

# S18RW3R Photoelectric Sensor – Opposed Mode Sensor (Receiver)



#### Technical data

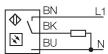
Туре	S18RW3R
ID no.	3029825
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	020000 mm
Electrical data	
Operating voltage	20250 VAC
AC rated operational current	≤ 200 mA
Output function	Dark operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Threaded barrel, S18
Dimensions	Ø 18 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 2 m, PVC
Number of cores	3
Core cross-section	0.5 mm <sup>2</sup>
Ambient temperature	-40+70 °C
Protection class	IP67 IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow



## Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
  Selectable light/dark operation or light operation with alarm function

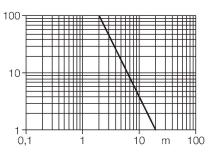
## Wiring diagram



## 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 extremly 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

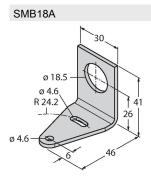




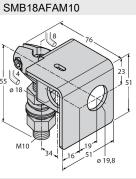
## **Technical data**

LED
CE, UL, CSA

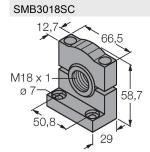
## Accessories



3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

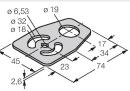


3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm



3053952 Mounting bracket, PTB black, for sensors with 18 mm thread

SMBAMS18P



3073134

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