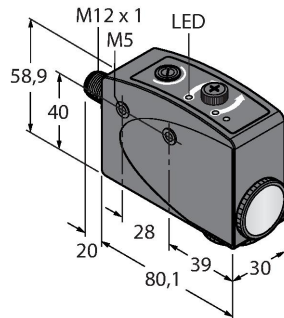


# R58ACR1DQ8

## Photoelectric Sensor – Convergent Mode Sensor Color Mark Sensor



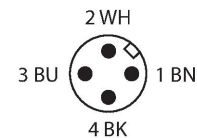
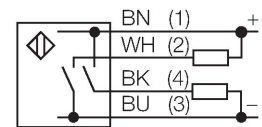
### Features

- Male M12 × 1, 4-pin
- Protection class IP67
- Threshold adjusted via 15-turn potentiometer
- Light/dark operate adjusted via rotary switch
- Emits red light for detection
- Parallel scan field relative to the housing axis
- Optics rotatable by 90°
- Operating voltage: 10...30 VDC
- PNP/NPN switching output
- Switching behavior adjustable (NO/NC)
- Switch-off delay 20 ms

### Technical data

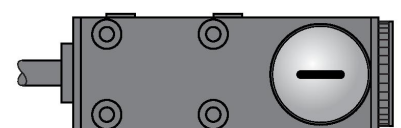
|                              |                                            |
|------------------------------|--------------------------------------------|
| Type                         | R58ACR1DQ8                                 |
| ID                           | 3010245                                    |
| <b>Optical data</b>          |                                            |
| Function                     | Inspection sensor                          |
| Operating mode               | Contrast sensor                            |
| Light type                   | Red                                        |
| Focal distance               | 10 mm                                      |
| Range                        | 10 mm                                      |
| <b>Electrical data</b>       |                                            |
| Operating voltage            | 10...30 VDC                                |
| Residual ripple              | < 10 % U <sub>ss</sub>                     |
| DC rated operational current | ≤ 100 mA                                   |
| No-load current              | ≤ 75 mA                                    |
| Short-circuit protection     | yes                                        |
| Reverse polarity protection  | yes                                        |
| Output function              | NO contact, PNP/NPN                        |
| Switching frequency          | 10 kHz                                     |
| Readiness delay              | ≤ 100 ms                                   |
| Setting option               | Potentiometer                              |
| <b>Mechanical data</b>       |                                            |
| Design                       | Rectangular, R58                           |
| Dimensions                   | 80.1 x 30 x 58.9 mm                        |
| Housing material             | Metal, Zinc Alloy Die-Cast, Black-finished |
| Lens                         | plastic, Acrylic                           |
| Electrical connection        | Connector, M12 × 1, PVC                    |
| Number of cores              | 4                                          |

### Wiring diagram



### Functional principle

The color mark sensor differentiates between all conventional color contrasts occurring in product and material registration. For this purpose it uses red light. The very short response time of 50 µs is ideally suited for high speed applications. The sensor's switchpoint is adjusted in 15 steps via potentiometer. Via rotary switch, the sensor can also be taught to differentiate between ON and OFF state.



Technical data

|                        |              |
|------------------------|--------------|
| Ambient temperature    | -10...+50 °C |
| Relative humidity      | 0...90 %     |
| Protection class       | IP67         |
| Special features       | keep/defer   |
| Power-on indication    | LED, Green   |
| Switching state        | LED, Yellow  |
| Excess gain indication | LED          |
| Tests/approvals        |              |
| Approvals              | CE           |

Accessories

SMB55A

3053259

Mounting bracket, stainless steel, for R58A/R58E and QL56/QL51

SMB55RA

3053261

Mounting bracket, rectangular, stainless steel, for R58A/R58E and QL56/QL51

SMB55F

3053260

Mounting panel, stainless steel, for R58A/R58E and QL56/QL51

SMB55S

3053265

Mounting bracket, stainless steel, for R58A/R58E and QL56/QL51