# Proximity Sensors Inductive Extended Range, Stainless Steel Housing Types IA, DC, M8, 2-wire





- Sensing distance: 2 to 4 mm
  Flush and non-flush types
- Power supply: 10 to 30 VDCOutput: Transistor
- Make or break switching
- Protection: Reverse polarity, short-circuit and transients
- 2 m cableDiameter: M8

### **Product Description**

M8 proximity switch with extended sensing range in stainless steel housing. Made in accordance with Euronorm EN 60 947-5-2.

Ordering Key	IA 08 BSF 02 DO
Ind. proximity switch Housing style Housing size Housing material Housing length	
Detection principle ——	
Sensing distance ———	
Output type ————	
Output configuration —	

## **Type Selection**

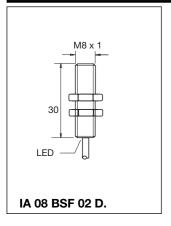
Housing diameter	Body style	Connection	Rated operating dist. (S <sub>n</sub> )	Ordering no. 2 wire DC Normally open	Ordering no. 2 wire DC Normally closed
M8 M8	Short Short	Cable Cable	2 mm <sup>1)</sup> 4 mm <sup>2)</sup>	IA 08 BSF 02 DO IA 08 BSN 04 DO	IA 08 BSF 02 DC IA 08 BSN 04 DC
1) For flush mounting in metal		2) For non-flush	mounting in metal		

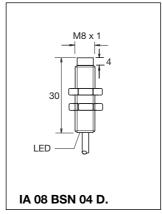
### **Specifications**

Rated operational volt. (U <sub>B</sub> )	10 to 30 VDC (ripple included)	Ambient temperature	
Ripple	≤ 10%	Operating	-25° to +70°C (-13° to +158°F)
Rated operational current (l <sub>e</sub> )		Storage	-30° to +80°C (-22° to +176°F)
Continuous	≤ 3-100 mA	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
No-load supply current (I)	≤ 1.2 mA	Housing material	0
Voltage drop (U <sub>d</sub> )	≤ 8 VDC at max. load	Body Front	Stainless steel  Black thermoplastic polyester
Protection	Reverse polarity, short-circuit, transients	Connection	Cable, 2 m, 2 x 0.5 mm <sup>2</sup> , grey PVC, oil proof
Transient voltage	≤ 2 kV/0.5 J	CE-marking	Yes
Power ON delay	< 50 ms	OE marking	ies
Frequency of operating			
cycles (f)	2 kHz		
Indication	LED, yellow		
Repeat accuracy (R)	≤ 2 %		
Hysteresis (H) (Differential travel)	1 to 20% of sensing distance		
Assured operating dist. (S <sub>a</sub> )	$0 \leq S_a \leq 0.77 \ S_n$		
Effective operating dist. (S <sub>r</sub> )	$0.9 \times S_n \le S_r \le 1.1 \times S_n$		
Usable operating dist. (S)	$0.85 \times S_r \le S_u \le 1.15 \times S_r$		

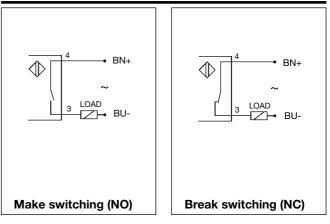


#### **Dimensions**

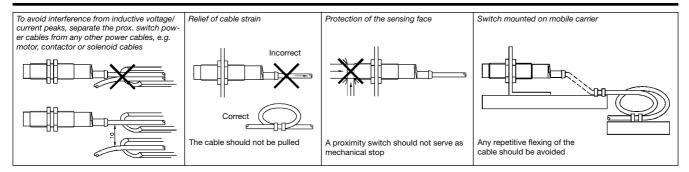




## **Wiring Diagrams**



#### **Installation Hints**



# **Power Supplies**

Power supplies VDC:

> SS 130/140.