LEAD FREE*

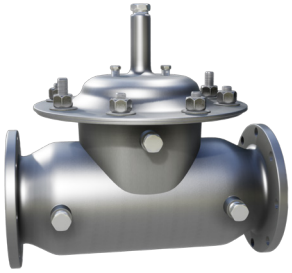
Full Port Stainless Steel Dual Chamber Basic Valve

This Ames ACV is a full port, dual chamber basic valve that incorporates a one-piece disc and diaphragm assembly. This assembly is the only moving part within the valve, allowing it to open or close as commanded by the pilot control system.

When pressure is applied to the upper diaphragm chamber and released from the lower diaphragm chamber, the valve travels to a closed position. When pressure is applied to the lower diaphragm chamber and released from the upper diaphragm chamber the valve travels to a full open position. When pressure is balanced between the upper and lower diaphragm chambers, the valve will hold an intermediate position until commanded to mod late open or closed by the pilot control system.

The Stainless Steel design offers superior corrosion resistance, as well as a lightweight alternative to conventional heavy iron valves. Stainless Steel construction reduces corrosion, reducing diaphragm wear and the frequency and labor costs associated with traditional maintenance repairs.

Ames ACV Main Valves are Lead Free. The Ames ACV piloting system contains Lead Free* components, ensuring all of our configurations are Lead Free compliant.



Flanged Globe

Flanged Angle

Globe Pattern Dual Chamber Basic Valve (900GS)

Angle Pattern Dual Chamber Basic Valve (900AS)

Standard Materials

Body, Cover & Flanges:	304L Stainless Steel (standard) 316L Stainless Steel (optional)
Trim:	316 Stainless Steel
Elastomers:	Buna-N (standard) EPDM (optional) Viton® (optional)
Nut & Spring, Stem:	Stainless Steel
Anti-Scale (Optional):	Xylan Coated Stem and Seat

NSF Certified to NSF/ANSI 61-G

***The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.**

Viton® is a registered trademark of DuPont Dow Elastomers.

Operating Pressure

150# Flanged = 250psi (17.2 bar)

300# Flanged = 400psi (27.5 bar)

Operating Temperature

Buna-N: 160°F (71°C) Maximum

EPDM: 300°F (140°C) Maximum

Viton®: 250°F (121°C) Maximum

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

AMES FIRE & WATERWORKS

A WATTS Brand

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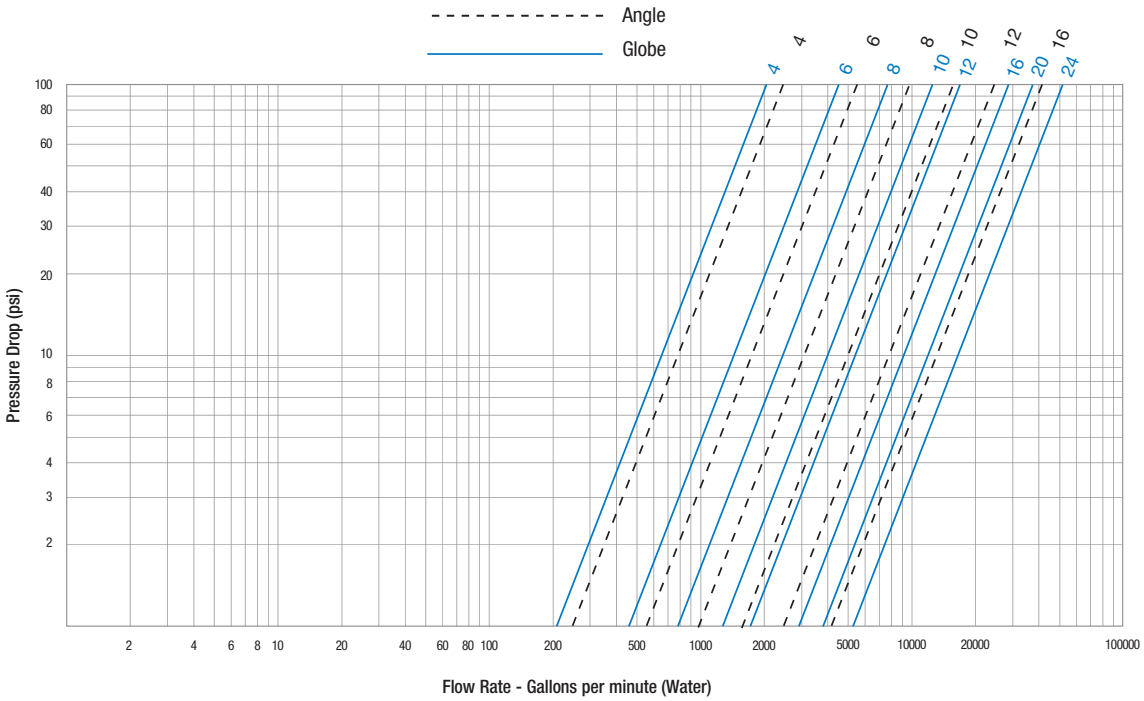
Flow Data

