

# Chemtrol™ PC6000

## PROGRAMMABLE CONTROLLER

INTEGRATED WATER TREATMENT  
with Duplex Remote Control  
and Probe Alert™ Safeguard\*

\* U.S. Patent 5,895,565

The **CHEMTROL™ PC6000** microprocessor-based programmable controller is a fully integrated command center for automated control of water chemistry and filtration with true duplex remote operation. It introduces a new standard of sophistication in automated water treatment for many applications such as swimming pools, spas, waterparks and industrial water treatment.

### STANDARD FEATURES

- ✓ **ORP CONTROL** of oxidizer with shock and chemical saving programs,
- ✓ **PPM CONTROL** with shock and chemical saving programs,
- ✓ **pH CONTROL** with acid / base feed and probe rinse program,
- ✓ **HEATER CONTROL** with energy saver program,
- ✓ **MAIN PUMP CONTROL** and **FLOW RATE** with cumulative display,
- ✓ **INFLUENT/EFFLUENT PRESSURES** monitoring with safety alarms,
- ✓ **AUTOMATED BACKWASH** for multiple filters,
- ✓ **LANGELIER SATURATION INDEX** for water balance,
- ✓ **AUTOMATIC DATA LOGGING** for up to 999 tests,
- ✓ **CONDUCTIVITY / Total Dissolved Solids (TDS) CONTROL** with autofill capability for salt generators,
- ✓ **WATER LEVEL CONTROL** with electronic sensor and fill valve control,
- ✓ **REMOTE COMPUTER OPERATION** and **GRAPHIC DATA DISPLAY**,
- ✓ **VOICE TELEPHONE** communication,
- ✓ **FULL-SCREEN MENUS** in English, French or Spanish,
- ✓ Screen displays in **US** or **METRIC UNITS**,
- ✓ COMPATIBLE with all **COMMON SANITIZERS, OXIDIZERS,** and **AUTOMATED CHLORAMINE TREATMENT (A.C.T.) PROGRAM.**



### OPTIONS

- ✓ **ETHERNET** and **INTERNET** communication,
- ✓ **MODBUS** communication to Building Management Systems,
- ✓ **4-20 mA** five-channel output to Building Management Systems.

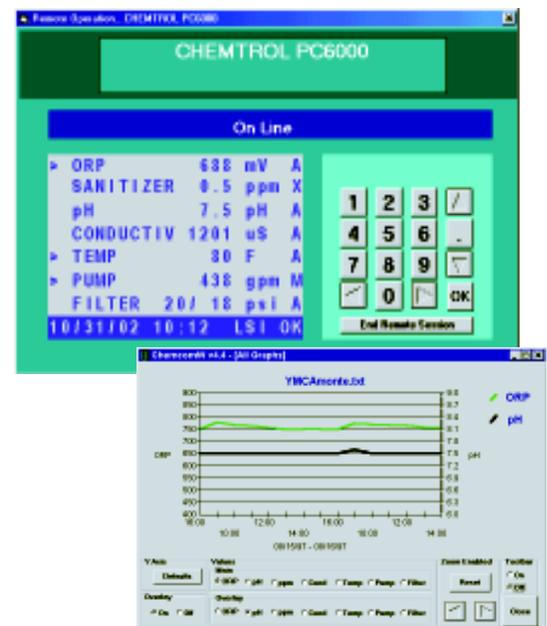
### POWERFUL AND RELIABLE

The **CHEMTROL™ PC6000** is a powerful and reliable controller that incorporates automated control of water chemistry and filtration in a single unit with choice of backwash programs for single or multiple filters. All menus are displayed in English, French or Spanish with choice of US or metric units. Each unit is supplied with a comprehensive operation manual, on-site startup and training by a Qualified Dealer and a **FIVE-YEAR electronics warranty**.

### EXTENDED TECHNICAL SUPPORT

Technical support from **CHEMTROL™** is based on our experience with over 30,000 installations worldwide. It is also available by toll-free phone, by fax or by e-mail.

- the **CHEMCOM™** Program for *Windows™* allows **immediate technical support** from our Service Department or from a Qualified Dealer by remote computer with true duplex operation.
- the patented **Probe Alert Safeguard\*** constantly monitors the response of the ORP and pH probes and alerts the operator in case of probe failure.



