

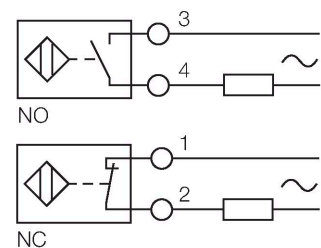
NI20NF-CP40-FZ3X2/S10

Inductive Sensor – With Selective Behaviour

Features

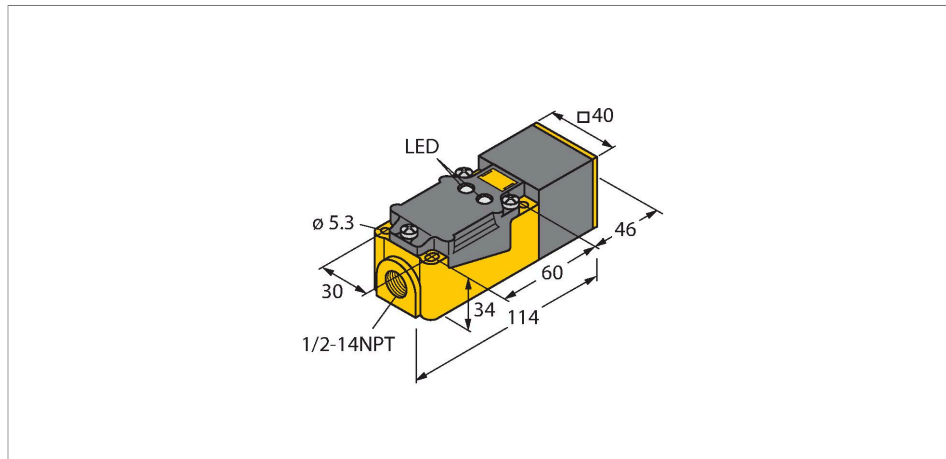
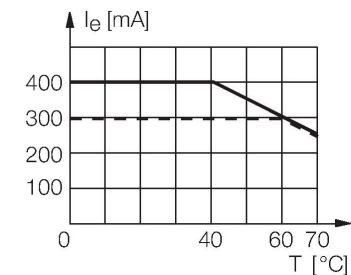
- Detects only non-ferromagnetic metal
- AC 2-wire, 20...250 VAC
- NC/NO programmable
- Terminal chamber

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors of the NF series with selective performance detect non-ferrous metals only.



Technical data

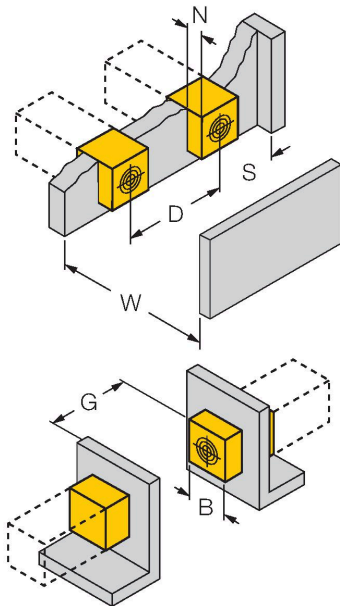
Type	NI20NF-CP40-FZ3X2/S10
Ident. no.	13782
Special version	S10 corresponds to: Mounting base with 1/2-14NPT thread
Rated switching distance	20 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Ambient temperature	0...+60 °C
Operating voltage	20...250 VAC
Frequency	$\geq 50 \dots \leq 60$ Hz
Residual current	≤ 1.7 mA
Isolation test voltage	≤ 1.5 kV
Surge current	≤ 8 A (≤ 10 ms max. 5 Hz)
Voltage drop at I _e	≤ 6 V
Output function	2-wire, Connection programmable
Smallest operating current	≥ 3 mA
Insulation class	□
Switching frequency	0.02 kHz
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black

Technical data

Active area material	Plastic, PBT-GF30-V0, yellow
Electrical connection	Terminal chamber
Clamping ability	$\leq 2.5 \text{ mm}^2$
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	348 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	2 × LEDs, Green
Switching state	2 × LEDs, Red

Mounting instructions

Mounting instructions/Description



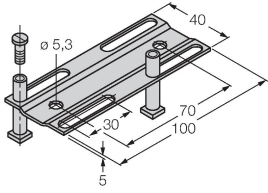
Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	1 x B
Width active area B	40 mm

Accessories

Adjusting bar JS 025/037

69429

Adjusting bar for rectangular housings
CK/CP40; material: VA 1.4301



BSS-CP40

6901318

Mounting clamp for rectangular
housings 40 x 40 mm; material:
Polypropylene

