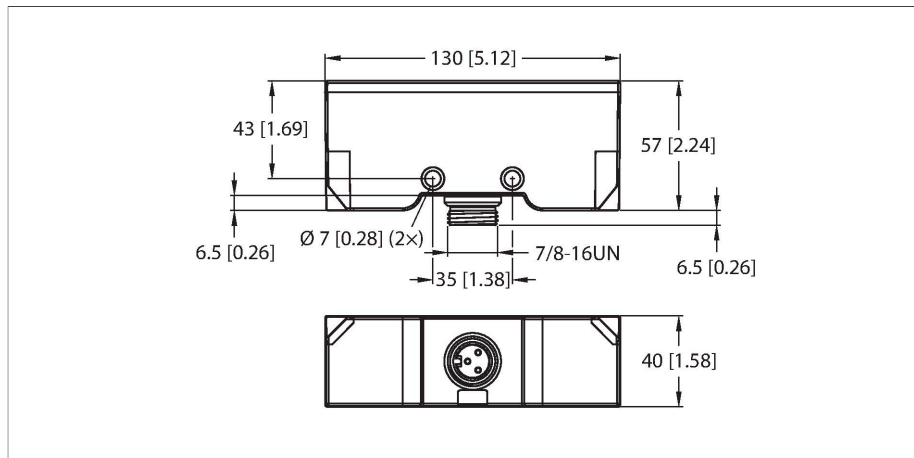


NI30-Q130WD-ADZ30X2-B1131

Inductive Sensor – For harsh environments



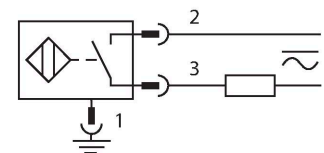
Features

- Rectangular, height 40 mm
- Active surface over the entire front
- Plastic, PPS-GF30
- High protection class IP69K for harsh environments
- Protection against all common acidic and alkaline cleaning agents
- Laser engraved label, permanently legible
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8" male connector

Technical data

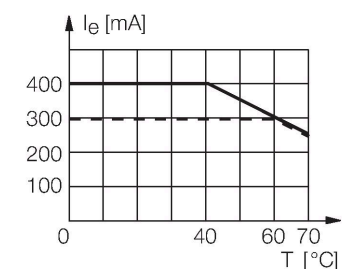
Type	NI30-Q130WD-ADZ30X2-B1131
ID	100003890
General data	
Rated switching distance	30 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
	$\leq \pm 20$ %, ≤ -25 °C $\geq +70$ °C
Hysteresis	3...15 %
Electrical data	
Operating voltage	20...250 VAC
Operating voltage	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50 ... ≤ 60 Hz
Residual current	≤ 1.7 mA
Isolation test voltage	≤ 1.5 kV
Surge current	≤ 3 A (≤ 20 ms max. 5 Hz)
Short-circuit protection	yes / Latching
Voltage drop at I_e	≤ 6 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz

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

Mechanical data	
Design	Rectangular, Q130
Dimensions	130 x 57 x 40 mm
Housing material	Plastic, PPS-GF30, Black
Active area material	Plastic, PPS-GF30, black
Plug adapter	metal, 1.4404 (AISI 316L)
Tightening torque fixing screw	4 Nm
Electrical connection	Connector, 7/8"
Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 IP69K
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Red

Mounting instructions

Mounting instructions/Description

The top diagram illustrates the side view of the sensor assembly. It shows a grey sensor unit with a black cable, mounted on a white base. The dimensions are labeled: D (Distance D), W (Distance W), S (Distance S), B (Width active area B), and S (Distance S). The bottom diagram shows a front view of the sensor unit, with dimension G (Distance G) indicated.

This diagram shows a side view of the sensor unit with a yellow cable, mounted on a white base. The sensor unit is shown in a perspective view, highlighting its profile and the cable connection.

The top diagram shows a front view of the sensor unit with a yellow cable, mounted on a white base. The bottom diagram shows a side view of the sensor unit with a yellow cable, mounted on a white base. Both diagrams illustrate the sensor unit's profile and the cable connection.

Distance D	180 mm
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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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Width active area B	130 mm
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Accessories

MB-Q130WD

A900166

Mounting clip for Q130WD sensors;
material: stainless steel, 1.4401 (AISI 316)