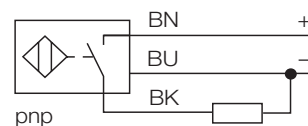


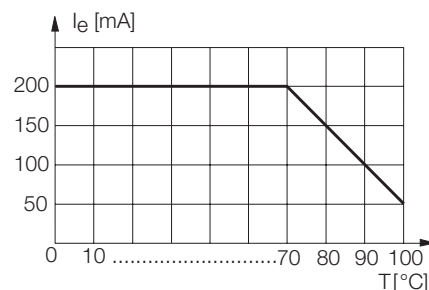
- threaded barrel, M12 x 1
- stainless steel, 1.4404
- Front cap made of liquid crystal polymer Vectra C130
- Factor 1 for all metals
- Magnetic field immunity
- Temperature range -40°C bis +100°C
- High degree of protection IP69K for extreme environmental conditions
- Special double-lip seal
- Protection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

Wiring diagram



Functional principle

The inductive sensors for the food industry are fully sealed and resistant to cleaning agents and disinfectants. The requirements of protection degree IP68 and IP69K are well exceeded by our uprox+ sensors. The sensors are entirely protected and robust because they feature a LCP front cap and a stainless steel housing.



Type	Bi4U-EM12WD-AP6X
Ident-No.	1634811
Rated operating distance Sn	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
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 _e	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 2 kHz
Housing	threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	metal, AISI 316L
Material active face	plastic, LCP-GF30
End cap	plastic, PP, transparent
Admissible pressure on front cap	≤ 20 bar
Tightening torque of housing nut	10 Nm
Connection	cable
Cable quality	Ø 5.2, white, D12YSL9Y-OB, PP, 2 m
Cable cross section:	3 x 0.34mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68 / IP69K
Display switch state	LED yellow

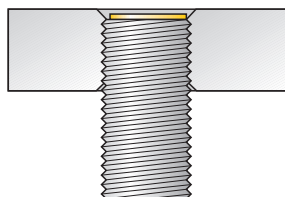
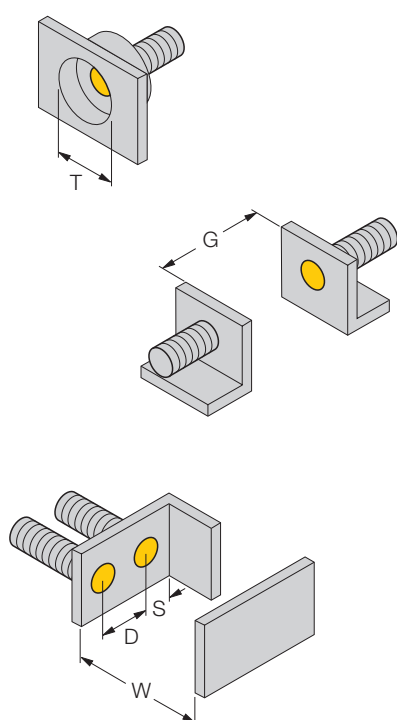
Inductive sensor for the food industry Bi4U-EM12WD-AP6X

Mounting instructions

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

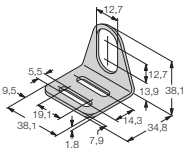

Diameter of the active area B

Ø 12 mm



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.

Accessories

Type code	Ident-No.	Short text	Dimension drawing
MW-12	6945003	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	fixing clamp; material: polypropylene	
PN-M12	6905309	Screw cap; material: Stainless steel A2 1.4305 (AISI 303)	