

REGULATOR

SERIES HSG-SGT500 STAINLESS STEEL DUAL STAGE HIGH PURITY REGULATOR - CORROSIVE SERVICE

Description

The stainless steel, diaphragm type, high purity dual stage regulators, Series HSG-SGT500, are designed for ultra high purity, corrosive, reactive or toxic gas applications where constant delivery pressure is required as inlet pressure decreases. The materials of construction will not off-gas and contaminate the gas stream. The design is highly resistant to inboard diffusion of atmospheric contaminants.



HSG-SGT500

Standard Specification

Maximum inlet pressure	: 3000 psig
Outlet range	
Model HSG-SGT500/15	: 2 - 15 psig
Model HSG-SGT500/40	: 2 - 40 psig
Model HSG-SGT500/80	: 4 - 80 psig
Model HSG-SGT500/125	: 5 - 125 psig
Outlet port	: 1/4" NPT (F)
Temperature range	: -40°C to +60°C
Flow coefficient	: $C_v = 0.111$
Helium leak rate	: 10^{-9} scc/sec
Outlet pressure rise	: <0.92 psig / 100 psig inlet decay
Weight	: 2 kg

Material Of Construction

Body	: 316L stainless steel
Spring housing cap	: Chrome plated brass
Diaphragm	: 316 stainless steel
Nozzle	: 316 stainless steel bar stock
Seat	: PCTEF
Seals	: Teflon
Poppet	: 316 stainless steel
Inboard filter	: 10 micron sintered stainless steel
Seat return spring	: 316L stainless steel
Pressure adjusting spring	: Heat-treated spring steel
Adjusting knob	: Acrylonitrile butadiene styrene

Key Features

- Flow straightening technology
- Design features for maximum safety and ease of installation in complex piping system
- Able to withstand internal vacuums generated during purging operation
- Metal-to-metal diaphragm seal
- 1.6" 316 stainless steel diaphragm for minimal footprint
- 2" dual scale gauges
- 2" stainless steel bar stock body with 6 ports (3 high / 3 low) for maximum installation flexibility
- Housing cap is threaded for easy panel mounting
- Relief valve on intermediate stage

Typical Applications

- CEM and EPA Protocol standards
- Gas and liquid chromatography
- Regulation of corrosive gases
- Diffusion furnaces
- Research sampling systems
- Laser gas systems
- Process analyzers