Belt driven linear actuator
ELGG-TB-...-45- -

Part number: 571059

Data sheet

Feature	Value
Drive pinion effective diameter	24.83 mm
Working stroke	50 mm...900 mm
Size	45
Toothed belt elongation	0.08 %
Toothed belt pitch	3 mm
Mounting position	Any
Guide	Plain-bearing guide Recirculating ball bearing
Structural design	Electromechanical linear axis With toothed belt
Motor type	Stepper motor Servo motor
Max. acceleration	50 m/s²
Max. speed	1 m/s...3 m/s
Repetition accuracy	±0.1 mm
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364 Zone III
Degree of protection	IP20
Ambient temperature	-10 °C...50 °C
2nd moment of area Iy	15700 mm⁴
2nd moment of area Iz	17940 mm⁴
Max. driving torque	1.24 Nm
Max. force Fy	100 N
Max. force Fz	100 N
Max. no-load resistance to shifting	16.1 N
Max. feed force Fx	100 N
No-load driving torque	0.2 Nm
Mass moment of inertia JH per meter of stroke	0.011 kgcm²
Mass moment of inertia JL per kg of payload	1.54 kgcm²
Feed constant	78 mm/U
Reference service life	2500 km
Additional moving mass per 10 mm stroke	0.69 g

Feature	Value
Basic weight with 0 mm stroke	4230 g
Additional weight per 10 mm stroke	100 g
Profile material	Wrought aluminum alloy Anodized
Note on materials	RoHS compliant
Drive cover material	Wrought aluminum alloy Anodized
Belt pulley material	high-alloy stainless steel
Slide material	Wrought aluminum alloy Anodized
Toothed belt clamping component material	Beryllium copper
Toothed belt material	Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating