



## Display/Operation

Function indicator	yes
Power indicator	no

## Electrical connection

Connection	M8x1-Male, 3-pole
Protection against device mix-ups	yes
Short-circuit protection	yes

## Electrical data

Load capacitance max. at Ue	1 µF
No-load current I <sub>o</sub> undamped max.	2 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	33.0 kOhm
Polarity reversal protected	yes
Protection class	II
Rated insulation voltage U <sub>i</sub>	250 V AC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	25 ms
Repeat accuracy max. (% of S <sub>r</sub> )	5.0 %
Residual current I <sub>r</sub> max.	10 µA
Residual ripple max. (% of U <sub>e</sub> )	10 %
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 gn, 11 ms

Internet	www.balluff.com
Balluff Germany	+49 (0) 7158 173-0, 173-370
Balluff USA	1-800-543-8390
Balluff China	+86 (0) 21-50 644131

EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP68

## Functional safety

MTTF (40 °C)	595 a
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## General data

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

## Material

Housing material	Stainless steel
Material sensing surface	PBT

## Mechanical data

Dimension	Ø 8 x 55 mm
Installation	flush
Size	M8x1
Tightening torque	8 Nm

## Output/Interface

Switching output	PNP normally open (NO)
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## Range/Distance

Assured operating distance S <sub>a</sub>	1.2 mm
Effective operating distance S <sub>r</sub>	1.5 mm
Hysteresis H max. (% of S <sub>r</sub> )	15.0 %
Rated operating distance S <sub>n</sub>	1.5 mm

Switching distance marking ■  
Temperature drift max. (% of Sr) 10 %

For further information about the 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.

## Remarks

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

## Connector view



## Wiring Diagram

