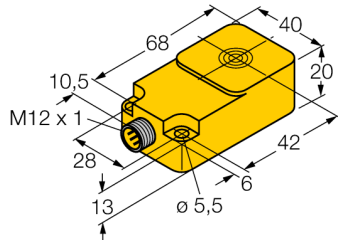
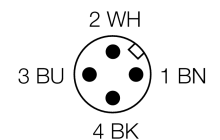
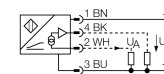


**Inductive sensor
for material recognition
BI15-Q20-2LU-H1141/S950**



- Rectangular, height 20 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Analog
- 1 x analog output for amplitude evaluation
- 1 x analog output for phase evaluation
- Male M12 x 1

Wiring diagram



Type code	BI15-Q20-2LU-H1141/S950
Ident no.	1534611
Mounting condition	flush
Reproducibility	≤ 0.5 %, after warm-up 0.5 h
Temperature drift	≤ 70 μm
Ambient temperature	≤ 35 μm, after a warm-up time of 0.5 h
	≤ ± 0.06 % / K
	-25...+70 °C
Operating voltage	15...30VDC
Residual ripple	≤ 10 % U _s
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	110 Hz
Design	rectangular, Q20
Dimensions	68 x 40 x 20 mm
Housing material	plastic, PBT
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

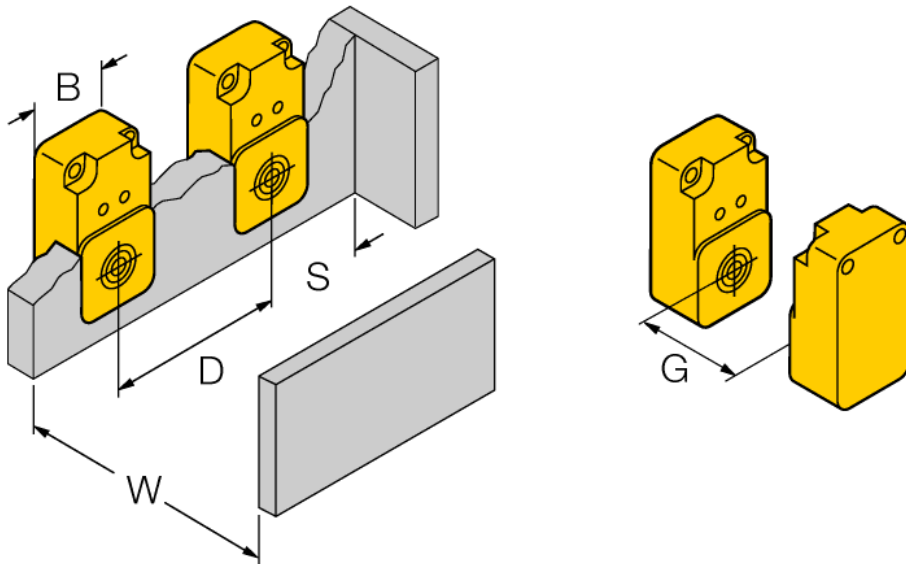
Functional principle

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
BI15-Q20-2LU-H1141/S950**

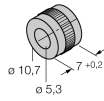
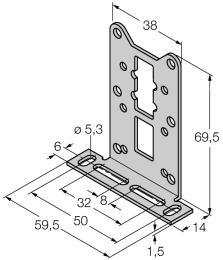
Distance D	60 mm
Distance W	33 mm
Distance S	40 mm
Distance G	66 mm

Width of the active face B 40 mm



**Inductive sensor
for material recognition
BI15-Q20-2LU-H1141/S950**

Accessories

Type code	Ident no.	Description	Dimension drawing
MH-Q20MONTAGEHÜLSEN	6950010	Mounted with active face downwards, for Q20	
MW-Q14/Q20	6945006	Mounting bracket for rectangular Q14 or Q20; material VA 1.4301	

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	