

# Digital pH sensor Orbipac CPF81D

Memosens compact electrode for wastewater, primaries and metal industries



More information and current pricing:

[www.de.endress.com/CPF81D](http://www.de.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. Orbipac CPF81D is not the latest Memosens generation. To get information on the new Memosens CPF81E sensor with extended functionality, click [here](#).

## 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: KNO<sub>3</sub> 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)

**Process pressure**

1 to 10 bar abs at 80 °C

(15 to 145 psi at 176 °F)

pH

**Temperature sensor**

NTC 30K

---

**Ex certification**

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

---

**Connection**

Memosens plug

---

**Ingres protection**

IP68

---

More information [www.de.endress.com/CPF81D](http://www.de.endress.com/CPF81D)