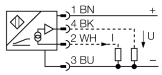
Inductive sensor
With analog output
WI70-M18-LIU5-H1141/S250

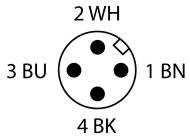
Industrial Automation

Kein Maßbild vorhanden/
No dimension drawing available

- **Threaded barrel, M18 x 1**
- **Chrome-plated brass**
- **Analog output (current and voltage)**
- **Fixed settings**
- **Actuated via short-circuiting ring, blind hole or the like**
- **4-wire, 15…30 VDC**
- **Analog output**
- **0…10 V and 4…20 mA**
- **M12 x 1 male connector**

Wiring diagram



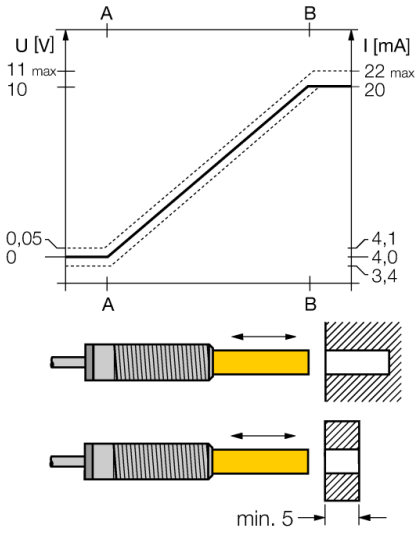


Type code	WI70-M18-LIU5-H1141/S250
Ident no.	1536614
Measuring range [A…B]	0…70mm
Mounting conditions	non-flush
Repeatability	≤ 1 % of measuring range |A - B|
	≤ 0.5 %, after warm-up 0.5 h
Linearity deviation	≤ 3 %
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25…+70 °C
Operating voltage	15…30VDC
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…10VDC
Current output	4…20mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance, current output	≤ 0.4 kΩ
Measuring sequence frequency	40 Hz
Construction	threaded barrel, M18 x 1
Dimensions	147 mm
Housing material	metal, CuZn, chrome-plated
Material active area	plastic, PA
Max. tightening torque housing nut	25 Nm
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
IP Rating	IP67
MTTF	751 years acc. to SN 29500 (Ed. 99) 40 °C
Included in delivery	brass ring

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



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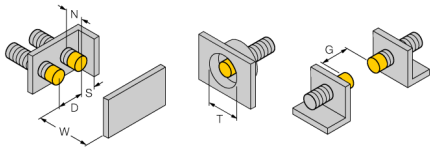
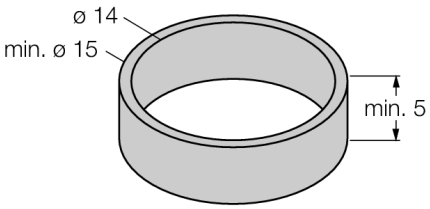
Distance W	2 x B
Distance T	5 x B
Distance S	1 x B
Distance G	3 x B
Distance N	85 mm

Diameter of the 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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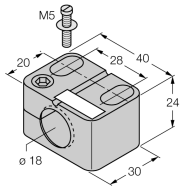
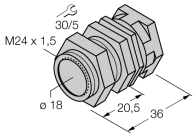
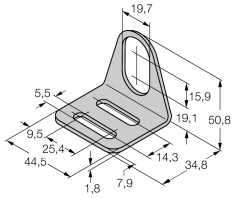
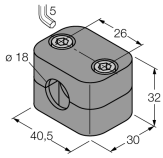
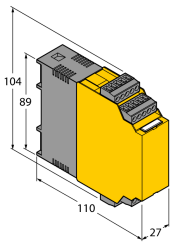
Accessories

Type code	Ident no.	Description	Design
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-18	6945102	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	
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.	

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