

# Proximity Sensors Inductive High Temperature, Nickel-plated Brass Housing Types IA, M12

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- Nickel-plated brass housing
- Sensing distance:  
Flush mounting: 2 mm or  
Non-flush mounting: 4 mm
- Power supply: 10 to 30 VDC
- Output: Transistor PNP and NPN, normally open
- High temperature range: -40° to +100°C
- Protection: Short-circuit
- LED-indication for output ON
- 2 m PUR cable or M12 plug

## Product Description

Inductive proximity sensor in M12 nickel-plated brass housing for high temperature applications.

Output configuration PNP, and NPN NO (make switching). Connection with 2 m PUR cable or M12 plug.

## Ordering Key IA 12 ASF 02 PO M1 HT-K

Type	IA 12
Housing style	ASF
Housing size	02
Housing material	PO
Housing length	M1
Detection principle	HT-K
Sensing distance	
Output type	
Output configuration	
Connection	
High temperature range	

## Type Selection

Rated operating distance (S <sub>n</sub> )	Connection type	Ordering no. Transistor PNP, Normally open	Ordering no. Transistor NPN, Normally open
2.0 mm <sup>1)</sup> 2.0 mm <sup>1)</sup>	Cable Plug M12	IA 12 ASF 02 PO HT-K IA 12 ASF 02 PO M1 HT-K	
4.0 mm 4.0 mm	Cable Plug M12	IA 12 ASN 04 PO HT-K IA 12 ASN 04 PO M1 HT-K	IA 12 ASN 04 NO HT-K

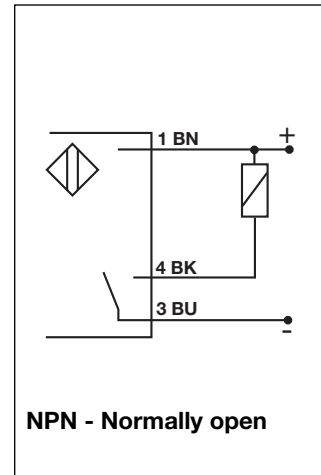
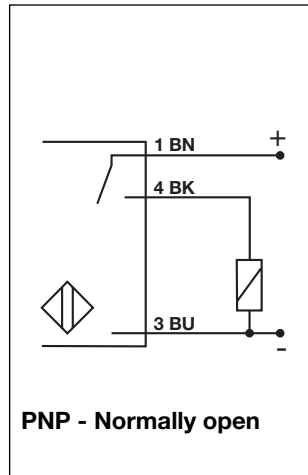
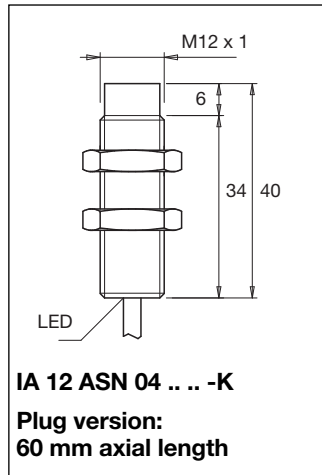
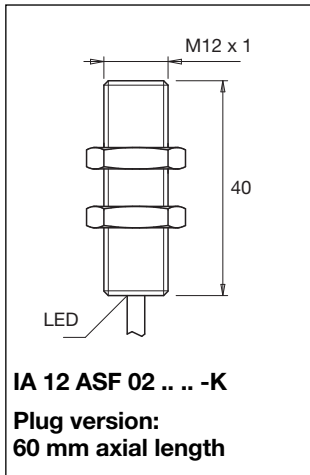
<sup>1)</sup> For flush mounting in metal

## Specifications

Rated operational volt. (U <sub>B</sub> )	10 to 30 VDC (ripple included)	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>
Ripple	≤ 10%	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>
Rated operational current (I <sub>a</sub> ) Continuous	≤ 200 mA @ + 25°C (+75°F)	Ambient temperature	
No-load supply current (I <sub>o</sub> )	≤ 20 mA (ON)	Operating	-40° to +100°C (-40° to +212°F)
Voltage drop (U <sub>d</sub> )	< 2,4 V (@ I <sub>max</sub> )	Storage	-45° to +105°C (-49° to +221°F)
Protection	Short circuit	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Frequency of operating cycles (f)	IA12ASF: 2 kHz IA12ASN: 1 kHz	Housing material	Nickel-plated brass
Indication for output ON	LED, yellow	CE-marking	Yes
Sensing distance	IA12ASF: 2 mm IA12ASN: 4 mm	Connection	Cable, 2 m, PUR, AWG 22 or Plug M12, CONH1A-xxx series

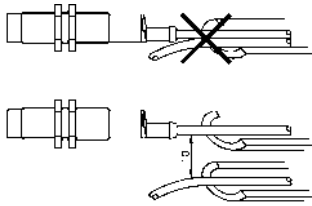
## Dimensions

## Wiring Diagrams

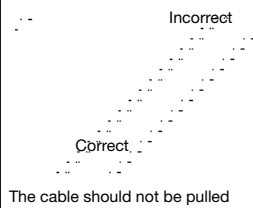


## Installation Hints

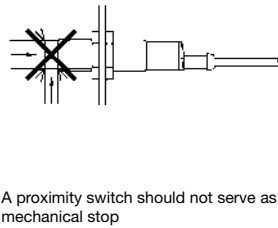
To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables



Relief of cable strain



Protection of the sensing face



Switch mounted on mobile carrier

