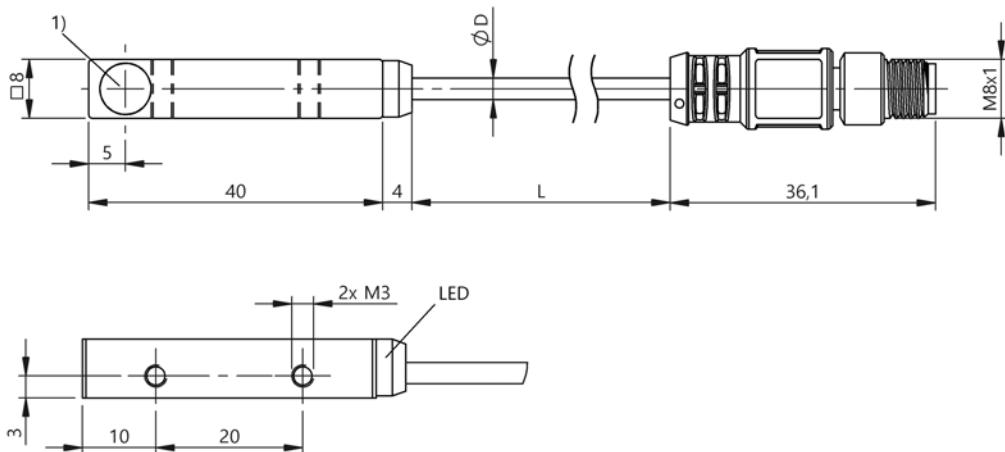


Inductive Sensors

BES Q08ZC-YPL20B-BP00,3-GS75

Order Code: BES05PK

BALLUFF

1) Sensing surface



Basic features

Application	Object detection
Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Operating mode	SIO Mode IO-Link Mode

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	2.9 mm
Cable length L	0.3 m
Connection	M8x1-Male, 4-pin
Connection type	Cable with connector, 0.3 m, PUR
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 μ F
No-load current I ₀ max., damped	18 mA
No-load current I ₀ max., undamped	13 mA
Operating voltage U _b	10...30 VDC
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	160 ms
Residual current I _r max.	10 μ A
Ripple max. (% of U _e)	15 %
Switching frequency	1200 Hz (SIO mode)
Utilization category	DC-13
Voltage drop static max.	1.2 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)	106 a
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IO-Link

IO-Link Profil IDs	0x0001 SSP0
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Interface

Baud rate	38.4 kBaud
Interface	IO-Link 1.1
Interface setting option	Factory setting (Reset) SIO mode/IO-Link mode Teach-In of switchpoints
Process data IN	Teaching successfully reply 1 byte Switching state Target too close/far
Process data OUT	1 byte
Process data cycle min.	3 ms
Switching output	2x PNP/NPN/push-pull NO/NC

Mechanical data

Dimension	44 x 8 x 8 mm
Installation	for flush mounting
Size	8x8
Tightening torque	0.5 Nm
Range/Distance	
Hysteresis H max. (% of Son)	16 %
Measuring range	1...2 mm
Rated operating distance Sn	2 mm
Switching distance marking	■■
Tolerance Sr	±10 %

Material

Housing material	Zinc, Die casting, Nickel-free coated
Material jacket	PUR
Material sensing surface	PBT

Remarks

The sensor is functional again after the overload has been eliminated.
 Sensors with IO-Link function are not suitable for series or parallel wiring.
 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