REMOTE COMPUTER OPERATION  
and GRAPHIC DATA DISPLAY  
under *Windows*

Visit our Web Site at [www.sbcontrol.com](http://www.sbcontrol.com) or call today for a free demo CD.

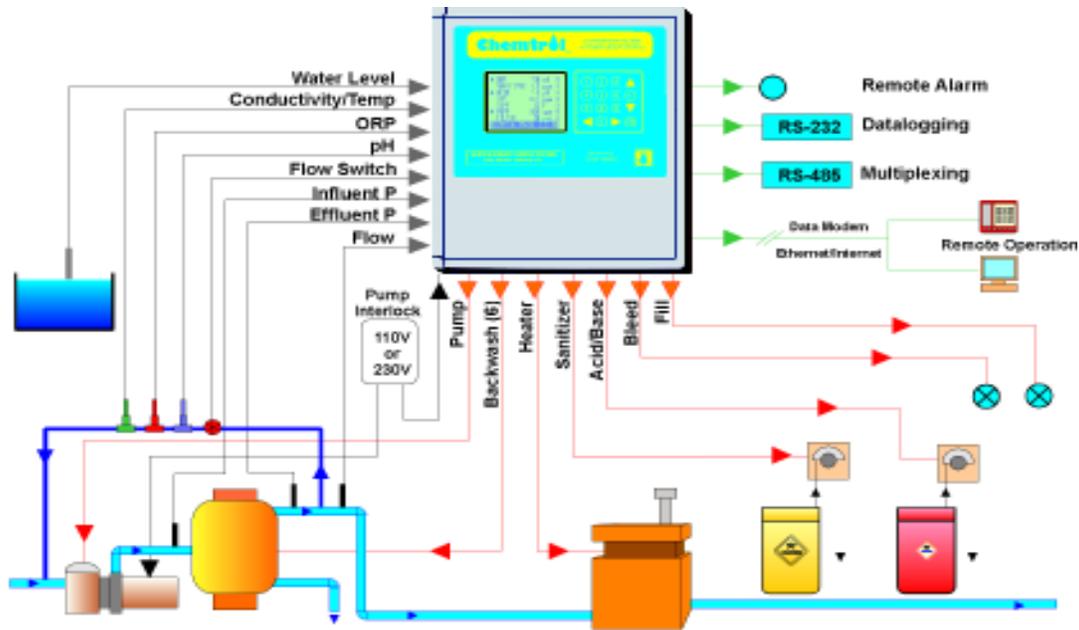


**SANTA BARBARA CONTROL SYSTEMS**  
5375 Overpass Road  
Santa Barbara, CA 93111 - USA

TOLL-FREE PHONE 800-621-2279  
PHONE 805-683-8833  
FAX 805-683-1893  
INTERNET [www.sbcontrol.com](http://www.sbcontrol.com)

Leading in Automated Water Treatment Since 1976

## POOL/SPA INSTALLATION



## SPECIFICATIONS

<b>SCREEN DISPLAY</b>	8 lines @ 22 characters
<b>ORP</b>	200-999 mV with oxidizer and/or reducer Programmable shock treatment and chemical saving cycles
<b>pH</b>	0-14 with acid and/or base feed
<b>SANITIZER</b>	0-10 ppm (mg/l)
<b>CONDUCTIVITY / TDS</b>	0-20,000 $\mu$ S/cm
<b>TEMPERATURE</b>	0 to 140 F (-18 to 60C)
<b>LANGELIER INDEX</b>	Water balance display
<b>SENSOR CALIBRATION</b>	1, 2 or 3 points
<b>CONTROL MODES</b>	Off, Manual, Auto, Timer ON/OFF or Proportional Feed
<b>ALARMS</b>	High/Low out-of-range Total feed time and Overfeed Patented Probe Alert* Safeguard
<b>DATA LOGGING</b>	Visual, audio and external alarms On-board memory for 999 tests
<b>REMOTE OPERATION</b>	RS232 communication port Data communication modem Ethernet/Internet modem CHEMCOM™ remote software and graphical display under Windows™ Telephone voice communication
<b>MULTIPLEXING</b>	RS485 port for multiple connections
<b>MECHANICAL</b>	13 x 11 x 6 1/2 in. (34 x 29 x 17 cm) Rain and splatter proof NEMA Type 3R
<b>ELECTRICAL</b>	10 A / 110 or 230 V with selector switch All output relays 5 A
<b>WARRANTY</b>	5-year electronics 1-year sensors
<b>SHIPPING</b>	Total 3 cartons
Controller	24x18x18 in / 60x45x45 cm (40 lbs/18 kg)
Sensor cabinet	19x19x11 in / 48x48x28 cm (21 lbs/9.5 kg)
Water level	72x12x12 in / 183x30x30 cm (70 lbs/32 kg)

