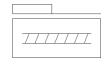
Spindle axis ELGA-BS-KF-80-100-0H-10P-ML Part number: 8041822

With recirculating ball bearing guide







Data sheet

Feature	Value
Working stroke	100 mm
Size	80
Stroke reserve	0 mm
Spindle diameter	15 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 actuator
Measuring method: displacement encoder	Incremental
Max. acceleration	15 m/s2
Max. speed	3,000 1/min
	0.5 m/s
Repetition accuracy	±0,02 mm
PWIS conformity	VDMA24364 zone III
Protection class	IP40
Ambient temperature	-10 60 °C
Area moment of inertia 2nd degree ly	310E+03 mm4
Area moment of inertia 2nd degree Iz	977E+03 mm4
No-load torque at maximum travel speed	0.55 Nm
No-load torque at minimum travel speed	0.3 Nm
Max. force Fy	2,500 N
Max. force Fz	3,050 N
Fy with theoretical service life of 100 km (from a guide perspective only)	9,200 N
Fz with theoretical service life of 100 km (from a guide perspective only)	11,224 N
Max. torque Mx	36 Nm
Max. torque My	228 Nm
Max. torque Mz	228 Nm
Mx with theoretical service life of 100 km (from a guide perspective only	132 Nm
My with theoretical service life of 100 km (from a guide perspective only)	839 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	839 Nm
Max. radial force at drive shaft	250 N
Max. feed force Fx	1,600 N
Torsional mass moment of inertia It	67.3E+03 mm4
Mass moment of inertia JH per meter of stroke	0.346 kgcm2
Mass moment of inertia JL per kg of working load	0.0253 kgcm2
Mass moment of inertia, JO	0.097 kgcm2
Feed constant	10 mm/U
Moving mass	1,370 g
Additional slide weight	1,110 g
Additional weight per 10 mm stroke	46.5 g



Feature	Value	
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	
Material of end caps	Wrought Aluminum alloy	
	Anodized	
Material of profile	Wrought Aluminum alloy	
	Anodized	
Materials note	Conforms to RoHS	
Material drive cover	Wrought Aluminum alloy	
	Anodized	
Material guide slide	Steel	
Material guide rail	Steel	
Material slide	Wrought Aluminum alloy	
	Anodized	
Material spindle nut	Steel	
Material spindle	Steel	