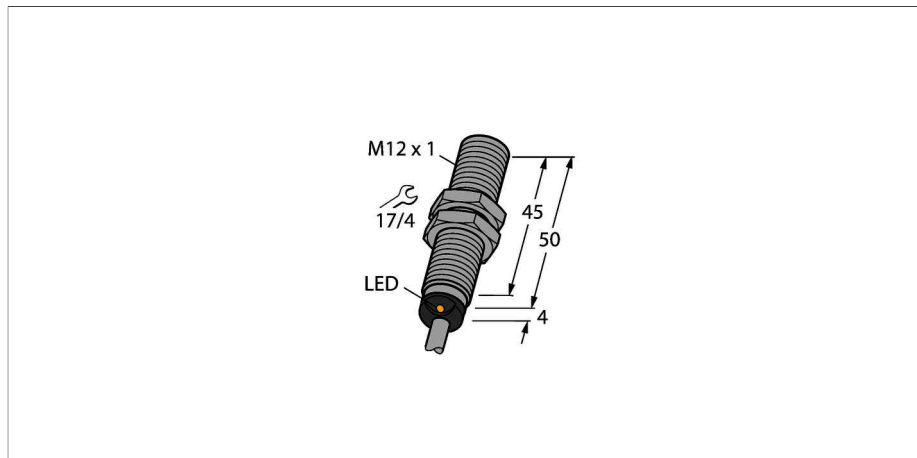


# BI2-M12-AD4X

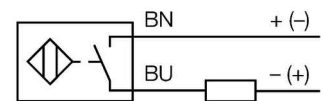
## Inductive sensor



### Features

- M12 x 1 threaded barrel
- Chrome-plated brass
- DC 2-wire, 10...65 VDC
- NO contact
- Cable connection

### Wiring diagram



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.

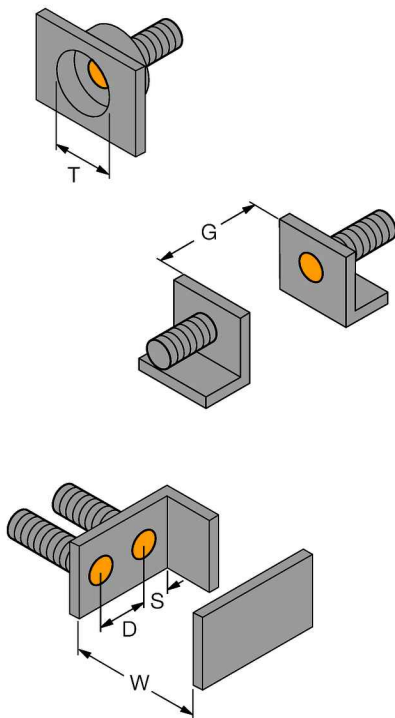
### Technical data

<b>Type</b>	BI2-M12-AD4X
ID number	44050
Rated switching distance	2 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	$\leq 2$ % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65 VDC
Residual ripple	$\leq 10$ % $U_{ss}$
DC rated operational current	$\leq 100$ mA
Residual current	$\leq 0.6$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at	$\leq 5$ V
Wire breakage/Reverse polarity protection	Complete
Output function	NO contact, 2-wire
Smallest operating current	$\geq 3$ mA
Switching frequency	1 kHz
<b>Design</b>	Threaded barrel, M12 x 1
Dimensions	54 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque housing nut	10 Nm

## Technical data

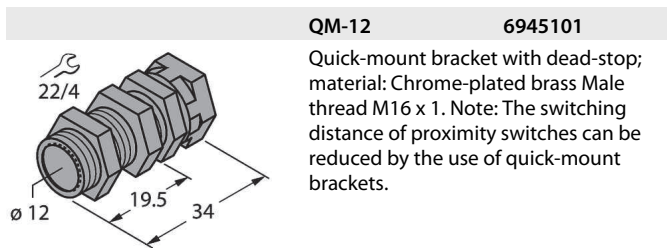
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Cable cross section	2 x 0.34 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

## Mounting instructions/Description

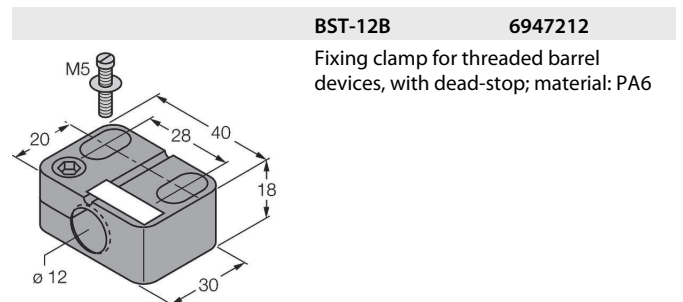


Distance D	24 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 12 mm

## Mounting accessories



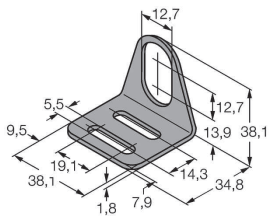
**QM-12 6945101**  
Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.



**BST-12B 6947212**  
Fixing clamp for threaded barrel devices, with dead-stop; material: PA6

**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

