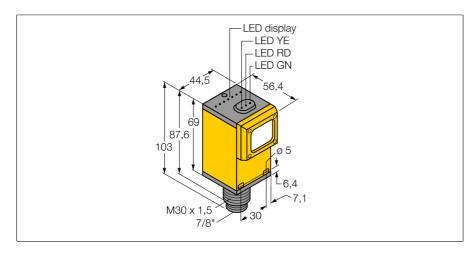


Photoelectric Sensor Opposed Mode Sensor (Emitter/Receiver) Q45VR2RFDQ

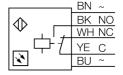


O45VP2PEDO

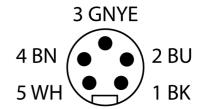
-	Male	connector	7/8"

- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage: 90...250 VAC
- Relay output, changeover (SPDT)
- Light or dark operation, adjusted via selector switch

Wiring Diagram



Туре	Q45VR2RFDQ	
ID	3073325	
Optical data		
Function	Opposed mode sensor	
Operating mode	Receiver	
Range	060000 mm	
Electrical data		
Operating voltage U₅	90250VAC	
No-load current I₀	≤ 50 mA	
Output function	Complementary contact, Relay output	
Readiness delay	≤ 100 ms	
Response time typical	< 15 ms	
Setting option	Potentiometer	
Mechanical data		
Design	Rectangular, Q45	
Dimensions	Ø 30 x 56.4 x 44.5 x 101.6 mm	
Housing material	Plastic, Thermoplastic material	
Lens	plastic, Acrylic	
Electrical connection	Connector, 7/8", PVC	
Number of cores	5	
Ambient temperature	-40+70 °C	
Protection class	IP67	
Special features	keep/defer	
Power-on indication	· · · · · · · · · · · · · · · · · · ·	
Switching state	LED, Yellow	
Error indication	LED, green	
Excess gain indication	LED, red	
Tests/approvals		
MTTF	F 67 years acc. to SN 29500 (Ed. 99) 40 °C	
Approvals	CE, cURus, CSA	



Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite 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. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremly high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

Excess gain curve

Excess gain in relation to the distance



Accessories

Type code	Ident no.		Dimension drawing
SMB30A	3032723	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread	o 30,5 6,3 wide o 6,3 7,5 R 40 69
SMB30FAM10	3011185	Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm	78.4 60.3 78.4 60.3 19 0 30.1 48
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread rotatable	12.7 66.5 M30 x 1,5 67. 58.7 50.8