

Pressure Regulators



Valcor Engineering Corporation

DESCRIPTION

Valcor produces both piston and diaphragm sensing pressure regulators. Our pressure regulators provide stable outlet pressure with varying inlet pressure and flow demand. Spring-loaded and dome-loaded regulators are available in self-relieving or non-relieving designs. Self-relieving regulators are capable of maintaining more accurate pressure control, as they can relieve excess downstream pressure. Non-relieving regulators are typically used in a continuously flowing application, or when the process media is toxic or corrosive. A wide range of available elastomer and lip seal soft goods are available.

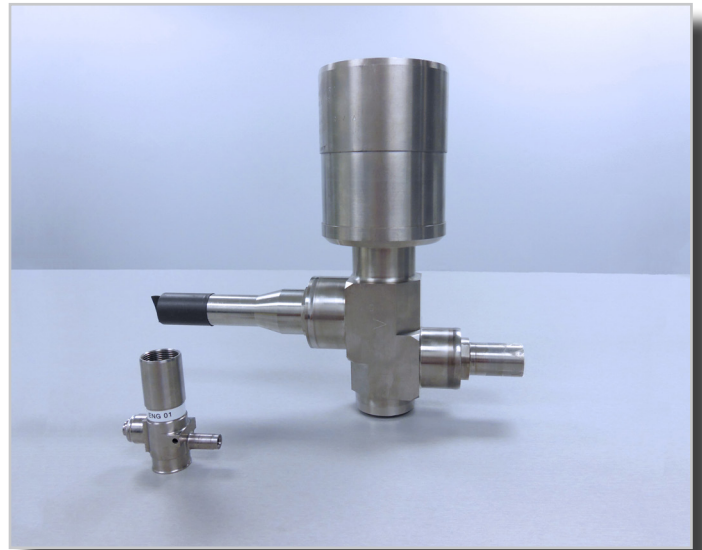
Valcor also offers absolute pressure regulators (for extremely low downstream pressure control) that utilize a bellows-sensing construction. The bellows provides a leak-tight pressure boundary seal to eliminate the potential for fugitive emissions, as well as possibility of ambient environment media contamination.

APPLICATION

Pressure regulators are used in propulsion systems for launch vehicles, missiles, and spacecraft. They provide stable control pressure for pressurant gases like GHe and GN₂. Liquid applications include coolant system control on spacecraft.

FEATURES

- Constructed from lightweight materials
- Constant outlet pressure over a wide range of supply pressures and flow rates
- Temperature ranges of -40°F to +160°F
- Designed for air, GHe, GN₂ and other non-corrosive gases
- Ported and manifold mount connections available
- Extensive configurable body and seal material combinations
- Fully customizable for your application



Custom designs are our specialty. Contact us today to see how we can help on your next project.

Valcor Engineering Corporation
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www.valcor.com

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Valcor specializes in custom designs.
Below are just some examples of solutions we
have created in the past for our customers.

Examples	Operating Fluid	Inlet Pressure Range	Outlet Pressure	Flow Rate	Weight	Body Material
V4000-117-1-W	Inert Gas	75-200 PSIA	12.8-14.7 PSIA	.034" ESEO	.50 lbs	Aluminum
V4000-128-W	Xe	80-3,200 PSIA	33-41 PSIA	18-478 SCCM	.48 lbs	Stainless Steel
V4000-96-W	H ₂ O	121 PSIG	81.6-97.3 PSIA	.010" ESEO	.80 lbs	Stainless Steel
V4000-202-W	H ₂ O, GHe, GN ₂ , IPA	121 PSIA	89.5 to 97.1 PSIA	2.6 lb/hr	1.0 lbs	Stainless Steel
V4000-239-W (dual stage)	GN ₂	150-1,800 PSIG	9-13 PSIA	0.06 lb/min	2.1 lbs	Aluminum
V4000-230-W (dual stage)	GHe	500-4,500 PSIG	440-500 PSIG	35 SCFM	7.5 lbs	Aluminum
V4000-248-W (dual stage)	GN ₂ , CH ₄ , O ₂	600-3,600 PSIG	125 PSIG	80 SCFM	7.5 lbs	Aluminum
V4000-244-W	GHe	800-6000 PSIA	500 PSIA	.320" ESEO	6.5 lbs	Stainless Steel
V4000-189-W	GHe	1,800-10,000 PSIG	1,100-1,375 PSIA	1.5 - 120 in ³ /sec	6.3 oz	Titanium
V4000-226-1-W	GHe	2,600-10,000 PSIA	2,100-2,200 PSIA	1.5 lb/sec	11 lbs	Titanium
V4000-252-W	Kr, Ar, Xe, GN ₂ , GHe	4,500 PSIG	10-40 PSIG	.002 ESEO	.50 lbs	Aluminum
V4000-250-1-W (dual stage)	GN ₂	5,500-1,650 PSIA	1,350-1,650 PSIA	.82 ESEO	180 lbs	Stainless Steel

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