

Stainless Steel Series Basic Valves

LEAD FREE*

600GS-16 / 600AS-16

Reduced Port Stainless Steel Dual Chamber Basic Valve with Mechanical Check Feature

The Ames ACV Models 600GS-16 and 600AS-16 are reduced port, dual chamber basic valves that incorporate a two-piece telescoping 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. The lower portion of this two-piece assembly is a mechanical check feature, which acts independent of diaphragm position or pilot control system, and provides immediate check action when flow ceases.

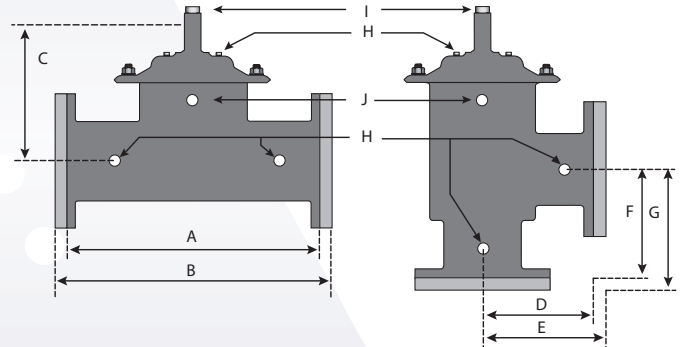
When pressure is applied to the upper diaphragm chamber and released from the lower diaphragm chamber, the valve travels to a closed position. When pressure is applied to the lower diaphragm chamber and released from the upper diaphragm chamber the valve travels to a full open position.

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.

600GS-16 (Globe)

600AS-16 (Angle)



Model 600GS-16: Globe Pattern Dual Chamber Basic Valve with Mechanical Check Feature

Model 600AS-16: Angle Pattern Dual Chamber Basic Valve with Mechanical Check Feature

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	lbs.	kgs.							
6	17¾	451	18½	473	15¼	387	8¾	225	9¾	238	6¾	171	7¼	184	½	¾	½	130	59
8	21¾	543	22¾	568	20⅞	511	10⅞	271	11¾	284	7¼	184	7¾	197	½	¾	½	210	95
10	26	660	27¾	695	23⅞	602								1	1	½	363	165	
12	30	762	31½	800	26¼	667								1	1¼	½	528	240	
16	35	889	36¾	930	34⅞	867								1	1½	1	826	375	
18	48	1219	49¾	1260	41	1041								1	1½	1	1365	619	
20	48	1219	49¾	1260	41	1041								1	1½	1	1390	630	
24	48	1219	49¾	1264	41	1041								1	1½	1	1485	674	

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)
- Stem, Nut & Spring: Stainless Steel

Operating Pressure

150 Flanged = 250psi (17.2 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.

*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.

Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Ames Fire & Waterworks products previously or subsequently sold.



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Flow Data - ACV 600GS-16 (Globe) / 600AS-16 (Angle)

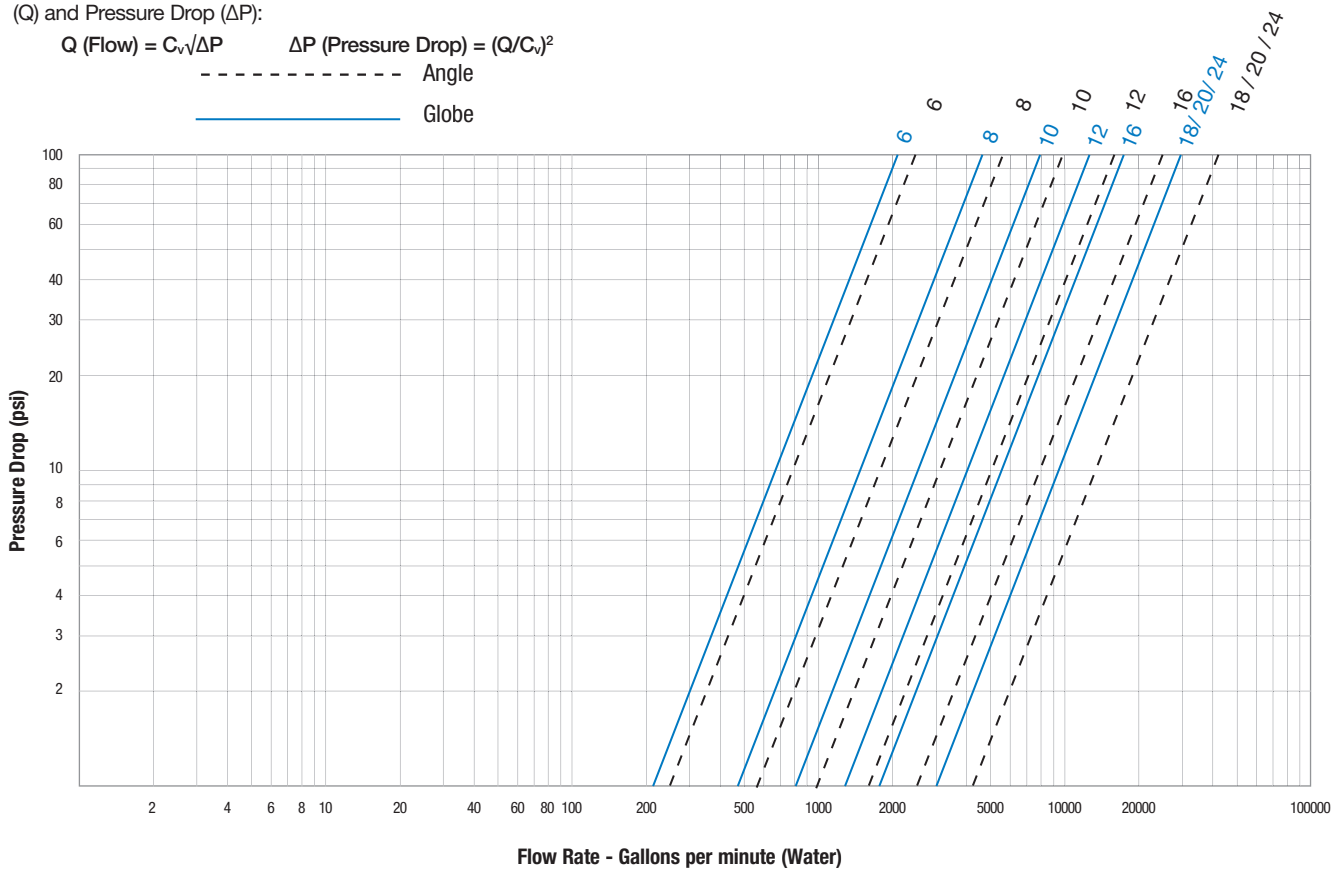
Valve Size - Inches		6	8	10	12	16	18	20	24
Suggested	Maximum Continuous Flow Rate Gpm (Water)	800	1850	3100	5000	7000	11100	11100	11100
	Maximum Intermittent Flow Rate Gpm (Water)	1000	2300	4000	6250	8900	14100	14100	14100
	Minimum Flow Rate Gpm (Water)	16	17	25	55	70	400	400	400
C _v	Factor GPM (Globe)	224	489	932	1428	2067	2881	2881	2881
	Factor GPM (Angle)	237	534						

- 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 valve 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):

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

----- Angle
 _____ Globe

- 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)	6	8	10	12	16	18	20	24
fl.oz.	22	70						
U.S. Gal			1¼	2½	4	9½	9½	9½

Valve Travel

Valve Size (in)	6	8	10	12	16	18	20	24
(in)	1	1½	2	2½	3	4	4	4



A Watts Water Technologies Company

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