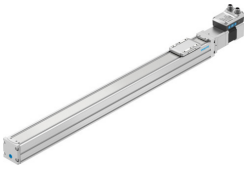
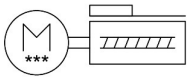
Ball screw axis unit
ELGS-BS-KF-45-400-10P-ST-M-H1-PLK-AA

Part number: 8083473





Data sheet

Feature	Value
Working stroke	400 mm
Size	45
Stroke reserve	0 mm
Spindle diameter	10 mm
Spindle pitch	10 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	5 m/s²
Max. speed	0.25 m/s
Repetition accuracy	±0.015 mm
Features of digital logic outputs	Configurable Not galvanically isolated
Duty cycle	100%
Insulation protection class	B
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 °C...60 °C
Relative air humidity	0 - 90%
Degree of protection	IP40
Ambient temperature	0 °C...50 °C
Note on ambient temperature	Power must be reduced by 2% per K at ambient temperatures above 30°C.
2nd moment of area Iy	140000 mm⁴
2nd moment of area Iz	170000 mm⁴
Max. force Fy	880 N
Max. force Fz	880 N
Fy at theoretical life value of 100 km (only guide consideration)	3240 N
Fz at theoretical life value of 100 km (only guide consideration)	3240 N
Max. moment Mx	5.5 Nm
Max. moment My	4.7 Nm
Max. moment Mz	4.7 Nm
Mx at theoretical life value of 100 km (only guide consideration)	20 Nm
My at theoretical life value of 100 km (only guide consideration)	17 Nm
Mz at theoretical life value of 100 km (only guide consideration)	17 Nm
Max. feed force Fx	100 N
Reference value effective load, horizontal	10 kg
Reference value effective load, vertical	5 kg
Feed constant	10 mm/U
Moving mass	220 g
Product weight	2794 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	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
Type of mounting	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