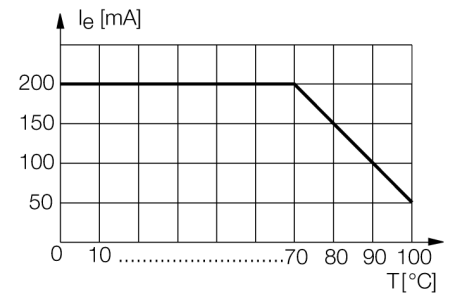
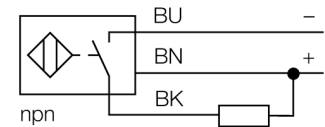


- Threaded barrel, M12 x 1
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer Vectra
- Factor 1 for all metals
- Resistant to magnetic fields
- For temperatures of -40 °C ... +100 °C
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid and alkaline cleaning agents
- Laser engraved label, permanently legible
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Cable connection

Type code	BI4U-EM12WD-AN6X
Ident no.	1634842
Rated operating distance Sn	4 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-40...+100 °C
Operating voltage	10...30VDC
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	3-wire, NO contact, NPN
Protection class	☐
Switching frequency	2 kHz
Design	threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	stainless steel, V4A (1.4404)
Material active area	Plastic, LCP
End cap	Plastic, PP, transparent
Admissible pressure on front cap	≤ 20 bar
Max. tightening torque housing nut	10 Nm
Connection	cable
Cable quality	5.2 mm, white, D12YSL9Y-OB, PP, 2 m halogen-free
Cable cross section	3 x 0.34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 / IP69K
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

Wiring diagram



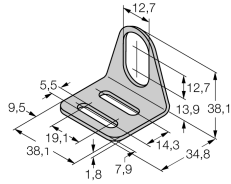
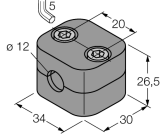
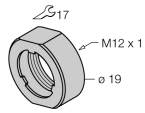
Distance D	24 mm
Distance W	12 mm
Distance T	36 mm
Distance S	18 mm
Distance G	24 mm

Diameter of the active area B \varnothing 12 mm



Flush and recessed mounting of all *uprox[®]+* 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
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a U-shaped mounting bracket. Dimensions: 12.7 (width of the top flange), 12.7 (height of the top flange), 13.9 (width of the base), 38.1 (total width), 14.3 (width of the base), 7.9 (width of the base), 1.8 (thickness of the base), 38.1 (total width), 13.1 (width of the base), 9.5 (width of the base), 5.5 (width of the base).</p>
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a rectangular mounting bracket. Dimensions: 20 (width), 26.5 (height), 34 (width), 30 (width), 5 (height of the top flange), 12 (diameter of the hole).</p>
PN-M12	6905309	Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	 <p>Technical drawing of a hexagonal impact protection nut. Dimensions: 17 (width), M12 x 1 (thread), 19 (diameter).</p>