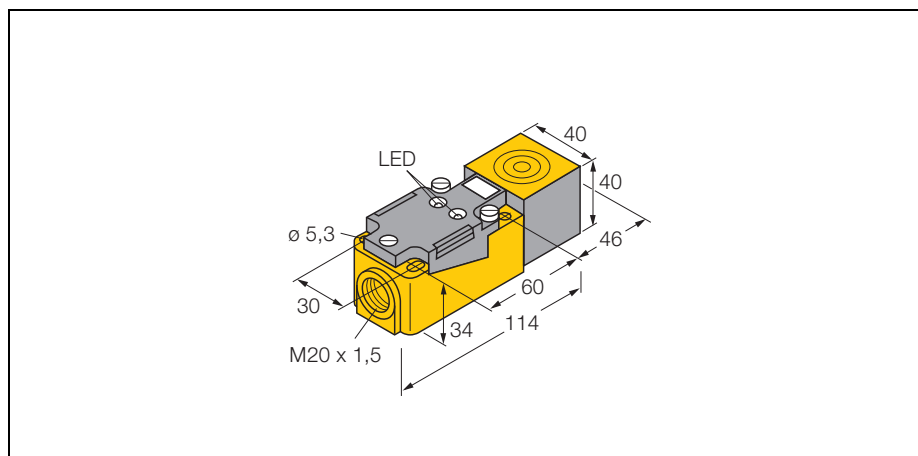
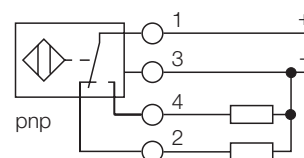


## Inductive sensor with extended temperature range Ni20-CP40-VP4X2/S97



- rectangular, height 40 mm
- plastic, PBT-GF30-V0
- for temperatures up to -40°C
- 4-wire DC, 10...65 VDC
- SPDT, pnp output
- terminal chamber

### Wiring diagram



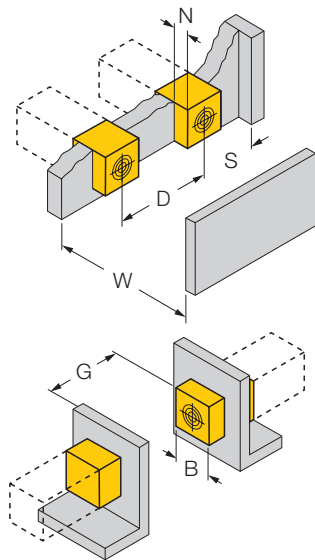
### Function principles

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. Special inductive sensors versions can be used at temperatures of -40°C up to +160°C

<b>Type</b>	Ni20-CP40-VP4X2/S97
Ident-No.	1569101
<b>Rated operating distance <math>S_n</math></b>	20 mm
Mounting mode	non-flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	≤ ± 20 %, ≤ -25 °C -40 ...+ 70 °C
<b>Rated operational voltage (DC) <math>U_B</math></b>	10... 65 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	4-wire, complementary, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at $I_e$	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
<b>Housing style</b>	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 <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
<b>Supply voltage indication</b>	LED green
Switching status indication	LED yellow

## Inductive sensor with extended temperature range Ni20-CP40-VP4X2/S97

<b>Mounting instructions</b>	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	$0,5 \times B$
<b>Width of active face B</b>	40 mm



## Inductive sensor with extended temperature range Ni20-CP40-VP4X2/S97

### 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	