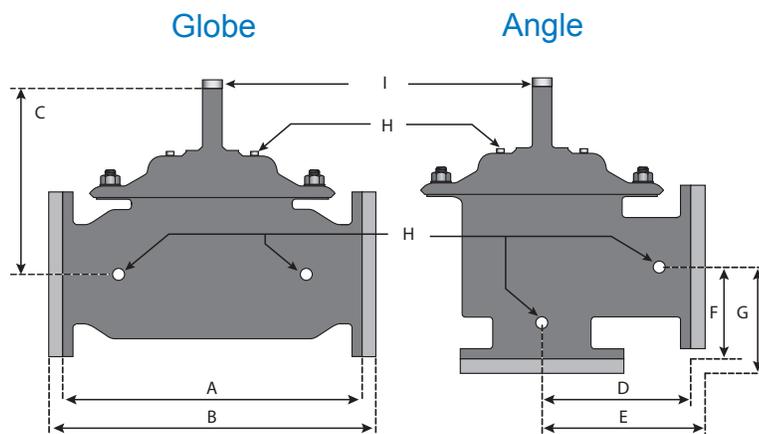## Standard Materials

Body & Cover:	304L Stainless Steel (standard) 316L Stainless Steel
Flanges:	Class D Zinc Plated Steel with Stainless Steel Seal Welds (standard) 304L Stainless Steel (-09 Option)
Trim:	316 Stainless Steel
Elastomers:	Buna-N (standard) EPDM Viton
Stem, Nut & Spring:	Stainless Steel

Globe   Angle

Dimensions

VALVE SIZE	A GLOBE 150#	B GLOBE 300#	C COVER TO CENTER	D ANGLE 150#	E ANGLE 300#	F ANGLE 150 #	G ANGLE 300#	H PORT SIZE	I PORT SIZE	SHIPPING WEIGHTS*
4	15	15-5/8	10-5/8	7-1/2	7-7/8	5	5-5/16	1/2	3/4	77
6	20	21	13-3/8	10	10-1/2	6	6-1/2	1/2	3/4	168
8	25-3/8	26-3/8	16	12-3/4	13-1/4	8	8-1/2	1	1	225
10	29-3/4	31-1/8	17-1/8	14-7/8	15-9/16	8-5/8	9-5/16	1	1-1/4	376
12	34	35-1/2	20-7/8	17	17-3/4	13-3/4	14-1/2	1	1-1/4	450
16	41-3/8	43-1/2	25	20-13/16	21-5/8	15-11/16	16-1/2	1	1-1/2	850

Estimated in lbs.

Description

The AMES Models 905GS and 905AS are full port, single chamber basic valves that incorporate a one-piece disc and diaphragm assembly. This assembly is the only moving part within the valve allowing it to open, close, or modulate as commanded 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 provides extended diaphragm life, and reduces the frequency and labor costs associated with traditional maintenance repairs.

Model 905GS: Globe Pattern Single Chamber Basic Valve
Model 905AS: Angle Pattern Single Chamber Basic Valve

Operating Pressure
150 Flanged = 250 psi / 300 Flanged = 400 psi

Operating Temperature
Buna-N: 160°F Maximum
EPDM: 300°F Maximum
Viton: 250°F Maximum

Flow Data - 905GS (Globe) / 905AS (Angle)

Valve Size - Inches	4	6	8	10	12	16
Maximum Continuous Flow Rate Gpm (Water)	800	1850	3100	5000	7000	11100
Maximum Intermittent Flow Rate Gpm (Water)	1000	2300	4000	6250	8900	14100
C_v Factor GPM (Globe)	210	460	790	1260	1725	2940
C_v Factor GPM (Angle)	250	561	990	1590	2500	4200

