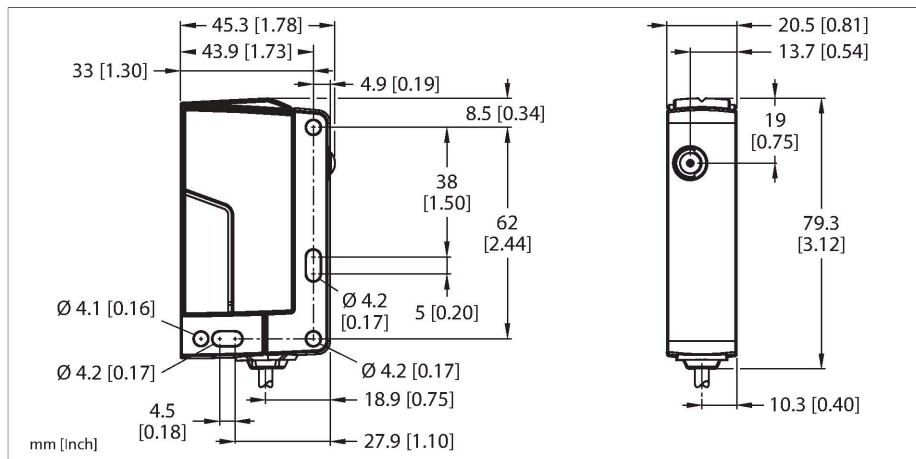


Q76E-VN-ZLVC-2M

Photoelectric Sensor – Retroreflective Light Barrier With Wide Light Beam



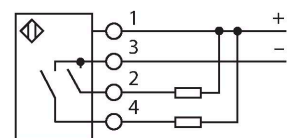
Technical data

Type	Q76E-VN-ZLVC-2M
ID	3808854
Optical data	
Function	Retroreflective Sensor
Reflector included in delivery	no
Light type	Red
Wavelength	620 nm
Optical resolution	19 mm
Range	400...4000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 15 % U _{ss}
Reverse polarity protection	yes
Output function	Complementary contact, NPN
Switching frequency	≤ 250 Hz
Readiness delay	≤ 300 ms
Response time typical	< 2 ms
Setting option	Push Button
Mechanical data	
Design	Rectangular, Q76
Dimensions	45.3 x 20.5 x 79.3 mm
Housing material	Plastic, PC PBT
Lens	plastic, PMMA
Electrical connection	Cable, 2 m
Number of cores	4

Features

- Protection class IP67/IP69
- 2-m PVC cable, 4-wire
- Range up to 4 m with reflector BRT-92X92CB
- Extra-wide light beam
- Operating voltage: 10...30 VDC
- Switching output, complementary contact, NPN
- ECOLAB-certified

Wiring diagram



Functional principle

Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. Retroreflective sensors feature some of the advantages of opposed mode sensors, such as good contrast and high excess gain. Furthermore, only one device has to be installed and wired. Devices without polarizing filter have a smaller sensing range and are more susceptible to disturbances caused by shiny objects. The Q76 product series is characterized by an extra-wide beam of light, which enables the edges of objects that are not standard shapes to be reliably detected. Various sensitivity settings facilitate operation in the area of material handling.

Technical data

Ambient temperature	-40...+60 °C
Storage temperature	-40...+70 °C
Protection class	IP67 IP69
Power-on indication	LED, Green
Switching state	LED, Yellow
Tests/approvals	
Approvals	ECOLAB
Approvals	CE cULus