## ORP/mV CONTROLLER PMV-1



## **FEATURES**

- O 0 1000mV range, ImV resolution.
- C Large 3 1/2 digital LCD display.
- O Enter all calibration parameters into non-volatile memory with an easy to use rotary encoder.
- Increased fine-tuning of dosing with automatic pulse width modulation.
- Alarm output with high and low set point.

  Potential free relay contacts.

- O Fully isolated 4-20mA current output
- 240VAC/5A relay output easily connected via 3 way terminal strip.
- O 4 20mA signal output, programmable over entire 0 1000mV range.
- Thermo plastic enclosure with transparent cover. Rated to IP55 specifications



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THE RIGHT CHOICE

## **SPECIFICATIONS**

Range: 0 to +1000mV with 1mV resolution

**Display:** 3 1/2 digit LCD display

Indicators: LED lights to indicate set point,

pulse, alarm, flow, and

configuration / calibration modes.

**Calibration:** Offset and slope calibrations

performed in the CAL menu.

**Electrode:** BNC, external of housing.

**Signal output:** 4-20mA for 0mV to +1000mV.

Screw terminals for fully isolated

4-20mA output located by removing front section.

Control range: Set point range 0mV to +1000mV

**Hysteresis:** Programmed at 10mV.

Pulsed output: Pulse width adjusts automatically.

On time changes from continuous to 1.5 seconds. Pulse interval increases / decreases to further

fine-tune a dosing cycle.

Output relay: 240 VAC, 5 Amps max. resistive

load. 3 terminals provide earth, neutral and active. 5A fuse protects

instrument and relay output.

Alarm relay: Potential free contacts.

Power: 240VAC 50Hz 7VA max.

**Housing:** Thermoplastic with transparent lid.

Rated IP 55

**Dimensions:** (W)130mm x (H)95mm x (D)85mm.

## **FEATURES**

The new PMV-1 ORP controller features an easy way for all configuration and calibration procedures. All programmed parameters are stored in non-volatile memory and are not lost if the instrument looses power.

You use the 'rotary encoder knob' to scroll through setup menus and dial up/down numbers when prompted to enter values for relay or alarm setpoints, current signal low and high points etc.

The large LCD display shows signal input, configuration and calibration menus or values (set point etc.) to be configured.

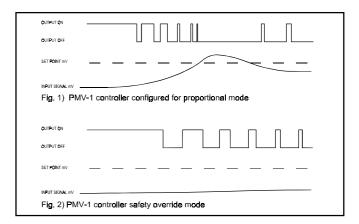
Dual coloured LED's show the operational status of the instrument or setup program currently available.

The relay output of the PMV-1 instrument is controlled through a complex algorithm that continuously monitors the difference between actual mV and set point. The output starts to pulse and varies the ON/OFF cycle as the mV input approaches the set point value. The ON/OFF cycle however is also adjusted from a 'correction factor'.

Dosing for an excessive period of time without a corresponding increase in mV is recognized as a possible failure. The output begins to pulse, preventing a gross overdosing.

The pulse output exhibits a very wide duty cycle. The ON and OFF times are both dynamic, both varying from 1.5 to 60 seconds.

This makes for a fully dynamic dosing control which adapts for widely varying conditions in a cooling tower or other plant installations.



Low and high setpoints can be selected for the alarm relay. This relay may also be used as an additional set point.

The 4-20mA output range is setup via the program.

A flow switch input locks out the relay output. This input can be configurerd for normally open or normally closed. (N/O or N/C)

Wiring the PMV-1 is easy. Simply remove the front panel to reveal the terminals. The output relay provides switched 240VAC  $\,$ 

