

QS303EQPMA Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Technical data

Туре	QS303EQPMA
ID no.	3073071
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	875 nm
Range	060000 mm
Electrical data	
Operating voltage	12250 VDC
Operating voltage	24250 VAC
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	< 15 ms
Mechanical data	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 51.5 x 22 x 44 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable with connector, 1/2", 0.15 m, PUR
Number of cores	5
Ambient temperature	-20+70 °C
Protection class	IP67
Power-on indication	LED, Green



Features

- Cable with male end M12 × 1, 5-pin, PUR,
- 150 mm
- Protection class IP67
- LED all-round visibleOperating 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



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Error indication	LED, green	1000
Excess gain indication	LED	
Tests/approvals		100
MTTF	402 years acc. to SN 29500 (Ed. 99) 40 °C	10
Approvals	CE	



Accessories

SMBQS30Y



3002811 Protective housing, stainless steel, for QS30 series

ø 3,3 56 40 R 3 18 M18 x 1 2 50 27,5

SMBQS30YL

3072741 Protective housing with safety glas

panel, stainless steel, for QS30 series

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