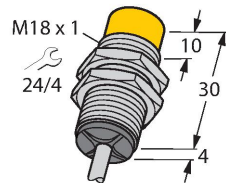


NI10-G18-Y0

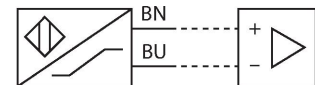
Inductive Sensor



Features

- M18 × 1 threaded barrel
- 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	NI10-G18-Y0
ID	1006170
General data	
Rated switching distance	10 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	≤ 2 % of full scale
Hysteresis	1...10 %
Electrical data	
Output function	2-wire, NAMUR
Switching frequency	0.5 kHz
Voltage	Nom. 8.2 VDC
Non-actuated current consumption	≥ 2.1 mA
Actuated current consumption	≤ 1.2 mA
Mechanical data	
Design	Threaded barrel, M18 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	25 Nm
Electrical connection	Cable

Functional principle

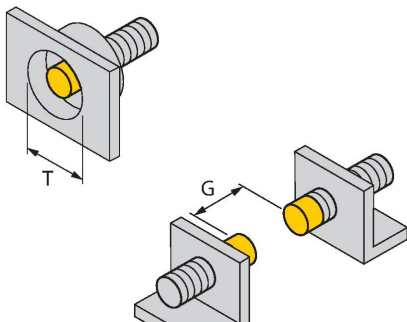
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Cable quality	Ø 5.2 mm, Blue, LiYY, PVC, 2 m
Core cross-section	2 x 0.5 mm ²
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



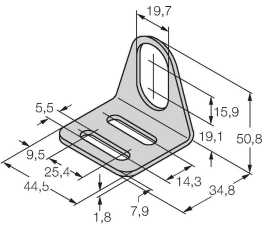
The image contains three technical diagrams illustrating different mounting configurations for a sensor. The top diagram shows a side view of a sensor mounted on a plate, with dimension T indicating the distance from the mounting surface to the sensor's active area. The middle diagram shows a top view of two sensors mounted on a plate, with dimension G indicating the distance between the sensors and dimension S indicating the distance from the mounting surface to the sensor's active area. The bottom diagram shows a perspective view of a sensor mounted on a plate, with dimensions N, D, S, and W indicating various mounting parameters.

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 18 mm

Accessories

MW18

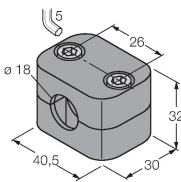
6945004



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

BSS-18

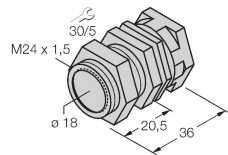
6901320



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

QM-18

6945102



Quick-mount bracket with dead-stop;
material: Chrome-plated brass. Male
thread M24 × 1.5. Note: The switching
distance of the proximity switches
may change when using quick-mount
brackets.