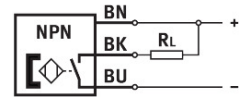


# Proximity sensor SDBT-BSW-1L-NU-W-5-N-LE

Part number: 2427618

**FESTO**



 [General operating condition](#)

## Data sheet

| Feature                                        | Value                                                                                                 |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Design                                         | For T-slot                                                                                            |
| Based on standard                              | EN 60947-5-2                                                                                          |
| Symbol                                         | 00991149                                                                                              |
| 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                                                 |
| Special characteristics                        | UV resistant<br>Oil resistant<br>Welding field resistant<br>Resistant to welding spatter              |
| Note on materials                              | RoHS-compliant                                                                                        |
| 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                            | Magneto-resistive                                                                                     |
| Ambient temperature                            | -25 °C ... 85 °C                                                                                      |
| Max. travel speed                              | 1 m/s                                                                                                 |
| Repetition accuracy                            | 0.2 mm                                                                                                |
| Switching output                               | NPN                                                                                                   |
| Switching behavior during welding process      | Output signal freezes                                                                                 |
| Switching element function                     | N/O contact                                                                                           |
| Switch-on time                                 | ≤15 ms                                                                                                |
| Switch-off time                                | ≤25 ms                                                                                                |
| Max. switching frequency                       | 25 Hz                                                                                                 |
| Max. output current                            | 100 mA                                                                                                |
| Max. output current using mounting kits        | 100 mA                                                                                                |
| Max. switching capacity DC                     | 2.8 W                                                                                                 |
| Max. switching capacity DC using mounting kits | 2.8 W                                                                                                 |
| Voltage drop                                   | <1.5 V                                                                                                |
| Inductive protective circuit                   | Adapted to MZ, MY, ME coils                                                                           |
| Min. load current                              | 0 mA                                                                                                  |
| Off-state current                              | <0.14 mA                                                                                              |
| Short circuit current rating                   | yes                                                                                                   |
| Overload protection                            | Available                                                                                             |
| Rated operational voltage DC                   | 24 V                                                                                                  |

| Feature                                              | Value                                                                                                                                                                      |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational voltage range DC                         | 10 V ... 30 V                                                                                                                                                              |
| Residual ripple                                      | 10 %                                                                                                                                                                       |
| 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 | 3                                                                                                                                                                          |
| Connection outlet orientation                        | In-line                                                                                                                                                                    |
| Test conditions cable                                | Bending strength: to Festo standard<br>Test conditions on request                                                                                                          |
| Cable length                                         | 5 m                                                                                                                                                                        |
| Cable characteristic                                 | Resistant to welding spatter                                                                                                                                               |
| Cable sheath colour                                  | Grey                                                                                                                                                                       |
| Material cable sheath                                | PVC, irradiated                                                                                                                                                            |
| Material insulating sheath                           | PVC                                                                                                                                                                        |
| Wire ends                                            | Wire ferrule                                                                                                                                                               |
| Type of mounting                                     | Screw-clamped<br>Insertable in the slot from above                                                                                                                         |
| Max. tightening torque                               | 0.6 Nm                                                                                                                                                                     |
| Mounting position                                    | optional                                                                                                                                                                   |
| Product weight                                       | 119.4 g                                                                                                                                                                    |
| Housing colour                                       | Black                                                                                                                                                                      |
| Material housing                                     | High-alloy stainless steel                                                                                                                                                 |
| Switching status indication                          | Yellow LED                                                                                                                                                                 |
| Function reserve indication                          | Orange LED                                                                                                                                                                 |
| Ambient temperature with moving cable                | -5 °C ... 80 °C                                                                                                                                                            |
| Degree of protection                                 | IP65<br>IP68                                                                                                                                                               |
| Immunity to magnetic fields                          | Insensitive to AC magnetic fields (50...60 Hz) < 200 mT<br>Insensitive to MFDC magnetic fields (1000 Hz) < 200 mT<br>Design insensitive to permanent magnetic fields < Bon |
| LABS (PWIS) conformity                               | VDMA24364-B2-L                                                                                                                                                             |