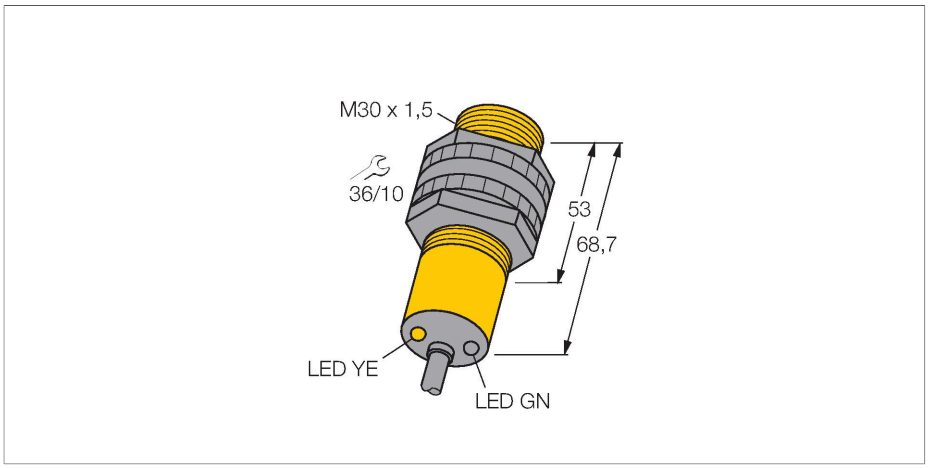
S30SN6FF200
Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



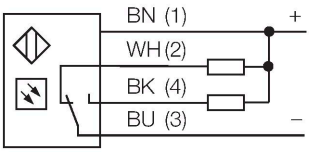
Technical data

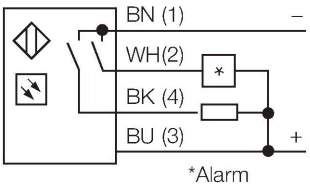
Type	S30SN6FF200
ID	3032329
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0…200 mm
Electrical data	
Operating voltage	10…30 VDC
No-load current	≤ 35 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Tube, S30
Dimensions	Ø 30 x 68.7 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm²

Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40…+70 °C
- Operating voltage: 10…30 VDC
- NPN switching output, changeover

Wiring diagram



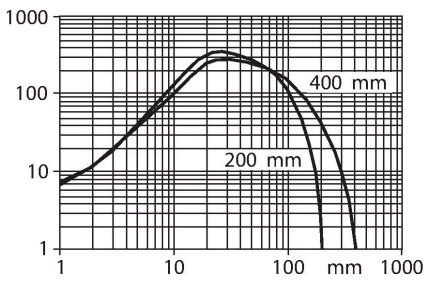


Functional principle

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

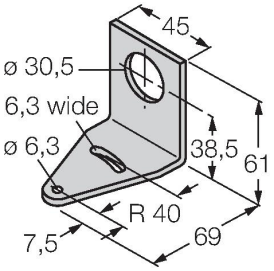


Technical data

Ambient temperature	-40…+70 °C
Protection class	IP67
Special features	Encapsulated
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, CSA

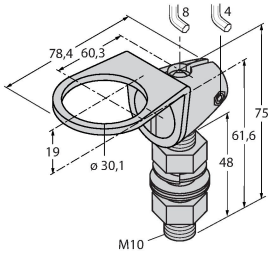
Accessories

SMB30A 3032723



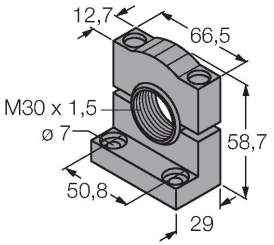
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10 3011185



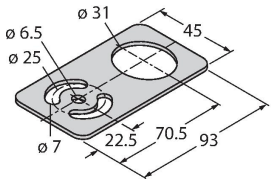
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC 3052521



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

SMBAMS30P 3073135



Mounting bracket, stainless steel, for sensors with 30 mm thread