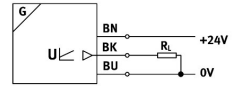


# Position transmitter SDAC-MHS-M20-1L-V-E-2.5-LE

Part number: 8128403

**FESTO**



## Data sheet

| Feature                                        | Value                                                                  |
|------------------------------------------------|------------------------------------------------------------------------|
| Design                                         | For round slot                                                         |
| Certification                                  | RCM compliance mark                                                    |
| 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                                         |
| Application note                               | Support / actuator-sensor overview "The right sensor for the actuator" |
| Measured variable                              | Position                                                               |
| Measuring principle                            | Magnetic Hall                                                          |
| Sensing range                                  | 25 mm                                                                  |
| Ambient temperature                            | -40 °C...80 °C                                                         |
| Typical sampling interval                      | 2 ms                                                                   |
| Max. travel speed                              | 4 m/s                                                                  |
| Displacement resolution                        | 0.047 mm                                                               |
| Repetition accuracy                            | 0.2 mm                                                                 |
| Analog output                                  | 0 - 10 V                                                               |
| Sensitivity                                    | 0.45 V/mm                                                              |
| Typical linearity error                        | ±2 mm                                                                  |
| Min. load resistance of voltage output         | 10 kOhm                                                                |
| Short-circuit protection                       | Yes                                                                    |
| Overload protection                            | Available                                                              |
| Output signal                                  | Analog                                                                 |
| DC operating voltage range                     | 15 V...30 V                                                            |
| Residual ripple                                | 10%                                                                    |
| Idle current                                   | 12 mA                                                                  |
| Reverse polarity protection                    | Yes                                                                    |
| Electrical connection 1, connection type       | Cable                                                                  |
| Electrical connection 1, connection technology | Open end                                                               |
| Electrical connection 1, number of pins/wires  | 3                                                                      |
| Connection outlet orientation                  | Longitudinal                                                           |

| Feature                                                   | Value                                                                                                                                                             |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connector cable test conditions                           | Flexural strength: as per Festo standard<br>Torsion resistance: > 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                                                                                                                     |
| Color cable sheath                                        | Gray                                                                                                                                                              |
| Material of cable sheath                                  | TPE-U(PUR)                                                                                                                                                        |
| Type of mounting                                          | Screwed on<br>Can be inserted in slot lengthwise                                                                                                                  |
| Mounting position                                         | Any                                                                                                                                                               |
| Product weight                                            | 21 g                                                                                                                                                              |
| Housing material                                          | PA-reinforced<br>high-alloy stainless steel                                                                                                                       |
| Status indicator                                          | LED red, green                                                                                                                                                    |
| 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 suitability, measured according to ISO 14644-14 | Class 4 according to ISO 14644-1                                                                                                                                  |