

Proximity Sensors Inductive

Short body, Stainless Steel Housing

Types IA, M5 w/short-circuit protection

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- Miniature stainless steel housing M5
- Short body
- Sensing distance: 1.0 mm (0.8 mm for IA05BSF10NCP only)
- Power supply: 10 to 30 VDC
- Output: Transistor NPN/PNP, normally open or normally closed
- Protection: Reverse polarity and short-circuit protection
- LED-indication for output ON
- 2 m PVC cable or M8 plug

Product Description

Miniature inductive proximity sensor with reduced body length. Output configuration for NPN/PNP with both NO and NC types as standard. M5 stainless steel housing. Connection with 2 m PVC cable or M8 plug.

Ordering Key

IA 05 BSF 10 NO M5 P

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

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
0.8 mm ¹⁾	Cable		IA 05 BSF 10 NC P		
1.0 mm ¹⁾	Cable	IA 05 BSF 10 NO P		IA 05 BSF 10 PO P	IA 05 BSF 10 PC P
1.0 mm ¹⁾	Plug	IA 05 BSF 10 NO M5 P	IA 05 BSF 10 NC M5 P	IA 05 BSF 10 PO M5 P	IA 05 BSF 10 PC M5 P

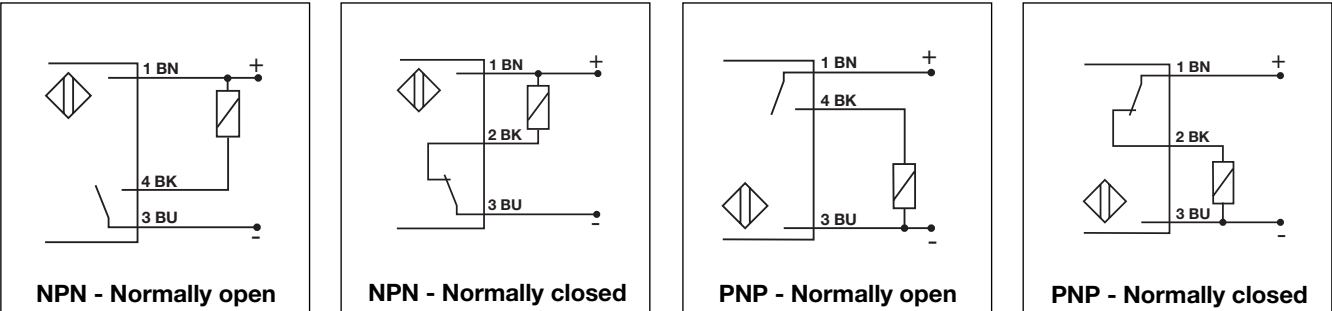
¹⁾ For flush mounting in metal

Specifications

Rated operational volt. (U _B)	10 to 30 VDC (ripple included)	Ambient temperature	
Ripple	≤ 10%	Operating	-25° to +70°C (-13° to +158°F)
Rated operational current (I _B)		Storage	-30° to +75°C (-22° to +167°F)
Continuous	≤ 200 mA	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
No-load supply current (I _o)	≤ 10 mA (ON)	Housing material	Stainless steel, AISI 303
Voltage drop (U _d)	< 1.0 V (@ I _{max})	CE-marking	Yes
Protection	Reverse polarity and short-circuit protection	Connection	
Frequency of operating cycles (f)	2000 Hz	Cable	2 m, PVC, oil proof AWG 26/ 3 x 0.15 mm ²
Indication for output ON	LED, yellow	Plug	M8, CONH5A-xxx Serie
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		



Wiring Diagrams



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
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Dimensions

