

Digital ORP sensor Orbipac CPF82D

Memosens compact electrode for wastewater, primaries and metal



More information and current pricing:

www.ch.endress.com/CPF82D

Benefits:

- Suitable for flow and immersion installation
- Long-time stable: Second electrolyte bridge for better protection against electrode poisoning ions such as S^{2-} or CN^- ions
- Robust polymer housing protects against mechanical damage
- Maximum process safety through non-contact inductive signal transmission
- Enables predictive maintenance due to storage of sensor and process-specific data
- Reduced operating costs thanks to minimized process downtime and extended sensor lifetime

Specs at a glance

- **Measurement 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: Orbipac CPF82D is the digital simple solution for ORP measurement in harsh environments. Its large, dirt-repellent PTFE diaphragm guarantees low maintenance while its integrated assembly saves space and time during flow or immersion installation. Thanks to Memosens digital technology, CPF82D combines maximum process and data integrity with simple operation. It resists corrosion and moisture, enables lab calibration and simplifies 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"

Measurement 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)

Temperature sensor

NTC

ORP / Redox

Ex certification

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

Connection

Process connection: NPT 3/4"

Memosens plug

Ingres protection

IP 68

More information www.ch.endress.com/CPF82D