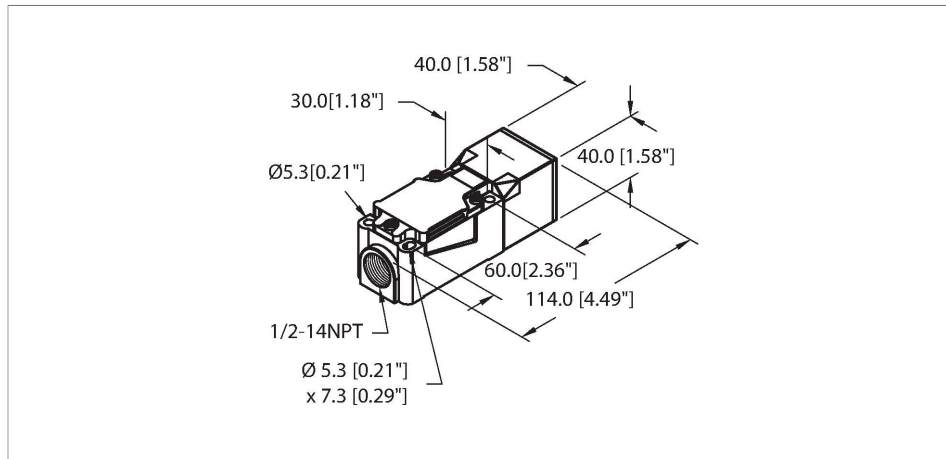


BI15-CP40-FZ3X2/S10

Inductive Sensor



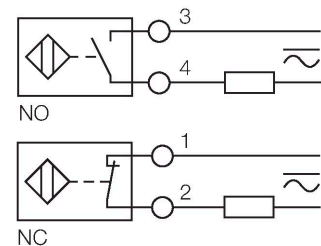
Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NC/NO programmable
- Terminal chamber

Technical data

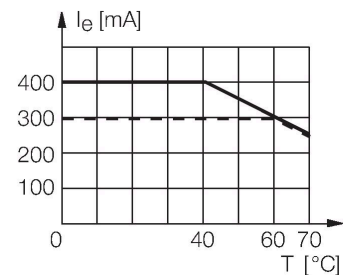
| | |
|------------------------------|------------------------------------------------------------|
| Type | BI15-CP40-FZ3X2/S10 |
| ID | 13410 |
| Special version | S10 corresponds to: Mounting base with 1/2-14NPT thread |
| General data | |
| Rated switching distance | 15 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | $\leq \pm 10$ % |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage | 20...250 VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Frequency | $\geq 50 \dots \leq 60$ Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 8 A (≤ 10 ms max. 5 Hz) |
| Voltage drop at I_o | ≤ 6 V |
| Output function | 2-wire, Connection programmable, 2-wire |
| Smallest operating current | ≥ 3 mA |

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



Technical data

| | |
|---------------------------------|--------------------------------------------|
| Switching frequency | 0.02 kHz |
| Mechanical data | |
| Design | Rectangular, CP40 |
| Dimensions | 114 x 40 x 40 mm |
| Housing material | Plastic, PBT-GF30-V0, Black |
| Active area material | Plastic, PBT-GF30-V0, yellow |
| Electrical connection | Terminal chamber |
| Clamping ability | ≤ 2.5 mm ² |
| Environmental conditions | |
| Ambient temperature | -25...+70 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Power-on indication | LED, Green |
| Switching state | LED, Red |

Mounting instructions

| | | |
|-----------------------------------|---------------------|--------|
| Mounting instructions/Description | | |
| | Distance D | 2 x B |
| | Distance W | 3 x Sn |
| | Distance S | 1 x B |
| | Distance G | 6 x Sn |
| | Width active area B | 40 mm |

Accessories

| | |
|-----------|---------------------------------------------------------------------|
| JS025/037 | 69429 |
| | Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301 |

| | |
|----------|-----------------------------------------------------------------------------|
| BSS-CP40 | 6901318 |
| | Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene |

B115-CP40-FZ3X2(S10) | 11/29/2022 06-10 | technical changes reserved