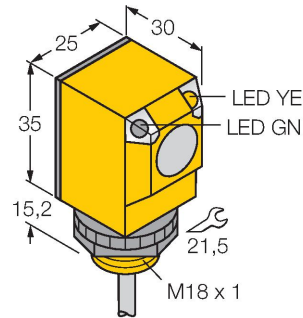


# Q25RW3LP

## Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



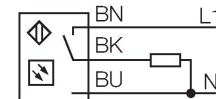
### Technical data

|                                |                                 |
|--------------------------------|---------------------------------|
| Type                           | Q25RW3LP                        |
| ID                             | 3031965                         |
| <b>Optical data</b>            |                                 |
| Function                       | Retroreflective Sensor          |
| Operating mode                 | Polarized                       |
| Reflector included in delivery | no                              |
| Light type                     | Red polarized                   |
| Wavelength                     | 680 nm                          |
| Range                          | 50...2000 mm                    |
| <b>Electrical data</b>         |                                 |
| Operating voltage              | 20...250 VAC                    |
| AC rated operational current   | ≤ 200 mA                        |
| Output function                | Dark operation, Relay output    |
| Switching frequency            | ≤ 40 Hz                         |
| Readiness delay                | ≤ 100 ms                        |
| Response time typical          | < 16 ms                         |
| <b>Mechanical data</b>         |                                 |
| Design                         | Rectangular, Q25                |
| Dimensions                     | Ø 18 x 30 x 25 x 50.2 mm        |
| Housing material               | Plastic, Thermoplastic material |
| Lens                           | plastic, Acrylic                |
| Electrical connection          | Cable, 2 m, PVC                 |
| Number of cores                | 3                               |
| Core cross-section             | 0.5 mm <sup>2</sup>             |
| Ambient temperature            | -40...+70 °C                    |
| Protection class               | IP69                            |

### Features

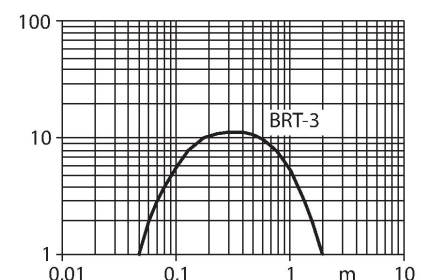
- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light operation with alarm function

### Wiring diagram



### Functional principle

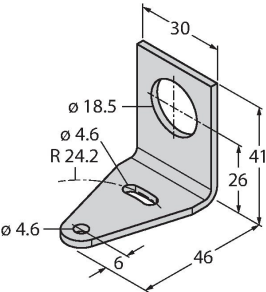
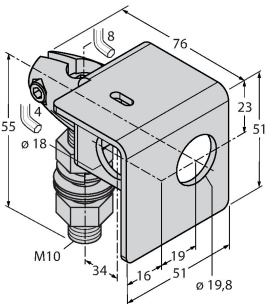
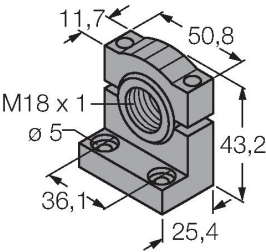
Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors have a high function gain and good contrast performance. Further it is merely required to install and wire a single device. Excess gain curve Excess gain in relation to the distance



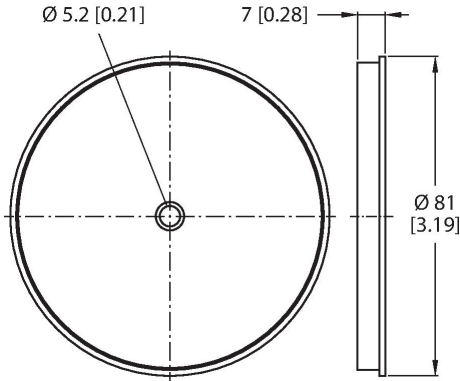
Technical data

|                        |                                                 |
|------------------------|-------------------------------------------------|
| Special features       | Chemical-resistant<br>Encapsulated<br>Wash down |
| Power-on indication    | LED, Green                                      |
| Switching state        | LED, Yellow                                     |
| Excess gain indication | LED                                             |
| Tests/approvals        |                                                 |
| Approvals              | CE, UL, CSA                                     |

Accessories

|                                                                                     |                                                                               |                                                                                     |                                                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| SMB18A                                                                              | 3033200                                                                       | SMB18AFAM10                                                                         | 3012558                                                                         |
|   | Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread |  | Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm |
| SMB18SF                                                                             | 3052519                                                                       |                                                                                     |                                                                                 |
|  | Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable         |                                                                                     |                                                                                 |

Accessories

| Dimension drawing                                                                   | Type  | ID      |                                                                                                 |
|-------------------------------------------------------------------------------------|-------|---------|-------------------------------------------------------------------------------------------------|
|  | BRT-3 | 3016164 | Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C |