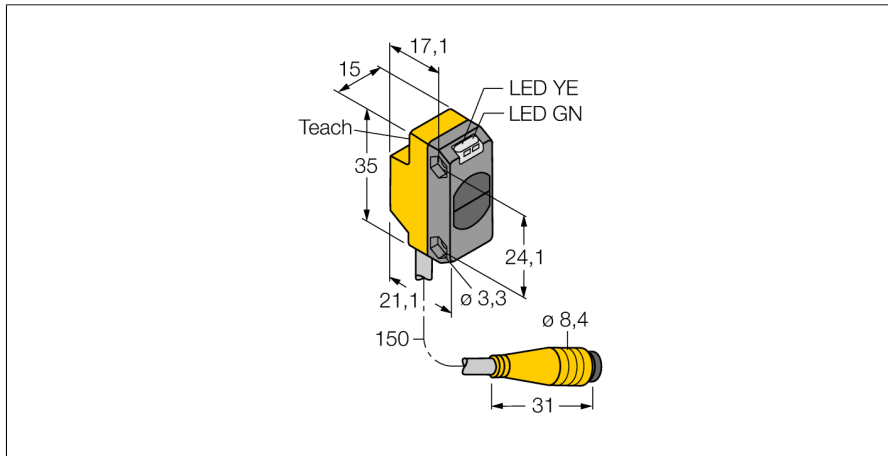
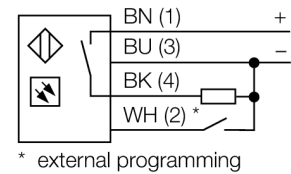


**Photoelectric sensor
diffuse mode sensor
QS18EP6WQ**

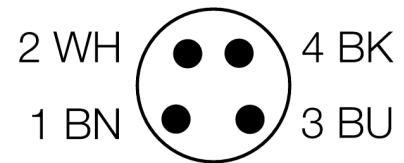


- Cable with male end, 4-pin, PVC, 150 mm
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- PNP switching output
- Light or dark operation

Wiring diagram



| | |
|--------------------------------|-----------------------------------|
| Type code | QS18EP6WQ |
| Ident no. | 3069218 |
| Operating mode | diffuse mode sensor |
| Light type | IR |
| Wavelength | 940 nm |
| Range | 0...300 mm |
| Ambient temperature | -20...+70 °C |
| Operating voltage | 10...30VDC |
| DC rated operational current | ≤ 100 mA |
| No-load current I ₀ | ≤ 35 mA |
| Reverse polarity protection | yes |
| Output function | NO contact, PNP |
| Switching frequency | ≤ 833 Hz |
| Design | rectangular, QS18 |
| Dimensions | 21.1 x 15 x 35 mm |
| Housing material | plastic, ABS |
| Lens | plastic, acrylic |
| Connection | cable with connector, PVC, Ø 8 mm |
| Cable length | 0.15 m |
| Protection class | IP67 |
| Power-on indication | LED green |
| Switching state | LED yellow |
| Error indication | LED green flashing |
| Alarm display | LED yellow flashing |

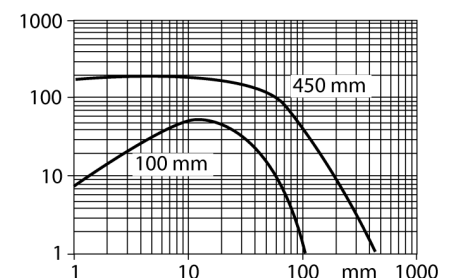


Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects sufficient light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors).

Excess gain curve

Excess gain in relation to the distance



**Photoelectric sensor
diffuse mode sensor
QS18EP6WQ**

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------|-----------|--|-------------------|
| SMB18A | 3033200 | Mounting bracket, stainless steel, for sensors with 18 mm thread | |
| SMBQS18A | 3069721 | Mounting bracket, stainless steel, for 18 mm thread | |
| SMBQS18AF | 3067467 | Mounting bracket, stainless steel, for 18 mm thread | |

Wiring accessories

| Type code | Ident no. | Description | Dimension drawing |
|---------------|-----------|--|-------------------|
| WKC4.5T-2/TEL | 6625028 | Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com | |
| RKC4.5T-2/TEL | 6625016 | Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com | |