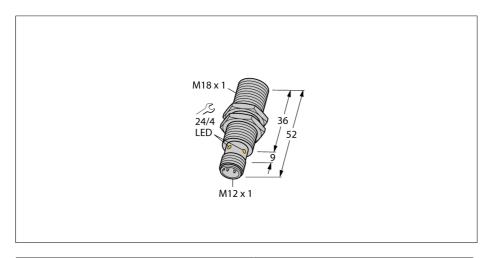


Inductive sensor for the food industry BI8U-EM18WD-AP6X-H1141





Type code	BI8U-EM18WD-AP6X-H1141
Ident no.	1634816

 Rated operating distance Sn
 8 mm

 Mounting condition
 flush

 Assured sensing range
 $\leq (0.8^{\circ})$

Assured sensing range \leq (0,81 x Sn) mm Repeatability \leq 2 % of full scale Temperaturdrift 10 %

 $\leq \pm~20~\%, \ \leq -25~^{\circ}\text{C}~, \ \geq +70~^{\circ}\text{C}$ Hysteresis 3...15 %

Ambient temperature -40...+100 °C

10...30VDC Operating voltage Residual ripple < 10 % U... DC rated operational current ≤ 200 mA No-load current I. < 15 mA Residual current \leq 0.1 mA Rated insulation voltage $\leq 0.5 \text{ kV}$ Short-circuit protection yes/ cyclic Voltage drop at I. ≤ 1.8 V Wire breakage / Reverse polarity protection yes/ complete

Output function 3-wire, NO contact, PNP

Protection class

Switching frequency

1.5 kHz

Design threaded barrel, M18 x 1

Dimensions 52 mm

 $\begin{array}{lll} \mbox{Housing material} & \mbox{Metal, V4A (1.4404)} \\ \mbox{Material active face} & \mbox{Plastic, LCP} \\ \mbox{Connector housing} & \mbox{plastic, PP} \\ \mbox{Admissible pressure on front cap} & \leq 15 \mbox{ bar} \\ \mbox{Max. tightening torque housing nut} & 25 \mbox{ Nm} \\ \end{array}$

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

Switching state • yellow

- Threaded barrel, M18 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
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 connector

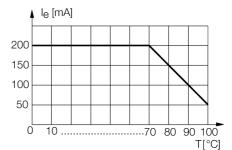
Wiring diagram





Functional principle

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 a LCP front cap and a stainless steel housing.

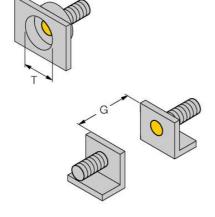


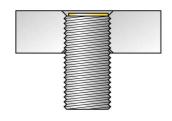


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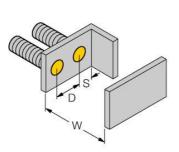


Distance D	36 mm
Distance W	24 mm
Distance T	54 mm
Distance S	27 mm
Distance G	48 mm
Diameter of the active area B	Ø 18 mm





Flush and recessed mounting of all *uprox*®+ threaded barrel sensors. Safe operation is ensured if the sensor is screwed in by half a turn.





Inductive sensor for the food industry BI8U-EM18WD-AP6X-H1141



Accessories

Type code	Ident no.	Description	Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	5,5 9,5 25,4 44,5 1,8 7,9
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	0 18 0 18 32 40,5
PN-M18	6905310	Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)	25 24 M18 x 1 o 26

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
RKC4T-2/TEL	6625010	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	