

## S30AW3FF100Q1 Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression

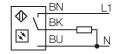
Technical data	
Туре	S30AW3FF100Q1
ID	3042610
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0100 mm
Electrical data	
Operating voltage	20250 VAC
AC rated operational current	≤ 200 mA
Output function	Light operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Tube, S30
Dimensions	Ø 30 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, 1/2", PVC
Number of cores	4
Ambient temperature	-40+70 °C
Protection class	IP69
Special features	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



## **Features**

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

## Wiring diagram

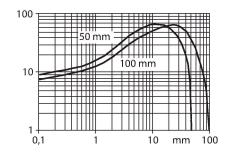


## Functional principle

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



3032723

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



3011185

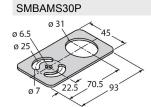
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm



29

3052521

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



3073135

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