

1) Optical axis, 2) Operating voltage



#### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BOS 18M-..-IE21-..
Scope of delivery	2x nut M18x1 User manual
Series	18M
Style	Cylinder Straight optics

#### Display/Operation

Adjuster	no
Display	LED green: Power

#### Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Protection against device mix-ups	yes

#### Electrical data

Input function	Test (Emitter off)
No-load current $I_0$ max. at $U_e$	30 mA
Operating voltage $U_b$	10...30 VDC
Protection class	II
Rated insulation voltage $U_i$	75 V DC
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	15 %

#### Environmental conditions

Ambient temperature	-5...55 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	Half-sinus, 100 gn, 2 ms, 3x8000
	10...55 Hz, amplitude 1 mm, 3x30 min
	10...2000 Hz, amplitude 1 mm, 30 gn, 3x5 h

IP rating	IP67
-----------	------

#### Functional safety

MTTF (40 °C)	950 a
--------------	-------

#### Material

Housing material	Brass, nickel-plated
Housing material, surface protection	nickel-plated
Material sensing surface	Glass, anti-glare
Surface protection	nickel-plated

#### Mechanical data

Dimension	Ø 18 x 75 mm
Mounting part	Nut M18x1
Tightening torque max.	15 Nm 30 Nm

#### Optical features

Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light type	LED infrared
Principle of optical operation	Through-beam sensor (Emitter)
Wave length	850 nm

#### Range/Distance

Range	0...50 m
Rated operating distance Sn	50 m

#### Remarks

For additional information, refer to user's guide.

Order accessories separately.

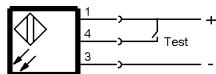
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

#### Connector Drawings



#### Wiring Diagrams



#### Opto Symbols

