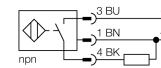




- Threaded barrel, M12x1
- Brass, PTFE-coated
- Duroplast front cap, very resistant to thermal and mechanical load
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Male M12 x 1

**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>	BI3U-MT12H-AN6X-H1141
<b>Ident no.</b>	1634213
<b>Rated operating distance Sn</b>	3 mm
<b>Mounting condition</b>	flush
<b>Assured sensing range</b>	≤ (0,81 x Sn) mm
<b>Repeatability</b>	≤ 2 % of full scale
<b>Temperature drift</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...30VDC
<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>0</sub></b>	≤ 1.8 V
<b>Wire breakage / Reverse polarity protection</b>	yes/ complete
<b>Output function</b>	3-wire, NO contact, NPN
<b>Protection class</b>	☐
<b>Switching frequency</b>	2 kHz
<b>Design</b>	threaded barrel, M12 x 1
<b>Dimensions</b>	52 mm
<b>Housing material</b>	metal, CuZn, PTFE-coated
<b>Material active area</b>	Plastic, Duroplast, PTFE-coated
<b>Max. tightening torque housing nut</b>	7 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>	LED yellow

**Inductive sensor  
BI3U-MT12H-AN6X-H1141**

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
Diameter of the active area B	Ø 12 mm



**Accessories**

Type code	Ident no.	Description	Dimension drawing
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QMT-12	6945106	Quick-mount bracket with dead-stop; material: brass, PTFE-coated; male thread M16 x 1. Note: The switching distance of the proximity switches may reduce when using quick-mount brackets.	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	