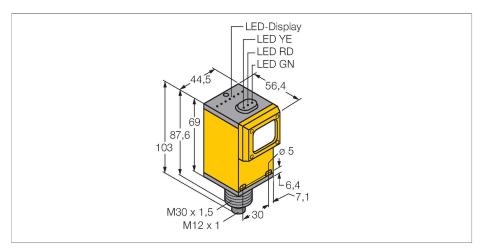


Q453EFQ Photoelectric Sensor – Opposed Mode Sensor (Emitter)



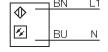
Technical data

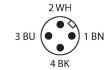
Туре	Q453EFQ
ID	3073326
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	880 nm
Range	06000 mm
Electrical data	
Operating voltage	12250 VDC
Operating voltage	24250 VAC
No-load current	≤ 50 mA
Mechanical data	
Design	Rectangular, Q45
Dimensions	56.4 x 44.5 x 102.6 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, 7/8", PVC
Number of cores	3
Ambient temperature	-25+55 °C
Relative humidity	090 %
Protection class	IP67
Special features	keep/defer
Power-on indication	LED, Green
Excess gain indication	LED

Features

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

Wiring diagram

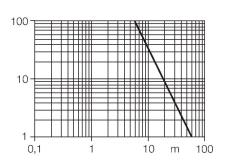




Functional principle

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

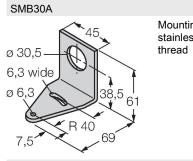




Technical data

Tests/approvals	
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus, CSA

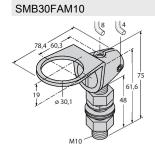
Accessories



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

3032723

3052521



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

3011185



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