Proximity Sensors Inductive Short body, Stainless Steel Housing Types IA, M8

CARLO GAVAZZI

- Miniature stainless steel housing M8
- Short body
- Sensing distance: 1.5 mm or 2.5 mm
- Power supply: 10 to 30 VDC
- Output: Transistor NPN/PNP, normally open or normally closed
- Protection: Short-circuit
- LED-indication for output ON
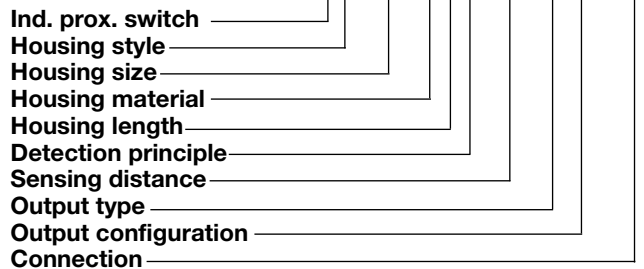- 2 m PVC cable or M8 plug

CE UL CSA

Product Description

Miniature inductive proximity sensor with reduced body length. Output configuration for NPN/PNP with both NO and NC types as standard. M8 stainless steel housing. Connection with 2 m PVC cable or M8 plug.

Ordering Key

IA 08 BSF 15 NO M5

Ind. prox. switch
Housing style
Housing size
Housing material
Housing length
Detection principle
Sensing distance
Output type
Output configuration
Connection

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
1.5 mm [1]	Cable	**IA 08 BSF 15 NO**	**IA 08 BSF 15 NC**	**IA 08 BSF 15 PO**	**IA 08 BSF 15 PC**
1.5 mm [1]	Plug	**IA 08 BSF 15 NO M5**	**IA 08 BSF 15 NC M5**	**IA 08 BSF 15 PO M5**	**IA 08 BSF 15 PC M5**
2.5 mm	Cable	**IA 08 BSN 25 NO**	**IA 08 BSN 25 NC**	**IA 08 BSN 25 PO**	**IA 08 BSN 25 PC**
2.5 mm	Plug	**IA 08 BSN 25 NO M5**	**IA 08 BSN 25 NC M5**	**IA 08 BSN 25 PO M5**	**IA 08 BSN 25 PC M5**

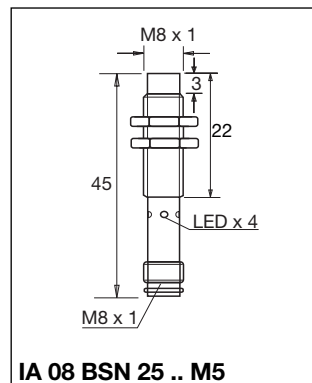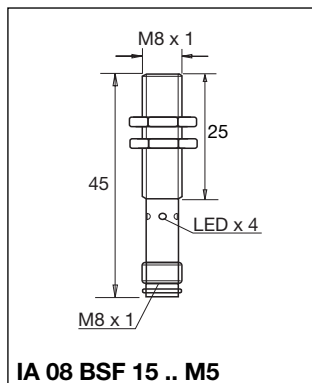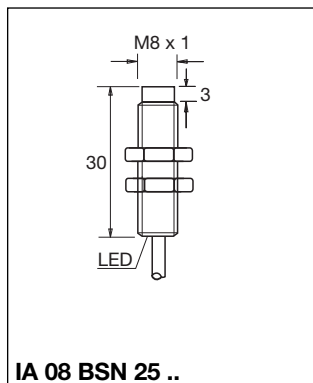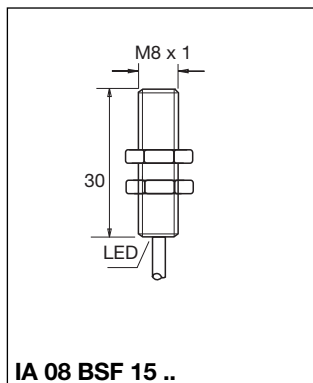[1] For flush mounting in metal

Specifications

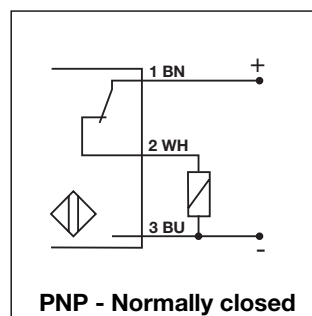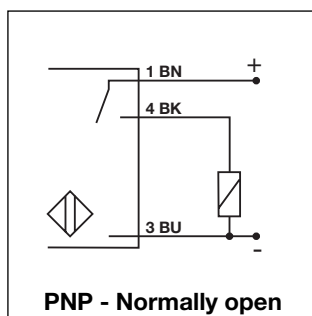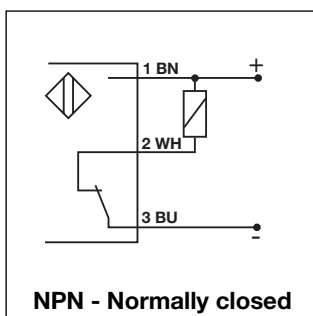|	
Rated operational volt. (U_B)	10 to 30 VDC (ripple included)
Ripple	≤ 10%
Rated operational current (I_e) Continuous	≤ 200 mA @ + 25°C (+75°F)
No-load supply current (I_o)	≤ 10 mA (ON)
Voltage drop (U_d)	< 2,5 V (@ I_{max})
Protection	Short circuit
Frequency of operating cycles (f)	2000 Hz
Indication for output ON	LED, yellow
Repeat Accuracy	≤ 5%
Effective operating dist. (S_r)	0.9 x S_n ≤ S_r ≤ 1.1 x S_n
Usable operating dist. (S_u)	0.85 x S_r ≤ S_u ≤ 1.15 x S_r

Ambient temperature Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +75°C (-22° to +167°F)
Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Housing material	Stainless steel, AISI 303
Approvals	UL, CSA
CE-marking	Yes
Connection Cable Plug	2 m, PVC, AWG 26, oil proof M8, CONH5A-xxx Serie

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Dimensions

M8 x 1	M8 x 1	M8 x 1	M8 x 1
30 / LED	3 / 30 / LED	45 / 25 / LED x 4 / M8 x 1	3 / 45 / 22 / LED x 4 / M8 x 1
IA 08 BSF 15 ..	**IA 08 BSN 25 ..**	**IA 08 BSF 15 .. M5**	**IA 08 BSN 25 .. M5**

Wiring Diagrams

1 BN + / 4 BK / 3 BU −	1 BN + / 2 WH / 3 BU −	1 BN + / 4 BK / 3 BU −	1 BN + / 2 WH / 3 BU −
NPN - Normally open	**NPN - Normally closed**	**PNP - Normally open**	**PNP - Normally closed**

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* Incorrect Correct 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

Specifications are subject to change without notice (26.08.10)