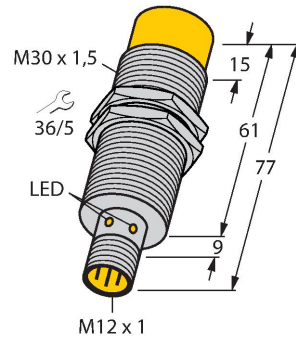


NI15-EM30E-Y0X-H1141

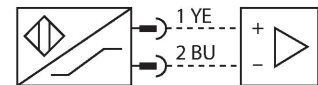
Inductive Sensor



Features

- Threaded barrel, M30 x 1.5
- Stainless steel, 1.4301
- DC 2-wire, nom. 8.2 VDC
- Output acc. to EN 60947-5-6 (NAMUR)
- M12 x 1 connector

Wiring diagram



Technical data

Type	NI15-EM30E-Y0X-H1141
ID	1006293
General data	
Rated switching distance	15 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	0.2 kHz
Voltage	Nom. 8.2 VDC
Non-actuated current consumption	≥ 2.1 mA
Actuated current consumption	≤ 1.2 mA
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	77 mm
Housing material	Stainless steel, 1.4301 (AISI 304)
Active area material	Plastic, PA12-GF30
Max. tightening torque of housing nut	75 Nm
Electrical connection	Connector, M12 x 1

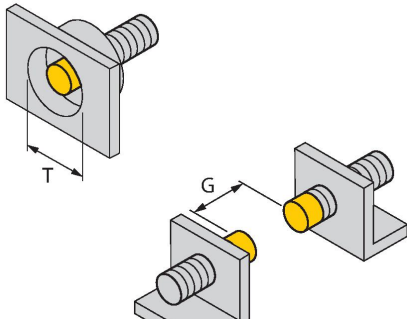
Functional principle

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

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
Switching state	LED, Yellow

Mounting instructions

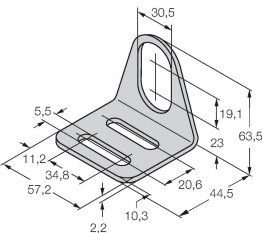


The image contains three isometric diagrams illustrating different mounting configurations for a sensor. The top diagram shows a single sensor mounted on a bracket with a dimension line labeled 'T' indicating the distance from the bracket face to the sensor. The middle diagram shows two sensors mounted on a bracket with dimension lines labeled 'G' and 'S' indicating the distance between the sensors and the bracket. The bottom diagram shows two sensors mounted on a bracket with dimension lines labeled 'N', 'S', 'D', and 'W' indicating the distance between the sensors and the bracket.

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 30 mm

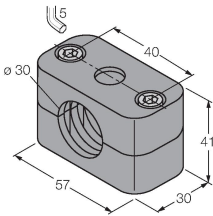
Accessories

MW306945005



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

BSS-306901319



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