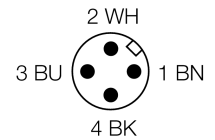
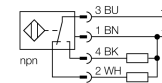


- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High switching frequency
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- M12 x 1 connector

Wiring diagram



Functional principle

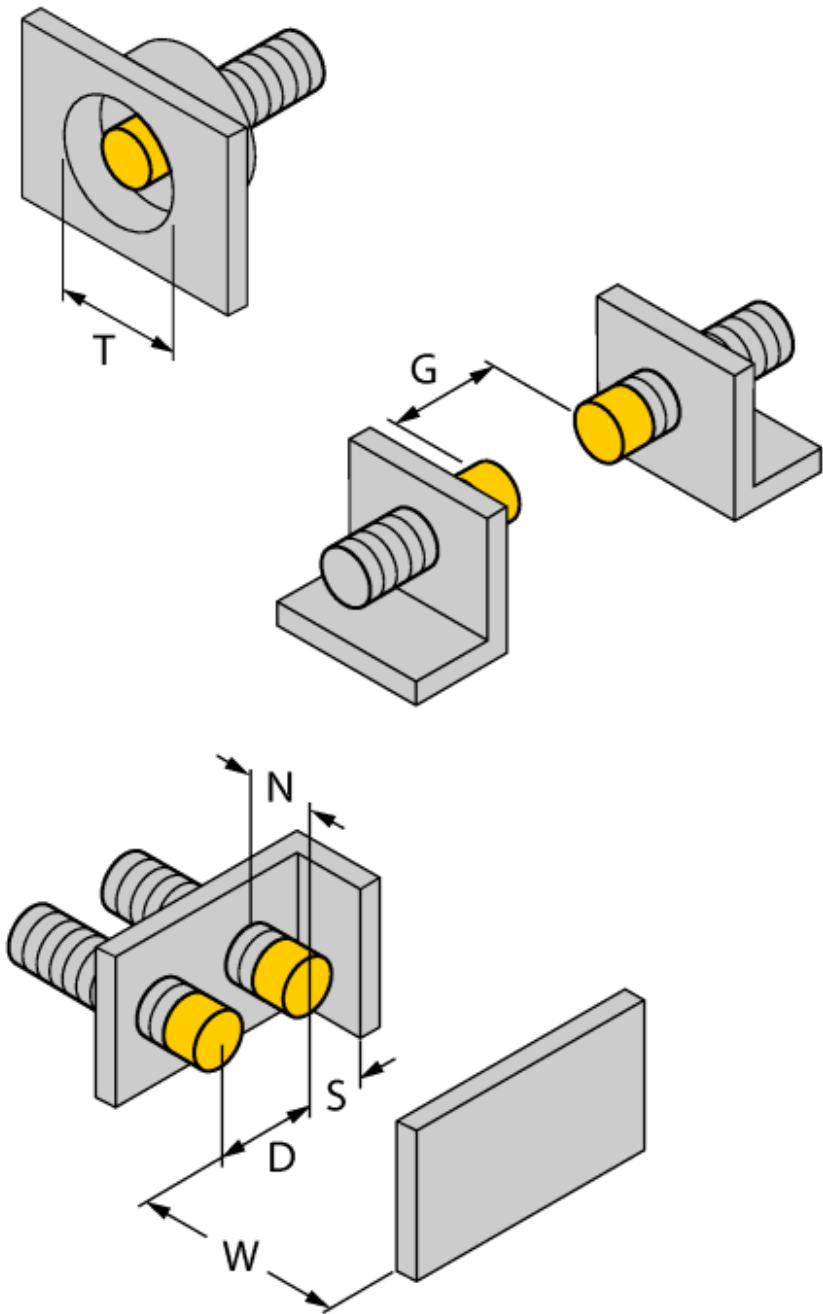
Inductive sensors detect metal objects contactless and wear-free. Due to the patented ferrite-less 3-coil system, *uprox®* factor 1 sensors have distinct advantages compared to conventional sensors. They detect all metals at the same switching distance, are magnetic field immune and feature large switching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

Type	NI12U-M18M-VN4X-H1141
Ident-No.	1581552
Rated operating distance Sn	12 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperaturdrift	10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation 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	4-wire, changover contact, NPN
Protection class	□
Switching frequency	1.5 kHz
Design	threaded barrel, M18 x 1
Dimensions	61.5 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, PBT
Max. tightening torque housing nut	25 Nm
Connection	male, M12 x 1
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
Switching state	• yellow

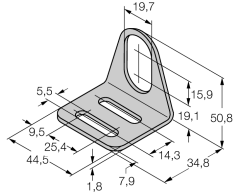
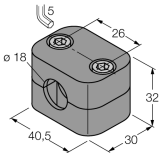
**Inductive sensor
NI12U-M18M-VN4X-H1141**

Mounting instructions / Description	minimum distances
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

Diameter of the active area B \varnothing 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 (width of the bottom flange), 1.8 (thickness of the bottom flange), 44.5 (total width), 25.4 (width of the main body), 9.5 (width of the main body), and 5.5 (width of the top flange).</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>