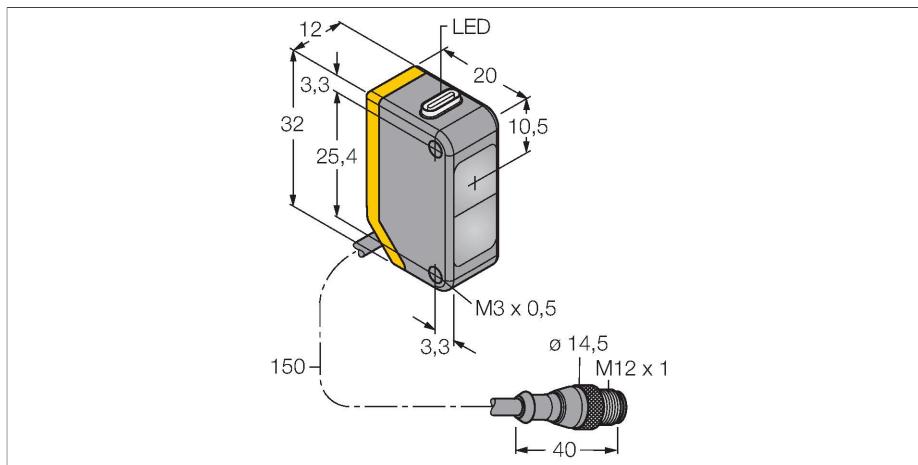


# RO12M-Q18-VP6X2-H1141-0.15

## Photoelectric Sensor – Opposed Mode Sensor (Receiver)



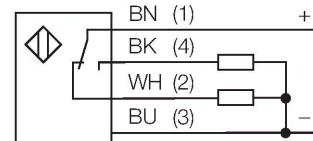
### Technical data

Type	RO12M-Q18-VP6X2-H1141-0.15
ID	7700124
Function	Opposed mode sensor (receiver)
Range	0...12000 mm
Operating voltage	10...30 VDC
Residual ripple	< 10 % $U_{ss}$
DC rated operational current	$\leq 100$ mA
No-load current	$\leq 18$ mA
Reverse polarity protection	yes
Output function	Complementary contact, PNP
Switching frequency	$\leq 600$ Hz
Readiness delay	$\leq 100$ ms
Design	Rectangular, Q20
Dimensions	20 x 12 x 32 mm
Housing material	Plastic, ABS
Lens	plastic, Acryl
Electrical connection	Cable with connector, M12 x 1, 0.15 m
Ambient temperature	-20...+60 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, flashing
Excess gain indication	LED, yellow, flashing

### Features

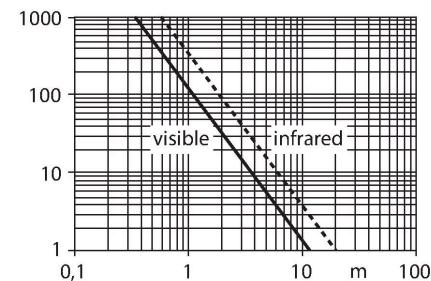
- Cable with male end, M12 x 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED, all-round visible
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

### Wiring diagram

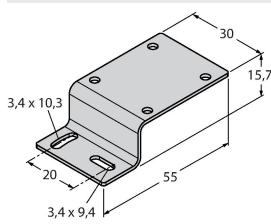


### Functional principle

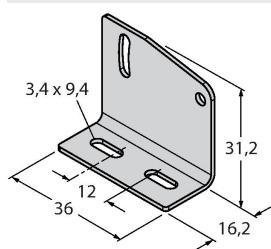
Opposed mode sensors consist of an emitter and a receiver. They are installed opposite to each other whereby the emitted light aims directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque objects. The high light/dark contrast and the very high excess gain are typical for this function mode and enable operation over large distances and under difficult conditions.



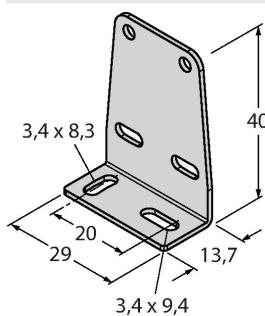
## Accessories

**TMBQ18H****7700420**

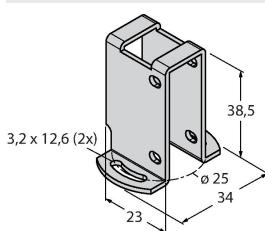
Mounting bracket, stainless steel, for Q18

**TMBQ18LV****7700422**

Mounting bracket, stainless steel, for Q18

**TMBQ18L****7700421**

Mounting bracket, stainless steel, for Q18

**TMBQ18U****7700423**

Protective housing, stainless steel, for Q18