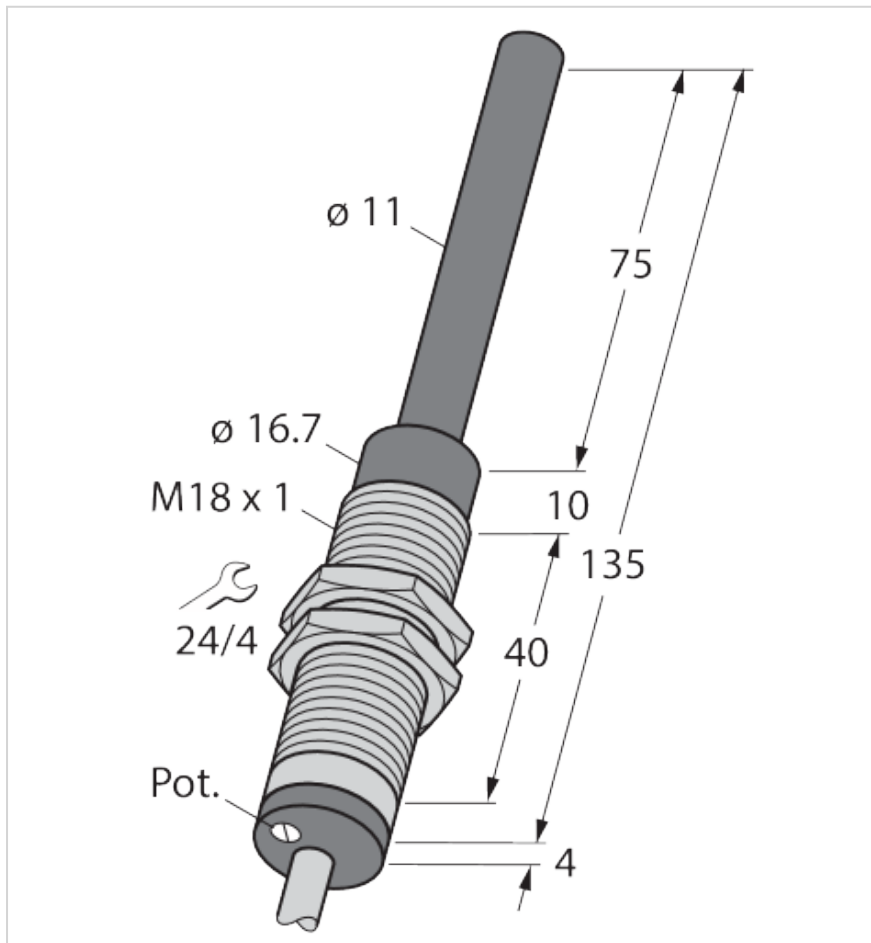


WI70-M18-LIU5

Inductive Sensor With Analog Output



Type designation	WI70-M18-LIU5
Ident-No.	1536600

Technical data

Application area	
Probe length	75 mm
Detection area/measuring range	
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Measuring range	0...70 mm
Power supply	
Operating voltage U_B	15...30 VDC

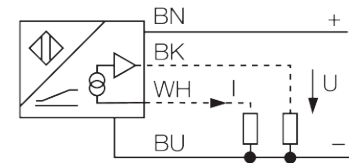
Features

- M18 × 1 threaded barrel
- 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

