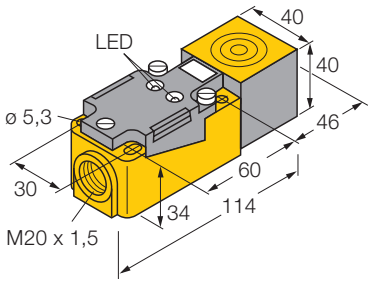
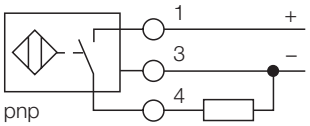
Inductive sensor
with extended switching distance
Bi30U-CP40-AP6X2



- **rectangular, height 40 mm**
- **plastic, PBT-GF30-V0**
- **factor 1 for all metals**
- **degree of protection IP68**
- **extended switching distance**
- **magnetic field immune**
- **3-wire DC, 10...30 VDC**
- **normally open pnp output**
- **terminal chamber**

Wiring diagram



Type	Bi30U-CP40-AP6X2
Ident-No.	1625830
Rated operating distance Sn	30 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 15 %
Operating temperature	0 ...+ 60 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U_{pp}
Rated operational current (DC) I_e	≤ 200 mA
No-load current I_0	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 0,25 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Protection class	⧈
Housing style	rectangular; CP40
Dimensions	114 x 40 x 40 mm
Housing material	plastic, PBT-GF30-V0
Active face	plastic, PBT-GF30-V0
Wiring	terminal chamber
Clamping ability	≤2,5 mm^2
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP68
Supply voltage indication	LED green
Switching status indication	LED yellow

Function principles

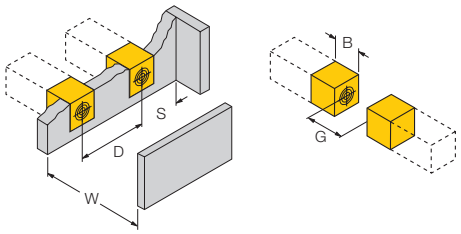
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. Due to a ferrite-less 3-coil system, Uprox factor 1 sensor have distinct advantages. The detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

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Inductive sensor
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Mounting instructions	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap S	1 x B
Gap G	6 x Sn
Width of active face B	40 mm

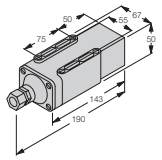
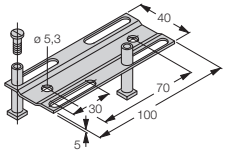


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Bi30U-CP40-AP6X2

Accessories

Typ	Ident-No.	Description	Dimension drawing
SG40	69500	protective housing; housing material: PA (per UL94/V-2); cover: PBT-GF30; for harsh environments; protection degree IP68, 5 m w.g.	
JS 025/037	69429	mounting rail; material: VA 1.4301	

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