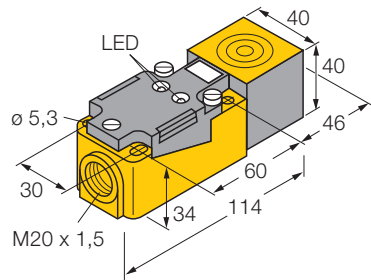


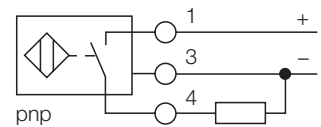
Inductive sensor

Ni20-CP40-AP6X2



- rectangular, height 40 mm
- plastic, PBT-GF30-V0
- 3-wire DC, 10...30 VDC
- normally open pnp output
- terminal chamber

Wiring diagram



Function principles

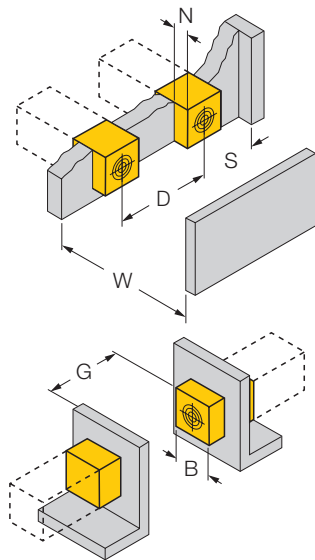
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Ni20-CP40-AP6X2
Ident-No.	16024
Rated operating distance Sn	20 mm
Mounting mode	non-flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	-25 ...+ 70 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U _{pp}
Rated operational current (DC) I _e	≤ 200 mA
No-load current I ₀	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 0,15 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I _e	≤ 1,8 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	≤ 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 yellow

Inductive sensor

Ni20-CP40-AP6X2

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-AP6X2

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	