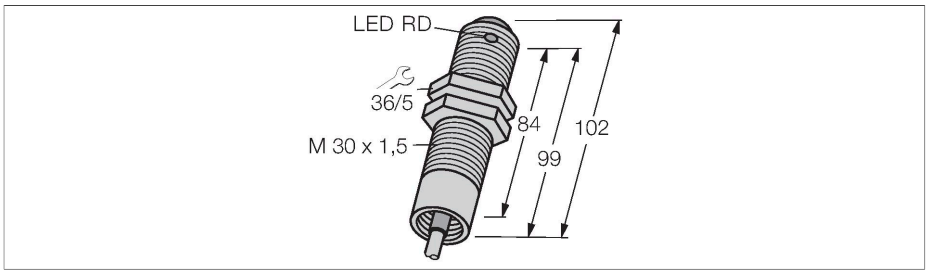
SM30SRLMC1 W/30
Photoelectric Sensor – Opposed Mode Sensor (Receiver)



Technical data

Type	SM30SRLMC1 W/30
ID	3070987
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0…150000 mm
Electrical data	
Operating voltage	10…30 VDC
No-load current	≤ 10 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, PNP/NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 0 ms
Response time typical	< 10 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Tube, SM30
Dimensions	Ø 30 x 102 mm
Housing material	Metal, Stainless steel
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	4
Core cross-section	0.5 mm^2
Ambient temperature	-40…+70 °C
Protection class	IP67
Special features	Chemical-resistant
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED

Features

- Cable, 9 m
- Protection class IP67
- Ambient temperature: -40…+70 °C
- Modulation frequency A, requires transmitters with the same frequency
- Operating voltage 10…30 VDC
- Bi-modal switching output (NPN or PNP, depending on connection)

Functional principle

Opposed mode sensors consist of an emitter and a receiver. They are installed opposite to each other whereby the emitted light aims 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 objects. The excellent light/dark contrast and the very high excess gain are typical for this function mode and enable operation over large distances and under difficult conditions.
Excess gain curve
Excess gain in relation to distance

Technical data

Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, cURus, CSA