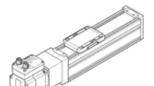
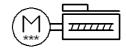
spindle axis unit ELGS-BS-KF-60-100-12P-ST-M-H1-PLK-AA Part number: 8083383







Data sheet

Feature	Value
Working stroke	100 mm
Size	60
Stroke reserve	0 mm
Spindle diameter	12 mm
Spindle pitch	12 mm/U
Assembly position	Any
Guide	Recirculating ball bearing guide
Design structure	Electromechanical linear axis
Design structure	with recirculating ball bearing spindle
	with integrated drive
Materitype	Stepper motor
Motor type	Ball screw
Spindle type	
Position detection	Motor encoder
D. C.	For proximity sensor
Referencing	Fixed stop block positive
	Fixed stop block negative
Rotor position sensor	Absolute single turn encoder
Rotary position encoder measuring principle	Magnetic
Temperature monitoring	Shutdown at over-temperature
	Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface
	Integrated end-position sensing
Display	LED
Ready status display	LED
Max. acceleration	5 m/s2
Max. speed	0.25 m/s
Repetition accuracy	±0,01 mm
Digital logic output characteristics	configurable
	Not electrically isolated
Duty cycle	100 %
Insulation protection class	В
Max. current, digital logic outputs	100 mA
Max. current consumption	5.3 A
Nominal voltage DC	24 V
Nominal current	5.3 A
Parameters configuring interface	IO-Link
Tarameters comparing interface	User interface
Rotor position encoder resolution	16 Bit
Permissible voltage fluctuation	+/- 15 %
Power supply, type of connection	Plug
Power supply, connection technology	M12x1, T-coded as per EN 61076-2-111
Power supply, number of pins/wires	PCM Mark
Authorization	RCM Mark
KC mark CE symbol (see declaration of conformity)	KC-EMV
	according to EU-EMV guideline
	in accordance with EU RoHS directive



Feature	Value	
UKCA marking (see declaration of conformity)	To UK instructions for EMC	
	To UK RoHS instructions	
Vibration resistance	Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6	
Shock resistance	Shock test with severity level 1 in accordance with FN 942017-5 and EN 60068-2-27	
PWIS conformity	VDMA24364 zone III	
Storage temperature	-20 60 °C	
Relative air humidity	0 - 90 %	
Protection class	IP40	
Safety class		
Ambient temperature	0 50 °C	
Note on ambient temperature	Above an ambient temperature of 30 $^{\circ}$ C, the power must be reduced by 2% per K.	
Area moment of inertia 2nd degree ly	441E+03 mm4	
Area moment of inertia 2nd degree Iz	542E+03 mm4	
Max. force Fy	600 N	
Max. force Fz	1,800 N	
Fy with theoretical service life of 100 km (from a guide perspective only)	2,208 N	
Fz with theoretical service life of 100 km (from a guide perspective only)	6,624 N	
Max. torque Mx	29.1 Nm	
Max. torque My	31.8 Nm	
Max. torque Mz	31.8 Nm	
Mx with theoretical service life of 100 km (from a guide perspective only	107 Nm	
My with theoretical service life of 100 km (from a guide perspective only)	117 Nm	
Mz with theoretical service life of 100 km (from a guide perspective only)	117 Nm	
Max. feed force Fx	200 N	
Reference value for working load, horizontal	20 kg	
Reference value for working load, vertical	13 kg	
Torsional mass moment of inertia It	29.8E+03 mm4	
Feed constant	12 mm/U	
Moving mass	525 g	
Product weight	3,372 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	
Number of 24 V DC digital logic outputs	2	
Number of digital logic inputs	2	
Specification, logic input	Based on IEC 61131-2, type 1	
Logic input working range	24 V	
IO-Link, SIO mode support	Yes	
Logic input characteristics	configurable	
	Not electrically isolated	
IO-Link, protocol	Device V 1.1	
IO-Link, communication mode	COM3 (230.4 kbd)	
IO-Link, port type	A	
IO-Link, number of ports	1	
IO-Link, process data width OUT	2 Byte	
IO-Link, process data content OUT	1 bit (Move in)	
	1 bit (Move out)	
IO Link, process data width IN	1 bit (Quit Error)	
IO-Link, process data width IN	2 Byte	
IO-Link, process data content IN	1 bit (State Device)	
	1 bit (State Move)	
	1 bit (State in)	
IO Link Service data contents IN	1 bit (State out) 32 bit Force	
IO-Link, Service data contents IN		
	32 bit Position	
IO Link minimum cyclo time	32 bit Speed	
IO-Link, minimum cycle time IO-Link, data memory required	1 ms 0.5 Kilobyte	
Max. line length	·	
max. me rengm	15 m outputs	



Feature	Value
	15 m inputs
	20 m with IO-Link operation
Switching logic, outputs	PNP (positive-switching)
Input circuit logic	PNP (positive-switching)
IO-Link, connection technology	Plug
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded in accordance with EN 61076-2-101
Logic interface, number of poles/wires	8
Logic interface, connection pattern	00992264
Material of end caps	Die-cast aluminium, painted
Material of profile	Anodised wrought aluminium alloy
Materials note	Conforms to RoHS
Material cover tape	High alloy steel, non-corrosive
Material drive cover	Die-cast aluminium, painted
Material guide slide	Steel
Material guide rail	Steel
Material slide	Aluminum die cast
Material spindle nut	Steel
Material spindle	Steel