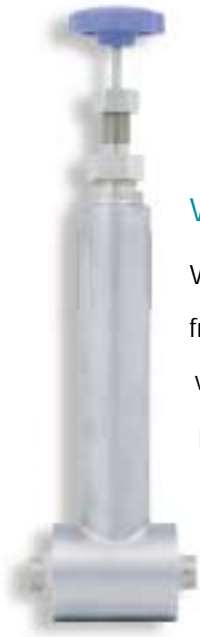


Vacuum Insulated Pipe Valves



T-Pattern vacuum insulated globe valve

Vacuum Insulated Valves:

Vacuum insulated valves are recommended when the system efficiency and elimination of frost, ice and moisture are essential. The initial cost is greater for the vacuum insulated valve option, but the return on investment is less than 1 year via the savings it adds to the piping system. It not only reduces product loss, but also maintains the quality of liquid from the bulk storage, due to the vacuum insulation not allowing the additional heat to enter the liquid through the valve. The non vacuum insulated valve is a direct heat path to the liquid. If a non vacuum insulated valve is incorporated into the system at

any point, the liquid after leaving the valve has picked up additional heat, therefore lessening the amount of cooling produced by the liquid. Vacuum insulated valves also offer maintenance free operation. There is no presence of frost or moisture when using vacuum insulated valves. Non vacuum insulated valves will form ice build-up and condensation causing moisture to drip onto floors or ceiling tiles. This also presents a safety concern for slipping as well as an extremely cold surface that a worker may come in contact with. Vacuum insulated valves eliminate the need to foam insulate the valve. This is a very tedious maintenance task that must be repeated several times a year.

T-pattern valves can only be used in the horizontal position. The convenient feature that the Y-pattern valve offers is that it can be used in the vertical as well as the horizontal position. This makes it user friendly at drop points to equipment.

Non Insulated Valves:

Non insulated valves are recommended for applications in which the presence of ice and moisture are not critical of system operation. The degree of ice and moisture can be minimized by implementing internal traps into the design of the piping system. By implementing internal traps into the piping system, the liquid is not in contact with the non insulated valve, but rather is kept trapped in the vacuum insulated line just above the point in which the trap is located. This in turn results in less product loss and a moisture free valve, when not in use. The frequency of valve use will affect the amount of moisture and ice formation. Non insulated valves offer a low cost alternative to the vacuum insulated valves for a trade off of lost product and poor appearance.

Actuators:

Electric and pneumatic actuators are available on any of the valves. Please specify type and if normally open or closed operation.



Y-Pattern vacuum insulated globe valve



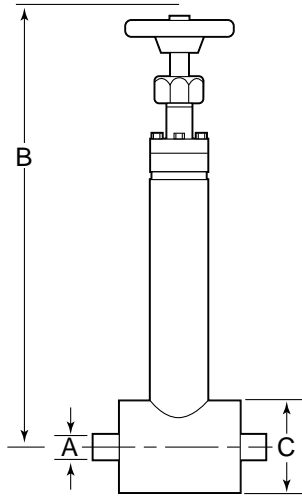
T-Pattern non-vacuum insulated extended stem globe valve



Valve Specifications

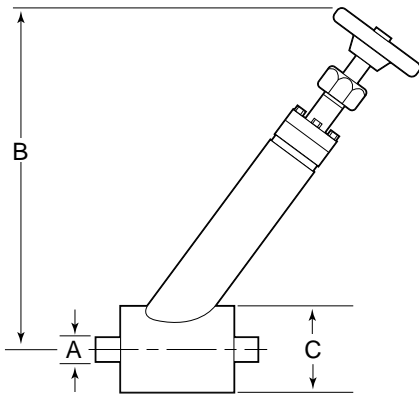
Ranges*: Operating Temperature -456°F to +300°F
 Operating Pressure 275 PSIG
 Proof of Pressure 225 PSIG (ambient)

* Does not apply to non-vacuum insulated pipe globe valves



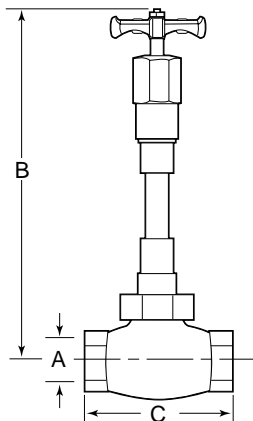
T-Pattern Vacuum Insulated Globe Valve

A (Size)	B	C	CV	BTU/Hr
1/2" PS	14.0	2.38	5.9	4.5
3/4" PS	16.5	2.88	8.0	6.6
1" PS	16.5	3.50	14.0	10.4
1-1/2" PS	19.5	4.00	34.0	21.8
2" PS	22.5	4.50	50.0	27.3
3" PS	28.0	8.62	139.0	68.1
4" PS	36.0	10.75	182.0	79.9



Y-Pattern Vacuum Insulated Globe Valve

A (Size)	B	C	CV	BTU/Hr
1/2" PS	14.0	2.38	6.2	4.5
3/4" PS	12.6	2.88	12.0	6.6
1" PS	12.6	2.88	22.0	10.4
1-1/2" PS	14.7	4.50	47.0	21.8
2" PS	14.7	4.50	96.0	27.3
3" PS	22.0	8.62	162.0	68.1
4" PS	34.0	10.75	288.0	79.9



T-Pattern Non-Insulated Extended Stem Globe Valve

A (Size) NPT	B	C	CV
1/2" NPT	9.15625	3.6875	4.7
3/4" NPT	9.15625	3.6875	6.7
1" NPT	13.0000	4.3125	11.2
1-1/2" NPT	16.5625	5.1875	17.5

Ranges: Operating Temperature -320°F to +165°F
 Maximum Operating Pressure 600 PSI CWP



Chart Applied Technologies., 3505 County Road 42 West, Burnsville, Minnesota 55306-3808 USA
 Customer Service: (888) 877-3093 (US) (952) 882-5000 (Worldwide) Fax: (952) 882-5188