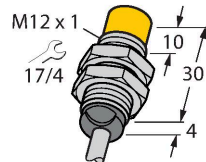


# NI5-G12-Y0

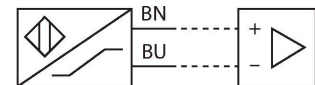
## Inductive Sensor



### Features

- Threaded barrel, M12 x 1
- Chrome-plated brass
- DC 2-wire, nom. 8.2 VDC
- Output acc. to EN 60947-5-6 (NAMUR)
- Cable connection

### Wiring diagram



### Technical data

Type	NI5-G12-Y0
ID	1005451
<b>General data</b>	
Rated switching distance	5 mm
Mounting conditions	Non-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
Hysteresis	1...10 %
<b>Electrical data</b>	
Output function	2-wire, NAMUR
Switching frequency	2 kHz
Voltage	Nom. 8.2 VDC
Non-actuated current consumption	$\geq 2.1$ mA
Actuated current consumption	$\leq 1.2$ mA
<b>Mechanical data</b>	
Design	Threaded barrel, M12 x 1
Dimensions	34 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque of housing nut	10 Nm
Electrical connection	Cable

### 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.

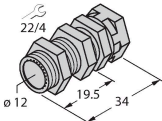
Technical data

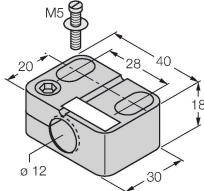
Cable quality	Ø 5.2 mm, Blue, LiYY, PVC, 2 m
Core cross-section	2 x 0.5 mm <sup>2</sup>
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	6198 years acc. to SN 29500 (Ed. 99) 40 °C

Mounting instructions

Mounting instructions/Description	
	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
	Diameter active area B
	Ø 12 mm

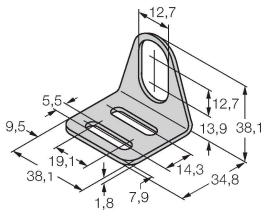
Accessories

QM-12	6945101
	
Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 × 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	

MW12

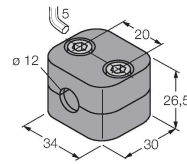
6945003



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