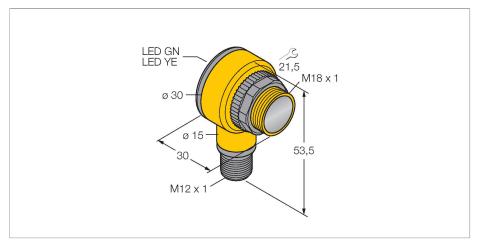
T18SN6FF50QP Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



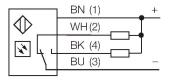
Technical data

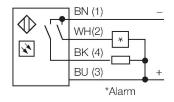
| Туре | T18SN6FF50QP |
|-----------------------------|--|
| ID no. | 3002768 |
| Optical data | |
| Function | Proximity switch |
| Operating mode | Background suppression, non-adjustable |
| Light type | IR |
| Wavelength | 880 nm |
| Range | 050 mm |
| Electrical data | |
| Operating voltage | 1030 VDC |
| No-load current | ≤ 25 mA |
| Short-circuit protection | yes / Cyclic |
| Reverse polarity protection | yes |
| Output function | Connection programmable, NPN |
| Switching frequency | ≤ 160 Hz |
| Readiness delay | ≤ 100 ms |
| Response time typical | < 3 ms |
| Overcurrent release | > 220 mA |
| Mechanical data | |
| Design | Rectangular with thread, T18 |
| Dimensions | Ø 18 x 30 x 30 x 54 mm |
| Housing material | Plastic, Thermoplastic material |
| Lens | plastic, Acrylic |
| Electrical connection | Cable with connector, M12 × 1, 0.15 m, PVC |
| Number of cores | 4 |

Features

- ■M12 × 1 male, 4-pin
- Protection classes IP67/IP69K
- ■Ambient temperature: -40...+70 °C
- Operating voltage: 10...30 VDC
- ■NPN switching output, changeover

Wiring diagram



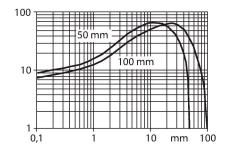


Functional principle

The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

Excess gain curve

Excess gain in relation to the distance

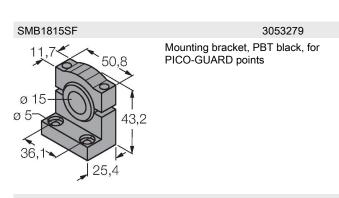




Technical data

| Ambient temperature | -40+70 °C |
|------------------------|---|
| Protection class | IP67 IP69 |
| Special features | Chemical-resistant Encapsulated Wash down |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Error indication | LED, green, Flashing |
| Excess gain indication | LED |
| Alarm display | LED yellow Flashing |
| Tests/approvals | |
| MTTF | 448 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals | CE, UL, CSA |

Accessories



© 18.5 © 4.6 R 24.2 Ø 4.6 R 24.2 Ø 4.6

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

3033200

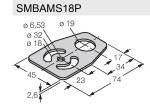
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SMB18FM 3079421

mounting bracket, black, M22 x1.5

mm, male thread, female thread M18

x 1, for sensors with 18 mm thread



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