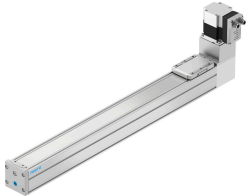


# Toothed belt axis unit ELGS-TB-KF-60-500-ST-M-H1-PLK-AA

FESTO

Part number: 8083572



## Data sheet

Feature	Value
Effective diameter of drive pinion	24.83 mm
Working stroke	500 mm
Size	60
Stroke reserve	0 mm
Toothed-belt stretch	0.124 %
Toothed-belt pitch	3 mm
Mounting position	Horizontal
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With toothed belt 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	6 m/s <sup>2</sup>
Max. speed	1.3 m/s
Repetition accuracy	±0.1 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	5,3 A
Nominal voltage DC	24 V
Nominal current	5.3 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
Vibration resistance	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
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	441000 mm <sup>4</sup>
2nd moment of area Iz	542000 mm <sup>4</sup>
Max. force Fy	600 N
Max. force Fz	1800 N
Max. moment Mx	29.1 Nm
Max. moment My	31.8 Nm
Max. moment Mz	31.8 Nm
Max. feed force Fx	65 N
Reference value effective load, horizontal	4 kg
Torsional mass moment of inertia It	29800 mm <sup>4</sup>
Feed constant	78 mm/U
Moving mass	482 g
Moving mass for 0 mm stroke	482 g
Weight of slide	139 g
Product weight	5105 g
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, Protocol version	Device V 1.1
IO-Link, communication mode	COM3 (230.4 kBaud)
IO-Link, Port class	A
IO-Link, Number of ports	1
IO-Link, Process data content OUT	1-bit (move in) 1-bit (move out) 1-bit (quit error)
IO-Link, Process data content IN	1-bit (state device) 1-bit (state move) 1-bit (state in) 1-bit (state out)
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)
IO-Link, connection technology	Plugs
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded according to EN 61076-2-101

<b>Feature</b>	<b>Value</b>
Logic interface, number of pins/wires	8
Material end cap	Painted die cast aluminium
Material profile	Anodised wrought aluminium alloy
Note on materials	RoHS-compliant
Material cover tape	Stainless steel strip
Material drive cover	Painted die cast aluminium
Material guide slide	Tempered steel
Material guide rail	Tempered steel
Material pulleys	High-alloy stainless steel
Material toothed belt	Polychloroprene with glass fibre