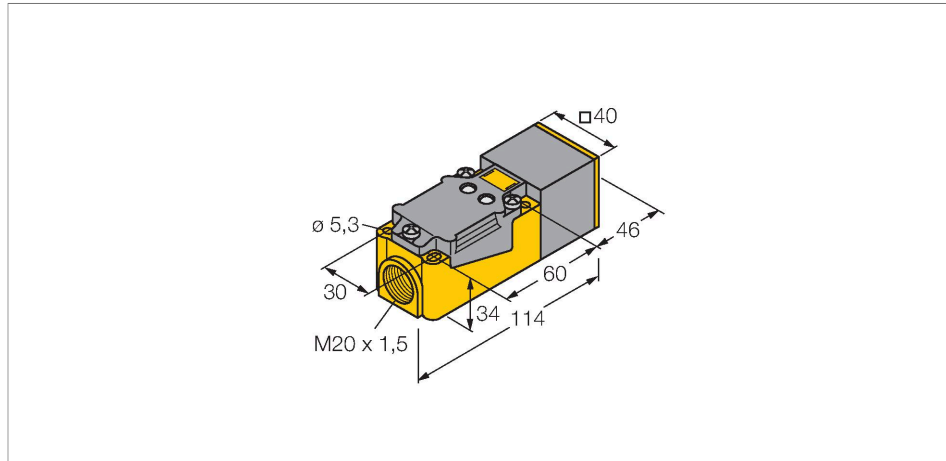


NI20NF-CP40-FZ3X2

Inductive sensor – With selective behaviour



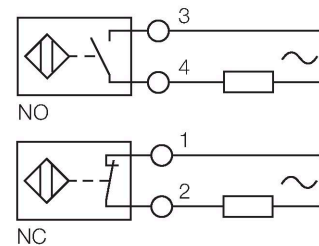
Technical data

Type	NI20NF-CP40-FZ3X2
Ident. no.	13284
Rated switching distance	20 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ 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
Active area material	Plastic, PBT-GF30-V0, yellow
Electrical connection	Terminal chamber

Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- Detects only non-ferromagnetic metal
- AC 2-wire, 20...250 VAC
- NC/NO programmable
- Terminal chamber

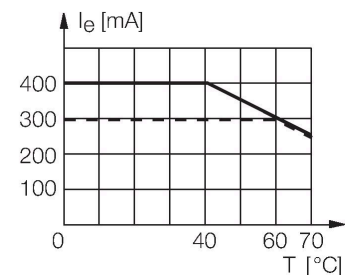
Wiring diagram



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

Clamping ability	≤ 2.5 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	LED, Green
Switching state	LED, Red

Mounting instructions

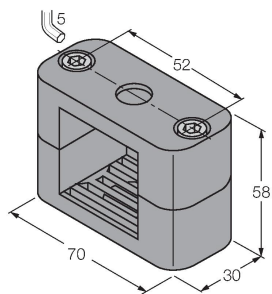
Mounting instructions/Description		
	Distance D	3 x B
	Distance W	3 x Sn
	Distance S	1.5 x B
	Distance G	6 x Sn
	Distance N	1 x B
	Width active area B	40 mm

Accessories

STRM M20X1.5 SCHWARZ	6965902
M20 x 1.5 cable gland	

JS025/037	69429
Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301	

N120NF-CP40-FZ3X2 | 03/07/2020 07-23 | technical changes reserved

BSS-CP40**6901318**

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



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