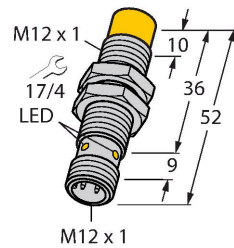


# NI4-M12-AN6X-H1141

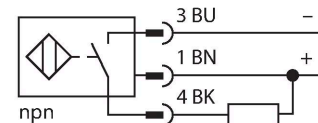
## Inductive sensor



### Features

- M12 × 1 threaded barrel
- Chrome-plated brass
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 male connector

### Wiring diagram



### Technical data

<b>Type</b>	NI4-M12-AN6X-H1141
Ident. no.	46068
Rated switching distance	4 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
Switching frequency	2 kHz
<b>Design</b>	Threaded barrel, M12 × 1
Dimensions	52 mm
Housing material	Metal, CuZn, Chrome-plated

### Functional principle

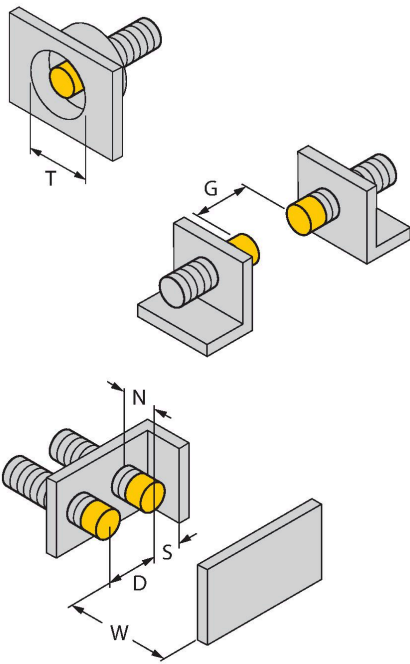
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Active area material	Plastic, PA12-GF30
Max. tightening torque housing nut	10 Nm
Electrical connection	Connector, M12 x 1
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

**Mounting instructions/Description**



Distance D	3 x B
Distance T	3 x B
Distance N	2 x Sn
Diameter active area B	Ø 12 mm

Accessories

**QM-12** **6945101**

Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 x 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

**BST-12B** **6947212**

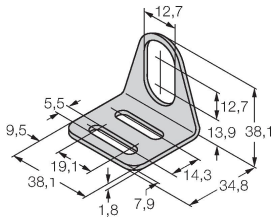
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

N14-M12-AN6X-H114 | 11/19/2019 16:23 | technical changes reserved

**MW12**

**6945003**

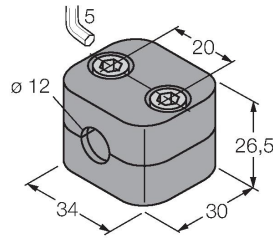
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



**BSS-12**

**6901321**

Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene





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