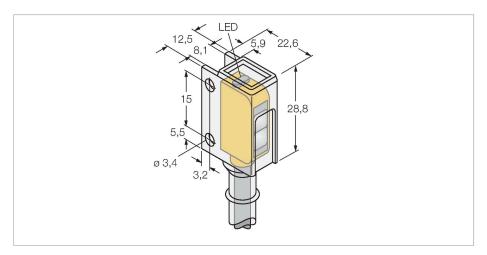


Q12AB6RCR Photoelectric Sensor – Opposed Mode Sensor (Emitter/ Receiver) Miniature Sensor



Technical data

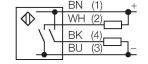
Туре	Q12AB6RCR
ID no.	3076486
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Wavelength	640 nm
Range	02000 mm
Electrical data	
Operating voltage	1030 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 50 mA
No-load current	≤ 20 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, light operation, PNP/NPN
Switching frequency	≤ 450 Hz
Readiness delay	≤ 120 ms
Response time typical	< 1.3 ms
Mechanical data	
Design	Rectangular, Q12
Dimensions	22.6 x 12.5 x 28.8 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Polycarbonate
Electrical connection	Cable, 2 m, PVC



Features

- ■Cable, PVC, 2 m
- Protection class IP67
- Chemical-proof PFA sheath
- ■LED all-round visible
- ■Indication of insufficient excess gain
- Operating voltage: 10...30 VDC
- Switching output, bipolar, light operation

Wiring diagram



Functional principle

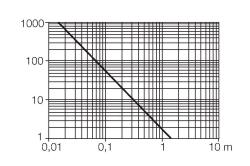
Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors 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



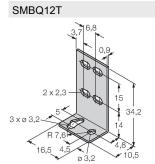
Technical data

Number of cores	3
Core cross-section	0.34 mm ²
Ambient temperature	-20+55 °C
Protection class	IP67
Special features	Chemical-resistant Resistant to chemicals
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green
Excess gain indication	LED, yellow, flashing
Tests/approvals	
Approvals	CE, cURus



Accessories

SMBQ12A	3074341
3 x o 3,2 5 3 34.2	Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series



Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series

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