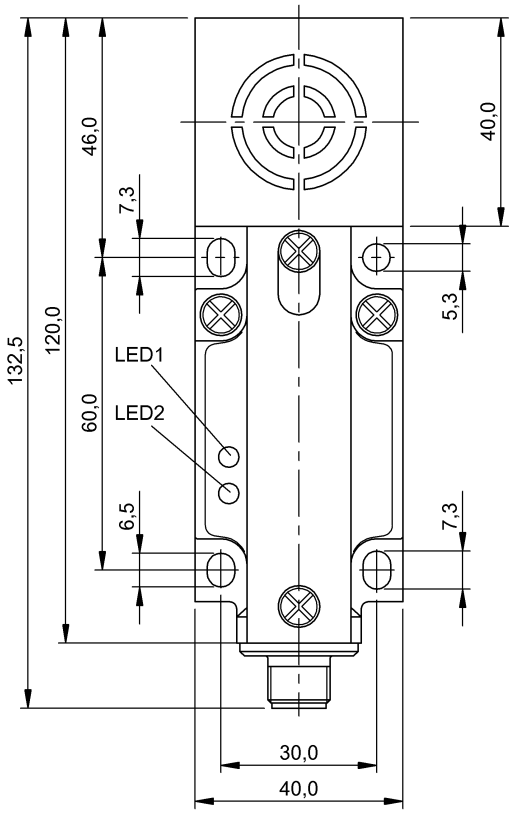
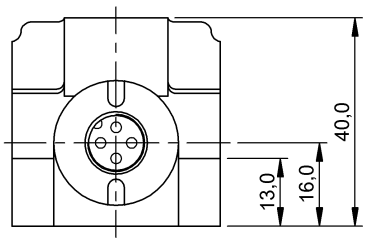
Inductive Sensors

BES 517-132-M4-H-S4
Order Code: BES0205





Basic features

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

Display/Operation

Function indicator	yes
Power indicator	yes

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	1 µF
Min. operating current Im	0 mA
No-load current Io max., damped	20 mA
No-load current Io max., undamped	15 mA
Operating voltage Ub	10...55 VDC
Output resistance Ra	33.0 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	100 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

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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

Functional safety

MTTF (40 °C)	730 a

Material

Housing material	PBT
Material sensing surface	PBT

Mechanical data

Dimension	132.5 x 40 x 40 mm
Installation	non-flush
Size	40x40

Output/Interface

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

Range/Distance

Assured operating distance Sa	16 mm
Hysteresis H max. (% of Sr)	20.0 %
Rated operating distance Sn	20 mm
Real switching distance sr	20 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

LED 1: Function
LED 2: Operating voltage
For single-side flush installation the switching distance is increased by up to 5 mm.
The sensor is functional again after the overload has been eliminated.
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