

S30SN6FF400 W/30

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

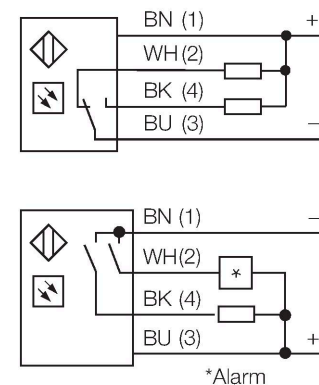
Technical data

Type	S30SN6FF400 W/30
ID no.	3033887
Optical data	
Function	Diffuse mode sensor with fixed-field background suppression
Light type	IR
Wavelength	880 nm
Range	0...400 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, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Threaded barrel, S30
Dimensions	Ø 30 mm
Housing material	Plastic, PBT
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP67
Special features	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	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL, CSA

Features

- Cable, 9 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram

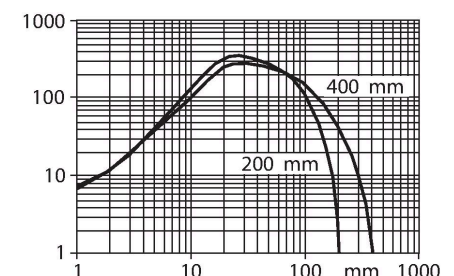


Functional principle

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

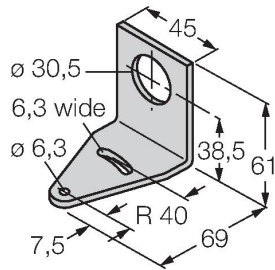
Excess gain in relation to the distance



Accessories

SMB30A

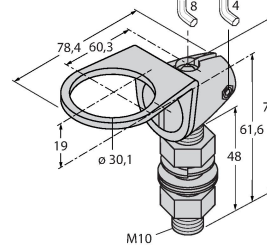
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Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10

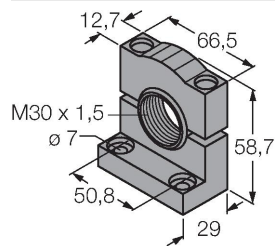
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Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC

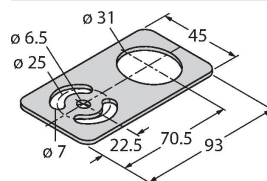
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Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

SMBAMS30P

3073135



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