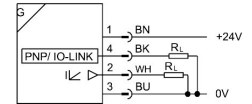


# Position transmitter SDAP-MHS-M50-1L-A-E-0.3-M8

Part number: 8050120

**FESTO**



[PDF General operating condition](#)

## Data sheet

| Feature                                               | Value                                                                                                                                                  |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                                                | for T-slot                                                                                                                                             |
| Symbol                                                | 00995389                                                                                                                                               |
| Certification                                         | RCM compliance mark<br>c UL us - Listed (OL)                                                                                                           |
| CE marking (see declaration of conformity)            | As per EU EMC directive<br>As per EU RoHS directive                                                                                                    |
| UKCA marking (see declaration of conformity)          | To UK instructions for EMC<br>To UK RoHS instructions                                                                                                  |
| Note on materials                                     | RoHS-compliant<br>Halogen-free                                                                                                                         |
| Measured variable                                     | Position                                                                                                                                               |
| Measuring principle                                   | Magnetic Hall                                                                                                                                          |
| Sensing range                                         | 0 µm ... 50000 µm                                                                                                                                      |
| Ambient temperature                                   | -25 °C ... 70 °C                                                                                                                                       |
| Typical sampling interval                             | 1 ms                                                                                                                                                   |
| Max. travel speed                                     | 3 m/s                                                                                                                                                  |
| Displacement resolution                               | 0.05 mm                                                                                                                                                |
| Analog output                                         | 4 - 20 mA                                                                                                                                              |
| Sensitivity                                           | 0.32 mA/mm                                                                                                                                             |
| Typical linearity error                               | ±0.25 mm                                                                                                                                               |
| Max. load resistance of current output                | 500 Ohm                                                                                                                                                |
| Short-circuit protection                              | yes                                                                                                                                                    |
| Overload protection                                   | Available                                                                                                                                              |
| DC operating voltage range                            | 15 V ... 30 V                                                                                                                                          |
| Residual ripple                                       | 10 %                                                                                                                                                   |
| Reverse polarity protection                           | for all electrical connections                                                                                                                         |
| Electrical connection 1, connection type              | Cable with plug                                                                                                                                        |
| Electrical connection 1, connection technology        | M8x1 A-coded as per EN 61076-2-104                                                                                                                     |
| Electrical connection 1, number of pins/wires         | 4                                                                                                                                                      |
| Electrical connection 1, type of mounting             | Screw-type lock                                                                                                                                        |
| Electrical connection for input 1, connection pattern | 00991171                                                                                                                                               |
| Connection outlet orientation                         | Longitudinal                                                                                                                                           |
| Material of pin contacts                              | Copper alloy, gold-plated                                                                                                                              |
| Connector cable test conditions                       | Flexural strength: as per Festo standard<br>Torsion resistance: > 300,000 cycles, ±270°/0.1 m<br>Energy chain > 5 million cycles, bending radius 28 mm |
| Cable length                                          | 0.3 m                                                                                                                                                  |

| Feature                                              | Value                                                              |
|------------------------------------------------------|--------------------------------------------------------------------|
| Cable characteristic                                 | Suitable for energy chains/robot applications                      |
| Color cable sheath                                   | Gray                                                               |
| Material of cable sheath                             | TPE-U(PUR)                                                         |
| Type of mounting                                     | Can be inserted in slot from above                                 |
| Mounting position                                    | Any                                                                |
| Product weight                                       | 19 g                                                               |
| Housing material                                     | Polyester<br>High-alloy stainless steel                            |
| Material of union nut                                | Brass, nickel-plated                                               |
| Film material                                        | Polyester                                                          |
| Ready status indication                              | LED green                                                          |
| Status indicator                                     | LED red                                                            |
| Ambient temperature with flexible cable installation | -20 °C ... 70 °C                                                   |
| Degree of protection                                 | IP65<br>IP68                                                       |
| LABS (PWIS) conformity                               | VDMA24364-B2-L                                                     |
| Suitability for the production of Li-ion batteries   | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom class                                      | Class 4 according to ISO 14644-1                                   |