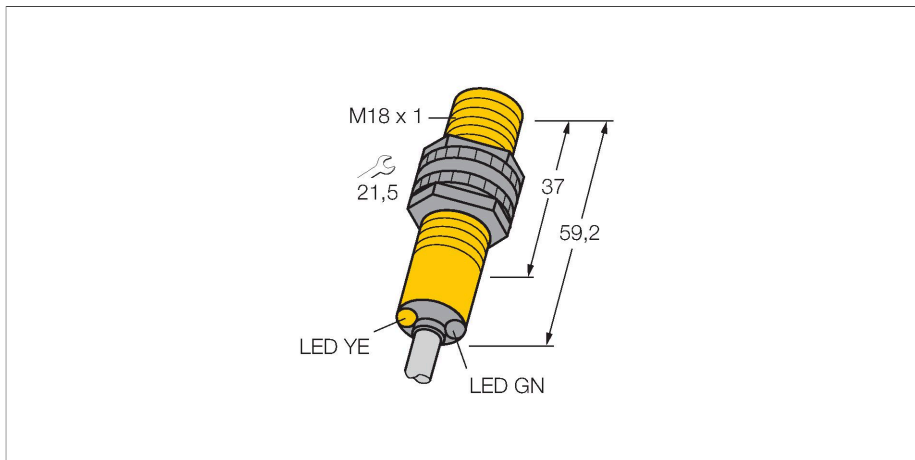


S18AW3L W/30

Photoelectric Sensor – Retroreflective Sensor



Technical data

| | |
|--------------------------------|---------------------------------|
| Type | S18AW3L W/30 |
| ID no. | 3030820 |
| Optical data | |
| Function | Retroreflective Sensor |
| Operating mode | Unpolarized |
| Reflector included in delivery | no |
| Light type | IR |
| Wavelength | 950 nm |
| Range | 50...2000 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 | Threaded barrel, S18 |
| Dimensions | Ø 18 x 59.2 mm |
| Housing material | Plastic, Thermoplastic material |
| Lens | plastic, Acrylic |
| Electrical connection | Cable, 9 m, PVC |
| Number of cores | 3 |
| Core cross-section | 0.5 mm ² |
| Ambient temperature | -40...+70 °C |
| Protection class | IP67 IP69 |

Features

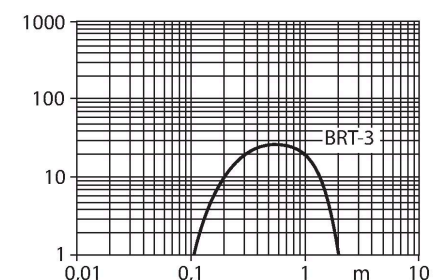
- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light operation with alarm function

Wiring diagram



Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single 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 have a high function gain and good contrast performance. Further it is merely required to install and wire a single device. Excess gain curve
Excess gain in relation to the distance



Technical data

| | |
|------------------------|---------------------------|
| Special features | Encapsulated Wash down |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Excess gain indication | LED |
| Tests/approvals | |
| Approvals | CE, UL, CSA |

Accessories

| | | | |
|--|---|--|--|
| | <p>SMB18A 3033200</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread</p> | | <p>SMB18AFAM10 3012558</p> <p>Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm</p> |
| | <p>SMB3018SC 3053952</p> <p>Mounting bracket, PTB black, for sensors with 18 mm thread</p> | | <p>SMBAMS18P 3073134</p> <p>Mounting bracket, stainless steel, for sensors with 18 mm thread</p> |

Accessories

| Dimension drawing | Type | ID no. | |
|-------------------|--------------|----------------|--|
| | <p>BRT-3</p> | <p>3016164</p> | <p>Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C</p> |