

QS30EXQ Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Technical data

Туре	QS30EXQ	
ID no.	3071561	
Optical data		
Function	Opposed mode sensor	
Operating mode	Emitter	
Light type	IR	
Wavelength	875 nm	
Range	0213000 mm	
Electrical data		
Operating voltage	1030 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	< 30 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, Zeonex	
Electrical connection	Connectors, M12 × 1, PVC	
Number of cores	5	
Ambient temperature	-20+60 °C	
Protection class	IP69	
Special features	Encapsulated Wash down	



Features

- Male M12 × 1, 5-pin
- Protection classes IP67 / IP69K
- LED all-round visible
- Selectable operating frequency, protection against crosstalk
- Emitter LED, switchable
- Operating voltage: 10...30 VDC

Wiring diagram



frequency B BN (1) ∕⊅ BU (3) WH (2)





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.



Technical data

Excess gain curve Excess gain in relation to the distance

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



Accessories

SMB30A	3032723	SMBQS30L	3002809
ø 30,5 6,3 wide ø 6,3 7,5 R 40 69	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread	ø 4,3 ø 4,3 35 24 33 64,4	Mounting bracket, stainless steel, for QS30 series
SMB30MM	3027162	SMB30SC	3052521
69.9 57.0 0.0,1 0.0,0 0.0,0 0.0,0 0.0,0 0,0,0,0 0,0,0,0 0,0,0,0 0,0,0,0 0,0,0,0,0 0,0,0,0,0,0 0,	Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment	12,7 66,5 07 50,8 29	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable
Dimension drawing	Time	ID no	
Dimension drawing		ID no.	Connection achieves (M40) acceled
265 32 t	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
M12x1 015 2 14	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