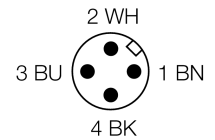
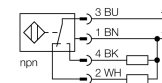


- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High switching frequency
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- M12 x 1 connector

**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.

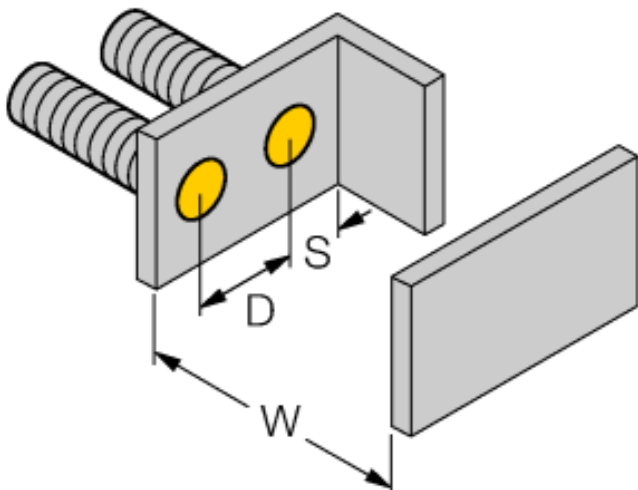
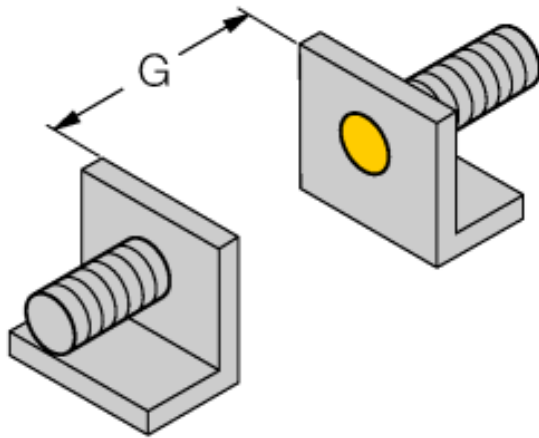
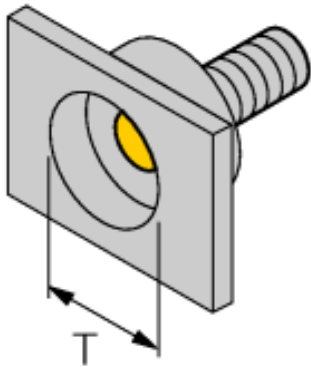
<b>Type</b>	BI5U-M18M-VN4X-H1141
<b>Ident-No.</b>	1581311
<b>Rated operating distance Sn</b>	5 mm
<b>Mounting condition</b>	flush
<b>Assured sensing range</b>	≤ (0,81 x Sn) mm
<b>Repeatability</b>	≤ 2 %
<b>Temperaturdrift</b>	10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
<b>Hysteresis</b>	3...15 %
<b>Ambient temperature</b>	-30...+85 °C
<b>Operating voltage</b>	10...65VDC
<b>Residual ripple</b>	≤ 10 % U <sub>ss</sub>
<b>DC rated operational current</b>	≤ 200 mA
<b>No-load current I<sub>0</sub></b>	≤ 15 mA
<b>Residual current</b>	≤ 0.1 mA
<b>Rated insulation voltage</b>	≤ 0.5 kV
<b>Short-circuit protection</b>	yes/ cyclic
<b>Voltage drop at I<sub>e</sub></b>	≤ 1.8 V
<b>Wire breakage / Reverse polarity protection</b>	yes/ complete
<b>Output function</b>	4-wire, changover contact, NPN
<b>Protection class</b>	☐
<b>Switching frequency</b>	1.5 kHz
<b>Design</b>	threaded barrel, M18 x 1
<b>Dimensions</b>	61.5 mm
<b>Housing material</b>	Metal, CuZn, chrome-plated
<b>Material active face</b>	Plastic, PBT
<b>Max. tightening torque housing nut</b>	25 Nm
<b>Connection</b>	male, M12 x 1
<b>Vibration resistance</b>	55 Hz (1 mm)
<b>Shock resistance</b>	30 g (11 ms)
<b>Protection class</b>	IP67
<b>MTTF</b>	874 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Switching state</b>	• yellow

**Inductive sensor  
BI5U-M18M-VN4X-H1141**

Mounting instructions / Description	minimum distances
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

---

<b>Diameter of the active area B</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)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	