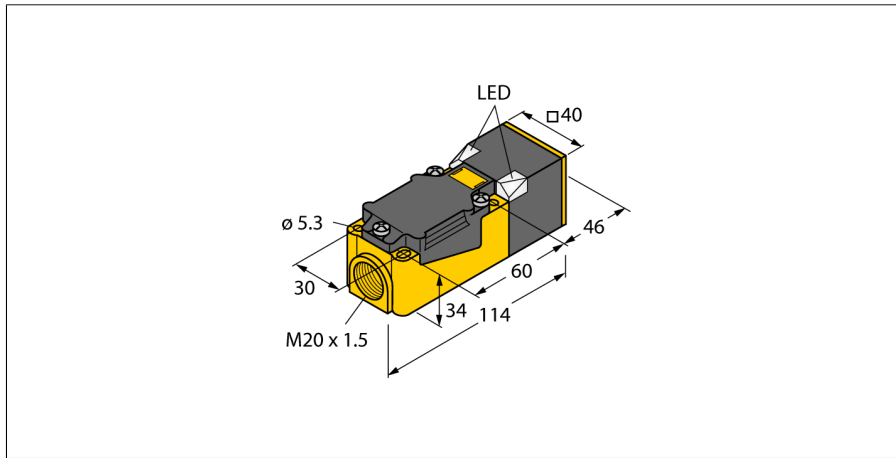


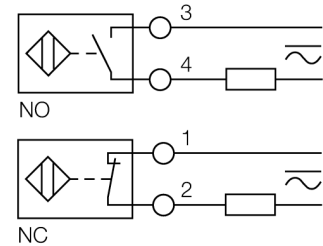
Inductive sensor
With increased switching distance
NI40U-CP40-FDZ30X2



- 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
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Large coverage
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NC/NO programmable
- Terminal chamber

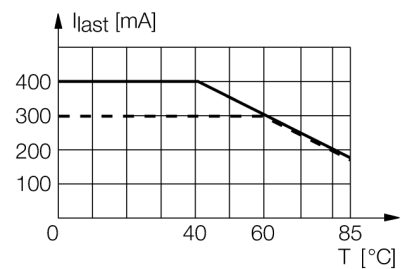
Type designation	NI40U-CP40-FDZ30X2
Ident no.	4280800
Rated switching distance S_n	40 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0,81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	$\leq \pm 20\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Ambient temperature	3...15 °C
	-30...+85 °C
Operating voltage	20...250VAC
Operating voltage	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50 ... ≤ 60 Hz
Residual current	≤ 1.7 mA
Isolation test voltage	≤ 1.5 kV
Surge current	≤ 3 A (≤ 20 ms max. 5 Hz)
Short-circuit protection	yes/ Latching
Voltage drop at I_L	≤ 6 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	2-wire, Connection programmable
Reverse polarity protection	Complete
Smallest operating current I_m	≥ 3 mA
Protection class	IP68
Switching frequency	0.01 kHz
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PA6-GF30-X, yellow
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	2 x LEDs green
Switching state	LED yellow

Wiring Diagram



Functional principle

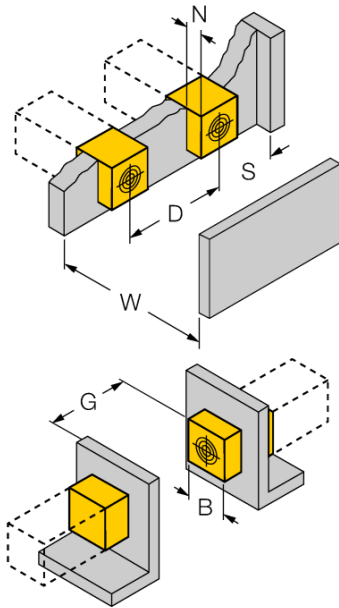
Inductive sensors detect metal objects contactless and wear-free. *uprox®* Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.



**Inductive sensor
With increased switching distance
NI40U-CP40-FDZ30X2**

Distance D	240 mm
Distance W	120 mm
Distance T	140 mm
Distance S	60 mm
Distance G	240 mm
Distance N	30 mm

Width active area B	40 mm
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Inductive sensor
With increased switching distance
NI40U-CP40-FDZ30X2

Accessories

Type code	Ident no.	Description	
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	