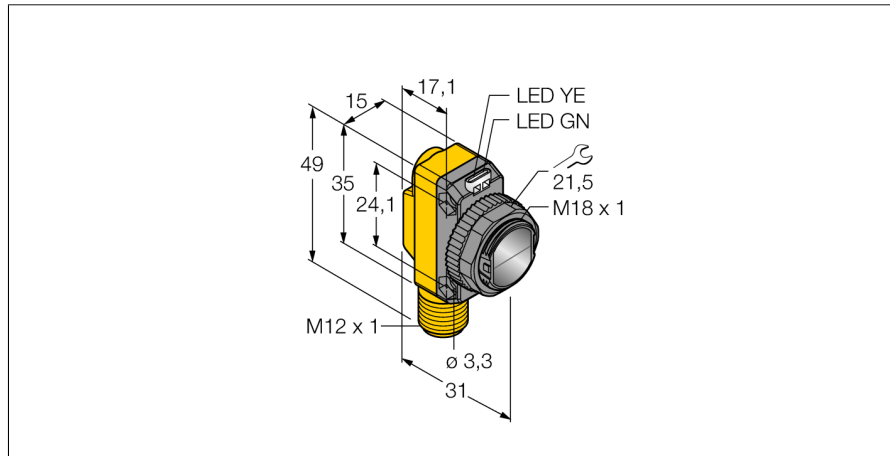
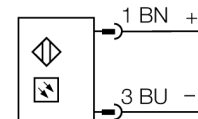


**Photoelectric sensor
opposed mode sensor (emitter)
QS186EQ8**

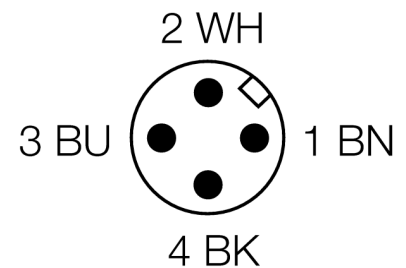
- Male M12 x 1, 4-pin
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC

Wiring diagram



Wiring diagram

| | |
|------------------------------|---|
| Type code | QS186EQ8 |
| Ident no. | 3066447 |
| Operating mode | opposed mode sensor (emitter) |
| Light type | IR |
| Wavelength | 940 nm |
| Range | 0...30000 mm |
| Ambient temperature | -20...+70 °C |
| Operating voltage | 10...30VDC |
| Residual ripple | < 10 % U _s |
| DC rated operational current | ≤ 100 mA |
| Short-circuit protection | yes |
| Reverse polarity protection | yes |
| Readiness delay | ≤ 100 ms |
| Design | rectangular, QS18 |
| Dimensions | 31 x 15 x 35 mm |
| Housing material | plastic, ABS |
| Lens | plastic, acrylic |
| Connection | male, M12 x 1 |
| Protection class | IP67 |
| MTTF | 530 years acc. to SN 29500 (Ed. 99) 40 °C |
| Power-on indication | LED green |

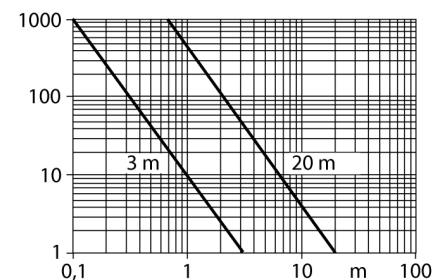


Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. The excellent light/dark contrast and the high excess gain allow operation over larger distances and under difficult conditions.

Excess gain curve

Excess gain in relation to the distance (type 6EB/RB)

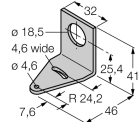
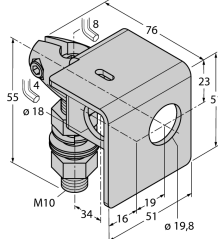
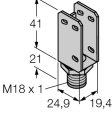
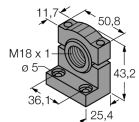


**Photoelectric sensor
opposed mode sensor (emitter)
QS186EQ8**

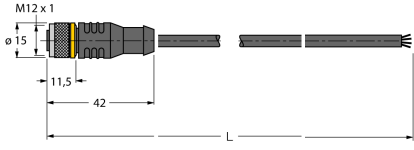
TURCK

Industrial
Automation

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-------------|-----------|---|---|
| SMB18A | 3033200 | Mounting bracket, 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 |  |
| SMBQS18A | 3069721 | Mounting bracket, stainless steel, for 18 mm thread |  |
| SMB18SF | 3052519 | Mounting bracket, PTB black steel, for sensors with 18 mm thread |  |

Wiring accessories

| Type code | Ident no. | Description | Dimension drawing |
|---------------|-----------|--|---|
| RKC4.4T-2/TEL | 6625013 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |  |

**Photoelectric sensor
opposed mode sensor (emitter)
QS186EQ8**

Wiring accessories

| Type code | Ident no. | Description | Dimension drawing |
|---------------|-----------|--|---|
| WKC4.4T-2/TEL | 6625025 | Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |  |