



## Basic features

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

## Display/Operation

Function indicator	yes
Power indicator	no

## Electrical connection

Polarity reversal protected	yes
Short-circuit protection	yes

## Electrical data

Min. operating current $I_m$	5 mA
Operating voltage $U_b$	20...250 VDC/20...250 VAC
Protection class	II
Rated insulation voltage $U_i$	250 V AC
Rated operating current $I_e$	250 mA
Rated operating voltage $U_e$ AC	110 V
Rated short circuit current	100 A
Ready delay $t_v$ max.	200 ms
Residual current $I_r$ max.	1700 $\mu$ A
Switching frequency	100 Hz
Utilization category	AC-140 DC -13
Voltage drop static max.	11.5 V

## Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Inductive Sensors  
**BES 517-223-M5-E**  
Order Code: BES023Y

**BALLUFF**

**Interface**

Cable fitting, thread size	M20x1.5
Switching output	NO/NC

**Material**

Housing material	PBT
Material sensing surface	PBT

**Mechanical data**

Connection cross-section	2.5 mm <sup>2</sup>
Dimension	120 x 40 x 40 mm
Installation	non-flush
Size	40x40
Tightening torque clamping screw	0.8 Nm

**Remarks**

Once the overload has been eliminated, interrupt operating voltage  $V_s$  for approx. 2 sec.  
Programming of the switching function using internal switch: Position 1: NO (default)  
Position 2: NC  
 $T_a \geq 25 \text{ }^\circ\text{C} \dots \leq 70 \text{ }^\circ\text{C}$ :  $I_e = 250 - 1.6 \times (T_a - 25)$   
NO/NC programmable.

**Range/Distance**

Assured operating distance $S_a$	24 mm
Hysteresis H max. (% of $S_r$ )	20.0 %
Rated operating distance $S_n$	30 mm
Real switching distance $s_r$	30 mm
Repeat accuracy max. (% of $S_r$ )	5.0 %
Temperature drift max. (% of $S_r$ )	10 %
Tolerance $S_r$	$\pm 10 \%$

**Wiring Diagrams**

