

Digital pH sensor Orbipac CPF81D

Memosens compact electrode for wastewater, primaries and metal industries



More information and current pricing:

www.at.endress.com/CPF81D

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^-
- Robust polymer housing protects against mechanical damage
- Optional flat membrane suitable for high flow rates and fibrous media
- Maximum process safety through non-contact inductive signal transmission
- Enables predictive maintenance due to storage of sensor and process-specific data
- Reduced operating costs due to minimized process downtime and extended sensor lifetime

Specs at a glance

- **Measurement range** pH 0 to 14
- **Process temperature** Version LH: 0 to 110 °C (32 to 230 °F)
Version NN: 0 to 80 °C (32 to 170 °F)
- **Process pressure** 1 to 10 bar abs at 80 °C (15 to 145 psi at 176 °F)

Field of application: Orbipac CPF81D is the digital, simple solution for harsh environments. It measures reliably and accurately even in fibrous media and at high flow rates. With its integrated assembly, the electrode saves space and time during flow or immersion installation. Thanks to Memosens digital technology, CPF81D combines maximum process and data integrity with simple operation. It resists corrosion and moisture, enables lab calibration and facilitates predictive maintenance.

Features and specifications

pH

Measuring principle

Potentiometric

Application

Flotation, leaching, neutralization, outlet monitoring

Characteristic

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

Measurement range

pH 0 to 14

Measuring principle

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

Design

Compact electrode in PPS housing with NPT 3/4" process connection

Material

Housing: PPS

pH electrode: lead-free membrane glass

Double chamber reference system: KNO₃ and KCl/AgCl**Dimension**

Diameter: 22 mm (0.87 inch)

Length (protction guard, long shaft): 150 mm (5.91 inch)

Length (flat membrane): 140 mm (5.51 inch)

Process temperature

Version LH: 0 to 110 °C (32 to 230 °F)

Version NN: 0 to 80 °C (32 to 170 °F)

pH

Process pressure

1 to 10 bar abs at 80 °C
(15 to 145 psi at 176 °F)

Temperature sensor

Pt1000

Ex certification

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

Connection

Memosens plug

Ingres protection

IP68

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