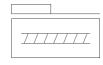
spindle axis ELGA-BS-KF-80-300-0H-20P-ML Part number: 8041831

With recirculating ball bearing guide







Data sheet

Feature	Value	
Working stroke	300 mm	
Size	80	
Stroke reserve	0 mm	
Spindle diameter	15 mm	
Spindle pitch	20 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	3,000 1/min	
	1 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	0.6 Nm	
No-load torque at minimum travel speed	0.35 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 metre of stroke	0.346 kgcm2	
Mass moment of inertia JL per kg of working load	0.1013 kgcm2	
Mass moment of inertia, JO	0.097 kgcm2	
Feed constant	20 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 Aluminium alloy	
	Anodised	
Material of profile	Wrought Aluminium alloy	
	Anodised	
Materials note	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	