Proximity Inductive Sensors
Extended range, Nickel-Plated Brass Housing
Types ICB, M30

CARLO GAVAZZI

- Sensing distance: 15 to 22 mm
- Flush and non-flush types
- Short and long body versions
- Rated operational voltage (U_b): 10 - 36 VDC
- Output: DC 200 mA, NPN or PNP
- Normally open, Normally closed
- LED indication for output ON
- Protection: reverse polarity, short circuit, transients
- Cable and M12 plug versions
- According to IEC 60947-5-2
- CSA certified for Hazardous Locations

Product Description

A family of inductive proximity switches in industrial standard nickel-plated brass housings. They are able to handle applications where high sensing range is requested.
Output is open collector NPN or PNP transistors.

Ordering Key

ICB30SF15NOM1

- Type
- Housing style
- Housing material
- Housing size
- Housing length
- Detection principle
- Sensing distance
- Output type
- Output configuration
- Connection

Type Selection

Connection	Body style	Rated operating distance S_n	Ordering no. NPN Normally open	Ordering no. PNP Normally open	Ordering no. NPN Normally closed	Ordering no. PNP Normally closed
Cable	Short	15 mm 1)	ICB 30 SF 15 NO	ICB 30 SF 15 PO	ICB 30 SF 15 NC	ICB 30 SF 15 PC
Cable	Short	22 mm 2)	ICB 30 SN 22 NO	ICB 30 SN 22 PO	ICB 30 SN 22 NC	ICB 30 SN 22 PC
Plug	Short	15 mm 1)	ICB 30 SF 15 NOM1	ICB 30 SF 15 POM1	ICB 30 SF 15 NCM1	ICB 30 SF 15 PCM1
Plug	Short	22 mm 2)	ICB 30 SN 22 NOM1	ICB 30 SN 22 POM1	ICB 30 SN 22 NCM1	ICB 30 SN 22 PCM1
Cable	Long	15 mm 1)	ICB 30 LF 15 NO	ICB 30 LF 15 PO	ICB 30 LF 15 NC	ICB 30 LF 15 PC
Cable	Long	22 mm 2)	ICB 30 LN 22 NO	ICB 30 LN 22 PO	ICB 30 LN 22 NC	ICB 30 LN 22 PC
Plug	Long	15 mm 1)	ICB 30 LF 15 NOM1	ICB 30 LF 15 POM1	ICB 30 LF 15 NCM1	ICB 30 LF 15 PCM1
Plug	Long	22 mm 2)	ICB 30 LN 22 NOM1	ICB 30 LN 22 POM1	ICB 30 LN 22 NCM1	ICB 30 LN 22 PCM1

1) For flush mounting in metal

2) For non-flush mounting in metal

Specifications

Rated operational voltage (U_b)	10 to 36 VDC (ripple incl.)
Ripple	≤ 10%
Output current (I_e)	≤ 200 mA @ 50°C (≤ 150 mA @ 50-70°C)
OFF-state current (I_r)	≤ 50 µA
No load supply current (I_O)	≤ 15 mA
Voltage drop (U_d)	Max. 2.5 VDC @ 200 mA
Protection	Reverse polarity, short-circuit, transients
Dielectric impulse voltage withstand	1 kV/0.5 J
Power ON delay (t_v)	300 ms
Operating frequency (f)	≤ 1000 Hz
Indication for output ON NO version NC version	Activated LED, yellow Target present Target not present

Indication for short circuit/ overload	LED blinking
Assured operating sensing distance (S_a)	$0 \le S_a \le 0.81 \times S_n$
Effective operating distance (S_r)	$0.9 \times S_n \le S_r \le 1.1 \times S_n$
Usable operating distance (S_u)	$0.85 \times S_r \le S_u \le 1.1 \times S_r$
Repeat accuracy (R)	≤ 5%
Differential travel (H) (Hysteresis)	1 to 20% of sensing dist.
Ambient temperature Operating Storage	 -25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
Shock and vibration	IEC 60947-5-2/7.4
Housing material Body Front	 Nickel-plated brass Grey thermoplastic polyester