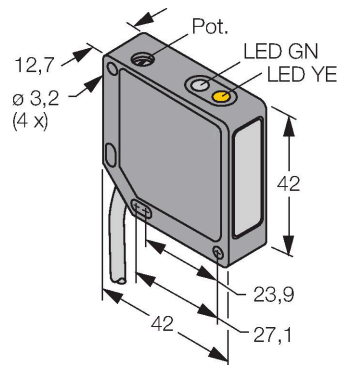


QM42VN6LP W/30'

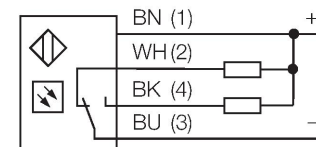
Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



Features

- Cable, PVC, 2 m, 4-wire
- Metal housing, ZN, black
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage 10...30 VDC
- NPN switching output
- Light/dark operation

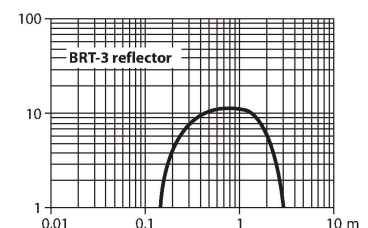
Wiring diagram



Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of disadvantage when shiny objects have to be detected.

Excess gain curve
Excess gain in relation to the distance



Technical data

Type	QM42VN6LP W/30'
ID	3056824
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	660 nm
Range	150...3000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
No-load current	≤ 30 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, NPN
Switching frequency	≤ 500 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 150 mA
Mechanical data	
Design	Rectangular, QM42
Dimensions	42 x 12.7 x 42 mm
Housing material	Metal, ZN, Black-finished
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4

Technical data

Core cross-section	0.5 mm ²
Ambient temperature	-20...+70 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, cURus

Accessories

SMB30SK3052523

Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/QMT42

Technical drawing of the SMB30SK mounting bracket. It shows a 3D perspective view of a black PBT bracket with a stainless steel mounting plate. Dimensions include: 12,7 mm for the top flange width, 66,5 mm for the top flange length, 66,5 mm for the mounting plate width, 38 mm for the mounting plate length, 50,8 mm for the base width, 58,7 mm for the base height, and a hole diameter of 7 mm. The base has a width of 29 mm.

SMB46S3048748

Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42

Technical drawing of the SMB46S mounting bracket. It shows a 3D perspective view of a stainless steel bracket. Dimensions include: 16 mm for the top flange width, 65 mm for the top flange length, 16 mm for the mounting plate width, 36 mm for the mounting plate length, 54 mm for the base width, 27 mm for the base height, and a hole diameter of 2 mm.

SMB46L3048747

Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42

Technical drawing of the SMB46L mounting bracket. It shows a 3D perspective view of a stainless steel bracket. Dimensions include: 16 mm for the top flange width, 65 mm for the top flange length, 16 mm for the mounting plate width, 36 mm for the mounting plate length, 54 mm for the base width, 27 mm for the base height, and a hole diameter of 2 mm.

Accessories

Dimension drawing	Type	ID	
Technical drawing of the BRT-3 round reflector. It shows a top view and a side view. The top view is a circle with a diameter of 81 mm [3.19]. The side view shows a thickness of 7 mm [0.28]. The center hole has a diameter of 5.2 mm [0.21].	BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C