

## PR-1 Series



The PR-1 Series is a versatile specialty pressure reducing control valve designed to fulfill a wide range of needs in instrumentation sample systems and other applications such as semiconductor processing gases. The many features of the PR-1 make it ideal for a wide range of applications controlling pressures at low to moderate flows in gas or liquid service. 316L stainless steel is used to facilitate welded connections. Stainless steel caps and adjusting screws prevent atmospheric corrosion and maintain appearance. The internal body surface finish is less than 25 Ra as standard. This,

coupled with electropolishing, allows easier cleaning and potentially less particle contamination in the flow stream.

Four different seat materials, three alternate orifice sizes and six pressure control ranges with stainless steel diaphragms offer the user a wide spectrum of capabilities for pressure and flow control.

- Gas or liquid service
- 316L stainless steel construction
- Electropolished body with better than 25 Ra finish in diaphragm cavity
- 20 micron inlet filter
- Bubble tight shutoff
- Available Cv's from 0.025 to 0.50. A Cv of 0.06 is standard.
- Outlet pressure ranges are 10, 25, 50, 100, 250, 500 and 750 psig
- Proof pressure is 2 times maximum working pressure
- Burst pressure is 4 times maximum working pressure
- Weight: 1.9 lbs (0.86 kg)
- Mounting style is surface or panel (see Outline and mounting dimensions)

# Maximum Temperature & Operating Inlet Pressures

Seat Material	Maximum Temperature		Maximum Operating Inlet Pressure
Tefzel®	150° F (66° C)	@	3600 psig (24.82 MPa)
High Density PTFE	150° F (66° C)	@	3600 psig (24.82 MPa)
CF PTFE	175° F (80° C)	@	3600 psig (24.82 MPa)
PCTFE	175° F (80° C)	@	6000 psig (41.37 MPa)
Polyimide	500° F (260° C)	@	3600 psig (24.82 MPa)
	175° F (80° C)	@	6000 psig (41.37 MPa)
PEEK	500° F (260° C)	@	3600 psig (24.82 MPa)
	175° F (80° C)	@	6000 psig (41.37 MPa)