

# T30RW3FF400Q1

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



### Technical data

|                              |                                        |
|------------------------------|----------------------------------------|
| Type                         | T30RW3FF400Q1                          |
| ID                           | 3033433                                |
| <b>Optical data</b>          |                                        |
| Function                     | Proximity switch                       |
| Operating mode               | Background suppression, non-adjustable |
| Light type                   | IR                                     |
| Wavelength                   | 880 nm                                 |
| Range                        | 0...400 mm                             |
| <b>Electrical data</b>       |                                        |
| Operating voltage            | 20...250 VAC                           |
| AC rated operational current | ≤ 200 mA                               |
| Output function              | Dark operation, Relay output           |
| Switching frequency          | ≤ 40 Hz                                |
| Readiness delay              | ≤ 100 ms                               |
| Response time typical        | < 16 ms                                |
| <b>Mechanical data</b>       |                                        |
| Design                       | Tube, T30                              |
| Dimensions                   | Ø 30 x 45 x 40 x 64 mm                 |
| Housing material             | Plastic, Thermoplastic material        |
| Lens                         | plastic, Acrylic                       |
| Electrical connection        | Connector, 1/2", PVC                   |
| Number of cores              | 4                                      |
| Ambient temperature          | -40...+70 °C                           |
| Protection class             | IP69                                   |
| Special features             | Encapsulated<br>Wash down              |

### Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C

### Wiring diagram

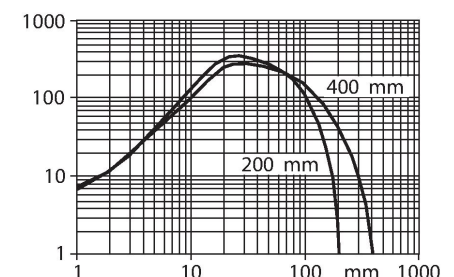


### Functional principle

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



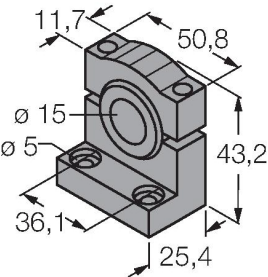
Technical data

|                        |                                           |
|------------------------|-------------------------------------------|
| Power-on indication    | LED, Green                                |
| Switching state        | LED, Yellow                               |
| Excess gain indication | LED                                       |
| Tests/approvals        |                                           |
| MTTF                   | 448 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals              | CE, UL, CSA                               |

Accessories

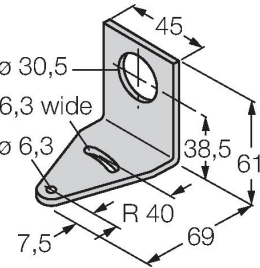
SMB1815SF 3053279

Mounting bracket, PBT black, for PICO-GUARD points



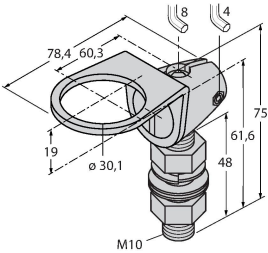
SMB30A 3032723

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread



SMB30FAM10 3011185

Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm



SMBAMS30P 3073135

Mounting bracket, stainless steel, for sensors with 30 mm thread

