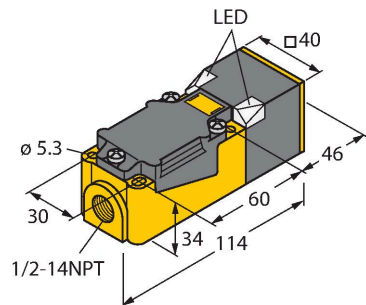


NI25U-CP40-AP6X2/S10

Inductive Sensor



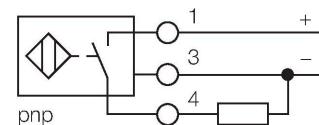
Features

- 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
- Thread, 1/2-14 NPT
- Factor 1 for all metals
- Protection class IP67
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Terminal chamber

Technical data

Type	NI25U-CP40-AP6X2/S10
ID	1623701
Special version	S10 Corresponds to: Mounting base with 1/2-14NPT thread
General data	
Rated switching distance	25 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Repeat accuracy	$\leq 2 \% \text{ of full scale}$
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \% U_{Bmax}$
DC rated operating current I_B	$\leq 200 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_B	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT

Wiring diagram



Functional principle

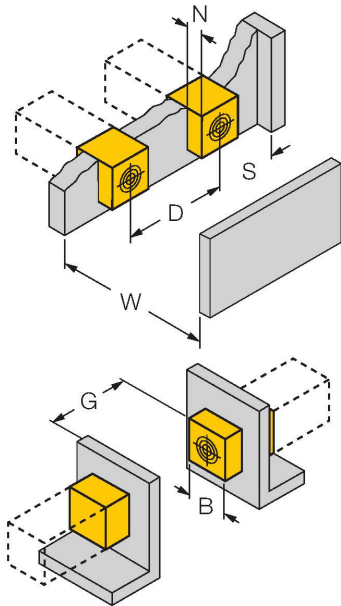
Inductive sensors detect metal objects contactless and wear-free. Due to the 3-coil system without ferrite core, uprox®+ factor 1 sensors have significant advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

Technical data

AC field stability	300 mT _{ss}
Insulation class	□
Switching frequency	0.25 kHz
Mechanical data	
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
Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



Distance D	6 x B
Distance W	75 mm
Distance S	1.5 x B
Distance G	150 mm
Distance N	1 x B
Width active area B	40 mm

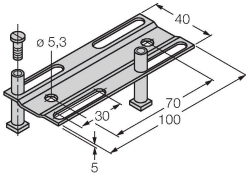
NI25U-CP40-AP6X2/S10 | 02/21/2025 13:40 | technical changes reserved

Accessories

JS025/037

69429

Adjusting bar for rectangular housings
CK/CP40; material: VA 1.4301



BSS-CP40

6901318

Mounting clamp for rectangular
housings 40 x 40 mm; material:
Polypropylene

