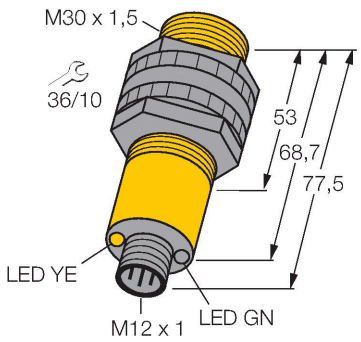
S30SN6REQ
Photoelectric Sensor – Opposed Mode Sensor (Receiver)



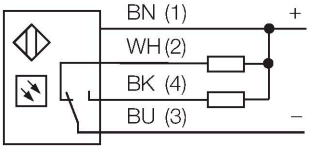
Technical data

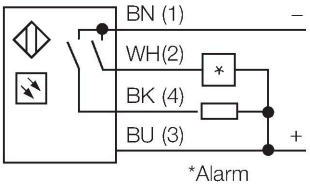
Type	S30SN6REQ
ID no.	3037086
Optical data	
Function	Opposed mode sensor (receiver)
Range	0…60000 mm
Electrical data	
Operating voltage	10…30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Threaded barrel, S30
Dimensions	Ø 30 x 77.5 mm
Housing material	Plastic, PBT
Lens	plastic, Lexan
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40…+70 °C
Protection class	IP69
Special features	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow

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

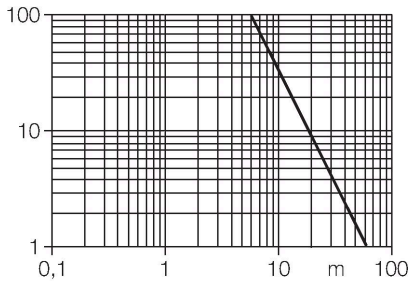
Wiring diagram





Functional principle

Opposed mode sensors 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 extremly 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

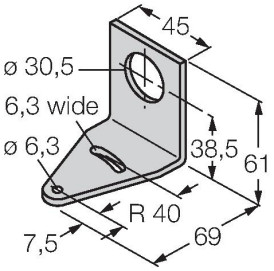


Technical data

Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, UL, CSA

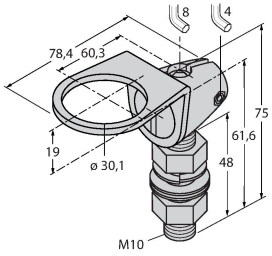
Accessories

SMB30A	3032723



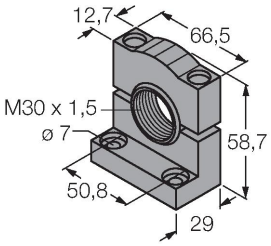
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10	3011185



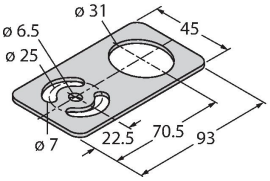
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC	3052521



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

SMBAMS30P	3073135



Mounting bracket, stainless steel, for sensors with 30 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