Digital pH sensor
Memosens CPS171D

Memosens glass electrode for bioreactors in the biotech industry and for the food industry

Benefits:

- The sensor's exceptional accuracy, reproducibility and reliability helps you to keep the pH value in the optimum range for a maximized product yield.
- A specialized glass membrane and reference system makes the sensor CIP/SIP and autoclaving resistant (up to 140°C/284°F) offering maximum long-term stability.
- Thanks to the Memosens technology, the cable connection cannot be affected by moisture or corrosion: you can count on the sensor's highest availability and your batch is safe.
- The sensor protects your product quality with its certified biocompatibility according to USP class VI, FDA compliance of wetted parts, no cytotoxicity, bioreactivity or animal-based materials.
- The sensor provides you with process and sensor data that allows you to decide if the sensor is ready for the next batch or should be replaced - a big improvement for your product safety.
- Streamline maintenance of CPS171D with the Memobase Plus software that automatically stores and documents all relevant sensor and process data.
- Approved for hazardous area use.

Specs at a glance

- **Measurement range** pH 0 to 14
- **Process temperature** 0 to 135 °C (32 to 275 °F)
- **Process pressure** 1 to 7 bar abs (14.5 to 101.5 psi)

Field of application: Keep the pH value of your batch in the optimum range and maximize your product yield with Memosens CPS171D. Thanks to its rugged design and long-term stability, it provides extremely
accurate, reproducible and reliable measuring values even after CIP/SIP and autoclaving. Memosens CPS171D is not the latest Memosens generation. To get information on the new Memosens CPS61E sensor with extended functionality, click [here](#).

## Features and specifications

<table>
<thead>
<tr>
<th>pH</th>
</tr>
</thead>
</table>
| **Measuring principle**  
Potentiometric |
| **Application**  
Hygienic and sterile applications, bioreactor, fermenter, biotechnology, pharmaceutical industry, foods |
| **Characteristic**  
Digital pH electrodes for bioreactors and biotechnology production processes with ion trap for long-term stable reference |
| **Measurement range**  
pH 0 to 14 |
| **Measuring principle**  
Ceramic diaphragm, ion-trap |
| **Design**  
All shaft lengths with temperature sensor  
Advanced gel technology  
Digital electrode with Memosens technology |
| **Material**  
Glass and ceramic |
| **Dimension**  
Diameter: 12 mm (0.47 inch)  
Shaft lengths: 120, 225, 360 and 425 mm (4.72, 8.86, 14.2 and 16.7 inch) |
<table>
<thead>
<tr>
<th><strong>pH</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process temperature</strong>&lt;br&gt;0 to 135 °C (32 to 275 °F)</td>
</tr>
<tr>
<td><strong>Process pressure</strong>&lt;br&gt;1 to 7 bar abs (14.5 to 101.5 psi)</td>
</tr>
<tr>
<td><strong>Temperature sensor</strong>&lt;br&gt;NTC 30k</td>
</tr>
<tr>
<td><strong>Ex certification</strong>&lt;br&gt;IECEX, ATEX, NEPSI, FM, CSA</td>
</tr>
<tr>
<td><strong>Connection</strong>&lt;br&gt;Inductive, digital connection head with Memosens technology</td>
</tr>
</tbody>
</table>

More information [www.endress.com/CPS171D](http://www.endress.com/CPS171D)