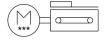
Toothed belt axis unit ELGS-TB-KF-60-600-ST-M-H1-PLK-AA

FESTO

Part number: 8083573





Data sheet

Working stroke 600 mm Size 600 mm Stroke reserve 0 mm Toothed belt elongation 0.124 % Toothed belt pitch 3 mm Mounting position Horizontal Guide Recirculating ball bearing guide Structural design Electromechanical linear axis with toothed belt With integrated drive Position sensing Motor encoder for proximity sensor Rotor position sensor Absolute encoder, single-turn Rotor position sensor measuring principle Magnetic Temperature monitoring Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output Additional functions User interface Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy 40.1 mm Characteristics of digital logic outputs Configurable Not galvanically isolated Duty cycle 100% Max. current of digital logic outputs 5.3 A Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Feature	Value
Size 60 Stroke reserve 0 0 mm Toothed belt elongation 0.124 % Toothed belt elongation 0.124 % Toothed belt pitch 3 mm Mounting position Horizontal Guide Recirculating ball bearing guide Structural design Electromechanical linear axis with toothed belt with integrated drive Position sensing Motor encoder For proximity sensor Rotor position sensor Absolute encoder, single-turn Rotor position sensor measuring principle Magnetic Temperature monitoring Shutdown in the event of over temperature Integrated procise CMOS temperature sensor with analogue output Additional functions User interface Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy = 0.1 mm Characteristics of digital logic outputs Configurable Not galvanically isolated Duty cycle 100% Max. current of digital logic outputs 100 mA Max. current of digital logic outputs 5.3 A Logic max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Drive pinion effective diameter	24.83 mm
Stroke reserve 0 mm Toothed belt elongation 0.124 % Toothed belt pitch 3 mm Mounting position Horizontal Guide Recirculating ball bearing guide Structural design Electromechanical linear axis with toothed belt with integrated drive Position sensing Motor encoder For proximity sensor Rotor position sensor Absolute encoder, single-turn Rotor position sensor measuring principle Magnetic Temperature monitoring Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output Additional functions User interface Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy ±0.1 mm Characteristics of digital logic outputs Configurable Not galvanically isolated Duty cycle 100% Max. current of digital logic outputs 15.3 A Logic max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Working stroke	600 mm
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Tothed belt pitch Mounting position Horizontal Recirculating ball bearing guide Electromechanical linear axis with toothed belt With integrated drive Position sensing Motor encoder For proximity sensor Rotor position sensor measuring principle Magnetic Temperature monitoring Motor encoder single-turn Magnetic Temperature monitoring Shutdown in the event of over temperature Integrated end-position sensing Display LED Max. acceleration Max. speed 1.3 m/s Repetition accuracy 1.1 mm Characteristics of digital logic outputs Max. current of digital logic outputs Max. current of digital logic outputs Max. current consumption Display Adams. current consumption Display LED Max. speed 1.3 m/s Repetition accuracy 1.0 mm Configurable Not galvanically isolated Duty cycle Insulation protection class B Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage	Stroke reserve	0 mm
Mounting position Guide Recirculating ball bearing guide Structural design Electromechanical linear axis with toothed belt With integrated drive Position sensing Motor encoder For proximity sensor Rotor position sensor measuring principle Magnetic Temperature monitoring Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy 2.0.1 mm Characteristics of digital logic outputs Characteristics of digital logic outputs Duty cycle Insulation protection class B Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage Electromechanical linear axis with toallower with toallower with town to me country Electromechanical linear axis with toothed belt with town to with town town town town town town town town	Toothed belt elongation	0.124 %
Recirculating ball bearing guide Structural design Electromechanical linear axis with toothed belt With integrated drive Position sensing Motor encoder For proximity sensor Rotor position sensor Absolute encoder, single-turn Rotor position sensor measuring principle Temperature monitoring Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output Additional functions User interface Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy 40.1 mm Characteristics of digital logic outputs Not galvanically isolated Duty cycle Inow Insulation protection class B Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage Electromechanical linear axis with toothed belt With intothed	Toothed belt pitch	3 mm
Structural design Electromechanical linear axis with toothed belt With integrated drive Position sensing Motor encoder For proximity sensor Rotor position sensor Absolute encoder, single-turn Rotor position sensor measuring principle Magnetic Temperature monitoring Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output Additional functions User interface Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy 20.1 mm Characteristics of digital logic outputs Not galvanically isolated Duty cycle Inow% Insulation protection class B Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage	Mounting position	Horizontal
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Temperature monitoring Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output User interface Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy Characteristics of digital logic outputs Duty cycle Duty cycle Insulation protection class B Max. current of digital logic outputs Duty accurrent consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage Service Integrated precise CMOS temperature sensor with analogue output User integrated precise CMOS temperature sensor with analogue output LED User interface Integrated end-position sensing 1.3 m/s 1.3 m/s	Rotor position sensor	Absolute encoder, single-turn
Integrated precise CMOS temperature sensor with analogue output User interface Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy 40.1 mm Characteristics of digital logic outputs Configurable Not galvanically isolated Duty cycle 100% Insulation protection class B Max. current of digital logic outputs Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage Issuer integrated precise CMOS temperature sensor with analogue output User interface Integrated end-position sensing User interface Integrated end-position sensing User interface Integrated end-position sensing Issue integrated end-position sensing Integrated precise CMOS temperature sensor with analogue output analogue output sensing Issue integrated end-position sensing Issue integrated end-posi	Rotor position sensor measuring principle	Magnetic
Integrated end-position sensing Display LED Max. acceleration 6 m/s² Max. speed 1.3 m/s Repetition accuracy ±0.1 mm Characteristics of digital logic outputs Characteristics of digital logic outputs Duty cycle 100% Insulation protection class B Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 1 LED LED LED Amys End Amys 1.3 m/s 40.1 mm Configurable Not galvanically isolated 100% 100 mA 5.3 A 24 V	Temperature monitoring	
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Repetition accuracy ±0.1 mm Characteristics of digital logic outputs Configurable Not galvanically isolated Duty cycle 100% Insulation protection class B Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Max. acceleration	6 m/s²
Characteristics of digital logic outputs Configurable Not galvanically isolated 100% Insulation protection class B Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Max. speed	1.3 m/s
Not galvanically isolated Duty cycle 100% Insulation protection class B Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Repetition accuracy	±0.1 mm
Insulation protection class Max. current of digital logic outputs 100 mA Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Characteristics of digital logic outputs	
Max. current of digital logic outputs Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Duty cycle	100%
Max. current consumption 5.3 A Logic max. current consumption 0.3 A DC nominal voltage 24 V	Insulation protection class	В
Logic max. current consumption 0.3 A DC nominal voltage 24 V	Max. current of digital logic outputs	100 mA
DC nominal voltage 24 V	Max. current consumption	5.3 A
-	Logic max. current consumption	0.3 A
Nominal current 5.3 A	DC nominal voltage	24 V
	Nominal current	5.3 A

