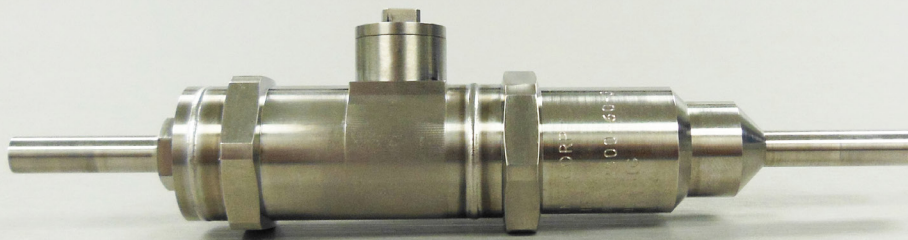


Check Valves

Valcor Aerospace



DESCRIPTION

Valcor check valves are specifically designed for spacecraft applications where assurance against the backward flow of propellants (or toxic fluids/gases) back upstream is required. Valcor check valves utilize our proprietary technology that has proven to virtually eliminate the typical check valve problems of chatter and instability. Optional seal materials (that are compatible) are available for propellants (fuels and oxidizers) and coolants.

APPLICATION

Typical applications for Valcor check valves are spacecraft propulsion systems, where compatibility with hydrazine and/or nitrogen tetroxide vapors is required. Additional applications are cooling systems that use ammonia.

FEATURES

- Chatter Free Operation
- Low Pressure Drop
- Tight Reverse Leakage
- All Welded Construction for Zero External Leakage
- Wide Service Temperature Ranges
- High Operating Pressures
- Low Weights



AEROSPACE CHECK VALVES

Brief Listing of Valcor's Qualified Aerospace Check Valves

Single Valve

Valcor Part No.	Operating Fluid	Cracking Pressure	Maximum Design Pressure	Flow Rate	Weight	Body Material
932596-W	Air, GN ₂ , GHe	2-8 PSID	3000 PSIG	1/4" Fitting	0.04 lb	Aluminum
V2300-60-W	MMH, NTO, GN ₂ , GHe, IPA	2 PSID	285 PSIG	Cv > 0.50	0.25 lb	Titanium
V2300-74-W	MMH, NTO, GN ₂ , GHe, IPA	1.5 PSID	715 PSIG	ESEO 0.285	0.25 lb	Titanium
V2300-35-W	NH ₃	0.3 PSID	430 PSIG	Cv > 0.60	0.30 lb	Titanium

Dual Valve (Series Redundant)

Valcor Part No.	Operating Fluid	Cracking Pressure	Maximum Design Pressure	Flow Rate	Weight	Body Material
V2300-60-3-W	MMH, NTO, GN ₂ , GHe, IPA	< 8 PSID	2600 PSIG	Cv > 0.10	< 1.0 lb	Titanium
V2300-82-1-W	MMH, NTO, GN ₂ , GHe, IPA	< 8 PSID	2600 PSIG	Cv > 10.4	< 2.0 lb	Titanium
V2300-82-W	MMH, NTO, GN ₂ , GHe, IPA	< 8 PSID	2600 PSIG	Cv > 10.4	< 2.0 lb	Titanium
V2300-60-2-W	MMH, NTO, GN ₂ , GHe, IPA	< 5 PSID	1000 PSIG	Cv > 0.10	< 1.0 lb	Titanium