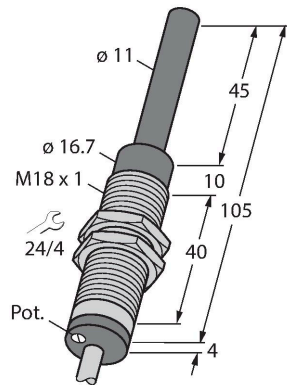


WI40-M18-LIU5

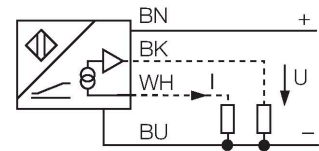
Inductive Sensor – With Analog Output



Features

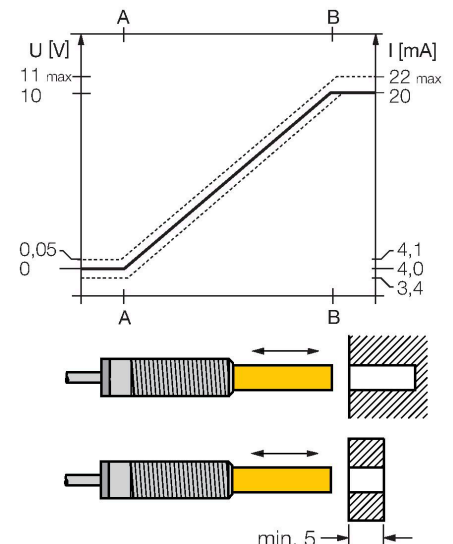
- Threaded barrel, M18 x 1
- Chrome-plated brass
- Potentiometer to adjust the characteristic
- Actuated via short-circuiting ring, blind hole or the like
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 4...20 mA
- Cable connection

Wiring diagram



Functional principle

Simple control tasks can be solved with the inductive linear position sensors of the WI series from Turck. They are selectively operated with a non-ferrous metal ring or blind hole and provide a distance proportional, analog output signal.



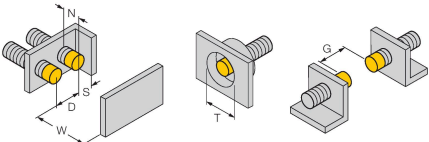
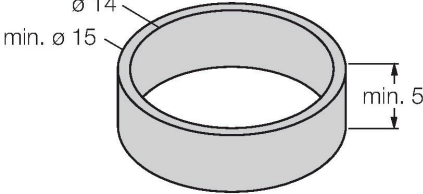
Technical data

| | |
|--|---------------------------------------|
| Type | WI40-M18-LIU5 |
| ID | 1536603 |
| General data | |
| Measuring range | 0...40 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeatability | $\leq 1 \%$ of measuring range A - B |
| | 0.5 %, after warm-up 0.5 h |
| Linearity deviation | $\leq 2 \%$ |
| Temperature drift | $\leq \pm 0.06 \%/K$ |
| Electrical data | |
| Operating voltage U_B | 15...30 VDC |
| Ripple U_{ss} | $\leq 10 \%$ U_{Bmax} |
| No-load current | ≤ 8 mA |
| Isolation test voltage | 0.5 kV |
| Short-circuit protection | yes |
| Wire break/reverse polarity protection | no/Complete |
| Output function | 4-wire, Analog output |
| Voltage output | 0...10 V |
| Current output | 4...20 mA |
| Load resistance voltage output | ≥ 4.7 k Ω |
| Load resistance current output | ≤ 0.4 k Ω |
| Measuring sequence frequency | 40 Hz |

Technical data

| Mechanical data | |
|---------------------------------------|---|
| Design | Threaded barrel, M18 x 1 |
| Dimensions | 109 mm |
| Probe length | 45 mm |
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | Plastic, PVC rigid, black |
| End cap | Plastic, PUR, black |
| Max. tightening torque of housing nut | 25 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, Gray, LifYY, PVC, 2 m |
| Core cross-section | 4 x 0.34 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 |
| Included in delivery | brass ring |

Mounting instructions

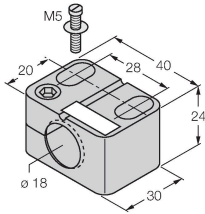
| Mounting instructions/Description | |
|---|------------------------|
|  | Distance D |
| | 72 mm |
|  | Distance W |
| | 2 x B |
| | Distance T |
| | 5 x B |
| | Distance S |
| | 1 x B |
| | Distance G |
| | 3 x B |
| | Distance N |
| | 55 mm |
| | Diameter active area B |
| | Ø 18 mm |
| <p>Use non-ferrous metals for ring or blind hole only.</p> <p>The diameter of the blind hole depends on its wall thickness and the material.</p> <p>Only the use of the NF-ring, which is included in the delivery, ensures that the values stated in the data sheet are observed.</p> <p>In case of non-observance or use of a blind hole, the measuring range may be reduced.</p> | |

Accessories

BST-18B

6947214

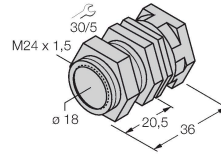
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



QM-18

6945102

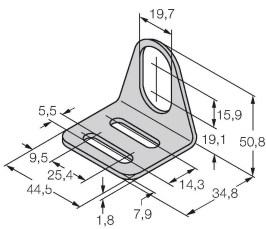
Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



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

