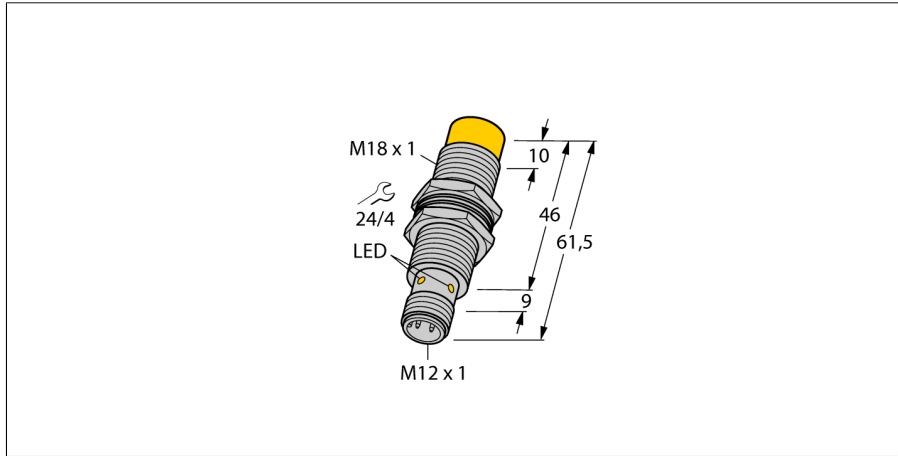


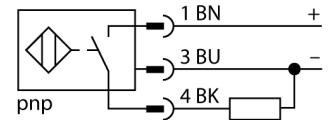
Inductive sensor
NI12U-EM18-AP6X2-H1141/S395/S1589



- Threaded barrel, M18 x 1
- Stainless steel, 1.4301
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- Auto-compensation protects against pre-attenuation
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Type designation	NI12U-EM18-AP6X2-H1141/S395/S1589
Ident-No.	1645491
Special version	S398-S1589 corresponds to: ÖLFLEX cable 3x0.75; with WeldGuard™ coating
Rated switching distance Sn	12 mm
Mounting conditions	Non-flush, partially embeddable
Secured operating distance	≤ (0,81 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3...15 %
	-30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _s
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Insulation class	□
Switching frequency	2 kHz
Design	Threaded barrel, M18 x 1
Dimensions	61.5 mm
Housing material	Stainless steel, V2A (1.4301)
Active area material	Plastic, PBT + WeldGuard™
Max. tightening torque housing nut	25 Nm
Electrical connection	Connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Wiring Diagram

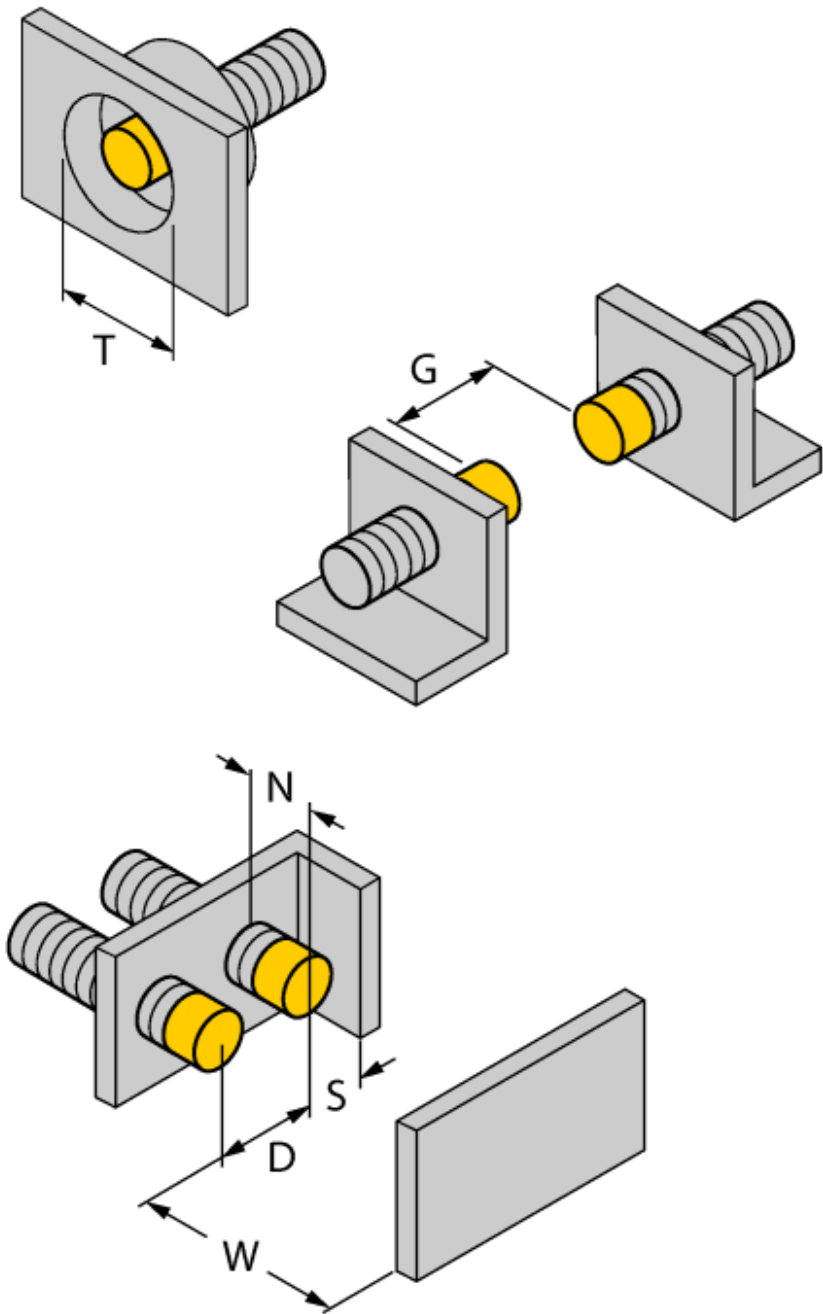


Functional principle

Inductive sensors detect metal objects contactless and wear-free. *uprox®* Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

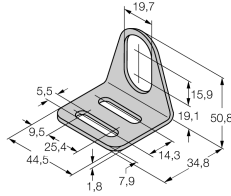
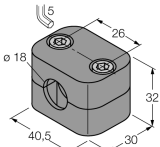
Inductive sensor
NI12U-EM18-AP6X2-H1141/S395/S1589

Distance D	3 x B
Distance T	3 x B
Distance N	2 x Sn
Diameter active area B	Ø 18 mm



**Inductive sensor
NI12U-EM18-AP6X2-H1141/S395/S1589**

Accessories

Type code	Ident-No.	Description	Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a mounting bracket for threaded barrel sensors. The drawing shows a 3D perspective view of the bracket with various dimensions: 19.7 (width of the top flange), 15.9 (height of the top flange), 50.8 (total height), 19.1 (height of the main body), 34.8 (width of the main body), 14.3 (width of the sensor opening), 7.9 (width of the base), 1.8 (thickness of the base), 44.5 (total width), 25.4 (width of the sensor opening), 9.5 (width of the top flange), and 5.5 (width of the top flange).</p>
BSS-18	6901320	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	 <p>Technical drawing of a mounting clamp for smooth and threaded barrel sensors. The drawing shows a 3D perspective view of the clamp with dimensions: 5 (height of the top flange), 26 (width of the top flange), 32 (total height), 30 (width of the main body), 40.5 (total width), and 18 (diameter of the sensor opening).</p>