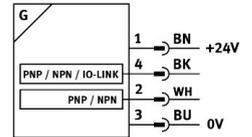


# Position transmitter

## SDAS-MHS-M40-1L-PNLK-PN-E-2.5-LE

Part number: 8063975

FESTO



## Data sheet

| Feature                                      | Value   |
|--|---|
| Design                                       | For T-slot  |
| Approval                                     | RCM trademark<br>c UL us listed (OL)  |
| CE mark (see declaration of conformity)      | To EU EMC Directive<br>In accordance with EU RoHS Directive   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions   |
| Certificate issuing authority                | UL E232949  |
| Note on materials                            | RoHS-compliant<br>Free of halogen   |
| Instructions on use                          | <a href="https://www.festo.com/Drive-Sensor-Overview">https://www.festo.com/Drive-Sensor-Overview</a> |
| Measured variable                            | Position  |
| Measuring principle                          | Magnetic Hall   |
| Sensing range                                | 52 mm   |
| Ambient temperature                          | -40 °C...80 °C  |
| Typical sampling interval                    | 2 ms  |
| Max. travel speed                            | 3 m/s   |
| Displacement resolution                      | 0.02 mm   |
| Repetition accuracy                          | 0.2 mm  |
| Switching output                             | 2x PNP or 2x NPN adjustable   |
| Switching element function                   | N/C or N/O contact, switchable  |
| Switch-on time                               | 4 ms  |
| Switch-off time                              | 4 ms  |
| Max. switching frequency                     | 125 Hz  |
| Max. switching output voltage DC             | 30 V  |
| Max. output current                          | 50 mA   |
| Max. switching capacity DC                   | 1.5 W   |
| Voltage drop                                 | 0.5 V   |
| Typical linearity error                      | ± 1 mm  |
| Short circuit current rating                 | yes   |
| Overload protection                          | Available   |
| Protocol                                     | I-Port<br>IO-Link®  |

| Feature  | Value  |
|--|--|
| IO-Link, Protocol version                            | Device V 1.1   |
| IO-Link, Profile                                     | Smart sensor profile   |
| IO-Link, Function classes                            | Process data variable (PDV)<br>Identification<br>Diagnostics<br>Teach channel<br>Switching signal channel (SSC)  |
| IO-Link, communication mode                          | COM2 (38.4 kBaud)  |
| IO-Link, SIO-Mode support                            | Yes  |
| IO-Link, Port class                                  | A  |
| IO-Link, Process data length IN                      | 2 bytes  |
| IO-Link, Process data content IN                     | 12 bit PDV (measured position value)<br>4 bit SSC (Switching Signal)   |
| IO-Link, Min. cycle time                             | 2.5 ms   |
| Operational voltage range DC                         | 10 V...30 V  |
| Residual ripple                                      | 10 %   |
| No-load supply current                               | 12 mA  |
| Reverse polarity protection                          | For all electrical connections   |
| Electrical connection 1, connection type             | Cable  |
| Electrical connection 1, connector system            | Open end   |
| Electrical connection 1, number of connections/cores | 4  |
| Connection outlet orientation                        | In-line  |
| Test conditions cable                                | Bending strength: to Festo standard<br>Torsional strength: > 300,000 cycles, $\pm 270^\circ/0.1$ m<br>Energy chain: > 5 million cycles, bending radius 28 mm   |
| Cable length   | 2.5 m  |
| Cable characteristic                                 | Suitable for energy chains/robot applications  |
| Cable sheath colour                                  | Grey   |
| Material cable sheath                                | TPE-U(PUR)   |
| Type of mounting                                     | Screw-clamped<br>Insertable in the slot from above   |
| Mounting position                                    | optional   |
| Product weight                                       | 27 g   |
| Material housing                                     | PA-reinforced<br>High-alloy stainless steel  |
| Switching status indication                          | Yellow LED   |
| Status indication                                    | Red LED  |
| Setting options                                      | IO-Link®<br>Capacitive pushbutton  |
| Ambient temperature with moving cable                | -20 °C...70 °C   |
| Degree of protection                                 | IP65<br>IP68   |
| LABS (PWIS) conformity                               | VDMA24364-B2-L   |
| Suitability for the production of Li-ion batteries   | Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class                                      | Class 4 according to ISO 14644-1   |