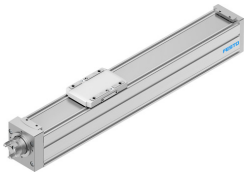
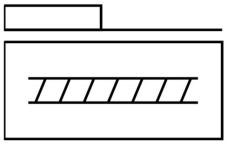
Ball screw linear actuator
ELGC-BS-KF-60-300-12P

Part number: 8061493





Data sheet

Feature	Value
Working stroke	300 mm
Size	60
Stroke reserve	0 mm
Screw diameter	12 mm
Spindle pitch	12 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	4000 1/min
Max. speed	0.8 m/s
Repetition accuracy	±0.01 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	441000 mm⁴
2nd moment of area Iz	542000 mm⁴
No-load torque at maximum travel speed	0.246 Nm
No-load torque at minimum travel speed	0.042 Nm
Max. force Fy	600 N
Max. force Fz	1800 N
Fy with theoretical service life of 100 km (from a guide perspective only)	2208 N
Fz with theoretical service life of 100 km (from a guide perspective only)	6624 N
Max. torque Mx	29.1 Nm
Max. torque My	31.8 Nm
Max. torque Mz	31.8 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	107 Nm
My with theoretical service life of 100 km (from a guide perspective only)	117 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	117 Nm

Feature	Value
Max. feed force Fx	200 N
Torsion moment of inertia It	29800 mm⁴
Mass moment of inertia JH per meter of stroke	0.10779 kgcm²
Mass moment of inertia JL per kg of payload	0.036476 kgcm²
Mass moment of inertia JO	0.02235 kgcm²
Feed constant	12 mm/U
Moving mass	525 g
Additional weight per 10 mm stroke	51 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	T42
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