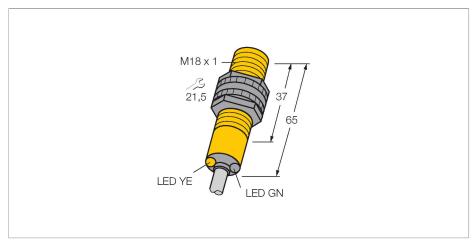
# S18AW3FF25 Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression





#### Technical data

Туре	S18AW3FF25
ID no.	3058416
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	025 mm
Electrical data	
Operating voltage	20250 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	Threaded barrel, S18
Dimensions	Ø 18 x 65 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	3
Core cross-section	0.5 mm²
Ambient temperature	-40+70 °C
Protection class	IP67

IP69

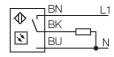
#### **Features**

Cable, 2 m

■Protection class IP67

■Ambient temperature: -40...+70 °C

### Wiring diagram

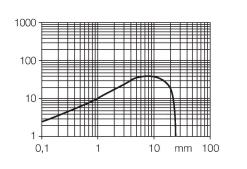


# Functional principle

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



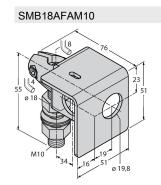


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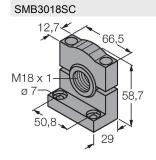
Special features	Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL, CSA

## Accessories

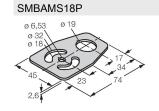
SMB18A	3033200
Ø 18.5 Ø 4.6 R 24.2 Ø 4.6 O 4.6	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread



3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm



3053952 Mounting bracket, PTB black, for sensors with 18 mm thread



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