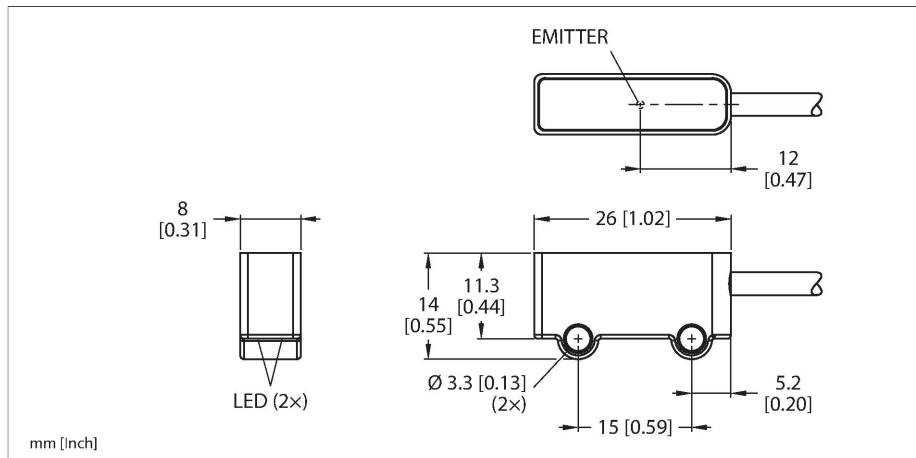


Q2XNAE-Q3

Photoelectric Sensor – Opposed Mode Sensor (Emitter)



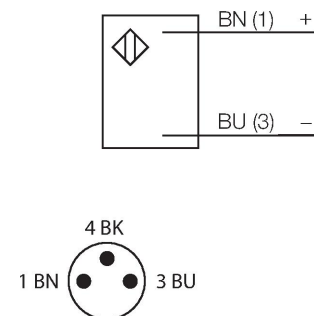
Technical data

Type	Q2XNAE-Q3
ID	3813316
Optical data	
Function	Opposed mode sensor (emitter)
Light type	Red
Wavelength	645 nm
Range	0...3000 mm
Electrical data	
Operating voltage U_B	10...30 VDC
Residual ripple	< 10 % U_{ss}
DC rated operating current I_a	≤ 16 mA
Reverse polarity protection	yes
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

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
- Operating voltage: 10...30 VDC

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

Power-on indication	LED, Green
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	