

Chlorine dioxide measurement in drinking and process water

Safe and efficient disinfection with Memosens CCS50D

Your sensor for all chlorine dioxide applications from trace measurement to high concentration

Safe disinfection

- Long-term stable measurement ensures consistent process monitoring
- Low flow dependence supports safe measurement in varying process conditions

More process uptime

- Memosens technology enables precalibration of sensors in the laboratory and fast exchange on site
- Contactless data transmission with Memosens technology eliminates measurement errors due to humidity or corrosion

Efficient process control

- High precision allows for lowest disinfectant dosing
- Fast response time provides accurate process monitoring even with small sample volumes



When do I use Memosens CCS50D?

Chlorine dioxide is more and more becoming a disinfectant of choice. It offers several advantages compared to free chlorine.

- Less corrosive
- Independent from the pH value
- Bacteria do not grow resistant to it
- Not impacted by silica and phosphate that are often used as corrosion inhibitors

In addition, the usage of chlorine dioxide is becoming easier and more cost-effective. Today it is available as a ready-to-use solution that does not require manual

mixing or the application of chemical generators. Memosens CCS50D ensures reliable measurement and efficient dosing of chlorine dioxide in all of its applications:

- Drinking water to ensure sufficient disinfection
- Cooling systems or towers to avoid pathogen growth and biofilm formation
- Wash water for packed vegetables and salads to ensure food safety
- Beverage plants to secure the absence of chlorine dioxide after cleaning cycles
- Desalination plants to prevent chlorine dioxide from disturbing reverse osmosis

time, Memosens CCS50D supports precise dosing of chlorine dioxide even in these skids, leading to safe disinfection and cost savings for chemicals.

More process uptime

Memosens technology allows for precalibration of the sensors in your lab. Swap the sensor into the process with plug & play. Contactless data transmission eliminates all measurement errors or even failures caused by humidity or corrosion. The sensor's fast response time allows you to quickly detect and remedy process changes.

Flexible installation

Memosens CCS50D can be used in combination with the Flowfit CCA151 flow assembly that offers flexible mounting options. You can position the sensor exactly where it is needed for accurate and reliable measurement. When combined with the Flexdip CYH112 immersion assembly, the chlorine dioxide sensor is perfectly suited for open vessels and channels.



Systematic disinfection is an essential step in water treatment and legally required in many areas to protect people and systems from illness or damage. However, high doses of disinfectants such as chlorine and chlorine dioxide can be toxic, which means compliance with limit values for those disinfectants is also very important.

The Memosens CCS50D chlorine dioxide sensor helps to achieve a safe and efficient disinfection by providing stable and fast measured values.

Safety by long-term stability

- Memosens CCS50D features a convex membrane made of dense,

dirt-repellent material which prevents soiling and makes it extremely resistant to biofouling.

- Ultrasonic welding of the membrane to the sensor cap ensures its integrity, preventing dilution of the electrolyte.
- Under moderate process conditions, the membrane cap with its electrolyte needs to be replaced only once per year.

Efficiency by fast response time

Many skids in the food & beverage industry use chlorine dioxide for disinfection. These skids provide only small-volume samples for dosing control. Thanks to its fast response

www.addresses.endress.com