



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



Basic features

Approval/Conformity	cULus CE Ecolab FDA compliant EAC WEEE
Basic standard	IEC 60947-5-2
Trademark	Proxinox®

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.5 μ F
Min. operating current I _m	0 mA
No-load current I _o max., damped	3 mA
No-load current I _o max., undamped	10 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	33.0 kOhm + D
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	200 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	20 ms
Residual current I _r max.	10 μ A
Ripple max. (% of U _e)	15 %
Switching frequency	700 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-40...85 °C
Chemical resistance	15 % H ₂ O ₂ solution 6 % H ₂ O ₂ solution 3 % H ₂ O ₂ solution
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP68
IP rating per DIN 40050	IP69K

Inductive Sensors
BES M18EI-POC80B-S04G-L01
Order Code: BES0438



Material

Housing material	Stainless steel (1.4404)
Material sensing surface	PEEK

Mechanical data

Dimension	Ø 18 x 65 mm
Installation	for flush mounting
Size	M18x1
Tightening torque	45 Nm

Output/Interface

Switching output	PNP normally closed (NC)
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Range/Distance

Assured operating distance Sa	6.4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	8 mm
Real switching distance sr	8 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■ ■
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

The sensor is functional again after the overload has been eliminated.
Flush: See installation instructions for inductive sensors with extended range 825357.

Connector Drawings



Wiring Diagrams