## MODEL SELECTION

### STANDARD FEATURES

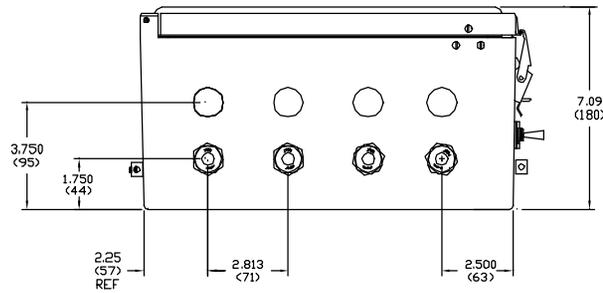
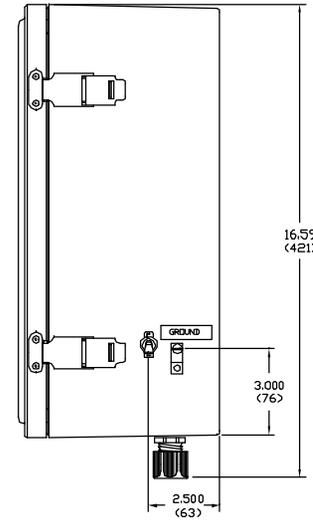
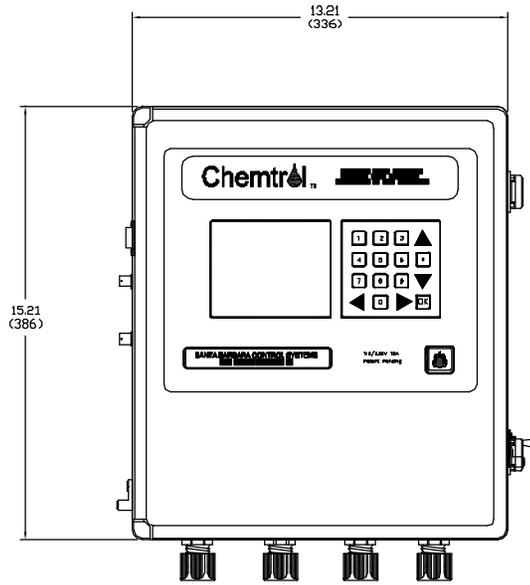
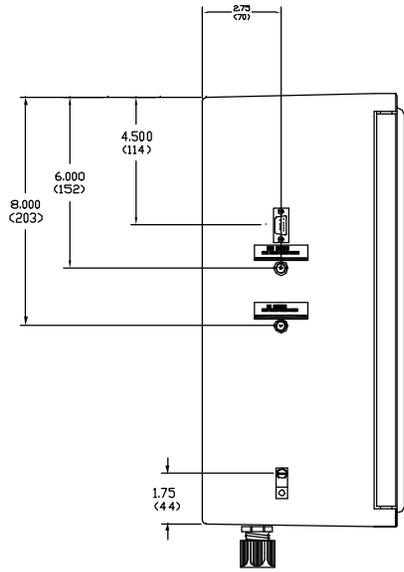
- ✓ ORP CONTROL
- ✓ PPM CONTROL
- ✓ pH CONTROL
- ✓ HEATER CONTROL
- ✓ CONDUCTIVITY / TDS CONTROL
- ✓ LANGELIER SATURATION INDEX
- ✓ FLOW RATE MONITORING
- ✓ AUTOMATIC WATER LEVEL CONTROL
- ✓ RECIRCULATION PUMP CONTROL
- ✓ INFLUENT/EFFLUENT PRESSURES MONITORING
- ✓ MULTIPLE FILTER BACKWASH
- ✓ AUTOMATIC DATA LOGGING
- ✓ REMOTE ALARM
- ✓ REMOTE COMPUTER OPERATION
- ✓ VOICE TELEPHONE COMMUNICATIONS
- ✓ SENSOR CELL ASSY WITH BYPASS LINE ASSY

### OPTIONS

- ETHERNET / INTERNET REMOTE OPERATION
- MODBUS COMMUNICATIONS TO B.M.S.
- 4-20 mA FIVE-CHANNEL OUTPUT TO B.M.S.

