spindle axis ELGA-BS-KF-120-400-0H-10P-ML Part number: 8041839

With recirculating ball bearing guide



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FESTO



Data sheet

Feature	Value
Working stroke	400 mm
Size	120
Stroke reserve	0 mm
Spindle diameter	25 mm
Spindle pitch	10 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 spindle
Measuring method: displacement encoder	Incremental
Max. acceleration	15 m/s2
Max. speed	3,600 1/min
	0.6 m/s
Repetition accuracy	±0,02 mm
Protection class	IP40
Ambient temperature	-10 60 °C
Area moment of inertia 2nd degree ly	1,240E+03 mm4
Area moment of inertia 2nd degree Iz	3,800E+03 mm4
No-load torque at maximum travel speed	1.33 Nm
No-load torque at minimum travel speed	1 Nm
Max. force Fy	5,500 N
Max. force Fz	6,890 N
Fy with theoretical service life of 100 km (from a guide perspective only)	20,240 N
Fz with theoretical service life of 100 km (from a guide perspective only)	25,355 N
Max. torque Mx	104 Nm
Max. torque My	680 Nm
Max. torque Mz	680 Nm
Mx with theoretical service life of 100 km (from a guide perspective only	383 Nm
My with theoretical service life of 100 km (from a guide perspective only)	2,502 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	2,502 Nm
Max. radial force at drive shaft	500 N
Max. feed force Fx	3,400 N
Torsional mass moment of inertia It	247E+03 mm4
Mass moment of inertia JH per metre of stroke	2.756 kgcm2
Mass moment of inertia JL per kg of working load	0.0253 kgcm2
Mass moment of inertia, JO	1.038 kgcm2
Feed constant	10 mm/U
Moving mass	4,459 g
Additional slide weight	3,600 g
Additional weight per 10 mm stroke	101 g
Dynamic deflection (load moved)	0.05% of the axis length, max. 0.5 mm



Feature	Value
Static deflection (load at standstill)	0.1% of the axis length
Material of end caps	Wrought Aluminium alloy
	Anodised
Material of profile	Wrought Aluminium alloy
	Anodised
Materials note	Contains PWIS substances
	Conforms to RoHS
Material drive cover	Wrought Aluminium alloy
	Anodised
Material guide slide	Steel
Material guide rail	Steel
Material slide	Wrought Aluminium alloy
	Anodised
Material spindle nut	Steel
Material spindle	Steel