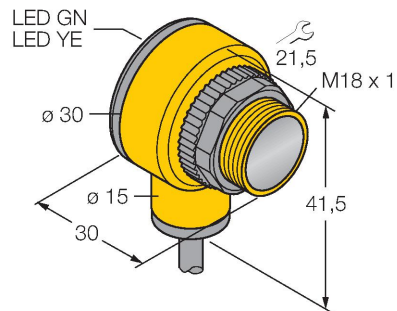


# T183E W/30

## Photoelectric Sensor – Opposed Mode Sensor (Emitter)



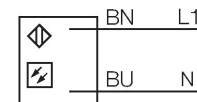
### Technical data

|                        |                                                 |
|------------------------|-------------------------------------------------|
| Type                   | T183E W/30                                      |
| ID                     | 3033927                                         |
| <b>Optical data</b>    |                                                 |
| Function               | Opposed mode sensor                             |
| Operating mode         | Emitter                                         |
| Light type             | IR                                              |
| Wavelength             | 950 nm                                          |
| Range                  | 0...20000 mm                                    |
| <b>Electrical data</b> |                                                 |
| Operating voltage      | 20...250 VAC                                    |
| Readiness delay        | ≤ 100 ms                                        |
| <b>Mechanical data</b> |                                                 |
| Design                 | Tube, T18                                       |
| Dimensions             | Ø 18 x 30 x 30 x 41.5 mm                        |
| Housing material       | Plastic, Thermoplastic material                 |
| Lens                   | plastic, Polycarbonate                          |
| Electrical connection  | Cable, 9 m, PVC                                 |
| Number of cores        | 2                                               |
| Core cross-section     | 0.5 mm <sup>2</sup>                             |
| Ambient temperature    | -40...+70 °C                                    |
| Protection class       | IP67<br>IP69                                    |
| Special features       | Chemical-resistant<br>Encapsulated<br>Wash down |
| Power-on indication    | LED, Green                                      |
| Excess gain indication | LED                                             |

### Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Operating voltage: 20...250 VAC

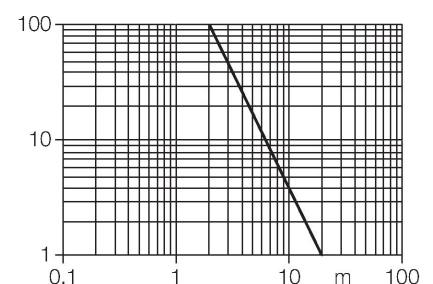
### Wiring diagram



### Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. The excellent light/dark contrast and the high excess gain allow operation over larger distances and under difficult conditions.

Excess gain curve  
Excess gain in relation to the distance

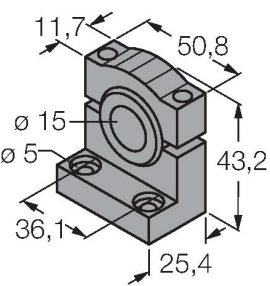


Technical data

| Tests/approvals |             |
|-----------------|-------------|
| Approvals       | CE, UL, CSA |

Accessories

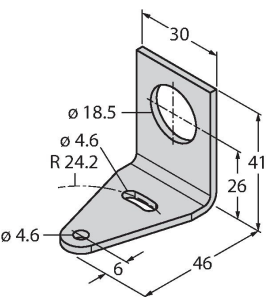
|           |         |
|-----------|---------|
| SMB1815SF | 3053279 |
|-----------|---------|



Technical drawing of the SMB1815SF mounting bracket. It is a 3D perspective view of a black PBT bracket. Dimensions include: top width 11.7, top depth 50.8, front width 36.1, front depth 25.4, side width 43.2, and two circular holes with diameters of 15 and 5.

Mounting bracket, PBT black, for PICO-GUARD points

|        |         |
|--------|---------|
| SMB18A | 3033200 |
|--------|---------|



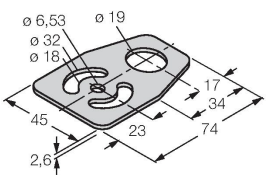
Technical drawing of the SMB18A mounting bracket. It is a 3D perspective view of a rectangular stainless steel bracket. Dimensions include: top width 30, top depth 41, front width 46, front depth 6, and two circular holes with diameters of 18.5 and 4.6. A radius of R 24.2 is indicated for the front edge.

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

|         |         |
|---------|---------|
| SMB18FM | 3079421 |
|---------|---------|

mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread

|           |         |
|-----------|---------|
| SMBAMS18P | 3073134 |
|-----------|---------|



Technical drawing of the SMBAMS18P mounting bracket. It is a 3D perspective view of a stainless steel bracket. Dimensions include: top width 45, top depth 17, front width 74, front depth 23, and two circular holes with diameters of 6.53, 32, and 18. A thickness of 2.6 is indicated.

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