Toothed belt axis unit
ELGE-TB-35-500-0H-ST-M-H1-PLK-AA-AT-FR
Part number: 8083935

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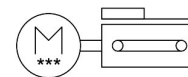
Data sheet

Feature	Value
Drive pinion effective diameter	18.46 mm
Working stroke	500 mm
Size	35
Toothed belt elongation	0.094 %
Toothed belt pitch	2 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	8.5 m/s²
Max. speed	1.2 m/s
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
Nominal current	5.3 A
Parameterization interface	IO-Link® User interface

Feature	Value
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 As per EU RoHS directive
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
LABS (PWIS) conformity	VDMA24364 zone III
Storage temperature	-20 ºC...60 ºC
Relative air humidity	0 - 90 %
Degree of protection	IP20
Ambient temperature	0 ºC...50 ºC
Note on ambient temperature	Above an ambient temperature of 30ºC, the power must be reduced by 2% per K.
2nd moment of area Iy	3770 mm^4
2nd moment of area Iz	4190 mm^4
Max. force Fy	50 N
Max. force Fz	50 N
Max. torque Mx	2.5 Nm
Max. torque My	8 Nm
Max. torque Mz	8 Nm
Max. feed force Fx	50 N
Guide value for payload, horizontal	2.8 kg
Feed constant	58 mm/U
Reference service life	5000 km
Additional moving mass per 10 mm stroke	0.31 g
Product weight	3740 g
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®, protocol version	Device V 1.1
IO-Link®, communication mode	COM3 (230.4 kBd)
IO-Link®, port class	A
IO-Link®, number of ports	Device 1
IO-Link®, process data width OUT	2 Byte
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®, minimum cycle time	1 ms
IO-Link®, data memory required	0.5 KB
Input switching logic	PNP (positive switching)
IO-Link®, Connection technology	Plug

Feature	Value
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded as per EN 61076-2-101
Logic interface, number of poles/wires	8
Type of mounting	Profile mounting
Profile material	Wrought aluminum alloy, anodized
Note on materials	RoHS-compliant
Drive cover material	Wrought aluminum alloy, anodized
Belt pulley material	High-alloy stainless steel
Toothed belt clamping component material	Beryllium bronze
Toothed belt material	Polychloroprene with glass cord and nylon coating