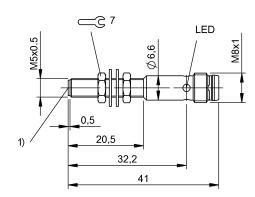
BES 516-3005-E5-C-S49 Order Code: BES00H2

BALLUFF



1) Sensing surface







Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 μF
Min. operating current Im	0 mA
No-load current lo max., damped	6 mA
No-load current lo max., undamped	2 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	Open drain
Rated insulation voltage Ui	75 V DC
Rated operating current le	100 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	21 ms
Residual current Ir max.	10 μΑ
Ripple max. (% of Ue)	10 %
Switching frequency	5000 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Environmental condit	ions
Ambient temperature	-2570 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67
Functional safety	
MTTF (40 °C)	305 a
General data	
Approval/Conformity	cULus
	CE
	EAC
	WEEE

Material

Subject to change without notice: 223517

Basic standard

Housing material	Stainless steel
Material sensing surface	PBT

Mechanical data

Dimension	Ø 5 x 41 mm
Installation	for flush mounting
Size	M5x0.5
Tightening torque	1 Nm

IEC 60947-5-2

BES 516-3005-E5-C-S49 Order Code: BES00H2



Output/Interface

Switching output

PNP normally open (NO)

Range/Distance

Assured operating distance Sa 0.65 mm Hysteresis H max. (% of Sr) 15.0 % Rated operating distance Sn 0.8 mm Real switching distance sr 0.8 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.

EMC: Surge resistance

External protection circuit is required. Document 825345, Section 2.

For further information about the MTTF and B10d see MTTF / B10d certificate

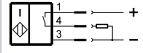
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



Internet

Wiring Diagrams



2/2