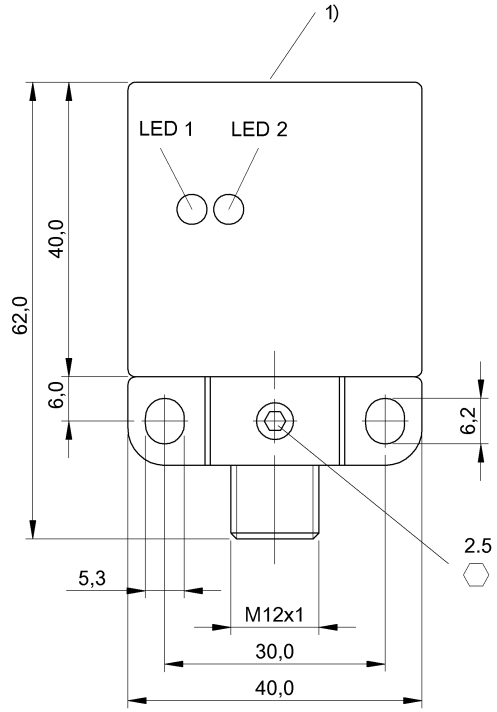
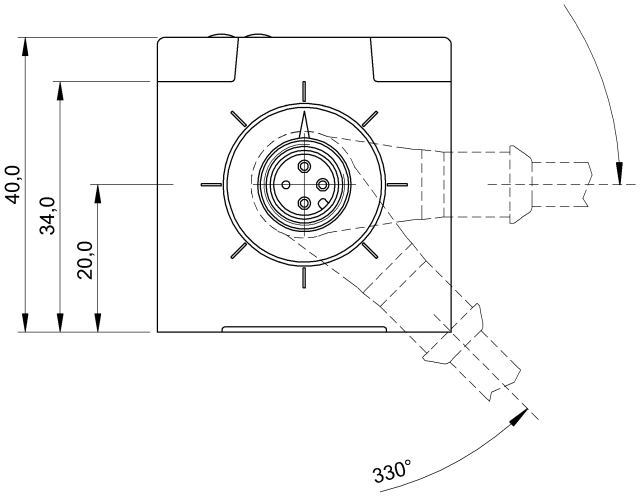
Inductive Sensors

BES Q40KFU-PAC35E-S04G-007
Order Code: BES021J





1) Sensing surface

Basic features

Additional features	Factor 1
Approval/Conformity	CE cULus WEEE
Basic standard	IEC 60947-5-2
Scope of delivery	Mounting bracket BES Q40-HW-2
Trademark	Factor 1

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
Magnetic field strength, interference field	100 kA/m
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...30 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	250 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

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Environmental conditions

Ambient temperature	-10...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
Magnetic field immune	magnetic field immune (AC/DC)

Interface

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

Material

Housing material	PBT
Material sensing surface	PBT

Mechanical data

Dimension	40 x 40 x 62 mm
Installation	non-flush
Size	40x40

Range/Distance

Assured operating distance Sa	28.4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	35 mm
Real switching distance sr	35 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
Switching distance and tolerance data apply to the sensing surface location shown.
The sensor is functional again after the overload has been eliminated.

Connector Drawings

Wiring Diagrams