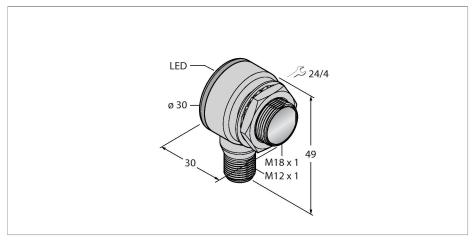
TM18VP6RQ8 Photoelectric Sensor – Opposed Mode Sensor (Receiver)



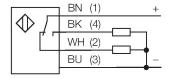
Technical data

| Туре | TM18VP6RQ8 |
|-----------------------------|--|
| ID | 3042036 |
| Optical data | |
| Function | Opposed mode sensor |
| Operating mode | Receiver |
| Range | 020000 mm |
| Electrical data | |
| Operating voltage | 1030 VDC |
| No-load current | ≤ 25 mA |
| Short-circuit protection | yes / Cyclic |
| Reverse polarity protection | yes |
| Output function | Complementary contact, PNP |
| Switching frequency | ≤ 440 Hz |
| Readiness delay | ≤ 100 ms |
| Response time typical | < 1.5 ms |
| Mechanical data | |
| Design | Tube, TM18 |
| Dimensions | Ø 18 x 30 x 30 x 49 mm |
| Housing material | Metal, Zinc Die-Cast with Nickel-Plating |
| Lens | plastic, Polycarbonate |
| Electrical connection | Connector, M12 × 1, PVC |
| Number of cores | 4 |
| Ambient temperature | -40+70 °C |
| Protection class | IP67 IP69 |
| Special features | Encapsulated Wash down |
| Power-on indication | LED, Green |

Features

- ■M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- ■Ambient temperature: -40 °C...+70 °C
- Metal housing
- Operating voltage: 10...30 VDC
- PNP switching output, light and dark operation

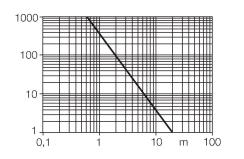
Wiring diagram



Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite 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. An excellent contrast between light and dark conditions and an extremly high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions. Excess gain curve

Excess gain in relation to the distance



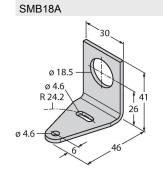


Technical data

| Switching state | LED, Yellow |
|------------------------|----------------------|
| Error indication | LED, green, Flashing |
| Excess gain indication | LED |
| Alarm display | LED yellow Flashing |
| Tests/approvals | |
| Approvals | CE, UL |

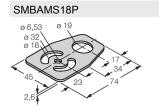
Accessories

| SMBT18Y | 3069554 |
|---------|---|
| | mounting bracket, rectangular, for sensors with 18 mm thread, 15.3 mm cable feedthrough or M12 x 1 male |



Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

3033200



3073134 Mounting bracket, stainless steel, for sensors with 18 mm thread

Accessories

