

# Proximity sensor SMT-8M-A-PS-24V-E-0,3-M8D-EX2

Part number: 574342

FESTO



## Data sheet

| Feature   | Value  |
|---|--|
| Type code   | SMT  |
| Electrical connection 1, type of mounting             | Screw-type lock  |
| Electrical connection for input 1, connection pattern | 00991155   |
| Electrical connection 1, connection technology        | M8x1 A-coded as per EN 61076-2-104   |
| Electrical connection 1, connection type              | Cable with plug  |
| KC characters   | KC EMC   |
| Repetition accuracy                                   | 0.2 mm   |
| Electrical connection 1, number of pins/wires         | 3  |
| Design  | for T-slot   |
| Based on norm   | EN 60947-5-2   |
| Symbol  | 00991153   |
| Certification   | c UL us - Listed (OL)<br>RCM compliance mark   |
| CE marking (see declaration of conformity)            | As per EU EMC directive<br>As per EU RoHS directive<br>as per EU explosion protection directive (ATEX) |
| Explosion prevention and protection                   | Zone 2 (ATEX)<br>Zone 22 (ATEX)  |
| ATEX category gas                                     | II 3G  |
| Type of ignition protection for gas                   | Ex nA IIC T4 X Gc  |
| ATEX category for dust                                | II 3D  |
| Type of (ignition) protection for dust                | Ex tc IIIC T120°C X Dc   |
| Explosive ambient temperature                         | -40°C ≤ Ta ≤ +70°C   |
| Special features                                      | Oil-resistant  |
| Note on materials                                     | Free of copper and PTFE<br>Halogen-free<br>RoHS-compliant  |
| Measured variable                                     | Position   |
| Measuring principle                                   | Magneto-resistive  |
| Ambient temperature                                   | -40 °C ... 85 °C   |
| Switching output                                      | PNP  |
| Switching element function                            | N/O contact  |
| On time   | ≤ 1.3 ms   |
| Switch-off time                                       | ≤ 1.4 ms   |
| Max. switching frequency                              | 180 Hz   |
| Max. output current                                   | 100 mA   |
| Max. output current in mounting kits                  | 80 mA  |

| Feature  | Value  |
|--|--|
| Max. switching capacity DC                           | 2.8 W  |
| Max. switching capacity DC in mounting kits          | 2.2 W  |
| Voltage drop   | <1.5 V   |
| Short-circuit protection                             | yes  |
| Overload protection                                  | Available  |
| Rated operating voltage DC                           | 24 V   |
| DC operating voltage range                           | 5 V ... 30 V   |
| Reverse polarity protection                          | for all electrical connections   |
| Connection outlet orientation                        | Longitudinal   |
| Connector cable test conditions                      | Test conditions on request<br>Flexural strength: as per Festo standard<br>Cable chain: 5 million cycles, bending radius 28 mm<br>Torsional resistance: > 300 000 cycles, ±270°/0.1 m |
| Cable length   | 0.3 m  |
| Cable characteristic                                 | Suitability for energy chains/robot applications   |
| Color cable sheath                                   | Gray   |
| Material of cable sheath                             | TPE-U(PUR)   |
| Type of mounting                                     | Screwed tightly<br>Can be inserted in slot from above  |
| Max. tightening torque                               | 0.6 Nm   |
| Mounting position                                    | Any  |
| Product weight                                       | 8.9 g  |
| Housing colour                                       | Black  |
| Housing material                                     | High-alloy stainless steel<br>Brass, nickel-plated<br>PA-reinforced  |
| Switching status indication                          | LED yellow   |
| Function reserve indication                          | LED orange   |
| Ambient temperature with flexible cable installation | -20 °C ... 85 °C   |
| Degree of protection                                 | IP69K<br>IP68<br>IP65  |