

# Ball screw axis ELGC-BS-KF-32-100-8P

Part number: 8061477

FESTO



 General operating condition

## Data sheet

Feature	Value
Working stroke	100 mm
Size	32
Stroke reserve	0 mm
Reversing backlash	150 µm
Screw diameter	8 mm
Spindle pitch	8 mm/U
Mounting position	Any
Guide	Recirculating ball bearing
Structural design	Electromechanical linear axis With ball screw
Motor type	Stepper motor Servo motor
Spindle type	Ball screw
Symbol	00991211
Position sensing	Via proximity switch For inductive sensors
Max. acceleration	15 m/s <sup>2</sup>
Max. rotational speed	4500 rpm
Max. speed	0.6 m/s
Repetition accuracy	±0.015 mm
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364 Zone III
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 7 according to ISO 14644-1
Storage temperature	-20 °C ... 60 °C
Degree of protection	IP40
Ambient temperature	0 °C ... 50 °C
Impact energy in the end positions	2.5E-4 J
Note on the impact energy in the end positions	At maximum speed of the reference run of 0.01 m/s
2nd moment of area ly	38000 mm <sup>4</sup>
2nd moment of area lz	45000 mm <sup>4</sup>
No-load torque at maximum travel speed	0.04 Nm
No-load torque at minimum travel speed	0.02 Nm
Max. force Fy	356 N
Max. force Fz	356 N
Max. force Fy total axis	150 N

Feature	Value
Max. force Fz total axis	300 N
Fy with theoretical service life of 100 km (from a guide perspective only)	1310 N
Fz with theoretical service life of 100 km (from a guide perspective only)	1310 N
Max. torque Mx	1.3 Nm
Max. torque My	1.1 Nm
Max. torque Mz	1.1 Nm
Max. moment Mx total axis	1.3 Nm
Max. moment My total axis	1.1 Nm
Max. moment Mz total axis	1.1 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	5 Nm
My with theoretical service life of 100 km (from a guide perspective only)	4 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	4 Nm
Distance between slide surface and guide center	31.4 mm
Max. radial force on actuator shaft	75 N
Max. feed force Fx	40 N
Torsion moment of inertia It	1700 mm <sup>4</sup>
Mass moment of inertia JH per meter of stroke	0.02218 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of payload	0.016211 kgcm <sup>2</sup>
Mass moment of inertia JO	0.00274 kgcm <sup>2</sup>
Feed constant	8 mm/U
Reference service life	5000 km
Maintenance interval	Lifetime lubrication
Moving mass	83.4 g
Additional weight per 10 mm stroke	18 g
Dynamic deflection (load moved)	0.05% of axis length, maximum 0.5 mm
Static deflection (load at standstill)	0.1 % of axis length
Interface code, actuator	V25
Material of end caps	Die cast aluminum, painted
Profile material	Wrought aluminum alloy, anodized
Note on materials	RoHS compliant
Cover strip material	high-alloy stainless steel
Drive cover material	Die cast aluminum, painted
Slide carriage material	Steel
Guide rail material	Steel
Slide material	Die-cast aluminum
Ball screw nut material	Steel
Spindle material	Steel