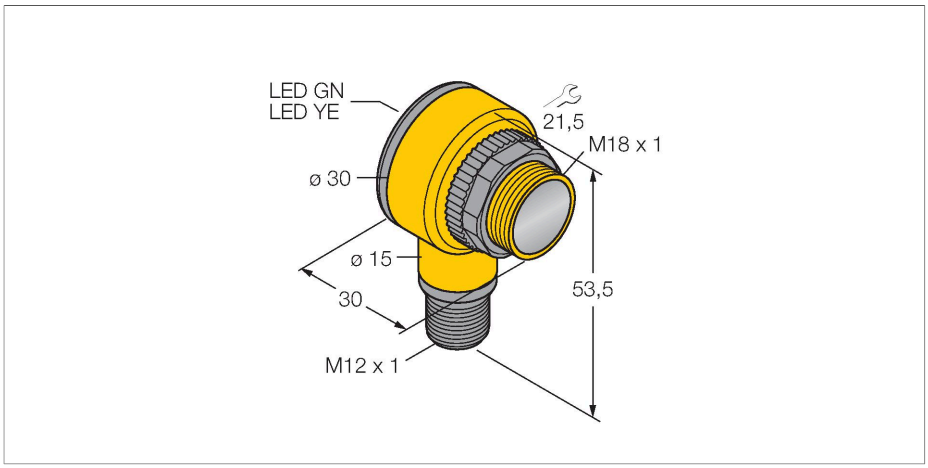
T18AW3FF100Q3
Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



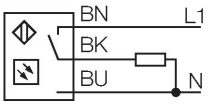
Technical data

Type	T18AW3FF100Q3
ID	3036924
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0…100 mm
Electrical data	
Operating voltage	20…250 VAC
AC rated operational current	≤ 200 mA
Output function	Light operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Tube, T18
Dimensions	Ø 18 x 30 x 30 x 54 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1, PVC
Number of cores	5
Ambient temperature	-40…+70 °C
Protection class	IP67 IP69
Special features	Chemical-resistant Encapsulated

Features

- M12 × 1 male, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40…+70 °C

Wiring diagram

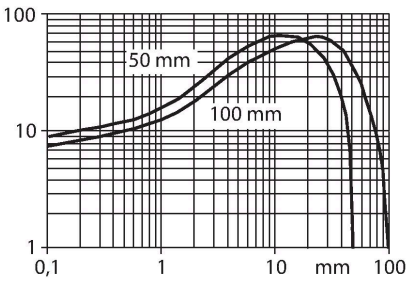


Functional principle

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

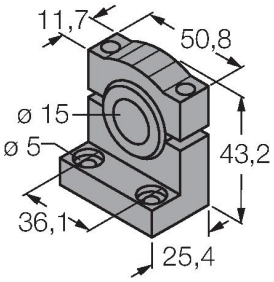


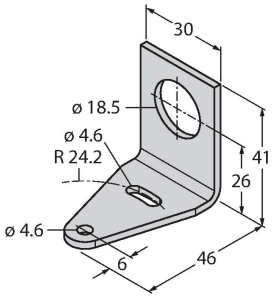
T18AW3FF100Q3| 19-01-2022 03-32 | Technical modifications reserved

Technical data

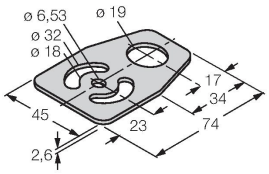
	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL, CSA

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

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