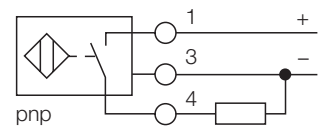


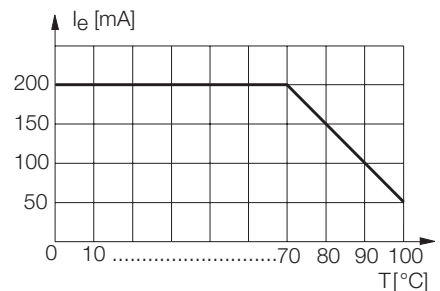
- threaded barrel, M12 x 1
- stainless steel, 1.4404
- Front cap made of liquid crystal polymer Vectra C130
- Factor 1 for all metals
- Magnetic field immunity
- Temperature range -40°C ... +100°C
- High degree of protection IP69K for extreme environmental conditions
- Special double-lip seal
- Protection against all common acid and alkaline cleaning agents
- Suited for food industry applications
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- Terminal chamber

**Wiring diagram**



**Functional principle**

With uproX+ Turck offers the perfect solution for applications in dairies, breweries, for the manufacture of bakery products and frozen foods, or for packaging and filling applications in the food industry. The inductive sensors for the food industry are absolutely impermeable and resistant to cleaning agents and disinfectants. The requirements of protection degree IP68 and IP69K are even exceeded by our uproX+ sensors. These robust sensors are securely protected by means of an LCP front cap and a stainless steel housing.

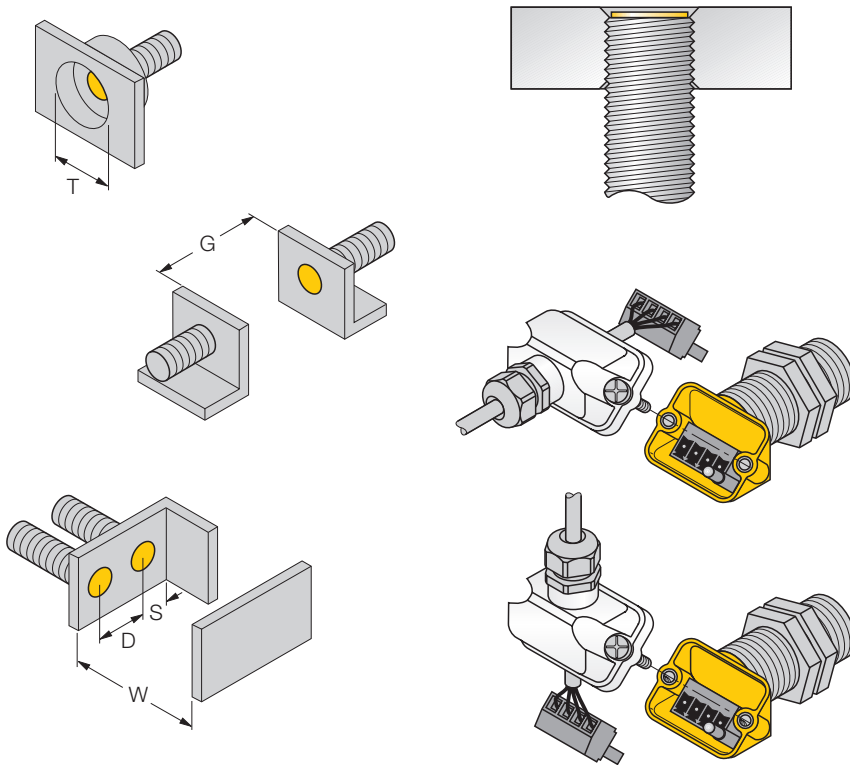


<b>Type</b>	Bi4U-EM12WDTC-AP6X
Ident-No.	1634760
<b>Rated operating distance Sn</b>	4 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Hysteresis	3... 15 %
Ambient temperature	-40... + 100 °C
<b>Operating 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>e</sub>	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 2 kHz
<b>Housing</b>	threaded barrel, M12 x 1
Dimensions	80 mm
Housing material	metal, AISI 316L
Terminal chamber cover material	plastic, Ultem
Terminal chamber housing material	plastic, LCP-GF30
Material active face	plastic, LCP-GF30
Admissible pressure on front cap	≤ 20 bar
Tightening torque of housing nut	10 Nm
Connection	Terminal chamber, removable cage clamp terminals suited for M16 x 1.5 cable glands
Clamping ability	≤ 1.5mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68 / IP69K
<b>Display switch state</b>	LED yellow

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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
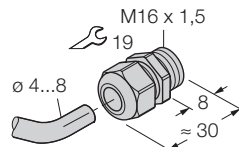
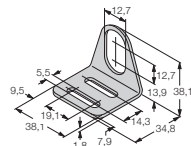
<b>Diameter of the active area B</b>	Ø 12 mm
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All flush mountable uprox+ threaded barrel switches allow recessed mounting. Safe operation is ensured if the sensor is recessed mounted by half a turn of the thread.

The innovative terminal chamber concept enables comfortable and simple connection of the sensor. Depending on the mounting style it is possible to select between a straight and an angled cable outlet, whereby the removable terminal strip guarantees simple handling features for wiring.

**Accessories**

Type code	Ident-No.	Short text	Dimension drawing
PN-M12	6905309	Screw cap; material: Stainless steel A2 1.4305 (AISI 303)	
M16x1,5 PVDF CABLE GLAND	1634759	cable glands M16 x 1.5, material PVDF	
MW-12	6945003	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	fixing clamp; material: polypropylene	