

1) Optical axis emitter 2) Optical axis receiver 3) Display and control panel 4) 270° rotatable

- Photoelectric sensor
- Series 21M
- LED, red light
- up to 1 m



**General attributes**

Adjuster  
Approvals / Conformity

Basic standard  
Enclosure Type per IEC 60529  
Indicator

Polarity reversal protected  
Protection Class  
Series  
Setting  
Short circuit protected

**Electrical attributes**

Connection type  
Eff. operating current I<sub>e</sub>  
Eff. operating voltage U<sub>e</sub> DC  
Electrical version  
Load capacitance max. (at U<sub>e</sub>)  
No-load current max. I<sub>o</sub> at U<sub>e</sub>  
Operating voltage U<sub>B</sub> max. DC [V]  
Operating voltage U<sub>B</sub> min. DC [V]  
Rated insulation voltage U<sub>i</sub>  
Ripple max. (% of U<sub>e</sub>)  
Switching freq. f max. (at U<sub>e</sub>)  
Switching function  
Switching output  
Turn on time t<sub>on</sub> max.  
Voltage drop U<sub>d</sub> max. (at I<sub>e</sub>)

Potentiometer 270° (1x)  
CE  
cULus  
IEC 60947-5-2  
IP67  
Stability - LED GN  
Output function - LED YE  
yes  
II  
Series 21M  
Switching distance (S<sub>n</sub>)  
yes

Connector  
100 mA  
24.0 V  
DC, direct current  
1.00 µF  
35 mA  
30.0 V  
10.0 V  
75 V DC  
8 %  
500 Hz  
NO-NC (pins 4-2)  
PNP (2x)  
1.00 ms  
2.0 V

**Mechanical attributes**

Ambient temperature T<sub>a</sub> max.  
Ambient temperature T<sub>a</sub> min.  
Connector type  
Detection range S<sub>d</sub>  
Eff. operating distance S<sub>r</sub>  
Housing material  
Length 1  
Length 2  
Length 3  
Minimum operating distance  
Mounting type  
Range S<sub>n</sub>  
Sensing face material  
Style  
Surface protection

55 °C  
-25 °C  
M12x1-S04  
10...1000 mm  
1000 mm  
GD-Zn, aluminum  
15.0 mm  
42.5 mm  
50.0 mm  
10 mm  
Screw M4  
S<sub>n</sub> = 1 m, adjustable  
PMMA  
Block, rotatable connection  
Powder coated

**Optical attributes**

Light type  
Principle of optical operation  
Switching function, optical  
Wavelength

LED, red light  
Light scanner, energetic  
NO light-on - NC dark-on  
650 nm

**Additional text**

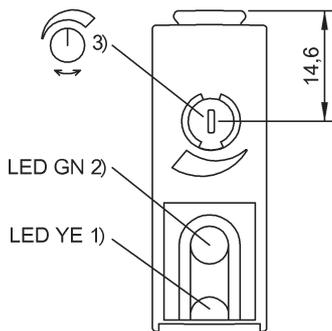
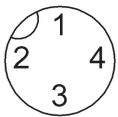
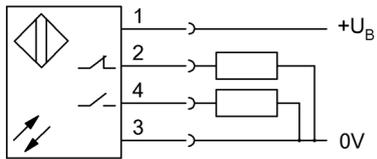
Order accessories separately.  
For additional information, refer to user's guide.  
Reference object (target): Gray card, 200 x 200,

90 % remission, axial approach.  
The sensor is functional again after the overload has been eliminated.  
Only for NFPA 79 applications (machines with a supply voltage of maximum 600 volts).  
Device shall be connected only by using any R/C (CYJV2) cord, having suitable ratings.

Photoelectric sensor

**BOS 21M-PA-RD10-S4**  
**BOS0033**

**BALLUFF**  
sensors worldwide



1) Output function 2) Stability 3) Sensitivity