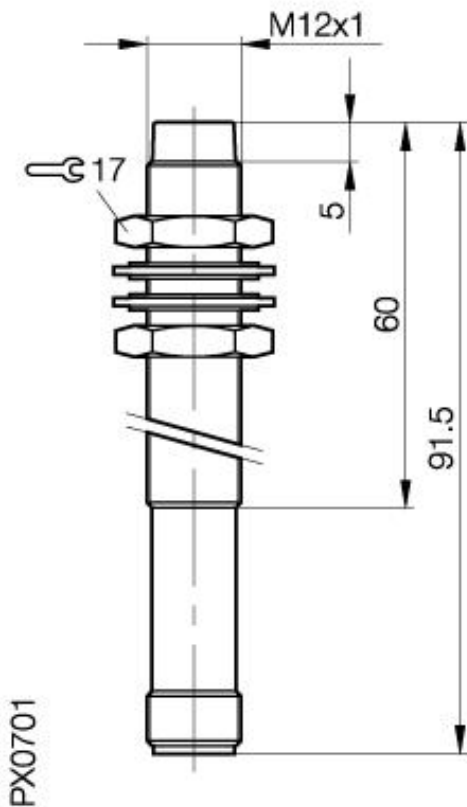


**Inductive Sensors**  
**BES 113-3019-SA 1-S 4**  
**M12x1 x 91.5**  
**normally-closed**  
**Sn=3,7mm**  
**unshielded**  
**function monitoring**



**Common Data**

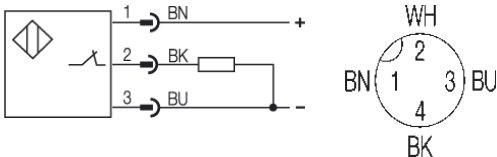
Product name	Safety Switches
Mounting in steel	unshielded
Rated operating distance Sn	3,7mm
Assured operating distance Sa	0...2.9mm
Repeatability R	≤ 5%
Hysteresis	≤ 15%
Ambient temperature range	-25...+70°C
Pollution Degree	3
Time delay before availability	≤ 50ms
Particular characteristics	function monitoring

**Mechanical Data**

Measurements BxHxT or DxT	M12x1 x 91.5mm
Housing material	Nickel plated brass
Material of sensing face	PA 12
Degree of protection	IP67IP
Connection	Connector S4 (M12)
Schock: Halbsinus, 30 gn, 11ms	
Vibration: 55 Hz, 1mm Amplitude, 3 x 30 Minutes	

**Electrical Data**

Current type	DC
Wiring	3-Wire
switching function	normally-closed
Output signal	PNP
Rated operational voltage	24 DCV
Rated operational current	130mA
Supply voltage	20...30 DCV
Ripple	≤ 15%
max. switching frequency	300Hz
Minimum operational current	1mA
No-load supply current	≤ 25/≤ 25mA
Off-state current	≤ 80µA
Voltage drop	typ. 2.5V
Short circuit protection	yes
Protected against polarity reversal	yes



Utilization categories  
 Insulation class

DC 12

Datasheet number:

Definitions see general catalog.  
 If not otherwise noted, ratings according to  
 IEC 60947-5-2 (DIN EN60947-5-2)

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