

# Specifications for the Hydro Model DPH-10000-CL2 Differential Pressure Regulator Specification DPH-10000-CL2

#### 1.01 GENERAL

## 1.01.1 Completeness

The system shall be complete with all components, equipment, and appurtenances.

## 1.01.2 Quality Assurance

All materials and components shall be new and unused of first quality by well-known manufacturers. Inferior materials or components shall not be allowed.

## 1.02 MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA or approved equal. The vacuum regulator shall be Hydro Instruments Model DPH-10000-CL2.

#### 1.03 SPECIFICATIONS

#### 1.03.1 General

- 1. The differential pressure regulator shall have a chlorine gas feed capacity of not less than 10,000 pounds per day (200 kg/hr).
- 2. The differential pressure regulator shall be constructed of materials suitable for chlorine gas under vacuum.
- 3. A total of two (2) 1.5" FPT gas feed connections shall be provided One (1) inlet and one (1) outlet.
- 4. A total of two (2) <sup>1</sup>/<sub>4</sub>" FPT connections shall be provided One (1) connection to the outlet high vacuum side and one (1) connection to the upstream low vacuum piping.

### 1.03.2 Differential Pressure Regulator

- 1. The differential pressure regulator shall maintain a constant pressure differential across a variable or fixed orifice providing a steady flow rate regardless of variations in upstream or downstream pressure.
- 2. The differential pressure regulator body parts shall be constructed of solid machined PVC material for maximum durability and cracking resistance.
- 3. The differential pressure regulator shall have a spring-opposed diaphragm assembly, which dampens pressure fluctuations.
- 4. Differential pressure regulator springs shall be made of Hastelloy C-276.