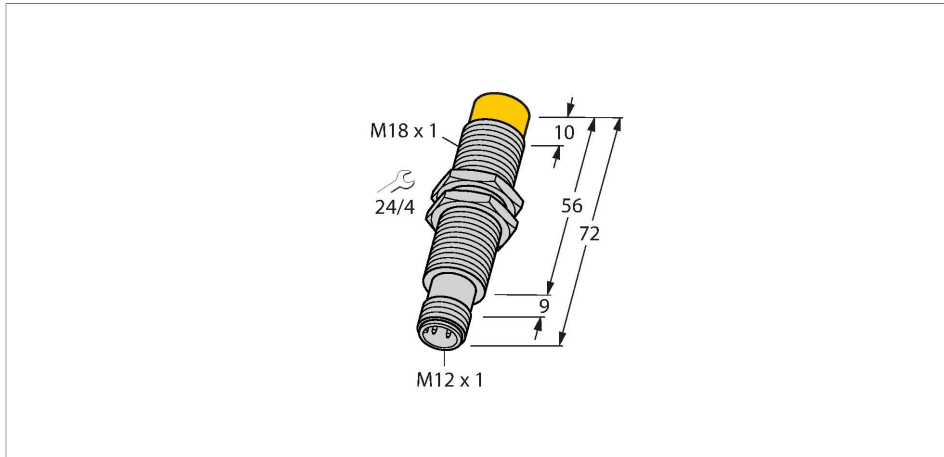


NI10-M18E-LIU-H1141

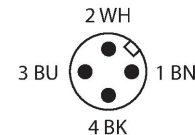
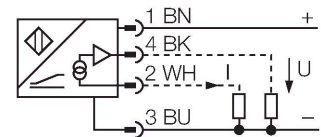
Inductive Sensor – With Analog Output



Features

- Threaded barrel, M18 x 1
- Chrome-plated brass
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- M12 x 1 male connector

Wiring diagram

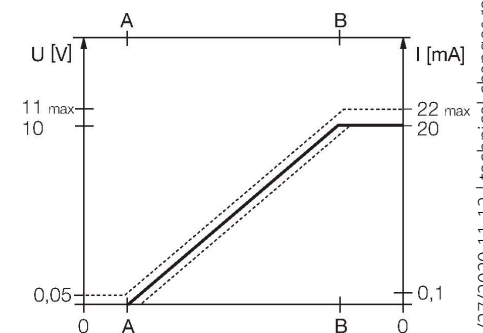


Technical data

| | |
|---|--|
| Type | NI10-M18E-LIU-H1141 |
| Ident. no. | 1535562 |
| Measuring range | 1...7 mm |
| Mounting conditions | Non-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 | $\leq 60\ \mu\text{m}$ |
| | $\leq 30\ \mu\text{m}$, after a warm-up time of 0.5 h |
| Linearity deviation | $\leq 5\%$ |
| Temperature drift | $\leq \pm 0.06\% / \text{K}$ |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 15...30 VDC |
| Residual ripple | $\leq 10\% U_{ss}$ |
| No-load current | $\leq 8\ \text{mA}$ |
| 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 |
| Current output | 0...20 mA |
| Load resistance voltage output | $\geq 4.7\ \text{k}\Omega$ |
| Load resistance, current output | $\leq 0.4\ \text{k}\Omega$ |

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.



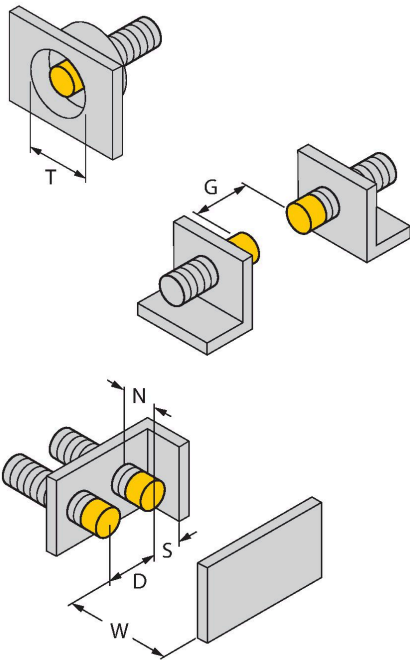
NI10-M18E-LIU-H1141 | 05/27/2020 11-12 | technical changes reserved

Technical data

| | |
|------------------------------------|---|
| Measuring sequence frequency | 100 Hz |
| Design | Threaded barrel, M18 × 1 |
| Dimensions | 72 mm |
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | Plastic, PA12-GF30 |
| Max. tightening torque housing nut | 25 Nm |
| Electrical connection | Connector, M12 × 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 |

Mounting instructions

Mounting instructions/Description

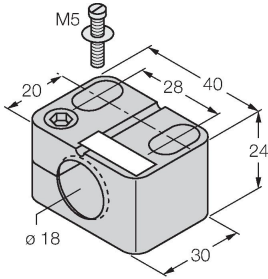


| | |
|------------------------|---------|
| Distance D | 36 mm |
| Distance W | 18 mm |
| Distance T | 3 x B |
| Distance S | 27 mm |
| Distance G | 36 mm |
| Distance N | 12 mm |
| Diameter active area B | Ø 18 mm |

Accessories

BST-18B

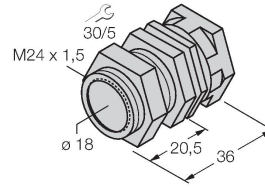
6947214



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

QM-18

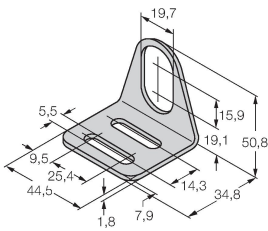
6945102



Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

MW18

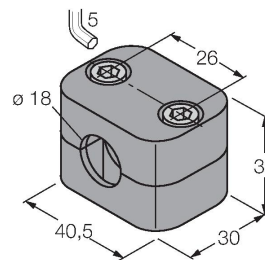
6945004



Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-18

6901320



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

Wiring accessories

Dimension drawing

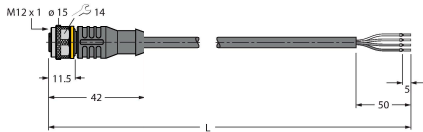
Type

Ident. no.

RKC4.4T-2/TEL

6625013

Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com



RKC4.301T-0.15-RSC4.334T/TXL 6631382

Extension cable, M12 female/male, straight, 4-pin, cable length: 0.15m, jacket material: PUR, black; cULus approval; Adapter cable for sensors with analog output on pin 2, for connection to analog inputs of fieldbus modules with 4-wire technology

