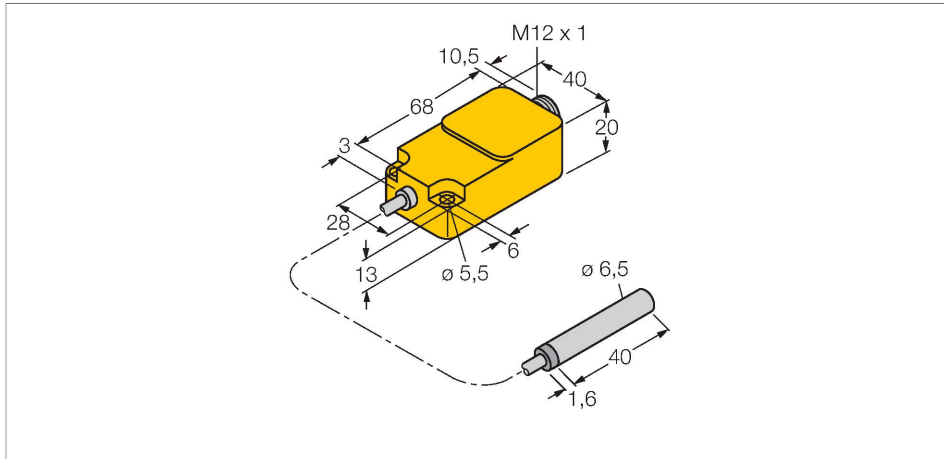


# BI1.5-EH6.5-0.2-Q20-2LU-H1141/S950

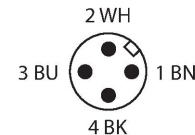
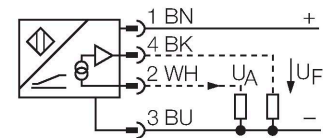
## Inductive Sensor – For Differentiation Between Metals



### Features

- 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



### Technical data

Type	BI1.5-EH6.5-0.2-Q20-2LU-H1141/S950
ID	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 Corresponds to: 1x analog amplitude output, 1x analog phase output
<b>General data</b>	
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
	0.5 %, after warm-up 0.5 h
Temperature drift	$\leq \pm 0.06$ %/K
<b>Electrical data</b>	
Operating voltage $U_s$	15...30 VDC
Ripple $U_{ss}$	$\leq 10$ % $U_{Bmax}$
No-load current	$\leq 8$ mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	no/Complete
Output function	4-wire, Analog output
Voltage output	0...10 V
Voltage output (phase)	$\geq 1... \leq 10$ VDC
Load resistance voltage output	$\geq 4.7$ kΩ
Measuring sequence frequency	80 Hz
<b>Mechanical data</b>	
Design	Smooth barrel, 6,5 mm

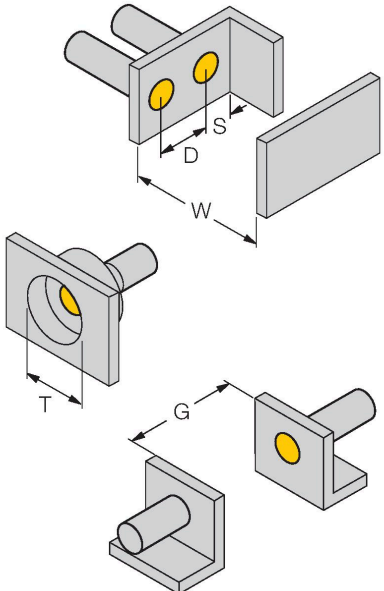
### Functional principle

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.

Technical data

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
Cable quality	0.2 m
Environmental conditions	
Ambient temperature	-25...+70 °C
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

Mounting instructions

Mounting instructions/Description		
	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	Ø 6.5 mm

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