

# Series 900 Chlorine System

The Toughest vacuum regulator in the world



Hydro Instruments has been manufacturing the highest quality gas chlorination and sulfonation equipment since 1973. The Series 900 Switchover Vacuum Regulator incorporates automatic switchover and a safety relief 'vent' into a single durable component.

- Solid Machined PVC Construction
- Hastelloy-C Inlet Adaptors
- 3 Year Limited Warranty
- Built in Vent Valve

## Quality

The Series 900 is simply the most ruggedly designed, heavy-duty vacuum regulator in existence.

Each part is derived from the very finest material available. To avoid cracking, our body parts are machined from solid PVC and designed with heavy wall thickness. For maximum durability and corrosion resistance our inlet adaptors are constructed of Hastelloy-C and our yoke assemblies are protected with the finest Epoxy Powder Coating.

## Safety

For ProMinent, safety is the highest concern, which helps set us apart from the competition. Our rugged design and highest quality machined parts maximise safety by preventing cracks and minimising corrosion.

Prior to shipping, skilled technicians follow a rigorous testing procedure for each and every vacuum regulator with chlorine or sulphur dioxide gas.

Each Series 900 Vacuum Regulator is equipped with an integrally designed safety relief 'vent' valve to immediately direct any leaking gas to a safe location.

## Design

Hydro as designed the vacuum regulator yokes so that a twisted cylinder wrench can be use for both the cylinder and vacuum regulator. One of these wrenches is provided with each vacuum regulator.

## Repairs

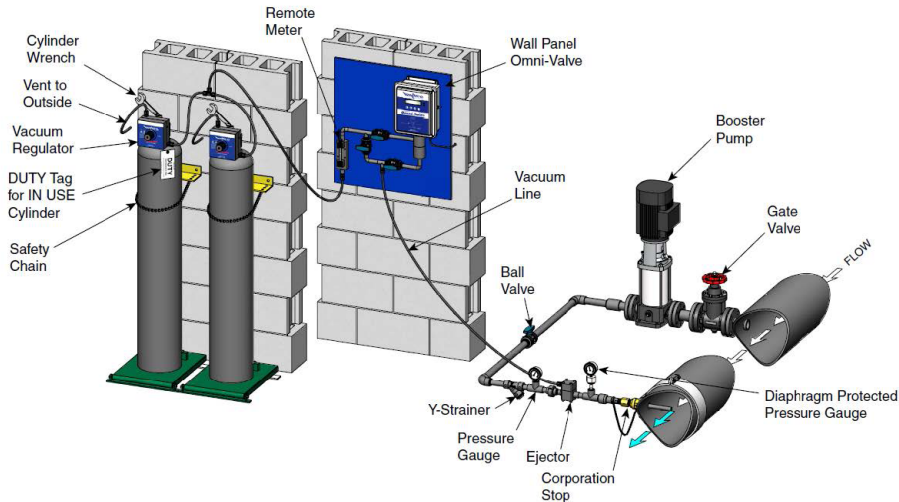
Hydro equipment is designed with fewer parts and our assemblies are designed to be easily repaired without special tools.

## Service

We provide top quality parts at reasonable prices and always keep parts in stock. For further information please email [service@prominentfluid.com.au](mailto:service@prominentfluid.com.au)



## Technical Data



### Ejector Connections

Capacity	Standard	
2 kg/h	Nozzle 1" hose and 3/4" NPT Diffuser 1" hose and 3/4" NPT	
5 kg/h & 10 kg/h	Inlet 1 1/4" NPT Outlet 1 1/4" NPT	Optional 1 1/2" hose
40 kg/h	Inlet 2" Flange Outlet 2" Flange	

Maximum back pressure at point of application for a standard ejector is 1034 kPa. For pressures greater than 1034 kPa, consult factory.

All feed rate capacities shown in this bulletin are for chlorine.

For sulfur dioxide, multiply each chlorine value by 0.95.

Various ejector nozzles are available – selected when ordering.

Nozzle performance charts can be found in the Series 900 O&M manual.

**Accuracy:** within 4% of maximum flowmeter capacity

**Operating Range:** 20:1 manual or automatic

**Operating Temperature:** Ejector, 1.6°C to 48°C;

Other components, -28°C to 48°C

The system operating temperature is largely dependent on the withdrawal rate of gas from the cylinder and is a function of the existing ambient temperature.

### Materials of Construction

Kynar, PVC, polyethylene, tantalum, silver, Hastelloy-C, monel, viton and teflon.

Vacuum Tubing

### Options and Accessories

Regulator-Mounted Flow Tubes

Inlet Water Assembly

Scales

Manifolds

Automatic Controls

Isolating Valves

Flexible Connectors

Gas Masks

Gas Detectors

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### CONNECTIONS

Model	Maximum Capacity	Vacuum	Vent
SVR-100-CL2 SVR-10T-CL2	2 kg/h	3/8"	3/8"
SVR-250-CL2 SVR-25T-CL2	5 kg/h	1/2"	3/8"
SVR-500-CL2 SVR-50T-CL2	10 kg/h	5/8"	3/8"
SVR-1000-CL2 SVR-100T-CL2	40 kg/h	5/8"	3/8"

### Size Requirements – Distance

The **Hydro Series 900 Vacuum Regulator** can be a few feet to several hundred feet from the ejector, depending on maximum feed rate and the diameter of connecting pipe or tubing.

### Maximum Feed Rate

### Length of Vacuum Tubing

(kg/h)	100' (31m)	200' (61m)	500' (153m)
(1)	3/8"	3/8"	1/2"
(2)	3/8"	1/2"	5/8"
(5)	1/2"	5/8"	3/4"
(10)	5/8"	3/4"	1"
(40)	1"	1"	1.5"

**Note:** Ammonia feed rates are 12, 25, 50, 100, 250, and 1000.

### Gas Warning

All unattended gas containers and gas feed equipment should be monitored for leaks. Gas sensitive detectors, which will respond quickly to gas leaks in the atmosphere, should be installed at each site.