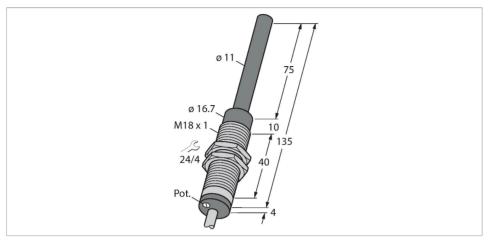


# WI70-M18-LIU5 Inductive Sensor – With Analog Output



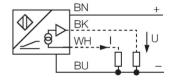
#### Technical data

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Type	WI70-M18-LIU5
ldent. no.	1536600
Measuring range	070 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeatability	$\leq$ 1 % of measuring range  A - B
	0.5 %, after warm-up 0.5 h
Linearity deviation	≤ 3 %
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25+70 °C
Operating voltage	1530 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
No-load current	≤ 8 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	4-wire, Analog output
Voltage output	010 V
Current output	420 mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance, current output	≤ 0.4 kΩ
Measuring sequence frequency	40 Hz
Design	Threaded barrel, M18 $\times$ 1
Dimensions	139 mm

#### **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

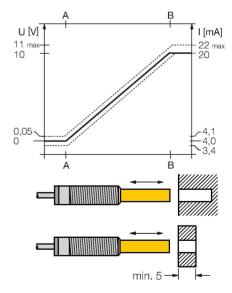
# Wiring diagram



# 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

Probe length	75 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PVC rigid, black
End cap	Plastic, PUR, black
Max. tightening torque 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 mm²
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

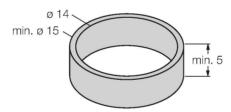
### Mounting instructions

#### 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.



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#### Accessories

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# BST-18B Mounting clamp sensors, with de

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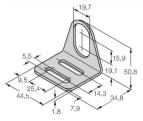
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

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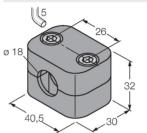


Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.





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



BSS-18

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