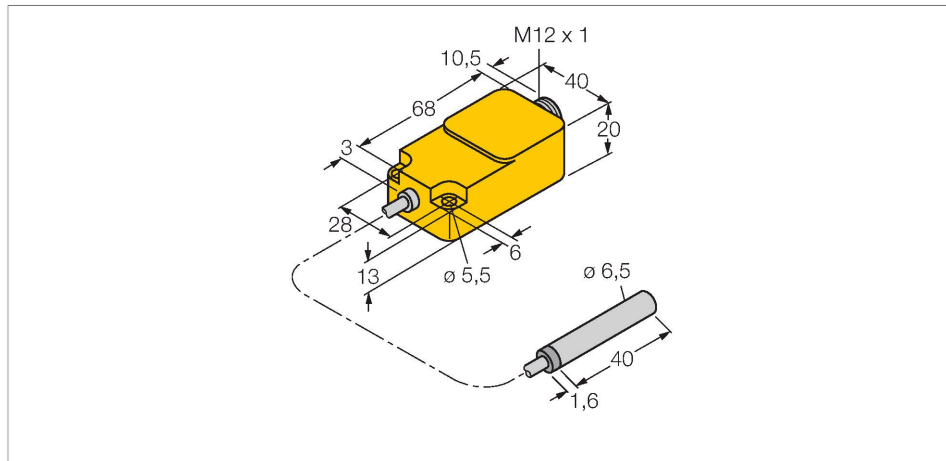


# BI1.5-EH6.5-0.2-Q20-2LU-H1141/S950

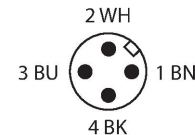
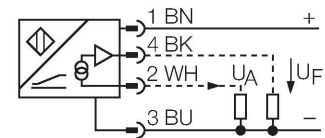
## Inductive Sensor – For Material Recognition



### 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
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 corresponds to: 1× analog amplitude output, 1× analog phase output
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Temperature drift	0.5 %, after warm-up 0.5 h
Ambient temperature	$\leq \pm 0.06$ % / K
Operating voltage	-25...+70 °C
Residual ripple	15...30 VDC
No-load current	$\leq 10$ % $U_{ss}$
Isolation test voltage	$\leq 8$ mA
Short-circuit protection	$\leq 0.5$ kV
Wire breakage/Reverse polarity protection	yes
Output function	no / Complete
Voltage output	4-wire, Analog output
Voltage output (phase)	0...10 V
Load resistance voltage output	$\geq 1... \leq 10$ VDC
Measuring sequence frequency	$\geq 4.7$ k $\Omega$
Design	80 Hz
Dimensions	Smooth barrel, 6.5 mm
	41.6 mm

### Functional principle

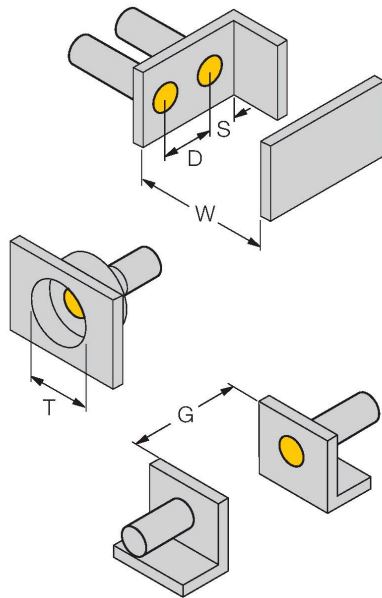
Many applications require a fast detection of material qualities. For example, the sorting of beverage cans made of aluminium or tin, or the differentiation of pipes made of different metals. Turck has developed an analog inductive sensor for this purpose that not only processes the amplitude signal 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

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
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