



**Electric Automation**  
Automation specialists

Reference: IA08BSN40NO

Selected parameters OUTPUT FUNCTION NO MOUNTING Non Flush HOUSING M8 SENSING RANGE >2 to 4 mm OUTPUT DC NPN CONNECTION Cable WIRE 3-wire MATERIAL Metal SYSTEM Proximity Sensor Others HOUSING M8 x 30 mm MATERIAL Stainless steel SENSING RANGE 4 mm OUTPUT FUNCTION Normally Open



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Proximity Inductive Sensors  
Extended range, Stainless Steel Housing  
Types IA, M8

- Sensing distance: 2 to 4 mm
- Flush and non-flush types
- Short body
- Rated operational voltage: 10 - 30 VDC
- Output: DC 200 mA, NPN or PNP, normally open or normally closed
- LED-indication
- Protection: reverse polarity, short-circuit, transients
- Cable and plug versions

Product Description

Ordering Key

IA08BSF20NOM5

A family of extendedrange inductive proximity switches in industrial stainless steel housings.They are able to handle applica tions where high sensing range is requested.

Type Selection

Outputsare opencollector NPN or PNP transistors. Available with cable and M8 plug.

Type

Housing style Housing size Housing material Housing length Detection principle

Sensing distance Output type

Output configuration

Connection type

Rated Conn.Ordering no.Ordering no. Ordering no.Ordering no. operating typeTransistor NPNTransistor NPN Transistor PNPTransistor PNP dist. (Sn) Normally open Normally closed Normally open Normally closed

2 mm 1)CableIA 08 BSF 20 NOIA 08 BSF 20 NC IA 08 BSF 20 POIA 08 BSF 20 PC

2 mm 1) Plug IA 08 BSF 20 NO M5 IA 08 BSF 20 NC M5 IA 08 BSF 20 PO M5 IA 08 BSF 20 PC M5

4 mm 2) Cable IA 08 BSN 40 NO IA 08 BSN 40 NC IA 08 BSN 40 PO IA 08 BSN 40 PC

4 mm 2) Plug IA 08 BSN 40 NO M5 IA 08 BSN 40 NC M5 IA 08 BSN 40 PO M5 IA 08 BSN 40 PC M5

1) For flush mounting in metal 2) For non-flush mounting in metal

Specifications

Rated operational voltage (UB) 10 to 30 VDC (ripple incl.)

Ripple  $\leq 10\%$

Output current ( $I_e$ )  $\leq 200$  mA Derating:

From  $+50^\circ\text{C}$  to  $+70^\circ\text{C}$ ,  $I_c @ 70^\circ\text{C} \leq 150$  mA

No load supply current ( $I_o$ )  $\leq 10$  mA

Voltage drop ( $U_d$ ) Max. 2.5 VDC @ 200 mA

Protection Reverse polarity,  
short-circuit, transients

Transient voltage 1 kV/0.5 J Power ON delay ( $t_v$ )  $< 100$  ms Operating frequency (f)

IA 08 BSF  $\geq 2000$  Hz

IA 08 BSN  $\geq 1000$  Hz

Indication for output ON LED, yellow

Assured operating dist. ( $S_a$ )  $0 \leq S_a \leq 0.81 \times S_n$

Effective operating dist. ( $S_r$ )  $0.9 \times S_n \leq S_r \leq 1.1 \times S_n$

Usable operating distance ( $S_u$ )  $0.85 \times S_r \leq S_u \leq 1.15 \times S_r$

Repeat accuracy (R)  $\leq 5\%$

Differential travel (H)

(Hysteresis) 1 to 20% of sensing dist.

Ambient temperature

Operating  $-25^\circ$  to  $+70^\circ\text{C}$  ( $-13^\circ$  to  $+158^\circ\text{F}$ ) Storage  $-30^\circ$  to  $+80^\circ\text{C}$  ( $-22^\circ$  to  $+176^\circ\text{F}$ )

Housing material

Body Stainless steel (AISI 304/303) Front Grey thermoplastic polyester Backpart

Plug NPB Nuts NPB

Connection

Cable 2 m, 3 x 0.14 mm<sup>2</sup>,  $\varnothing 3,2$  grey PVC, oil proof

Plug M8 x 1

Cables for plug (M5) CONH5A series

Degree of protection IP 67

Specifications are subject to change without notice (22.01.14) 1