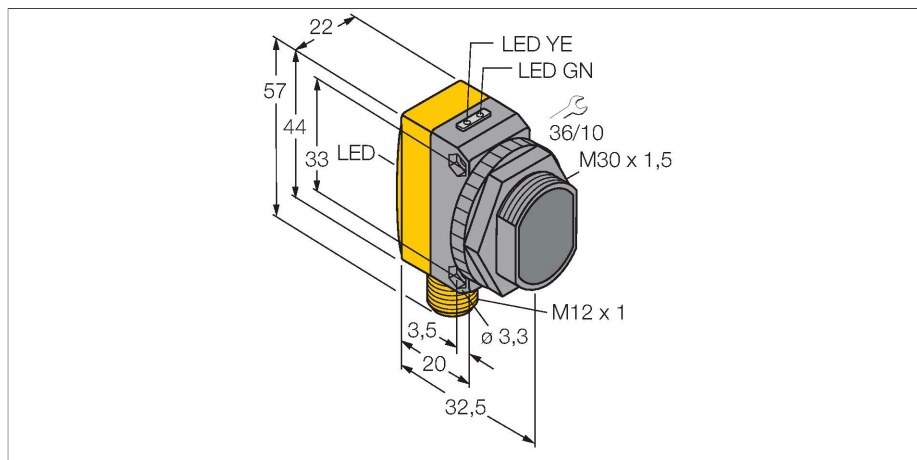


QS30EQ

Photoelectric Sensor – Opposed Mode Sensor (Emitter)



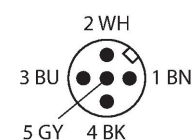
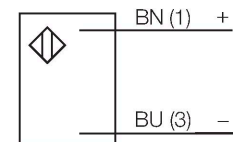
Technical data

Type	QS30EQ
ID no.	3073082
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	875 nm
Range	0...60000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 70 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 100 ms
Response time typical	< 5 ms
Mechanical data	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 35 x 22 x 57 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	5
Ambient temperature	-20...+70 °C
Protection class	IP67
Power-on indication	LED, Green
Error indication	LED, green

Features

- Male M12 × 1, 5-pin
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC

Wiring diagram



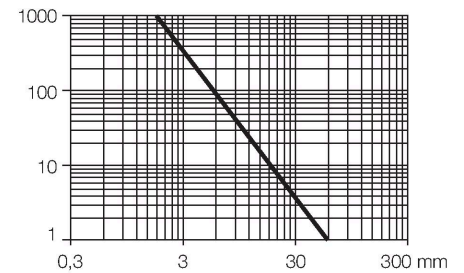
Functional principle

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

Excess gain indication	LED
Tests/approvals	
MTTF	402 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	
	CE



Accessories

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

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 www.turck.com
	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