

T18SP6FF50QP

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



Features

- M12 × 1 male, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40...+70 °C
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

Wiring diagram

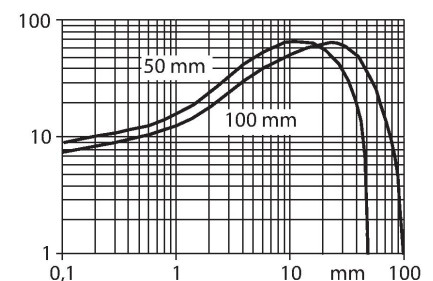


Functional principle

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

Type	T18SP6FF50QP
ID	3057964
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	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, PNP
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Rectangular with thread, T18
Dimensions	30 x 30 x 54 mm
Housing material	Plastic, PBT
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1
Ambient temperature	-40...+70 °C
Protection class	IP67 IP69K

Technical data

Special features	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Alarm display	LED yellow Flashing
Tests/approvals	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL, CSA

Accessories

SMB1815SF3053279

Mounting bracket, PBT black, for PICO-GUARD points

Technical drawing of SMB1815SF mounting bracket. Dimensions: 11,7, 50,8, 43,2, 25,4, 36,1, 5, 15.

SMB18A3033200

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

Technical drawing of SMB18A mounting bracket. Dimensions: 30, 41, 26, 46, 6, 4,6, 18,5, 4,6, R 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 SMB18FM mounting bracket. Dimensions: 45, 23, 74, 17, 34, 2,6, 6,53, 32, 18, 19.

SMBAMS18P3073134

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

Technical drawing of SMBAMS18P mounting bracket. Dimensions: 45, 23, 74, 17, 34, 2,6, 6,53, 32, 18, 19.