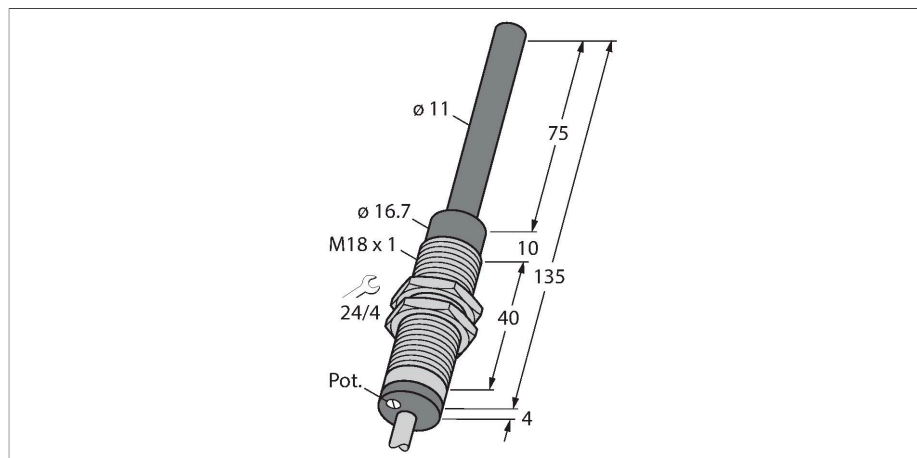


WI70-M18-LIU5

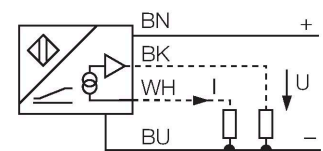
Inductive Sensor – With Analog Output



Features

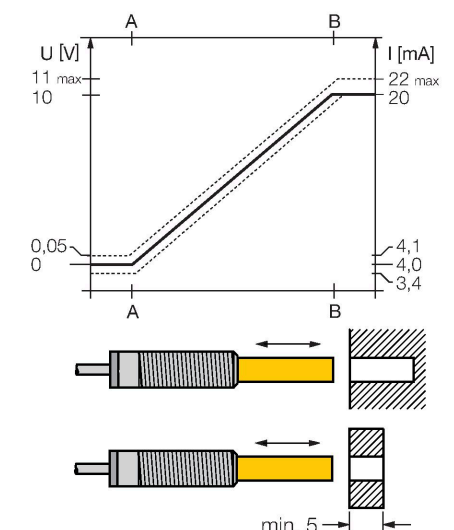
- Threaded barrel, M18 x 1
- Chrome-plated brass
- Actuated via short-circuiting ring, blind hole or the like
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 4...20 mA
- Cable connection

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

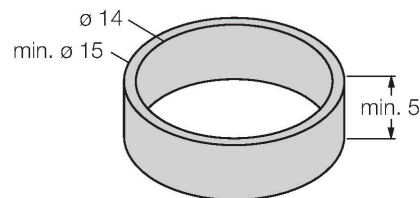
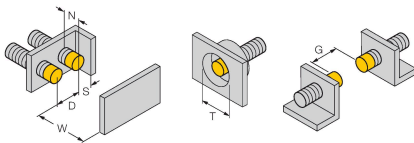
Type	WI70-M18-LIU5
ID	1536600
General data	
Measuring range	0...70 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeatability	$\leq 1 \%$ of measuring range [A - B] 0.5 %, after warm-up 0.5 h
Linearity deviation	$\leq 3 \%$
Temperature drift	$\leq \pm 0.06 \%/K$
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
Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	139 mm
Probe length	75 mm

Technical data

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	85 mm
Diameter active area B	Ø 18 mm

Use non-ferrous metals for ring or blind hole only.

The diameter of the blind hole depends on its wall thickness and the material.

Only the use of the NF-ring, which is included in the delivery, ensures that the values stated in the data sheet are observed.

In case of non-observance or use of a blind hole, the measuring range may be reduced.

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



Accessories

Dimension drawing

Type

ID

IM43-13-SR

7540041

Trip amplifier; 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 indicators are described in our "Interface Technology" catalog.