Estimated

Maximum continuous flow based on velocity of 20 ft. per second.
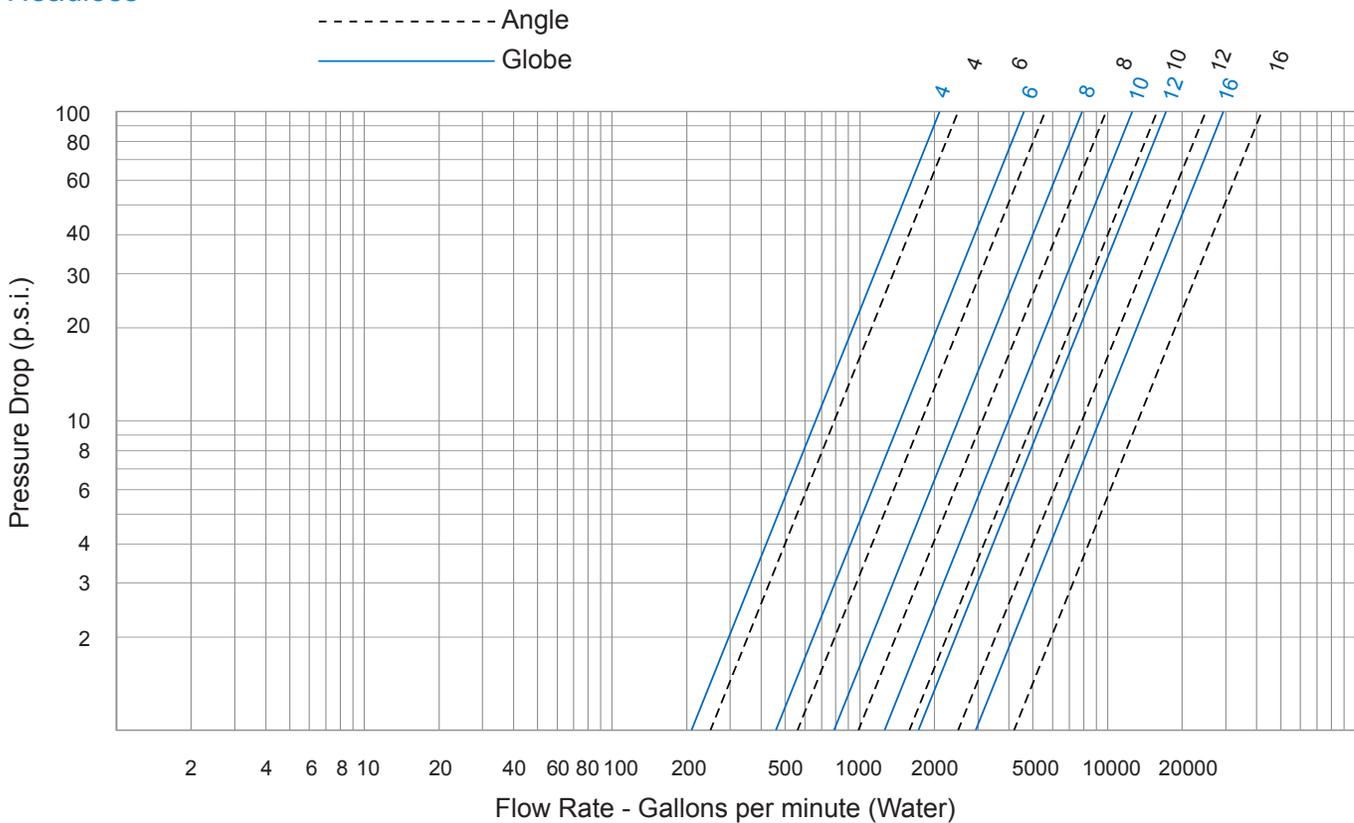Maximum intermittent flow based on velocity of 25 ft. per second.
The C_v Factor of a value is the flow rate in US GPM at 60° F that will cause a 1 psi drop in pressure.
The factors stated are based upon a fully open valve.
Cv factor can be used in the following equations to determine Flow (Q) and Pressure Drop (Δ P):

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

Headloss

Valve Cover Chamber Capacity

Valve Size (in)	4	6	8	10	12	16
fl.oz.	22	70				
U.S. Gal			1-1/4	2-1/2	4	9-1/2

Valve Travel

Valve Size (in)	4	6	8	10	12	16
Travel (in)	1	1-1/2	2	2-1/2	3	4