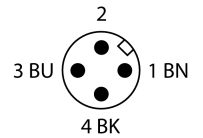
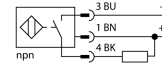


- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 male connector

**Wiring Diagram**



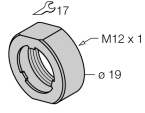
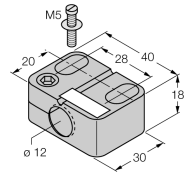
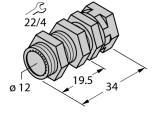
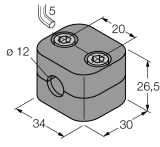
**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

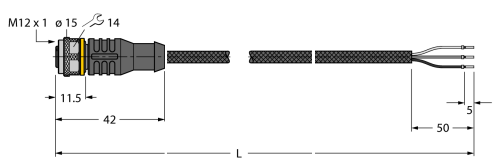
<b>Type designation</b>	BI4U-MT12-AN6X-H1141
Ident-No.	1634829
Ident-No (TUSA)	M1634829
<b>Rated switching distance Sn</b>	4 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	-30...+85 °C
<b>Operating voltage</b>	10...30 VDC
Residual ripple	≤ 10 % U <sub>s</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test 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, NPN
Protection class	☐
Switching frequency	2 kHz
<b>Design</b>	Threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP, PTFE-coated
Max. tightening torque housing nut	7 Nm
Electrical connection	Connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Switching state</b>	LED, Yellow



### Accessories

Type code	Ident-No.	Description	
PN-M12	6905309	Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	 <p>Diagram of an impact protection nut with dimensions: 17 (height), M12 x 1 (thread), and ø 19 (outer diameter).</p>
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	 <p>Diagram of a fixing clamp with dimensions: 20 (width), 28 (length), 40 (total length), 18 (height), and ø 12 (diameter). An M5 screw is shown for mounting.</p>
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.	 <p>Diagram of a quick-mount bracket with dimensions: 22/4 (thread), 19.5 (length), 34 (total length), and ø 12 (diameter).</p>
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Diagram of a mounting bracket with dimensions: 5 (height), 20 (width), 26.5 (total height), 34 (length), and ø 12 (diameter).</p>

### Wiring accessories

Type code	Ident-No.	Description	
RKC4T-2/TXL1001	6630249	Connection cable, M12 connector, female, straight, 3-pin, cable length: 2 m, protective sheathing material: Aramid fibers, yellow; Temperature peak: 200 °C; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	 <p>Diagram of a connection cable with dimensions: 11.5 (connector length), 42 (cable length), 50 (wire length), and 5 (wire diameter). The connector is labeled M12 x 1 ø 15 and 14.</p>