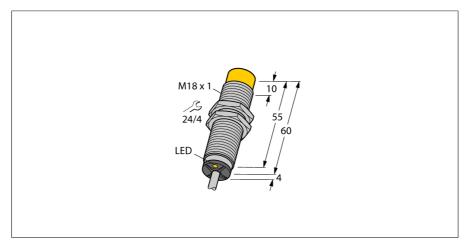


Inductive sensor Ni10U-M18M-AD4X





Type code	Ni10U-M18M-AD4X
Ident no.	4405070

Rated operating distance Sn 10 mm Mounting condition non-flush Assured sensing range ≤ (0,81 x Sn) mm Repeatability \leq 2 % of full scale Temperature drift 10 % \leq ± 15 %, \leq -25 °C v \geq +70 °C 3...20 % Hysteresis Ambient temperature -25...+70 °C

Operating voltage 10...65VDC Residual ripple \leq 10 % U_{ss} DC rated operational current \leq 100 mA Residual current ≤ 0.8 mA Rated insulation voltage $\leq 0.5 \; kV$ Short-circuit protection yes/ cyclic Voltage drop at I, ≤ 5 V Smallest operating current I_m \leq 3 mA

Switching frequency 0.01 kHz Design threaded barrel, M18 x 1 Dimensions 64 mm Housing material metal, CuZn, chrome-plated Material active area Plastic, LCP

Plastic, EPTR End cap Max. tightening torque housing nut 25 Nm cable Connection Cable quality 5.2 mm, LifYY, PVC, 2 m Cable cross section 2 x 0.34 mm²

Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C

LED yellow

Chrome-plated brass

Factor 1 for all metals

Resistant to magnetic fields

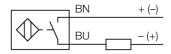
Threaded barrel, M18 x 1

2-wire DC, 10...65 VDC

NO contact

Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, uprox®+ sensors have distinct advantages compared to conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

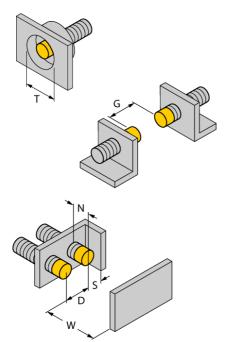
Switching state

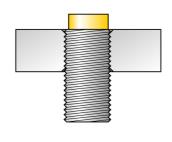


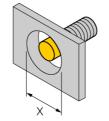
Inductive sensor Ni10U-M18M-AD4X



Distance D	54 mm
Distance W	30 mm
Distance T	54 mm
Distance S	27 mm
Distance G	60 mm
Distance N	20 mm
Diameter of the active area B	Ø 18 mm







All non-flush mountable uprox®+ threaded barrel sensors can be screwed to the upper edge of the barrel. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

When installed in an aperture plate a distance of X = 70 mm must be observed.

Isolating switching amplifiers can be applied because uprox®+ 2-wire DC sensors work with 8 VDC low operating voltage (limited load current).

If the sensors are operated with the Turck remote I/ O fieldbus system BL20, wire-break and short-circuit events are immediately detected. For this purpose connected the sensor to the BL20-4DI-NAMUR slice.





Accessories

Type code	Ident no.	Description	Dimension drawing
BL20-4DI-NAMUR	6827212	4 digital inputs acc. to EN 60947-5-6. For NAMUR sensors, de-energized contacts or uprox®+ 2-wire DC sensors.	73.1 117.6 128.9 154.5
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	19.7 19.7 15.9 19.1 50.8 25.4 14.5 1.8 7,9
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	e 18 26 32 32 40.5 30