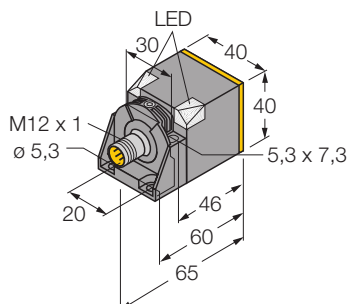
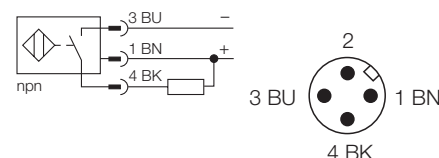


**Inductive sensor
extended switching distance
Ni35U-CK40-AN6X2-H1141**



- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum visibility of operating-voltage display and switching state in any installation position
- factor 1 for all metals
- extended switching distance
- degree of protection IP68
- magnetic field immune
- extended temperature range
- high switching frequency
- predamping protection through self-compensation
- 3-wire DC, 10...30 VDC
- normally open npn output
- connector, M12 x 1

Wiring diagram



Functional 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.

Type	Ni35U-CK40-AN6X2-H1141
Ident-No.	1625810
Rated operating distance Sn	35 mm
Mounting condition	non-flush, partial embedding possible
Assured sensing range	(0,81 x Sn) mm
Repeatability	2 %
Temperature drift	± 10 %
	± 20 %, -25 °C ≤ +70 °C
Hysteresis	3... 15 %
Ambient temperature	-30...+ 85 °C
Operating voltage	10... 30VDC
Residual ripple	10 % U _{ss}
DC rated operational current	200 mA
No-load current I ₀	15 mA
Residual current	0.1 mA
Rated insulation voltage	0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I _e	1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, npn
Insulation class	
Switching frequency	0.25 kHz
Housing	rectangular, CK40
Dimensions	65 x 40 x 40 mm variable orientation of active face in 5 directions
Housing material	plastic, PBT-GF20-V0, black
Material active face	plastic, PA6-GF30-X, yellow
Connection	connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
Operating voltage display	2 x LEDs green
Display switch state	2 x LED yellow
Included in scope of supply	BS4-CK40

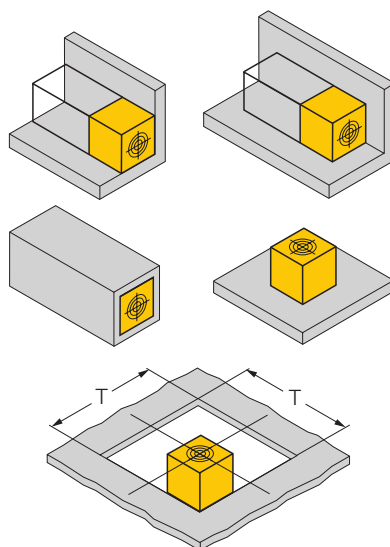
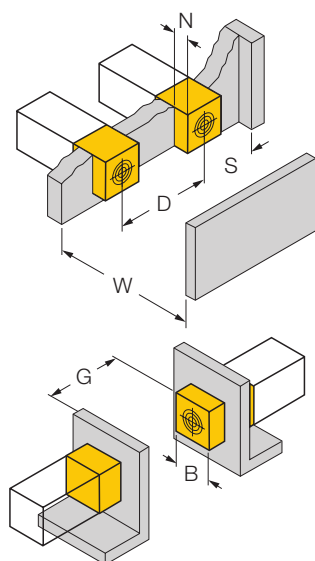
**Inductive sensor
extended switching distance
Ni35U-CK40-AN6X2-H1141**

Mounting instructions

Distance D	120 mm
Distance W	105 mm
Distance T	140 mm
Distance S	60 mm
Distance G	210 mm
Distance N	30 mm

Width of the active face B

40 mm



up to 4-side flush mounting possible

1-side flush mounting: $S_r = 28 \text{ mm}$

2-side flush mounting: $S_r = 24 \text{ mm}$

3-side flush mounting: $S_r = 19 \text{ mm}$

4-side flush mounting: $S_r = 12 \text{ mm}$

back-mounting without reduction of the switching distance.

Recessed mounting with switching distance reduction possible.

The values stated relate to 1 mm thick steel plate.

Accessories

Type code	Ident-No.	Short text	Dimension drawing
BSS-CP40	6901318	fixing clamp; material: polypropylene	