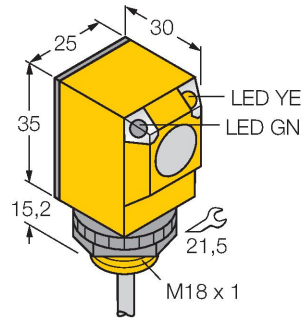


Q25SP6R

Photoelectric Sensor – Opposed Mode Sensor (Receiver)



Technical data

Type	Q25SP6R
ID	3031928
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0...20000 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, PNP
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, Polycarbonate
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²
Ambient temperature	-40...+70 °C
Protection class	IP69
Special features	Chemical-resistant

Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

Wiring diagram



Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions. Excess gain curve
Excess gain in relation to the distance

Technical data

	Encapsulated 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	
Approvals	CE, UL, CSA



Accessories

SMB18A

3033200

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

Technical drawing of the SMB18A mounting bracket. It is a rectangular bracket with a 18 mm diameter hole for the sensor. Dimensions include a total width of 30 mm, a mounting hole diameter of 18.5 mm, a central hole diameter of 4.6 mm, a radius of R24.2, a base width of 46 mm, and a base thickness of 6 mm. The bracket is made of stainless steel.

SMB18AFAM10

3012558

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

Technical drawing of the SMB18AFAM10 mounting bracket. It is a rectangular bracket with an M10 x 1.5 thread. Dimensions include a total width of 76 mm, a mounting hole diameter of 18 mm, a central hole diameter of 4 mm, a base width of 51 mm, and a base thickness of 16 mm. The bracket is made of material VA 1.4401.

SMB18SF

3052519

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

Technical drawing of the SMB18SF mounting bracket. It is a rectangular bracket with an M18 x 1 thread. Dimensions include a total width of 50.8 mm, a mounting hole diameter of 18 mm, a central hole diameter of 5 mm, a base width of 43.2 mm, and a base thickness of 25.4 mm. The bracket is made of PBT black and is rotatable.