

Spindle axis ELGC-BS-KF-32-500-8P

Part number: 8061481

FESTO



Data sheet

Feature	Value
Working stroke	500 mm
Size	32
Stroke reserve	0 mm
Reversing backlash	0.15 mm
Spindle diameter	8 mm
Spindle pitch	8 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 ²
Max. speed	4,500 1/min 0.6 m/s
Repetition accuracy	±0,015 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	0.25 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	38E+03 mm ⁴
Area moment of inertia 2nd degree Iz	45E+03 mm ⁴
No-load torque at maximum travel speed	0.04 Nm
No-load torque at minimum travel speed	0.02 Nm
Max. force Fy	150 N
Max. force Fz	300 N
Fy for the guide calculation for a service life of 5000 km or 5 million cycles	356 N
Fz for the guide calculation for a service life of 5000 km or 5 million cycles	356 N
Fy with theoretical service life of 100 km (from a guide perspective only)	1,310 N
Fz with theoretical service life of 100 km (from a guide perspective only)	1,310 N
Max. torque Mx	1.3 Nm
Max. torque My	1.1 Nm
Max. torque Mz	1.1 Nm
Mx for the guide calculation for a service life of 5000 km or 5 million cycles	1.3 Nm
My for the guide calculation for a service life of 5000 km or 5 million cycles	1.1 Nm
Mz for the guide calculation for a service life of 5000 km or 5 million cycles	1.1 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	5 Nm
My with theoretical service life of 100 km (from a guide perspective only)	4 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	4 Nm

Feature	Value
Distance between the slide surface and the centre of the guide	31.4 mm
Max. radial force at drive shaft	75 N
Max. feed force Fx	40 N
Torsional mass moment of inertia It	1.7E+03 mm ⁴
Mass moment of inertia JH per meter of stroke	0.02218 kgcm ²
Mass moment of inertia JL per kg of working load	0.016211 kgcm ²
Mass moment of inertia, JO	0.00274 kgcm ²
Feed constant	8 mm/U
Maintenance interval	Life-time lubrication
Moving mass	83.4 g
Additional weight per 10 mm stroke	18 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	V25
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