

Digital ORP sensor Memosens CPF82E

Memosens 2.0 compact electrode for
wastewater, mining, minerals and metal
industries



More information and current pricing:

www.endress.com/CPF82E

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.
- Long time stable: Double junction provides better protection against electrode poisoning ions such as S^{2-} or CN^- .
- Robust polymer housing protects against mechanical damage.
- The sensor is suitable for flow and immersion installation
- Non-contact, inductive signal transmission maximizes process safety.
- Minimum process downtime and extended sensor lifetime reduce operating costs.

Specs at a glance

- **Measuring range** -1500mV to +1500mV
- **Process temperature** 0 to 80 °C (32 to 170 °F)
- **Process pressure** 1 to 10 bar abs at 80 °C (15 to 145 psi abs at 176 °F)

Field of application: Memosens CPF82E is the digital, robust solution for ORP measurement in harsh environments. Its large, dirt-repellent PTFE junction guarantees low maintenance while its integrated assembly offers easy and compact installation. Thanks to Memosens 2.0 digital technology, CPF82E combines maximum process integrity with simple operation. It resists moisture, enables lab calibration and 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

Flotation, leaching, neutralization, outlet monitoring

Characteristic

Resistent against electrolyte poisoning and dirt repellent gel-electrode including process connection NPT 3/4"

Measuring range

-1500mV to +1500mV

Measuring principle

Gel-compact electrode with double chamber reference system, potassium nitrate bridge electrolyte and PTFE-diaphragm, platinum ring

Design

Compact electrode in PPS housing with NPT3/4" process connection

Material

Housing: PPS

ORP electrode: platinum ring

Double chamber reference system: KNO₃ and KCl/AgCl

Dimension

Diameter: 22 mm (0.87 inch)

Length: 150 mm (5.91 inch)

Process temperature

0 to 80 °C (32 to 170 °F)

Process pressure

1 to 10 bar abs at 80 °C

(15 to 145 psi abs at 176 °F)

ORP / Redox

Temperature sensor

NTC

Ex certification

(optional) FM IS NI Cl. I Div.1&2, Groups A-D

Connection

Process connection: NPT 3/4"

Memosens plug

Ingress protection

IP 68

More information www.endress.com/CPF82E