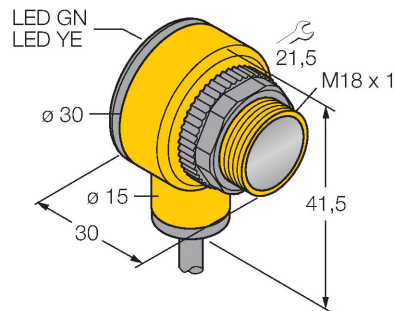


T18SN6RE

Photoelectric Sensor – Opposed Mode Sensor (Receiver)



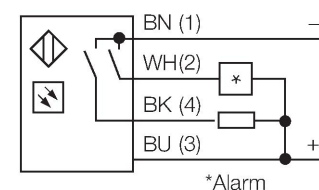
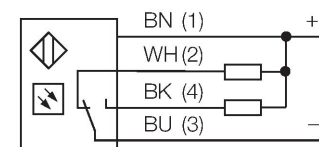
Technical data

Type	T18SN6RE
ID	3037060
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter/receiver pair
Range	0...20000 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
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, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²
Ambient temperature	-40...+70 °C
Protection class	IP67 IP69

Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram

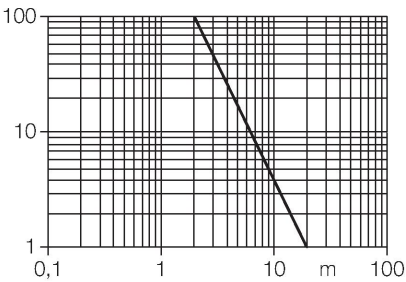


Functional principle

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

Special features	Chemical-resistant Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, UL, CSA



Accessories

SMB1815SF3053279

Mounting bracket, PBT black, for PICO-GUARD points

Technical drawing of the SMB1815SF mounting bracket. It is a 3D perspective view of a black PBT bracket. Dimensions are: top width 11.7, top depth 50.8, front face width 36.1, front face depth 25.4, and a central circular feature with a diameter of 15. There are also smaller circular features with a diameter of 5.

SMB18A3033200

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

Technical drawing of the SMB18A mounting bracket. It is a 3D perspective view of a rectangular stainless steel bracket. Dimensions are: top width 30, top depth 41, front face width 46, and front face depth 26. There are two circular features with a diameter of 18.5 and a central circular feature with a diameter of 4.6. The bracket has a radius of 24.2.

SMB18FM3079421

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

Technical drawing of the SMB18FM mounting bracket. It is a 3D perspective view of a black mounting bracket. Dimensions are: top width 45, top depth 17, front face width 74, and front face depth 23. There are two circular features with a diameter of 6.53 and a central circular feature with a diameter of 19. The bracket has a radius of 2.6.

SMBAMS18P3073134

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

Technical drawing of the SMBAMS18P mounting bracket. It is a 3D perspective view of a stainless steel mounting bracket. Dimensions are: top width 45, top depth 17, front face width 74, and front face depth 23. There are two circular features with a diameter of 6.53 and a central circular feature with a diameter of 19. The bracket has a radius of 2.6.