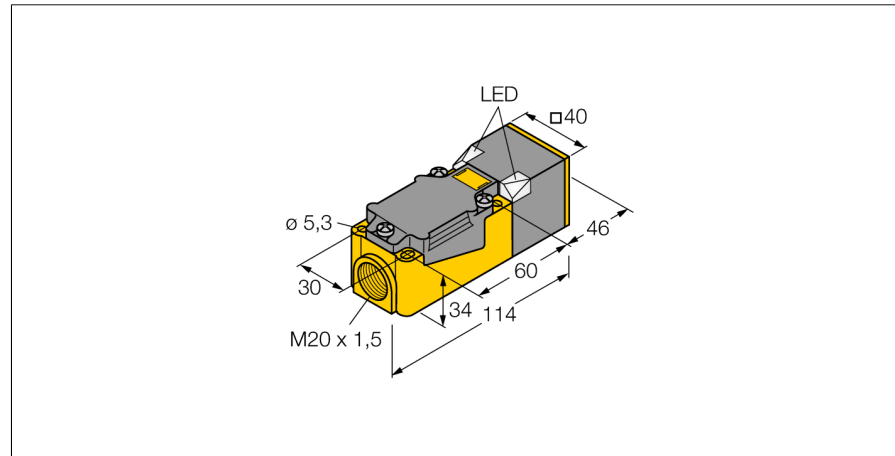


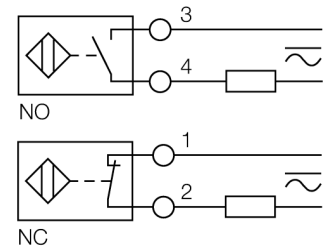
**Inductive sensor  
with extended switching distance  
NI40U-CP40-FDZ30X2**



- 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 detection range
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VAC
- 2-wire DC, 10...300 VDC
- NC/NO programmable
- Terminal chamber

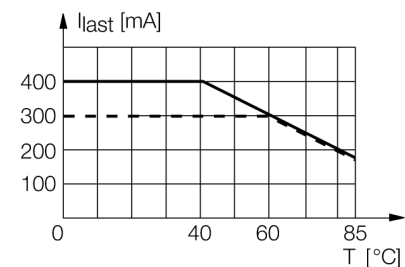
<b>Type code</b>	NI40U-CP40-FDZ30X2
Ident no.	4280800
<b>Rated operating distance Sn</b>	40 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
<b>Operating voltage</b>	20...250 VAC
Operating voltage	10...300VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50...≤ 60 Hz
Residual current	≤ 1.7 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	≤ 3 A (≤ 20 ms max. 5 Hz)
Short-circuit protection	yes/ latching
Voltage drop at I <sub>N</sub>	≤ 6 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	2-wire, connection programmable
Smallest operating current I <sub>m</sub>	≤ 3 mA
Protection class	☐
Switching frequency	0.02 kHz
<b>Design</b>	rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	plastic, PBT, black
Connection	terminal chamber
Clamping ability	≤ 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 x LEDs green
Switching state	LED yellow

**Wiring diagram**



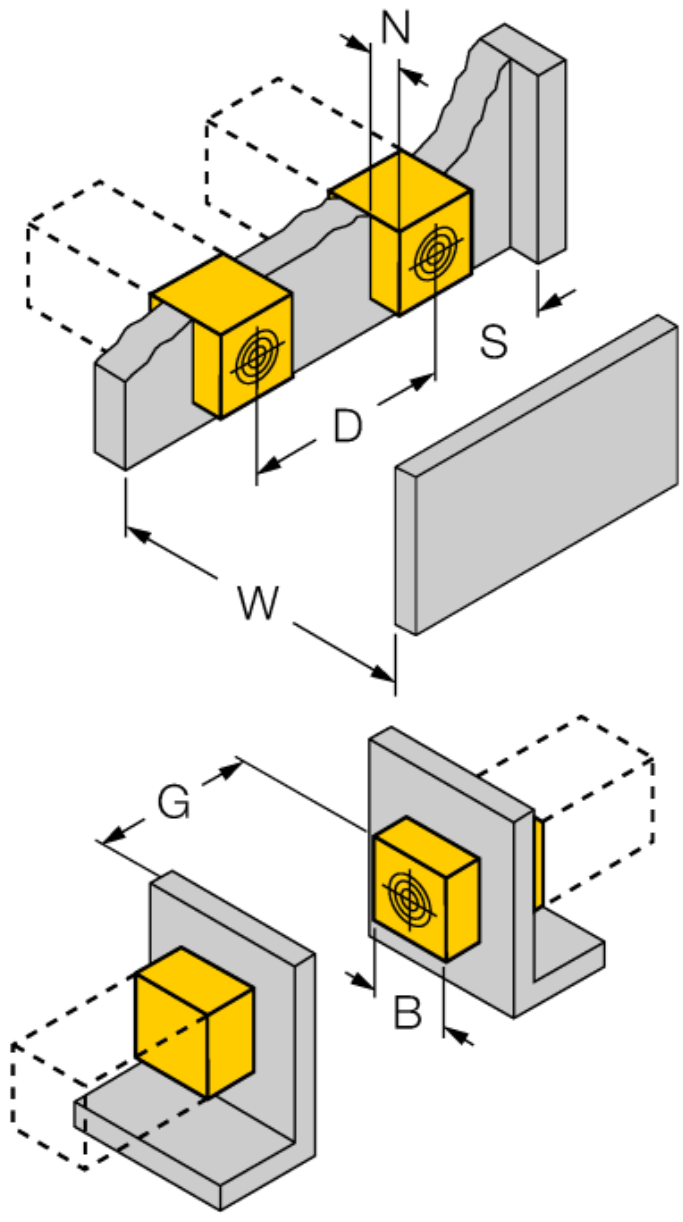
**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicoil system, uprox®+ sensors have distinct advantages over conventional sensors. They detect all metals at the same large switching distance and are resistant to magnetic fields.



**Inductive sensor  
with extended 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
<hr/>	
Width of the active face B	40 mm



**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	