spindle axis ELGT-BS-120-Part number: 8121225

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Data sheet

Overall data sheet - Individual values depend upon your configuration.

Feature	Value	
Working stroke	100 1,100 mm	
Size	120	
Stroke reserve	0 mm	
Reversing backlash	<= 0.15 μm	
Spindle diameter	15 16 mm	
Spindle pitch	10 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	
Variants	Recommended for production facilities for the manufacture of lithium- ion batteries	
Max. acceleration	15 m/s2	
	3,000 1/min	
Max. speed	0.5 1 m/s	
Denetition accuracy		
Repetition accuracy	±0,02 mm	
Duty cycle PWIS conformity	100 %	
RSBP classification to CD-0033	VDMA24364 zone III	
	F1a	
Cleanroom class	ISO class 8	
Protection class	IP20	
Ambient temperature	050 °C	
Permanent feed force	805 1,265 N	
Area moment of inertia 2nd degree ly	966E+03 mm4	
Area moment of inertia 2nd degree Iz	6,011E+03 mm4	
No-load torque at maximum travel speed	0.3 Nm	
No-load torque at minimum travel speed	0.08 Nm	
Max. force Fy	6,800 N	
Max. force Fz	8,090 N	
Fy with theoretical service life of 100 km (from a guide perspective only)	25,051 N	
Fz with theoretical service life of 100 km (from a guide perspective only)	29,804 N	
Max. torque Mx	300 Nm	
Max. torque My	310 Nm	
Max. torque Mz	310 Nm	
Mx with theoretical service life of 100 km (from a guide perspective only	1,105 Nm	
My with theoretical service life of 100 km (from a guide perspective only)	1,142 Nm	
Mz with theoretical service life of 100 km (from a guide perspective only)	1,142 Nm	
Max. radial force at drive shaft	290 N	
Max. feed force Fx	805 1,265 N	
Torsional mass moment of inertia It	506E+03 mm4	
Mass moment of inertia JH per metre of stroke	0.2522 0.3453 kgcm2	



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Feature	Value	
Mass moment of inertia JL per kg of working load	0.0253 0.1013 kgcm2	
Mass moment of inertia, JO	0.1306 0.2654 kgcm2	
Mass moment of inertia JW for additional slide	0.0448 0.1793 kgcm2	
Feed constant	10 20 mm/U	
Moving mass	2,019 2,036 g	
Product weight	6,454 18,880 g	
Additional slide weight	1,770 g	
Basic weight for 0 mm stroke	5,235 5,259 g	
Additional weight per 10 mm stroke	124 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	T46	
Material of end caps	Die-cast aluminium, painted	
Material of profile	Anodised wrought aluminium alloy	
Materials note	Conforms to RoHS	
Material drive cover	Die-cast aluminium, painted	
Material guide slide	Steel	
Material guide rail	Steel	
Material slide	Anodised wrought aluminium alloy	
Material spindle nut	Steel	
Material spindle	Steel	