



VB-7315 Series

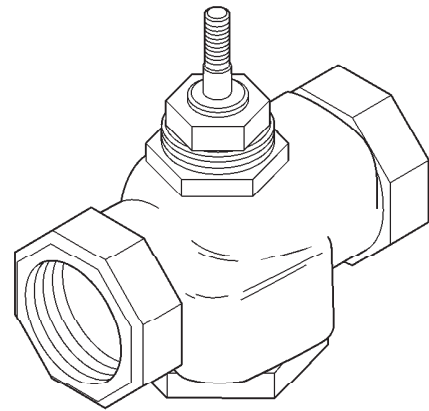
15 mm to 50 mm Screwed R_p Three-Way Mixing Valves General Instructions

Application

VB-7315 series three-way mixing valves control hot or chilled water in heating or air conditioning systems. These valves must be piped with two inlets ("A" and "B" ports) and one outlet ("AB" port). They are used for two-position or proportional control applications. Valve assemblies require an actuator and a valve linkage that must be purchased separately.



Danger: Do not use for combustible gas applications. The VB-7315 series valve packings are not rated for combustible gas applications, and if used in these applications, gas leaks and explosions could result.



Features

- Valve sizes 15 mm to 50 mm
- PN16 nominal pressure; also meets 250 psig pressure rating per ANSI Standards (B16.15-1985) for screwed cast bronze bodies
- Spring-loaded TFE packing
- End fittings Internal Parallel Pipe Thread per ISO 7/1, BS 21, JIS B0203

Applicable Literature

- Siebe Environmental Controls Catalog, F-25683
- Siebe Environmental Controls Cross-Reference Guide, F-23638
- Siebe Environmental Controls Reference Manual, F-21683
- Siebe Environmental Controls Application Manual, F-21335
- Control Valve Sizing, F-13755
- Valve Selection Chart for Water, F-11080
- EN-205 Water System Guidelines, F-26080

SPECIFICATIONS

Table-1 Specifications/Models.

Specifications		Valve Body Series VB-7315-0-4-P
Service		Chilled or Hot Water
Flow Characteristics (Figure-1)		Mixing
Sizes		15 mm to 50 mm
Type of End Fitting		Internal Parallel Pipe Thread per ISO 7/1, BS 21, JIS B0203
Valve Materials	Body	Bronze
	Seat	Bronze
	Stem	Stainless Steel
	Plug	Brass
	Packing	Spring-loaded TFE
	Disc	None
Pressure Class		PN16 (16 Bar) ^a
Allowable Control Media Temperature		-7 to 138°C
Allowable Differential Pressure for Water^b		241 kPa Max. for Normal Life (refer to "Cavitation Limitations on Valve Pressure Drop" on page 6)
Valve Size in mm (R_p)^c	k_{vs} Rating^d	Complete Valve Body Part Number
15 (1/2)	1.9	VB-7315-0-4-2
	3.8	VB-7315-0-4-4
20 (3/4)	6.5	VB-7315-0-4-6
25 (1)	12	VB-7315-0-4-8
32 (1-1/4)	17	VB-7315-0-4-9
40 (1-1/2)	24	VB-7315-0-4-10
50 (2)	35	VB-7315-0-4-11

^a Also meets ANSI Class 250 (Figure-2)

^b Maximum recommended differential pressure. Do not exceed recommended differential pressure (pressure drop) or integrity of parts may be affected. Exceeding maximum recommended differential pressure voids product warranty.

^c R_p = internal parallel pipe thread

^d k_{vs} = m³/h (ΔP = 100 kPa) C_v = k_{vs} x 1.156

Close-off Pressure Rating

The close-off pressure rating is dependent on the size of the valve, valve linkage, and actuator. Consult the **Siebe Environmental Controls Catalog, F-25683**, for close-off ratings.