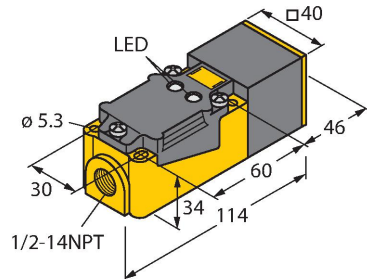


BI15-CP40-VDZ3X2/S10

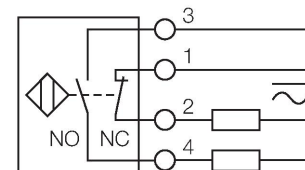
Inductive Sensor



Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- AC 2-wire, 20...250 VAC
- DC 2-wire, 20...300 VDC
- NC and NO contact, galvanically isolated
- Terminal chamber

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

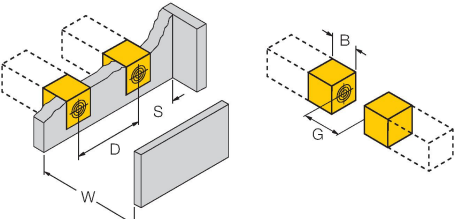
Technical data

Type	BI15-CP40-VDZ3X2/S10
ID	42227
Special version	S10 Corresponds to: Mounting base with 1/2-14NPT thread
General data	
Rated switching distance	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	20...250 VAC
Operating voltage U_B	20...300 VDC
AC rated operational current	≤ 350 mA
DC rated operating current I_o	≤ 350 mA
Frequency	$\geq 50 \dots \leq 60$ Hz
Residual current	≤ 2 mA
Isolation test voltage	1.5 kV
Surge current	≤ 8 A (≤ 10 ms max. 5 Hz)
Short-circuit protection	no
Voltage drop at I_o	≤ 7 V
Wire break/reverse polarity protection	yes/Complete

Technical data

Output function	4-wire, NO/NC, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.01 kHz
Mechanical data	
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PBT-GF30-V0, yellow
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm²
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Red

Mounting instructions

Mounting instructions/Description	
	Distance D 2 x B
	Distance W 3 x Sn
	Distance S 1 x B
	Distance G 6 x Sn
	Width active area B 40 mm

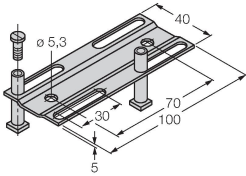
BI15-CP40-VDZ3X2/S10| 02/21/2025 13-35 | technical changes reserved

Accessories

JS025/037

69429

Adjusting bar for rectangular housings
CK/CP40; material: VA 1.4301



BSS-CP40

6901318

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

