## Belt driven linear actuator ELGA-TB-KF-70-500-0H

**FESTO** 

Part number: 8041853



## **Data sheet**

Feature	Value
Drive pinion effective diameter	28.65 mm
Working stroke	500 mm
Size	70
Stroke reserve	0 mm
Toothed belt elongation	0.213 %
Toothed belt pitch	3 mm
Type code	ELGA
Mounting position	Any
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis with toothed belt
Motor type	Stepper motor Servo motor
Measuring principle of linear potentiometer	Incremental
Max. acceleration	50 m/s <sup>2</sup>
Max. speed	5 m/s
Repetition accuracy	±0.08 mm
Duty cycle	100%
Degree of protection	IP40
Ambient temperature	-10 °C 60 °C
2nd moment of area ly	146050 mm⁴
2nd moment of area Iz	459290 mm⁴
Max. driving torque	5.02 Nm
Max. force Fy	1500 N
Max. force Fz	1850 N
Max. no-load resistance to shifting	41.9 N
Max. torque Mx	16 Nm
Max. torque My	132 Nm
Max. torque Mz	132 Nm
Max. feed force Fx	350 N
No-load driving torque	0.6 Nm
Torsion moment of inertia It	103880 mm⁴
Mass moment of inertia JH per meter of stroke	0.19 kgcm²
Mass moment of inertia JL per kg of payload	2.05 kgcm <sup>2</sup>
Mass moment of inertia JO	2.43 kgcm <sup>2</sup>
Mass moment of inertia JW for additional slide	1.86 kgcm <sup>2</sup>

Feature	Value
Feed constant	90 mm/U
Lubrication interval, distance dependent	1000 km
Slide weight	900 g
Additional slide weight	740 g
Additional weight per 10 mm stroke	39 g
Basic weight with 0 mm stroke	2970 g
Profile material	Wrought aluminum alloy Anodized
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Cover strip material	Stainless steel strip
Drive cover material	Wrought aluminum alloy Anodized
Slide carriage material	Stainless steel
Guide rail material	Stainless steel
Belt pulley material	High-alloy stainless steel
Slide material	Wrought aluminum alloy Anodized
Toothed belt clamping component material	Cast stainless steel
Toothed belt material	Polychloroprene with glass cord and nylon coating