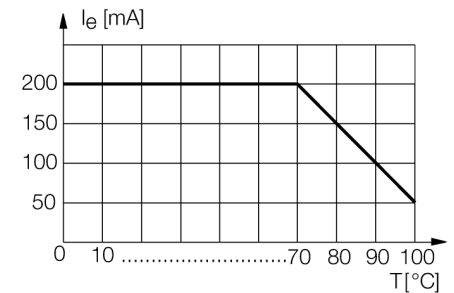
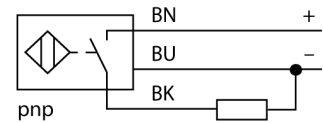


- Threaded barrel, M12 x 1
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer Vectra
- Factor 1 for all metals
- Magnetic field immune
- For temperatures of - 40 °C to +100 °C
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common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

**Wiring diagram**



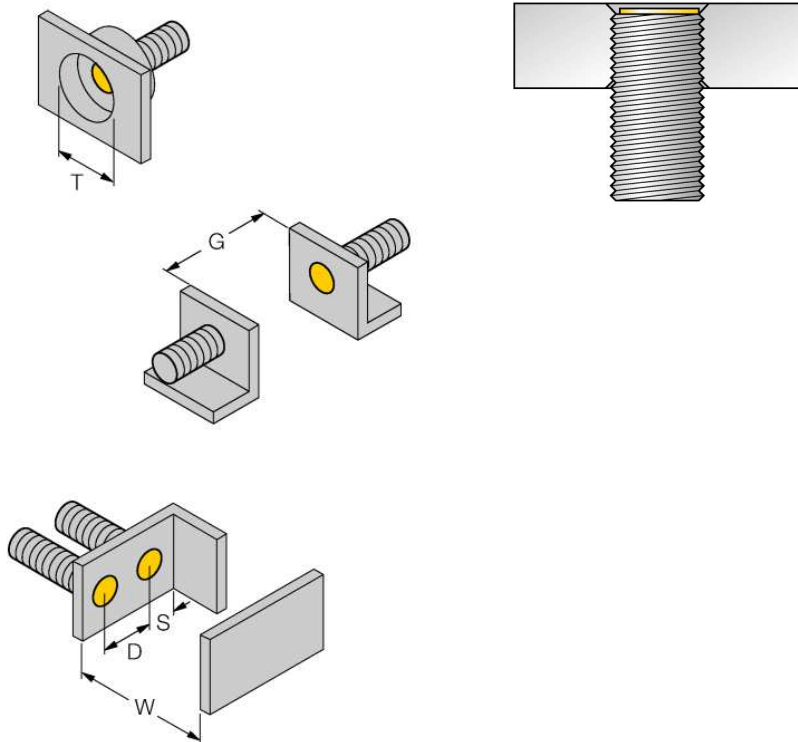
<b>Type code</b>	BI4U-EM12WD-AP6X
Ident no.	1634811
<b>Rated operating distance S<sub>n</sub></b>	4 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x S <sub>n</sub> ) mm
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Ambient temperature	3...15 % -40...+100 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>s</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, PNP
Protection class	☐
Switching frequency	2 kHz
<b>Design</b>	threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	Metal, V4A (1.4404)
Material active face	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 <sup>2</sup>
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
<b>Switching state</b>	● yellow

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

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Diameter of the active area B                     $\varnothing$  12 mm



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
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	
PN-M12	6905309	Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	