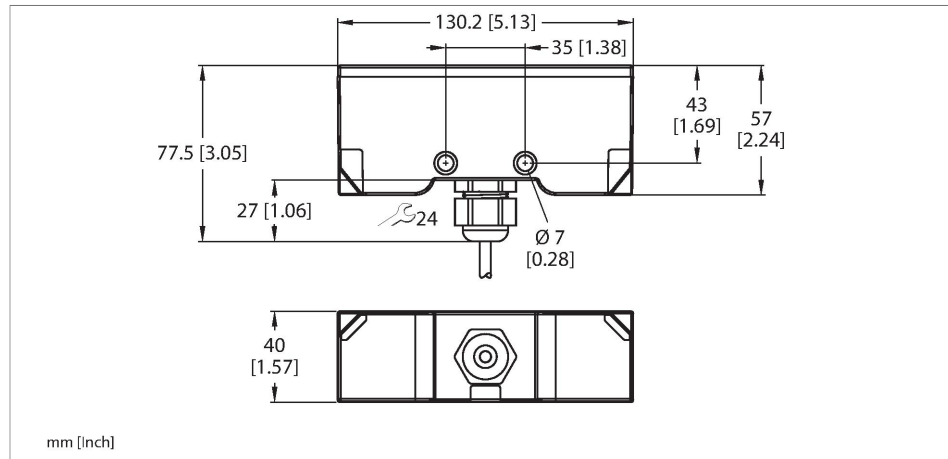


NI30-Q130WD-ADZ30X2

Inductive Sensor – For harsh environments



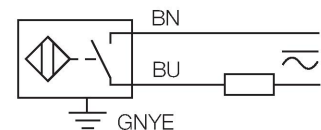
Technical data

Type	NI30-Q130WD-ADZ30X2
ID	100027541
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	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 20 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	20...250 VAC
Operating voltage U_B	10...300 VDC
AC rated operational current	$\leq 400 \text{ mA}$
DC rated operating current I_o	$\leq 300 \text{ mA}$
Frequency	$\geq 50 \dots \leq 60 \text{ Hz}$
Residual current	$\leq 1.7 \text{ mA}$
Isolation test voltage	1.5 kV
Surge current	$\leq 3 \text{ A} (\leq 20 \text{ ms max. } 5 \text{ Hz})$
Short-circuit protection	yes/Latching
Voltage drop at I_o	$\leq 6 \text{ V}$
Wire break/reverse polarity protection	yes/Complete

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
- Cable connection

Wiring diagram

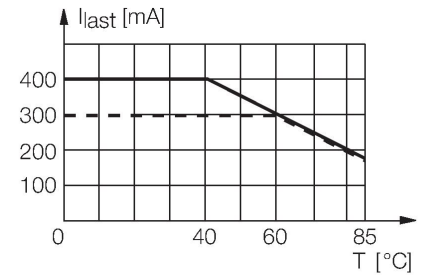


Functional principle

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.

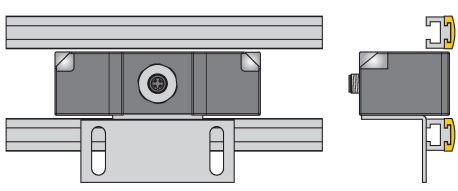
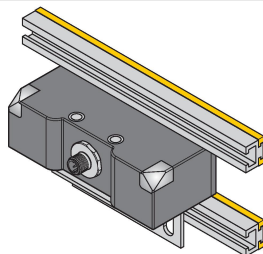
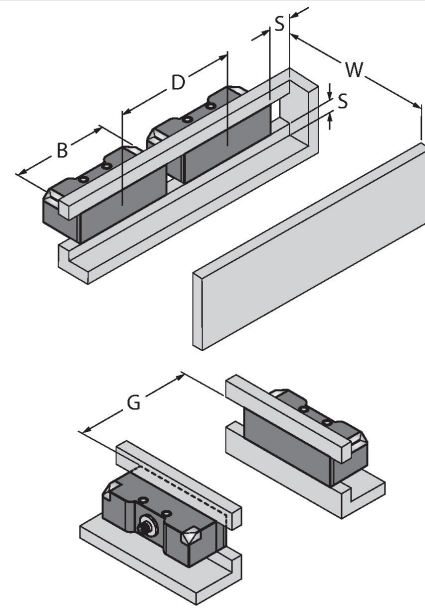
Technical data

Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz
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
Tightening torque fixing screw	4 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LiSiHSi-O, Silicone, 2 m
Core cross-section	2 x 0.5 mm ²
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

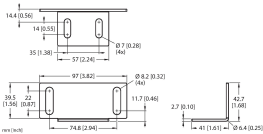


Distance D	180 mm
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Width active area B	130 mm

Accessories

MB-Q130WD

A900166



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

NI30-Q130WD-ADZ30X2 | 02/21/2025 14-39 | technical changes reserved