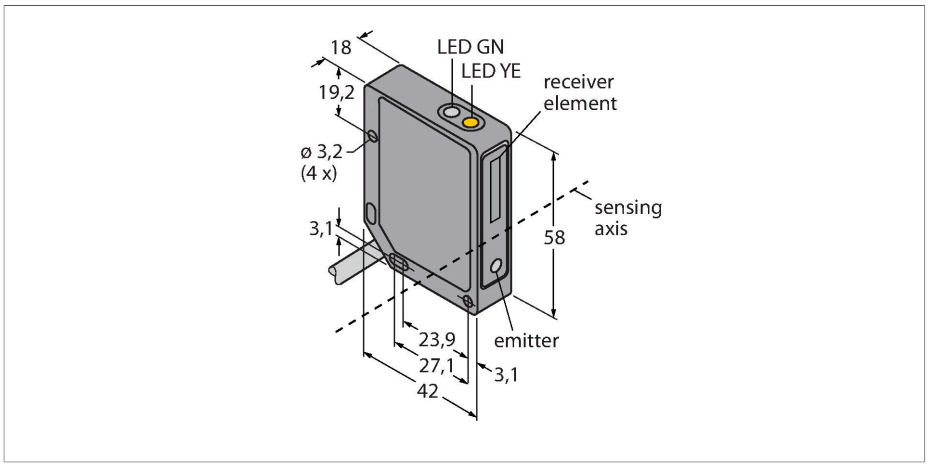
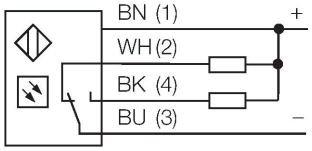
QMT42VN6AFV400 W/30
Photoelectric Sensor – Diffuse Mode Sensor with Adjustable Background Suppression



Features

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

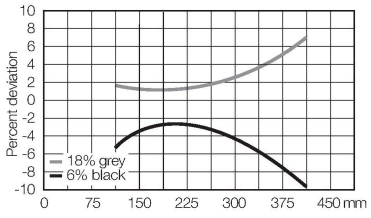
Wiring diagram



Functional principle

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object is within or outside the measuring range. These sensors come with an adjustable cut-off point.

Deviation curve
Sensing range deviation curve



Technical data

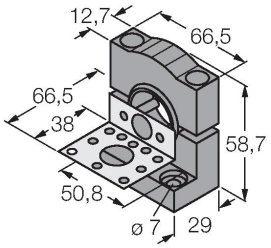
Type	QMT42VN6AFV400 W/30
ID no.	3048943
Optical data	
Function	Diffuse mode sensor with adjustable background suppression
Light type	Red
Wavelength	680 nm
Range	125…400 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 10 % U_{ss}
DC rated operational current	≤ 100 mA
No-load current	≤ 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
Mechanical data	
Design	Rectangular, QMT42
Dimensions	42 x 18 x 58 mm
Housing material	Metal, ZN, Black-finished
Lens	plastic, Acrylic

Technical data

Electrical connection	Cable, 9 m, PVC
Number of cores	4
Core cross-section	0.5 mm²
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
Tests/approvals	
Approvals	CE, cURus

Accessories

SMB30SK 3052523



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

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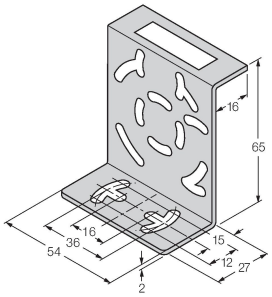

Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/ QMT42

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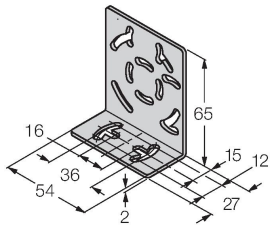

Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/ QMT42