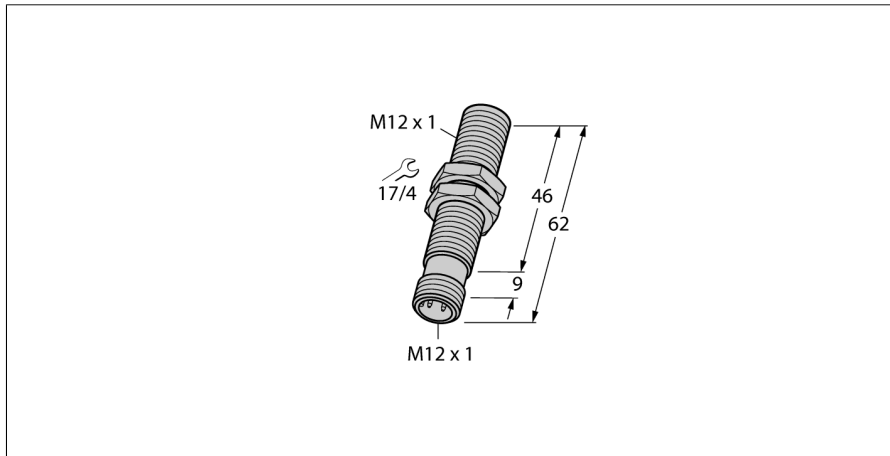
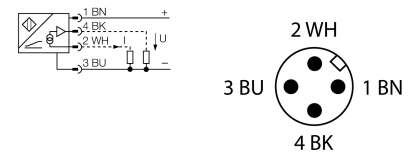


**Inductive sensor**  
**With analog output**  
**BI4-M12-LIU-H1141**



- Threaded barrel, M12 x 1
- Chrome-plated brass
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- M12 x 1 male connector

**Wiring diagram**

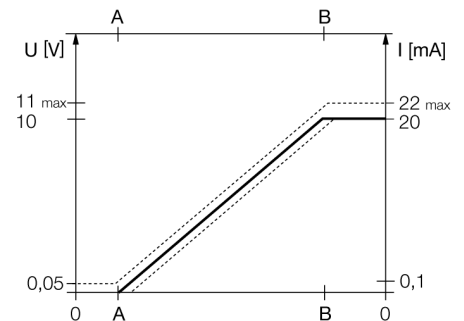


<b>Type code</b>	BI4-M12-LIU-H1141
Ident-No.	1535531
Ident-No (TUSA)	M1535531
<b>Measuring range [A...B]</b>	0.5...3mm
Mounting conditions	flush
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 1 % of measuring range  A - B  ≤ 0.5 %, after warm-up 0.5 h
Reproducibility	≤ 25 μm ≤ 12.5 μm, after a warm-up time of 0.5 h
Linearity deviation	≤ 5 %
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	15... 30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
No-load current I <sub>0</sub>	≤ 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	0...20mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance, current output	≤ 0.4 kΩ
Measuring sequence frequency	200 Hz
<b>Construction</b>	threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	metal, CuZn, chrome-plated
Material active area	plastic, PA
Max. tightening torque housing nut	10 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

**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**



**Inductive sensor**  
**With analog output**  
**BI4-M12-LIU-H1141**

---

Distance D	24 mm
Distance W	9 mm
Distance T	3 x B
Distance S	18 mm
Distance G	18 mm

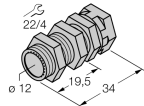
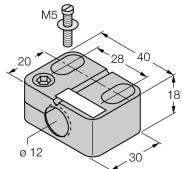
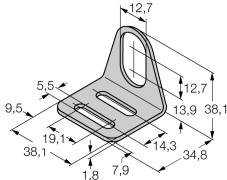
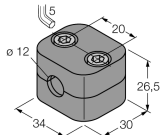
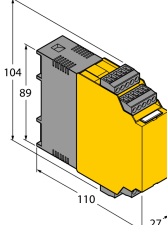
---

**Diameter of the active area B**       $\varnothing$  12 mm



**Inductive sensor  
With analog output  
BI4-M12-LIU-H1141**

**Accessories**

Type code	Ident-No.	Description	Design
QM-12	6945101	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	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.	

**Inductive sensor  
With analog output  
BI4-M12-LIU-H1141**



**Wiring accessories**

Type code	Ident-No.	Description	Design
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	