

T18-2VPFF50IR-Q8

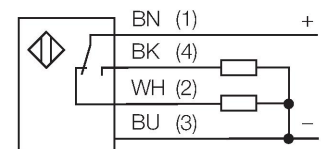
Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



Features

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

Wiring diagram

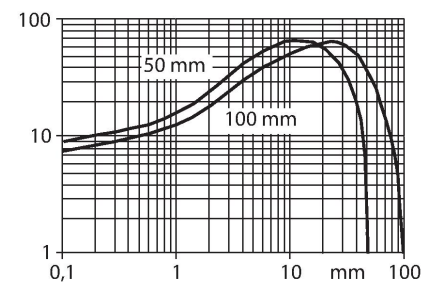


Functional principle

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	T18-2VPFF50IR-Q8
ID	3802694
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	870 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	Complementary contact, PNP
Readiness delay	≤ 500 ms
Response time typical	< 1.5 ms
Mechanical data	
Design	Tube, T18
Dimensions	30 x 30 x 54 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP67 IP68

Technical data

	IP69
Special features	Chemical-resistant Encapsulated Wash down Resistant to chemicals
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	
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 showing dimensions: 11,7, 50,8, 43,2, 25,4, 36,1, 15, 5.

SMB18A3033200

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

Technical drawing of SMB18A mounting bracket showing 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 showing dimensions: 17, 34, 74, 23, 45, 2,6, 19, 32, 18, 6,53.

SMBAMS18P3073134

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

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

Accessories

Dimension drawing	Type	ID	
Technical drawing of RKC4.4T-2/TEL connection cable showing dimensions: 11,5, 42, 50, 14, 15, 12x1.	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

Dimension drawing	Type	ID	
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com