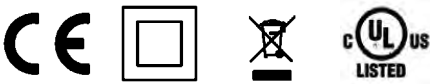
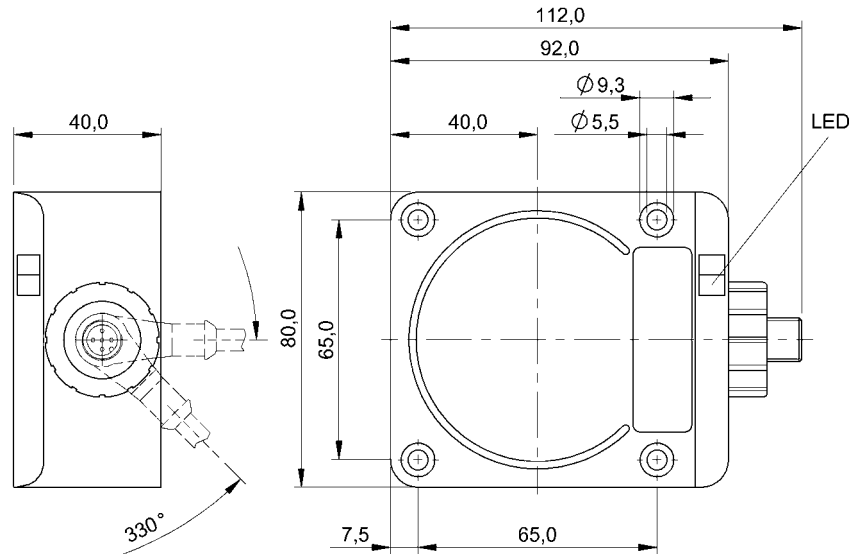


Inductive Sensors

BES Q80KA-PAC50B-S04Q-U

Order Code: BES030C

BALLUFF



Basic features

Approval/Conformity	CE cULus 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	0.5 µF
No-load current I _o max., damped	20 mA
Operating voltage U _b	10...36 VDC
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating current I _e	250 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	20 ms
Switching frequency	70 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 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	1160 a
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Interface

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

Housing material	PPE
Material sensing surface	PPE

Mechanical data

Dimension	112 x 80 x 40 mm
Installation	for flush mounting
Size	80x80

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Range/Distance

Assured operating distance Sa	40.5 mm
Hysteresis H max. (% of Sr)	20.0 %
Rated operating distance Sn	50 mm

Real switching distance sr	50 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.
LED yellow: Function
LED green: Power
Housing resistant to weld spatter
For non-flush installation the switching distance is reduced by up to 5.5 mm.
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

