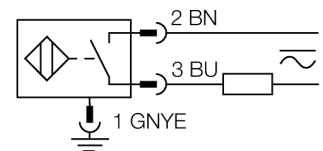


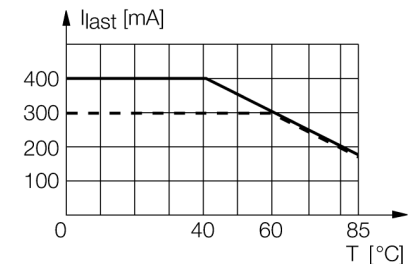
- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- Connector, 1/2"

Wiring diagram



Functional principle

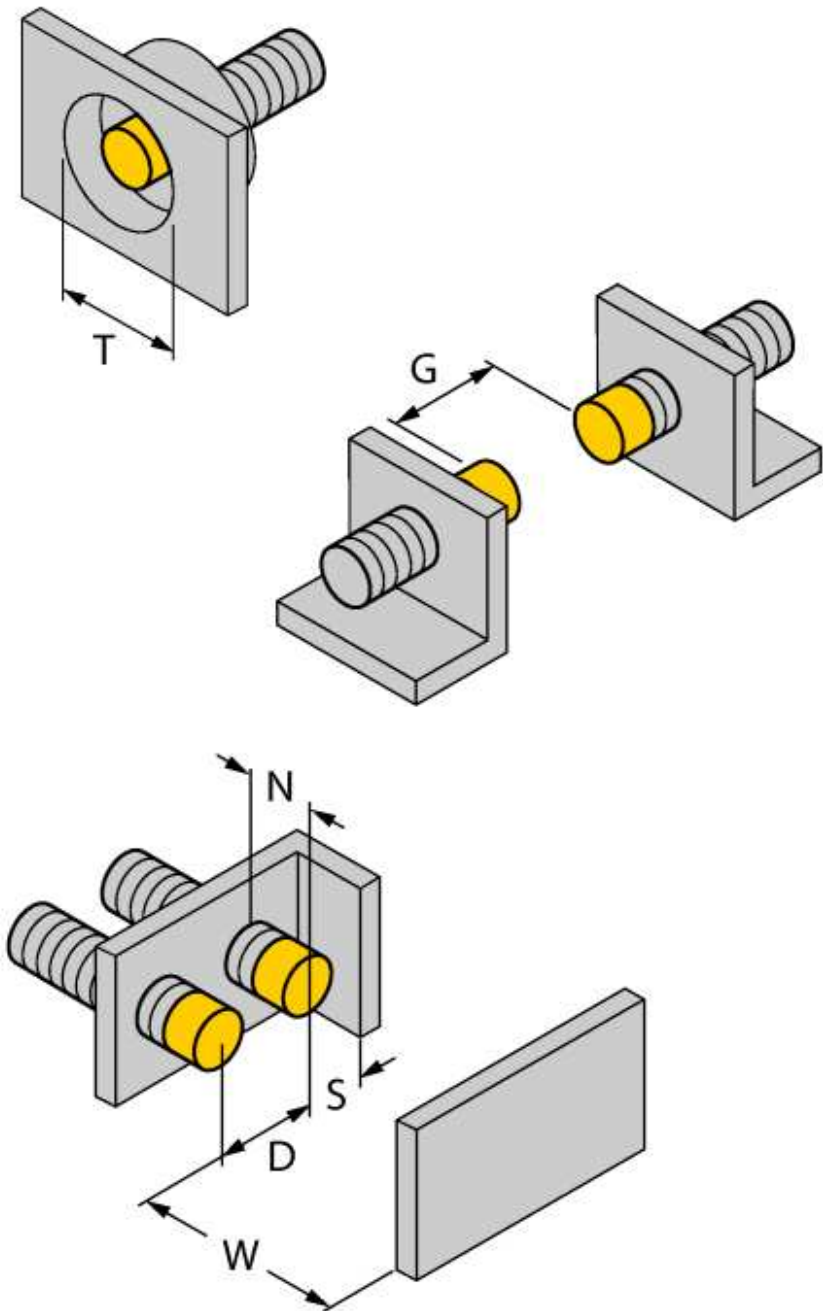
Inductive sensors detect metal objects contactless and wear-free. Due to the patented ferrite-less 3-coil system, uprox® factor 1 sensors have distinct advantages compared to conventional sensors. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.



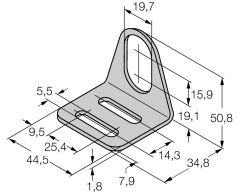
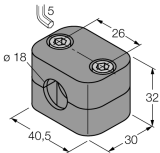
Type code	NI12U-G18-ADZ30X2-B3331
Ident no.	4281413
Rated operating distance Sn	12 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3...15 % -30...+85 °C
Operating voltage	20...250 VAC
Operating voltage	10...300VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50...≤ 60 Hz
Residual current	≤ 1.7 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	≤ 3 A (≤ 20 ms max. 5 Hz)
Short-circuit protection	yes/ latching
Voltage drop at I _n	≤ 6 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	2-wire, NO contact
Smallest operating current I _m	≤ 3 mA
Switching frequency	0.02 kHz
Design	threaded barrel, M18 x 1
Dimensions	82 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, PA
Max. tightening torque housing nut	25 Nm
Connection	male, 1/2"
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Operating voltage	LED green
Switching state	• yellow

**Inductive sensor
NI12U-G18-ADZ30X2-B3331**

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
<hr/>	
Diameter of the active area B	Ø 18 mm



Accessories

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