Digital conductivity sensor
Memosens CLS16E

Memosens 2.0 contacting conductivity sensor for hygienic applications in life sciences and food

Benefits:
- Certified with quality certificate and EN 10204 3.1 and complying with EHEDG, USP Class VI, ASME and FDA, Memosens CLS16E is perfectly suited for hygienic applications in the life sciences and food industries.
- The sensor is sterilizable and autoclavable, resists cleaning in place (CIP) and sterilization in place (SIP).
- Stainless steel ensures robust, corrosion-free operation and the replaceable seal enables a long operating life.
- Highest precision and measuring accuracy even at high temperatures and under pressure provide you with reliable data for optimum process and product quality.
- Non-contact, inductive signal transmission ensures high process integrity.
- IIoT ready: Memosens 2.0 offers extended storage of calibration and process data, enabling better trend identification and providing a future-proof basis for predictive maintenance and enhanced IIoT services.

Specs at a glance
- Measurement range \( k=0.1: 0.04 \text{ to } 500 \ \mu\text{S/cm} \)
- Process temperature -5 to 120 °C (23 to 248 °F) For sterilization: max. 150 °C at 5 bar (Max. 302 °F at 73 psi)
- Process pressure 13 bar at 20 °C (188 psi at 68 °F) 9 bar at 120 °C (130 psi at 248 °F)

Field of application: Memosens CLS16E is a high-end conductivity sensor with certified hygienic design conforming to FDA and USP Class VI. It measures with highest precision delivering reliable data for optimum
process and product quality. The sensor is robust and offers a long operating life thanks to its replaceable seal. With Memosens 2.0 technology, CLS16E is able to store more calibration and process data, facilitating predictive maintenance and providing the perfect basis for IIoT services.

### Features and specifications

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Conductivity

**Material**

- In contact with medium
- Sensor depending on order execution:
  - Electropolished, stainless steel 1.4435 (AISI 316L)
  - PEEK
- Sealing depending on order execution:
  - Form seal ISOLAST (FFKM)
  - Form seal EPDM

**Dimension**

- Electrode diameter: 17 mm (0.66 inch)
- Electrode length: 54 mm (2.13 inch)

**Process temperature**

- -5 to 120 °C (23 to 248 °F)
- For Sterilization: max. 150 °C at 5 bar
  (Max. 302 °F at 73 psi)

**Process pressure**

- 13 bar at 20 °C (188 psi at 68 °F)
- 9 bar at 120 °C (130 psi at 248 °F)

**Temperature sensor**

- Pt1000

**Ex certification**

- ATEX, NEPSI, CSA, IECEx, INMETRO, EAC Ex

**Connection**

- Process connection: Varivent, Neumo, BioControl, Clamp
- Sensor connection: Inductive, digital connection head with Memosens 2.0 technology

**Ingress protection**

- IP68
Conductivity

**Additional certifications**

Material certification 3.1  
EHEDG certified, hygienic design  
CoC ASME BPE  
Conformity to cGMP derived