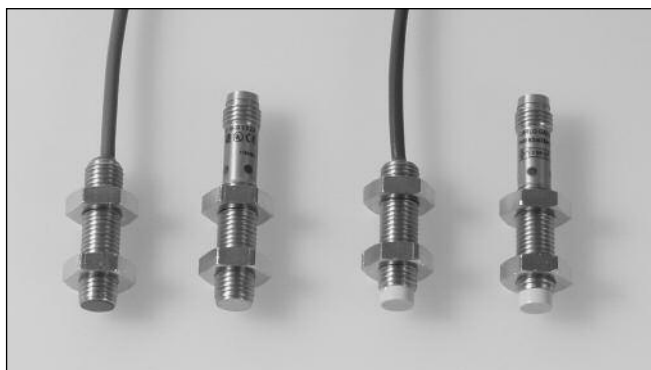


Proximity Inductive Sensors

Extended range, Stainless Steel Housing

Types IA, M8

CARLO GAVAZZI



- 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

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

Outputs are open collector NPN or PNP transistors. Available with cable and M8 plug.

Ordering Key

IA08BSF20NOM5

Type _____
Housing style _____
Housing size _____
Housing material _____
Housing length _____
Detection principle _____
Sensing distance _____
Output type _____
Output configuration _____
Connection type _____

Type Selection

Rated operating dist. (S _n)	Conn. type	Ordering no. Transistor NPN Normally open	Ordering no. Transistor NPN Normally closed	Ordering no. Transistor PNP Normally open	Ordering no. Transistor PNP Normally closed
2 mm ¹⁾	Cable	IA 08 BSF 20 NO	IA 08 BSF 20 NC	IA 08 BSF 20 PO	IA 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

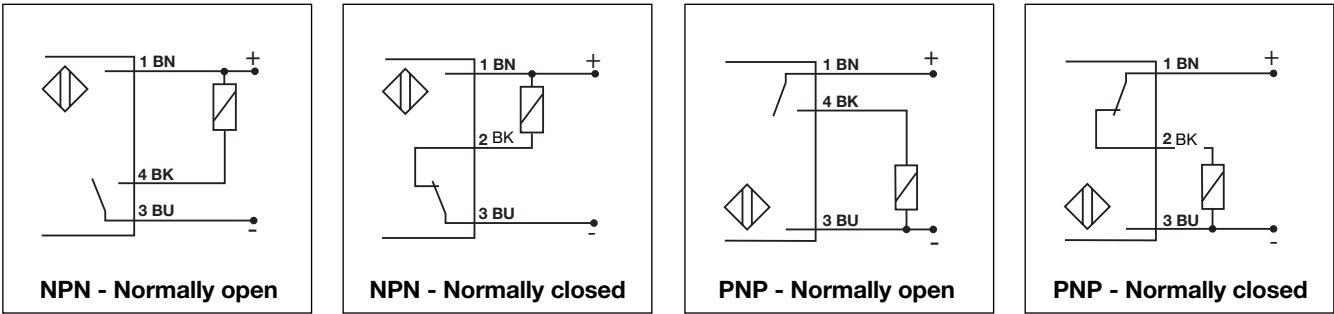
Rated operational voltage (U_B)	10 to 30 VDC (ripple incl.)	Usable operating distance (S_u)	$0.85 \times S_r \leq S_u \leq 1.15 \times S_r$
Ripple	≤ 10%	Repeat accuracy (R)	≤ 5%
Output current (I_o)	≤ 200 mA Derating: From +50°C to +70°C, I _o @ 70°C ≤ 150 mA	Differential travel (H) (Hysteresis)	1 to 20% of sensing dist.
No load supply current (I_o)	≤ 10 mA	Ambient temperature Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
Voltage drop (U_d)	Max. 2.5 VDC @ 200 mA	Housing material Body Front Backpart Plug Nuts	Stainless steel (AISI 304/303) Grey thermoplastic polyester NPB NPB
Protection	Reverse polarity, short-circuit, transients	Connection Cable Plug Cables for plug (M5)	2 m, 3 x 0.14 mm ² , Ø 3,2 grey PVC,oil proof M8 x 1 CONH5A series
Transient voltage	1 kV/0.5 J	Degree of protection	IP 67
Power ON delay (t_v)	< 100 ms		
Operating frequency (f) IA08 BSF IA08 BSN	≥ 2000 Hz ≥ 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)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$		



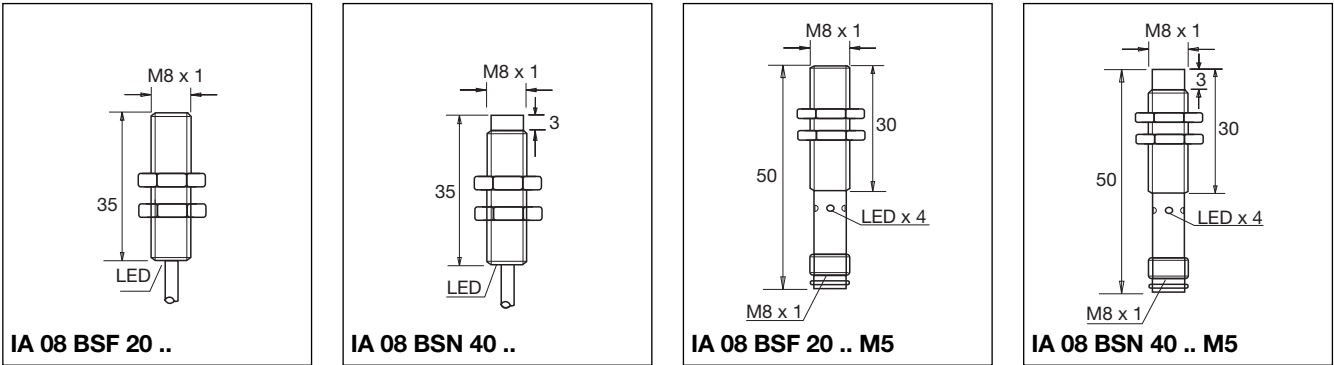
Specifications (cont.)

Weight (cable/nuts included)	IA 08 ..	Approx. 30 g	Approvals	UL, CSA
	IA 08 .. M5	Approx. 5 g		Yes
Tightening torque		5.0 Nm (x)	CE-marking	
		8.0 Nm (y)		

Wiring Diagrams



Dimensions



Installation Hints

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

Relief of cable strain

The cable should not be pulled

Protection of the sensing face

A proximity switch should not serve as mechanical stop

Switch mounted on mobile carrier

Any repetitive flexing of the cable should be avoided

Delivery Contents

- Inductive proximity switch IA..
- 2 nuts NPB
- Packaging: plastic bag