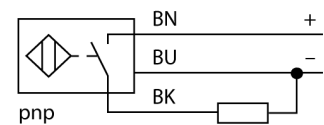


- Rectangular, height 20 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High switching frequency
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



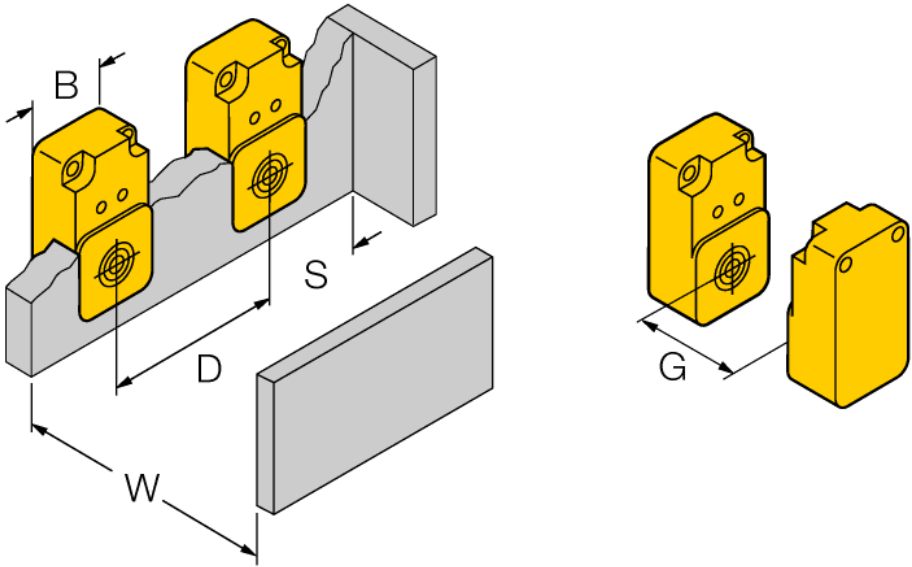
Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented ferrite-less 3-coil system, *uprox®* factor 1 sensors have distinct advantages compared to conventional sensors. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

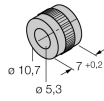
Type code	BI15U-Q20-AP6X2
Ident no.	1608800
Rated operating distance Sn	15 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30VDC
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, PNP
Protection class	☐
Switching frequency	0.25 kHz
Design	rectangular, Q20
Dimensions	68x 40x 20 mm
Housing material	Plastic, PBT
Connection	cable
Cable quality	5.2 mm, LifYY-11Y, PUR, 2 m
Cable cross section	3 x 0.34 mm ²
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
Operating voltage	LED green
Switching state	● yellow

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
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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	