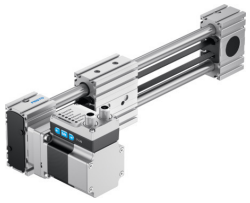
Toothed belt axis unit
ELGE-TB-35-

Part number: 8083929



Data sheet

Feature	Value
Effective diameter of drive pinion	18.46 mm
Working stroke	50 mm...800 mm
Size	35
Toothed-belt stretch	0.094 %
Toothed-belt pitch	2 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	8.5 m/s²
Max. speed	0.48 m/s...1.2 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
Max. current consumption, logic	0.3 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 2 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 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	IP20
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	3770 mm⁴
2nd moment of area Iz	4190 mm⁴
Max. force Fy	50 N
Max. force Fz	50 N
Max. moment Mx	2.5 Nm
Max. moment My	8 Nm
Max. moment Mz	8 Nm
Max. feed force Fx	50 N
Reference value effective load, 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	2615 g...4490 g
Basic weight for 0 mm stroke	2490 g
Additional weight per 10 mm stroke	25 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, 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 IN	32-bit force 32-bit position 32-bit speed
IO-Link, Data storage required	0.5 KB
Switching logic for inputs	NPN (negative switching) PNP (positive switching)
IO-Link, connection technology	Plugs
Logic interface, connection type	Plug

Feature	Value
Logic interface, connection technology	M12x1, A-coded according to EN 61076-2-101
Logic interface, number of pins/wires	8
Type of mounting	Profile mounting
Material profile	Anodised wrought aluminium alloy
Note on materials	RoHS-compliant
Material drive cover	Anodised wrought aluminium alloy
Material pulleys	High-alloy stainless steel
Material toothed belt clamping piece	Beryllium bronze
Material toothed belt	Polychloroprene with glass filament and nylon coating