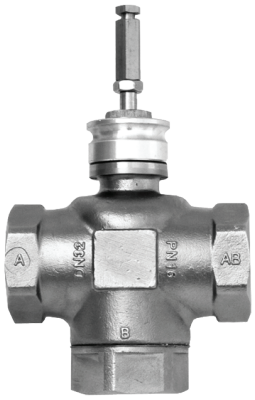
PAXTON
CORPORATION

V43 Series Globe Valves

Sizes ¾" to 2-½"

DATA SHEET



V43 series valves are 3-way control valves used to control the flow of hot water, chilled water and other fluids.

By plugging the bottom B-port, the valve becomes a normally closed 2-way that can used for steam and water. Stem up to close.

See separate documentation for the TVS43 Domestic Tempering Valve package.

Technical Data

Size	¾" to 2-½"
Connection	F NPT - Internal thread
Pattern	3-way mixing
Fluid	Chilled or hot water, potable water, steam
Pressure rating water	250 PSIG
Pressure rating steam	35 PSIG
Max temperature	350F
Flow characteristic	Modified equal percentage
Servicing	Replacement packing kit
Max differential pressure	65 PSIG
Valve stroke	¾"

Materials

Valve body	Stainless steel
Valve stem	Stainless steel
Valve plug	Stainless steel
Valve seat	Stainless steel
Valve packing	PTFE with Viton O-ring

Selection

Model	Size	Cv
V43-020	¾"	7.3
V43-025	1"	11.6
V43-032	1-¼"	18.5
V43-040	1-½"	29.0
V43-050	2"	46.3
V43-065	2-½"	65.0

Suitable Electric Actuators

Non-spring	VM800, VM1500, AME-655
Spring	VM900, AME-658 SU, AME-658 SD

Consult Paxton for pneumatic actuator options.

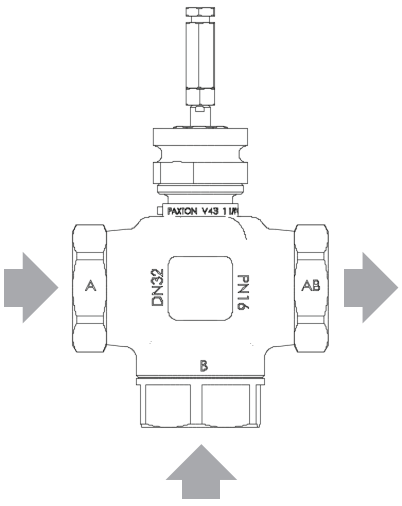
Installation

Flow direction: when piped as a 3-way mixing valve, ports A and B are inlets with AB being the outlet port. As the stem of the valve raises, the B port flows more. As the stem lowers, the A port flows more.

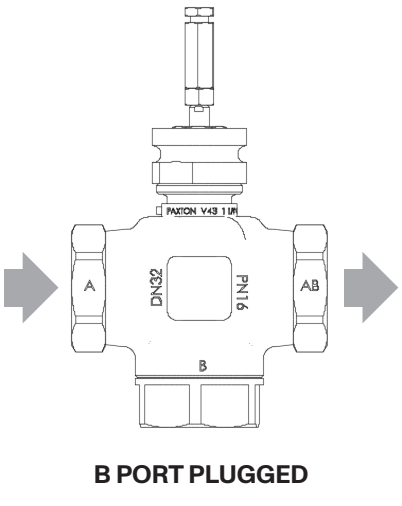
When the B port is plugged, port A is the inlet and AB is the outlet. When the stem raises, the valve closes A to AB.

Note: with proper information about job site conditions, the V43 series can be piped as a diverting valve with AB as the inlet and A and B as outlets. Please consult Paxton before using this in this pattern. Often when planning diverting can be avoided by placing the valve elsewhere in the piping. Mixing valves in general work better in 3-way applications and is advisable.

3-WAY MIXING

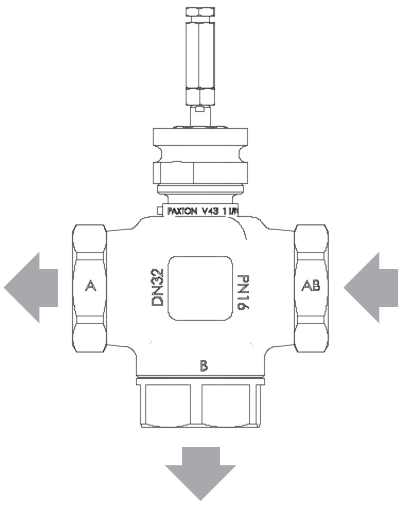


2-WAY

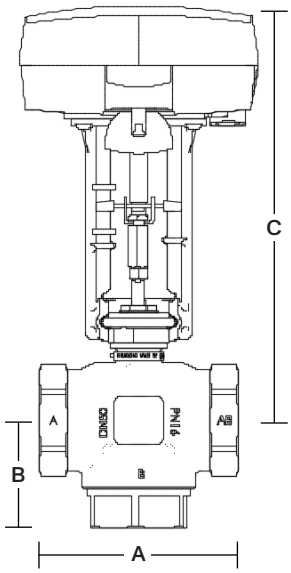


B PORT PLUGGED

3-WAY DIVERTING



Dimensions



	¾"	1"	1-¼"	1-½"	2"	2-½"
A	3-½"	4-½"	4-¾"	5-⅛"	5-¾"	7-⅛"
B	2"	2"	2-½"	2-⅝"	3-⅛"	3-½"
C (VM)	11"	11-¼"	11-½"	11-¾"	12"	12-½"
C (AME)	15-¼"	15-½"	15-¾"	16"	16-½"	16-¾"

Leave 3" clearance above the actuator.

Flow Rates

Flow gpm versus pressure drop psi over an open port

Size	Cv @ 1 psi	2 psi	3 psi	4 psi	5 psi	6 psi	8 psi	10 psi	15 psi	20 psi	25 psi	30 psi
¾"	7.3 gpm	10.8	13.2	15.3	17	18.7	21.6	24.3	29	34	39	43
1"	11.6	16.3	20	23.2	25.5	27.8	32.5	37	45	52	58	64
1-¼"	18.5	26.5	32.2	36.8	41.4	44.8	51.7	58.6	71	83	92	101
1-½"	29	40.2	49.4	57.5	64.4	70.2	81.7	91	112	128	142	157
2"	46.3	65.5	79.3	92	102	112	130	145	178	205	230	252
2-½"	65	91	112	129	145	158	183	204	249	290	324	355