



**Electric Automation**  
Automation specialists

Reference: BSA-INDA

Selected parameters Others TYPE Inductive sensor HOUSING M18x55 POWER SUPPLY Bus-powered MAIN CHARACTERISTICS Inductive flush-mount sensor with 5 mm sensing distance, M12 connector

[Buy it at Electric Automation Network](#)

Transmitter with Inductive Prox. Switch Function

BSA-INDA

Stainless steel housing, cylindrical Diameter: M18

Short version

Flush mounting

Sensing distance: 5 mm Powered by smart-house Available with M12 connector

Freely programmable channel code by BGP-COD-BAT

GENERAL SPECIFICATIONS

Power ON delayTyp. 5 ms

Environment

Degree of protectionIP 67

Pollution degree 3 (IEC 60664)

Operating temperature -25° to +70°C (-13° to +158°F) Storage temperature -30° to +80°C (-22° to +176°F)

Mechanical resistance

Tightening torque 2.6 Nm

Material

Housing & BodyStainless steel (1.4301) BackBlack polyester

FrontGrey thermoplastic polyester

Connection M12 plug

Weight 25 g

INPUT SPECIFICATIONS

Inputs Inductive proximity switch

Nominal sensing distance  $S_n$  5 mm

Effective sensing range  $S_r$   $0.9 \times S_n \leq S_r \leq 1.1 \times S_n$  Usable operating range  $S_u$   $0.9 \times S_r \leq S_u \leq 1.1 \times S_r$  Assured operating range  $S_a$   $0 < S_a < 0.81 \times S_n$  Hysteresis  $H$ Typ. 7%

Response time $\leq 1$ smart-house pulse train

REDUCTION FACTORS

The nominal sensing distance is reduced by the use of metal and alloys other than ST 37. Most important reduction factors for the inductive proximity switch are:

Stainless steel  $0.6 \times S_n$  Brass  $0.4 \times S_n$  Aluminium  $0.3 \times S_n$  Copper  $0.2 \times S_n$

## SUPPLY SPECIFICATIONS

Power supply Supplied by smart-house

Reverse polarity protection Yes

Rated operational current Typ. 900  $\mu$ A

TYPE SELECTION Housing Connection Rated operating Ordering no. diameter dist. (Sn)

M18M12 plug 5 mm 1) BSA-INDA

1) For flush mounting in metal

## MODE OF OPERATION

The BSA-INDA inductive proximity switch with built-in smart-house transmitter operates in the same way as the commonly available pro-

## WIRING DIAGRAM

D + D -

ducts of a similar kind. Once a metallic object is brought within sensing distance of the inductive proximity switch the respective channel will be activated.

The inductive proximity switch may be coded to any smart-house channel by means of the programmer BGP-COD-BAT and the adapter ADAPT 1605.

Brown

Blue

Black

Specifications are subject to change without notice (14.08.2009) - A product of the CARLO GAVAZZI Group