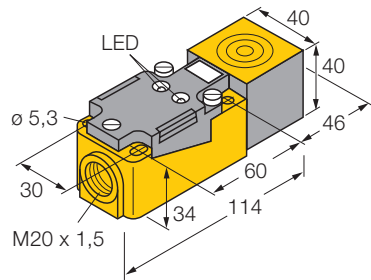


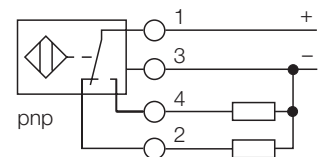
Inductive sensor

Ni20-CP40-VP4X2



- rectangular, height 40 mm
- plastic, PBT-GF30-V0
- 4-wire DC, 10...65 VDC
- SPDT, pnp output
- terminal chamber

Wiring diagram



Function principles

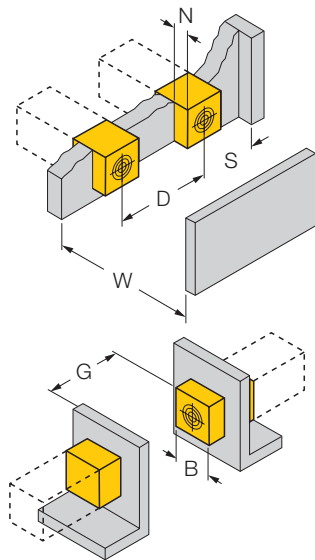
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Ni20-CP40-VP4X2
Ident-No.	15691
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	-25 ... + 70 °C
Rated operational voltage (DC) U_B	10... 65 VDC
Max. ripple	$\leq 10 \% U_{pp}$
Rated operational current (DC) I_e	$\leq 200 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Max. OFF-state current	$\leq 0,1 \text{ mA}$
Max. switching frequency	$\leq 0,15 \text{ kHz}$
Rated insulation voltage	$\leq 0,5 \text{ kV}$
Output function	4-wire, complementary, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	$\leq 1,8 \text{ V}$
Wire breakage / reverse polarity protection	yes / complete
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	$\leq 2,5 \text{ mm}^2$
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 yellow

Inductive sensor

Ni20-CP40-VP4X2

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	$0,5 \times B$
Width of active face B	40 mm



Inductive sensor

Ni20-CP40-VP4X2

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	