## Belt driven linear actuator ELGA-TB-KF-120-1200-0H

**FESTO** 

Part number: 8041869



## **Data sheet**

Feature	Value
Drive pinion effective diameter	52.52 mm
Working stroke	1200 mm
Size	120
Stroke reserve	0 mm
Toothed belt elongation	0.21 %
Toothed belt pitch	5 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	1264580 mm⁴
2nd moment of area Iz	4365790 mm⁴
Max. driving torque	34.1 Nm
Max. force Fy	5500 N
Max. force Fz	6890 N
Max. no-load resistance to shifting	76.2 N
Max. torque Mx	104 Nm
Max. torque My	680 Nm
Max. torque Mz	680 Nm
Max. feed force Fx	1300 N
No-load driving torque	2.8 Nm
Torsion moment of inertia It	435680 mm⁴
Mass moment of inertia JH per meter of stroke	2.15 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of payload	6.9 kgcm²
Mass moment of inertia JO	40.99 kgcm <sup>2</sup>
Mass moment of inertia JW for additional slide	28.91 kgcm²

Feature	Value
Feed constant	165 mm/U
Lubrication interval, distance dependent	1000 km
Slide weight	4190 g
Additional slide weight	3240 g
Additional weight per 10 mm stroke	106 g
Basic weight with 0 mm stroke	15680 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	Tempered steel
Guide rail material	Tempered steel Corrotect coated
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