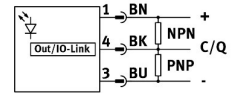


# Diffuse sensor SOOE-DS-R-PNLK-T

Part number: 8075663

FESTO



## Data sheet

| Feature                                    | Value   |
|--|---|
| Design                                     | Block design  |
| Conforms to standard                       | EN 60947-5-2  |
| 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 |
| CE 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                           | Diffuse sensor  |
| Type of light                              | Red<br>LED  |
| Max. light spot                            | 65 mm at a sensing range of 1000 mm                         |
| Operating distance                         | 2 mm...1000 mm  |
| Ambient temperature                        | -40 °C...60 °C  |
| Reference material                         | Standard white 90%, 100x100 mm                              |
| Switching output                           | Push-pull   |
| Switching element function                 | Switchable<br>PNP, light switching<br>NPN, dark switching   |
| Hysteresis                                 | 200 mm  |
| Max. switching frequency                   | 1000 Hz   |
| Max. output current                        | 100 mA  |
| Voltage drop                               | 0 V...1.5 V   |
| Timer function                             | Via IO-Link®  |
| Short circuit current rating               | Pulsed  |
| Protocol                                   | IO-Link®  |
| IO-Link, Protocol version                  | Device V 1.1  |
| IO-Link, communication mode                | COM2 (38.4 kBaud)   |
| IO-Link, SIO-Mode support                  | Yes   |
| IO-Link, Port class                        | A   |

| Feature  | Value                                   |
|--|---|
| IO-Link, Process data length OUT                     | 2 bit                                   |
| IO-Link, Process data content OUT                    | 1 bit (emitter disable)<br>1 bit (Hold) |
| IO-Link, Process data length IN                      | 1 bit                                   |
| IO-Link, Process data content IN                     | 1 bit SSC (switching signal)            |
| IO-Link, Min. cycle time                             | 2.3 ms                                  |
| IO-Link, Data storage required                       | 2 KB                                    |
| Operational voltage range DC                         | 10 V...30 V                             |
| Residual ripple                                      | 10 %                                    |
| No-load supply current                               | 25 mA                                   |
| Reverse polarity protection                          | For all electrical connections          |
| Electrical connection 1, connection type             | Plugs                                   |
| 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                         |
| Material electrical contact                          | Gold-plated brass                       |
| Type of mounting                                     | Via through-hole for M3 screw           |
| Tightening torque                                    | 0.8 Nm                                  |
| Mounting position                                    | optional                                |
| Product weight                                       | 10 g                                    |
| Material housing                                     | PC<br>PMMA                              |
| Ready status indication                              | Green LED                               |
| Switching status indication                          | Yellow LED                              |
| Setting options                                      | IO-Link®<br>Potentiometer<br>Teach-in   |
| Setting range lower limit                            | 75 mm                                   |
| Setting range upper limit                            | 1000 mm                                 |
| Degree of protection                                 | IP65<br>IP67<br>IP69K                   |
| Insulation voltage                                   | 500 V                                   |
| Immunity to surge                                    | 1 kV                                    |
| Corrosion resistance class CRC                       | 1 - Low corrosion stress                |
| LABS (PWIS) conformity                               | VDMA24364 zone III                      |
| Pollution degree                                     | 3                                       |