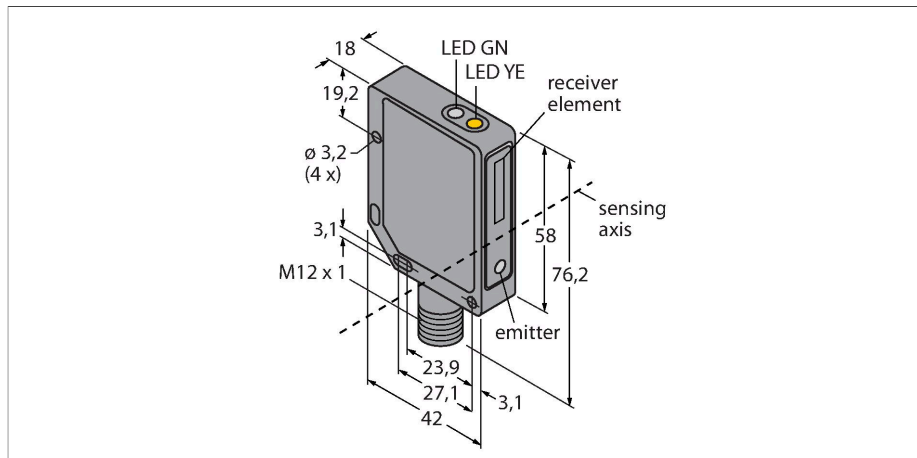


DOIR6M-BRM42-VP6X2-H1141

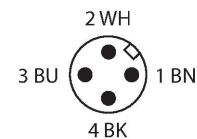
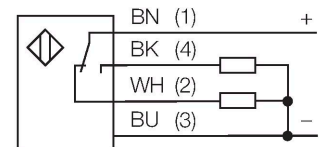
Photoelectric Sensor – Diffuse Mode Sensor



Features

- Male, M12 x 1, 4-pin
- Metal housing, ZN, black
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage 10...30 VDC
- PNP switching output
- Light/dark operation

Wiring diagram



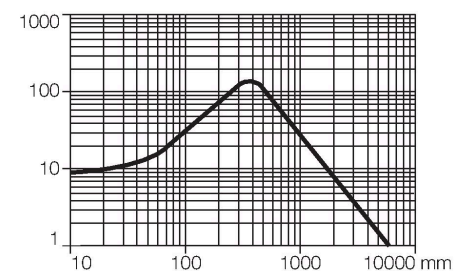
Technical data

Type	DOIR6M-BRM42-VP6X2-H1141
ID	7700757
Function	Diffuse mode sensor
Light type	IR
Wavelength	880 nm
Range	10...6000 mm
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, PNP
Switching frequency	≤ 500 Hz
Overcurrent release	> 150 mA
Design	Rectangular, QMT42
Dimensions	42 x 18 x 76.2 mm
Housing material	Metal, ZN, Black-finished
Lens	plastic, Acryl
Electrical connection	Connector, M12 × 1
Ambient temperature	-20...+55 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, flashing
Alarm display	LED yellow flashing

Functional principle

Like retroreflective sensors, diffuse mode sensors also contain emitter and receiver circuitry in the same housing. However, diffuse mode sensors do not capture the interruption of a light beam but the reflection of a target. A target is captured if it reflects sufficient light back to the receiver. The switching distance of diffuse mode sensors largely depends on the reflectivity of the target.

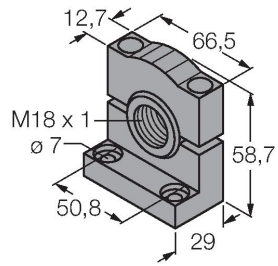
Excess gain curve
Excess gain in relation to distance



Accessories

TMB3018SC

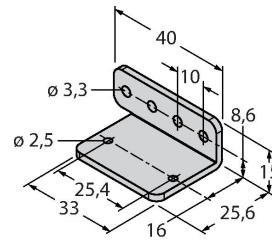
7700397



Mounting bracket, PBT black, for 18 mm thread

TMBBRM42L

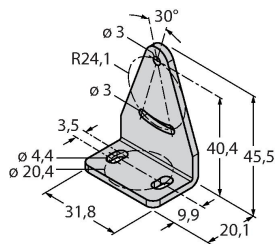
7700402



Mounting bracket, stainless steel, for QS18AF series

TMBBRM42T

7700403



Mounting bracket, stainless steel, for BRM42