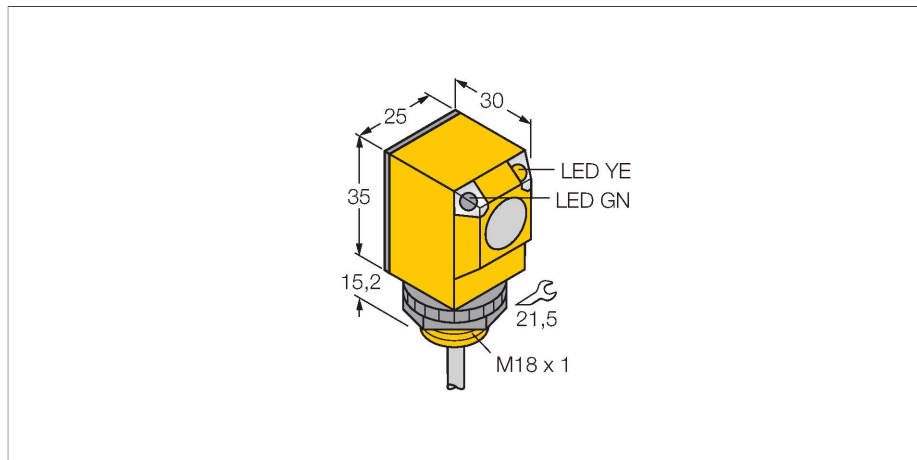


Q25AW3R

Photoelectric Sensor – Opposed Mode Sensor (Receiver)



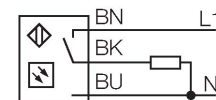
Technical data

| | |
|------------------------------|---|
| Type | Q25AW3R |
| ID no. | 3031967 |
| Optical data | |
| Function | Opposed mode sensor |
| Operating mode | Receiver |
| Range | 0...20000 mm |
| Electrical data | |
| Operating voltage | 20...250 VAC |
| AC rated operational current | ≤ 200 mA |
| Output function | Light operation, Relay output |
| Switching frequency | ≤ 40 Hz |
| Readiness delay | ≤ 100 ms |
| Response time typical | < 16 ms |
| Mechanical data | |
| Design | Rectangular, Q25 |
| Dimensions | Ø 18 x 30 x 25 x 50.2 mm |
| Housing material | Plastic, Thermoplastic material |
| Lens | plastic, Polycarbonate |
| Electrical connection | Cable, 2 m, PVC |
| Number of cores | 3 |
| Core cross-section | 0.5 mm ² |
| Ambient temperature | -40...+70 °C |
| Protection class | IP69 |
| Special features | Chemical-resistant Encapsulated Wash down |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |

Features

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

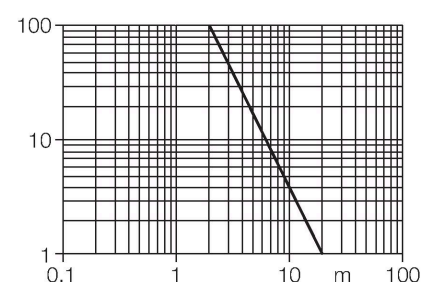
Wiring diagram



Functional principle

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 extremely 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

Excess gain indication LED

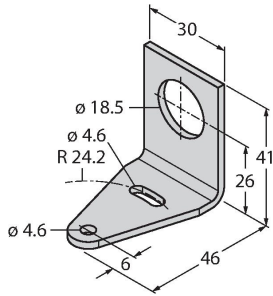
Tests/approvals

Approvals CE, UL, CSA

Accessories

SMB18A

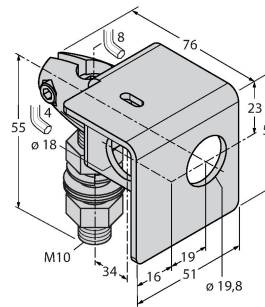
3033200



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

SMB18AFAM10

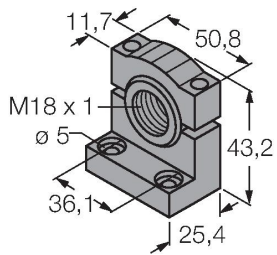
3012558



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