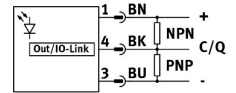


# Retro-reflective sensor SOOE-RG-R-PNLK-T

Part number: 8075667

**FESTO**



## Data sheet

| Feature                                      | Value                                                                                                                                                                                                                                       |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                                       | Block design                                                                                                                                                                                                                                |
| Conforms to standard                         | EN 60947-5-2                                                                                                                                                                                                                                |
| 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                                                                                                                                                                                       |
| Certificate issuing authority                | UL E232949                                                                                                                                                                                                                                  |
| Note on materials                            | RoHS compliant                                                                                                                                                                                                                              |
| Measuring principle                          | Optoelectronic                                                                                                                                                                                                                              |
| Detection method                             | Reflection light barrier for transparent objects                                                                                                                                                                                            |
| Type of light                                | Red<br>LED                                                                                                                                                                                                                                  |
| Max. light spot                              | 300 mm at 3500 mm                                                                                                                                                                                                                           |
| Working range                                | 0 mm...3500 mm                                                                                                                                                                                                                              |
| Distance sensor Reflector                    | Ø 1 ... 5000 SARA-R-Q50-S<br>Ø 1 ... 2000 SARA-R-Q50-MC<br>Ø 1 ... 1800 SARA-RF-Q100-S<br>Ø 1 ... 3300 SARA-RF-Q100-MC<br>Ø 1 ... 2000 SARA-R-Q20-S<br>Ø 1 ... 1800 SARA-R-Q20-MC<br>Ø 1 ... 1100 SARA-R-Q14-M<br>Ø 1 ... 1400 SARA-R-D20-M |
| Ambient temperature                          | -20 °C...60 °C                                                                                                                                                                                                                              |
| Reference material                           | Reference reflector: SARA-R-Q50-S                                                                                                                                                                                                           |
| Switching output                             | Push-pull                                                                                                                                                                                                                                   |
| Switching element function                   | Switchable<br>PNP, dark-switching<br>NPN, light-switching                                                                                                                                                                                   |
| Max. switching frequency                     | 500 Hz                                                                                                                                                                                                                                      |
| Max. output current                          | 100 mA                                                                                                                                                                                                                                      |
| Voltage drop                                 | 0 V...1.5 V                                                                                                                                                                                                                                 |
| Timer function                               | Via IO-Link®                                                                                                                                                                                                                                |
| Short-circuit protection                     | Pulsed                                                                                                                                                                                                                                      |

| Feature                                        | Value                                                   |
|------------------------------------------------|---------------------------------------------------------|
| Protocol                                       | IO-Link®                                                |
| IO-Link®, protocol version                     | Device V 1.1                                            |
| IO-Link®, communication mode                   | COM2 (38,4 kBd)                                         |
| IO-Link®, SIO mode support                     | Yes                                                     |
| IO-Link®, port class                           | A                                                       |
| IO-Link®, process data width OUT               | 2 bit                                                   |
| IO-Link®, process data content OUT             | 1 bit (emitter disable)<br>1 bit (hold)                 |
| IO-Link®, process data width IN                | 2 bit                                                   |
| IO-Link®, process data content IN              | 1 bit (stability alarm)<br>1 bit SSC (switching signal) |
| IO-Link®, minimum cycle time                   | 2.3 ms                                                  |
| IO-Link®, data memory required                 | 2 KB                                                    |
| DC operating voltage range                     | 10 V...30 V                                             |
| Residual ripple                                | 10%                                                     |
| Idle current                                   | 25 mA                                                   |
| Reverse polarity protection                    | for all electrical connections                          |
| Electrical connection 1, connection type       | Plug                                                    |
| Electrical connection 1, connection technology | M8x1 A-coded as per EN 61076-2-104                      |
| Electrical connection 1, number of pins/wires  | 3                                                       |
| Electrical connection 1, type of mounting      | Screw-type lock                                         |
| Material of pin contacts                       | Gold-plated brass                                       |
| Type of mounting                               | With through-hole for M3 screw                          |
| Tightening torque                              | 0.8 Nm                                                  |
| Mounting position                              | Any                                                     |
| Product weight                                 | 10 g                                                    |
| Housing material                               | PC<br>PMMA                                              |
| Ready status indication                        | Green LED                                               |
| Switching status indication                    | Yellow LED                                              |
| Function reserve indication                    | Yellow LED, flashing                                    |
| Setting options                                | IO-Link®<br>Potentiometer<br>Teach-in                   |
| Degree of protection                           | IP65<br>IP67<br>IP69K                                   |
| Insulation voltage                             | 500 V                                                   |
| Surge resistance                               | 1 kV                                                    |
| Corrosion resistance class (CRC)               | 1 - Low corrosion stress                                |
| LABS (PWIS) conformity                         | VDMA24364 Zone III                                      |
| Contamination level                            | 3                                                       |