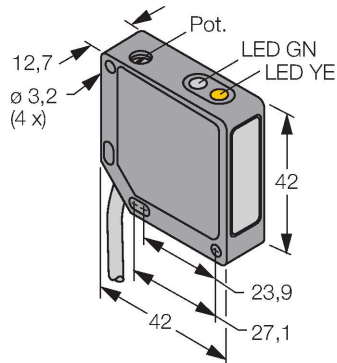


QM42VN6D

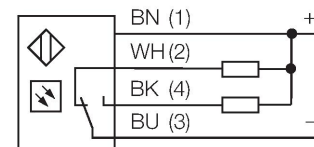
Photoelectric Sensor – Diffuse Mode Sensor



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

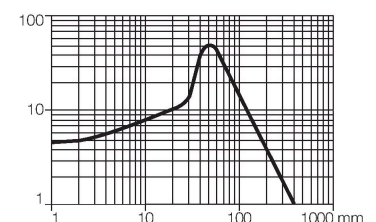
Wiring diagram



Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects a sufficient amount of light back to the receiver. The switching distance of diffuse mode sensors largely depends on the reflectivity of the target.

Excess gain curve
Excess gain in relation to the distance



Technical data

Type	QM42VN6D
ID no.	3044338
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	880 nm
Range	0...400 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
Response time typical	< 1 ms
Overcurrent release	> 150 mA
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, QM42
Dimensions	42 x 12.7 x 42 mm
Housing material	Metal, Die-cast zinc alloy, Black-finished
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4

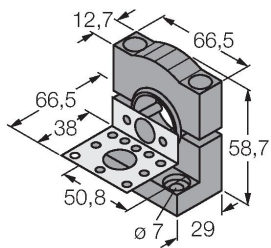
Technical data

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
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, cURus

Accessories

SMB30SK

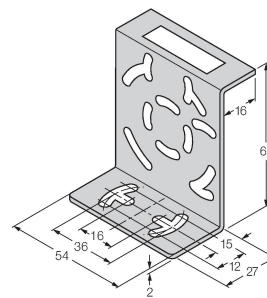
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Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/QMT42

SMB46S

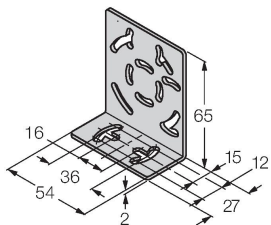
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Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42

SMB46L

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