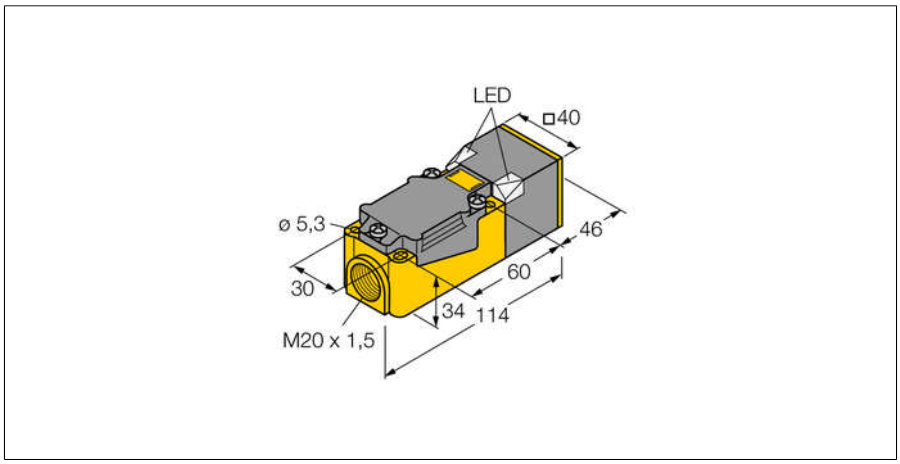
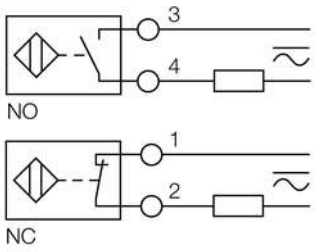
Inductive sensor
BI15U-CP40-FDZ30X2



- **Rectangular, height 40 mm**
- **Variable orientation of active face in 9 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**
- **Extended temperature range**
- **High switching frequency**
- **AC 2-wire, 20…250 VDC**
- **DC 2-wire, 10…300 VDC**
- **NC/NO programmable**
- **Terminal chamber**

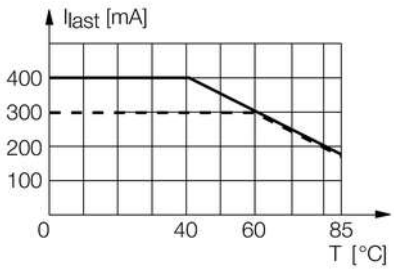
Type code	BI15U-CP40-FDZ30X2
Ident no.	4280600
Rated switching distance Sn	15 mm
Mounting conditions	flush
Assured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…15 %
Ambient temperature	-30…+85 °C
Operating voltage	20…250 VAC
Operating voltage	10… 300VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50…≤ 60 Hz
Residual current	≤ 1.7 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	≤ 3 A (≤ 20 ms max. 5 Hz)
Short-circuit protection	yes/ latching
Voltage drop at I_e	≤ 6 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	2-wire, connection programmable
Smallest operating current I_m	≥ 3 mA
Protective insulation	⧈
Switching frequency	0.01 kHz
Construction	rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	plastic, PBT, black
Connection	terminal chamber
Clamping ability	≤ 2.5 mm²
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	LED green
Switching state	LED yellow

Wiring Diagram



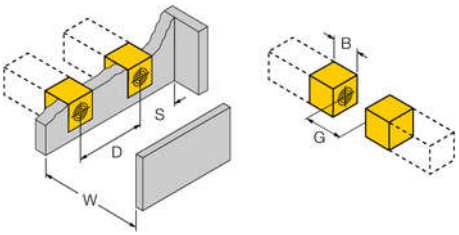
Functional principle

Inductive sensors detect metal objects contactless and wear-free. *uprox*® Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.



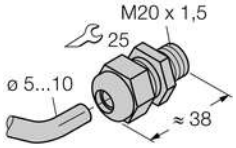
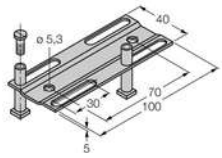
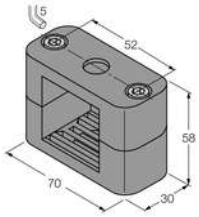
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Distance D	80 mm
Distance W	45 mm
Distance S	40 mm
Distance G	90 mm
Width of the active face B	40 mm



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Accessories

Type code	Ident no.	Description	Design
STRM M20X1,5 BLACK	6965902	Cable glands M20 x 1.5	
Adjusting bar JS 025/037	69429	Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301	
BSS-CP40	6901318	Mounting bracket for rectangular devices; material: Polypropylene	

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