



1) Optical axis receiver 2) Optical axis emitter 3) Power 4) Light reception/Limit range 5) Sn

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



General attributes

Adjuster	Potentiometer 270° (1x)
Approvals / Conformity	cULus CE
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Indicator	Power - LED GN Light receipt - LED YE Limit range - LED YE, flash.
Polarity reversal protected	yes
Protection Class	II
Series	Series 18M
Setting	Switching distance (Sn)
Short circuit protected	yes

Electrical attributes

Connection type	Connector
Eff. operating current Ie	100 mA
Eff. operating voltage Ue DC	24.0 V
Electrical version	DC, direct current
Load capacitance max. (at Ue)	0.10 µF
No-load current max. Io at Ue	30 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)	15 %
Switching freq. f max. (at Ue)	400 Hz
Switching function	NO-NC (pins 4-2)
Switching output	PNP (2x)
Turn on time ton max.	1.25 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	1...800 mm
Eff. operating distance Sr	800 mm
Housing material	Brass
Length 1	Ø18.0 mm
Length 2	75.0 mm
Mounting type	Nut M18x1
Range Sn	Sn = 800 mm, adjustable
Sensing face material	Glass
Style	Cylinder, straight optics
Surface protection	Nickel-plated
Tightening torque max.	15/30 Nm

Optical attributes

Ambient light max.	5,000 Lux
LED group acc. IEC 62471	Exempt group
Light type	Infrared
Principle of optical operation	Light scanner, energetic
Switching function, optical	NO/NC: light-on/dark-on
Wavelength	850 nm

Remarks

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.

Photoelectric sensor

BOS 18M-PA-ID20-S4
BOS01EY

BALLUFF