	Valve Size - Inches	4	6	8	10	12	16	20	24
Suggested	Maximum Continuous Flow Rate Gpm (Water)	800	1850	3100	5000	7000	11100	17322	25071
	Maximum Intermittent Flow Rate Gpm (Water)	1000	2300	4000	6250	8900	14100	21652	31339
	Minimum Flow Rate Gpm (Water)	16	17	25	55	70	400	500	650
C_V	Factor GPM (Globe)	161	342	591	1060	1404	2581	3900	5100
	Factor GPM (Angle)	177	561	860	1590	1645	4200		

- Maximum continuous flow based on velocity of 20 ft. per second.
- Maximum intermittent flow based on velocity of 25 ft. per second.
- Minimum flow rates based on a 20-40 psi pressure drop.
- The C_v Factor of a value is the flow rate in US GPM at 60°F that will cause a 1psi drop in pressure.
- C_v factor can be used in the following equations to determine Flow (Q) and Pressure Drop (ΔP):

  Q (Flow) = $C_v\sqrt{\Delta P}$ **ΔP (Pressure Drop) = $(Q/C_v)^2$**

- The C_v factors stated are based upon a fully open valve.
- Many factors should be considered in sizing control valves including inlet pressure, outlet pressure and flow rates.
- For sizing questions including cavitation analysis consult Watts with system details.



Valve Cover Chamber Capacity

Valve Size (in)	4	6	8	10	12	16	20	24
fl.oz.	22	70						
U.S. Gal			1¼	2½	4	9½	18	31

Valve Travel

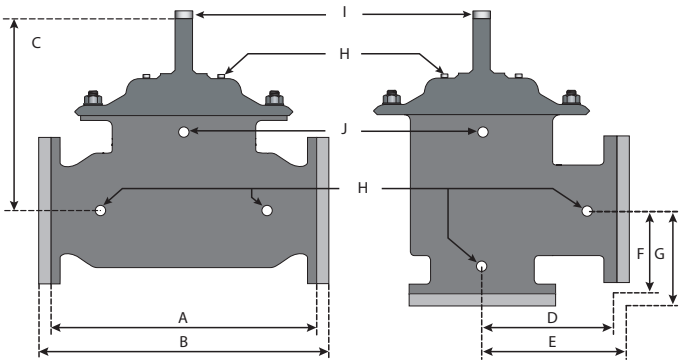
Valve Size (in)	4	6	8	10	12	16	20	24
Travel (in)	1	1½	2	2½	3	4	5	6

NOTICE

Installation: If unit is installed in any orientation other than horizontal (cover up) OR extreme space constraints exist, consult customer service prior to or at the time of order.

Full Port Stainless Steel Dual Chamber Basic Valve

Dimensions



Dimensions

Valve Size	Globe 150#		Globe 300#		Cover To Center		Angle 150#		Angle 300#		Angle 150#		Angle 300#		Port Size NPT	Port Size NPT	Port Size NPT	Shipping Weights*	
	A		B		C		D		E		F		G		H	I	J		
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*in.*	*in.*	*lbs.*	*kgs.*
4	15	381	15 5/8	397	14 1/4	362	7 1/2	191	7 7/8	200	5	127	5 5/16	135	1/2	3/4	1/2	87	39
6	20	508	21	533	18 7/16	468	10	254	10 1/2	267	6	152	6 1/2	165	1/2	3/4	1/2	178	81
8	25 3/8	645	26 3/8	670	21 13/16	554	12 3/4	324	13 1/4	337	8	203	8 1/2	216	1	1	1/2	240	109
10	29 3/4	756	31 1/8	791	23 3/8	594	14 7/8	378	15 9/16	395	8 5/8	219	9 5/16	237	1	1 1/4	1/2	397	180
12	34	864	35 1/2	902	29 5/16	744	17	432	17 3/4	451	13 3/4	349	14 1/2	368	1	1 1/4	1	480	217
16	41 3/8	1051	43 1/2	1105	35	889	20 13/16	529	21 5/8	549	15 11/16	398	16 1/2	419	1	1 1/2	1	925	420
20	52	1321	53 5/8	1362	48 1/8	1222									1	1 1/2	1	5850	2656
24	61 1/2	1562	63 1/4	1607	52 3/4	1340									1	1 1/2	1	7915	3593

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USA: Control Valves T: (713) 943-0688 • F: (713) 944-9445 • AmesFireWater.com
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