

STAINLESS STEEL HIGH PURITY 2-STAGE REGULATOR

Series 3500

DESCRIPTION

The Series 3500 two stage regulators are designed and constructed for both high purity and general purpose applications. While compact in design these regulators provide outstanding performance, comparable to most larger diaphragm competitive models. They are an excellent choice for use with ultra high purity gases or gas mixtures having a full cylinder pressure of 1000 psig or more. They are rugged and versatile enough for the laboratory or plant.

FEATURES

- High purity diffusion resistant, metal diaphragm construction on both stages.
- Encapsulated seats on both stages.
- Diffusion resistant, stainless steel diaphragm packless control valve installed on outlet as standard.
- Designed to pass an inboard helium leak-rate test of 1×10^{-9} cc per sec.
- All parts ultrasonically cleaned prior to assembly.
- Optional interstage safety relief valve available.

APPLICATIONS

The 3500 Series regulators are ideal for critical pressure reduction applications, where the precise control of pressure or flow is required. They are also very useful for controlling the pressure of gas mixtures containing corrosive gases, such as ammonia, hydrogen sulfide, sulfur dioxide, and low levels of the corrosive halogen gases, like chlorine.

SPECIFICATIONS

Max. Inlet Pressure: 3000 psig Operating
Temp. Range: -40° to +185° F.
Flow Coefficient (C_v): 0.08 standard, 0.2 optional**
Inlet and Outlet: 1/4" NPT female
Delivery Pressure Rise: 0.02 psig max. per 100 psi inlet pressure decay.

HOW TO ORDER***

Model Number	Del. Press. Range psig	Del. Press. Gauge psig	Inlet Press. Gauge psig
3501-10-CGA*	5-10	0-15	0-3000
3501-25-CGA*	5-25	0-30	0-3000
3501-50-CGA*	5-50	0-100	0-3000
3501-100-CGA*	10-100	0-200	0-3000
3501-250-CGA*	25-250	0-400	0-3000
3501-500-CGA*	100-500	0-1000	0-3000

*Specify CGA Connection Number when ordering.

**Add "HF" to basic model number (i.e. 3501 HF-25-CGA).

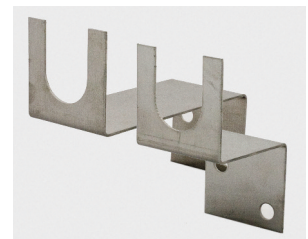
***For panel mounting bonnet add "PM" to base number (i.e., 3501PM-50-CGA).

Warning: A Purge assembly (see pages 86 and 87) is strongly suggested when using the above regulators with any corrosive gas.



MATERIALS OF CONSTRUCTION

Body: 316 stainless steel Poppets:
316 stainless steel Nozzles: 316
stainless steel Poppet Spring:
Inconel®
Seat: 1st stage - Teflon®
2nd stage - Teflon®
Diaphragm: stainless steel
Diaphragm Seal: Teflon®
Inlet Filter: stainless steel
Bonnet: nickel plated aluminum
Gauges: 316 stainless steel
Knob: aluminum - black anodized



EZ Mounting Brackets (see page 91).

OUTLET OPTIONS

	P/N Suffix
No Outlet Valve	NV
1/4" Compression Fitting	T4F
1/8" Compression Fitting	T2F
1/4" NPT Male	P4M
1/4" Hose Barb	4HB