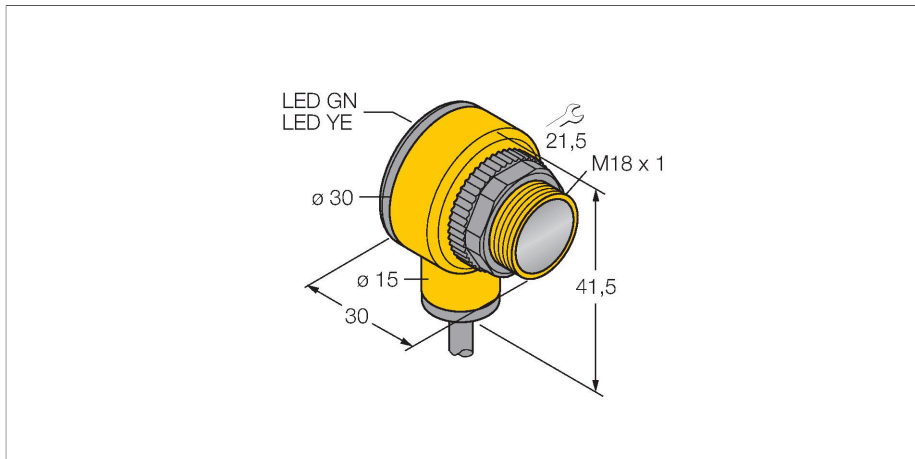


# T18AW3FF100 W/30

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



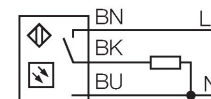
### Technical data

Type	T18AW3FF100 W/30
ID no.	3033925
<b>Optical data</b>	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0...100 mm
<b>Electrical data</b>	
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
<b>Mechanical data</b>	
Design	Rectangular with thread, T18
Dimensions	Ø 18 x 30 x 30 x 41.5 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	3
Core cross-section	0.5 mm <sup>2</sup>
Ambient temperature	-40...+70 °C
Protection class	IP67 IP69

### Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C

### Wiring diagram

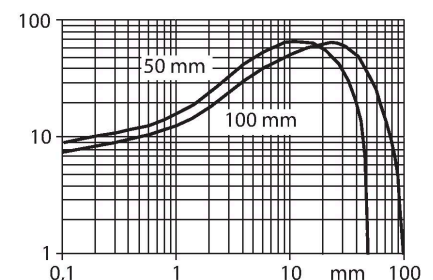


### Functional principle

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



## Technical data

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

## Accessories

<p><b>SMB1815SF</b></p>	<p><b>3053279</b></p> <p>Mounting bracket, PBT black, for PICO-GUARD points</p>	<p><b>SMB18A</b></p>	<p><b>3033200</b></p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread</p>
<p><b>SMB18FM</b></p>	<p><b>3079421</b></p> <p>mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread</p>	<p><b>SMBAMS18P</b></p>	<p><b>3073134</b></p> <p>Mounting bracket, stainless steel, for sensors with 18 mm thread</p>