## **FESTO**

## Ball screw axis unit ELGS-BS-KF-32-

Part number: 8083433



## **Data sheet**

Feature	Value
Working stroke	100 mm800 mm
Size	32
Stroke reserve	0 mm
Spindle diameter	8 mm
Spindle pitch	8 mm/U
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With ball screw With integrated drive
Position detection	Motor encoder Via proximity switch
Rotor position sensor	Absolute single-turn encoder
Rotor position sensor, encoder measuring principle	Magnetic
Temperature monitoring	Switch-off for excessive temperature Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface Integrated end-position sensing
Display	LED
Max. acceleration	3 m/s <sup>2</sup> 5 m/s <sup>2</sup>
Max. speed	0.18 m/s
Repetition accuracy	±0.015 mm
Features of digital logic outputs	Configurable Not galvanically isolated
Duty cycle	100%
Insulation protection class	В
Max. current digital logic outputs	100 mA
Max. current consumption	3 A
Max. current consumption, logic	0.3 A
Nominal voltage DC	24 V
Nominal current	3 A
Parameterisation interface	IO-Link User interface

Feature	Value
Permissible voltage fluctuations	+/- 15%
Power supply, connection type	Plugs
power supply, connection system	M12x1, T-coded according to EN 61076-2-111
Power supply, number of pins/wires	4
Approval	RCM trademark
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
LABS (PWIS) conformity	VDMA24364 zone III
Storage temperature	-20 °C60 °C
Relative air humidity	0 - 90%
Degree of protection	IP40
Ambient temperature	0 °C50 °C
Note on ambient temperature	Power must be reduced by 2% per K at ambient temperatures above 30°C.
2nd moment of area ly	38000 mm⁴
2nd moment of area Iz	45000 mm⁴
Max. force Fy	356 N
Max. force Fz	356 N
Fy at theoretical life value of 100 km (only guide consideration)	1310 N
Fz at theoretical life value of 100 km (only guide consideration)	1310 N
Mx at theoretical life value of 100 km (only guide consideration)	5 Nm
My at theoretical life value of 100 km (only guide consideration)	4 Nm
Mz at theoretical life value of 100 km (only guide consideration)	4 Nm
Max. feed force Fx	40 N
Reference value effective load, horizontal	2 kg
Reference value effective load, vertical	2 kg
Feed constant	8 mm/U
Moving mass	83.4 g
Product weight	1069 g2493 g
Basic weight for 0 mm stroke	889 g1053 g
Additional weight per 10 mm stroke	18 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
Number of digital logic outputs 24 V DC	2
Number of digital logic inputs	2
Working range of logic input	24 V
Features of logic input	Configurable Not galvanically isolated
IO-Link, Process data content OUT	Move in 1 bit Move out 1 bit Quit Error 1 bit Move intermediate 1 bit
IO-Link, Process data content IN	State Device 1 bit State In 1 bit State Intermediate 1 bit State Move 1 bit State Out 1 bit
IO-Link, Service data IN	32-bit force 32-bit position 32-bit speed
IO-Link, Data storage required	0.5 KB
Switching logic for inputs	NPN (negative switching) PNP (positive switching)
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded according to EN 61076-2-101
Logic interface, number of pins/wires	8

Feature	Value
7,1	Via female thread Via centring sleeve and pin With accessories
Material end cap	Painted die cast aluminium
Material profile	Anodised wrought aluminium alloy
Note on materials	RoHS-compliant
Material cover tape	High-alloy stainless steel
Material guide slide	Steel
Material guide rail	Steel