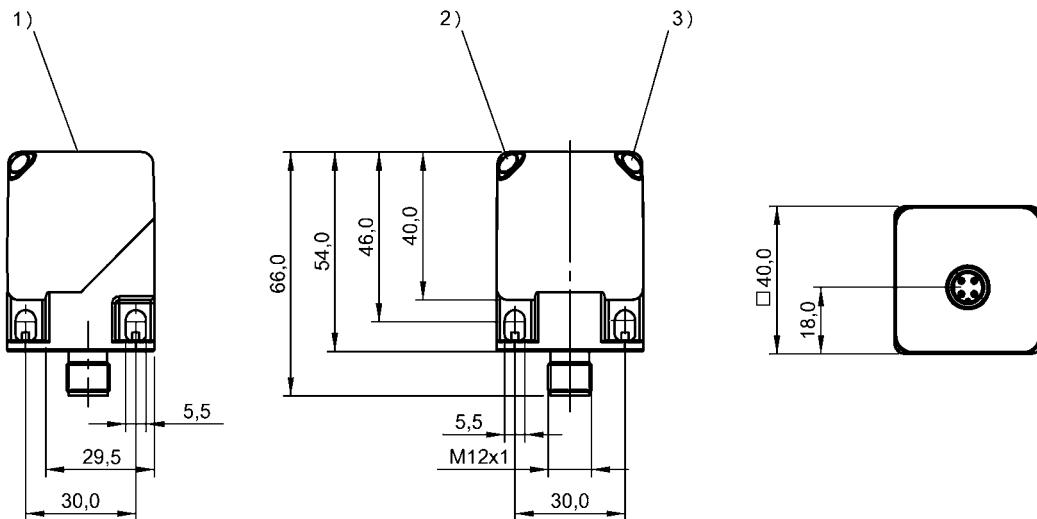


## Inductive Sensors

BES Q40KFU-PSC40F-S04G-012

Order Code: BES0308

**BALLUFF**

1) Sensing surface, 2) LED yellow, 3) LED green



## 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 $U_e$	0.15 $\mu$ F
Min. operating current $I_m$	0 mA
No-load current $I_0$ max., damped	20 mA
No-load current $I_0$ max., undamped	20 mA
Operating voltage $U_b$	10...36 VDC
Protection class	II
Rated insulation voltage $U_i$	250 V AC
Rated operating current $I_e$	200 mA
Rated operating voltage $U_e$ DC	24 V
Rated short circuit current	100 A
Ready delay $t_v$ max.	28 ms
Residual current $I_r$ max.	100 $\mu$ A
Switching frequency	60 Hz
Utilization category	DC-12
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 <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

## Functional safety

MTTF (40 °C)	1494 a
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#### Interface

Switching output PNP normally open (NO)

#### Material

Housing material PA

Material sensing surface PA

#### Mechanical data

Dimension 40 x 40 x 66 mm

Installation non-flush

Size 40x40

#### Range/Distance

Assured operating distance Sa	32.4 mm
Hysteresis H max. (% of Sr)	20.0 %
Rated operating distance Sn	40 mm
Real switching distance sr	40 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■■
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

Sensing surface can be set in 5 positions

M12 connector

rotation, locking latch

Switching distance and tolerance data apply to the sensing surface location shown.

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

