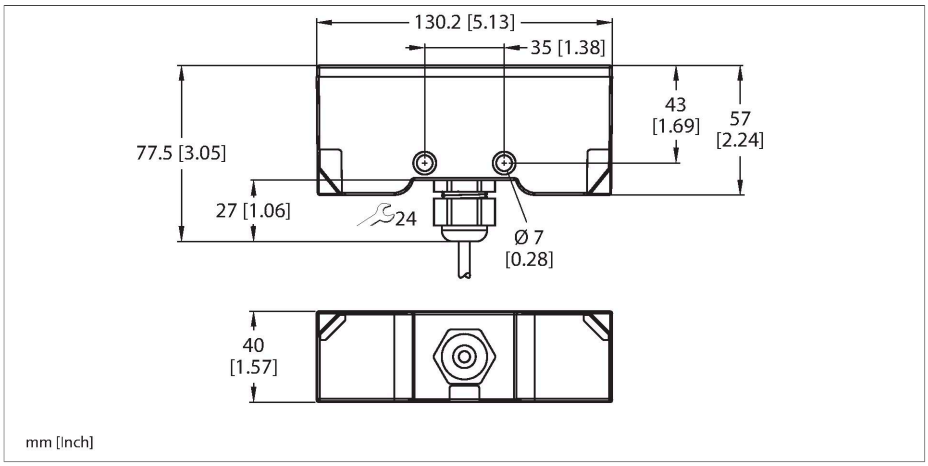
NI30-Q130WD-ADZ30X2
Inductive Sensor – For harsh environments



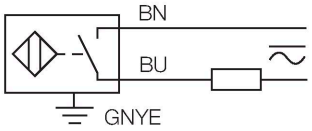
Technical data

Type	NI30-Q130WD-ADZ30X2
ID	100027541
General data	
Rated switching distance	30 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…15 %
Electrical data	
Operating voltage U_B	20…250 VAC
Operating voltage U_B	10…300 VDC
AC rated operational current	≤ 400 mA
DC rated operating current I_e	≤ 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 break/reverse polarity protection	yes/Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz

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

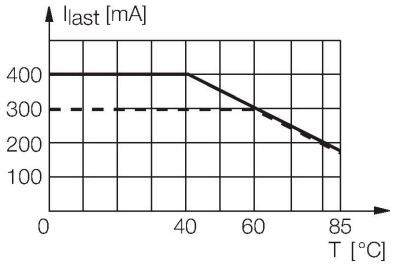
Wiring diagram



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.

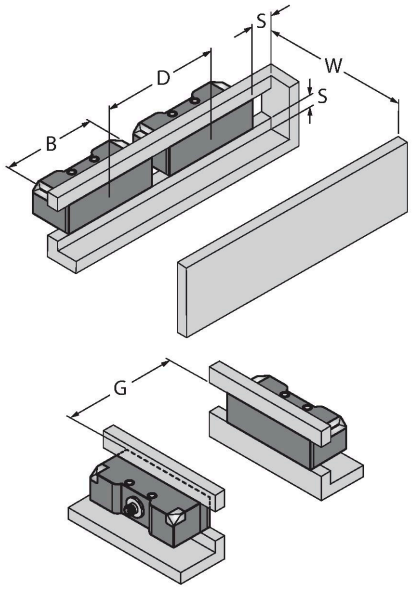
Technical data

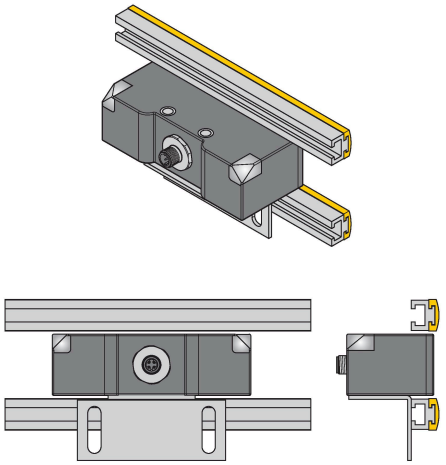


Mechanical data	
Design	Rectangular, Q130
Dimensions	130 x 57 x 40 mm
Housing material	Plastic, PPS-GF30, Black
Active area material	Plastic, PPS-GF30, black
Tightening torque fixing screw	4 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LiSiHSi-O, Silicone, 2 m
Core cross-section	2 x 0.5 mm^2
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

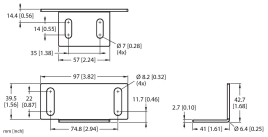
Mounting instructions/Description





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)