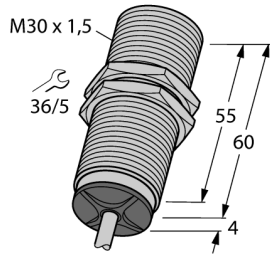
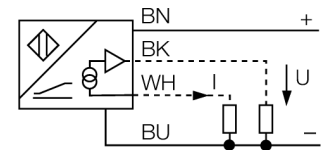


**Inductive sensor
with analog output
BI15-M30-LIU**



- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Cable connection

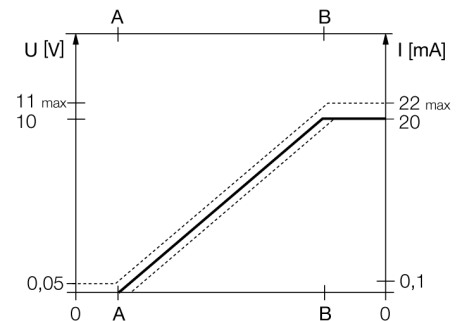
Wiring diagram



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.

Measuring range

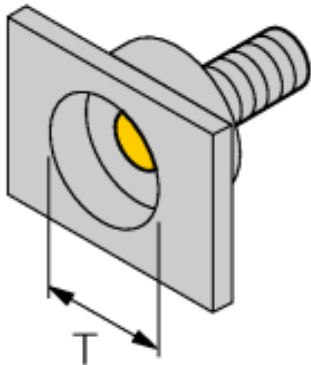


| | |
|---|---|
| Type code | BI15-M30-LIU |
| Ident no. | 1535543 |
| Measuring range [A...B] | 2...10mm |
| Mounting condition | flush |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeatability | ≤ 1 % of measuring range A - B |
| | ≤ 0.5 %, after warm-up 0.5 h |
| Reproducibility | ≤ 80 μm |
| | ≤ 40 μm, after a warm-up time of 0.5 h |
| Linearity deviation | ≤ 5 % |
| Temperature drift | ≤ ± 0.06 % / K |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 15...30VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| No-load current I ₀ | ≤ 8 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 4-wire, analog output |
| Voltage output | 0...10V |
| Current output | 0...20mA |
| Load resistance voltage output | ≥ 4.7 kΩ |
| Load resistance current output | ≤ 0.4 kΩ |
| Measuring sequence frequency | 140 Hz |
| Design | threaded barrel, M30 x 1.5 |
| Dimensions | 64 mm |
| Housing material | metal, CuZn, chrome-plated |
| Material active area | Plastic, PA |
| End cap | Plastic, EPTR |
| Max. tightening torque housing nut | 75 Nm |
| Connection | cable |
| Cable quality | 5.2 mm, LifYY, PVC, 2 m |
| Cable cross section | 4 x 0.34 mm ² |
| 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 |

**Inductive sensor
with analog output
BI15-M30-LIU**

| | |
|------------|-------|
| Distance D | 60 mm |
| Distance W | 27 mm |
| Distance T | 3 x B |
| Distance S | 45 mm |
| Distance G | 54 mm |

Diameter of the active area B \varnothing 30 mm

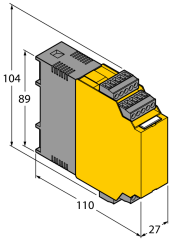
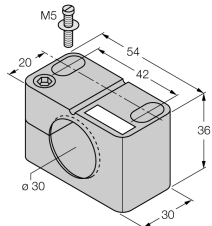
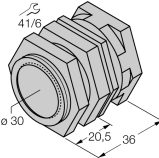
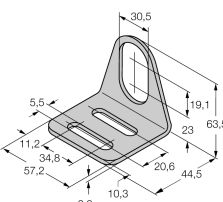
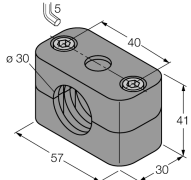


**Inductive sensor
with analog output
BI15-M30-LIU**

TURCK

Industrial
Automation

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|------------|-----------|--|---|
| IM43-13-SR | 7540041 | Limit value monitor; 1-channel; input 0/4...20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one NO contact each; removable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalog. |  |
| BST-30B | 6947216 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 |  |
| QM-30 | 6945103 | Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M36 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets. |  |
| MW-30 | 6945005 | Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304) |  |
| BSS-30 | 6901319 | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene |  |