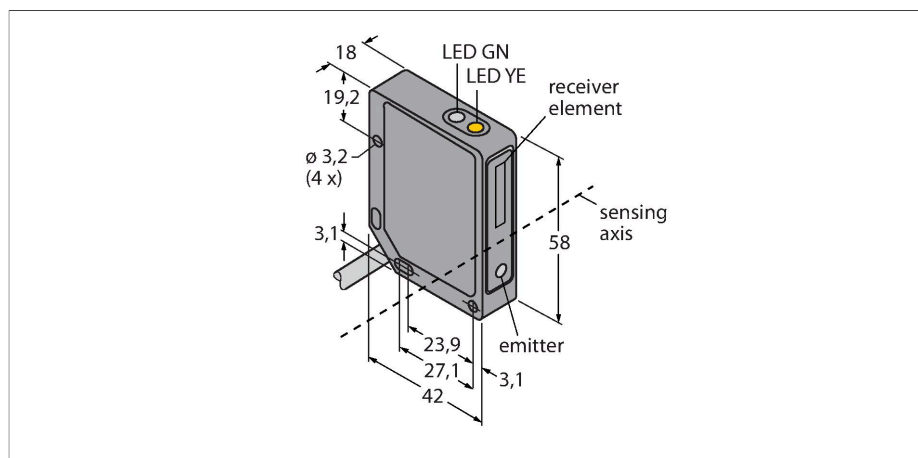


# QMT42VN6DX

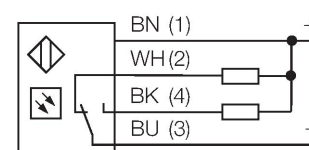
## Photoelectric Sensor – Diffuse Mode Sensor



### Features

- Operating voltage 10...30 VDC
- NPN switching output
- Sensitivity adjusted via potentiometer
- Operating voltage 10...30 VDC
- NPN switching output
- Light/dark operation

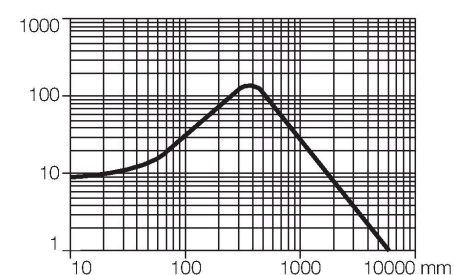
### Wiring diagram



### Functional principle

Like retroreflective sensors, diffuse mode sensors also contain emitter and receiver circuitry in the same housing. 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 sufficient 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 distance



### Technical data

Type	QMT42VN6DX
ID	3056894
<b>Optical data</b>	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	880 nm
Range	10...6000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
No-load current	≤ 50 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
<b>Mechanical data</b>	
Design	Rectangular, QMT42
Dimensions	42 x 18 x 58 mm
Housing material	Metal, Zinc Alloy Die-Cast, Black-finished
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC

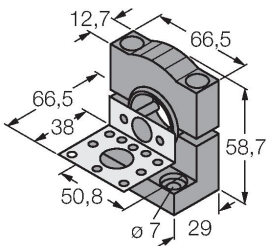
## Technical data

Number of cores	4
Core cross-section	0.5 mm <sup>2</sup>
Ambient temperature	-20...+55 °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
<b>Tests/approvals</b>	
Approvals	CE, cURus

## Accessories

SMB30SK

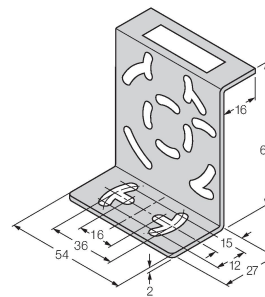
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Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/ QMT42

SMB46S

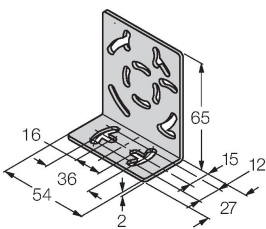
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Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/ QMT42

SMB46L

3048747



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