



1) Sensing surface



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	3.00 mm
Cable length L	2 m
Conductor cross-section	0.14 mm ²
Connection type	Cable, 2.00 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.5 µF
Min. operating current I_m	0 mA
No-load current I_o max., damped	12 mA
No-load current I_o max., undamped	4 mA
Operating voltage U_b	10...30 VDC
Output resistance R_a	33.0 kOhm + D
Rated insulation voltage U_i	75 V DC
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.	10 ms
Residual current I_r max.	80 µA
Ripple max. (% of U_e)	15 %
Switching frequency	3000 Hz
Utilization category	DC -13
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 _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Interface

Switching output	PNP normally open (NO)
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Inductive Sensors
BES Q08ZE-PSC20B-BP02
Order Code: BES01UM

BALLUFF

Material

Housing material	Zinc, Die casting
Material jacket	PUR
Material sensing surface	PBT

Mechanical data

Dimension	40 x 8 x 8 mm
Installation	for flush mounting
Size	8x8

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)	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.

Wiring Diagrams

