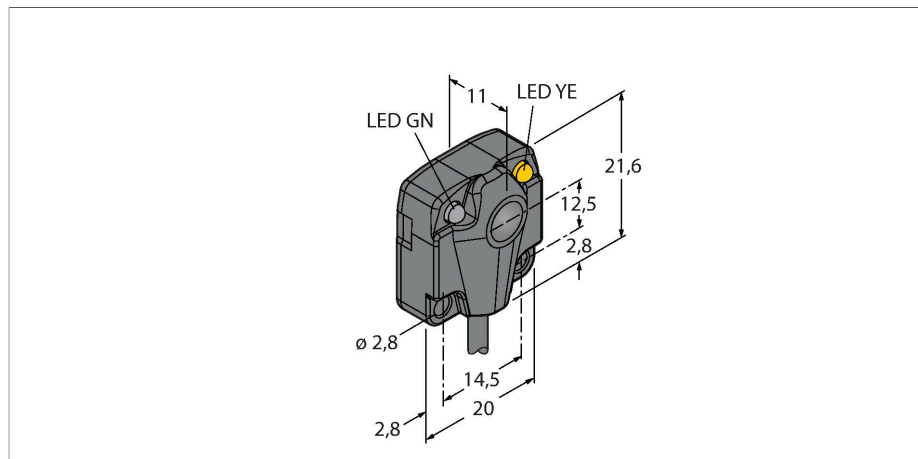


# RO1.8M-Q10F-AP6X2

## Photoelectric Sensor – Opposed Mode Sensor (Receiver)

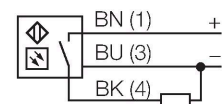
### Miniature Sensor



### Features

- Cable, 2 m
- Protection class IP67
- Glass lens
- Operating voltage: 10...30 VDC
- PNP/NPN switching output, light operation

### Wiring diagram



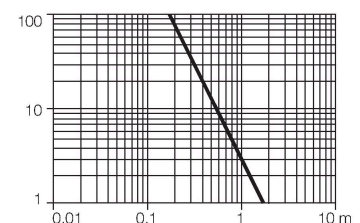
### Technical data

Type	RO1.8M-Q10F-AP6X2
ID	7700476
Light type	IR
Wavelength	880 nm
Range	0...1800 mm
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
No-load current	≤ 15 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	NO contact, light operation, PNP
Switching frequency	0.083 kHz
Overcurrent release	> 220 mA
Design	Rectangular
Dimensions	21.6 x 20 x 10 mm
Housing material	Plastic, ABS, Black
Lens	glass
Electrical connection	Cable, 2 m
Number of cores	3
Core cross-section	0.8 mm <sup>2</sup>
Ambient temperature	-40...+70 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, flashing
Excess gain indication	LED, green

### 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.

Excess gain curve  
Excess gain in relation to distance



## Technical data

Alarm display

LED yellow flashing

---