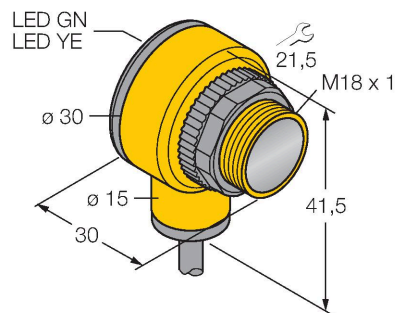


T18RW3FF50

Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



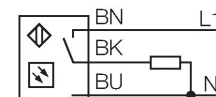
Technical data

Type	T18RW3FF50
ID no.	3033404
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0...50 mm
Electrical data	
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
Mechanical data	
Design	Rectangular with thread, T18
Dimensions	Ø 18 x 30 x 30 x 41.5 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	3
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

Wiring diagram

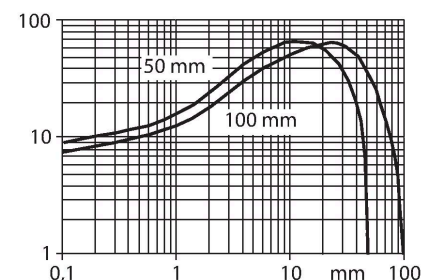


Functional principle

The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

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
Excess gain indication	LED
Tests/approvals	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL, CSA

Accessories

SMB1815SF3053279

Technical drawing of the SMB1815SF mounting bracket. It is a 3D perspective view of a black PBT bracket. Dimensions shown: top width 11.7, top length 50.8, front width 36.1, front height 25.4, side height 43.2, and a central hole diameter of 15. There are also smaller holes with a diameter of 5.

Mounting bracket, PBT black, for PICO-GUARD points

SMB18FM3079421

Technical drawing of the SMB18FM mounting bracket. It is a 3D perspective view of a black bracket. Dimensions shown: top width 11.7, top length 50.8, front width 36.1, front height 25.4, side height 43.2, and a central hole diameter of 15. There are also smaller holes with a diameter of 5.

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

SMB18A3033200

Technical drawing of the SMB18A mounting bracket. It is a 3D perspective view of a rectangular stainless steel bracket. Dimensions shown: top width 30, side height 41, front height 26, front width 46, and a central hole diameter of 18.5. There are also smaller holes with a diameter of 4.6 and a radius of R 24.2.

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

SMBAMS18P3073134

Technical drawing of the SMBAMS18P mounting bracket. It is a 3D perspective view of a stainless steel bracket. Dimensions shown: top width 45, side height 2.6, front height 17, front width 34, and a central hole diameter of 19. There are also smaller holes with diameters of 6.53, 32, and 18.

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