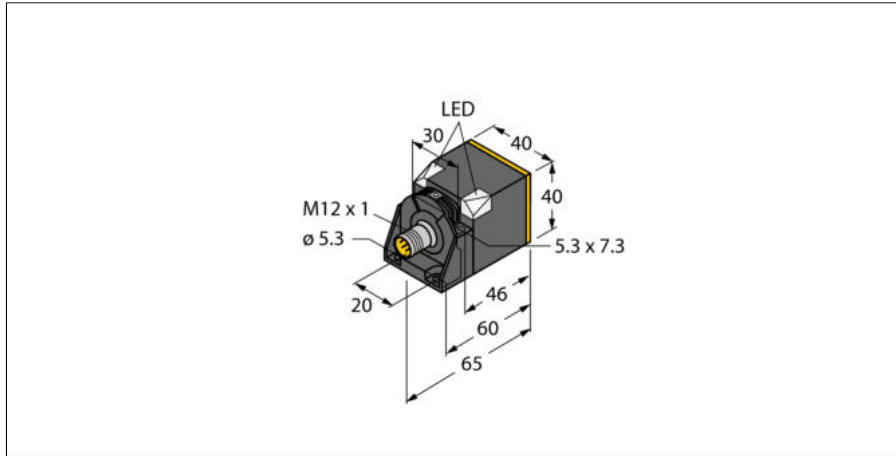
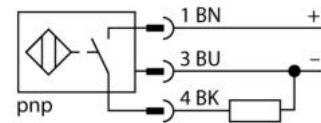


**Inductive sensor**  
**With increased switching distance**  
**NI40U-CK40-AP6X2-H1141**



- Rectangular, height 40 mm
- Variable orientation of active face in 5 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
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

**Wiring Diagram**



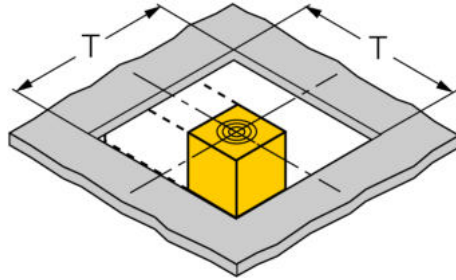
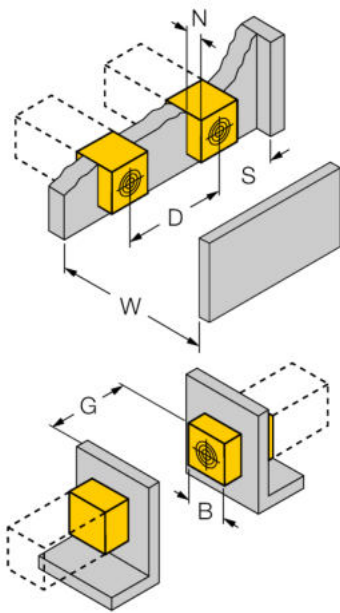
**Functional principle**

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.

<b>Type designation</b>	NI40U-CK40-AP6X2-H1141
Ident no.	1623641
<b>Rated switching distance Sn</b>	40 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0,81 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3...15 % -30...+85 °C
<b>Operating voltage</b>	10...30 VDC
Residual ripple	≤ 10 % U <sub>s</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Protection class	☐
Switching frequency	0.25 kHz
<b>Design</b>	Rectangular,CK40
Dimensions	65 x 40 x 40 mm variable orientation of active face in 5 directions
Housing material	Plastic, PBT-GF20-V0, Black
Active area material	Plastic, PA12-GF30, yellow
Electrical connection	Connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Power-on indication</b>	2 x LEDs, Green
Switching state	2 x LEDs, Yellow
Included in delivery	Fixing clamp BS4-CK40

**Inductive sensor**  
**With increased switching distance**  
**NI40U-CK40-AP6X2-H1141**

Distance D	240 mm
Distance W	120 mm
Distance S	60 mm
Distance G	240 mm
Distance N	40 mm
<hr/>	
Width active area B	40 mm



Flush mounting  
 1-side mounting: Sr = 30 mm; D = 240 mm  
 2-side mounting: Sr = 24 mm; D = 240 mm  
 3-side mounting: Sr = 19 mm; D = 80 mm  
 4-side mounting: Sr = 12 mm; D = 60 mm

Backside as well as recessed mounting with reduced switching distance

Recessed mounting in metal:  
 x = 10 mm: Sr = 20 mm  
 x = 20 mm: Sr = 20 mm  
 x = 30 mm: Sr = 20 mm  
 x = 40 mm: Sr = 20 mm

Protruded mounting:  
 y = 10 mm: Sr = 30 mm  
 y = 20 mm: Sr = 40 mm  
 y = 30 mm: Sr = 40 mm  
 y = 40 mm: Sr = 40 mm

Mounting in aperture plate:  
 T = 140 mm:

Sensor with twisted turning angle  
 On metal Sr = 40 mm  
 Metal-enclosed on one side Sr = 30mm  
 Metal-enclosed on two sides Sr = 20mm  
 Metal-enclosed on three sides Sr = 15 mm

The values stated relate to a 1 mm thick steel plate.

**Inductive sensor**  
**With increased switching distance**  
**NI40U-CK40-AP6X2-H1141**

**Accessories**

Type code	Ident no.	Description	
BSS-CP40	6901318	Mounting bracket for rectangular devices; material: Polypropylene	