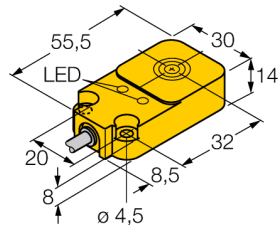


Inductive sensor NI20-Q14-AP6X2

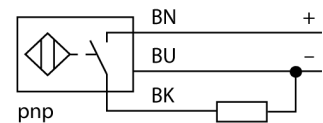
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- Rectangular, height 14 mm
- Active face on top
- Plastic, PBT-GF30-V0
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type code	NI20-Q14-AP6X2
Ident no.	4690205
Rated operating distance Sn	20 mm
Mounting condition	non-flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	$\leq 10\% U_{ss}$
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
Switching frequency	0.25 kHz
Design	rectangular, Q14
Dimensions	52x 30x 14 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	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Operating voltage	LED green
Switching state	• yellow

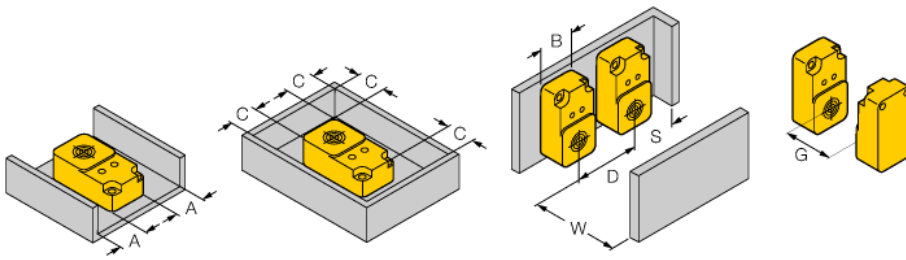
Inductive sensor NI20-Q14-AP6X2

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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

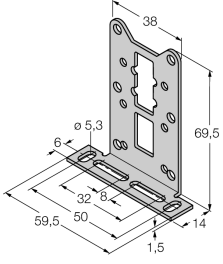


**Inductive sensor
NI20-Q14-AP6X2**

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Accessories

Type code	Ident no.	Description	Dimension drawing
MW-Q14/Q20	6945006	Mounting bracket for rectangular Q14 or Q20; material VA 1.4301	
MH-Q14MONTAGEHÜLSEN	6950011	Mounted with active face downwards, for Q14	