

# toothed belt axis ELGR-TB-45-500-0H

Part number: 8083780

FESTO



## Data sheet

Feature	Value
Effective diameter of drive pinion	24.83 mm
Working stroke	500 mm
Size	45
Toothed-belt stretch	0.08 %
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	1 ... 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	15.7E+03 mm <sup>4</sup>
Area moment of inertia 2nd degree Iz	17.94E+03 mm <sup>4</sup>
Max. drive torque	1.24 Nm
Max. force Fy	100 N
Max. force Fz	100 N
Max. idling displacement resistance	16.1 N
Max. feed force Fx	100 N
No-load driving torque	0.2 Nm
Mass moment of inertia JH per metre of stroke	0.11 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	1.54 kgcm <sup>2</sup>
Feed constant	78 mm/U
Reference value, running performance	5,000 km
Additional mass factor per 10 mm of stroke	0.69 g
Product weight	5,730 g
Additional weight per 10 mm stroke	50 g
Material of profile	Wrought Aluminium alloy Anodised
Materials note	Conforms to RoHS
Material drive cover	Wrought Aluminium alloy Anodised
Material pulleys	High alloy steel, non-corrosive
Material slide	Wrought Aluminium alloy Anodised
Material toothed belt clamping piece	Beryllium bronze
Material toothed belt	polychloroprene with glass cord and nylon coating