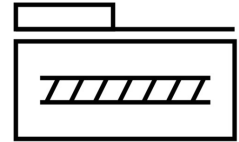


Spindle axis ELGA-BS-KF-80-100-0H-20P-ML

Part number: 8041829

FESTO



 General operating condition

Data sheet

Feature	Value
Working stroke	100 mm
Size	80
Stroke reserve	0 mm
Spindle diameter	15 mm
Spindle pitch	20 mm/U
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With ball screw
Type of motor	Stepper motor Servo motor
Spindle type	Ball screw
Symbol	00991211
Functional principle of measuring system	Incremental
Max. acceleration	15 m/s ²
Max. rotational speed	3000 rpm
Max. speed	1 m/s
Repetition accuracy	±0.02 mm
LABS (PWIS) conformity	VDMA24364 zone III
Degree of protection	IP40
Ambient temperature	-10 °C ... 60 °C
2nd moment of area Iy	310000 mm ⁴
2nd moment of area Iz	977000 mm ⁴
Idle torque at v _{max}	0.6 Nm
Idle torque at v _{min}	0.35 Nm
Max. force F _y	2500 N
Max. force F _z	3050 N
F _y at theoretical life value of 100 km (only guide consideration)	9200 N
F _z at theoretical life value of 100 km (only guide consideration)	11224 N
Max. moment M _x	36 Nm
Max. moment M _y	228 Nm
Max. moment M _z	228 Nm
M _x at theoretical life value of 100 km (only guide consideration)	132 Nm
M _y at theoretical life value of 100 km (only guide consideration)	839 Nm
M _z at theoretical life value of 100 km (only guide consideration)	839 Nm
Max. radial force at drive shaft	250 N

Feature	Value
Max. feed force Fx	1600 N
Torsional mass moment of inertia It	67300 mm ⁴
Mass moment of inertia JH per metre of stroke	0.346 kgcm ²
Mass moment of inertia JL per kg of working load	0.1013 kgcm ²
Mass moment of inertia JO	0.097 kgcm ²
Feed constant	20 mm/U
Moving mass	1370 g
Weight of additional slide	1110 g
Additional weight per 10 mm stroke	46.5 g
Dynamic deflection (moving load)	0.05% of the axis length, max. 0.5 mm
Static deflection (load in standstill)	0.1% of the axis length
Material end cap	Wrought aluminium alloy Anodised
Material profile	Wrought aluminium alloy Anodised
Note on materials	RoHS-compliant
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