

Flanged Globe Valves

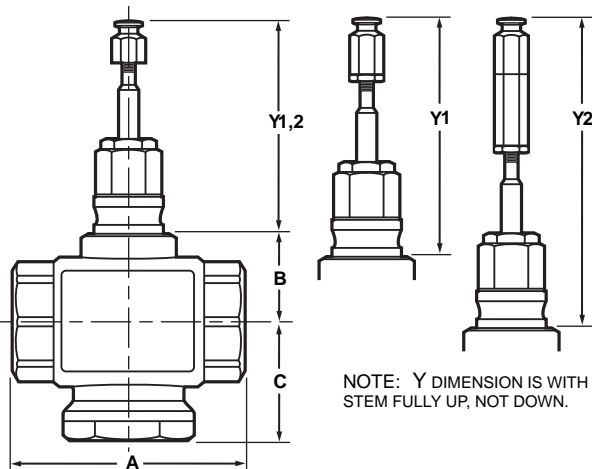
V5013N Three-Way Threaded Globe Valves



The V5013N is a three-way threaded globe valve that controls hot water, cold water, and glycol solutions (up to 50 percent concentration) in heating or cooling HVAC applications. The valves are used for mixing service to direct flow from one or two inlets to a common outlet in two-position or modulating control systems.

- Red brass body with NPT-threaded connections
- Stainless steel stem and brass plug
- Low seat leakage rating, < 0.05%
- Spring-loaded, self adjusting packing
- 50:1 rangeability per VDI/VDE 2173
- Constant total flow throughout full stem travel
- Accurate positioning to ensure state-of-the-art temperature control
- Sizes range from 1/2 inch to 2 inches
- Valves utilize direct mounting, electric or pneumatic valve actuators; Q5001 linkage with Modutrol Motor; or Q5020/Q5022 linkages with Direct Coupled Actuators to operate the valve
- Repack and rebuild kits available for field servicing
- Not suitable for combustible gases

Dimensions in inches (millimeters)



VALVE SIZE	A	B	C	STEM UP	
				Y 1	Y 2 ^a
1/2 (15)	3-1/4 (83)	1-9/16 (39.7)	2-9/16 (65)	4-3/16 (106)	5-15/16 (151)
3/4 (20)	3-1/4 (83)	1-9/16 (39.7)	2-9/16 (65)		
1 (25)	4-1/16 (103)	1-9/16 (39.7)	2-5/8 (66.5)		
1-1/4 (32)	4-3/16 (106)	1-9/16 (39.7)	2-7/8 (72.5)		
1-1/2 (40)	4-3/4 (120)	1-13/16 (46.5)	3 (77)		
2 (50)	5-1/4 (134)	1-13/16 (46.5)	3-5/16 (83.5)		

^a Y₂ WITH STEM EXTENSION FOR MP953C,E (8 IN. ONLY)

M12901A

Valve Type: Globe Valve

Body Pattern: Three-way mixing, A-B-AB porting

Connection Type: Female NPT

Controlled Medium: Chilled or hot water with up to 50% Glycol; not for use with steam or fuels

Leakage Rating: 0.05% of Cv

Maximum Safe Operating Pressure: 217 psi at 248 F (1500 kPa at 120 C)

Maximum Differential for Quiet Water Service: 20 psid (138 kPa)

Maximum Differential Pressure Ratings (Close-off): 240 psi (1655 kPa)

Ambient Temperature Range: 36 F to 248 F water (2 C to 120 C water)

Stem Travel: 3/4 in. (20 mm)

Bonnet Size: 1 3/8 in. (35 mm)

ANSI/ASME Rating: 150

Actuation: Must be purchased separately

Materials

(Body): Red Brass

(Stem): Stainless Steel

(Plug/Ball/Disc): Brass

(Packing): Teflon/EPDM

(Seat):

V5013N1030, 1048: Stainless Steel

V5013N1055, 1063: Integral Brass

V5013N1071, 1089, 1097: Brass

Approvals

CRN Number: 0C0861.9087YTN/0C0861.123

Product Number	Valve Size		Flow Capacity		Flow Characteristic	Valve Action	Used With
	(inch)	DN	(Cv)	(Kv)			
V5013N1030/U	1/2 in.	DN15	2.9 Cv	2.5 kvs	Linear (B-AB); Equal Percentage (A-AB)	Mixing	ML6984/ML7984; Q5020/DCA; Q5001/Modutrol IV Motor; ML7420/ML7421A/ML7425; ML6420,21A,25
V5013N1048/U	1/2 in.	DN15	4.7 Cv	4.0 kvs	Linear (B-AB); Equal Percentage (A-AB)	Mixing	Q5020/DCA; ML6984/ML7984; Q5001/Modutrol IV Motor; ML6420,21A,25; ML7420/ML7421A/ML7425
V5013N1055/U	3/4 in.	DN20	7.3 Cv	6.3 kvs	Linear (B-AB); Equal Percentage (A-AB)	Mixing	ML6984/ML7984; Q5020/DCA; Q5001/Modutrol IV Motor; ML7420/ML7421A/ML7425; ML6420,21A,25
V5013N1063/U	1 in.	DN25	11.7 Cv	10 kvs	Linear (B-AB); Equal Percentage (A-AB)	Mixing	Q5020/DCA; ML6984/ML7984; Q5001/Modutrol IV Motor; ML6420,21A,25; ML7420/ML7421A/ML7425
V5013N1071/U	1 1/4 in.	DN32	18.7 Cv	16 kvs	Linear (B-AB); Equal Percentage (A-AB)	Mixing	ML6984/ML7984; Q5020/DCA; Q5001/Modutrol IV Motor; ML7420/ML7421A/ML7425; ML6420,21A,25
V5013N1089/U	1 1/2 in.	DN40	29 Cv	25 kvs	Linear (B-AB); Equal Percentage (A-AB)	Mixing	Q5020/DCA; ML6984/ML7984; Q5001/Modutrol IV Motor; ML6420,21A,25; ML7420/ML7421A/ML7425
V5013N1097/U	2 in.	DN50	46.8 Cv	40 kvs	Linear (B-AB); Equal Percentage (A-AB)	Mixing	ML6984/ML7984; Q5020/DCA; Q5001/Modutrol IV Motor; ML7420/ML7421A/ML7425; ML6420,21A,25