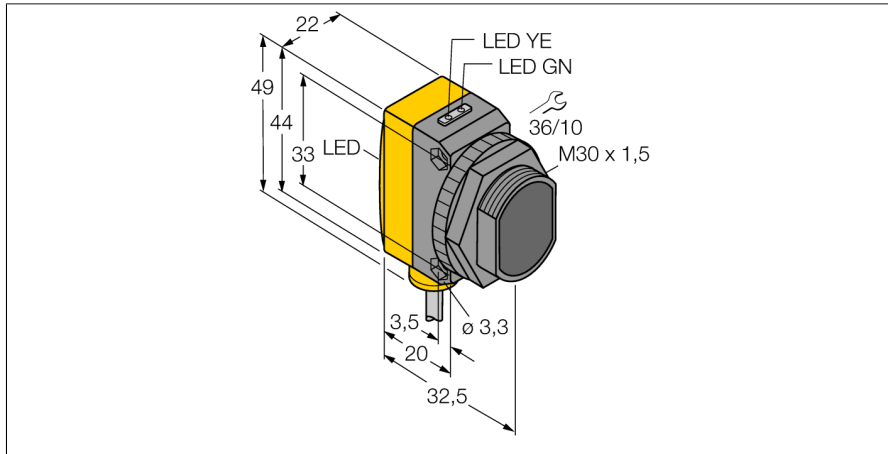


Photoelectric Sensor Opposed Mode Sensor (Emitter/Receiver) QS30RRXQPMA



Type	QS30RRXQPMA
ID	3072063

Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Wavelength	875 nm
Range	0...213000 mm

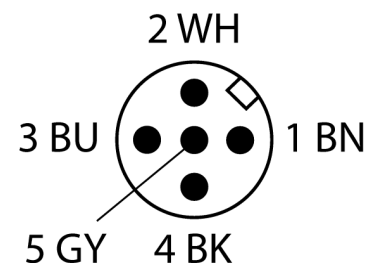
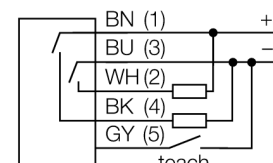
Electrical data	
Operating voltage U_s	10...30 VDC
Residual ripple	< 10 % U_s
DC rated operating current I_s	≤ 150 mA
No-load current I_0	≤ 22 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, dark operation, PNP/NPN
Switching frequency	≤ 100 Hz
Readiness delay	≤ 100 ms
Response time typical	< 5 ms

Mechanical data	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 35 x 22 x 49 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Zeonex
Electrical connection	Cable with connector, M12 x 1, 0.15 m, PUR
Number of cores	5
Ambient temperature	-20...+70 °C
Protection class	IP67

Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	Bargraph, red, flashing

- Cable with male end M12 x 1, 5-pin, PUR, 150 mm
- Protection class IP67
- LED all-round visible
- Selectable operating frequency, protection against crosstalk
- 4-segment bargraph
- Operating voltage: 10...30 VDC
- Switching output, bipolar, dark operation

Wiring Diagram



Functional principle

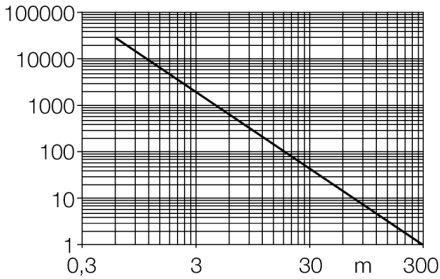
Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Large distance operation is

Tests/approvals	
MTTF	293 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

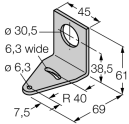
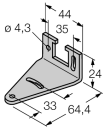
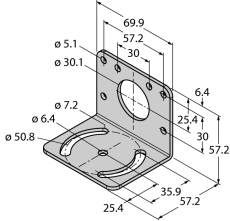
possible due to an excellent light/dark contrast and an extremely high excess gain.

Excess gain curve

Excess gain in relation to the distance



Accessories

Type code	Ident no.		Dimension drawing
SMB30A	3032723	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread	
SMBQS30L	3002809	Mounting bracket, stainless steel, for QS30 series	
SMB30MM	3027162	Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment	
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable	