

# Proximity Sensors Inductive High Temperature Types IA, DC, M5, M8

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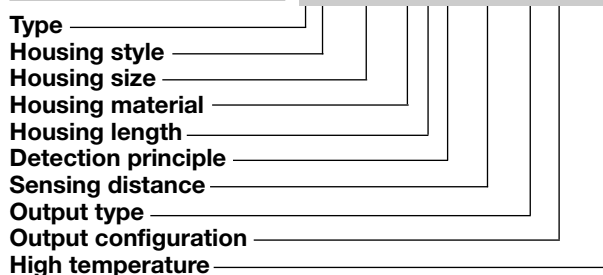
- Stainless steel housings
- For flush mounting
- Short body
- Sensing distance: 0.8 - 1 mm
- Power supply: 10 to 30 VDC
- Output: Transistor NPN or PNP, Normally open
- 2 m silicone cable

## Product Description

Inductive proximity sensor with transistor output in M5 and M8 stainless steel housing for flush mounting in metal. Output configuration for NPN/PNP with NO as standard. Connection with 2 m silicone cable.

## Ordering Key

**IA 05 BSF 08 NO HT-K**



## Type Selection

| Rated operating dist. (S <sub>n</sub> ) | Connection type | Housing dimensions | Ordering no. Transistor NPN Normally open | Ordering no. Transistor PNP Normally open |
|---|-----------------|--------------------|---|---|
| 0.8 mm                                  | Cable, 2 m      | M5                 | IA 05 BSF 08 NOHT-K                       | IA 05 BSF 08 POHT-K                       |
| 1.0 mm                                  | Cable, 2 m      | M8                 | IA 08 BSF 10 NOHT-K                       | IA 08 BSF 10 POHT-K                       |

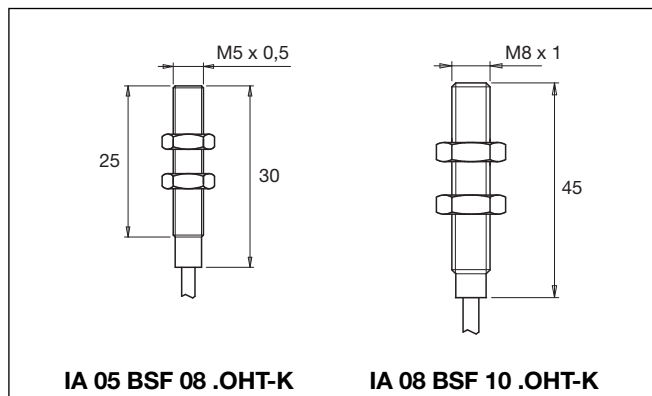
All types for flush mounting in metal

## Specifications

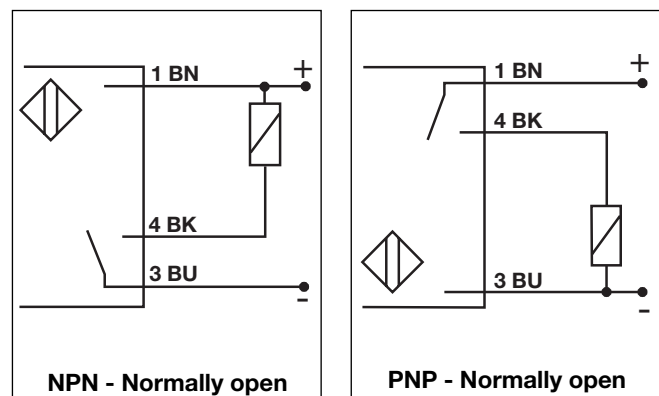
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|---|--|
| Rated operational volt. (U <sub>B</sub> )                 | 10 to 30 VDC (ripple included)                                 |
| Ripple  | ≤ 10%  |
| Rated operational current (I <sub>o</sub> )<br>Continuous | ≤ 50 mA @ + 25°C (+75°F)                                       |
| No-load supply current (I <sub>o</sub> )                  | ≤ 5 mA (ON)  |
| Voltage drop (U <sub>d</sub> )                            | < 3,0 V (@ I <sub>max</sub> )                                  |
| Frequency of op. cycles (f)                               |  |
| IA05  | 3 kHz  |
| IA08  | 2 kHz  |
| Effective operating dist. (S <sub>r</sub> )               | 0.9 x S <sub>n</sub> ≤ S <sub>r</sub> ≤ 1.1 x S <sub>n</sub>   |
| Usable operating dist. (S <sub>u</sub> )                  | 0.85 x S <sub>r</sub> ≤ S <sub>u</sub> ≤ 1.15 x S <sub>r</sub> |

|                      |                                 |
|----------------------|---------------------------------|
| Ambient temperature  |                                 |
| Operating            | -25° to +120°C (-13° to +248°F) |
| Storage              | -30° to +125°C (-22° to +257°F) |
| Degree of protection | IP 67 (Nema 1, 3, 4, 6, 13)     |
| Connection           | Cable, silicone, 2 m, AWG 26    |
| Housing material     | Stainless steel                 |
| CE-marking           | Yes                             |

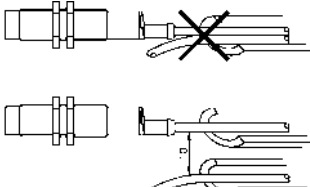
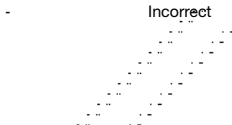
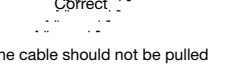
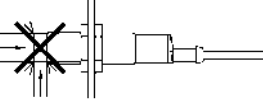
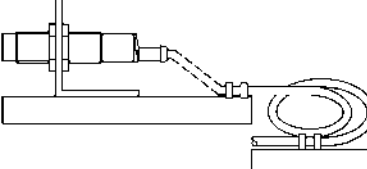
## Dimensions



## Wiring Diagrams



## Installation Hints

|  |  |  |   |
|--|--|--|---|
| <p>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</p>  | <p>Relief of cable strain</p> <p>Incorrect</p>  <p>Correct</p>  <p>The cable should not be pulled</p> | <p>Protection of the sensing face</p>  <p>A proximity switch should not serve as mechanical stop</p> | <p>Switch mounted on mobile carrier</p>  <p>Any repetitive flexing of the cable should be avoided</p> |
|--|--|--|---|