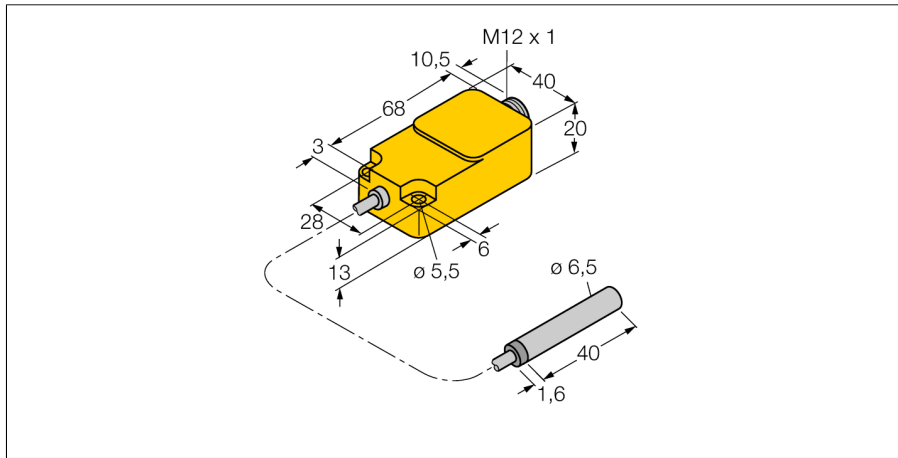
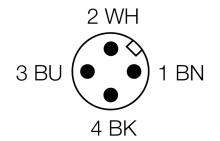
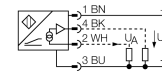


**Inductive sensor
for material recognition
Bi1,5-EH6,5-0,2-Q20-2LU-H1141/S950**



- Smooth barrel, Ø 6.5 mm
- Stainless steel, 1.4404
- Analog
- 1 x analog output for amplitude evaluation
- 1 x analog output for phase evaluation
- Male M12 x 1

Wiring diagram



Type code	Bi1,5-EH6,5-0,2-Q20-2LU-H1141/S950
Ident no.	1533010
Mounting condition	flush
Temperature drift	≤ 0.5 %, after warm-up 0.5 h
Ambient temperature	≤ ± 0.06 % / K -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...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	metal, V2A (1.4301)
Material active area	Plastic, PA
End cap	Plastic, PP
Connection	male, M12 x 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

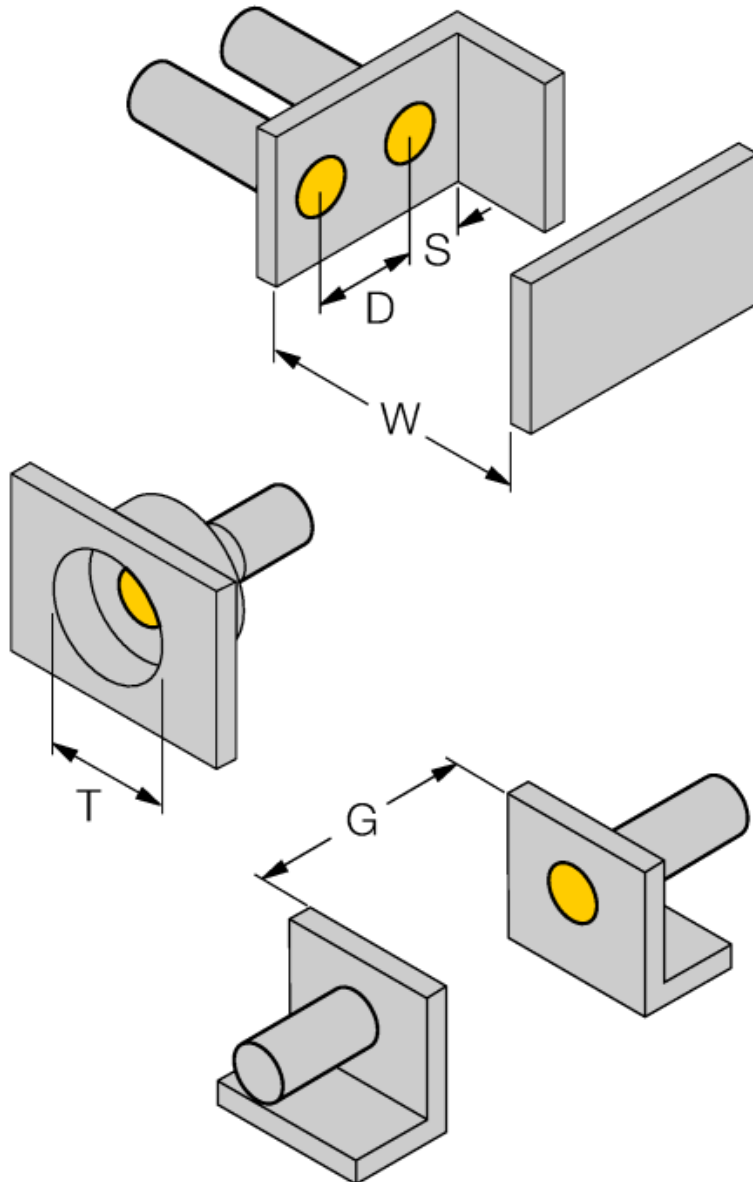
Functional principle

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**

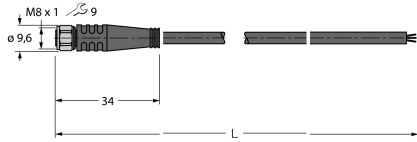
Distance D	16 mm
Distance W	4,5 mm
Distance T	3 x B
Distance S	12 mm
Distance G	9 mm

Diameter of the active area B \varnothing 6.5 mm



**Inductive sensor
for material recognition
Bi1,5-EH6,5-0,2-Q20-2LU-H1141/S950**

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
PKG3M-2/TEL	6625385	Connection cable, female M8, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	 <p>The dimension drawing shows a side view of the cable assembly. On the left, there is an M8 x 1 female connector with a 9mm thread length. The distance from the center of the connector to the start of the main cable is 34mm. The total length of the main cable is labeled as L.</p>