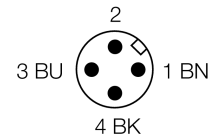


- Rectangular, height 20 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Male M12 x 1

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicoil system, *uprox®* sensors have distinct advantages over conventional sensors. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Type code	BI15U-Q20-AN6X2-H1141
Ident no.	1608610
Rated operating distance Sn	15 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Protection class	2
Switching frequency	0.25 kHz
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	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED green
Switching state	LED yellow

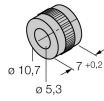
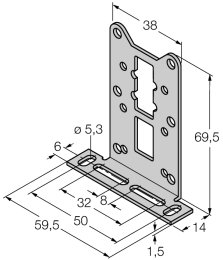
**Inductive sensor
BI15U-Q20-AN6X2-H1141**

Distance D	1.5 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

Width of the active face B 40 mm



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
RKC4T-2/TEL	6625010	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	