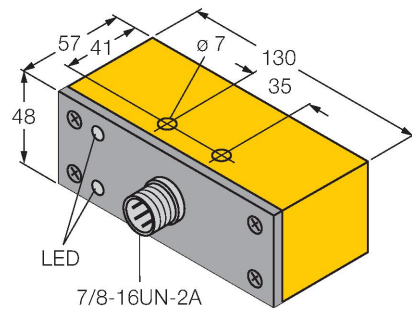


NI30-Q130-VN4X2-B2141

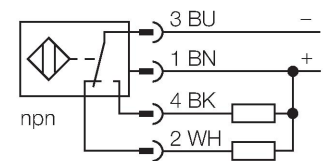
Inductive Sensor



Features

- Rectangular, height 48 mm
- Active face in front
- Plastic, PBT
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- 7/8" male connector

Wiring diagram



Technical data

Type	NI30-Q130-VN4X2-B2141
ID	15180
General data	
Rated switching distance	30 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	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage U_b	10...65 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_b	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_b	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, NPN
Switching frequency	0.06 kHz

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

Mechanical data	
Design	Rectangular, Q130
Dimensions	130 x 57 x 48 mm
Housing material	Plastic, PBT
Active area material	Plastic, PBT
Electrical connection	Connector, 7/8"
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
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description	
	Distance D180 mm
	Distance W3 x Sn
	Distance S1.5 x B
	Distance G6 x Sn
	Distance N2 x Sn
	Width active area B130 mm
Flush mounting of the sensor in metal.	

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