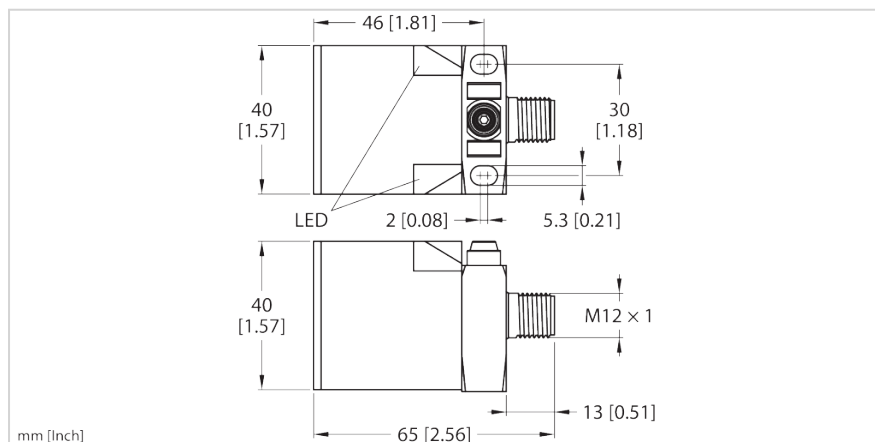


BI15U-CK40-AP6X2-H1141

Inductive Sensor



Type designation	BI15U-CK40-AP6X2-H1141
Ident-No.	1625600

Technical data

Application area	
Magnetic field immune	Immune to magnetic AC and DC fields
Detection area/measuring range	
Rated switching distance	15 mm
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Power supply	
Operating voltage U_B	10...30 VDC
Voltage drop at I_e	$\leq 1,8$ V
Electrical data	
AC field stability	300 mT _{SS}
No-load current	15 mA
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes/Cyclic
Wire break/reverse polarity protection	yes/Complete
DC field stability	300 mT
DC rated operational current	≤ 200 mA
Insulation class	II
Isolation test voltage	$\leq 0,5$ kV
Residual current	$\leq 0,1$ mA

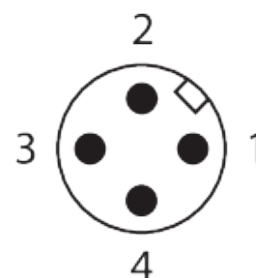
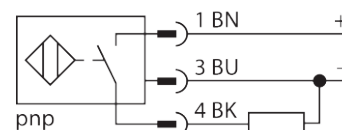
Features

- Rectangular, height 40 mm
- Variable orientation of active face in 5 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
- DC 3-wire, 10...30 VDC
- NO, PNP output
- Connector, M12 x 1

Technical data

Residual ripple	$\leq 10 \% U_{SS}$
Switching frequency	0,25 kHz
Accuracy/deviation	
Hysteresis	3 % v. E...15 % v. E.
Temperature drift	10 %
Repeat accuracy	$\leq 2 \% v. E.$
	$\leq \pm 15 \%, \leq -25^{\circ}C \vee \geq +70^{\circ}C$
Mechanical data	
Design	Rectangular, CK40
Construction type designation	CK40
Dimensions	65 mm x 40 mm x 40 mm
	variable orientation of active face in 5 directions
Housing material	Plastic, PBT-GF20-V0, Black
Active area material	Plastic, PA12-GF30, yellow
Electrical connection	Connector, M12 x 1
Number of pins	4
Pressure resistant	no
Mounting conditions	Flush
Ambient conditions	
Ambient temperature	-30...+85 °C
Pollution degree	3
Shock resistance	30 g (11 ms)
Vibration resistance	55 Hz (1 mm)
Protection class	IP68
Tests/approvals	
MTTF	874 Years acc. to SN 29500 (Ed. 99) 40 °C
Displays/controls	
Power-on indication	2 × LEDs, Green
Switching state	2 × LEDs, Yellow
Other properties	
RoHs compatibility	yes
Comments	
Included in delivery	BS1-CK40

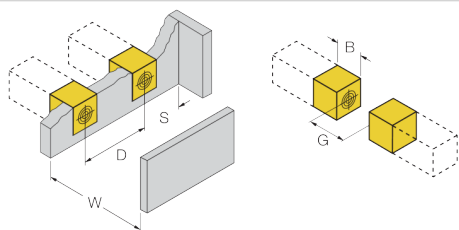
Wiring Diagram



Functional principle

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

Assembly instructions

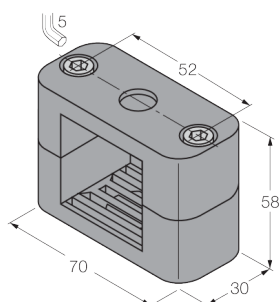


Distance D: 80 mm
Distance W: 45 mm
Distance S: 40 mm
Distance G: 90 mm
Width active area B: 40 mm

Mounting accessories

BSS-CP40

6901318

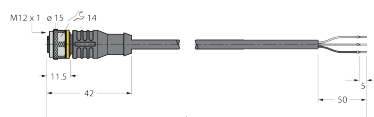


Mounting bracket for rectangular housings 40 x 40 mm; material: Polypropylene; ambient temperature -30°C ... +90 °C

Connection accessories

RKC4T-2/TEL

6625010



Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval