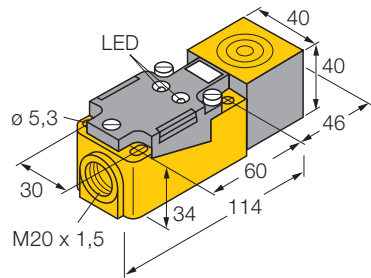


Inductive sensor

Bi15U-CP40-FDZ30X2



- rectangular, height 40 mm
- plastic, PBT-GF30-V0
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- extended temperature range
- high switching frequency
- 2-wire AC, 20...250 VAC
- 2-wire DC, 10...300 VDC
- connection programmable (n.c./n.o.)
- terminal chamber

Wiring diagram



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.

Type	Bi15U-CP40-FDZ30X2
Ident-No.	4280600
Rated operating distance S_n	15 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	$\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$ $-30 \dots +85^\circ\text{C}$
Rated operational voltage (AC) U_B	20... 250 VAC
Rated operational voltage (DC) U_B	10... 300 VDC
Rated operational current (AC) I_e	$\leq 400 \text{ mA}$
Rated operational current (DC) I_e	$\leq 300 \text{ mA}$
Line frequency	50... 60 Hz
Max. OFF-state current	$\leq 1,7 \text{ mA}$
Max. switching frequency	$\leq 0,06 \text{ kHz}$
Rated insulation voltage	$\leq 1,5 \text{ kV}$
Surge Current	$\leq 3 \text{ A} (\leq 20 \text{ ms max. } 5 \text{ Hz})$
Output function	2-wire, connection programmable
Short-circuit protection	yes, short-circuit
Max. voltage drop at I_e	$\leq 6 \text{ V}$
Wire breakage / reverse polarity protection	yes / complete
Min. operational current I_m	$\geq 3 \text{ mA}$
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	$\leq 2,5 \text{ mm}^2$
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP68



Inductive sensor

Bi15U-CP40-FDZ30X2

Supply voltage indication

LED green

Switching status indication

LED yellow

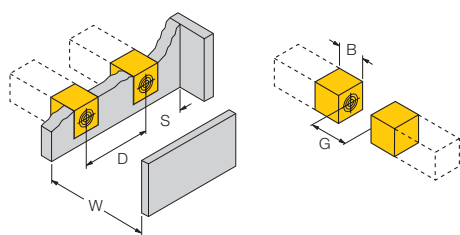
The TURCK logo, consisting of the word "TURCK" in a bold, black, sans-serif font, positioned on a yellow background that forms part of a larger yellow T-shape.

Inductive sensor**Bi15U-CP40-FDZ30X2****Mounting instructions**

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



Inductive sensor

Bi15U-CP40-FDZ30X2

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	