

1) Optical axis emitter



IND. CONT. EQ.
 81U2
 Class 2 Type 1



Basic features

Approval/Conformity	CE cULus Ecolab EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BOS 18E-PA-RE30-S4
Series	18E
Style	Cylinder Straight optics

Environmental conditions

Ambient temperature	-25...60 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 100 gn, 2 ms, 3x8000
EN 60068-2-6, Vibration	10...2000 Hz, amplitude 1 mm, 30 gn, 3x5 h
IP rating per DIN 40050	IPx9K
Protection degree	IP68/IP67

Functional safety

MTTF (40 °C)	1359 a
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Display/Operation

Adjuster	no
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Material

Housing material	Stainless steel (1.4404)
Material sensing surface	PMMA

Electrical connection

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

Mechanical data

Dimension	Ø 18 x 75 mm
Mounting	Nut M18x1
Tightening torque max.	40 Nm

Electrical data

No-load current I_0 max. at U_e	25 mA
Operating voltage U_b	10...30 VDC
Rated insulation voltage U_i	75 V DC
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	15 %

Optical features

Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light type	LED, red light
Principle of optical operation	Through-beam sensor (Emitter)
Wave length	640 nm

Range/Distance

Range 0...20 m
Rated operating distance S_n 20 m

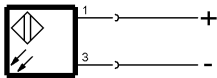
Remarks

For additional information, refer to user's guide.
Order accessories separately.

Connector Drawings



Wiring Diagrams



1) Emitter

Opto Symbols

