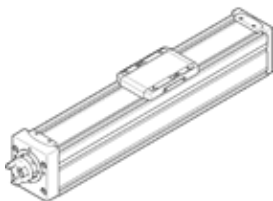


# Spindle axis ELGC-BS-KF-60-100-12P

Part number: 8061491

FESTO



## Data sheet

Feature	Value
Working stroke	100 mm
Size	60
Stroke reserve	0 mm
Reversing backlash	0.15 mm
Spindle diameter	12 mm
Spindle pitch	12 mm/U
Assembly position	Any
Guide	Recirculating ball bearing guide
Design structure	Electromechanical linear axis with recirculating ball bearing spindle
Motor type	Stepper motor Servomotor
Spindle type	Ball screw
Position detection	For proximity sensor For inductive sensors
Max. acceleration	15 m/s <sup>2</sup>
Max. speed	4,000 1/min 0.8 m/s
Repetition accuracy	±0,01 mm
Duty cycle	100 %
PWIS conformity	VDMA24364 zone III
RSBP classification to CD-0033	F1a
Cleanroom class	ISO class 7
Protection class	IP40
Ambient temperature	0 ... 50 °C
Impact energy in end positions	1 mJ
Note on the impact energy in the end positions	At maximum homing speed of 0.01 m/s
Area moment of inertia 2nd degree Iy	441E+03 mm <sup>4</sup>
Area moment of inertia 2nd degree Iz	542E+03 mm <sup>4</sup>
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	1,800 N
Fy for the guide calculation for a service life of 5000 km or 5 million cycles	3,641 N
Fz for the guide calculation for a service life of 5000 km or 5 million cycles	3,641 N
Fy with theoretical service life of 100 km (from a guide perspective only)	13,400 N
Fz with theoretical service life of 100 km (from a guide perspective only)	13,400 N
Max. torque Mx	29.1 Nm
Max. torque My	31.8 Nm
Max. torque Mz	31.8 Nm
Mx for the guide calculation for a service life of 5000 km or 5 million cycles	29.1 Nm
My for the guide calculation for a service life of 5000 km or 5 million cycles	31.8 Nm
Mz for the guide calculation for a service life of 5000 km or 5 million cycles	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
Distance between the slide surface and the centre of the guide	54.6 mm
Max. radial force at drive shaft	230 N
Max. feed force Fx	200 N
Torsional mass moment of inertia It	29.8E+03 mm <sup>4</sup>
Mass moment of inertia JH per meter of stroke	0.10779 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.036476 kgcm <sup>2</sup>
Mass moment of inertia, JO	0.02235 kgcm <sup>2</sup>
Feed constant	12 mm/U
Maintenance interval	Life-time lubrication
Moving mass	525 g
Additional weight per 10 mm stroke	51 g
Dynamic deflection (load moved)	0.05% of the axis length, max. 0.5 mm
Static deflection (load at standstill)	0.1% of the axis length
Interface code, actuator	T42
Material of end caps	Die-cast aluminium, painted
Material of profile	Anodised wrought aluminium alloy
Materials note	Conforms to RoHS
Material cover tape	High alloy steel, non-corrosive
Material drive cover	Die-cast aluminium, painted
Material guide slide	Steel
Material guide rail	Steel
Material slide	Aluminum die cast
Material spindle nut	Steel
Material spindle	Steel