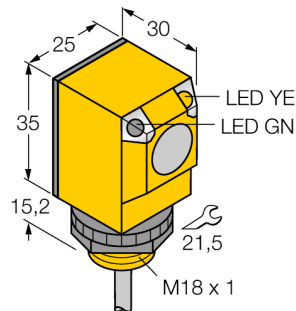


# Photoelectric Sensor

## Retroreflective Sensor with Polarizing Filter

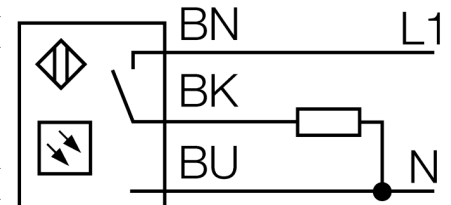
### Q25RW3LP W/30



|                                |                                 |
|--------------------------------|---------------------------------|
| Type                           | Q25RW3LP W/30                   |
| ID                             | 3033877                         |
| <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 $U_s$        | 20...250VAC                     |
| 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, 9 m, PVC                 |
| Number of cores                | 3                               |
| Core cross-section             | 0.5 mm <sup>2</sup>             |
| Ambient temperature            | -40...+70 °C                    |
| Protection class               | IP69                            |
| <b>Special features</b>        |                                 |
|                                | Chemical-resistant              |
|                                | Encapsulated                    |
|                                | Wash down                       |
| Power-on indication            | LED, Green                      |
| Switching state                | LED, Yellow                     |
| Excess gain indication         | LED                             |

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

#### Wiring Diagram

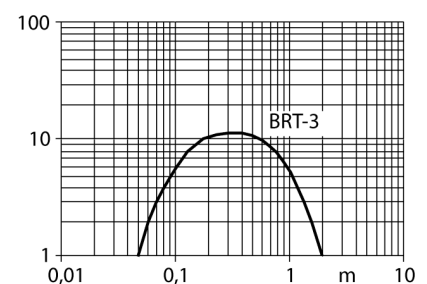


#### Functional principle

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

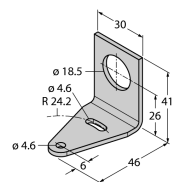
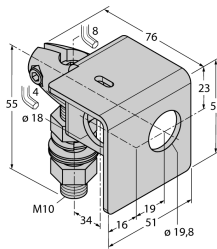
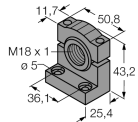


Tests/approvals

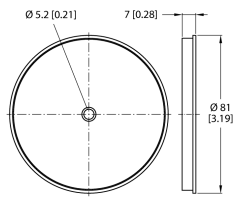
Approvals

CE, UL, CSA

## Accessories

| Type code   | Ident no. |                                                                                 | Dimension drawing                                                                    |
|-------------|-----------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| SMB18A      | 3033200   | Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread   |   |
| SMB18AFAM10 | 3012558   | 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           |  |

## Function accessories

| Type code | Ident no. |                                                                                                 | Dimension drawing                                                                     |
|-----------|-----------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| BRT-3     | 3016164   | Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C |  |