

Fill & Drain Service Valves



Valcor Engineering Corporation

DESCRIPTION

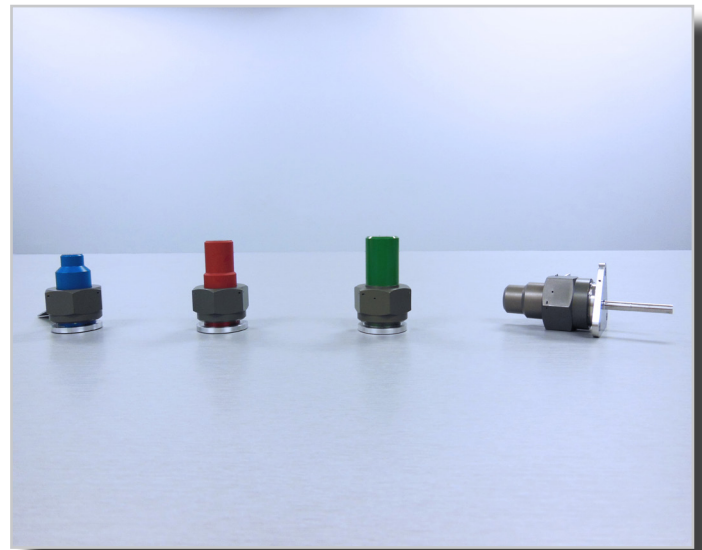
Our metal-to-metal seated 2-way fill and drain valves are designed to maintain extremely low internal and external leak rates, while capable of high cycle life. The wetted materials are compatible with typical propellants, including: hydrazine, nitrogen tetroxide, monomethyl hydrazine, and ammonia, as well as pressurants (inert gases). A wide range of mounting styles, end connections, body and seal options are available. They are custom designed to your specific requirements.

APPLICATION

These valves are used in spacecraft and launch vehicle systems for propellant loading and venting, and pneumatic pressure vessel charging and venting. They are also used in pressurant systems that are part of the reaction control system (RCS) and attitude control system (ACS) where high vibration conditions and large temperature extremes are typically found.

FEATURES

- Metal to metal seating for maximum cycle life and compatibility
- Extensive body, trim, and seal options available
- Extremely low internal and external leak rate of $<1 \times 10^{-6}$ scc/sec He
- Triple redundant external seals
- High pressure and high flow configurations
- Optional color-coded covers, bodies, and lanyards available
- 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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Fill & Drain Service Valves



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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.

