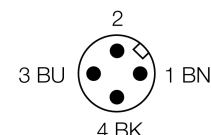
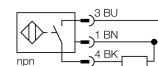


- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Protection class IP68
- Magnetic field immune
- High switching distance
- Recessed mounting possible
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 connector

#### Wiring diagram



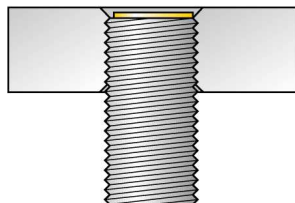
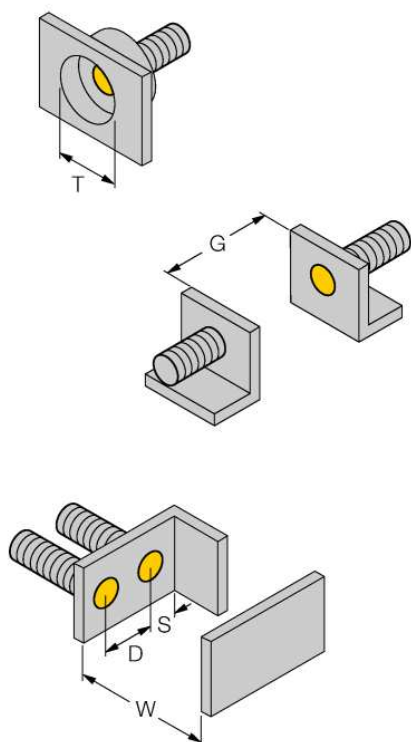
#### Functional principle

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

<b>Type code</b>	BI4U-MT12-AN6X-H1141
<b>Ident no.</b>	1634829
<b>Rated operating distance Sn</b>	4 mm
Mounting condition	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, NPN
Protection class	□
Switching frequency	2 kHz
<b>Design</b>	threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	Metal, CuZn, PTFE-coated
Material active face	Plastic, LCP, PTFE-coated
Max. tightening torque housing nut	7 Nm
Connection	male, 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>	• yellow

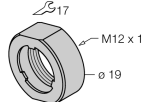
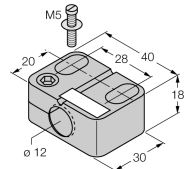
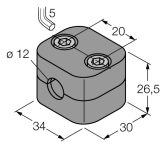
Distance D	24 mm
Distance W	12 mm
Distance T	36 mm
Distance S	18 mm
Distance G	24 mm

Diameter of the active area B	Ø 12 mm
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Flush and recessed mounting of all *uprox<sup>®</sup>+* threaded barrel sensors. Safe operation is ensured if the sensor is screwed in by half a turn.

## Accessories

Type code	Ident no.	Description	Dimension drawing
PN-M12	6905309	Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	

## Wiring accessories

Type code	Ident no.	Description	Dimension drawing
RKC4T-2/TXL	6625500	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	