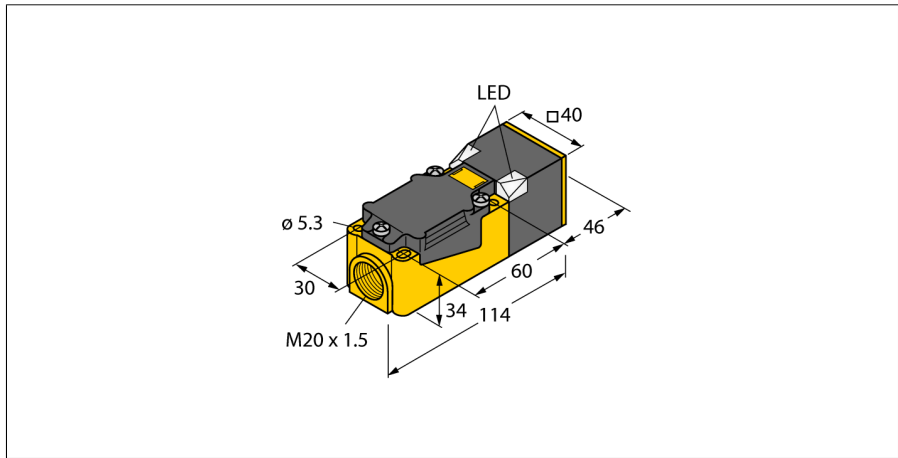


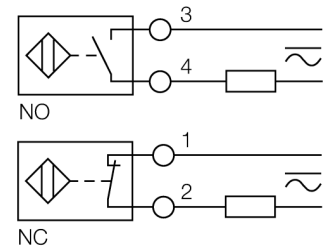
**Inductive sensor**  
**With increased switching distance**  
**NI40U-CP40-FDZ30X2**



- 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

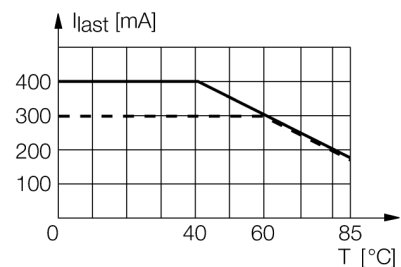
<b>Type designation</b>	NI40U-CP40-FDZ30X2
Ident no.	4280800
<b>Rated switching distance <math>S_n</math></b>	40 mm
Mounting conditions	non-flush
Assured switching distance	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	$\leq \pm 20\%$ , $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Ambient temperature	3...15 °C
	-30...+85 °C
<b>Operating voltage</b>	20...250 VAC
Operating voltage	10... 300VDC
AC rated operational current	$\leq 400$ mA
DC rated operational current	$\leq 300$ mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	$\leq 1.7$ mA
Rated insulation voltage	$\leq 1.5$ kV
Surge current	$\leq 3$ A ( $\leq 20$ ms max. 5 Hz)
Short-circuit protection	yes/ latching
Voltage drop at $I_n$	$\leq 6$ V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	2-wire, connection programmable
Smallest operating current $I_m$	$\geq 3$ mA
Protective insulation	☐
Switching frequency	0.01 kHz
<b>Construction</b>	rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, black
Electrical connection	terminal chamber
Clamping ability	$\leq 2.5$ mm <sup>2</sup>
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
<b>Power-on indication</b>	2 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.



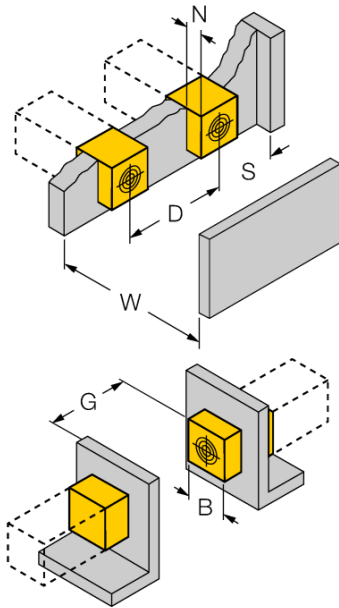
**Inductive sensor  
With increased switching distance  
NI40U-CP40-FDZ30X2**

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

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Width of the active face 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	