Digital 4-electrode conductivity sensor
Memosens CLS82E

Memosens 2.0 contacting conductivity sensor for hygienic applications in life sciences, food & bev

Benefits:
- Hygienic design and materials certified and approved by EHEDG, 3-A and FDA ensure compliance with GMP requirements. The sensor is sterilizable and autoclavable.
- Absolute loop safety thanks to Memosens and unique detection of build-up on electrodes.
- The broad measuring range enables monitoring of core processes and final rinse with one sensor, saving costs.
- Its compact design makes the sensor suitable for small pipe diameters and narrow, space-limited installations.
- Quality certificate stating the individual cell constant allows precise adjustment of the measurement.
- Non-contact, inductive signal transmission ensures high process and data 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.

More information and current pricing:
www.endress.com/CLS82E

Specs at a glance
- **Measurement range** 1 µS/cm to 500 mS/cm
- **Process temperature** -5 to 120 °C (23 to 248 °F) Sterilization: max. 140 °C at 6 bar for max. 45 min (Max. 284 °F at 87 psi for max. 45 min)
- **Process pressure** 17 bar abs at 20 °C (247 psi at 68 °F) 9 bar abs at 120 °C (131 psi at 248 °F)
Field of application: Memosens CLS82E is a high-end, hygienic sensor for applications with widely varying conductivity values. It enables reliable monitoring of core processes as well as final rinse with only one sensor. FDA compliance and a small, compact design ensure the perfect fit to your processes. With Memosens 2.0 digital technology, CLS82E allows for extended storage of process and sensor data facilitating lab calibration and predictive maintenance and providing the perfect basis for enhanced IIoT services.

Features and specifications

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<td>Phase separation, chromatography, fermentation</td>
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<td>CIP monitoring in small pipes</td>
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<td>Ultrafiltration</td>
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<td>Final rinse</td>
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<td>Characteristic</td>
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<td>Conductivity sensor with a broad measurement range for all hygienic applications with advanced requirements to process safety</td>
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<td>1 µS/cm to 500 mS/cm</td>
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<td>Hygienic 4-electrode conductivity sensor</td>
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<td>Design</td>
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<tr>
<td>Certified hygienic design with FDA compliant materials, 3-A and EHEDG certified, available as 120 mm sensor with PG13.5 and in many other standard process connections</td>
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<tr>
<td>Material</td>
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<td>Process connection: stainless steel 1.4435 (316L)</td>
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<td>Sensor element: platinum and ceramic</td>
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Conductivity

**Dimension**
Sensor diameter: 12 mm (0.47 inch)
Electrode length: depending on process connection

**Process temperature**
-5 to 120 °C (23 to 248 °F)
Sterilization: max. 140 °C at 6 bar for max. 45 min
(Max. 284 °F at 87 psi for max. 45 min)

**Process pressure**
17 bar abs at 20 °C (247 psi at 68 °F)
9 bar abs at 120 °C (131 psi at 248 °F)

**Temperature sensor**
Pt1000

**Ex certification**
ATEX, NEPSI, CSA, IECE, EAC Ex, INMETRO

**Connection**
Clamp 1,5", Clamp 2", Varivent F DN25, Varivent N DN40-DN125, BioControl DN25, PG13,5, DN25 standard/40mm, DN25 B.Braun port/65mm, Threat G1", Thread NPT 1"
Sensor connection: Inductive, digital connection head with Memosens 2.0 technology

**Ingress protection**
IP 68 / NEMA Type 6P

**Additional certifications**
Material certification 3.1
3-A and EHEDG certified, hygienic design
ASME BPE
Conformity to cGMP derived requirements
ASME BPE
FDA approved
China Food
More information www.endress.com/CLS82E