

# REGULATOR

## SERIES HSG-HPS280 / HSG-HPS281 CHROME-PLATED SINGLE STAGE HIGH PURITY REGULATOR - NON-CORROSIVE SERVICE

### Description

The chromium plated brass, diaphragm type, high purity single stage regulators, Series HSG-HPS280 and HSG-HPS281, are designed to control high purity, non-corrosive gases for applications where minor fluctuations in outlet pressure due to diminishing inlet pressure can be tolerated. These regulators are highly recommended for acetylene and liquefied hydrocarbon gas applications with a maximum inlet pressure of 350 psig.



HSG-HPS280 / HSG-HPS281

### Standard Specification

Maximum inlet pressure	: 350 psig
Outlet ranges	
Model HSG-HPS280/15	: 2 - 15 psig (with red line for acetylene use)
Model HSG-HPS281/15	: 2 - 15 psig
Model HSG-HPS281/40	: 2 - 40 psig
Outlet port	: 1/4" NPT (F)
Temperature range	: -17°C to +60°C
Flow coefficient	: $C_v = 0.05$
Helium leak rate	: $1 \times 10^{-8}$ scc/sec
Outlet pressure rise	: <0.5 psig / 100 psig inlet decay

### Material Of Construction

Body	: Chrome-plated forged brass
Spring housing cap	: Chrome-plated forged brass
Diaphragm	: 316 stainless steel
Nozzle	: Brass
Seat	: PCTFE
Seals	: Viton
Filter	: Cartridge - Brass Inlet - 10 micron sintered stainless steel
Seat return spring	: 316 stainless steel
Pressure adjusting spring	: Heat treated spring steel
Adjusting knob	: Acrylonitrile butadiene styrene

### Key Features

- 2.75" stainless steel diaphragm
- 2.5" Dual scale gauges
- Cartridge type inlet with 10 micron filter
- Resistant to inboard diffusion of atmospheric contaminants
- Materials of construction will not contaminate the gas stream

### Typical Applications

- Atomic absorption analysis
- Non-critical specialty gases
- Liquid Hydrocarbon blends
- Purging systems
- Research sampling systems
- Process analyzers