REPRESENTED BY:

REVISIONS				
ZONE	REV	DESCRIPTION	Date	APPROVED
			01AUG31	CHN



UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES  
 DECIMALS FRACTIONS ±X/X"  
 .XX ±.050 ±.020 ±.010  
 X.XX ±.020 ±.010  
 X.XXX ±.010  
 ANGULAR  
 X.X° ±.5°

MATERIAL

FINISH

**SANTA BARBARA CONTROL SYSTEMS**  
 8376 OVERPASS ROAD, SANTA BARBARA CA 93111-2007  
 805-683-8835 FAX 805-683-1893

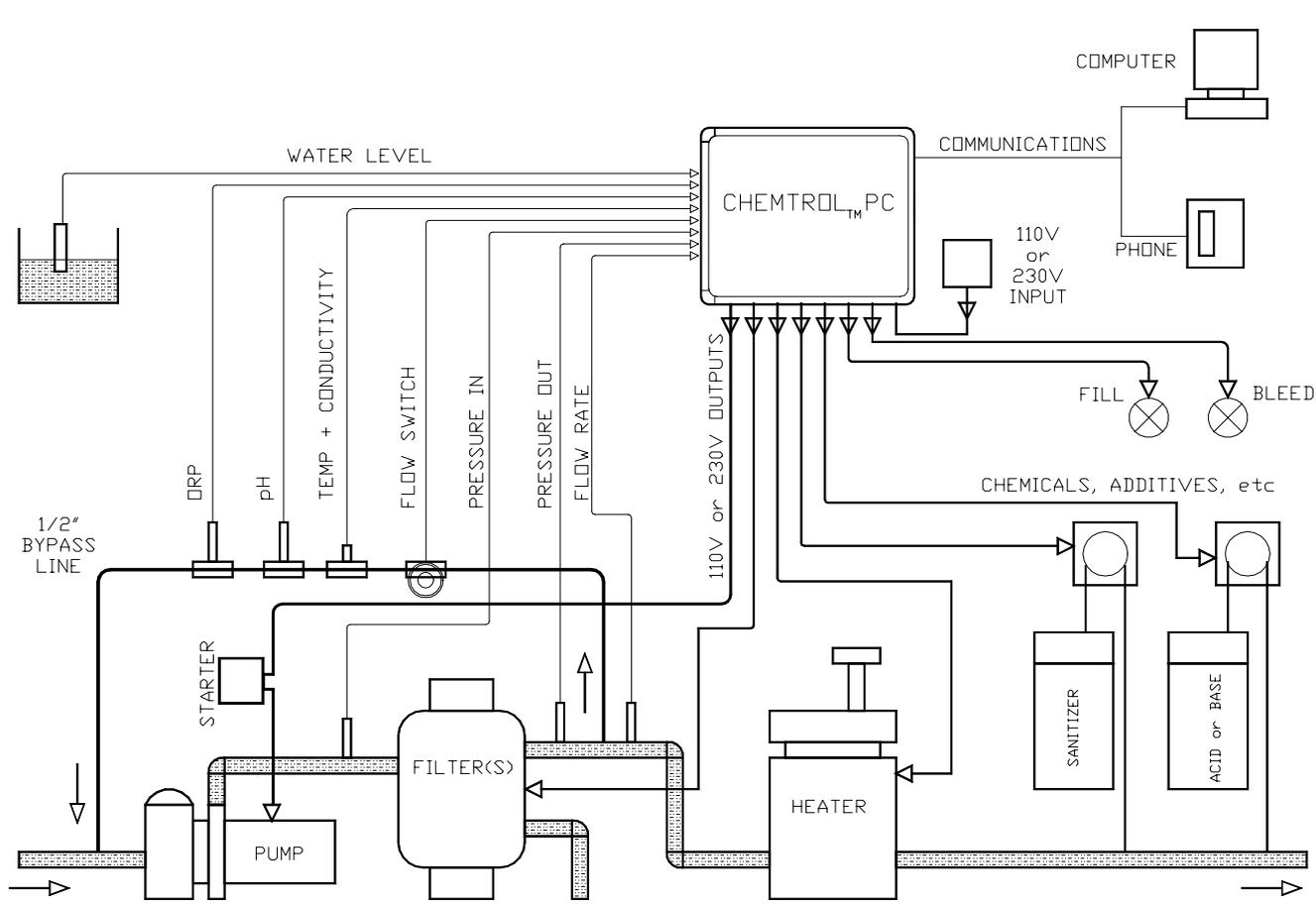


**CHEMTROL™ PC6000 CONTROLLER  
 FIBERGLASS CABINET**

SIZE B	FSCM NO.	DWG NO.	REV —
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Scale: ALL DIMENSIONS IN IN. (MM) Sheet 1 OF 1

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- ELECTRICAL**
- POWER INPUT**  
 115V / 10A dedicated  
 230V selector switch
- POWER OUTPUTS**  
 Same voltage as input  
 All 5A relays with  
 5A slow blow fuses
- SANITIZER FEED, PPM  
 OXIDIZER FEED, DRP  
 DE-OXIDIZER CONTROL  
 ACID FEED  
 BASE FEED  
 ACID CLEAN  
 DUMP VALVE  
