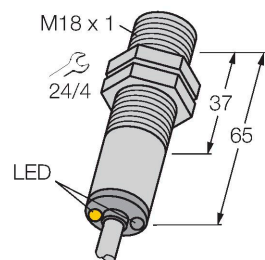


M18SN6FF25

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



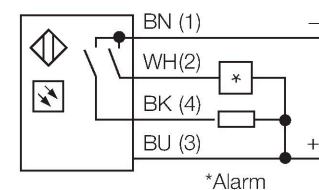
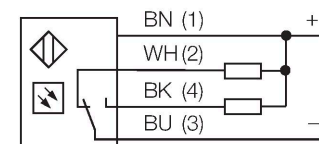
Technical data

| | |
|-----------------------------|--|
| Type | M18SN6FF25 |
| ID no. | 3058428 |
| Optical data | |
| Function | Proximity switch |
| Operating mode | Background suppression, non-adjustable |
| Light type | IR |
| Wavelength | 880 nm |
| Range | 0...25 mm |
| Electrical data | |
| Operating voltage | 10...30 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 | Threaded barrel, M18 |
| Dimensions | Ø 18 x 65 mm |
| Housing material | Metal, Stainless steel |
| Lens | plastic, Acrylic |
| Electrical connection | Cable, 2 m, PVC |
| Number of cores | 4 |
| Core cross-section | 0.5 mm ² |

Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Metal housing
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram



Functional principle

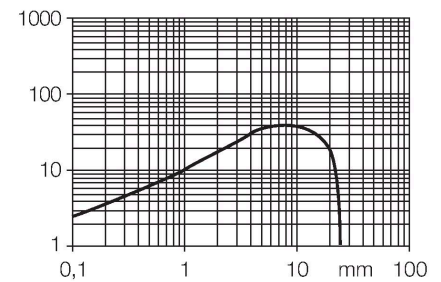
The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

Excess gain curve

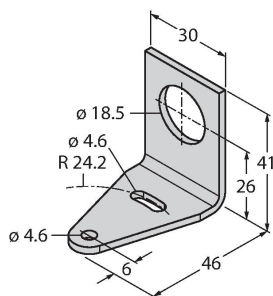
Excess gain in relation to the distance

Technical data

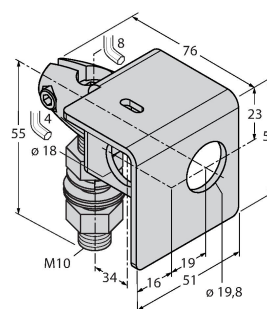
| | |
|------------------------|---|
| Ambient temperature | -40...+70 °C |
| Protection class | IP69 |
| Special features | Chemical-resistant Encapsulated Wash down |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Error indication | LED, green, Flashing |
| Excess gain indication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



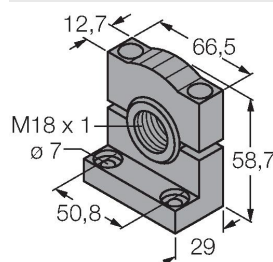
Accessories

SMB18A
3033200


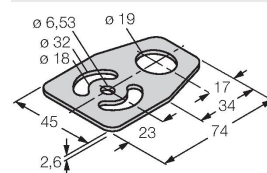
Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18AFAM10
3012558


Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

SMB3018SC
3053952


Mounting bracket, PTB black, for sensors with 18 mm thread

SMBAMS18P
3073134


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