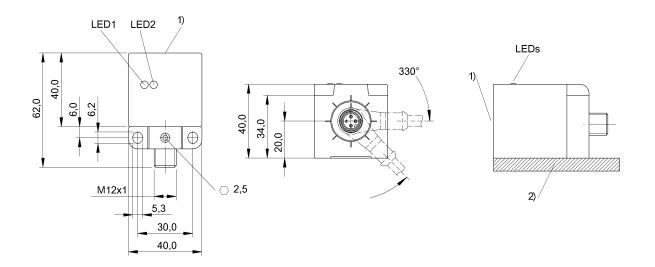
## BES Q40KFU-PSC35Z-S04G-011

Order Code: BES0222

# BALLUFF



1) Sensing surface, 2) Metal plate











#### Basic features

Additional features Factor 1

Approval/Conformity CE
UKCA
cULus
WEEE

Basic standard IEC 60947-5-2

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 Magnetic field strength, interference field 100 kA/m Min. operating current Im  $0 \, \text{mA}$ No-load current Io max., damped 20 mA No-load current lo max., undamped 15 mA Operating voltage Ub 10...30 VDC Output resistance Ra 33.0 kOhm + D Protection class Rated insulation voltage Ui 250 V AC Rated operating current le 200 mA 24 V Rated operating voltage Ue DC Rated short circuit current 100 A 30 ms Ready delay tv max. Residual current Ir max. 80 μΑ Ripple max. (% of Ue) 15% Switching frequency 250 Hz DC -13 Utilization category Voltage drop static max. 2.5 V

### Environmental conditions

Ambient temperature -10...60 °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

Magnetic field immune magnetic field immune (AC/DC)

## BES Q40KFU-PSC35Z-S04G-011 Order Code: BES0222



Functional safety	
MTTF (40 °C)	785 a
Interface	
Switching output	PNP normally open (NO)
Material	
Housing material	PBT
Material sensing surface	PBT

## D\7FFCLL

#### Mechanical data

 Dimension
 40 x 40 x 62 mm

 Installation
 Flush on one side

 Size
 40x40

## Range/Distance

Assured operating distance Sa

Hysteresis H max. (% of Sr)

Rated operating distance Sn

Real switching distance sr

Repeat accuracy max. (% of Sr)

Temperature drift max. (% of Sr)

Tolerance Sr

28.4 mm

15.0 %

35 mm

5.0 %

10 %

#### Remarks

LED 1: Function

LED 2: Operating voltage

The sensor is functional again after the overload has been eliminated.

Installed non-flush. For installation conditions see Instruction 939225.

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

Installation: The sensor front edge must protrude at least 10 mm over metallic installation materials.

Sensor does not respond to loose aluminum chips on the sensing surface.

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 (Schematic)

