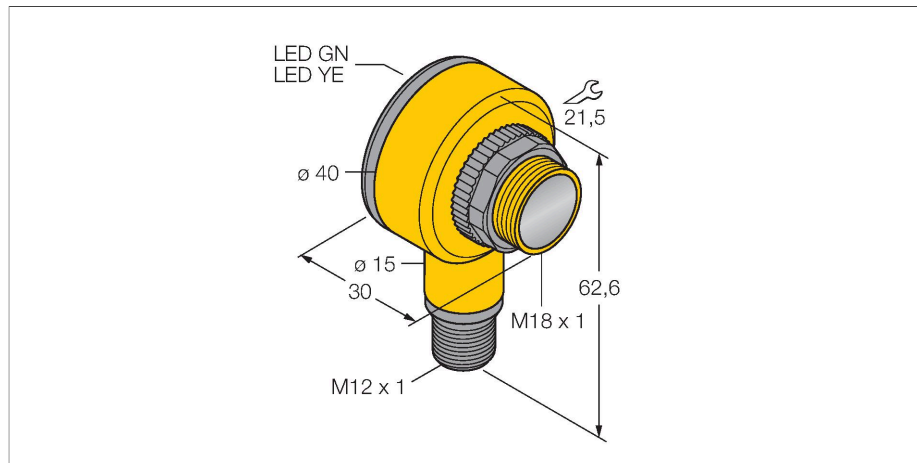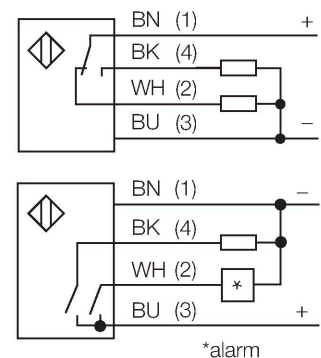# T18SP6DQ
Photoelectric Sensor –   Diffuse Mode Sensor

Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C…+70 °C
- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10…30 VDC
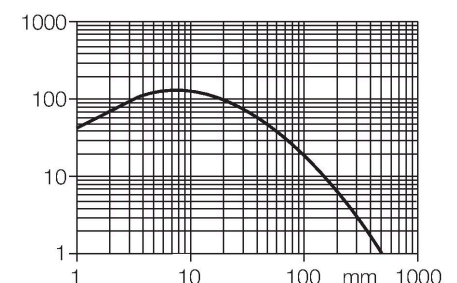- PNP switching output, changeover

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
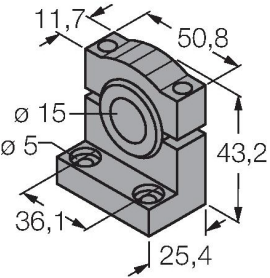
Excess gain in relation to the distance

Technical data

Type	T18SP6DQ
ID no.	3034631
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	880 nm
Range	0…500 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
Setting option	Potentiometer
Mechanical data	
Design	Rectangular with thread, T18
Dimensions	Ø 18 x 30 x 30 x 54 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40…+70 °C

Technical data

Protection class	IP67 IP69
Special features	Chemical-resistant 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	
Approvals	CE, UL, CSA

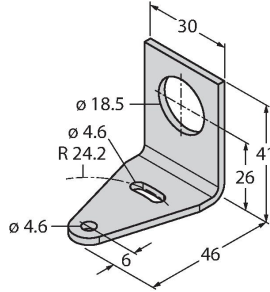## Accessories

SMB1815SF	3053279

Mounting bracket, PBT black, for PICO-GUARD points

SMB18A	3033200

Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread
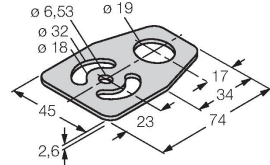
SMB18FM	3079421

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

SMBAMS18P	3073134

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

Accessories

Dimension drawing	Type	ID no.	
	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
	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