S18SN6RQ
Photoelectric Sensor – Opposed Mode Sensor (Receiver)
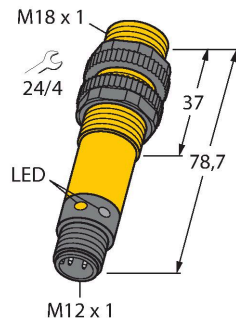


Technical data

Type	S18SN6RQ
ID no.	3029506
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0…20000 mm
Electrical data	
Operating voltage	10…30 VDC
DC rated operational current	≤ 150 mA
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	Threaded barrel, S18
Dimensions	Ø 18 x 78.7 mm
Housing material	Plastic, Thermoplastic material
Lens	Lexan, Polycarbonate
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40…+70 °C
Protection class	IP67 IP69

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
- Operating voltage: 10…30 VDC
- NPN switching output, changeover

Wiring diagram
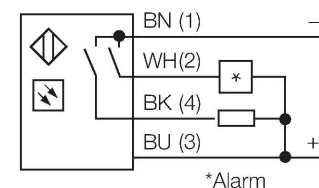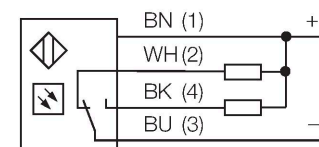
Functional principle

Opposed mode sensors are composed of an emitter and a receiver, both separately housed. When installed, the emitter light should directly aim at the receiver. If 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. Large distance operation is possible due to an excellent light/dark contrast and an extremely high excess gain. Even in case of dirt build-up on the lens or misalignment the sensor type works reliably.

S18SN6RQ | 05-05-2021 21-37 | Technical modifications reserved

Technical data

Special features	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
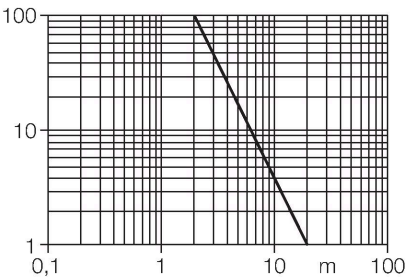
Accessories

SMB18A	3033200

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

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

Accessories

Dimension drawing	Type	ID no.	
	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com