

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

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- Sensing distance: 2 to 4 mm
- Flush and non-flush types
- Power supply: 10 to 60 VDC
- Output: Transistor
- Normally open or normally closed
- Protection: Reverse polarity, short-circuit and transients
- 2 m cable
- Diameter: 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	IA
Housing style	08
Housing size	BSF
Housing material	02
Housing length	DO
Detection principle	
Sensing distance	
Output type	
Output configuration	

## Type Selection

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

<sup>1)</sup> For flush mounting in metal

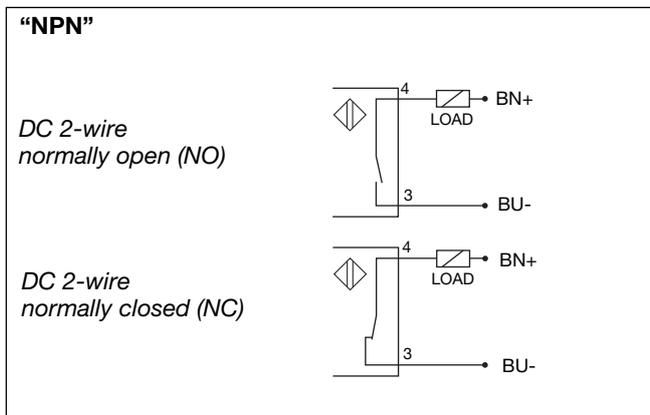
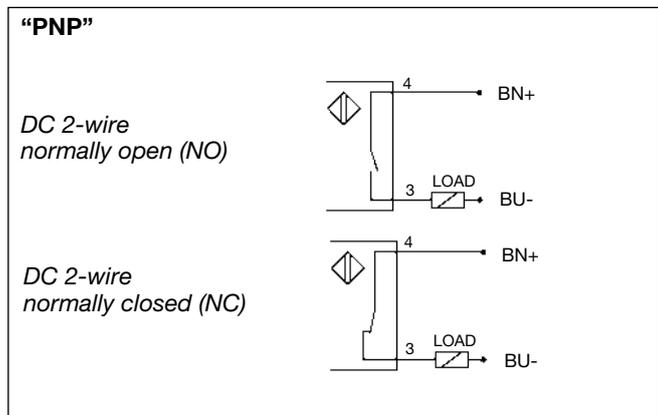
<sup>2)</sup> For non-flush mounting in metal

## Specifications

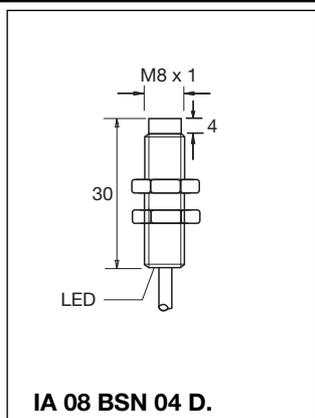
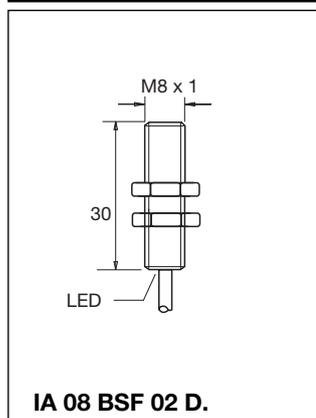
<b>Rated operational volt. (U<sub>B</sub>)</b>	10 to 60 VDC (ripple included)	<b>Ambient temperature</b>	
<b>Ripple</b>	≤ 10%	Operating	-25° to +70°C (-13° to +158°F)
<b>Rated operational current (I<sub>e</sub>)</b> Continuous	≤ 3-100 mA	Storage	-30° to +80°C (-22° to +176°F)
<b>No-load supply current (I)</b>	≤ 1.2 mA	<b>Degree of protection</b>	IP 67 (Nema 1, 3, 4, 6, 13)
<b>Voltage drop (U<sub>d</sub>)</b>	≤ 8 VDC at max. load	<b>Housing material</b>	
<b>Protection</b>	Reverse polarity, short-circuit, transients	Body	Stainless steel
<b>Transient voltage</b>	≤ 2 kV/0.5 J	Front	Black thermoplastic polyester
<b>Power ON delay</b>	< 50 ms	<b>Connection</b>	Cable, 2 m, 2 x 0.5 mm <sup>2</sup> , grey PVC, oil proof
<b>Frequency of operating cycles (f)</b>	2 kHz	<b>Approvals</b>	CSA
<b>Indication</b>	LED, yellow	<b>CE-marking</b>	Yes
<b>Repeat accuracy (R)</b>	≤ 2 %		
<b>Hysteresis (H) (Differential travel)</b>	1 to 20% of sensing distance		
<b>Assured operating dist. (S<sub>a</sub>)</b>	0 ≤ S <sub>a</sub> ≤ 0.77 S <sub>n</sub>		
<b>Effective operating dist. (S<sub>r</sub>)</b>	0.9 x S <sub>n</sub> ≤ S <sub>r</sub> ≤ 1.1 x S <sub>n</sub>		
<b>Usable operating dist. (S)</b>	0.85 x S <sub>r</sub> ≤ S <sub>u</sub> ≤ 1.15 x S <sub>r</sub>		



## Wiring Diagrams



## Dimensions



## Power Supplies

Power supplies VDC: > SS 130/140.

## Installation Hints

<p>To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables</p>	<p>Relief of cable strain</p> <p>The cable should not be pulled</p>	<p>Protection of the sensing face</p> <p>A proximity switch should not serve as mechanical stop</p>	<p>Switch mounted on mobile carrier</p> <p>Any repetitive flexing of the cable should be avoided</p>
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