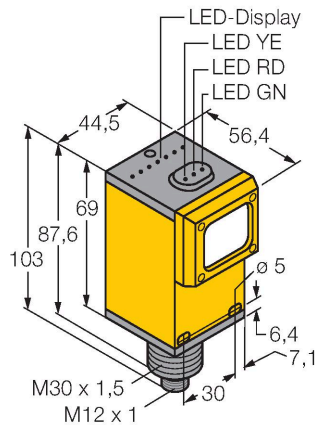


Q453EFQ

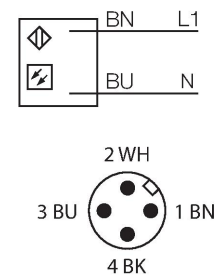
Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Features

- Male M12 × 1
- Protection class IP67
- Operating voltage: 12...250 VDC or 24...250 VAC

Wiring diagram

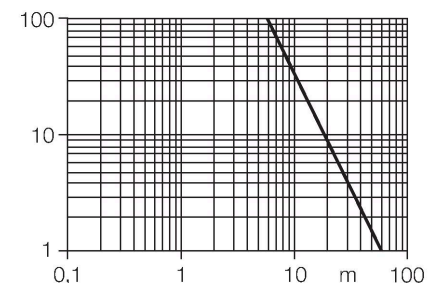


Technical data

Type	Q453EFQ
ID no.	3073326
Optical data	
Function	Opposed mode sensor (emitter)
Light type	IR
Wavelength	880 nm
Range	0...6000 mm
Electrical data	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
No-load current	≤ 50 mA
Mechanical data	
Design	Rectangular, Q45
Dimensions	56.4 x 44.5 x 102.6 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connectors, 7/8", PVC
Number of cores	3
Ambient temperature	-25...+55 °C
Relative humidity	0...90 %
Protection class	IP67
Special features	keep/defer
Power-on indication	LED, Green
Excess gain indication	LED
Tests/approvals	
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C

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 extremely 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

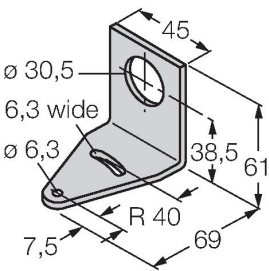


Technical data

Approvals	CE, cURus, CSA
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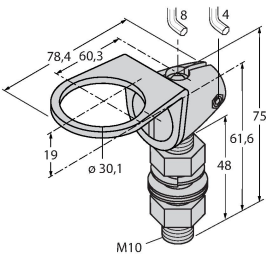
Accessories

SMB30A	3032723
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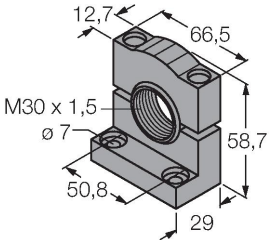
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10	3011185
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Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC	3052521
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Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable