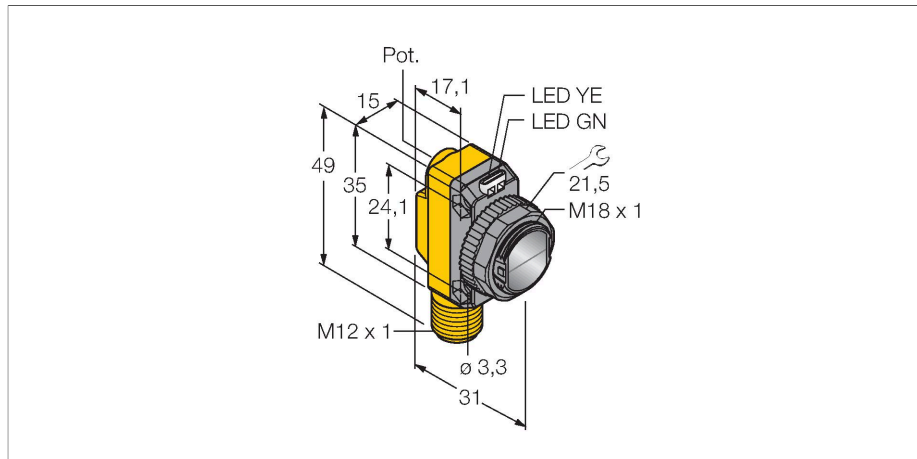


LOP3.5M-BT18-VN6X2-H1141

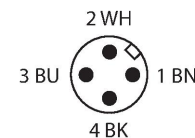
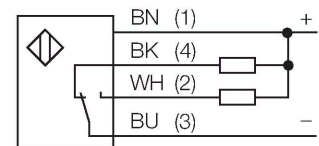
Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



Features

- Male, M12 x 1, 4-pin
- Protection class IP67
- LED, all-round visible
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram



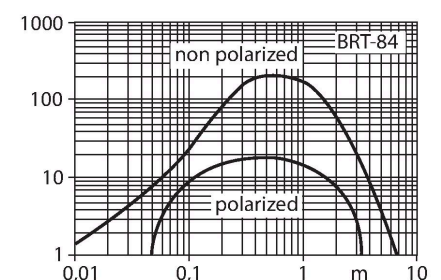
Technical data

Type	LOP3.5M-BT18-VN6X2-H1141
ID	7700663
Function	Retroreflective sensor with polarizing filter
Light type	Red
Wavelength	660 nm
Range	50...3500 mm
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, NPN
Current output	100 mA
Switching frequency	≤ 800 Hz
Design	Rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, Acryl
Electrical connection	Connector, M12 × 1
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, yellow, flashing

Functional principle

Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. Retroreflective sensors feature some of the advantages of opposed mode sensors, such as good contrast and high excess gain. Furthermore, only one device has to be installed and wired. Devices without polarizing filter have a smaller sensing range and are more susceptible to disturbances caused by shiny objects.

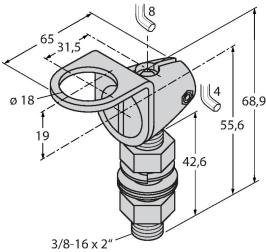
Excess gain curve
Excess gain in relation to the distance (polarized)



Accessories

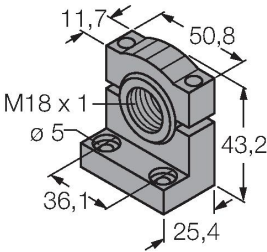
TMBM18FA **7700395**

Mounting bracket; material VA 1.4401, for 18 mm thread



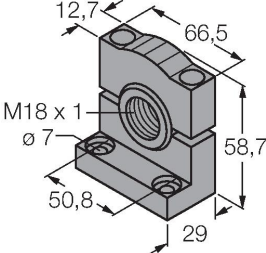
TMB18SF **7700396**

Mounting bracket, PBT black, for 10 mm thread



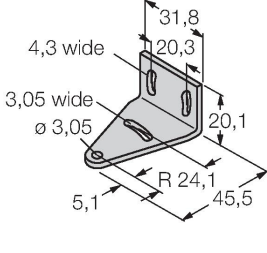
TMB3018SC **7700397**

Mounting bracket, PBT black, for 18 mm thread



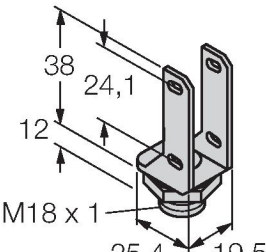
TMBMIS **7700401**

Mounting bracket, stainless steel, for BT18/BQ18 and ..-MI-..



TMBBT18Y **7700425**

Protective housing, stainless steel, for BQ18



Accessories

Dimension drawing	Type	ID	
	T-BRT-84	7700382	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C

