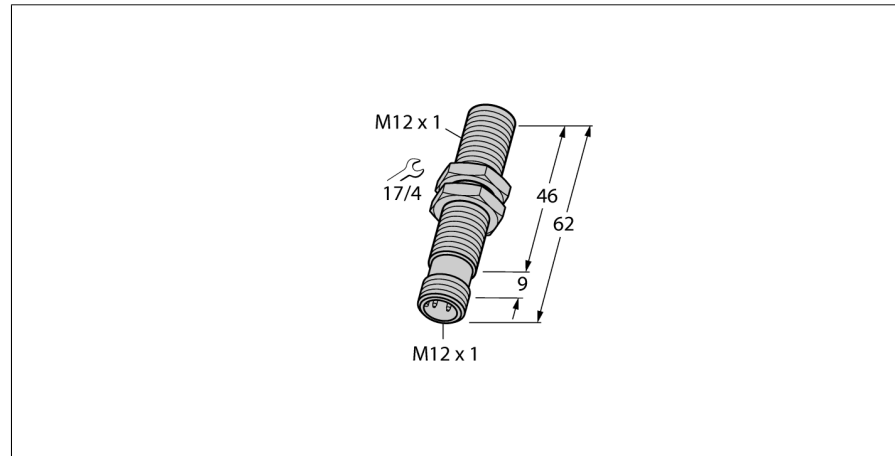
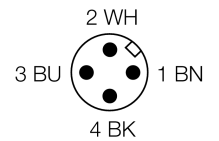
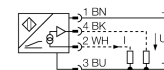


**Inductive sensor
with analog output
BI2-M12-LIU-H1141**



- Threaded barrel, M12 x 1
- Chrome-plated brass
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Male M12 x 1

Wiring diagram

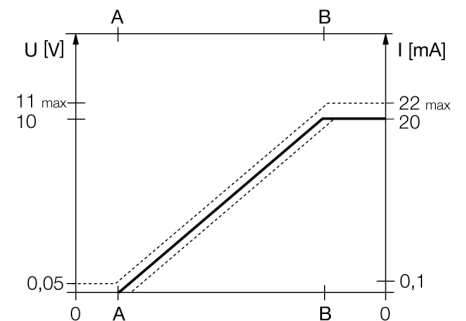


| | |
|---|---|
| Type code | BI2-M12-LIU-H1141 |
| Ident no. | 1535533 |
| Measuring range [A...B] | 1...2.5mm |
| Mounting condition | flush |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeatability | ≤ 1 % of measuring range A - B |
| | ≤ 0.5 %, after warm-up 0.5 h |
| Reproducibility | ≤ 15 µm |
| | ≤ 7.5 µm, after a warm-up time of 0.5 h |
| Linearity deviation | ≤ 3 % |
| 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 | 200 Hz |
| Design | threaded barrel, M12 x 1 |
| Dimensions | 62 mm |
| Housing material | metal, CuZn, chrome-plated |
| Material active face | Plastic, PA |
| Max. tightening torque housing nut | 10 Nm |
| Connection | male, M12 x 1 |
| 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 |

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



**Inductive sensor
with analog output
BI2-M12-LIU-H1141**

| | |
|------------|-------|
| Distance D | 24 mm |
| Distance W | 9 mm |
| Distance T | 3 x B |
| Distance S | 18 mm |
| Distance G | 18 mm |

Diameter of the active area B \varnothing 12 mm

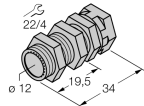
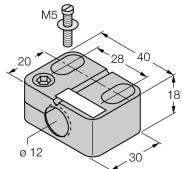
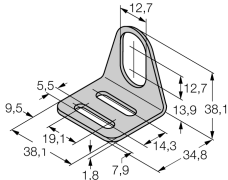
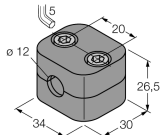
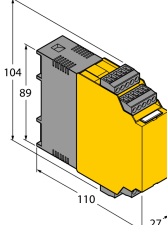


**Inductive sensor
with analog output
BI2-M12-LIU-H1141**

TURCK

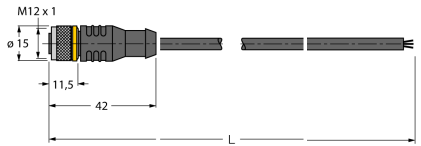
Industrial
Automation

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|------------|-----------|--|---|
| QM-12 | 6945101 | Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets. |  |
| BST-12B | 6947212 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 |  |
| MW-12 | 6945003 | Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304) |  |
| BSS-12 | 6901321 | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene |  |
| 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. |  |

**Inductive sensor
with analog output
BI2-M12-LIU-H1141**

Wiring accessories

| Type code | Ident no. | Description | Dimension drawing |
|-------------|-----------|--|---|
| RKC4T-2/TEL | 6625010 | Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |  |