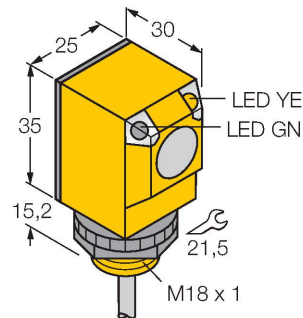


Q25SN6FF50 W/30

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



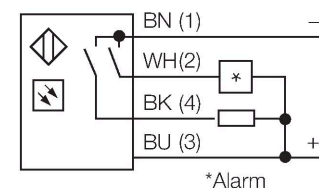
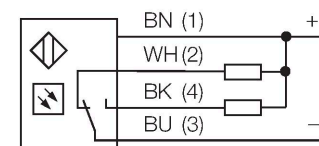
Technical data

Type	Q25SN6FF50 W/30
ID no.	3033869
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0...50 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	Rectangular, Q25
Dimensions	Ø 18 x 30 x 25 x 50.2 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²

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

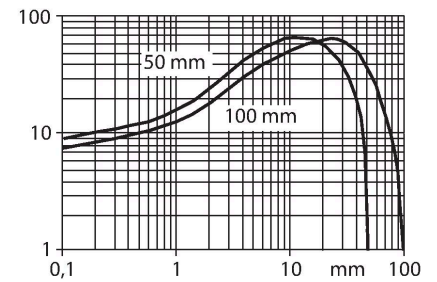
The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

Excess gain curve

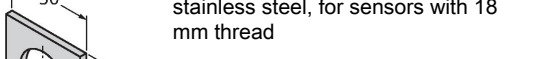
Excess gain in relation to the distance

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

SMB18A  Technical drawing of the SMB18A mounting bracket. It is a rectangular bracket made of stainless steel. The drawing shows a side view with dimensions: a vertical leg of 30 mm, a horizontal leg of 46 mm, and a total height of 41 mm. The horizontal leg has a circular hole with a diameter of 18.5 mm and a smaller hole with a diameter of 4.6 mm. The vertical leg has a hole with a diameter of 4.6 mm. The bracket is designed for sensors with an 18 mm thread.	3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread
SMB18SF  Technical drawing of the SMB18SF mounting bracket. It is a black PBT bracket designed for sensors with an 18 mm thread. The drawing shows a side view with dimensions: a vertical leg of 50.8 mm, a horizontal leg of 36.1 mm, and a total height of 43.2 mm. The horizontal leg has a circular hole with a diameter of 18 mm. The bracket is rotatable.	3052519 Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable