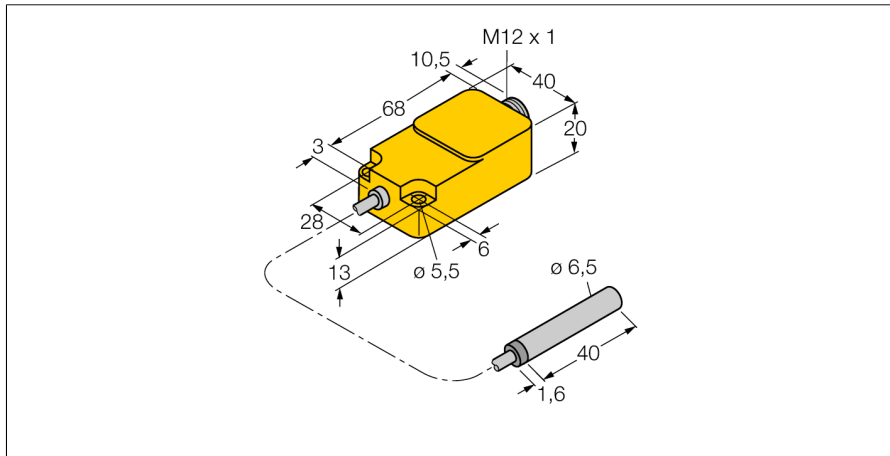
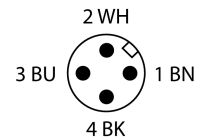
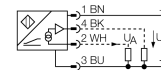


Inductive sensor
For material recognition
Bi1.5-EH6.5-0.2-Q20-2LU-H1141/S950



- Smooth barrel, Ø 6.5 mm
- Stainless steel, 1.4427 SO
- Analog
- 1 x analog output for amplitude evaluation
- 1 x analog output for phase evaluation
- M12 x 1 male connector

Wiring Diagram



Type designation	Bi1.5-EH6.5-0.2-Q20-2LU-H1141/S950
Ident-No.	1533010
Remark to product	Because of the new black front cap, the thickness of 0,6 mm to 0,3 mm modified.
Special version	S950 = Bi50R-Q80-2LU-H1141/S950: 1 x analog amplitude output; 1 x analog phase output
Mounting conditions	Flush
Temperature drift	≤ 0.5 %, after warm-up 0.5 h
Ambient temperature	± 0.06 % / K -25...+70 °C
Operating voltage	15...30 VDC
Residual ripple	≤ 10 % U _{ss}
No-load current I ₀	≤ 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	0...10V
Voltage output (phase)	≥ 1...≤ 10VDC
Load resistance voltage output	≥ 4.7 kΩ
Measuring sequence frequency	80 Hz
Design	Smooth barrel, 6.5 mm
Dimensions	41.6 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF20, black
End cap	Plastic, PP
Electrical connection	Connector, M12 × 1
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
Packaging unit	1

Functional principle

Many applications require a fast detection of material qualities. For example, the sorting of beverage cans made of aluminium or tin, or the differentiation of pipes made of different metals. Turck has developed an analog inductive sensor for this purpose that not only processes the amplitude signal but also the phase signal. Both signals are output as analog values and processed mathematically with a control unit. Different metals are thus detected independent of the distance.

Inductive sensor For material recognition Bi1.5-EH6.5-0.2-Q20-2LU-H1141/S950

Distance D	16 mm
Distance W	4,5 mm
Distance T	3 x B
Distance S	12 mm
Distance G	9 mm

Diameter active area B \varnothing 6.5 mm

