Slide material	Wrought aluminum alloy Anodized
Toothed belt clamping component material	Beryllium bronze
Toothed belt material	Polychloroprene oder Nitrilkautschuk (NBR) mit Glascord und Nylonüberzug