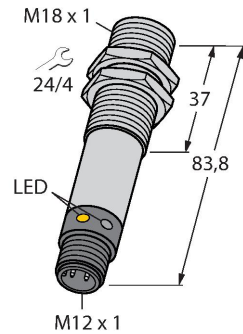


M18SP6FF25Q

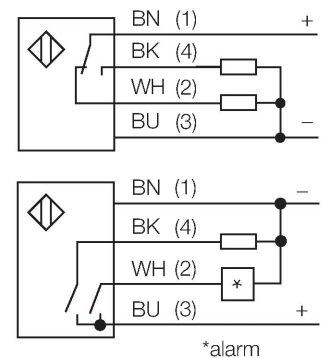
Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



Features

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

Wiring diagram

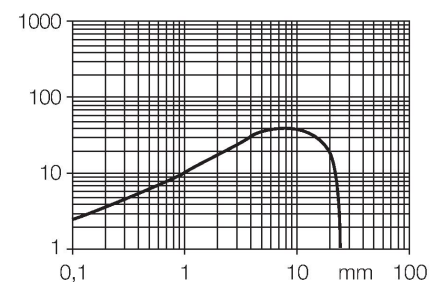


Functional principle

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



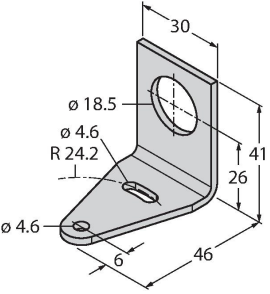
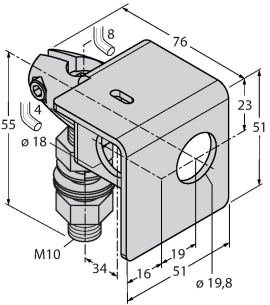
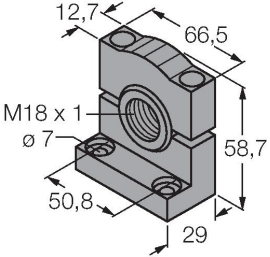
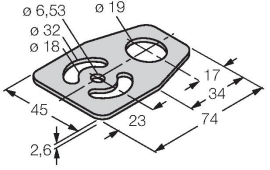
Technical data

Type	M18SP6FF25Q
ID	3058433
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0...25 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
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Tube, M18
Dimensions	Ø 18 x 83.8 mm
Housing material	Metal, Stainless steel
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40...+70 °C

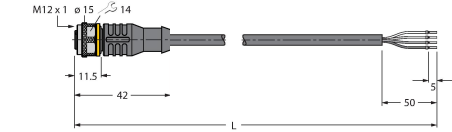
Technical data

Protection class	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

Accessories

SMB18A 	3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	SMB18AFAM10 	3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm
SMB3018SC 	3053952 Mounting bracket, PTB black, for sensors with 18 mm thread	SMBAMS18P 	3073134 Mounting bracket, stainless steel, for sensors with 18 mm thread

Accessories

Dimension drawing	Type	ID	
	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