Two Position Spring Return PopTop, Two-Way and Three-Way VT, VS High Close-Off Assemblies

VT/VS Series Valves with High Close-Off Actuator

High Close-Off Valve and Actuator Assemblies				
2-Way Normally Closed				
Catalog Part Number	**Size**	**Type**	**Cv**	**MOPD[a] (PSI)**
VT2211H13A020	1/2”	Sweat	1.0	75
VT2212H13A020			2.5	50
VT2213H13A020			3.5	30
VT2221H13A020		NPT	1.0	75
VT2222H13A020			2.5	50
VT2223H13A020			3.5	30
VT2231H13U020			1.0	75
VT2232H13U020		Rp	2.5	50
VT2233H13U020			3.5	30
VT2251H13A020		SAE	1.0	75
VT2252H13A020			2.5	50
VT2253H13A020			3.5	30
VT2312H13A020	3/4”	Sweat	2.5	50
VT2313H13A020			3.5	30
VT2315H13A020			5.0	25
VT2317H13A020			7.5	20
VT2322H13A020		NPT	2.5	50
VT2323H13A020			3.5	30
VT2325H13A020			5.0	25
VT2327H13A020			7.5	20
VT2332H13U020		Rp	2.5	50
VT2333H13U020			3.5	30
VT2335H13U020			5.0	25
VT2337H13U020			7.5	20
VT2341H13A020		Inv. Flare	1.0	75
VT2342H13A020			2.5	50
VT2343H13A020			3.5	30
VT2415H13A020	1”	Sweat	5.0	25
VT2417H13A020			7.5	20
VT2427H13A020		NPT	8.0	20
VT2437H13U020		Rp	8.0	20
VT2517H13A020	1-1/4”	Sweat	8.0	20

High Close-Off Valve and Actuator Assemblies				
3-Way Normally Closed				
Catalog Part Number	**Size**	**Type**	**Cv**	**MOPD [a] (PSI)**
VT3211H13A020	1/2”	Sweat	1.5	75
VT3212H13A020			3.0	50
VT3213H13A020			4.0	30
VT3221H13A020		NPT	1.5	75
VT3222H13A020			3.0	50
VT3223H13A020			4.0	30
VT3231H13U020		Rp	1.5	75
VT3232H13U020			3.0	50
VT3233H13U020			4.0	30
VT3251H13A020		SAE	1.5	75
VT3252H13A020			3.0	50
VT3253H13A020			4.0	30
VT3312H13A020	3/4”	Sweat	3.0	50
VT3313H13A020			4.0	30
VT3315H13A020			5.0	25
VT3317H13A020			7.5	20
VT3322H13A020		NPT	3.0	50
VT3323H13A020			4.0	30
VT3325H13A020			5.0	25
VT3327H13A020			7.5	20
VT3332H13U020		Rp	3.0	50
VT3333H13U020			4.0	30
VT3335H13U020			5.0	25
VT3337H13U020			7.5	20
VT3341H13A020		SAE	1.5	75
VT3342H13A020			3.0	50
VT3343H13A020			4.0	30
VT3415H13A020	1”	Sweat	5.0	25
VT3417H13A020			7.5	20
VT3427H13A020		NPT	8.0	20
VT3437H13U020		Rp	8.0	20
VT3517H13A020	1-1/4”	Sweat	8.0	20

[a] MOPD = Maximum Operating Pressure Differential

TABLE 2. Options Available: Modify model numbers as shown below.

Options	Select
V_xxxxHx4xxxx	**For Steam use "S".**
VT2xxxH_xxxxx	For Normally Open (2-Way only) use “2”.
VTxxxxHxxx_	**For Terminal Block with End Switch use “01A”.**
VTxxxxHxx_xxx	For Voltage Selection use the following: "A” = 24 Vac, 50/60 Hz “B” = 110 Vac, 50 Hz and 120 Vac, 60 Hz “D” = 208 Vac, 50/60 Hz “T” = 277 Vac, 50/60 Hz “U” = 230Vac, 50 Hz and 240 Vac, 60 Hz.
VTxxxxHxxxxx_	For End Switch use “A”.

Two Position Zone Valves with Actuators, Spring Return
AG, AH Series

Note: For complete part number configuration see the Part Numbering System on page 3.

DIMENSIONAL DATA

Dimensions are in inches (mm).

