



High Purity Single Stage Brass Barstock Regulator

SHSS - Series

DESCRIPTION

The SHSS regulators are designed and constructed for both high purity, low volume use and general purpose applications where a slight pressure rise is acceptable due to the decrease in cylinder pressure. This regulator provides outstanding performance, but are rugged and versatile enough for the laboratory or plant applications.

FEATURES

- Minimal internal volume: .320 cubic inches.
- Seat area protected by a 30 micron filter.
- Five delivery pressure ranges available.
- Stainless steel diaphragm eliminates contamination from diffusion or out gassing.
- Body is pre-tapped and has milled flats for back panel mounting.
- Designed to pass an helium leak-rate test of 1×10^{-8} SCC/SEC.



APPLICATIONS

The SHSS series regulators are ideally suited for use with small cylinders of Research Purity or High Purity gases up to 5.0 purity. The small internal volume and high purity design result in more efficient use of expensive materials because it takes less gas to fill the internal cavity. They are useful for less critical pressure reduction applications, where the precise control of pressure or flow is not required.

MATERIALS OF CONSTRUCTION

- Body: Brass Barstock, Chrome Plated
- Bonnet: Zinc, Chrome Plated
- Diaphragm: 316 Stainless Steel
- Seat: PCTFE
- Seals: EPDM
- Filters: 30 micron sintered porous bronze
- Gauges: 2" Chrome Plated Brass

SPECIFICATIONS

- Max. Inlet Pressure: 3,000 psig
- Operating Temperature Range: -20°F to 120°F
- Internal Volume: 0.32 in
- Leakage: Bubble Tight
- Flow Coefficient (C_v): 0.015
- Shipping Weight: 3.1 lbs (without outlet valve)

OPTION SPECIFICATIONS

- Optional Relief Valve: Brass body, EPDM seat
- Optional Diaphragm Valve: Chrome Plate Brass Body
Kel-f Seat, Eigloy
Diaphragm and Viton
seals

Model Selection Guide

Example: SHSS450R0346 = model SHSS with up to 450 psig delivery pressure, relief valve and CGA 346 inlet connection.

Specify:	Maximum Delivery Pressure		Relief Valve	Outlet Port	CGA Inlet Connection
SHSS	[***]		[*]	[*]	[***]
	Delivery Pressure Range 015 = 0-15 psig 045 = 0-45 psig 080 = 0-80 psig 150 = 0-150 psig 450 = 0-450 psig	Delivery Pressure Gauge 30" Hg - 0-30 or 0-30 Red Line 0 - 60 0-200 0-200 0-600	0 - Plugged R - Pipe away relief valve	0 - None (1/4" NPT female) V - Diaphragm Valve	000 - None (1/4" NPT female) 280 - Medical Breathing Mixtures 300 - Acetylene 320 - Carbon Dioxide 326 - Nitrous Oxide 346 - Zero Air, Compressed Air 350 - Hydrogen* 510 - Acetylene 540 - Oxygen 580 - Helium, Nitrogen, Argon 590 - Zero Air

* CGA 350 available only with relief valve