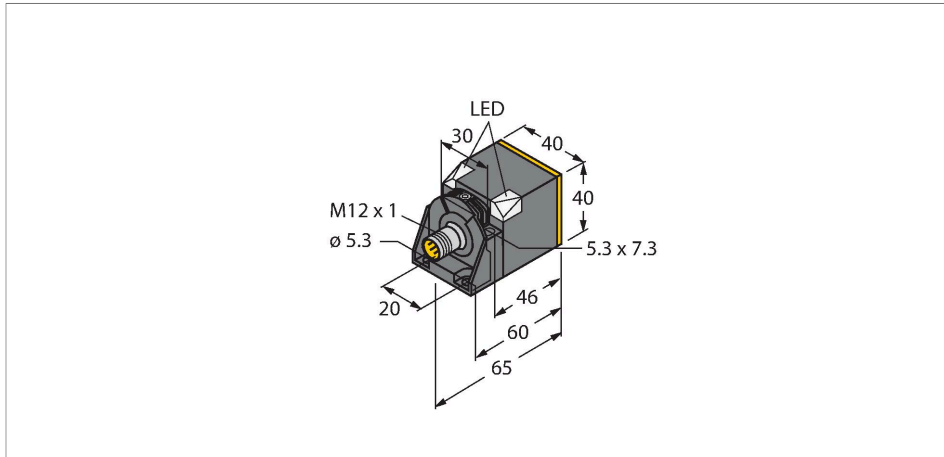


BI30U-CK40-AP6X2-H1141/S1590 W/BS4

Inductive Sensor – With Extended Switching Distance



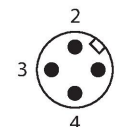
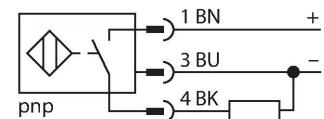
Technical data

Type	BI30U-CK40-AP6X2-H1141/S1590 W/BS4
ID	1625893
Special version	S1590 corresponds to: With WeldGuard™ Coating
General data	
Rated switching distance	30 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S _n) mm
Repeat accuracy	≤ 2 % of full scale
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current	15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I _o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT _{ss}
Insulation class	□

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
- Protection class IP68
- Resistant to magnetic fields
- Large coverage
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram



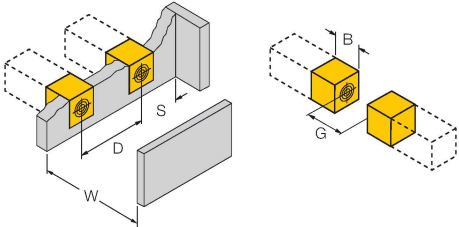
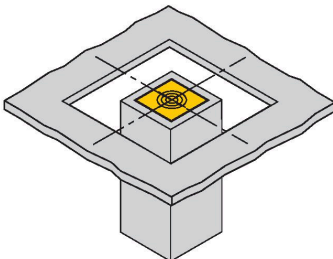
Functional principle

Technical data

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.

Switching frequency	0.25 kHz
Mechanical data	
Design	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	Connector, M12 x 1
Environmental conditions	
Ambient temperature	-10...+60 °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
Power-on indication	2 x LEDs, Green
Switching state	2 x LEDs, Yellow
Included in delivery	Fixing clamp BS4-CK40

Mounting instructions

Mounting instructions/Description	
	
	

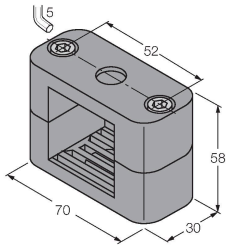
Distance D	80 mm
Distance W	90 mm
Distance S	40 mm
Distance G	180 mm
Width active area B	40 mm

When installing the sensor in an aperture plate (sheet metal, e.g., a step plate) the sensor must be fully embedded in metal for reliable detection of the target.

Accessories

BSS-CP40 6901318

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



Wiring 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

