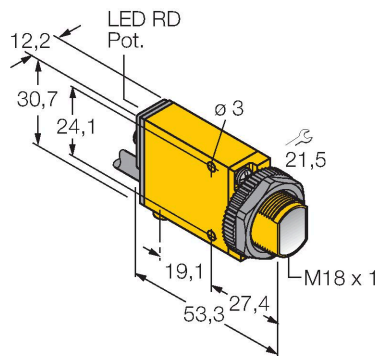


# SM312FP1H W/30'

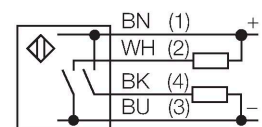
## Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



### Features

- Cable, PVC, 2 m
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Alignment indicator
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light/dark operation

### Wiring diagram



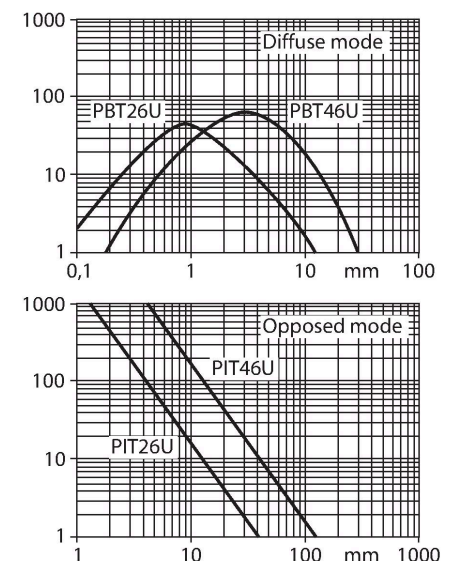
### Technical data

|                              |                        |
|------------------------------|------------------------|
| Type                         | SM312FP1H W/30'        |
| ID                           | 3061824                |
| <b>Optical data</b>          |                        |
| Function                     | Fiber optic sensor     |
| Operating mode               | Plastic fiber          |
| Fiber-optic type             | plastic                |
| Light type                   | Red                    |
| Wavelength                   | 650 nm                 |
| <b>Electrical data</b>       |                        |
| Operating voltage            | 10...30 VDC            |
| Residual ripple              | < 10 % U <sub>ss</sub> |
| DC rated operational current | ≤ 150 mA               |
| No-load current              | ≤ 25 mA                |
| Output function              | NO contact, PNP/NPN    |
| Switching frequency          | ≤ 500 Hz               |
| Readiness delay              | ≤ 100 ms               |
| Overcurrent release          | > 220 mA               |
| <b>Mechanical data</b>       |                        |
| Design                       | Rectangular, Mini Beam |
| Dimensions                   | 53.3 x 12.3 x 30.7 mm  |
| Housing material             | Plastic, PBT, Yellow   |
| Electrical connection        | Cable, 2 m, PVC        |
| Number of cores              | 4                      |
| Core cross-section           | 0.5 mm <sup>2</sup>    |
| Ambient temperature          | -20...+70 °C           |
| Protection class             | IP67                   |
| Switching state              | LED, Red               |

### Functional principle

Glass or plastic fibers are the optimum choice for high-temperature applications and limited spaces. Optical fibers transfer the light from the sensor to a remote object. Individual fibers are used for opposed sensing mode, whereas bifurcated fibers are suited for diffuse sensing mode.

Excess gain curve  
Excess gain in relation to distance

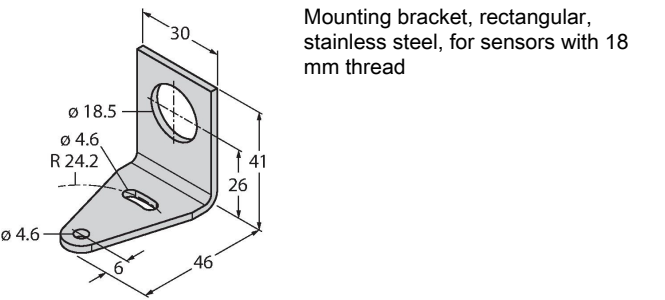


Technical data

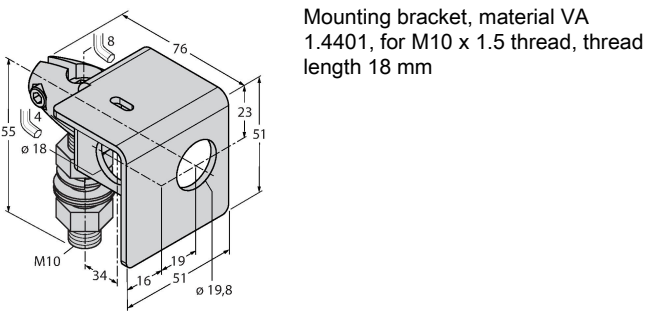
|                        |                    |
|------------------------|--------------------|
| Excess gain indication | LED, red, flashing |
| Tests/approvals        |                    |
| Approvals              | CE, cURus, CSA     |

Accessories

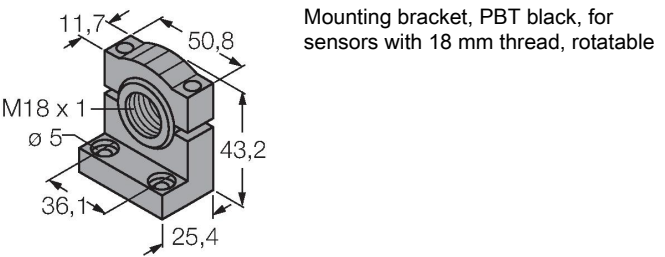
SMB18A 3033200



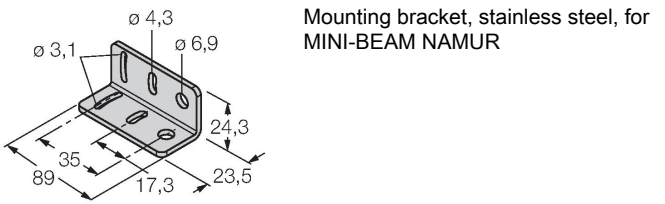
SMB18AFAM10 3012558



SMB18SF 3052519



SMB312B 3025519



SMB3018SC 3053952

