



1) Sensing surface



Basic features

Approval/Conformity	CE EAC WEEE
Basic standard	IEC 60947-5-2

Display/Operation

Function indicator	no
Power indicator	no

Electrical connection

Cable diameter D	3.5 mm
Cable length L	5 m
Conductor cross-section	0.14 mm ²
Connection type	Cable, 5.0 m, Silicone
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at U _e	9 µF
Min. operating current I _m	0 mA
No-load current I _o max., damped	5 mA
No-load current I _o max., undamped	5 mA
Operating voltage U _b	10...30 VDC
Rated operating current I _e	50 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	12 ms
Residual current I _r max.	15 µA
Ripple max. (% of U _e)	10 %
Switching frequency	500 Hz
Utilization category	DC -13
Voltage drop static max.	1.3 V

Environmental conditions

Ambient temperature	-25...140 °C
Protection degree	IP65

Functional safety

MTTF (40 °C)	1326 a
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Material

Housing material	Stainless steel
Material jacket	Silicone
Material sensing surface	LCP

Inductive Sensors
BES Q08EC-PSD20B-ES05
Order Code: BES05N7

BALLUFF

Mechanical data

Dimension	8 x 8 x 55 mm
Installation	for flush mounting
Size	8x8

Output/Interface

Switching output	PNP normally open (NO)
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Range/Distance

Assured operating distance Sa	1.6 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	2 mm
Real switching distance sr	2 mm
Repeat accuracy max. (% of Sr)	2.3 %
Tolerance Sr	±15 %

Wiring Diagrams

