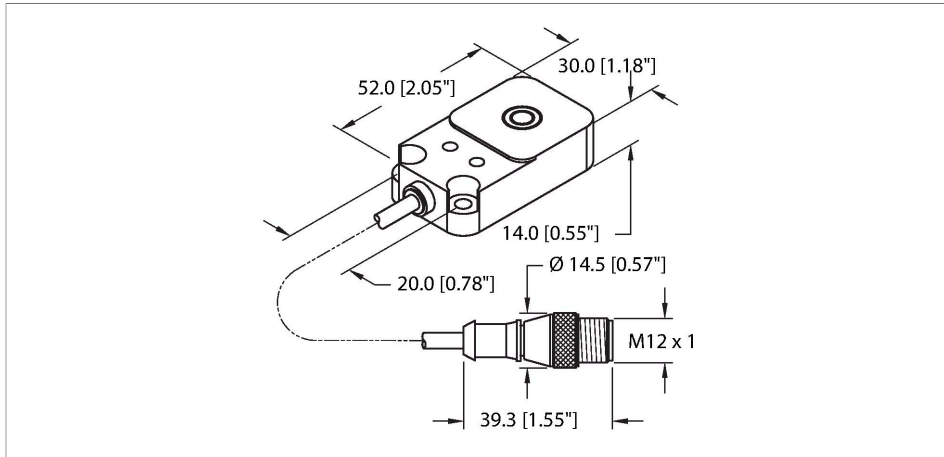


NI20-Q14-AD4X-0.2-RS4.2T Inductive Sensor



Technical data

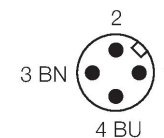
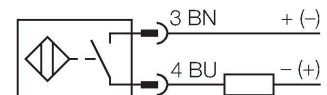
Type	NI20-Q14-AD4X-0.2-RS4.2T
ID	4690298
General data	
Rated switching distance	20 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \%$ of full scale
Hysteresis	1...15 %
Electrical data	
Operating voltage U_B	10...65 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 100 mA
Residual current	≤ 0.6 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 5 V
Wire break/reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.15 kHz
Mechanical data	
Design	Rectangular, Q14



Features

- Rectangular, height 14 mm
- Active face on top
- Plastic, PBT-GF30-V0
- DC 2-wire, 10...65 VDC
- NO contact
- Cable with male end

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Dimensions	52 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 5.2 mm, Gray, LifYY-11Y, PUR, 0.2 m
Core cross-section	2 x 0.34 mm²
Environmental conditions	
Ambient temperature	-25...+70 °C
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
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description

Distance D	3 x B
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Distance W	3 x Sn
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Distance S	1.5 x B
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Distance G	6 x Sn
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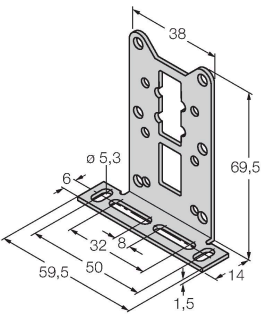
Distance N	2 x Sn
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Distance A	1 x Sn
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Distance C	2 x Sn
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Width active area B	30 mm
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Accessories

MW-Q14/Q20	6945006
 Mounting bracket for rectangular Q14 or Q20; material VA 1.4301	