

2. VB-7000 Series 1/2"...2" Globe Valves

VB-7300 1/2"...2" 3-Way Mixing Valves

Mixing Valves

	5/8" OD 45° SAE Flared	Threaded NPT	Union Sweat
3-Way Brass Trim Mixing Valves Body Type ^b			
Series Part Numbers	VB-7312-0-4-	VB-7313-0-4-	VB-7314-0-4-
Pipe Size	1/2" I.D.		1/2"...2"
Stem Flow Action	Stem Up Closes A Port and Opens B Port to the Common AB Port		
ANSI Pressure Class	250 psi (up to 400 psi below 150°F)		
ANSI A Port Seat Leakage ^d	ANSI Class III ^a	Designed to ANSI V with ANSI IV above 35 psi (241 kPa) close off with long term seat leakage dependent on proper water conditioning maintenance of the system.	
ANSI B Port Seat Leakage ^d	ANSI Class III		
Control Media and Temperature	20...281°F (-7...138°C) water (up to 60% glycol/water solution)		
Water Flow Curve	Modified Linear		
Allowable ΔP for water	35 psi (241 kPa) ^a	87 psi (600 kPa) Max. for normal life ^d	
Size	Cv	Kvs	Valve Body Part Numbers
1/2"	2.2	1.9	VB-7312-0-4-02
	4.4	3.8	VB-7312-0-4-04
3/4"	7.5	6.5	VB-7313-0-4-06
			VB-7314-0-4-06
1"	12	10.4	–
	14	12.1	VB-7313-0-4-08
1 1/4"	20	17.3	VB-7314-0-4-08 ^c
1 1/2"	28	24.2	VB-7313-0-4-09
			VB-7314-0-4-09 ^c
2"	36	31.3	VB-7313-0-4-10
	41	35.5	VB-7314-0-4-10 ^c
			VB-7313-0-4-11
			VB-7314-0-4-11 ^c

a,d - To minimize noise, ensure the flow rate in the piping is less than three meters (10ft)/second and the differential pressure is less than 35 psi (241 kPa). Operating within the cavitation zone or an operating differential pressure above 35 psi (241 kPa) may result in additional noise but is acceptable up to 87 psi (600 kPa).

b - The VB-7363-0-4- series has stainless steel trim.

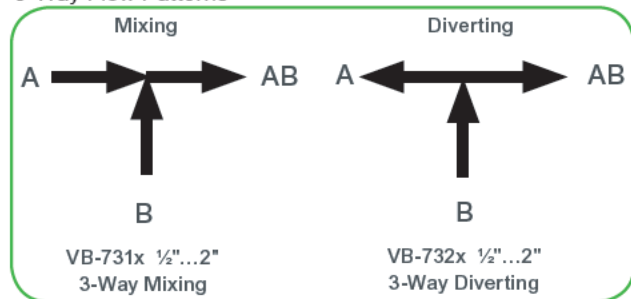
c - These part numbers do not have RoHS compliant nuts and tail pieces.

d - Refer to Seat Leakage Classes table.

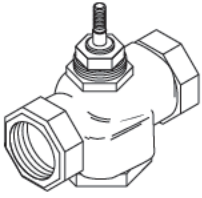
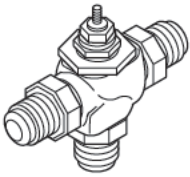
Seat Leakage Classes

ANSI/FCI 70-2 Leakage Class	Maximum Seat Leakage
Class II	0.5% of rated Cv
Class III	0.1% of Rated Cv
Class IV	0.01% of Rated Cv
Class V	0.0005 ml per minute per inch of orifice diameter per psi differential

3-Way Flow Patterns



Diverting and Sequencing Valves

3-Way Brass Trim Diverting and Sequencing Valves Body Types	Diverting Threaded NPT	5/8" OD 45° SAE Flared Sequencing	
			
Series Part Numbers	VB-7323-0-4-	VB-7332-0-4-	
Pipe Size	½"...2"	½" I.D.	
Stem Flow Action	Stem Up Closes A Port and Opens AB Port to the Common B Port	Stem Up Opens B to AB and Stem Down Opens A to AB, Stem Mid Position A and B are Both Closed	
Stem Force Allowed	300 Lbs.		
ANSI Pressure Class	250 psi (up to 400 psi below 150°F)	250 psi (up to 400 psi below 150°F)	
ANSI A Port Seat Leakage ^a	ANSI Class III		
Control Media and Temperature	20...281°F (-7...138°C) water (up to 60% glycol/water solution)		
Water Flow Curve	Modified Linear	Sequencing, Modified Linear	
Allowable ΔP for water	35 psi (241 kPa) Max. for normal Life		
Size	Cv	Kvs	Valve Body Part Numbers
½"	2.2	1.9	–
	4.4	3.8	VB-7323-0-4-04
¾"	7.5	6.5	VB-7323-0-4-06
1"	14	12.1	VB-7323-0-4-08
1¼"	20	17.3	VB-7323-0-4-09
1½"	28	24.2	VB-7323-0-4-10
2"	40	34.6	VB-7323-0-4-11
			VB-7332-0-4-03
			VB-7332-0-4-04
			–

2. VB-7000 Series
½"...2" Globe Valves

a - Refer to Seat Leakage Classes.

Seat Leakage Classes

ANSI/FCI 70-2 Leakage Class	Maximum Seat Leakage
Class II	0.5% of rated Cv
Class III	0.1% of Rated Cv
Class IV	0.01% of Rated Cv
Class V	0.0005 ml per minute per inch of orifice diameter per psi differential

3-Way Flow Patterns

