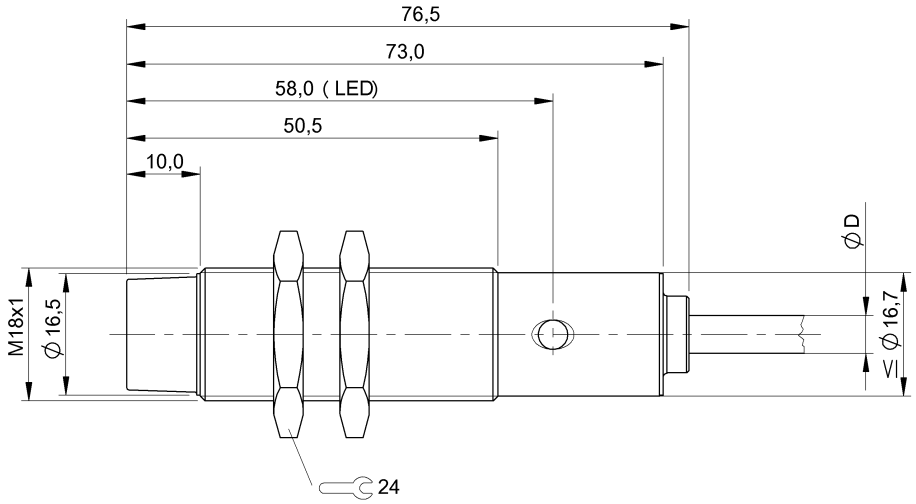
Inductive Sensors

BES 516-124-BO-C-05
Order Code: BES0170



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

Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	4.60 mm
Cable length L	5 m
Conductor cross-section	0.25 mm²
Connection type	Cable, 5.00 m, PVC
Number of conductors	4
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
Min. operating current Im	0 mA
No-load current Io max., damped	30 mA
No-load current Io max., undamped	20 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	2.2 kOhm + D + LED/4.7 kOhm + D
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	30 ms
Residual current Ir max.	80 µA
Ripple max. (% of Ue)	15 %
Switching frequency	200 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

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Material

Housing material	Brass, nickel plated
Material jacket	PVC
Material sensing surface	PA 12
Surface protection	nickel plated

Mechanical data

Dimension	Ø 18 x 76.5 mm
Installation	non-flush
Size	M18x1
Tightening torque	35 Nm

Output/Interface

Switching output	NPN normally open/normally closed (NO/NC)

Range/Distance

Assured operating distance Sa	6.5 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 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

The sensor is functional again after the overload has been eliminated.

Wiring Diagrams