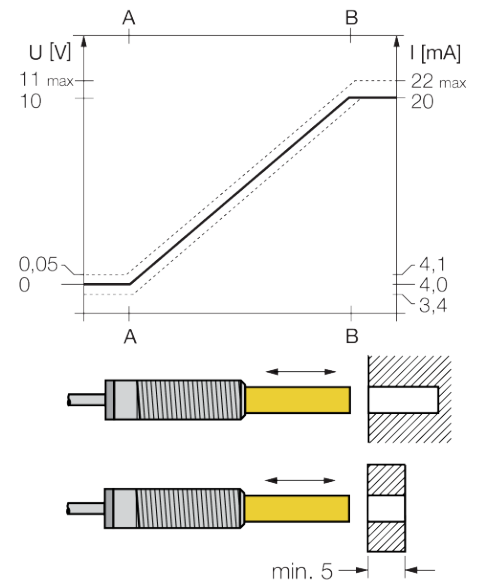
Technical data

Electrical data	
No-load current	8 mA
Output function	4-wire, Analog output
Short-circuit protection	yes
Wire break/reverse polarity protection	no/Complete
Isolation test voltage	≤ 0,5 kV
Measuring sequence frequency	40 Hz
Residual ripple	≤ 10 % U _{SS}
Outputs	
Current output	4...20 mA
Voltage output	0...10 V
Load resistance current output	≤ 0,4 kΩ
Load resistance voltage output	≥ 4,7 kΩ
Accuracy/deviation	
Linearity deviation	3 %
Repeatability	≤ 1 % of measuring range A - B
	0.5 %, after warm-up 0.5 h
Temperature drift	≤ ±0,06 %/K
Mechanical data	
Design	Threaded barrel, M18 x 1
Construction type designation	M18
	ø 18 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
Pressure resistant	no
Thread length	40 mm
Thread size	M18 x 1
Mounting conditions	Non-flush
Cable	
Cable length	2 m
Cable jacket	Gray
Core cross-section	4 x 0,34 mm ²
Cable type	LifYY
External Diameter of the Cable	Ø 5,2 mm

Wiring Diagram



Measuring Range



Functional principle

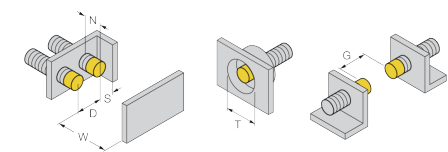
Simple control tasks can be solved with the inductive linear position sensors of the WI series from Turck.

They are selectively operated with a non-ferrous metal ring or blind hole and provide a distance proportional, analog output signal.

Technical data

Cable Jacket Material	PVC
Ambient conditions	
Ambient temperature	-25...+70 °C
Pollution degree	3
Shock resistance	30 g (11 ms)
Vibration resistance	55 Hz (1 mm)
Protection class	IP67
Tests/approvals	
MTTF	751 Years acc. to SN 29500 (Ed. 99) 40 °C
Other properties	
RoHs compatibility	yes
Comments	
Included in delivery	Brass ring

Assembly instructions

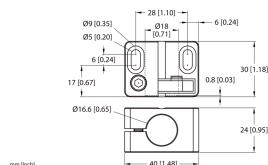


Distance D: 72 mm
Distance W: 2 x B
Distance T: 5 x B
Distance S: 1 x B
Distance G: 3 x B
Distance N: 85 mm
Diameter active area B: 18 mm
Installation information:
use non-ferrous metals for ring- or blind hole only
The diameter of the blind hole depends on its wall thickness and the material. Only the 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.

Mounting accessories

BST-18B

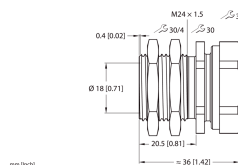
6947214



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

QM-18

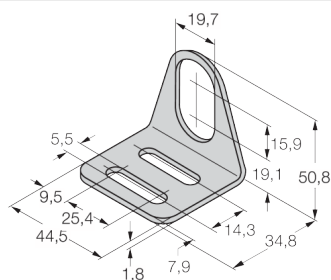
6945102



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

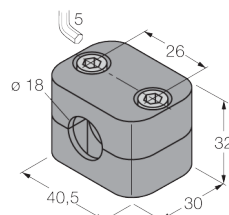
6945004



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

BSS-18

6901320

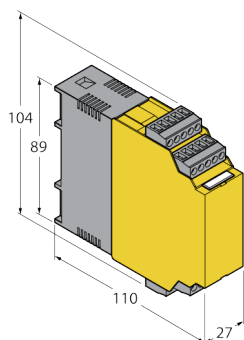


Mounting bracket for smooth and threaded barrel sensors; material: Polypropylene

Functional accessories

IM43-13-SR

7540041



Trip amplifier; 1-channel; input 0/4...20 mA or 0/2...10 V; power supply for 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 operating voltage 20...250 VUC; additional trip amplifiers available in our "Interface Technology" catalog