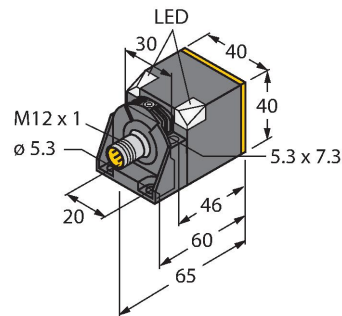


NI35U-CK40-AD4X-H1144

Inductive Sensor

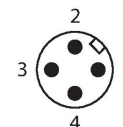
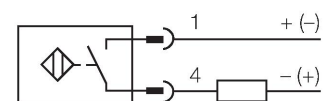


Technical data

Type	NI35U-CK40-AD4X-H1144
ID	4280232
General data	
Rated switching distance	35 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$
Hysteresis	3...20 %
Electrical data	
Operating voltage U_B	10...65 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 100 mA
Residual current	≤ 0.8 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 5 V
Wire break/reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
DC field stability	300 mT
AC field stability	300 mT _{ss}
Smallest operating current	≥ 3 mA
Switching frequency	0.01 kHz
Mechanical data	
Design	Rectangular, CK40
Dimensions	65 x 40 x 40 mm

Features

- 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
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- M12 x 1 male connector



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

	variable orientation of active face in 5 directions
Housing material	Plastic, PBT-GF20-V0, Black
Active area material	Plastic, PA12-GF30, yellow
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-25...+70 °C
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
Switching state	2 × LEDs, Yellow
Included in delivery	Mounting bracket BS4-CK40

Mounting instructions

Mounting instructions/Description

The image contains two technical diagrams illustrating the mounting of the BS4-CK40 sensor. The top diagram is a side view showing two sensors mounted on a bracket. Dimensions labeled include: N (sensor width), S (sensor height), D (distance between sensors), and W (mounting bracket width). The bottom diagram is a front view showing a sensor mounted on a bracket. Dimensions labeled include: G (mounting bracket depth) and B (sensor depth). Both diagrams show the sensor as a yellow cube with a circular logo on its side, and the mounting bracket as a grey L-shaped structure. Dashed lines indicate the sensor's position and dimensions relative to the bracket and other sensors.

Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	1 x B
Width active area B	40 mm

Flush-mounted installation on up to 4 sides

1-side flush-mounted: Sr = 28 mm

2-side flush-mounted: Sr = 24 mm

3-side flush-mounted: Sr = 19 mm

4-side flush-mounted: Sr = 12 mm

Rear-side mounting with full switching distance possible.

Recessed installation with reduced switching distance possible.

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

Accessories

BSS-CP40

6901318

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

