Digital ORP sensor
Memosens CPS62E

Memosens 2.0 ORP electrode for the chemical and life sciences industries

Benefits:

- 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.
- Sensor resists strong acids and bases and high organic loads.
- Maintains high accuracy even after CIP/SIP or autoclaving.
- Free from animal-based materials and from acrylamide.
- Upside-down mounting option allows for flexible installation.
- Maximum process safety is ensured by non-contact, inductive signal transmission.
- Minimized process downtime and extended sensor lifetime result in reduced operating costs.

Specs at a glance

- **Measurement range** –1 500 to 1 500 mV
- **Process temperature** 0 to 100 °C (32 to 212 °F) 0 to 140 °C (32 to 284 °F) (140 °C (284 °F) or sterilization only)
- **Process pressure** 0.8 to 7 bar (11.6 to 101.5 psi) absolute

Field of application: Memosens CPS62E is the digital specialist for demanding processes and hygienic applications. Its contamination-resistant gel guarantees stable measurement even in flowing media, in low conductivities and at high temperatures. Thanks to Memosens 2.0 digital technology, CPS62E combines maximum process integrity with simple operation. It resists moisture and enables lab calibration. It offers extended storage of calibration and process data providing the perfect basis for predictive maintenance.

Features and specifications
ORP / Redox

**Measuring principle**
Sensor ORP / Redox

**Application**
Hygiene and sterile applications (sterilizable, autoclavable):
- Fermenter
- Biotechnology
- Pharma

**Characteristic**
Digital ORP electrode for hygienic production processes with ion trap for long-term stable reference

**Measurement range**
-1,500 to 1,500 mV

**Measuring principle**
Gel compact electrode with ceramic junction and ion trap
Measuring element platinum cap

**Design**
All shaft lengths with temperature sensor
Advanced gel technology

**Material**
Sensor shaft: Glass to suit process
Metal lead: Ag/AgCl
Open aperture: Ceramic junction, zirconium dioxide
ORP measuring element: Platinum
O-ring: FKM
Process coupling: PPS fiber-glass reinforced
Nameplate: Ceramic metal oxide

**Dimension**
Diameter: 12 mm (0.46 inch)
Shaft lengths: 120, 225 and 360 mm (4.68, 8.77 and 14.04 inch)
**ORP / Redox**

| **Process temperature** | 0 to 100 °C (32 to 212 °F)  
|                         | 0 to 140 °C (32 to 284 °F) (140 °C (284 °F) or sterilization only) |

| **Process pressure** | 0.8 to 7 bar (11.6 to 101.5 psi) absolute |

| **Temperature sensor** | NTC 30k |

| **Ex certification** | With ATEX, IECEx, CSA C/US, NEPSI, Japan Ex and INMETRO approvals for use in hazardous areas Zone 0, Zone 1 and Zone 2 |

| **Connection** | Inductive, digital connection head with Memosens 2.0 technology |

| **Ingress protection** | IP68 |

| **Additional certifications** | Additional certifications |