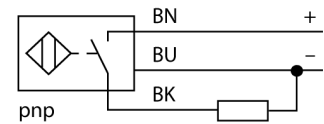


- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High switching frequency
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

**Wiring diagram**



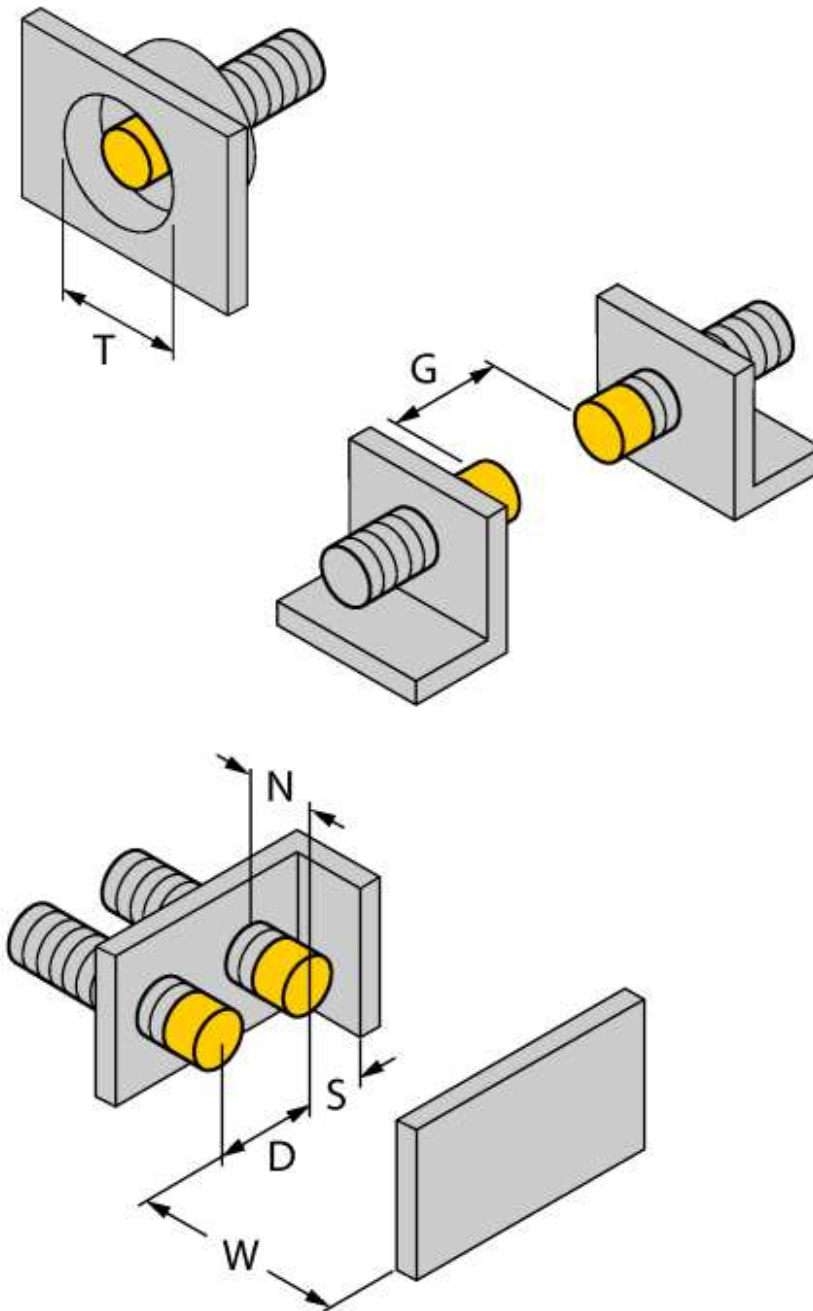
**Functional principle**

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.

<b>Type code</b>	NI12U-M18-AP6X
Ident no.	1645100
<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
Temperaturdrift	10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	☐
Switching frequency	1.5 kHz
<b>Design</b>	threaded barrel, M18 x 1
Dimensions	54 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, LCP
End cap	Plastic, EPTR
Max. tightening torque housing nut	25 Nm
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2 m
Cable cross section	3 x 0.34 mm <sup>2</sup>
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>Switching state</b>	● yellow

Distance D	72 mm
Distance W	36 mm
Distance T	54 mm
Distance S	27 mm
Distance G	72 mm
Distance N	20 mm

**Diameter of the active area B**                       $\varnothing$  18 mm



**Accessories**

Type code	Ident no.	Description	Dimension drawing
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-18	6945102	Quick-mount bracket 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-mount brackets.	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	