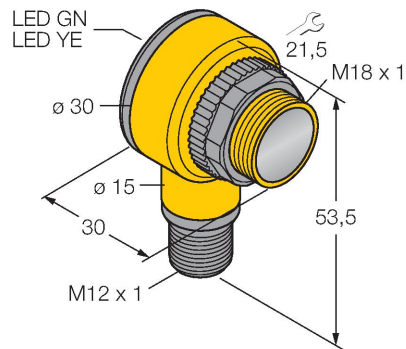


# T18AW3REQI

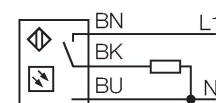
## Photoelectric Sensor – Opposed Mode Sensor (Receiver)



### Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Selectable light/dark operation or light operation with alarm function

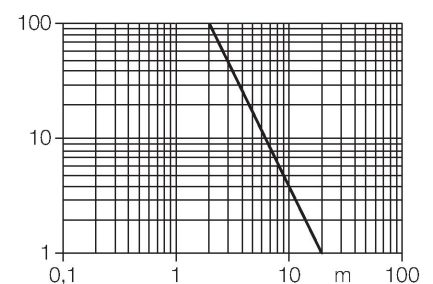
### Wiring diagram



### Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite 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. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions. Excess gain curve

Excess gain in relation to the distance



### Technical data

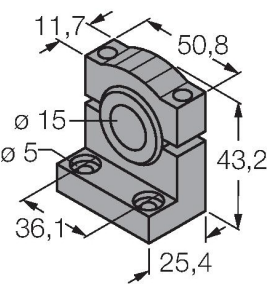
|                              |                                                 |
|------------------------------|-------------------------------------------------|
| Type                         | T18AW3REQI                                      |
| ID                           | 3037066                                         |
| <b>Optical data</b>          |                                                 |
| Function                     | Opposed mode sensor                             |
| Operating mode               | Emitter/receiver pair                           |
| Range                        | 0...20000 mm                                    |
| <b>Electrical data</b>       |                                                 |
| Operating voltage            | 20...250 VAC                                    |
| AC rated operational current | ≤ 200 mA                                        |
| Output function              | Light operation, Relay output                   |
| Switching frequency          | ≤ 40 Hz                                         |
| Readiness delay              | ≤ 100 ms                                        |
| Response time typical        | < 16 ms                                         |
| <b>Mechanical data</b>       |                                                 |
| Design                       | Tube, T18                                       |
| Dimensions                   | Ø 18 x 30 x 30 x 54 mm                          |
| Housing material             | Plastic, Thermoplastic material                 |
| Lens                         | plastic, Polycarbonate                          |
| Electrical connection        | Connector, 1/2", PVC                            |
| Number of cores              | 4                                               |
| Ambient temperature          | -40...+70 °C                                    |
| Protection class             | IP67<br>IP69                                    |
| Special features             | Chemical-resistant<br>Encapsulated<br>Wash down |
| Power-on indication          | LED, Green                                      |
| Switching state              | LED, Yellow                                     |

Technical data

|                        |             |
|------------------------|-------------|
| Excess gain indication | LED         |
| Tests/approvals        |             |
| Approvals              | CE, UL, CSA |

Accessories

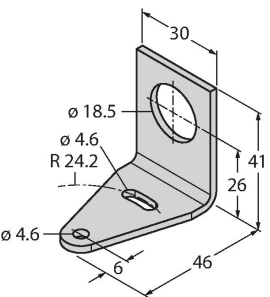
|           |         |
|-----------|---------|
| SMB1815SF | 3053279 |
|-----------|---------|



Technical drawing of the SMB1815SF mounting bracket. It is a 3D perspective view showing a black PBT bracket with a central circular opening. Dimensions include: top width 11,7; top outer width 50,8; central hole diameter  $\varnothing 15$ ; bottom hole diameter  $\varnothing 5$ ; bottom width 36,1; bottom depth 25,4; and total height 43,2.

Mounting bracket, PBT black, for PICO-GUARD points

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



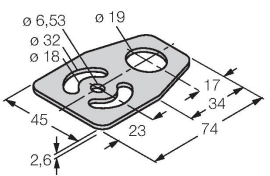
Technical drawing of the SMB18A mounting bracket. It is a 3D perspective view showing a rectangular stainless steel bracket. Dimensions include: top width 30; central hole diameter  $\varnothing 18.5$ ; mounting hole diameter  $\varnothing 4.6$ ; radius R 24.2; bottom hole diameter  $\varnothing 4.6$ ; bottom width 6; bottom depth 46; and total height 41.

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 showing a stainless steel bracket with a complex shape. Dimensions include: top width 45; top outer width 74; central hole diameter  $\varnothing 19$ ; mounting hole diameter  $\varnothing 6.53$ ; bottom hole diameter  $\varnothing 32$ ; bottom hole diameter  $\varnothing 18$ ; bottom width 23; bottom depth 2,6; and total height 17.

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