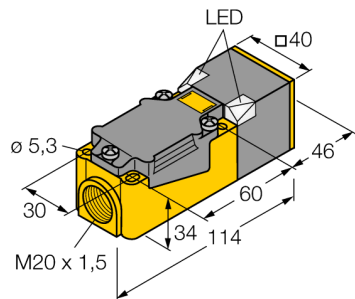


Inductive sensor NI20-CP40-VP4X2

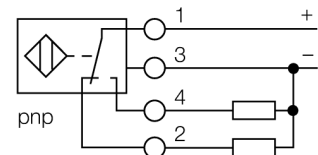
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- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Terminal chamber

Wiring diagram



Functional principle

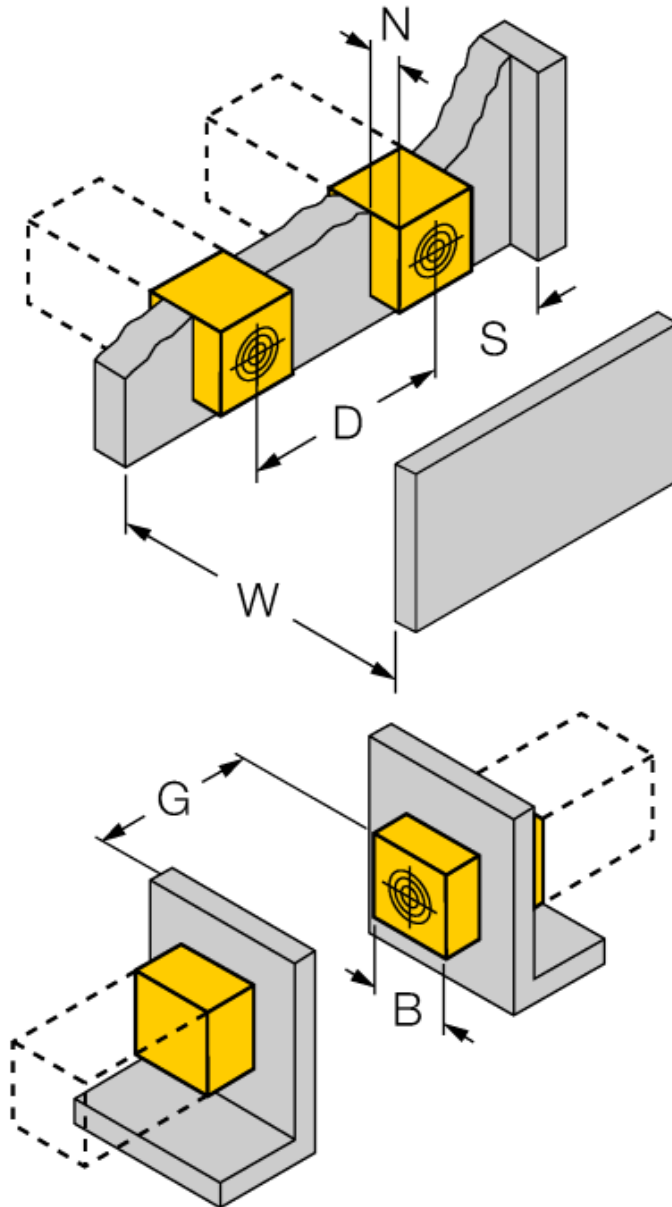
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type code	NI20-CP40-VP4X2
Ident no.	15691
Rated operating distance Sn	20 mm
Mounting condition	non-flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	$\leq 10\%$ U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Voltage drop at I_0	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Switching frequency	0.15 kHz
Design	rectangular, CP40
Dimensions	114x 40x 40 mm
Housing material	Plastic, PBT, black
Connection	Terminal chamber
Clamping ability	≤ 2.5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Operating voltage	2 x LEDs green
Switching state	●● yellow

**Inductive sensor
NI20-CP40-VP4X2**

Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$0.5 \times B$

Width of the active face B 40 mm



**Inductive sensor
NI20-CP40-VP4X2**

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Accessories

Type code	Ident no.	Description	Dimension drawing
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	