



1) Optical axis 2) Output function 3) Sn

- Photoelectric sensor
- Series 18M
- Infrared
- 400 mm



General attributes

Additional features Base unit for fibre optics BFO 18..
 Adjuster Potentiometer 270° (1x)
 Approvals / Conformity CE
 cULus
 Basic standard IEC 60947-5-2
 Enclosure Type per IEC 60529 IP67
 Indicator Output function - LED RD
 Polarity reversal protected yes
 Series Series 18M
 Setting Switching distance (Sn)
 Short circuit protected yes

Electrical attributes

Connection type Connector
 Eff. operating current Ie 200 mA
 Eff. operating voltage Ue DC 24.0 V
 Electrical version DC, direct current
 Load capacitance max. (at Ue) 0.30 µF
 No-load current max. Io at Ue 20 mA
 Operating voltage UB max. DC [V] 30.0 V
 Operating voltage UB min. DC [V] 10.0 V
 Rated insulation voltage Ui 75 V DC
 Ripple max. (% of Ue) 10 %
 Switching freq. f max. (at Ue) 100 Hz
 Switching function NO-NC (pins 4-2)
 Switching output PNP (2x)
 Turn on time ton max. 5.00 ms
 Voltage drop Ud max. (at Ie) 2.5 V

Mechanical attributes

Ambient temperature Ta max. 55 °C

Ambient temperature Ta min. -5 °C
 Connector type M12x1-S04
 Detection range Sd 0...400 mm
 Eff. operating distance Sr 400 mm
 Housing material Brass
 Length 1 Ø18.0 mm
 Length 2 69.0 mm
 Minimum operating distance 0 mm
 Mounting type Nut M18x1
 Range Sn Sn = 400 mm, adjustable
 Sensing face material PMMA
 Style Cylinder, straight optics
 Surface protection Nickel-plated
 Tightening torque max. 35 Nm

Optical attributes

Ambient light max. 5,000 Lux
 Light type Infrared
 Principle of optical operation Light scanner, energetic
 Switching function, optical NO light-on - NC dark-on
 Wavelength 880 nm

Remarks

Reference object (target): Gray card, 200 x 200,
 90 % remission, axial approach.
 Order accessories separately.
 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 18M-PA-1PD-E5-C-S4
BOS0049

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