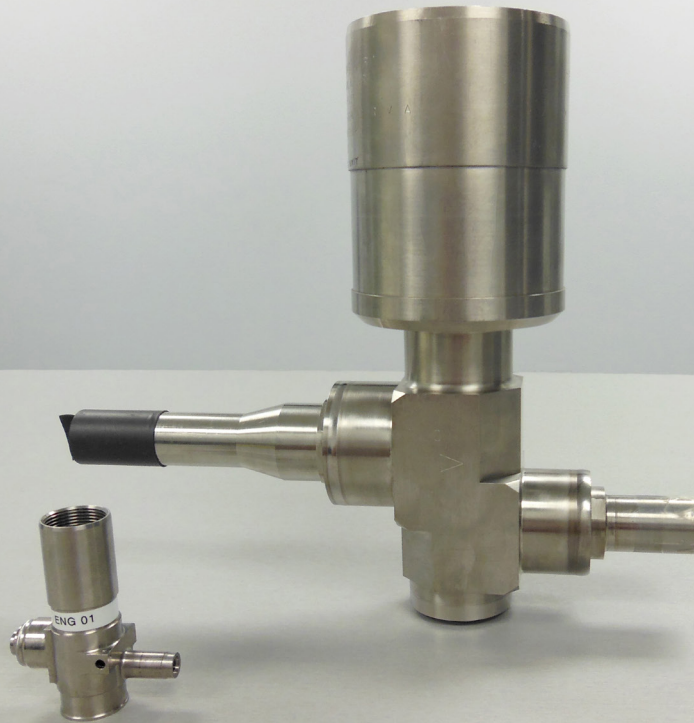


# Pressure Regulators

Valcor Aerospace



## DESCRIPTION

Valcor's pressure regulators provide stable outlet pressure when supplied with a varying inlet pressure. The regulators are all mechanical and are available as pressure reducers (without integral pressure relief) or pressure regulators (that contain an internal relief capability) that provide a tighter outlet pressure band. Valcor designs and manufactures bellows sealed regulators for "absolute" pressure control and traditional o-ring (and/or lip seal) style regulators.

## APPLICATION

Valcor pressure regulators are found in launch vehicle propulsion systems, and missile & spacecraft propulsion systems, for the accurate control of pressurant (GHe, GN<sub>2</sub>, other inert gases) for the propulsion system. Valcor has also manufactured liquid pressure regulators for the control of fluids used in cooling systems onboard spacecraft.

## FEATURES

- Constructed from lightweight materials
- Plug-in designs or custom bodies
- Constant outlet pressure over a wide range of supply pressures and flow rates
- Temperature ranges of -40°F to +160°F
- Available medias include: air, GN<sub>2</sub> and other non-corrosive gases
- Flow rates up to 240 SCFM
- Lengthy pedigree of successful missions.



## Valcor Aerospace Pressure Regulators

### Brief Listing of Valcor's Qualified Aerospace Pressure Regulators

Valcor Part No.	Operating Fluid	Inlet Pressure Range	Outlet Pressure	Flow Rate	Weight	Body Material
V4000-189-W	GHe	1,800-10,000 PSIG	1,100-1,375 PSIA	1.5 - 120 IN <sup>3</sup> /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 LB	Titanium
V4000-202-W	H <sub>2</sub> O, Ghe, GN2, IPA	121 PSIA	89.5 to 97.1 PSIA	2.6 LB/HR	1.0 LB	304L
V4000-117-1-W	Inert Gas	75-200 PSIA	12.8-14.7 PSIA	.034" ESEO	.50 LB	Aluminum
V4000-96-W	Water	121 PSIG	81.6-97.3 PSIA	.010" ESEO	.8 LB	Stainless Steel
V4000-128-W	Xenon	80-3,200 PSIA	33-41 PSIA	18-478 SCCM	.48 LB	Stainless Steel