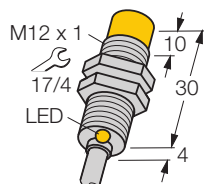


# Inductive sensor Ni5-G12K-AP6X

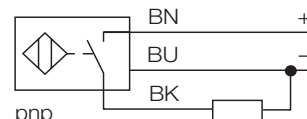
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- threaded barrel, M12x1
- Chrome-plated brass
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

### Wiring diagram



### Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. Concerning inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

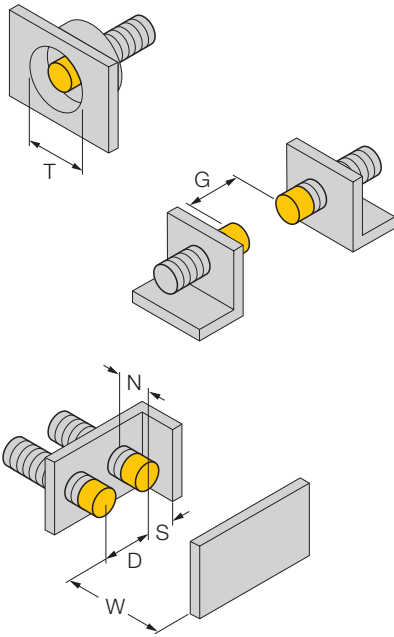
<b>Type</b>	Ni5-G12K-AP6X
Ident-No.	46703
<b>Rated operating distance Sn</b>	5 mm
Mounting condition	non-flush
Assured sensing range	(0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	2 %
Temperature drift	± 10 %
Hysteresis	3... 15 %
Ambient temperature	-25...+ 70 °C
<b>Operating voltage</b>	10... 30VDC
Residual ripple	10 % U <sub>SS</sub>
DC rated operational current	200 mA
No-load current I <sub>0</sub>	15 mA
Residual current	0.1 mA
Rated insulation voltage	0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I <sub>e</sub>	1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Switching frequency	1.5 kHz
<b>Housing</b>	threaded barrel, M12 x 1
Dimensions	34 mm
Housing material	metal, CuZn, chrome-plated
Material active face	plastic, PA12-GF30
Tightening torque of housing nut	10 Nm
Connection	cable
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section:	3 x 0.34mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
<b>Display switch state</b>	LED yellow

**Inductive sensor  
Ni5-G12K-AP6X**

Mounting instructions	minimum distances
Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1,5 x B
Distance G	6 x Sn
Distance N	2 x Sn

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**Diameter of the active area B**      Ø 12 mm

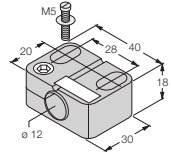

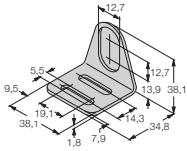


# Inductive sensor Ni5-G12K-AP6X

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## Accessories

Type code	Ident-No.	Short text	Dimension drawing
BST-12B	6947212	fixing clamp with dead-stop; material: PA6	
QM-12	6945101	quick-mount fixing clamp 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 mounting brackets.	
MW-12	6945003	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	fixing clamp; material: polypropylene	