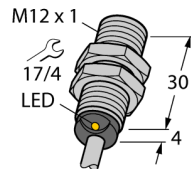


Inductive sensor Bi2-G12K-RP6X 7M

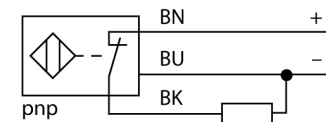
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Automation



- Threaded barrel, M12 x 1
- Chrome-plated brass
- DC 3-wire, 10...30 VDC
- NC contact, PNP output
- Cable connection

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.

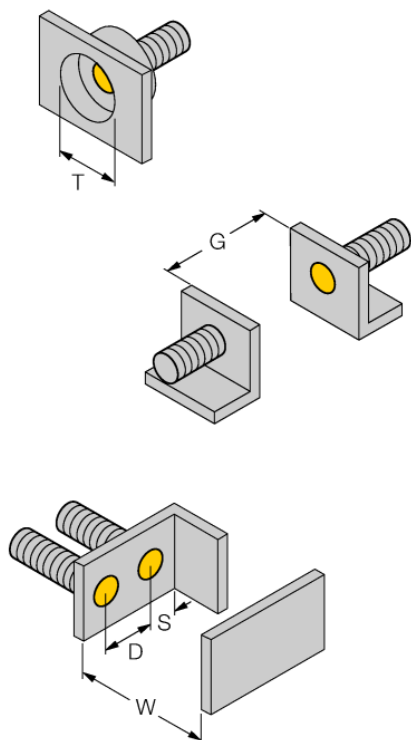
Type code	Bi2-G12K-RP6X 7M
Ident no.	4670265
Rated switching distance Sn	2 mm
Mounting conditions	flush
Assured switching distance	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_0	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NC contact, PNP
Switching frequency	2 kHz
Construction	threaded barrel, M12 x 1
Dimensions	34 mm
Housing material	metal, CuZn, chrome-plated
Material active area	plastic, PA
Max. tightening torque housing nut	10 Nm
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 7m
Cable cross section	3 x 0.34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
IP Rating	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

Inductive sensor Bi2-G12K-RP6X 7M

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Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B	Ø 12 mm
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Accessories

Type code	Ident no.	Description	Design
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-12	6945101	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	