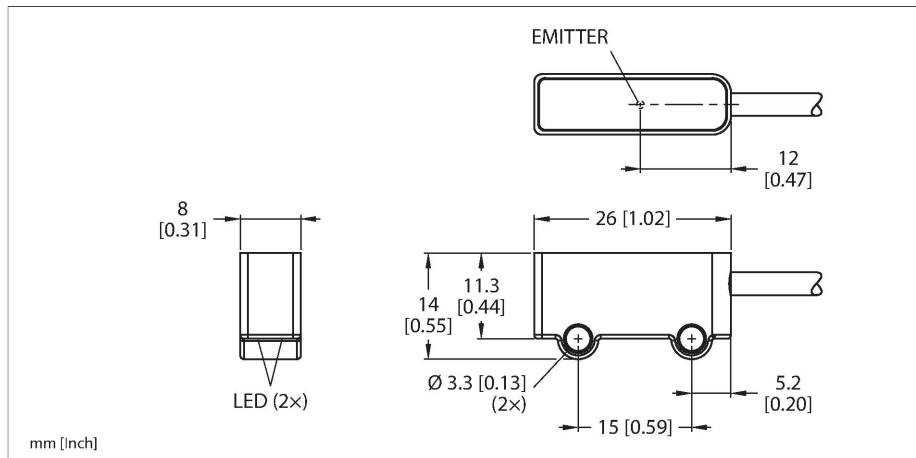


Q2XRNR-Q3

Photoelectric Sensor – Opposed Mode Sensor (Receiver)



Technical data

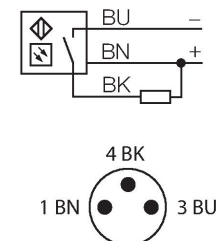
Type	Q2XRNR-Q3
ID	3813321
Optical data	
Function	Opposed mode sensor (receiver)
Range	0...3000 mm
Electrical data	
Operating voltage U_B	10...30 VDC
Residual ripple	< 10 % U_{ss}
DC rated operating current I_o	≤ 16 mA
Reverse polarity protection	yes
Output function	NPN
Readiness delay	≤ 120 ms
Response time typical	< 0.85 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, Q2X
Dimensions	14 x 31 mm
Housing material	Plastic, PC ABS
Lens	acrylic, Acrylic
Electrical connection	Cable with connector, M8 × 1, PVC
Number of cores	3
Ambient temperature	-25...+50 °C
Relative humidity	0...95 %
Protection class	IP67
Special features	Miniature Crosstalk protection
Power-on indication	LED, Green



Features

- Miniature sensor with slim housing for confined spaces
- Protection class IP67
- Connection via 150-mm PVC cable with M8 × 1 male connector, 3-pin
- Adjusted via potentiometer
- NPN switching output, dark operation

Wiring diagram



Functional principle

Opposed mode sensors consist of an emitter and a receiver. They are installed in such a way that the emitted light is aimed directly at the receiver. When an object interrupts or weakens the light beam, a switching operation is triggered. Opposed mode sensors are the most reliable photoelectric sensors for any application that requires the detection of opaque objects. High light/dark contrast and very high excess gain are typical of this operating mode and enable operation over long distances and under difficult conditions.

Technical data

Switching state	LED, Yellow
Excess gain indication	LED, yellow, flashing
Tests/approvals	
Approvals	CE, cURus

Accessories

SMBQ2XB	3812494	SMBQ2XA	3812493
	Mounting bracket, stainless steel, for Q2X design, L-shaped for wall mounting		Mounting bracket, stainless steel, for Q2X design, L-shaped for mounting on horizontal surfaces