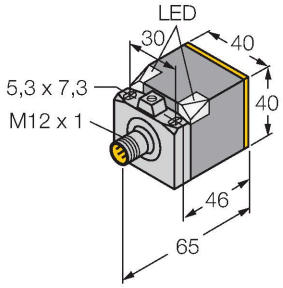
BI15U-CK40-AD4X-H1144
Inductive Sensor

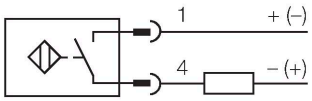


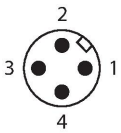
Technical data

Type	BI15U-CK40-AD4X-H1144
ID	4280032
General data	
Rated switching distance	15 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…20 %
Electrical data	
Operating voltage U_B	10…65 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 100 mA
Residual current	≤ 0.8 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_e	≤ 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
- 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.

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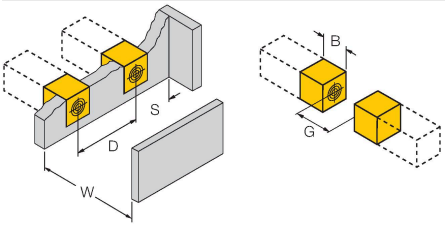
Technical data

	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	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	2 × LEDs, Yellow
Included in delivery	BS1-CK40

Mounting instructions

Mounting instructions/Description



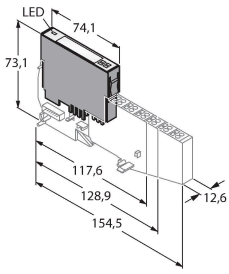
Distance D	80 mm
Distance W	45 mm
Distance S	1 x B
Distance G	90 mm
Width active area B	40 mm

Since the uprox+ 2-wire DC sensors work at a low operating voltage of 8 VDC (with limited load current of 50 mA), the use of isolating switching amplifiers is possible.

The sensors can be operated with the Turck remote I/O fieldbus system BL20. The use of a BL20-4DI-NAMUR slice, allows wire-break or short-circuit to be detected immediately.

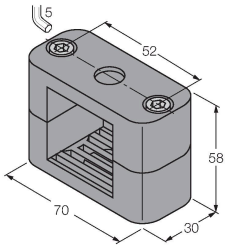
Accessories

BL20-4DI-NAMUR 6827212



4 digital inputs acc. to EN 60947-5-6 For NAMUR sensors, de-energized contacts or uprox®+ 2-wire DC sensors.

BSS-CP40 6901318



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

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Accessories

Dimension drawing	Type	ID	
	RKC4T-2/TEL	6625010	Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

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