Feature	Value
Parameterization interface	IO-Link® User interface
Permissible voltage fluctuations	+/- 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	4
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive
ee marking (see declaration of comonity)	As per 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 ℃50 ℃
Note on ambient temperature	Above an ambient temperature of 30°C, the power must be reduced by 2% per K.
2nd moment of area ly	441000 mm ⁴
2nd moment of area Iz	542000 mm ⁴
Max. force Fy	3641 N
Max. force Fz	3641 N
Fy with theoretical service life of 100 km (from a guide perspective only)	13400 N
Fz with theoretical service life of 100 km (from a guide perspective only)	13400 N
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	65 N
Guide value for payload, horizontal	4 kg
Feed constant	78 mm/U
Moving mass	482 g
Moving mass at 0 mm stroke	482 g
Slide weight	139 g
Product weight	5535 g
Dynamic deflection (load moved)	0.05% of axis length, maximum 0.5 mm
Static deflection (load at standstill)	0.1 % of axis length
Number of digital logic outputs 24 V DC	2
Number of digital logic inputs	2
Work range of logic input	24 V
Characteristics 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 contents IN	32 bit force 32 bit position 32 bit speed
IO-Link®, data memory required	0.5 KB
Input switching logic	PNP (positive switching)
Logic interface, connection type	Plug

Feature	Value
Logic interface, connection technology	M12x1, A-coded as per EN 61076-2-101
Logic interface, number of poles/wires	8
Type of mounting	With internal thread With centering sleeve and pin With accessories
Material of end caps	Die cast aluminum, painted
Profile material	Wrought aluminum alloy, anodized
Note on materials	RoHS-compliant
Cover strip material	Stainless steel strip
Slide carriage material	Tempered steel
Guide rail material	Tempered steel
Toothed belt material	Polychloroprene with glass fiber