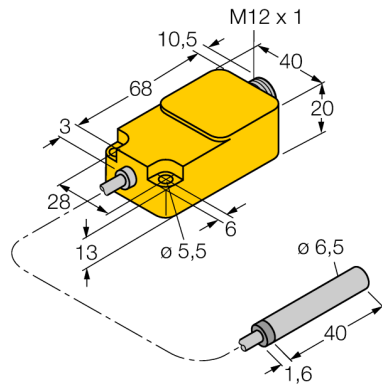


**Inductive sensor
for material recognition
Bi1,5-EH6,5-0,2-Q20-2LU-H1141/S950**

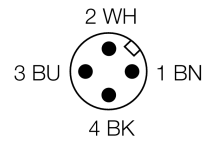
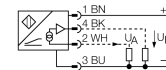
TURCK

Industrial
Automation



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

Wiring diagram



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.

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 _{as}
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 face	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

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

TURCK

Industrial
Automation

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	Ø 6.5 mm
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