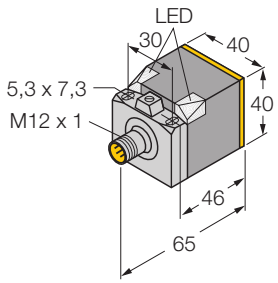
Inductive sensor
Bi15-CK40-AP6X2-H1141

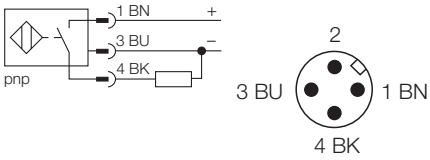
Industrial Automation



- **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**
- **3-wire DC, 10…30 VDC**
- **normally open, pnp output**
- **connector, M12 x 1**

Type	Bi15-CK40-AP6X2-H1141
Ident-No.	16250
Rated operating distance Sn	15 mm
Mounting condition	flush
Assured sensing range	(0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	2 %
Temperature drift	± 10 %
Hysteresis	3… 15 %
Ambient temperature	-25…+ 70 °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, pnp
Switching frequency	0.15 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	IP67
Operating voltage display	2 x LEDs green
Display switch state	2 x LED yellow
Included in scope of supply	BS1-CK40

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. Conserning inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

• Edition: • 08.11.2008

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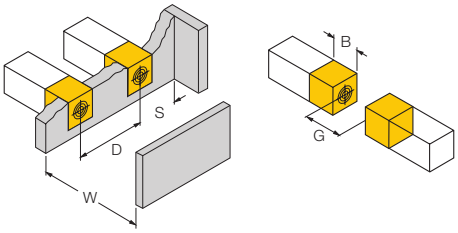
Mounting instructions	minimum distances
Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width of the active face B	40 mm



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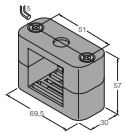
Accessories

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

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