

# Digital 4-electrode conductivity sensor Memosens CLS82D

## Memosens conductive conductivity sensor for hygienic applications in Life Sciences, Pharma and Food



More information and current pricing:

[www.apsc.endress.com/CLS82D](http://www.apsc.endress.com/CLS82D)

### Benefits:

- Broad measurement range
- Hygienic design certified by EHEDG and 3-A
- Absolute loop safety thanks to Memosens and unique electrode connection surveillance
- Sterilizable and autoclavable
- Quality certificate stating the individual cell constant
- Logging of sensor-specific data for easy traceability and predictive maintenance
- Convenient maintenance strategy with Memobase Plus for easy calibration and sensor management

### Specs at a glance

- **Measurement range** 1  $\mu\text{S}/\text{cm}$  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 CLS82D is a hygienic, digital sensor for applications with widely varying conductivity values, where it performs reliably, safe and fast. Numerous certificates, various process connections and a small compact design ensure the perfect fit for your process. With Memosens digital technology, CLS82D combines maximum process and data integrity with simple operation. It resists corrosion and moisture, enables lab calibration and facilitates predictive maintenance.

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## Features and specifications

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### Conductivity

**Measuring principle**

Conductive

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**Application**

Phase separation, chromatography, fermentation, CIP monitoring in small pipes, ultrafiltration

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**Characteristic**

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

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**Measurement range**

1  $\mu\text{S}/\text{cm}$  to 500  $\text{mS}/\text{cm}$

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**Measuring principle**

4-electrode conductive conductivity sensor

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**Design**

Certified hygienic design with FDA compliant materials, available as 120 mm sensor with PG13.5 and in many other standard process connections

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**Material**

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

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**Dimension**

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

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**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)

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## Conductivity

**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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**Temperature sensor**Pt1000

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**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"Cable: Memosens connector

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**Ingres protection**IP 68 / NEMA type 6P

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**Additional certifications**

3-A, hygienic design EHEDG, ASME BPE-2002

Pharma CoC, FDA, Regulation (EC) No.

1935/2004

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