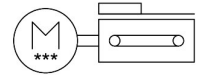
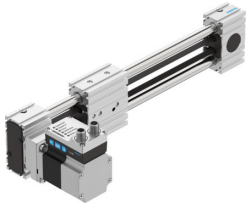


# Toothed belt axis unit ELGE-TB-35-300-0H-ST-M-H1-PLK-AA-AT-FR

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  |
| Mounting position                                  | Horizontal  |
| Guide  | Recirculating ball bearing guide  |
| Design   | Electromechanical linear axis<br>With toothed belt<br>With integrated drive                             |
| Position detection                                 | Motor encoder<br>Via proximity switch   |
| Rotor position sensor                              | Absolute single-turn encoder  |
| Rotor position sensor, encoder measuring principle | Magnetic  |
| Temperature monitoring                             | Switch-off for excessive temperature<br>Integrated precise CMOS temperature sensor with analogue output |
| Additional functions                               | User interface<br>Integrated end-position sensing   |
| Display  | LED   |
| Max. acceleration                                  | 8.5 m/s <sup>2</sup>  |
| Max. speed   | 1.2 m/s   |
| Repetition accuracy                                | ±0.1 mm   |
| Features of digital logic outputs                  | Configurable<br>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<br>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<br>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 mm <sup>4</sup>  |
| 2nd moment of area Iz                      | 4190 mm <sup>4</sup>  |
| 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                             | 3240 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<br>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                   | Device 1  |
| IO-Link, Process data length OUT           | 2 bytes   |
| IO-Link, Process data content OUT          | Move in 1 bit<br>Move out 1 bit<br>Quit Error 1 bit<br>Move intermediate 1 bit                          |
| IO-Link, Process data content IN           | State Device 1 bit<br>State In 1 bit<br>State Intermediate 1 bit<br>State Move 1 bit<br>State Out 1 bit |
| IO-Link, Service data IN                   | 32-bit force<br>32-bit position<br>32-bit speed   |
| IO-Link, Min. cycle time                   | 1 ms  |
| IO-Link, Data storage required             | 0.5 KB  |
| Switching logic for inputs                 | PNP (positive switching)  |
| IO-Link, connection technology             | Plugs   |

| Feature                                | Value   |
|--|---|
| Logic interface, connection type       | Plug  |
| 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 |