Valcor Part No.	Inlet	Outlet	Body Material	Media	Operating Pressure
V24000-01-1-W	10-32 UNJF	Flange	Aluminum	GN ₂ , GHe	1,050 psi
V24000-02-1-W	AS4395-G-02	Flange	Aluminum	GN ₂ , GHe, MMH	1,050 psi
V24000-03-1-W	AS4395-G-03	Flange	Aluminum	GN ₂ , GHe, NTO	1,050 psi
V24000-04-1-W	1/4-28 UNJF	0.1875" tube	Inconel 625	GN ₂ , GHe	10,000 psi
V24000-10-W	1/4-28 UNJF	0.1875" tube	Inconel 625	GN ₂ , GHe	10,000 psi
V24000-11-W	AS4395-G-02	0.437" tube	Aluminum	GN ₂ , GHe, MMH	1,400 psi
V24000-12-W	AS4395-G-03	0.437" tube	Aluminum	GN ₂ , GHe, NTO	1,400 psi
V24000-15-W	AS4395-G-03	0.25" tube	Titanium	GN ₂ , GHe	4,600 psi
V24000-15-1-W	AS4395-G-03	0.25" tube	CRES 304L	GN ₂ , GHe, NTO, MMH	4,300 psi
V24000-16-W	AS4395-G-03	0.25" tube	Titanium	GN ₂ , GHe	4,600 psi
V24000-17-W	AS4395-G-04	0.25" tube	Titanium	GN ₂ , GHe, MMH	315 psi
V24000-17-1-W	AS4395-G-04	0.25" tube	CRES 304L	GN ₂ , GHe, MMH	300 psi
V24000-18-W	AS4395-G-04	0.375" tube	Titanium	GN ₂ , GHe, MMH	315 psi
V24000-18-1-W	AS4395-G-06	0.375" tube	Titanium	GN ₂ , GHe, Ammonia	428 psi
V24000-19-W	AS4395-G-05	0.25" tube	Titanium	GN ₂ , GHe, NTO	315 psi
V24000-19-1-W	AS4395-G-05	0.25" tube	CRES 304L	GN ₂ , GHe, NTO	300 psi
V24000-20-W	AS4395-G-05	0.375" tube	Titanium	GN ₂ , GHe, NTO	315 psi
V24000-21-W	AS4395-G-03	0.25" tube	Titanium	GN ₂ , GHe	428 psi
V24000-31-W	AS4395-G-03	0.25" tube	Titanium	GN ₂ , GHe	4,500 psi
V24000-32-W	AS4395-G-04	0.25" tube	Titanium	GN ₂ , GHe, MMH	360 psi
V24000-33-W	AS4395-G-05	0.25" tube	Titanium	GN ₂ , GHe, NTO	360 psi
V24000-34-W	AS4395-G-04	0.25" tube	Titanium	GN ₂ , GHe, NTO	300 psi
V24000-35-W	AS4395-G-02	AS4320-05	Inconel 625	GN ₂ , GHe	3,000 psi
V24000-36-W	AS4395-G-03	0.25" tube	Titanium	GN ₂ , GHe, TEA, TEB	1,200 psi
V24000-38-W	AS4395-G-04	0.25" tube	Titanium	FC-72	360 psi
V24000-58-W	AS1098-G-08	0.50" tube	Titanium	GN ₂ , GHe, MMH	900 psi
V24000-59-W	A1098-G-10	0.50" tube	Titanium	GN ₂ , GHe, NTO	900 psi
V24000-61-W	AS4395-G-03	0.25" tube	Inconel 625	GN ₂ , GHe	10,000 psi
V24000-61-1-W	AS4395-G-03	0.25" tube	Inconel 625	GN ₂ , GHe	10,000 psi
V24000-62-W	AS4395-G-04	0.25" tube	Titanium	GN ₂ , GHe, MMH	400 psi
V24000-62-1-W	AS4395-G-04	0.25" tube	Titanium	GN ₂ , GHe, MMH	400 psi
V24000-63-W	AS4395-G-05	0.25" tube	Titanium	GN ₂ , GHe, MMH	400 psi
V24000-63-1-W	AS4395-G-05	0.25" tube	Titanium	GN ₂ , GHe, MMH	400 psi
V24000-63-2-W	AS4395-G-04	0.25" tube	CRES 316L	GN ₂ , GHe, MMH	320 psi
V24000-64-W	AS4395-G-03	0.25" tube	CRES 316L	GN ₂ , GHe	1,300 psi
V24000-67-W	AS4395-G-03	0.25" tube	Titanium	GN ₂ , GHe, N ₂ H ₄	4,700 psi
V24000-72-W	1/4-28 UNJF	0.1875" tube	Inconel 625	GN ₂ , GHe	10,000 psi
V24000-73-W	AS4395-G-04	0.25" tube	CRES 304L	GN ₂ , GHe, MMH	300 psi
V24000-74-W	AS4395-G-05	0.25" tube	CRES 316L	GN ₂ , GHe, N ₂ H ₄	360 psi
V24000-78-W	AS1098-G-08	0.50" tube	Titanium	GN ₂ , GHe, MMH	2,600 psi
V24000-79-W	AS1098-G-10	0.50" tube	Titanium	GN ₂ , GHe, NTO	2,600 psi
V24000-97-W	AS4395-G-03-LH	0.50" tube	Inconel 718	GN ₂ , GHe	4,800 psi
V24000-98-W	AS4395-G-03	0.375" tube	Inconel 718	GN ₂ , GHe, RP-1	4,800 psi
V24000-99-W	AS4395-G-06-LH	0.375" tube	CRES 316L	GN ₂ , GHe, RP-1	1,850 psi
V24000-100-W	AS4395-G-06	0.75" tube	CRES 316L	GN ₂ , GHe, 90% H ₂ O ₂	1,850 psi
V24000-102-W	1/4-28 UNJF	0.1875" tube	Inconel 625	GN ₂ , GHe	10,000 psi

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

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