

Proximity Sensors Inductive High Temperature, Nickel-plated Brass Housing Types IA, M18, M30

CARLO GAVAZZI



- Nickel-plated brass housing
- Sensing distance:
flush mounting: 5 or 10 mm
non-flush mounting: 8 or 15 mm
- Power supply: 10 to 30 VDC
- Output: Transistor PNP, make switching
- 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 M18 and M30 nickel-plated brass housings for high temperature applications. Output configuration PNP, NO (make switching). Connection with 2 m PUR cable or M12 plug.

Ordering Key IA 18 ASF 05 PO M1 HT-K

Ind. prox. switch	IA
Housing style	18
Housing size	ASF
Housing material	05
Housing length	PO
Detection principle	M1
Sensing distance	HT
Output type	K
Output configuration	
Connection	
High temperature range	

Type Selection

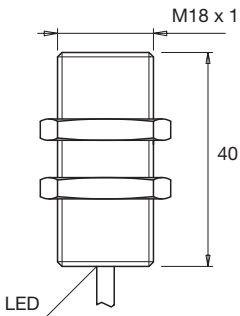
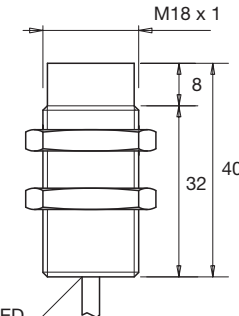
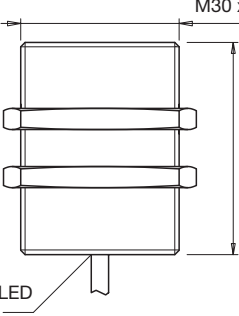
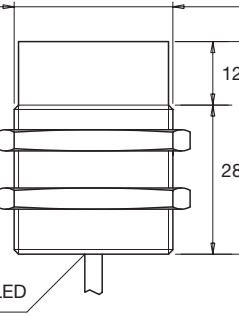
Rated operating distance (S _n)	Connection type	Housing dimensions	Ordering no. Transistor PNP Make switching
5 mm ¹⁾	Cable	M18	IA 18 ASF 05 PO HT-K
5 mm ¹⁾	Plug M12	M18	IA 18 ASF 05 PO M1 HT-K
8 mm	Cable	M18	IA 18 ASN 08 PO HT-K
8 mm	Plug M12	M18	IA 18 ASN 08 PO M1 HT-K
10 mm ¹⁾	Cable	M30	IA 30 ASF 10 PO HT-K
10 mm ¹⁾	Plug M12	M30	IA 30 ASF 10 PO M1 HT-K
15 mm	Cable	M30	IA 30 ASN 15 PO HT-K
15 mm	Plug M12	M30	IA 30 ASN 15 PO M1 HT-K

¹⁾ For flush mounting in metal

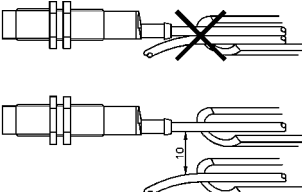
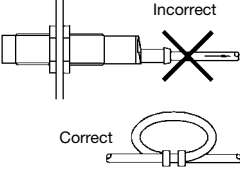
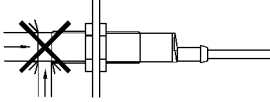
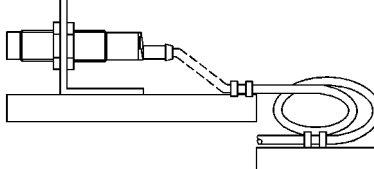
Specifications

Rated operational volt. (U_B)	10 to 30 VDC (ripple included)	Sensing distance	IA18ASF: 5 mm IA18ASN: 8 mm IA30ASF: 10 mm IA30ASN: 15 mm
Ripple	≤ 10%	Effective operating dist. (S_i)	0.9 x S _n ≤ S _r ≤ 1.1 x S _n
Rated operational current (I_e) Continuous	≤ 200 mA @ + 25°C (+75°F)	Usable operating dist. (S_u)	0.85 x S _r ≤ S _u ≤ 1.15 x S _r
No-load supply current (I_o)	≤ 25 mA (ON)	Ambient temperature	Operating: -40° to +100°C (-40° to +212°F) Storage: -45° to +105°C (-49° to +221°F)
Voltage drop (U_d)	< 2,4 V (@ I _{max})	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Protection	Short circuit	Housing material	Nickel-plated brass
Frequency of operating cycles (f)	IA18ASF: 1 kHz IA18ASN: 500 Hz IA30ASF: 500 Hz IA30ASN: 300 Hz	CE-marking	Yes
Indication for output ON	LED, yellow	Connection	Cable, 2 m, PUR, AWG 22 or Plug M12, CONH1A-xxx serie

Dimensions

 <p>IA 18 ASF 05 ... -K</p> <p>Plug version: 60 mm axial length</p>	 <p>IA 18 ASN 08 ... -K</p> <p>Plug version: 60 mm axial length</p>	 <p>IA 30 ASF 10 ... -K</p> <p>Plug version: 60 mm axial length</p>	 <p>IA 30 ASN 15 ... -K</p> <p>Plug version: 60 mm axial length</p>
---	---	--	---

Installation Hints

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

Wiring Diagram

