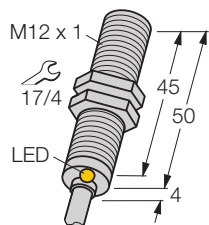


# Inductive sensor Bi2-M12-AD4X

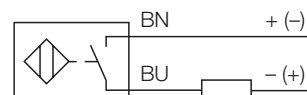
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- threaded barrel, M12 x 1
- Chrome-plated brass
- 2-wire DC, 10...65 VDC
- normally open
- cable connection

## 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>	Bi2-M12-AD4X
Ident-No.	44050
<b>Rated operating distance Sn</b>	2 mm
Mounting condition	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	1... 15 %
Ambient temperature	-25...+ 70 °C
<b>Operating voltage</b>	10... 65VDC
Residual ripple	10 % U <sub>ss</sub>
DC rated operational current	100 mA
Residual current	0.6 mA
Rated insulation voltage	0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I <sub>e</sub>	5V
Output function	2-wire, normally open
Smallest operating current I <sub>m</sub>	≥ 3 mA
Switching frequency	1 kHz
<b>Housing</b>	threaded barrel, M12 x 1
Dimensions	54 mm
Housing material	metal, CuZn, chrome-plated
Material active face	plastic, PA12-GF30
End cap	plastic, EPTR
Tightening torque of housing nut	10 Nm
Connection	cable
Cable quality	Ø 5.2, LiYY, PVC, 2 m
Cable cross section:	2 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

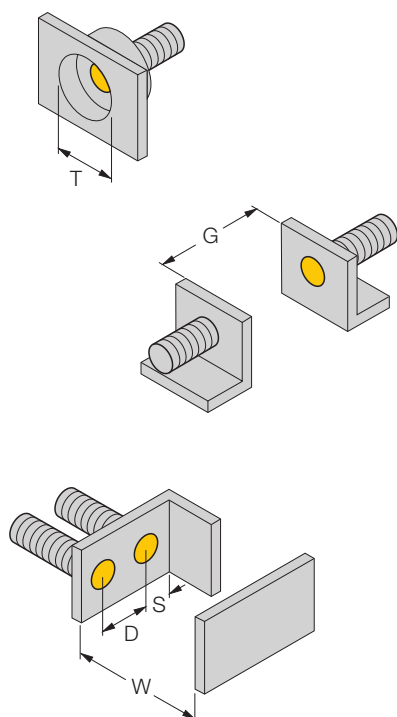
# Inductive sensor Bi2-M12-AD4X

## Mounting instructions

	minimum distances
Distance D	$2 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1,5 \times B$
Distance G	$6 \times S_n$

## Diameter of the active area B

Ø 12 mm


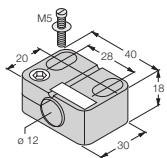
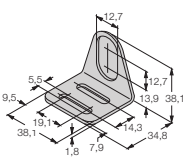


# Inductive sensor Bi2-M12-AD4X

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## Accessories

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