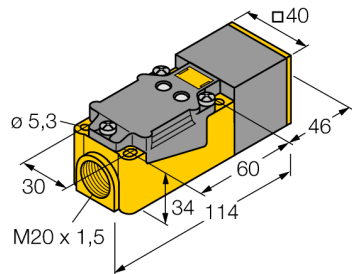


## Inductive sensor

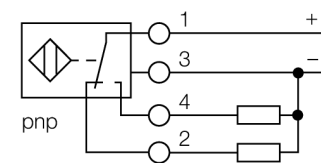
### With selective behaviour

### NI20NF-CP40-VP4X2



- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- Detects only non-ferromagnetic metal
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- 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.

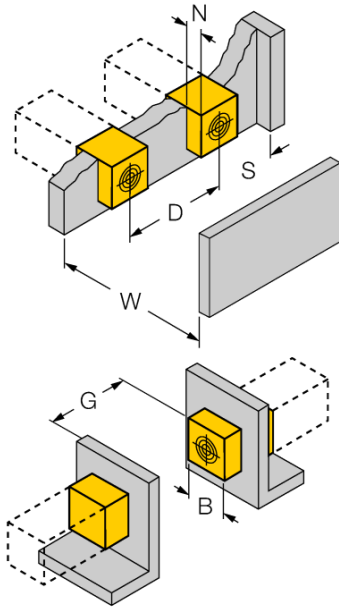
Inductive sensors of the NF series with selective performance detect non-ferrous metals only.

<b>Type designation</b>	NI20NF-CP40-VP4X2
Ident no.	15684
<b>Rated switching distance <math>S_n</math></b>	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
<b>Operating voltage</b>	10...65 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current $I_0$	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes
Voltage drop at $I_0$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
Reverse polarity protection	Complete
Protection class	□
Switching frequency	0.1 kHz
<b>Design</b>	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
Clamping ability	$\leq 2.5$ mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	392 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Power-on indication</b>	LED green
Switching state	LED yellow

**Inductive sensor  
With selective behaviour  
NI20NF-CP40-VP4X2**

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
<b>Width active area B</b>	<b>40 mm</b>

flush mounting in St37 admissible



**Inductive sensor  
With selective behaviour  
NI20NF-CP40-VP4X2**

**Accessories**

Type code	Ident no.	Description	
STRM M20X1,5 BLACK	6965902	Cable glands M20 x 1.5	
Adjusting bar JS 025/037	69429	Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301	
BSS-CP40	6901318	Mounting bracket for rectangular devices; material: Polypropylene	