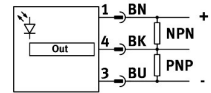


# Retro-reflective sensor S00D-RS-L-PN

Part number: 8075662

FESTO



 General operating condition

## Data sheet

| Feature                                      | Value                                                                                                                                                                                                                                                              |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                                       | Block design                                                                                                                                                                                                                                                       |
| Conforms to standard                         | EN 60947-5-2                                                                                                                                                                                                                                                       |
| Symbol                                       | 00995959                                                                                                                                                                                                                                                           |
| Approval                                     | RCM trademark<br>c UL us - Recognized (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                                                                                                                                                                                                              |
| Certificate issuing authority                | UL E232949                                                                                                                                                                                                                                                         |
| Note on materials                            | RoHS-compliant                                                                                                                                                                                                                                                     |
| Measuring principle                          | Optoelectronic                                                                                                                                                                                                                                                     |
| Detection method                             | Retro-reflective sensor                                                                                                                                                                                                                                            |
| Type of light                                | Laser<br>Red                                                                                                                                                                                                                                                       |
| Max. light spot                              | 35 mm with 2000 mm                                                                                                                                                                                                                                                 |
| Operating distance                           | 0 mm ... 2000 mm                                                                                                                                                                                                                                                   |
| Sensor reflector distance                    | 100 ... 2000 mm SARA-R-Q50-S<br>150 ... 1800 mm SARA-R-Q50-MC<br>250 ... 600 mm SARA-RF-Q100-S<br>150 ... 2000 mm SARA-RF-Q100-MC<br>200 ... 1500 mm SARA-R-Q20-S<br>150 ... 1500 mm SARA-R-Q20-MC<br>150 ... 1500 mm SARA-R-Q14-M<br>250 ... 1200 mm SARA-R-D20-M |
| Ambient temperature                          | -20 °C ... 60 °C                                                                                                                                                                                                                                                   |
| Reference material                           | Reference reflector                                                                                                                                                                                                                                                |
| Switching output                             | Push-pull                                                                                                                                                                                                                                                          |
| Switching element function                   | PNP, dark switching<br>NPN, light switching                                                                                                                                                                                                                        |
| Max. switching frequency                     | 2000 Hz                                                                                                                                                                                                                                                            |
| Max. output current                          | 50 mA                                                                                                                                                                                                                                                              |
| Voltage drop                                 | 0 V ... 1.5 V                                                                                                                                                                                                                                                      |
| Short circuit current rating                 | Pulsed                                                                                                                                                                                                                                                             |
| Operational voltage range DC                 | 10 V ... 30 V                                                                                                                                                                                                                                                      |
| Residual ripple                              | 10 %                                                                                                                                                                                                                                                               |
| No-load supply current                       | 10 mA                                                                                                                                                                                                                                                              |
| Reverse polarity protection                  | For all electrical connections                                                                                                                                                                                                                                     |
| Electrical connection 1, connection type     | Cable with plug                                                                                                                                                                                                                                                    |

| Feature                                              | Value                            |
|------------------------------------------------------|----------------------------------|
| Electrical connection 1, connector system            | M8x1, A-coded, to EN 61076-2-104 |
| Electrical connection 1, number of connections/cores | 3                                |
| Electrical connection 1, type of mounting            | Screw-type lock, size 9 mm A/F   |
| Electrical connection 1, connection pattern          | 00991155                         |
| Material electrical contact                          | Gold-plated brass                |
| Cable length                                         | 0.15 m                           |
| Cable characteristic                                 | Standard                         |
| Material cable sheath                                | TPE-U(PUR)                       |
| Type of mounting                                     | With through-hole                |
| Tightening torque                                    | 0.5 Nm                           |
| Mounting position                                    | optional                         |
| Product weight                                       | 10 g                             |
| Material housing                                     | PC<br>TPE-U(PU)                  |
| Ready status indication                              | Green LED                        |
| Switching status indication                          | Yellow LED                       |
| Function reserve indication                          | Flashing yellow LED              |
| Degree of protection                                 | IP65<br>IP67                     |
| Insulation voltage                                   | 500 V                            |
| Immunity to surge                                    | 1 kV                             |
| Corrosion resistance class CRC                       | 1 - Low corrosion stress         |
| LABS (PWIS) conformity                               | VDMA24364 zone III               |
| Laser safety class                                   | 1                                |
| Pollution degree                                     | 3                                |