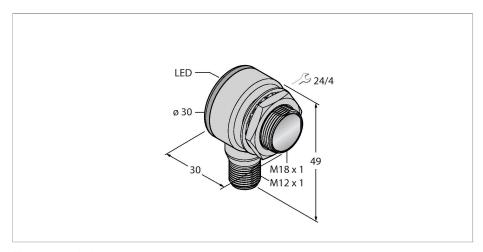
# TM18AP6FF25Q8 Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



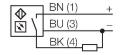
#### Technical data

Туре	TM18AP6FF25Q8
ID no.	3042013
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	Red
Wavelength	660 nm
Range	025 mm
Electrical data	
Operating voltage	1030 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	NO contact, light operation, PNP
Switching frequency	≤ 220 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Mechanical data	
Design	Rectangular with thread, TM18
Dimensions	Ø 18 x 30 x 30 x 49 mm
Housing material	Metal, Zinc Die-Cast with Nickel-Plating
Lens	plastic, Acrylic
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40+70 °C
Protection class	IP67

#### **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, light operation

## Wiring diagram

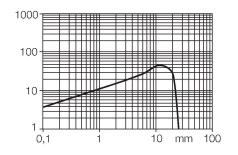


# Functional principle

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



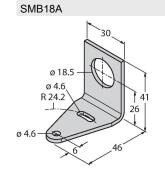


# Technical data

	IP69
Special features	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	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL

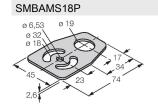
## Accessories

SMBT18Y	3069554
	mounting bracket, rectangular, for sensors with 18 mm thread, 15.3 mm cable feedthrough or M12 x 1 male



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

3033200



3073134 Mounting bracket, stainless steel, for sensors with 18 mm thread

### Accessories