 FILL VALVE  
 HEATER CONTROL  
 RECIRCULATION PUMP CONTROL  
 FILTER CONTROLS (6 each)  
 EXTERNAL ALARM
- SENSORS**  
 DRP: Potentiometric  
 1/2" SST PVC tee  
 pH: Potentiometric  
 1/2" SST PVC tee  
 TEMPERATURE: Thermistor  
 1/2" SST PVC tee  
 CONDUCTIVITY: Resistive  
 1/2" SST PVC tee  
 SAFETY FLOW SWITCH  
 1/2" MPT fittings  
 PRESSURE: Piezoelectric (2)  
 1/8" MPT fittings  
 FLOW METER: Square wave  
 1.5" MPT + saddle clamp  
 WATER LEVEL: Optical  
 1/4" MPT fitting
- COMMUNICATIONS**  
 RS-232 SERIAL PORT  
 RS-485 PARALLEL PORT  
 TELEPHONE JACK

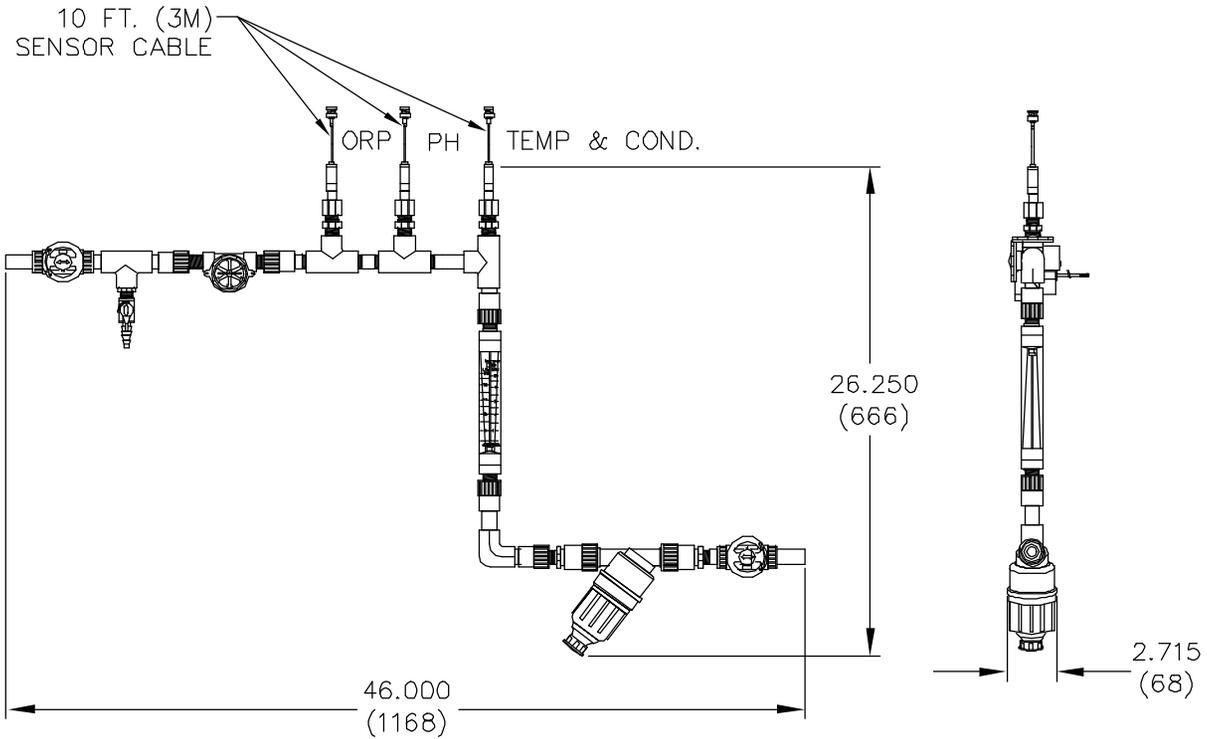
NOTE #1: Controller must be located more than 10-ft (3-m) away from water edge.  
 NOTE #2: Sensor cable lengths are 10-ft (3-m) long with optional 25-ft (8-m) and 50-ft (16-m) extensions.  
 NOTE #3: For main recirculation line over 2-in (50 mm), install 1/2" bypass line for Bypass Line Assembly (BPL-0.5) or Sensor Cell Cabinet (SCC).

