

# FLEXTROL pH / ORP Panel



- ◆ Acid/Base or Oxidant Feed Control
- ◆ Plug N' Play Simplicity
- ◆ One Touch Calibration - Easy To Use
- ◆ On-Board Sensor and Chemical Feed
- ◆ Over Feed Protection
- ◆ Pre-Wired for any Solenoid Chemical Metering Pumps
- ◆ Run Time Totalization
- ◆ Sensor Wash Option Included

The FLEXTROL Series of panels are an ideal economical solution for pH and ORP control applications in recirculating water systems.

These pre-fabricated and tested systems are designed for true Plug N' Play simplicity.

System water is routed through a highly reliable mechanical flow switch to assure chemical feed is limited to periods of sampling and flow.

The water then enters a see through flow cell which houses the sensor and a convenient sample tap.

The micro-controller based unit accepts one probe input, either pH or ORP and, in turn, controls the on-board chemical feed pump.

Treatment chemical is fed on-board to the discharge of the flow cell where it returns to the recirculating water.

The Flextrol controller permits either proportional or ON/OFF control. The unit is field programmed to perform either pH or ORP control functions. A bright eight digit LED alpha-numeric display provides the user with instantaneous readout of probe level together with setup prompts during operation. A computer is not necessary to program the unit.

Additional features include a second control output channel capable of being programmed for probe washing, alarm output or reversing pH control to up-down approach.

Total feed times for outputs #1 and #2 are separately recorded in totalized minutes to facilitate monitoring chemical usage. Either timer may be reset to zero as necessary.

All setup programming and calibration is performed through a label embedded panel mounted three-button keypad. Upon setup completion, the controller will easily and reliably take over the task of accurate chemical control. Default program setups allow operation immediately upon initial powering up. All setup parameters are saved in memory during input power disruption.

The controller will operate on 100 to 264 VAC 47/64 Hertz input power without internal changes. Units supplied by the factory to operate on 115 VAC are pre-wired with a five foot, 3-wire cord and molded plug. The ORP or pH probe with BNC connector plugs into the unit, and the pump or solenoid valve is either wired directly or plugged into the pigtail 3-wire receptacles.

Overfeed time is selectable to disable feed output in event of continuous feed conditions. The unit is responsive to a liquid flow signal using an optional cable assembly to disable both feed outputs in event of low or non-existent process flow.

## OUR STRENGTHS

Chemical Dosing  
Integrated Controls  
System Design  
Systems Integration  
Application Knowledge  
Quality Engineering  
Nimble Flexibility  
Customer Service  
Field Service

## WE DELIVER

Custom Systems  
Standard Systems  
Metering Pumps  
Controls  
Instrumentation  
Accessories

## MARKETS SERVED

Municipal  
Industrial  
Commercial

## APPLICATIONS

Cooling  
Boiler  
Process  
Potable  
Waste Water

Chem-Flow Inc.  
1450 W. Fullerton Avenue  
Addison, Illinois 60101

Phone: 630.543.1911  
Fax : 630.543.2089

www.chemflow.com



### Applications:

- ◆ ORP, pH water control applications
- ◆ Cooling tower water quality control
- ◆ Waste water quality control
- ◆ Water park water quality control
- ◆ Chemical process control

### Specifications:

- ◆ ORP Range: -1000 to +1500 millivolts
- ◆ pH Range: 0.0 to 14.0
- ◆ Proportional feed with adjustable proportional band: 0.0 to 1.0 pH, 0 to 50 mv ORP.
- ◆ ON/OFF feed with adjustable dead band, 0.2 pH, 25 mv ORP.
- ◆ Selectable feed up, feed down, overfeed time: proportional or ON/OFF control.



Output #2 acid feed can be preset for 1 to 24 hour delay before the acid probe wash feature will repeat every 24 hours. The data logger feature allows quickly reading the time to next acid wash. Acid wash duration is settable from 1 to 5 minutes.

Total feed times for outputs #1 and #2 are separately recorded in totalized minutes to facilitate monitoring chemical usage. Either timer may be reset to zero as necessary.

### Display:

Eight (8) digit alpha-numeric red LED. Resolution +/- one digit. Temporary or long term power loss does not affect program setups.

### Control Output:

Two solid state relays with zero cross-over AC switching contact closure, SPST, 5 ampere N.O. connected for proportionally controlling a motor driven, electronic pulsing type chemical addition pump or solenoid valve. Cycle reset time in the ON/OFF mode is one minute.

NOTE: Chemical addition pump voltages or other controlled devices must match input voltage level.

### Controller Operating Voltage:

100 to 264 VAC, 47/64 Hertz. Fuse, external fuse holder 3AG, 5 ampere Slo-Blow.

NOTE: Chemical addition pump voltage or other controlled device must match input voltage level.

### Programming:

Keypad data input for user programming desired operation. Unique keypad sequence necessary for changing parameter setups to prevent unauthorized or accidental program changes.

### Enclosure:

PVC, 5" x 5"x2". Vertical mount using two tabs on enclosure. Unit does not have to be opened for installation or programming.

