## **Chemtrol**<sup>®</sup> Free Chlorine Sensors

#### SIMPLE, RELIABLE AND FLEXIBLE

Chemtrol<sup>®</sup> PPM sensors enable direct, precise and reliable measurement of free chlorine in water in parts per million (ppm) or milligrams per liter (mg/l). Unlike other chlorine sensors on the market, these sensors are extremely precise and reliable – even backed by the security of a **2-year electronics warranty**. They're also easy to install and practically maintenance-free.

For best results in water management, it's recommended to use both ORP control of free chlorine and PPM monitoring of total and combined chlorine. Alternatively, PPM control can be used for control of the sanitizer and ORP control for a non-chlorine oxidizing agent such as ozone. The chlorine sensor is now available with the Chemtrol<sup>®</sup> 255T Digital Controller for PPM and pH. The sensor is also available with the Chemtrol<sup>®</sup> 5000 and 7000 controllers for simultaneous ORP control or monitoring of the activity of free active chlorine, HOCI.

## **TECHNICAL SUPPORT**

Receive immediate tech support. Our webserver communication enables immediate technical support remotely from our service department or with a Qualified Dealer. Call 1-800-621-2279 or email sales@sbcontrol.com.

## **STANDARD FEATURES**

- Direct free chlorine measurement
- Measurement includes free chlorine (HOCI & OCL-) and combined isocyanurates if present, corresponding to the DPD1 test
- pH range of 5.5 to 9.5
- Temperature range of 5 to 50° C (40 to 120° F)
- All sensors available with PPM ranges 0-2 / 0-10 / 0-200
- Cyanuric acid compatible
- Pressure range up to 3 bars (45 psi)
- PVC body with 1" MPT fitting
- Replaceable membrane and electrolyte
- Flow cell with specially designed probe housing
- Easy calibration on startup
- 0-10 PPM

#### AVAILABLE OPTIONS

- Free Chlorine Sensor
- Bromine Sensor
- Active Chlorine Sensor
- Total Chlorine Sensor
- 0-2 PPM
- 0-200 PPM



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# Chemtrol®

## **Free Chlorine Sensors**

#### FLOW CELL INSTALLATION

The sensor is designed to be installed in a specially designed flow cell for controlled flow of water. Install the flow cell on a bypass line with 3/8" tubing as shown on the right. Make sure that the bypass line is located after the filter and that there is a sufficient but not excessive flow of water. The recommended flow rate is about 8-30 GPH.

#### SENSOR INSTALLATION

The chlorine sensor is shipped in a molded foam package containing:

- One (1) PPM sensor with serial number (needed for warranty)
- One (1) compression fitting with O-ring and compression disk
- One (1) electrolyte cap with membrane
- One (1) electrolyte bottle and screw-on filling tip
- One (1) screwdriver (not needed if pre-wired)

In order to prevent serious damage to the sensor, be careful not to touch the membrane or the electrodes.

To facilitate shipment and storage of the sensor, it is not fitted with the electrolyte cap until ready for installation. The sensor cap must be filled with the electrolyte solution before usage and emptied during storage.

Fill the sensor cap with the electrolyte taking care to prevent air bubbles. Fill the cap to the bottom of the threaded section. Thread the sensor into the cap as far as it will go. Excess air and electrolyte may escape through the hole below the rubber seal. Wipe any excess electrolyte with a soft tissue. Contact your CHEMTROL<sup>®</sup> dealer If you need additional electrolyte.

Slide the O-ring and the compression disk over the sensor tip up to the compression ring. Finally, insert the sensor with the compression fitting in the flow cell and make it finger tight.

#### SENSOR CALIBRATION

To calibrate the sensor, use a DPD or OTO test kit for total chlorine. It is recommended to do the first calibration 2 hours after startup and to repeat it after 24 hours. After that check calibration as necessary which is generally every 3 to 4 weeks.

#### SENSOR MAINTENANCE

There is no special maintenance requirements except to make sure that the membrane remains clean and to replace the membrane and electrolyte when needed. In winter, remove the sensor to prevent freezing if applicable. Do not reuse the membrane once removed. Replace with new membrane and electrolyte. Do not clean or touch the sensor shaft as this may damage the sensor.



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### THE CHEMTROL GUARANTEE

Every unit we make is supplied with a comprehensive operation manual and is backed by our five year electronics warranty. Our customer support department is second to none, providing the technical support you need - and we've been part of over 100,000 installations worldwide.