

# 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
Assembly position	Any
Guide	Recirculating ball bearing guide
Design structure	Electromechanical linear axis With toothed belt
Motor type	Stepper motor Servomotor
Max. acceleration	50 m/s <sup>2</sup>
Max. speed	0.35 ... 3 m/s
Repetition accuracy	±0,1 mm
Duty cycle	100 %
PWIS conformity	VDMA24364 zone III
Protection class	IP20
Ambient temperature	-10 ... 50 °C
Area moment of inertia 2nd degree Iy	38.3E+03 mm <sup>4</sup>
Area moment of inertia 2nd degree Iz	41.18E+03 mm <sup>4</sup>
Max. drive torque	5 Nm
Max. force Fy	300 N
Max. force Fz	300 N
Max. idling displacement resistance	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 <sup>2</sup>
Mass moment of inertia JL per kg of working load	2.05 kgcm <sup>2</sup>
Feed constant	90 mm/U
Reference value, running performance	5,000 km
Additional mass factor per 10 mm of stroke	0.92 g
Product weight	9,340 g
Additional weight per 10 mm stroke	78 g
Material of profile	Wrought Aluminum alloy Anodized
Materials note	Conforms to RoHS
Material drive cover	Wrought Aluminum alloy Anodized
Material pulleys	High alloy steel, non-corrosive
Material slide	Wrought Aluminum alloy Anodized
Material toothed belt clamping piece	Beryllium bronze
Material toothed belt	polychloroprene with glass cord and nylon coating