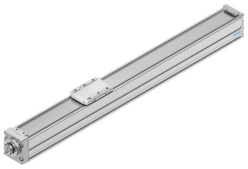
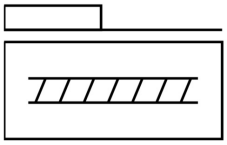
Ball screw linear actuator
ELGC-BS-KF-45-400-10P

Part number: 8061487





Data sheet

Feature	Value
Working stroke	400 mm
Size	45
Stroke reserve	0 mm
Screw diameter	10 mm
Spindle pitch	10 mm/U
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Electromechanical linear axis with ball screw
Motor type	Stepper motor Servo motor
Spindle type	Ball screw drive
Symbol	00991211
Max. acceleration	15 m/s²
Max. rotational speed	3600 1/min
Max. speed	0.6 m/s
Repetition accuracy	±0.015 mm
RSBP classification to CD-0033	F1a
Cleanroom class	ISO Class 7
Degree of protection	IP40
Ambient temperature	0 °C ... 50 °C
2nd moment of area Iy	140000 mm⁴
2nd moment of area Iz	170000 mm⁴
No-load torque at maximum travel speed	0.12 Nm
No-load torque at minimum travel speed	0.032 Nm
Max. force Fy	300 N
Max. force Fz	600 N
Fy with theoretical service life of 100 km (from a guide perspective only)	1104 N
Fz with theoretical service life of 100 km (from a guide perspective only)	2208 N
Max. torque Mx	5.5 Nm
Max. torque My	4.7 Nm
Max. torque Mz	4.7 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	20 Nm
My with theoretical service life of 100 km (from a guide perspective only)	17 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	17 Nm

Feature	Value
Max. feed force Fx	100 N
Torsion moment of inertia It	8500 mm⁴
Mass moment of inertia JH per meter of stroke	0.05056 kgcm²
Mass moment of inertia JL per kg of payload	0.02533 kgcm²
Mass moment of inertia JO	0.0082 kgcm²
Feed constant	10 mm/U
Moving mass	220 g
Additional weight per 10 mm stroke	36 g
Dynamic deflection (load moved)	0.05% of axis length, maximum 0.5 mm
Static deflection (load at standstill)	0.1 % of axis length
Interface code, actuator	V32
Material of end caps	Die cast aluminum, painted
Profile material	Wrought aluminum alloy, anodized
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Cover strip material	High-alloy stainless steel
Drive cover material	Die cast aluminum, painted
Slide carriage material	Steel
Guide rail material	Steel
Slide material	Die-cast aluminum
Spindle nut material	Steel
Spindle material	Steel