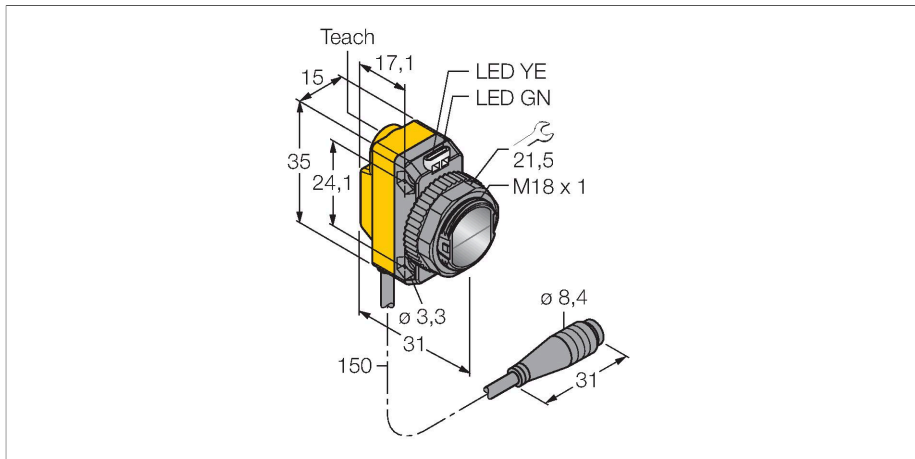


# QS18EP6LPQ

## Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



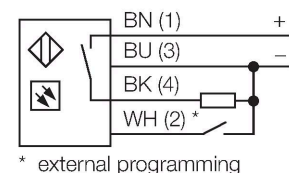
### Technical data

|                                |                               |
|--------------------------------|-------------------------------|
| Type                           | QS18EP6LPQ                    |
| ID                             | 3068748                       |
| <b>Optical data</b>            |                               |
| Function                       | Retroreflective Sensor        |
| Operating mode                 | Polarized                     |
| Reflector included in delivery | no                            |
| Light type                     | Red polarized                 |
| Wavelength                     | 630 nm                        |
| Range                          | 50...3500 mm                  |
| <b>Electrical data</b>         |                               |
| Operating voltage              | 10...30 VDC                   |
| DC rated operational current   | ≤ 100 mA                      |
| No-load current                | ≤ 35 mA                       |
| Reverse polarity protection    | yes                           |
| Output function                | NO contact, PNP               |
| Switching frequency            | ≤ 833 Hz                      |
| Readiness delay                | ≤ 100 ms                      |
| Response time typical          | < 0.6 ms                      |
| Setting option                 | Push Button<br>Remote Teach   |
| <b>Mechanical data</b>         |                               |
| Design                         | Rectangular with thread, QS18 |
| Dimensions                     | Ø 18 x 31 x 15 x 35 mm        |
| Housing material               | Plastic, ABS                  |
| Lens                           | plastic, PMMA                 |

### Features

- Cable with male end, PVC, M8 × 1, 4-pin, 150 mm
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- PNP switching output
- Light or dark operation

### Wiring diagram



### Functional principle

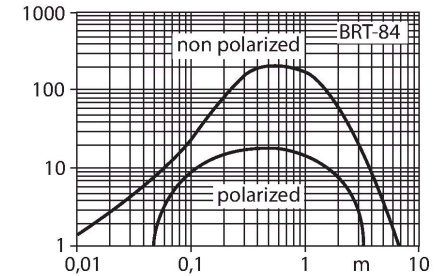
Retro-reflective sensors incorporate emitter and receiver in the same compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of

