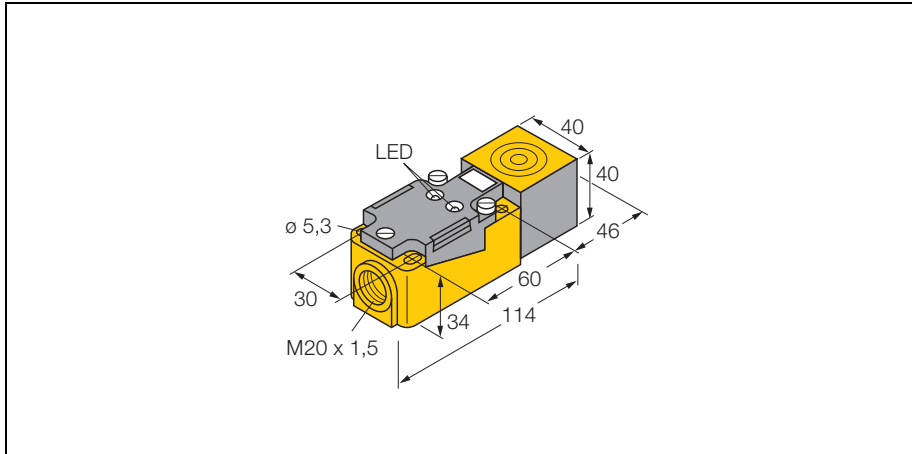


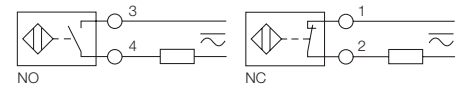
**inductive sensor  
with extended switching distance  
Ni40U-CP40-FDZ30X2**



- rectangular, height 40 mm
- 9 selectable sensor head positions
- plastic, PBT-GF30-V0
- factor 1 for all metals
- extended switching distance
- degree of protection IP68
- large detection range
- magnetic field immune
- extended temperature range
- high switching frequency
- 2-wire AC, 20...250 VAC
- 2-wire DC, 10...0.300 VDC
- connection programmable (n.c./n.o.)
- terminal chamber

<b>Type</b>	Ni40U-CP40-FDZ30X2
Ident-No.	4280800
<b>Rated operating distance Sn</b>	40 mm
Mounting condition	non-flush
Assured switching distance	≤ (0,81 x Sn) mm
Repetition accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3... 15 %
ambient temperature	-30 ... + 85 °C
<b>Operating voltage</b>	20... 250 VAC
Operating voltage	10... 300 V DC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Mains 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 dip at I <sub>e</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
Insulation class	□
Switching frequency	≤ 0.06 kHz
<b>Housing style</b>	rectangular; CP40
Dimensions	114 x 40 x 40 mm
Housing material	plastic, PBT-GF30-V0, black
Material active area	plastic, PA6-GF30-X, yellow
Connection	terminal chamber
Clamping ability	≤ 2.5 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Protection degree	IP68
<b>Operating voltage display</b>	LED green
Switch state display	LED yellow

**Wiring diagram**



**Function principle**

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

