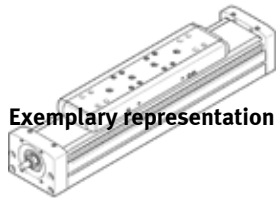
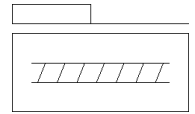


# spindle axis ELGA-BS-KF-150- -

Part number: 8024921

FESTO

With recirculating ball bearing guide



Exemplary representation

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Working stroke	50 ... 3,000 mm
Size	150
Spindle diameter	40 mm
Spindle pitch	40 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/s <sup>2</sup>
Max. speed	3,000 1/min 2 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 Iy	4,700E+03 mm <sup>4</sup>
Area moment of inertia 2nd degree Iz	11,800E+03 mm <sup>4</sup>
No-load torque at maximum travel speed	4.4 Nm
No-load torque at minimum travel speed	2.2 Nm
Max. force Fy	5,500 N
Max. force Fz	11,000 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)	40,480 N
Max. torque Mx	167 Nm
Max. torque My	1,150 Nm
Max. torque Mz	1,150 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	615 Nm
My with theoretical service life of 100 km (from a guide perspective only)	4,232 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	4,232 Nm
Max. radial force at drive shaft	4,000 N
Max. feed force Fx	6,400 N
Torsional mass moment of inertia It	783E+03 mm <sup>4</sup>
Mass moment of inertia JH per metre of stroke	18.031 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.4053 kgcm <sup>2</sup>
Mass moment of inertia, JO	8.63 kgcm <sup>2</sup>
Feed constant	40 mm/U
Moving mass	10,514 g
Additional slide weight	5,900 g

Feature	Value
Basic weight for 0 mm stroke	25,100 g
Additional weight per 10 mm stroke	213 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
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