Digital 4-electrode conductivity sensor Memosens CLS82E

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

More information and current pricing:

www.endress.com/CLS82E

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.

Specs at a glance

- **Measuring 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)

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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

Conductivity

Measuring principle

Conductive

Application

Phase seperation, chromotography, fermentation
CIP monitoring in small pipes
Ultrafiltration
Final rinse

Characteristic

Conductivity sensor with a broad measurement range for all hygienic applications with advanced requirements to process safety

Measuring range

1 µS/cm to 500 mS/cm

Measuring principle

Hygienic 4-electrode conductivity sensor

Design

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

Material

Process connection: stainless steel 1.4435 (316L)
Sensor element: platinum and ceramic

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

Regulation (EC) No. 1935/2004

China Food

More information **www.endress.com/CLS82E**

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