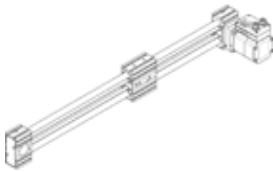


# toothed belt axis unit

## ELGE-TB-35-300-0H-ST-M-H1-PLK-AA-AT-FR

Part number: 8083933

FESTO



### Data sheet

Feature	Value
Effective diameter of drive pinion	18.46 mm
Working stroke	300 mm
Size	35
Toothed-belt stretch	0.094 %
Toothed-belt pitch	2 mm
Assembly position	Horizontal
Guide	Recirculating ball bearing guide
Design structure	Electromechanical linear axis With toothed belt with integrated drive
Motor type	Stepper motor
Position detection	Motor encoder 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	8.5 m/s <sup>2</sup>
Max. speed	1.2 m/s
Repetition accuracy	±0,1 mm
Digital logic output characteristics	configurable Not electrically isolated
Duty cycle	100 %
Insulation protection class	B
Max. current, digital logic outputs	100 mA
Max. current consumption	5.3 A
Max. current consumption, logic	0.3 A
Nominal voltage DC	24 V
Nominal current	5.3 A
Parameters configuring interface	IO-Link 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	4
Authorization	RCM Mark
KC mark	KC-EMV
CE symbol (see declaration of conformity)	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 at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 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	IP20
Safety class	III
Ambient temperature	0 ... 50 °C
Note on ambient temperature	Above an ambient temperature of 30 °C, the power must be reduced by 2% per K.
Area moment of inertia 2nd degree Iy	3.77E+03 mm <sup>4</sup>
Area moment of inertia 2nd degree Iz	4.19E+03 mm <sup>4</sup>
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
Reference value for working load, horizontal	2.8 kg
Feed constant	58 mm/U
Reference value, running performance	5,000 km
Maintenance interval	Life-time lubrication
Additional mass factor per 10 mm of stroke	0.31 g
Product weight	3,240 g
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	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 width IN	2 Byte
IO-Link, process data content IN	State In 1 bit State Out 1 bit State Move 1 bit State Device 1 bit State Intermediate 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 Kilobyte
Max. line length	15 m outputs 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

Feature	Value
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
Mounting type	Profile mounting
Material of profile	Anodised wrought aluminium alloy
Materials note	Conforms to RoHS
Material drive cover	Anodised wrought aluminium alloy
Material pulleys	High alloy steel, non-corrosive
Material slide	Anodised wrought aluminium alloy
Material toothed belt clamping piece	Beryllium bronze
Material toothed belt	polychloroprene with glass cord and nylon coating