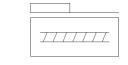
## spindle axis ELGT-BS-90-500-10P Part number: 8124409







## **Data sheet**

Feature	Value
Working stroke	500 mm
Size	90
Stroke reserve	0 mm
Reversing backlash	<= 0.15 μm
Spindle diameter	16 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
71	Servomotor
Spindle type	Ball screw spindle
Variants	Recommended for production facilities for the manufacture of lithium-
	ion batteries
Max. acceleration	15 m/s2
Max. speed	3,000 1/min
	0.5 m/s
Repetition accuracy	±0,02 mm
Duty cycle	100 %
PWIS conformity	VDMA24364 zone III
RSBP classification to CD-0033	F1a
Cleanroom class	ISO class 6
Protection class	IP20
Ambient temperature	0 50 °C
Permanent feed force	1,054 N
Area moment of inertia 2nd degree ly	631E+03 mm4
Area moment of inertia 2nd degree Iz	1,948E+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	4,710 N
Max. force Fz	5,600 N
Fy with theoretical service life of 100 km (from a guide perspective only)	17,352 N
Fz with theoretical service life of 100 km (from a guide perspective only)	20,631 N
Max. torque Mx	65 Nm
Max. torque My	51 Nm
Max. torque Mz	51 Nm
Mx with theoretical service life of 100 km (from a guide perspective only	239 Nm
My with theoretical service life of 100 km (from a guide perspective only)	188 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	188 Nm
Max. radial force at drive shaft	290 N
Max. feed force Fx	1,054 N
Torsional mass moment of inertia It	151E+03 mm4
Mass moment of inertia JH per metre of stroke	0.3453 kgcm2
Mass moment of inertia JL per kg of working load	0.0253 kgcm2
Mass moment of inertia, JO	0.1252 kgcm2



Feature	Value	
Feed constant	10 mm/U	
Moving mass	1,628 g	
Product weight	9,591 g	
Basic weight for 0 mm stroke	4,380 g	
Additional weight per 10 mm stroke	104 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	