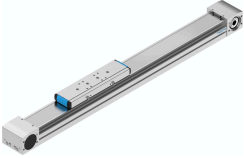


Toothed belt axis ELGA-TB-KF-80-500-0H

Part number: 8041859

FESTO



Data sheet

Feature	Value
Effective diameter of drive pinion	39.79 mm
Working stroke	500 mm
Size	80
Stroke reserve	0 mm
Toothed-belt stretch	0.168 %
Toothed-belt pitch	5 mm
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With toothed belt
Type of motor	Stepper motor Servo motor
Functional principle of measuring system	Incremental
Max. acceleration	50 m/s ²
Max. speed	5 m/s
Repetition accuracy	±0.08 mm
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364 zone III
Degree of protection	IP40
Ambient temperature	-10 °C...60 °C
2nd moment of area Iy	257180 mm ⁴
2nd moment of area Iz	913660 mm ⁴
Max. drive torque	15.92 Nm
Max. force Fy	2500 N
Max. force Fz	3050 N
Max. idle running transfer resistance	50.3 N
Max. moment Mx	36 Nm
Max. moment My	228 Nm
Max. moment Mz	228 Nm
Max. feed force Fx	800 N
Frictional torque independent of load	1 Nm
Torsional mass moment of inertia It	159250 mm ⁴

Feature	Value
Mass moment of inertia JH per metre of stroke	0.93 kgcm ²
Mass moment of inertia JL per kg of working load	3.96 kgcm ²
Mass moment of inertia JO	9.82 kgcm ²
Mass moment of inertia JW for additional slide	7.61 kgcm ²
Feed constant	125 mm/U
Lubrication interval dependent on operating distance	1000 km
Weight of slide	1,9 kg
Weight of additional slide	1,53 kg
Basic weight for 0 mm stroke	4,7 kg
Additional weight per 10 mm stroke	0,051 kg
Material profile	Wrought aluminium alloy Anodised
Note on materials	RoHS-compliant
Material cover tape	Stainless steel strip
Material drive cover	Wrought aluminium alloy Anodised
Material guide slide	Stainless steel
Material guide rail	Stainless steel
Material pulleys	High-alloy stainless steel
Material slide	Wrought aluminium alloy Anodised
Material toothed belt clamping piece	Stainless steel casting
Material toothed belt	Polychloroprene with glass filament and nylon coating