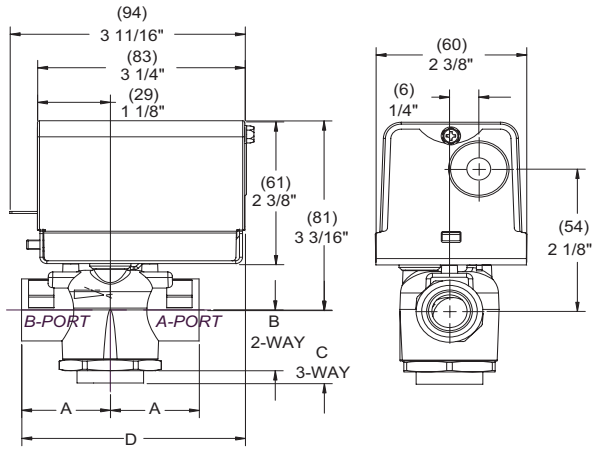


Figure 1 VT/VS Series General Close-off.

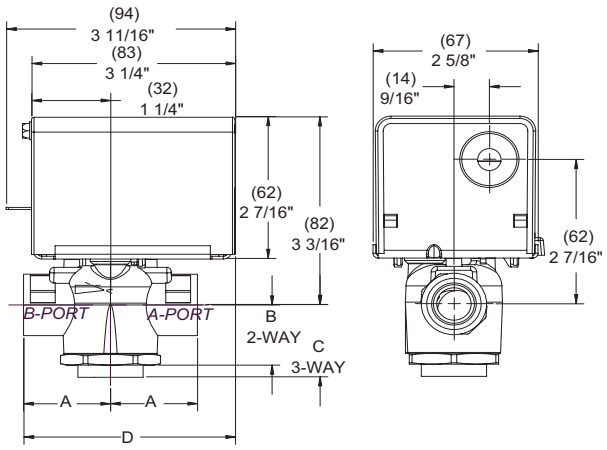


Figure 2 VT/VS Series High Close-off.

TABLE 3. Dimensions - inches (mm).

Valve Body Size	A	B	C	D (General Close-Off)	D (High Close-Off)
1/2" Sweat	1-5/16 (33)	15/16 (23)	1-5/16 (33)	3-5/16 (84)	3-5/8 (92)
3/4" Sweat	1-3/8 (35)	15/16 (23)	1-11/16 (43)	3-3/8 (86)	3-3/4 (95)
1" Sweat	1-11/16 (43)	15/16 (23)	1-11/16 (43)	3-5/8 (92)	4 (102)
1-1/4" Sweat	1-7/8 (47)	1 (25)	1-13/16 (46)	3-11/16 (94)	4-1/8 (105)
1/2" NPT, Rp	1-3/8 (35)	15/16 (23)	1-5/16 (33)	3-3/8 (86)	3-5/8 (92)
3/4" NPT, Rp	1-11/16 (43)	15/16 (23)	1-7/16 (37)	3-5/8 (92)	4 (102)
1" NPT, Rp	1-7/8 (47)	1 (25)	1-11/16 (43)	3-11/16 (94)	4-1/8 (105)
Inverted Flare	See Figure-3 and Figure-4.			4-3/16 (106)	4-7/16 (113)
SAE Flare				See Figure-3 and Figure-4.	

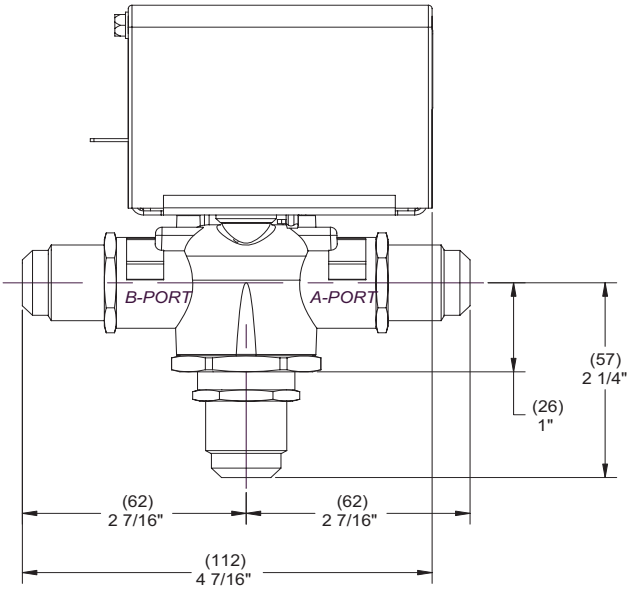


Figure-3 SAE - High Close-Off Style.

