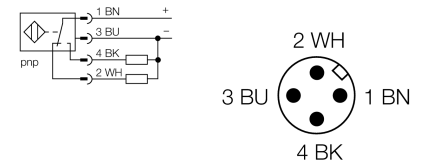


- Threaded barrel, M12 x 1
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer Vectra
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid and alkaline cleaning agents
- Laser engraved label, permanently legible
- For the food industry
- DC 4-wire, 10...55 VDC
- Changeover contact, PNP output
- M12 x 1 connector

<b>Type</b>	BI4U-EM12EWD-VP44X-H1141
Ident-No.	1634905
<b>Rated operating distance Sn</b>	4 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
<b>Operating voltage</b>	10...55VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>N</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Protection class	□
Switching frequency	2 kHz
<b>Design</b>	threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	Metal, V4A (1.4404)
Material active face	Plastic, LCP
Connector housing	plastic, PP
Admissible pressure on front cap	≤ 20 bar
Max. tightening torque housing nut	10 Nm
Connection	male, M12 x 1, M12 push-pull compatible
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>	LED yellow

**Wiring diagram**



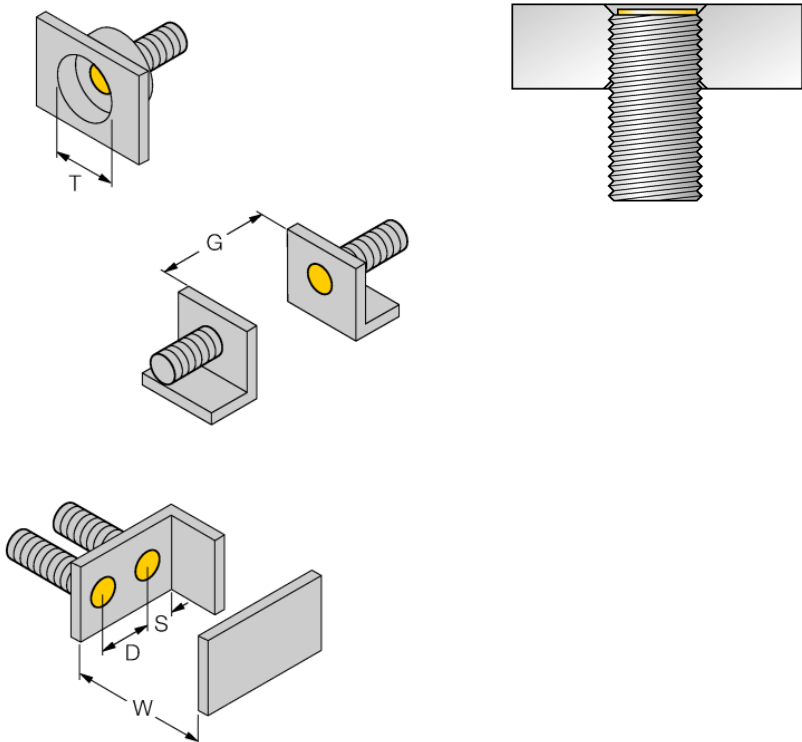
**Functional principle**

Turck offers the perfect solution for dairies, breweries, for the manufacture of bakery products and frozen food, or for packaging and filling applications in the food industry. The inductive sensors for the food industry are absolutely watertight and resistant to cleaning agents and disinfectants. The requirements of the protection classes IP68 and IP69K are well exceeded by our uprox®+ sensors. The sensors are well protected by an LCP front cap and a stainless steel housing.

Mounting instructions	minimum distances
Distance D	24 mm
Distance W	12 mm
Distance T	36 mm
Distance S	18 mm
Distance G	24 mm

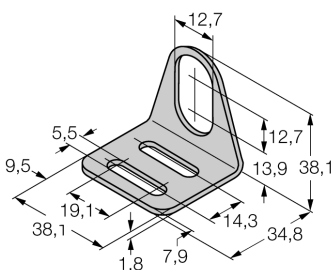
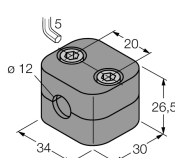
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**Diameter of the active area B**                       $\varnothing$  12 mm



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.		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)	