SANTA BARBARA CONTROL SYSTEMS  
 Santa Barbara, CA 93111 805/683-8833

CHEMTROL™ PC6000 INSTALLATION  
 Fiberglass Cabinet  
 All dimensions in in. [mm]

JMS 10/17/96  
 PCINSTAL.dwg

REVISIONS				
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			01SEP06	CHN



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES	
DECIMALS	FRACTIONS ±X/X"
X.X ±.050	ANGULAR ±1°
X.XX ±.020	X.X' ±.5°
X.XXX ±.010	
MATERIAL	MATERIAL
FINISH	FINISH

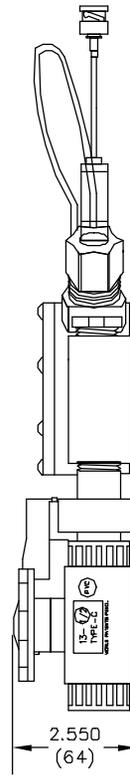
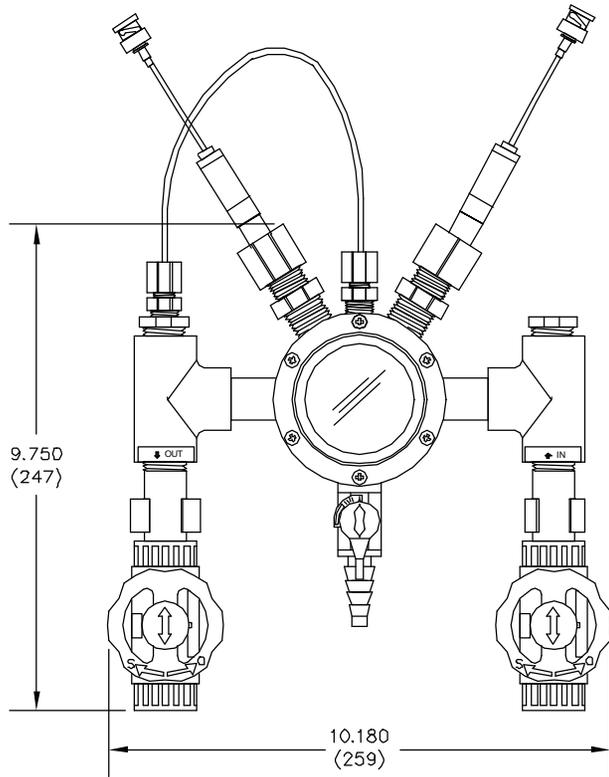
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**Chemtrol**

<b>BYPASS LINE ASSEMBLY (BPL)</b> (COMPONENTS ONLY, PVC FITTINGS NOT SUPPLIED)			
SIZE	FSCM NO.	DWG NO.	REV
			-
Scale NOT TO SCALE		Sheet 1 OF 1	
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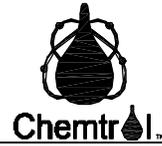
UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES  
TOLERANCES

