



## Reliability – batch by batch

### Memosens CPS171D pH sensor for absolutely reliable production processes in biotechnology

**Optimize your plant availability  
and productivity**

**Long-term stability and precision  
like no other pH sensor**

- Outstanding measurement results after sterilization and autoclave cycles
- High reproducibility

**The expert for Life Sciences with  
hygienic sensor design**

- Proven biocompatible pH sensor
- Pressurized reference so that microorganisms have no chance at getting in
- All relevant certificates, documents and approvals: pharmaceutical certificate of compliance, FDA, USP, ATEX/IECEX

**Always make the right decision  
for your process**

- An indicator shows you the status of the pressurized reference
- Significantly increased process reliability, thanks to Memosens technology and efficient sensor management with Memobase Plus software





### All-inclusive package for optimum results in your biotech processes

Cost-effective sensor management and regulation-compliant documentation with **Memobase Plus**



Easy-to-operate **Liquiline transmitters** for all of your process parameters



Standardized **Memosens data cable** for all Memosens sensors



**Process assemblies** with certified hygienic design for the highest requirements



Quality **calibration buffers** guarantee pH measurements with extreme precision



Robust **Liquiline To Go** handhelds make it really easy to check measuring points



Fermentation processes require consistent monitoring of critical parameters. The pH value is also first and foremost among them. That is because maximum yield and high-quality products can be achieved only within a very narrow pH range. The new Memosens CPS171D sensor developed by Endress+Hauser specially for bioreactors ensures you are always on the safe side with your batches.

#### Long-term stability and precision

The newly developed glass and gel give the Memosens CPS171D pH sensor exceptional resistance and long-term stability – for extremely reliable and accurate measured values even after cleaning in place (CIP), sterilization in place (SIP) and autoclaving at up to 140 °C.

The CPS171D is like no other pH sensor, maintaining its precision and providing maximum reproducibility.

#### Hygienic design

The Memosens CPS171D allows us to offer a sensor that has proven biocompatibility. Its safety with respect to cytotoxicity and bioreactivity have been certified through testing. The pressurized reference offers one example of the sensor's hygienic design. This prevents microorganisms from getting in. Need documentation proving pharmaceutical conformity? You can get all of the required certificates, documents and approvals from us, such as FDA, USP <87> and USP <88> Class VI. Optionally, we also offer ATEX/IECEX for use in hazardous areas.

#### Making the right decisions

Knowing the status of your sensor with precision gives you security for every single batch. Memosens CPS171D provides you with information that supports you in correctly estimating the electrode condition and taking the required calibration and maintenance measures. For example an indicator shows you whether there is still enough pressure in the reference. In addition, thanks to Memosens technology, an alarm indicates when the cable connection should be disconnected. In combination with the Liquiline platform and efficient sensor management with Memobase Plus software, you can significantly increase your process reliability.

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