## Technical data

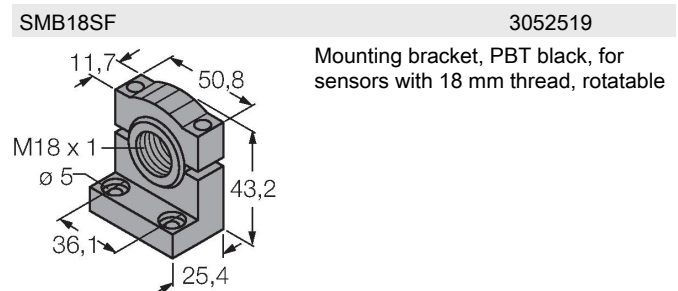
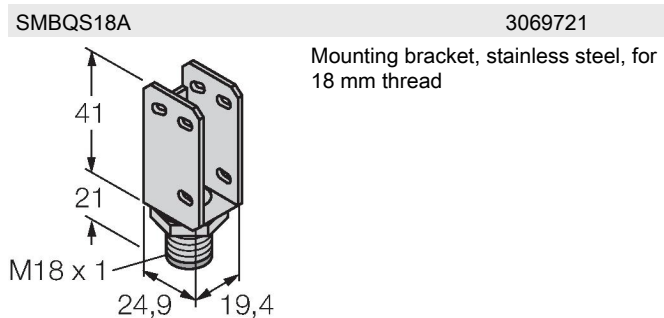
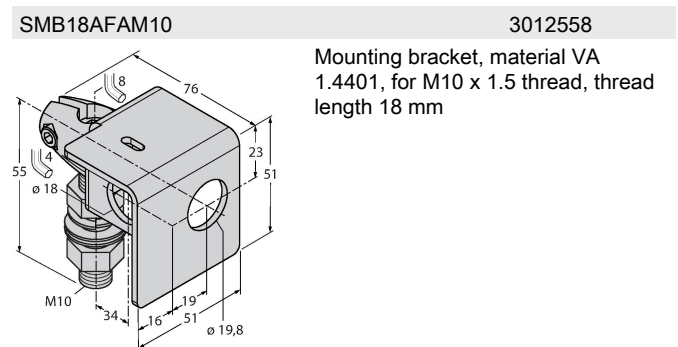
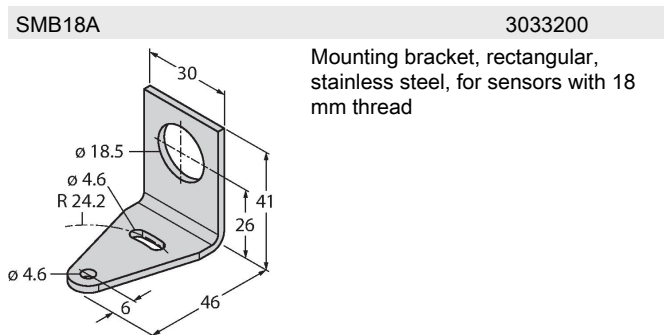
|                        |   |
|------------------------|---|
| Electrical connection  | Cable with connector, M8 × 1, 0.15 m, PVC |
| Number of cores        | 4   |
| Ambient temperature    | -20...+70 °C                              |
| Protection class       | IP67                                      |
| Special features       | keep/defer                                |
| Power-on indication    | LED, Green                                |
| Switching state        | LED, Yellow                               |
| Error indication       | LED, green, Flashing                      |
| Excess gain indication | LED                                       |
| Alarm display          | LED yellow Flashing                       |
| <b>Tests/approvals</b> |   |
| Approvals              | CE, cURus                                 |

disadvantage when shiny objects have to be detected.


Excess gain curve  
Excess gain in relation to the distance (type LP)



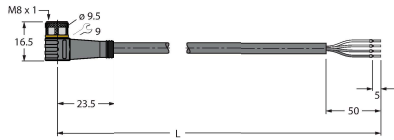
## Accessories



## Accessories

| Dimension drawing   | Type        | ID      |   |
|---|-------------|---------|---|
|  | PKG4M-2/TEL | 6625061 | Connection cable, female M8, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |

| Dimension drawing | Type        | ID      |   |
|-------------------|-------------|---------|---|
|                   | PKW4M-2/TEL | 6625067 | Connection cable, female M8, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |



## Accessories

| Dimension drawing | Type   | ID      |   |
|-------------------|--------|---------|---|
|                   | BRT-84 | 3058979 | Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C |

