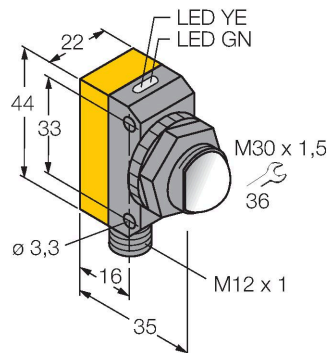


# QS30RRXQ

## Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)



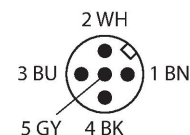
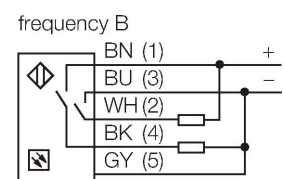
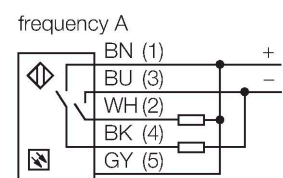
### Technical data

Type	QS30RRXQ
ID no.	3071741
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Receiver
Wavelength	875 nm
Range	0...213000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
No-load current	≤ 22 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, dark operation, PNP/NPN
Switching frequency	≤ 16 Hz
Readiness delay	≤ 100 ms
Response time typical	< 5 ms
<b>Mechanical data</b>	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 35 x 22 x 57 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Zeonex
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	5
Ambient temperature	-20...+70 °C

### Features

- Male M12 × 1, 5-pin
- Protection classes IP67 / IP69K
- 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

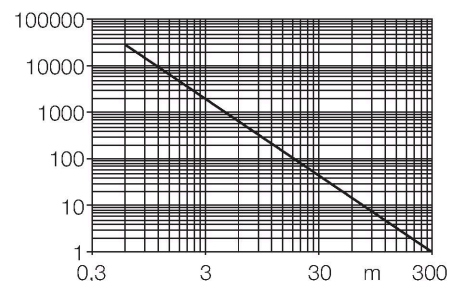
Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the

## Technical data

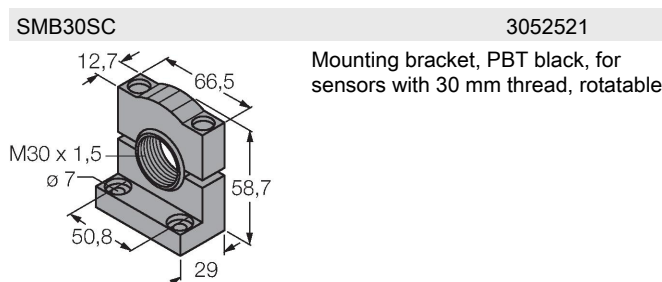
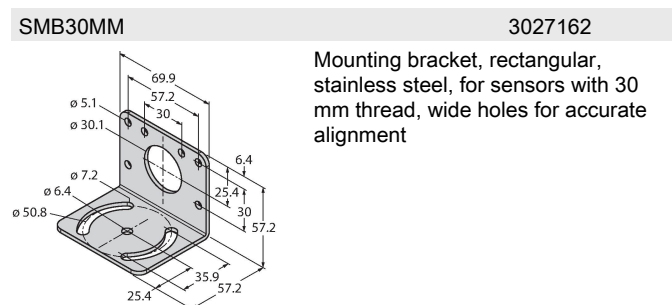
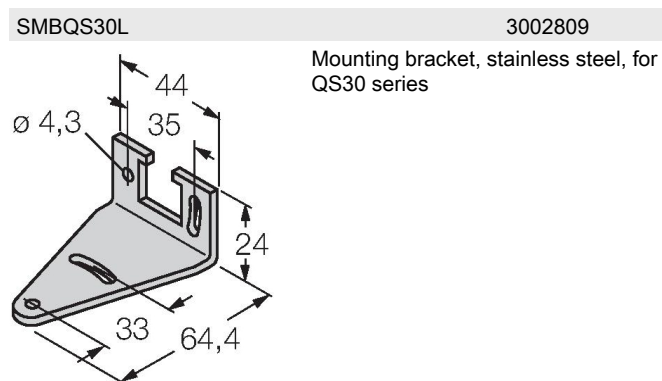
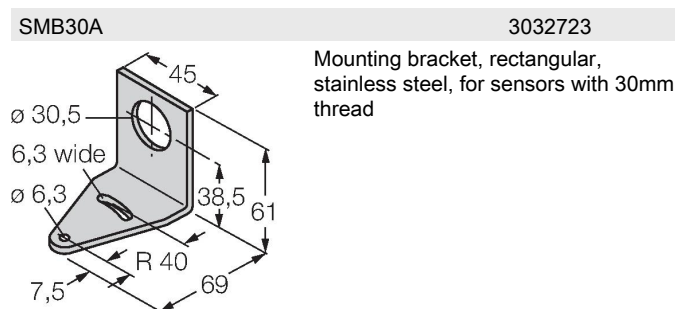
Protection class	IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	Bargraph, red, flashing
<b>Tests/approvals</b>	
MTTF	293 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

sensor switches. Large distance operation is possible due to an excellent light/dark contrast and an extremely high excess gain.

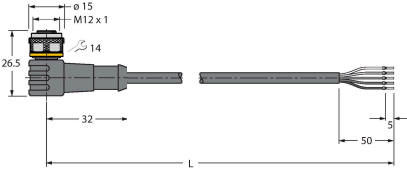
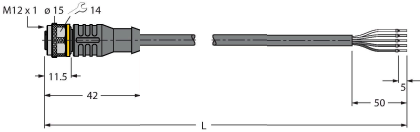
Excess gain curve  
Excess gain in relation to the distance



## Accessories



Accessories

Dimension drawing	Type	ID no.	
	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 <a href="http://www.turck.com">www.turck.com</a>
	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 <a href="http://www.turck.com">www.turck.com</a>