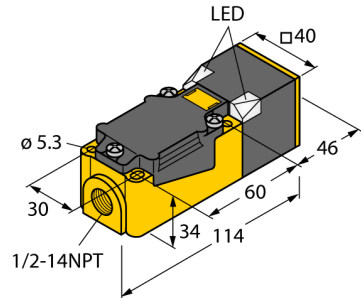


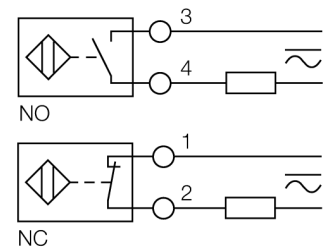
Inductive sensor

BI15-CP40-FZ3X2/S10



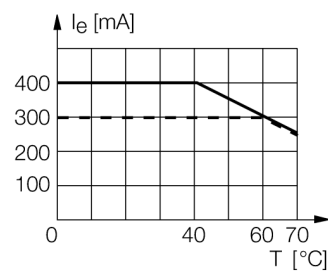
- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NC/NO programmable
- Terminal chamber

Wiring Diagram



Functional principle

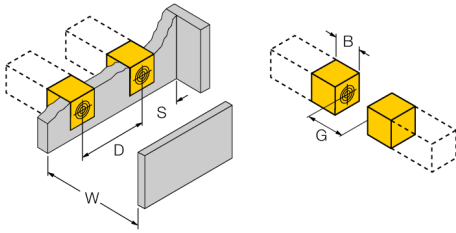
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



| | |
|---|---|
| Type designation | BI15-CP40-FZ3X2/S10 |
| Ident-No. | 13410 |
| Special version | S10 = Mounting base with 1/2-14NPT thread |
| Rated switching distance Sn | 15 mm |
| Mounting conditions | Flush |
| Secured operating distance | ≤ (0,81 x Sn) mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 20...250VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Frequency | ≥ 50...≤ 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 _e | ≤ 6 V |
| Output function | 2-wire, Connection programmable |
| Smallest operating current I _o | ≥ 3 mA |
| Switching frequency | 0.02 kHz |
| 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 |
| 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 |
| Packaging unit | 1 |
| Power-on indication | LED,Green |
| Switching state | LED, Red |

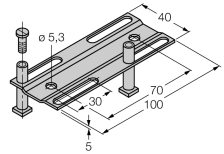
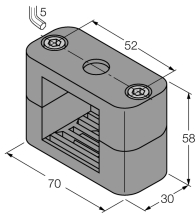
Inductive sensor
BI15-CP40-FZ3X2/S10

| | |
|----------------------------|--------|
| 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 |



Inductive sensor
BI15-CP40-FZ3X2/S10

Accessories

| Type code | Ident-No. | Description | |
|--------------------------|-----------|---|---|
| Adjusting bar JS 025/037 | 69429 | Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301 |  |
| BSS-CP40 | 6901318 | Mounting bracket for rectangular devices; material: Polypropylene |  |