



1) Sensing surface



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection type	1. Switch position: Screw terminals
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
No-load current I ₀ max., undamped	15 mA
Output resistance R _a	2.0 kOhm + D + LED
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating current I _e	130 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 %
Utilization category	DC -13
Voltage drop static max.	3.5 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
Protection degree	IP67

Mechanical Cam Switches
BES 516-344-H2-Y
Order Code: BES01ZK

BALLUFF

Functional safety

MTTF (40 °C) 1620 a

Material

Housing material Aluminum, Anodized
Housing material, surface protection Anodized
Material sensing surface PA 12

Mechanical data

Connection cross-section 2.5 mm²
Dimension 42 x 22 x 48 mm
Installation for flush mounting
Tightening torque 3...4 Nm (M16x1.5)
Tightening torque clamping screw 0.4 Nm

Output/Interface

Cable fitting, thread size M16x1.5
Switching output NPN normally open (NO)

Range/Distance

Assured operating distance Sa 1. Switch position: 4 mm
Hysteresis H max. (% of Sr) 15.0 %
Range 5 mm
Rated operating distance Sn 1. Switch position: 5 mm
Real switching distance sr 5 mm
Repeat accuracy max. (% of Sr) 5.0 %
Temperature drift max. (% of Sr) 10 %

Remarks

The sensor is functional again after the overload has been eliminated.
For more information about 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.

Wiring Diagrams

