

S18AW3DQ3

Photoelectric Sensor – Diffuse Mode Sensor



Technical data

Type	S18AW3DQ3
ID	3036873
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	880 nm
Range	0...100 mm
Electrical data	
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
Mechanical data	
Design	Tube, S18
Dimensions	Ø 18 x 78.7 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1, PVC
Number of cores	5
Ambient temperature	-40...+70 °C
Protection class	IP67 IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green

Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Selectable light/dark operation or light operation with alarm function

Wiring diagram

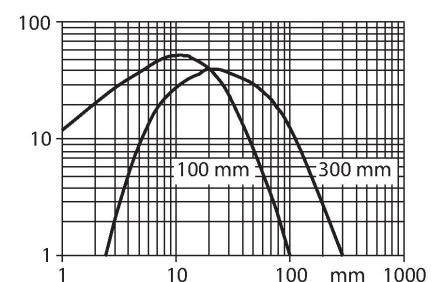


Functional principle

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



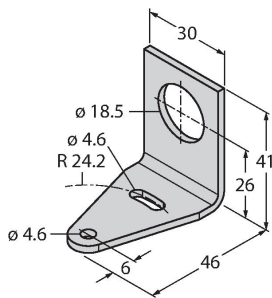
Technical data

Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

Accessories

SMB18A

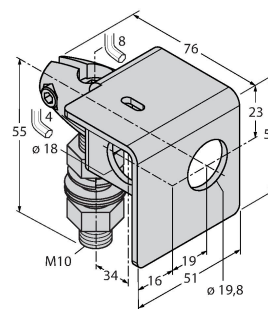
3033200



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

SMB18AFAM10

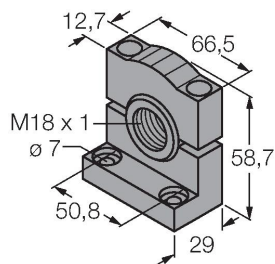
3012558



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

SMB3018SC

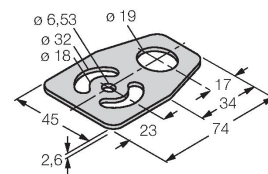
3053952



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

SMBAMS18P

3073134



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