

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

FESTO

Part number: 8083573



Data sheet

| Feature | Value |
|--|---|
| Effective diameter of drive pinion | 24.83 mm |
| Working stroke | 600 mm |
| Size | 60 |
| Stroke reserve | 0 mm |
| Toothed-belt stretch | 0.124 % |
| Toothed-belt pitch | 3 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 | 6 m/s ² |
| Max. speed | 1.3 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 |
| 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 1 to FN 942017-4 and EN 60068-2-6 |
| Shock resistance | Shock test with severity level 1 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 | IP40 |
| 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 ly | 441000 mm ⁴ |
| 2nd moment of area lz | 542000 mm ⁴ |
| Max. force Fy | 600 N |
| Max. force Fz | 1800 N |
| Max. moment Mx | 29.1 Nm |
| Max. moment My | 31.8 Nm |
| Max. moment Mz | 31.8 Nm |
| Max. feed force Fx | 65 N |
| Reference value effective load, horizontal | 4 kg |
| Torsional mass moment of inertia It | 29800 mm ⁴ |
| Feed constant | 78 mm/U |
| Moving mass | 482 g |
| Moving mass for 0 mm stroke | 482 g |
| Weight of slide | 139 g |
| Product weight | 5535 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, Number of ports | 1 |
| IO-Link, Process data content OUT | 1-bit (move in) 1-bit (move out) 1-bit (quit error) |
| IO-Link, Process data content IN | 1-bit (state device) 1-bit (state move) 1-bit (state in) 1-bit (state out) |
| 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 | PNP (positive switching) |
| IO-Link, connection technology | Plugs |
| Logic interface, connection type | Plug |
| Logic interface, connection technology | M12x1, A-coded according to EN 61076-2-101 |

| Feature | Value |
|---------------------------------------|----------------------------------|
| Logic interface, number of pins/wires | 8 |
| Material end cap | Painted die cast aluminium |
| Material profile | Anodised wrought aluminium alloy |
| Note on materials | RoHS-compliant |
| Material cover tape | Stainless steel strip |
| Material drive cover | Painted die cast aluminium |
| Material guide slide | Tempered steel |
| Material guide rail | Tempered steel |
| Material pulleys | High-alloy stainless steel |
| Material toothed belt | Polychloroprene with glass fibre |