

Check Valves



Valcor Engineering Corporation

DESCRIPTION

Check valves prevent the backflow of process media in gas and liquid systems. Our proprietary technology provides chatter free, stable performance and are well-suited for the extreme vibration, temperature, and cycle life requirements found in the most severe flight and ground-based operating conditions. Their compact size and low weight allow these check valves to be used in the tightest space available. Their all-welded construction eliminates external leakage. They are available in single redundant valves assemblies. Available soft goods include polymeric or elastomeric seats and seals.

APPLICATION

Check valves are used in aircraft fuel, hydraulic and pneumatic systems as well as spacecraft propellant systems. They also have applications in ammonia-based cooling systems. Our check valves provide stable operation under high vibration conditions and large temperature extremes.

FEATURES

- Maximum Operating Pressure: 3000 PSI
- Leak Rate: Internal is 5 scc/hr; External is 0 cc/min at 3000 PSIG
- Temperature: -40°F to +160°F
- Dependable and tight crack to reseal pressures
- Cracking pressures as low as 0.3 PSID
- All-welded construction eliminates external leakage
- Extensive configurable body and seal material combinations
- Redundant valves assemblies available
- Wide range of cracking pressures and flow rates
- Chatter free design
- Fully customizable for your application



Contact us today to see how we can help on your next project.

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

SINGLE VALVE

Valcor Part No.	Operating Fluid	Cracking Pressure	Maximum Design Pressure	Cv	Weight	Body Material
V2300-60-W	MMH, NTO, GN ₂ , GHe, IPA	<2 PSID	285 PSIG	0.50	0.25 lb	Titanium
V2300-74-W	MMH, NTO, GN ₂ , GHe, IPA	<1.5 PSID	715 PSIG	1.5	0.25 lb	Titanium
V2300-35-W	NH ₃	<0.3 PSID	430 PSIG	0.60	0.30 lb	Titanium

DUAL VALVE (SERIES REDUNDANT)

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