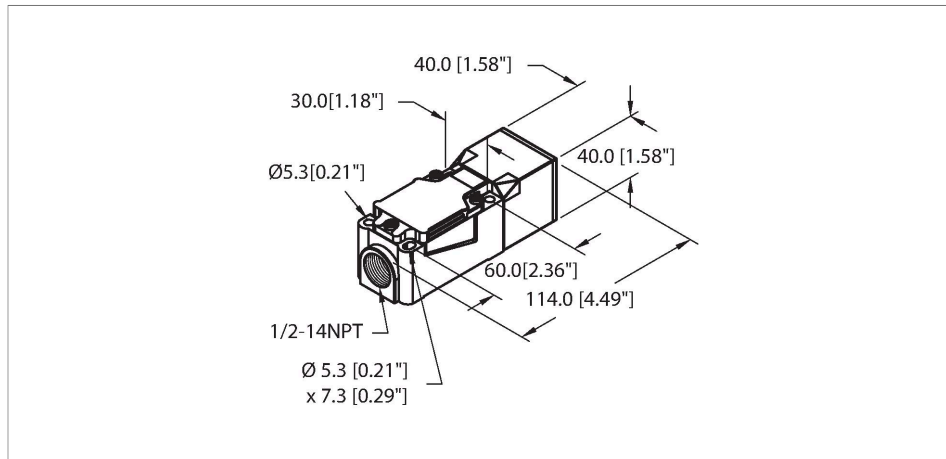


BI15-CP40-LIU/S10

Inductive Sensor – With Analog Output



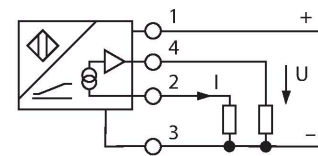
Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-VO
- High-luminance corner LEDs
- Optimum view of operating voltage and switching state from any position
- Thread, 1/2-14 NPT
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Terminal chamber

Technical data

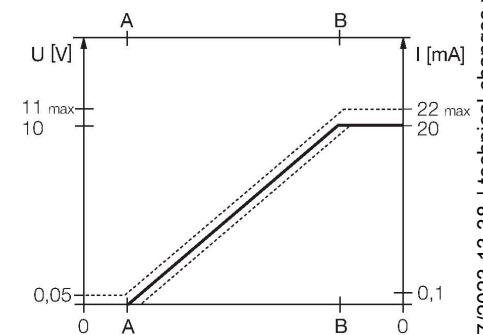
| | |
|---|--|
| Type | BI15-CP40-LIU/S10 |
| ID | 15357 |
| Special version | S10 corresponds to: Mounting base with 1/2-14NPT thread |
| General data | |
| Measuring range | 4...11 mm |
| Rated switching distance | 15 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeatability | $\leq 1\%$ of measuring range A - B |
| | 0.5 %, after warm-up 0.5 h |
| Reproducibility | $\leq 70\ \mu\text{m}$ |
| | $\leq 35\ \mu\text{m}$, after a warm-up time of 0.5 h |
| Temperature drift | $\leq \pm 0.06\ \%/K$ |
| Electrical data | |
| Operating voltage | 15...30 VDC |
| Residual ripple | $\leq 10\% U_{ss}$ |
| No-load current | 8 mA |
| Isolation test voltage | $\leq 0.5\ \text{kV}$ |
| Short-circuit protection | yes |
| Wire breakage/Reverse polarity protection | no / Complete |
| Output function | 4-wire, Analog output |
| Voltage output | 0...10 V |

Wiring diagram



Functional principle

Inductive TURCK sensors with analog output accomplish simple control tasks. They provide a current, voltage or frequency signal proportional to the target's distance. The output signal is linear to the distance of the target over the entire sensing range.



BI15-CP40-LIU/S10 | 11/07/2023 13-38 | technical changes reserved

Technical data

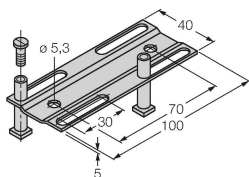
| | |
|---------------------------------|---|
| Current output | 0...20 mA |
| Load resistance voltage output | $\geq 4.7 \text{ k}\Omega$ |
| Load resistance current output | $\leq 0.4 \text{ k}\Omega$ |
| Measuring sequence frequency | 110 Hz |
| Mechanical data | |
| Design | Rectangular, CP40 |
| 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 | $\leq 2.5 \text{ mm}^2$ |
| Environmental conditions | |
| Ambient temperature | -25...+70 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 751 years acc. to SN 29500 (Ed. 99) 40 °C |

Mounting instructions

| Mounting instructions/Description | | |
|-----------------------------------|---------------------|-------|
| | Distance D | 80 mm |
| | Distance W | 33 mm |
| | Distance S | 40 mm |
| | Distance G | 66 mm |
| | 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

