

Standard SVF valves, with no special preparation can effectively be used in vacuum service down to 20 microns. When Higher Vacuum service is required, valves are specially prepared to be used down to 10^{-6} mm of mercury.

Valves for Higher Vacuum service, would require to have all the valve components, specially cleaned, assembled, tested, bagged and sealed in polyethylene bags with silica gels and clearly marked for Vacuum Service.

Listed below are vacuum ratings for both standard and high vacuum SVF valves:

POUNDS PER SQUARE INCH (P.S.I.) ABSOLUTE	INCHES OF MERCURY ABSOLUTE	Torr (MM OF HG) ABSOLUTE	MICRONS (MM OF HG) (Torr X 1000)	VALVE APPLICATION
14.7	29.92	760	760,000	USE STANDARD VALVE NO SPECIAL PREPARATION
1	2.04	51.7	51,700	
0.49	1	25.4	25,400	
0.0004 or 4×10^{-4}	0.0008 or 8×10^{-4}	20 or 2×10^{-2}	20,000	
V0.0193	0.0394	1	1,000	USE HIGH VACUUM VALVE
0.000019	0.000039	0.001	1	

1 TORR = 1 millimeter of mercury (mm of Hg).

1 MICRON Hg = .001 millimeter of mercury.

LOW VACUUM = 760 TORR TO 200 TORR.

MEDIUM VACUUM = 200 TORR TO 1 TORR.

HIGH VACUUM = Down to 10^{-6} TORR (0.000001 mm Hg).

The normal practice of SVF Flow Controls is not to supply certification of actual vacuum test.

These can be supplied at additional cost by obtaining tests at an independent testing facility. In such cases, it is important to determine the degree of vacuum required to be held in what type of unit and maximum permissible leakage rate.