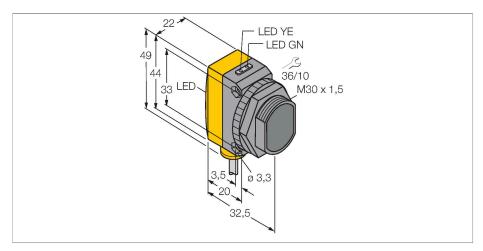


# QS30RQPMA Photoelectric Sensor – Opposed Mode Sensor (Emitter)





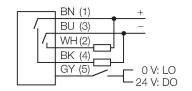
Туре	QS30RQPMA
ID	3073080
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Light type	IR
Wavelength	875 nm
Range	060000 mm
Electrical data	
Operating voltage	1030 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 150 mA
No-load current	≤ 70 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
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, Acrylic
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PUR
Number of cores	5
Ambient temperature	-20+70 °C

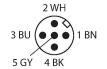


#### **Features**

- Cable with male end M12 × 1, 5-pin, PUR, 150 mm
- ■Protection class IP67
- ■LED all-round visible
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation

## Wiring diagram





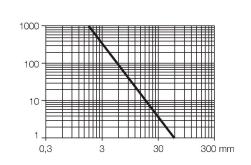
#### Functional principle

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

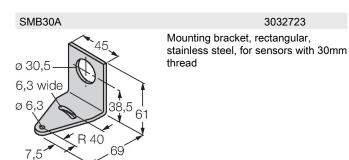
Excess gain curve Excess gain in relation to the distance

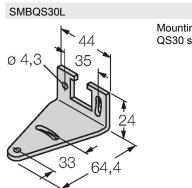
# Technical data

Protection class	IP67		
Power-on indication	LED, Green		
Switching state	LED, Yellow		
Error indication	LED, green, Flashing		
Excess gain indication	LED, yellow		
Tests/approvals			
MTTF	402 years acc. to SN 29500 (Ed. 99) 40 °C		
Approvals	CE		

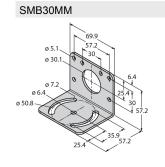


#### Accessories



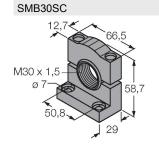


3002809 Mounting bracket, stainless steel, for QS30 series



Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment

3027162



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

3052521

### Accessories

Dimension drawing	Туре	ID	
0 15 M12 x 1 26.5 32 — 5 5 5 5	WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com



 Dimension drawing
 Type
 ID

 RKC4.5T-2/TEL
 6625016



Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com