

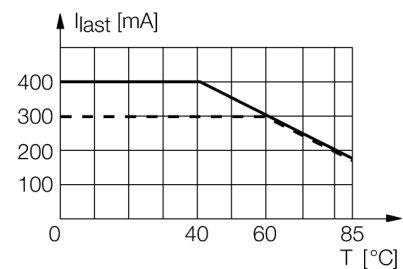
- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VAC
- 2-wire DC, 10...300 VDC
- NO contact
- Male 7/8"

**Wiring diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicoil system, uprox®+ sensors have distinct advantages over conventional sensors. They detect all metals at the same large switching distance and are resistant to magnetic fields.



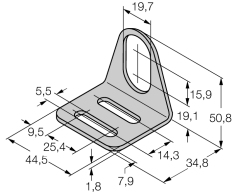
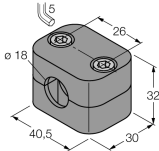
<b>Type code</b>	NI12U-G18-ADZ30X2-B1331
Ident no.	4281412
<b>Rated operating distance Sn</b>	12 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3...15 % -30...+85 °C
<b>Operating voltage</b>	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 <sub>n</sub>	≤ 6 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	2-wire, NO contact
Smallest operating current I <sub>m</sub>	≤ 3 mA
Switching frequency	0.02 kHz
<b>Design</b>	threaded barrel, M18 x 1
Dimensions	82 mm
Housing material	metal, CuZn, chrome-plated
Material active area	Plastic, PBT
Max. tightening torque housing nut	25 Nm
Connection	male, 7/8"
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
<b>Power-on indication</b>	LED green
Switching state	LED yellow

**Inductive sensor  
NI12U-G18-ADZ30X2-B1331**

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



**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>