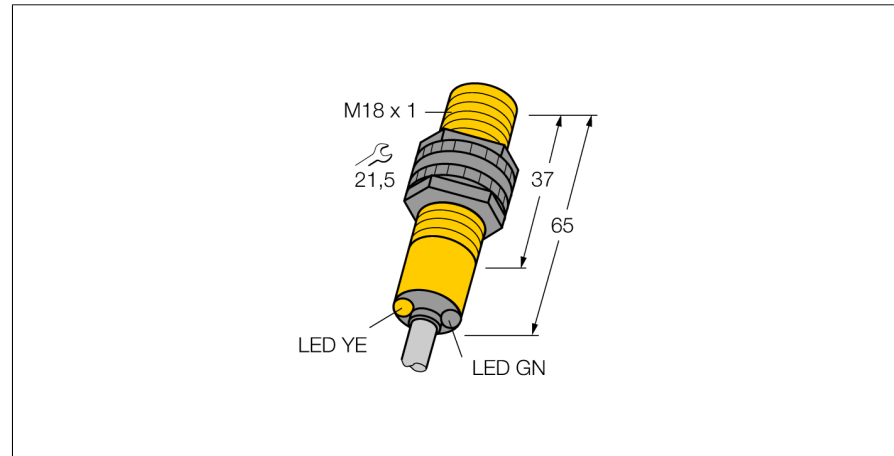
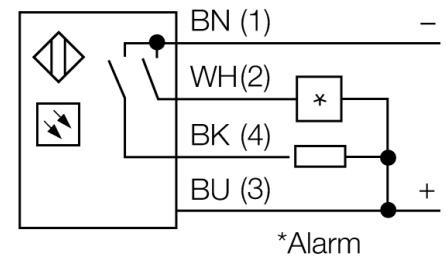
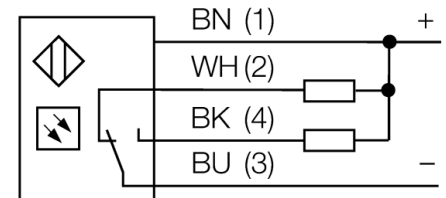


Photoelectric sensor
diffuse mode sensor with fixed-field background suppression
S18SN6FF100



- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Connecting cable, 2 m

Wiring diagram

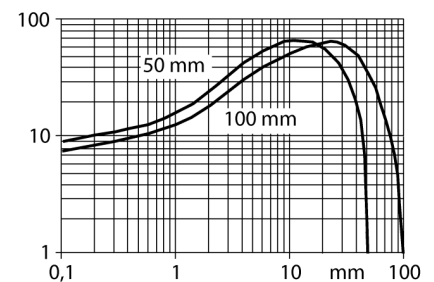


Functional principle

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



| | |
|--------------------------------|---|
| Type code | S18SN6FF100 |
| Ident no. | 3029086 |
| Operating mode | diffuse mode sensor with fixed-field background suppression |
| Light type | IR |
| Wavelength | 880 nm |
| Range | 0...100 mm |
| Ambient temperature | -40...+70 °C |
| Operating voltage | 10...30VDC |
| No-load current I ₀ | ≤ 35 mA |
| Short-circuit protection | yes/ cyclic |
| Reverse polarity protection | yes |
| Output function | connection programmable, NPN |
| Switching frequency | ≤ 160 Hz |
| Readiness delay | ≤ 100 ms |
| Overcurrent release | > 220 mA |
| Design | cylindrical/threaded, S18 |
| Dimensions | 65 mm |
| Housing diameter | 18 mm |
| Housing material | plastic, PBT |
| Lens | plastic, acrylic |
| Connection | cable |
| Cable length | 2 m |
| Cable cross section | 4 x 0.5 mm ² |
| Protection class | IP67 |
| MTTF | 448 years acc. to SN 29500 (Ed. 99) 40 °C |
| Power-on indication | LED green |
| Switching state | LED yellow |
| Error indication | LED green flashing |
| Alarm display | LED yellow flashing |

**Photoelectric sensor
diffuse mode sensor with fixed-field background suppression
S18SN6FF100**

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-------------|-----------|---|-------------------|
| SMB18A | 3033200 | Mounting bracket, 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 | |