# Proximity Sensors Inductive Short body, Stainless Steel Housing Types IA, M5 w/short-circuit protection





- 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 I	BSF '	10 N	O M	15 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 <sub>n</sub> )	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 <sup>1)</sup>	Cable		IA 05 BSF 10 NC P		
1.0 mm <sup>1)</sup>	Cable	IA 05 BSF 10 NO P		IA 05 BSF 10 PO P	IA 05 BSF 10 PC P
1.0 mm <sup>1)</sup>	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

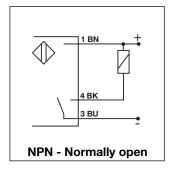
<sup>1)</sup> For flush mounting in metal

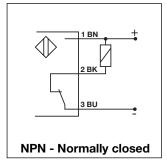
## **Specifications**

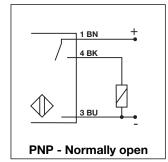
Rated operational volt. (UB)	10 to 30 VDC (ripple included)	Ambient temperature			
Ripple	≤ 10%	Operating	-25° to +70°C (-13° to +158°F)		
Rated operational current (l <sub>e</sub> )		Storage	-30° to +75°C (-22° to +167°F)		
Continuous	≤ 200 mA	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)		
No-load supply current (I <sub>o</sub> )	≤ 10 mA (ON)	Housing material	Stainless steel, AISI 303		
Voltage drop (U <sub>d</sub> )	< 1.0 V (@ I <sub>max</sub> )	CE-marking	Yes		
Protection	Reverse polarity and short-circuit protection	Connection Cable	2 m, PVC, oil proof		
Frequency of operating cycles (f)	2000 Hz	Plug	AWG 26/3 x 0.15 mm <sup>2</sup> M8, CONH5A-xxx Serie		
Indication for output ON	LED, yellow				
Effective operating dist. (S <sub>r</sub> )	$0.9 \times S_n \le S_r \le 1.1 \times S_n$				
Usable operating dist. (S <sub>u</sub> )	$0.85 \times S_r \le S_u \le 1.15 \times S_r$				

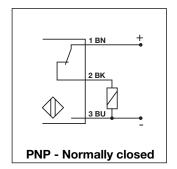


# **Wiring Diagrams**

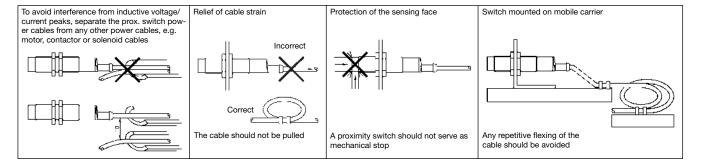








### **Installation Hints**



### **Dimensions**

