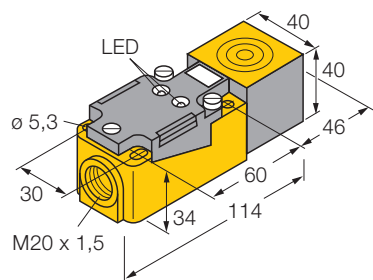


Inductive sensor with selective performance Ni20NF-CP40-FZ3X2



- rectangular, height 40 mm
- plastic, PBT-GF30-V0
- detects non-ferromagnetic metals only
- 2-wire AC, 20...250 VAC;
- connection programmable (n.c./n.o.)
- terminal chamber

Wiring diagram



Function principles

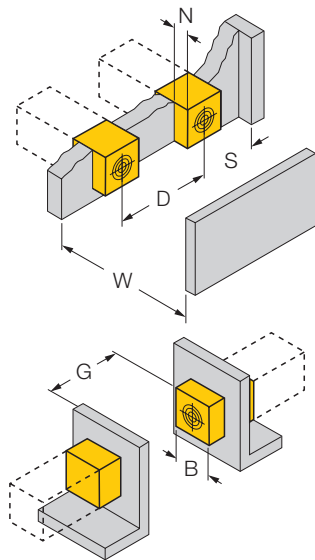
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. This field is generated by ferrite-less 3-coil system. inductive sensors with selective performance detect non-ferrous metals only

Type	Ni20NF-CP40-FZ3X2
Ident-No.	13284
Rated operating distance S_n	20 mm
Mounting mode	non-flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	0 ... + 60 °C
Rated operational voltage (AC) U_B	20... 250 VAC
Rated operational current (AC) I_e	≤ 400 mA
Line frequency	50... 60 Hz
Max. OFF-state current	$\leq 1,7$ mA
Max. switching frequency	$\leq 0,02$ kHz
Rated insulation voltage	$\leq 1,5$ kV
Surge Current	≤ 8 A (≤ 10 ms max. 5 Hz)
Output function	2-wire, connection programmable
Max. voltage drop at I_e	≤ 6 V
Min. operational current I_m	≥ 3 mA
Protection class	□
Housing style	rectangular; CP40
Dimensions	114 x 40 x 40 mm
Housing material	plastic, PBT-GF30-V0
Active face	plastic, PBT-GF30-V0
Wiring	terminal chamber
Clamping ability	$\leq 2,5$ mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Supply voltage indication	LED green
Switching status indication	LED red

Inductive sensor with selective performance Ni20NF-CP40-FZ3X2

Mounting instructions	minimum gap
Gap D	$3 \times B$
Gap W	$3 \times S_n$
Gap S	$1,5 \times B$
Gap G	$6 \times S_n$
Gap N	$1 \times B$
Width of active face B	40 mm

flush mounting in St37 admissible



Inductive sensor with selective performance Ni20NF-CP40-FZ3X2

Accessories

Typ	Ident-No.	Description	Dimension drawing
SG40	69500	protective housing; housing material: PA (per UL94/V-2); cover: PBT-GF30; for harsh environments; protection degree IP68, 5 m w.g.	
JS 025/037	69429	mounting rail; material: VA 1.4301	