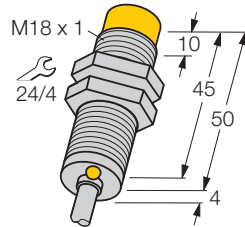


Inductive sensor Ni8-M18-AN6X

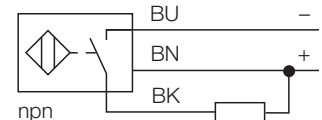
TURCK

Industrial
Automation



- Threaded barrel, M18 x 1
- Chrome-plated brass
- 3-wire DC, 10...30 VDC
- normally open npn output
- cable connection

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. Concerning inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

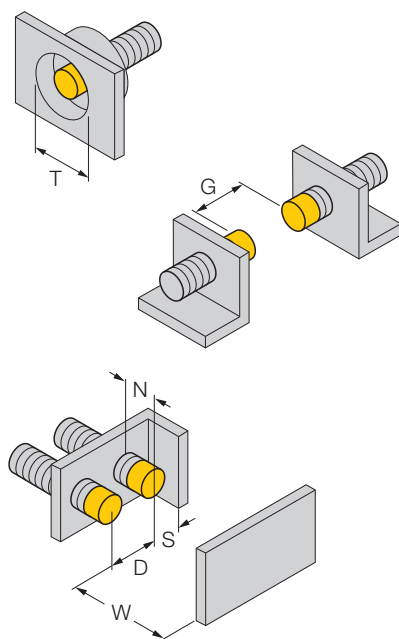
Type	Ni8-M18-AN6X
Ident-No.	46113
Rated operating distance Sn	8 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
Hysteresis	3... 15 %
Ambient temperature	-25...+ 70 °C
Operating voltage	10... 30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I _e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, NO contact, NPN
Switching frequency	≤ 0.5kHz
Housing	threaded barrel, M18 x 1
Dimensions	54 mm
Housing material	metal, CuZn, chrome-plated
Material active face	Plastic, PA12-GF30
End cap	plastic, EPTR
Tightening torque of housing nut	25 Nm
Electrical connection	cables
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section:	3 x 0.34mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Protection class	IP67
Display switch state	LED yellow

Inductive sensor Ni8-M18-AN6X

TURCKIndustrial
Automation

Mounting instructions	minimum distances
Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$2 \times S_n$

Diameter of the active area B	$\varnothing 18 \text{ mm}$
--------------------------------------	-----------------------------

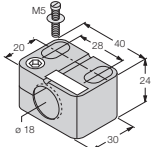
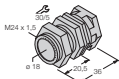
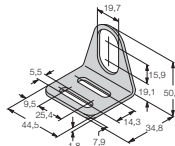


Inductive sensor Ni8-M18-AN6X

TURCK

Industrial
Automation

Accessories

Type code	Ident-No.	Short text	Dimension drawing
BST-18B	6947214	Fixing clamp with dead-stop; material: PA6	
QM-18	6945102	Quick-mount fixing clamp with dead-stop; material: Chrome-plated brass Male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick mounting brackets.	
MW-18	6945004	Mounting bracket; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Fixing clamp; material: Polypropylene	