DECIMALS	FRACTIONS	ANGULAR
X.X ±0.030	X <sup>1</sup> / <sub>16</sub> ±0.005	° ±0.1°
X.XX ±0.020	X <sup>2</sup> / <sub>16</sub> ±0.005	' ±0.5'
X.XXX ±0.010	X <sup>3</sup> / <sub>16</sub> ±0.005	

MATERIAL

FINISH

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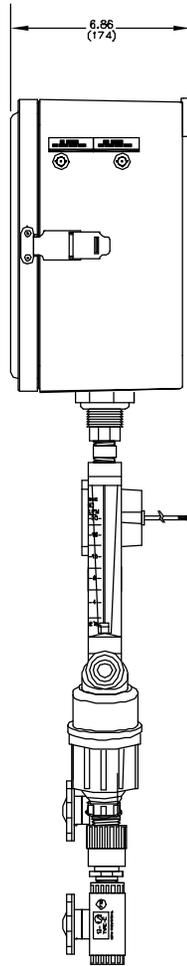
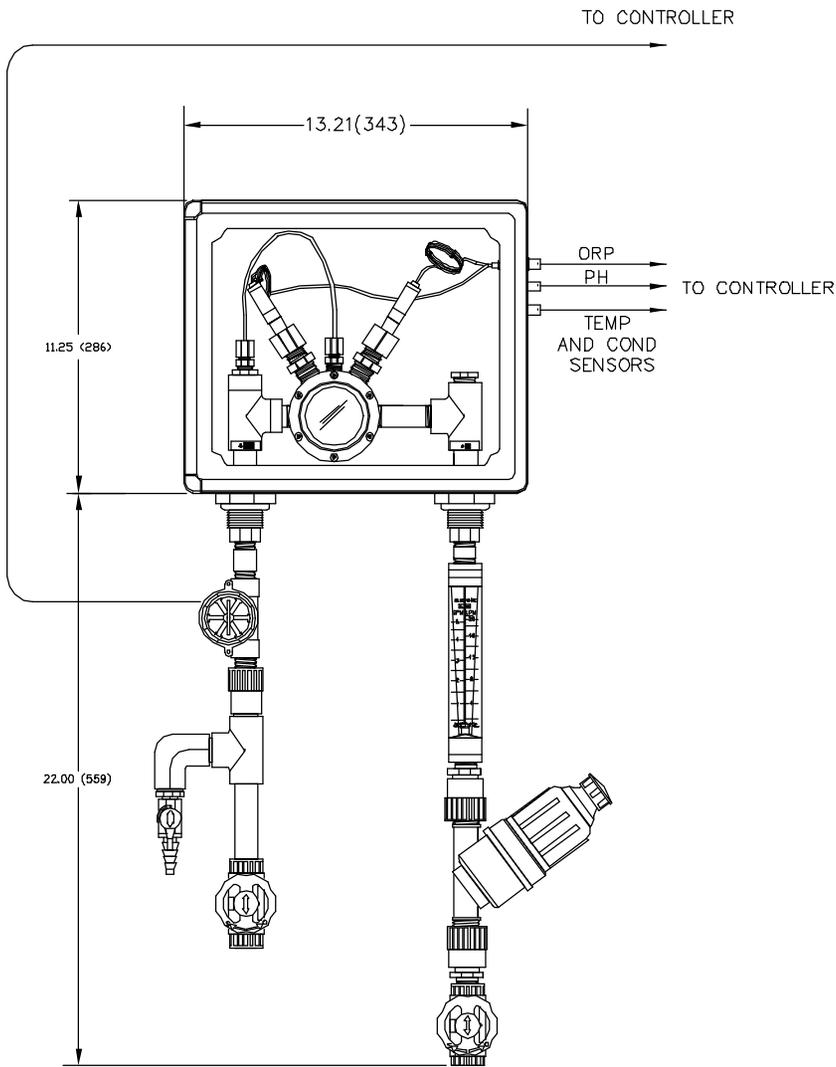
**FLOW CELL ASSEMBLY (FCA)**

SIZE B	FSCM NO.	DWG NO.	REV
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Scale: ALL DIMENSIONS IN IN. (MM) Sheet 1 OF 1

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**Chemtrol**

**WETBOX- SENSOR CELL ASSEMBLY (SCA)  
 (SHOWN WITH ASSEMBLED BYPASS LINE)**

SIZE E	FSCM NO.	DWG NO.	REV
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Scale NOT TO SCALE Sheet 1 OF 1

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