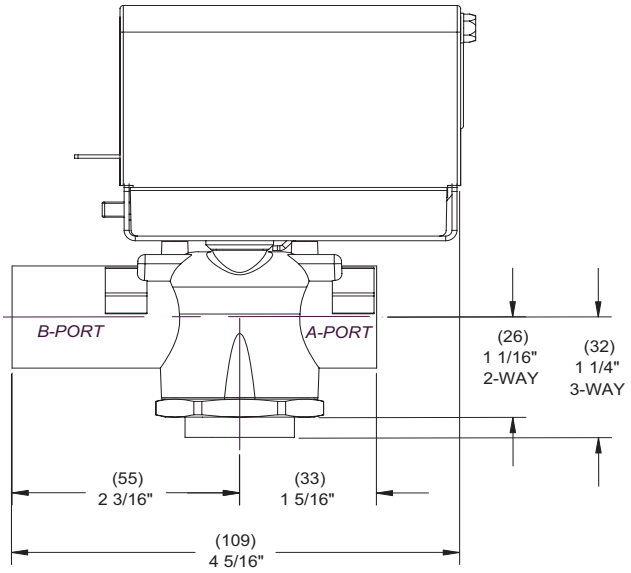


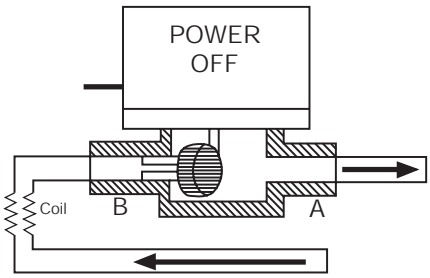
Figure-4 Inverted Flare - General Close-Off Style.

Two Position Zone Valves with Actuators, Spring Return
AG, AH Series

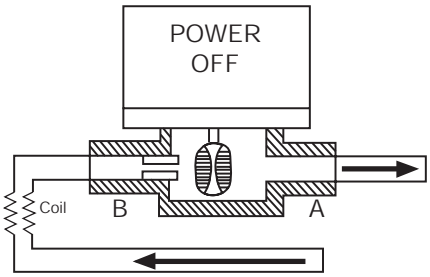
Piping

- Three-way valves always require a normally closed actuator.
- Three-way valves are always closed at B port when no power is applied to motor.
- On power up the valve closes to A port on three-way valves.
- Orient three-way valve body as needed for normally open or normally closed flow through coil.

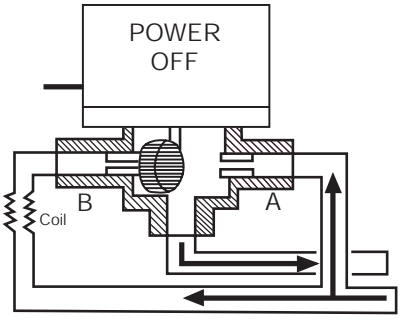
CAUTION: Use in systems which have substantial make-up water (open systems) is not recommended. Follow proper water treatment practices and system procedures. Refer to document F-26080 for Water and Steam EN205 Guidelines.



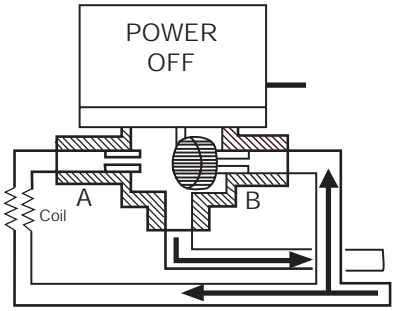
2-Way Valve With Normally Closed Actuator



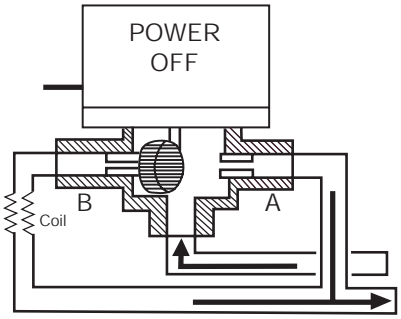
2-Way Valve With Normally Open Actuator



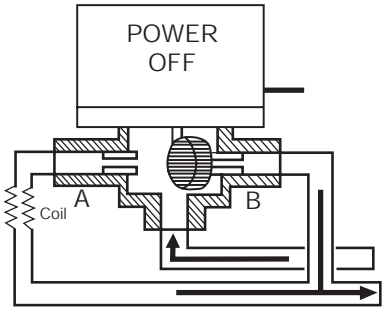
3-Way Valve in Mixing Configuration Normally Closed to the Coil



3-Way Valve in Mixing Configuration Normally Open to the Coil



3-Way Valve in Diverting Configuration Normally Closed to the Coil



3-Way Valve in Diverting Configuration Normally Open to the Coil

Figure 5 Piping Configurations.

Note: Three-way N.O. applications can be achieved when using a N.C. actuator, by piping the valves in reverse. The three-way examples show normally closed actuators.