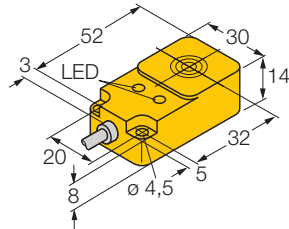


Inductive sensor Ni20-Q14-AN6X2

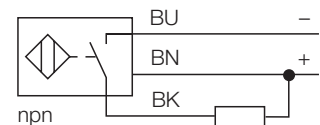
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- rectangular, height 14mm
- top active face
- Plastic, PBT-GF30-V0
- 3-wire DC, 10...30 VDC
- normally open npn output
- cable connection

Wiring diagram



Functional principle

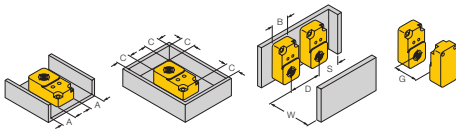
Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. Concerning inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Ni20-Q14-AN6X2
Ident-No.	4690220
Rated operating distance Sn	20 mm
Mounting condition	non-flush
Assured sensing range	(0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	2 %
Temperature drift	± 10 %
Hysteresis	3... 15 %
Ambient temperature	-25...+ 70 °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 _e	1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, npn
Switching frequency	0.25 kHz
Housing	rectangular, Q14
Dimensions	52 x 30 x 14 mm
Housing material	plastic, PBT-GF30-V0
Material active face	plastic, PBT-GF30-V0
Connection	cable
Cable quality	Ø 5.2, LifYY-11Y, PUR, 2 m
Cable cross section:	3 x 0.34mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Operating voltage display	LED green
Display switch state	LED yellow

**Inductive sensor
Ni20-Q14-AN6X2**

Mounting instructions	minimum distances
Distance D	3 x B
Distance W	3 x Sn
Distance S	1,5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Distance A	1 x Sn
Distance C	2 x Sn

Width of the active face B	30 mm
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Inductive sensor Ni20-Q14-AN6X2

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Accessories

Type code	Ident-No.	Short text	Dimension drawing
MW-Q14/Q20	6945006	mounting bracket; material VA 1.4301	
MH-Q14	6950011	for mounting with active face downwards	