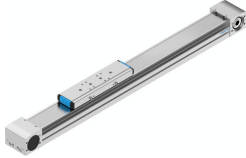


# Belt driven linear actuator ELGA-TB-KF-80-500-0H

Part number: 8041859

FESTO



## Data sheet

Feature	Value
Drive pinion effective diameter	39.79 mm
Working stroke	500 mm
Size	80
Stroke reserve	0 mm
Toothed belt elongation	0.168 %
Toothed belt pitch	5 mm
Type code	ELGA
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural 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 Iy	257180 mm <sup>4</sup>
2nd moment of area Iz	913660 mm <sup>4</sup>
Max. driving torque	15.92 Nm
Max. force Fy	2500 N
Max. force Fz	3050 N
Max. no-load resistance to shifting	50.3 N
Max. torque Mx	36 Nm
Max. torque My	228 Nm
Max. torque Mz	228 Nm
Max. feed force Fx	800 N
No-load driving torque	1 Nm
Torsion moment of inertia It	159250 mm <sup>4</sup>
Mass moment of inertia JH per meter of stroke	0.93 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of payload	3.96 kgcm <sup>2</sup>
Mass moment of inertia JO	9.82 kgcm <sup>2</sup>
Mass moment of inertia JW for additional slide	7.61 kgcm <sup>2</sup>

<b>Feature</b>	<b>Value</b>
Feed constant	125 mm/U
Lubrication interval, distance dependent	1000 km
Slide weight	1900 g
Additional slide weight	1530 g
Additional weight per 10 mm stroke	51 g
Basic weight with 0 mm stroke	4700 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