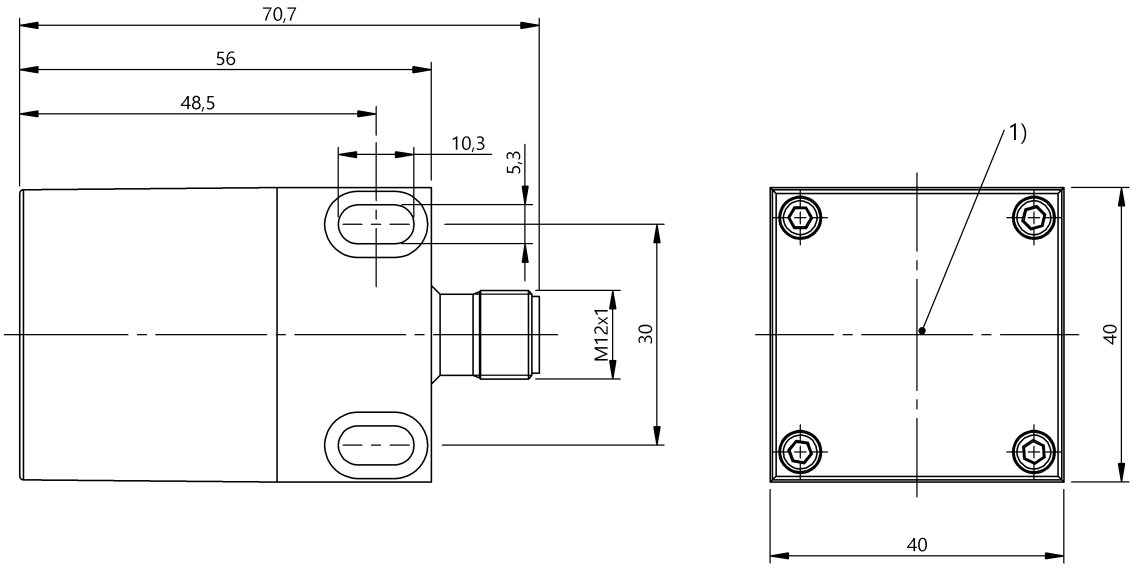
Inductive Sensors

BES Q40KG-PSD25F-S04G
Order Code: BES05N9



1) Sensing surface

Basic features

Approval/Conformity	CE WEEE UKCA
Basic standard	IEC 60947-5-2
Principle of operation	Inductive sensor

Display/Operation

Function indicator	no
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	9 µF
Min. operating current Im	0 mA
No-load current Io max., damped	5.4 mA
No-load current Io max., undamped	2.2 mA
Operating voltage Ub	10...35 VDC
Rated operating current Ie	120 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	4 ms
Residual current Ir max.	2 µA
Ripple max. (% of Ue)	20 %
Switching frequency	100 Hz
Utilization category	DC -13
Voltage drop static max.	1.3 V

Environmental conditions

Ambient temperature	0...150 °C
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

BES Q40KG-PSD25F-S04G
Order Code: BES05N9

Functional safety

MTTF (40 °C)	813 a

Interface

Switching output	PNP normally open (NO)

Material

Housing material	1.4305 stainless steel LCP
Material sensing surface	LCP

Mechanical data

Dimension	40 x 40 x 70.7 mm
Installation	non-flush
Size	40x40

Range/Distance

Assured operating distance Sa	20.2 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	25 mm
Real switching distance sr	25 mm
Repeat accuracy max. (% of Sr)	1.87 %
Tolerance Sr	±15 %

Connector Drawings

Wiring Diagrams (Schematic)