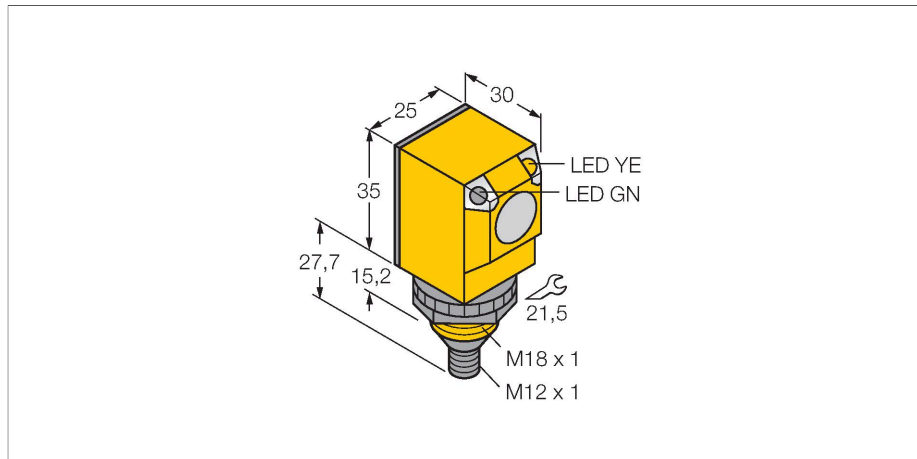


Q25RW3FF100Q1

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



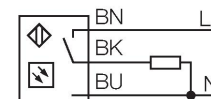
Technical data

Type	Q25RW3FF100Q1
ID	3031923
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
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	Dark operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Rectangular, Q25
Dimensions	Ø 18 x 30 x 25 x 62.7 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	Chemical-resistant Encapsulated

Features

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

Wiring diagram

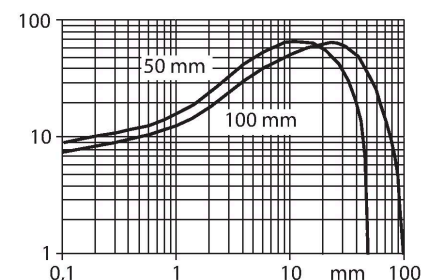


Functional principle

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



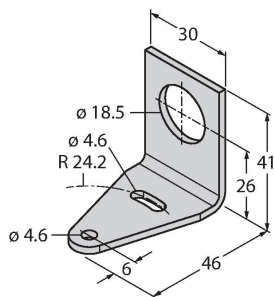
Technical data

	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

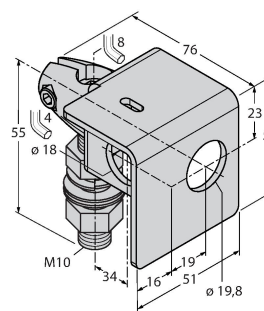
3033200



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

SMB18AFAM10

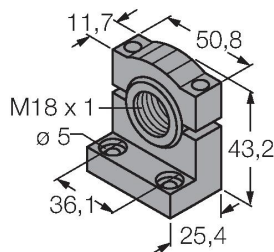
3012558



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

SMB18SF

3052519



Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable