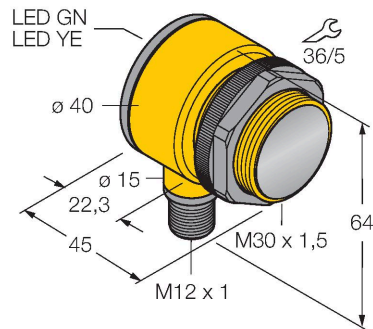


# T30RW3RQ1

## Photoelectric Sensor – Opposed Mode Sensor (Receiver)



### Technical data

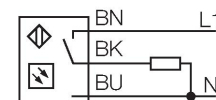
Type	T30RW3RQ1
ID no.	3033447
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0...60000 mm
<b>Electrical data</b>	
Operating voltage	20...250 VAC
AC rated operational current	≤ 200 mA
Output function	Dark operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
<b>Mechanical data</b>	
Design	Rectangular with thread, T30
Dimensions	Ø 30 x 45 x 40 x 64 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connectors, 1/2", PVC
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED



### Features

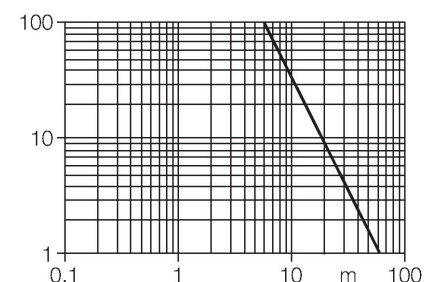
- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C

### 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

### Tests/approvals

Approvals

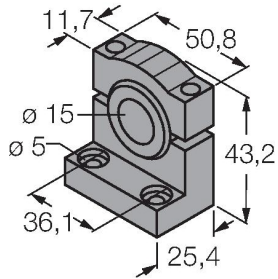
CE, UL, CSA

## Accessories

SMB1815SF

3053279

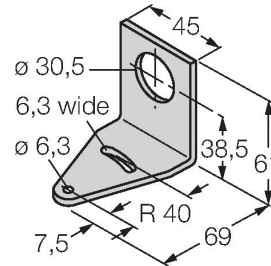
Mounting bracket, PBT black, for PICO-GUARD points



SMB30A

3032723

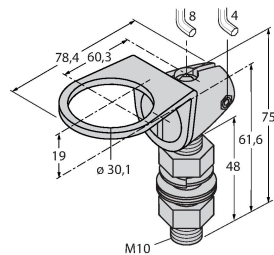
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread



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

