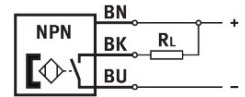


# Proximity sensor SDBT-BSW-1L-NU-W-5-N-LE

Part number: 2427618

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                              | Value                                                                                                 |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Design                                               | for T-slot                                                                                            |
| Based on norm                                        | EN 60947-5-2                                                                                          |
| Symbol                                               | 00991149                                                                                              |
| 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                                                 |
| Special features                                     | UV-resistant<br>Oil-resistant<br>Welding field resistant<br>Resistant to welding spatter              |
| Note on materials                                    | RoHS-compliant                                                                                        |
| Application note                                     | <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 characteristics during the welding process | Output signal freezes                                                                                 |
| Switching element function                           | N/O contact                                                                                           |
| On time                                              | ≤15 ms                                                                                                |
| Switch-off time                                      | ≤25 ms                                                                                                |
| Max. switching frequency                             | 25 Hz                                                                                                 |
| Max. output current                                  | 100 mA                                                                                                |
| Max. output current in mounting kits                 | 100 mA                                                                                                |
| Max. switching capacity DC                           | 2.8 W                                                                                                 |
| Max. switching capacity DC in mounting kits          | 2.8 W                                                                                                 |
| Voltage drop                                         | <1.5 V                                                                                                |
| Inductive protective circuit                         | Adapted to MZ, MY and ME coils                                                                        |
| Minimum load current                                 | 0 mA                                                                                                  |
| Residual current                                     | <0.14 mA                                                                                              |
| Short-circuit protection                             | yes                                                                                                   |
| Overload protection                                  | Available                                                                                             |
| Rated operating voltage DC                           | 24 V                                                                                                  |

| Feature                                              | Value                                                                                                                                                                      |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC operating voltage range                           | 10 V ... 30 V                                                                                                                                                              |
| Residual ripple                                      | 10 %                                                                                                                                                                       |
| Reverse polarity protection                          | for all electrical connections                                                                                                                                             |
| 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                                                                                                                                                               |
| Connector cable test conditions                      | Flexural strength: as per Festo standard<br>Test conditions on request                                                                                                     |
| Cable length                                         | 5 m                                                                                                                                                                        |
| Cable characteristic                                 | Resistant to welding spatter                                                                                                                                               |
| Color cable sheath                                   | Gray                                                                                                                                                                       |
| Material of cable sheath                             | PVC, cross-linked by irradiation                                                                                                                                           |
| Insulating sheath material                           | PVC                                                                                                                                                                        |
| Wire ends                                            | Cable end sleeve                                                                                                                                                           |
| Type of mounting                                     | Can be inserted in slot from above                                                                                                                                         |
| Max. tightening torque                               | 0.6 Nm                                                                                                                                                                     |
| Mounting position                                    | Any                                                                                                                                                                        |
| Product weight                                       | 119.4 g                                                                                                                                                                    |
| Housing colour                                       | Black                                                                                                                                                                      |
| Housing material                                     | High-alloy stainless steel                                                                                                                                                 |
| Switching status indication                          | LED yellow                                                                                                                                                                 |
| Function reserve indication                          | LED orange                                                                                                                                                                 |
| Ambient temperature with flexible cable installation | -5 °C ... 80 °C                                                                                                                                                            |
| Degree of protection                                 | IP65<br>IP68                                                                                                                                                               |
| Resistance to interference from 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                                                                                                                                                             |