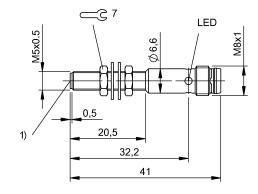
# Inductive Sensors BES 516-3005-E5-C-S49 Order Code: BES00H2





#### 1) Sensing surface



yes no

### **Display/Operation**

Function indicator	
Power indicator	

#### **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 µA
Ripple max. (% of Ue)	10 %
Switching frequency	5000 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

## **Environmental conditions**

	115
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
Protection degree	IP67
Functional safety	
MTTF (40 °C)	305 a
General data	
Approval/Conformity	cULus
	CE EAC
	WEEE
Basic standard	IEC 60947-5-2
Material	
Housing material	Stainless steel
Material sensing surface	РВТ
Mechanical data	
Dimension	Ø 5 x 41 mm
Installation	for flush mounting
Size	M5x0.5
Tightening torque	1 Nm

# Inductive Sensors BES 516-3005-E5-C-S49 Order Code: BES00H2

# BVLLAL

±10 %

Output/Interface		Range/Distance	
Switching output	PNP normally open (NO)	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 %

#### 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.

**Tolerance Sr** 

## **Connector Drawings**



# Wiring Diagrams

