

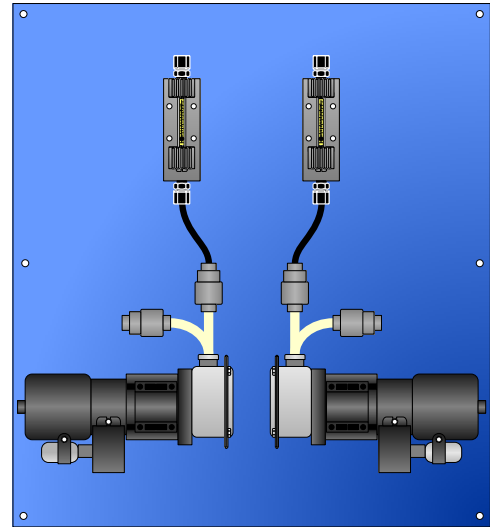


## High Range Residual Analyzer & Sample Water Dilution Panel

The Hydro Instruments high range residual chlorine analysis package is comprised of an adjustable sample water dilution panel and Hydro Instruments' RPH-250 residual chlorine analyzer with a high range free chlorine probe.

### Features

- Available ranges:  
0-1372 PPM  
0-1734 PPM
- Continuous measurement
- No reagents
- Easy installation and calibration
- Simple maintenance



### Operation

By taking a highly chlorinated solution of water that would normally be out of range for the analyzer and diluting it with a controlled amount of chlorine free water a measurable and repeatable chlorine residual reading can be achieved. This measurement can then be taken and an accurate process residual calculated from it.

### Design

Hydro Instruments' sample water dilution panel utilizes two peristaltic pumps and two liquid flow meters, all specially sized to provide proper dilution, one set for the highly chlorinated solution and the other set for chlorine free dilution water<sup>1</sup>.

The peristaltic pumps are self-priming<sup>2</sup>, chemically resistant and spring loaded so that as the pump tube wears the compression will increase and provide the same chemical feed rate for the life of the pump tube. The self-priming feature will eliminate the need for a pump controller as the feed rate will always be constant.

Tubing is teed together after the remote meters, mixing the chlorinated solution and dilution water together prior to entering the RPH-250 residual chlorine analyzer.

See Bulletin RPH-250 for additional details.



# High Range Residual Analyzer & Sample Water Dilution Panel

## Specifications

### Solution Pump

Power: 230 VAC 50 Hz  
115 VAC 60 Hz  
Capacity: 1.1 GPH @ 50 Hz  
1.34 GPH @ 60 Hz  
RPM: 37 @ 50 Hz  
45 @ 60 Hz  
Tube: 3.2mm bore (1/8")

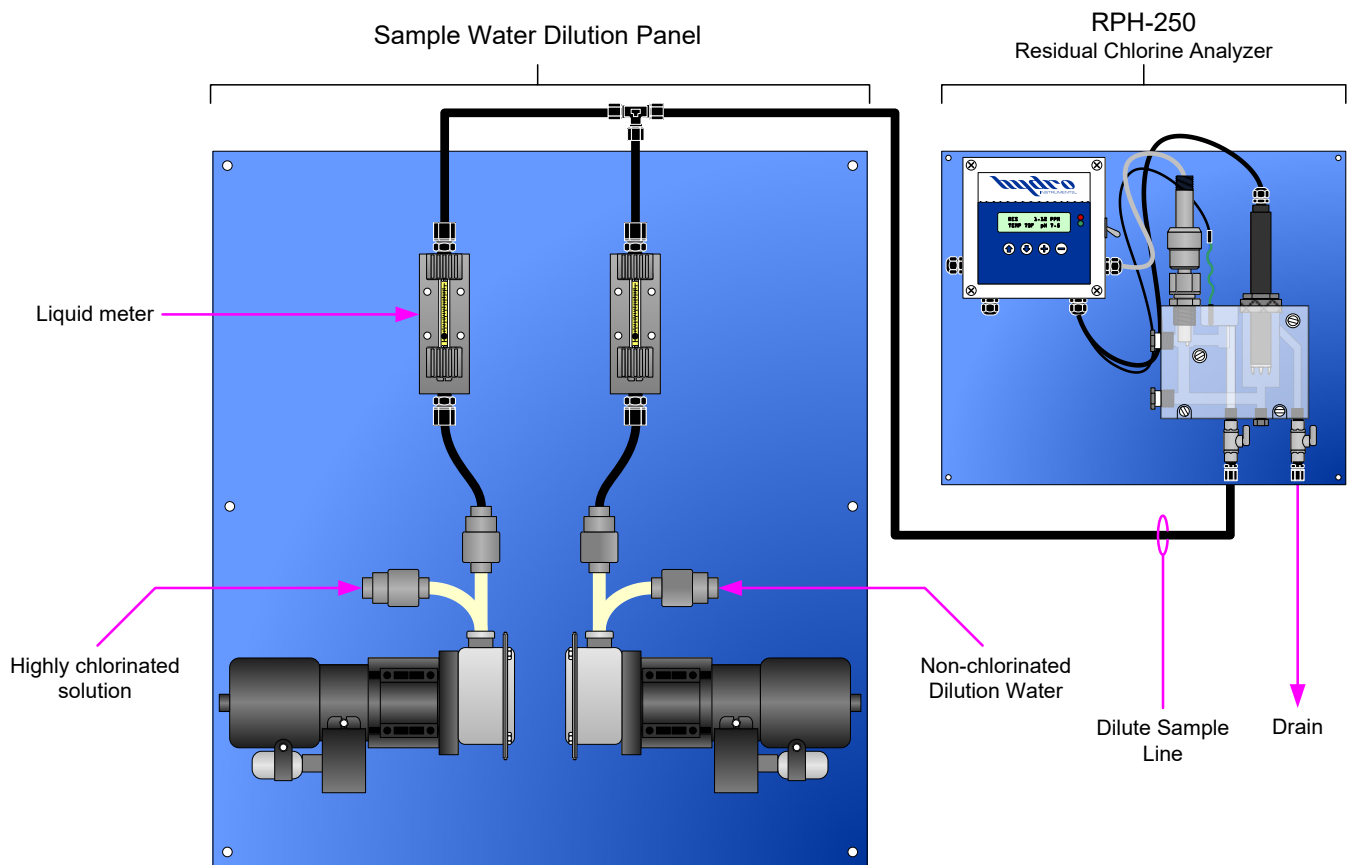
### Dilution Pump

Power: 230 VAC 50 Hz  
115 VAC 60 Hz  
Capacity: 6.45 GPH @ 50 Hz  
7.85 GPH @ 60 Hz  
RPM: 37 @ 50 Hz  
45 @ 60 Hz  
Tube: 8mm bore (5/16")

### Residual Analyzer

Power: 230 VAC 50 Hz  
115 VAC 60 Hz  
Range: 0-200 PPM (free Cl<sub>2</sub>)

## Installation



<sup>1</sup> A carbon filter may be required on the inlet side of the dilution pump incase the dilution sample contains chlorinated water.

<sup>2</sup> Due to the nature of peristaltic pumps, there cannot be any pressure on the suction/inlet side. This will be adequate for the sample pump as sample will most likely be withdrawn from an open tank. The dilution pump, however cannot be connected to a pressurized water connection and will need some type of container for proper operation.