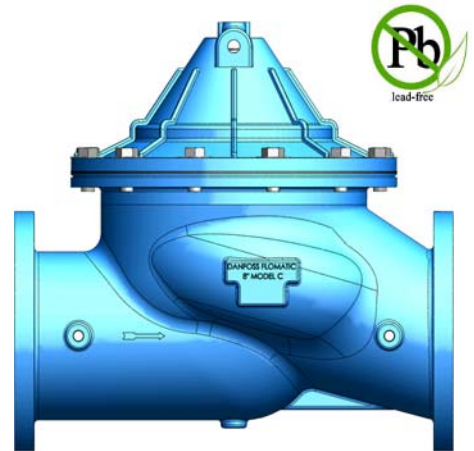
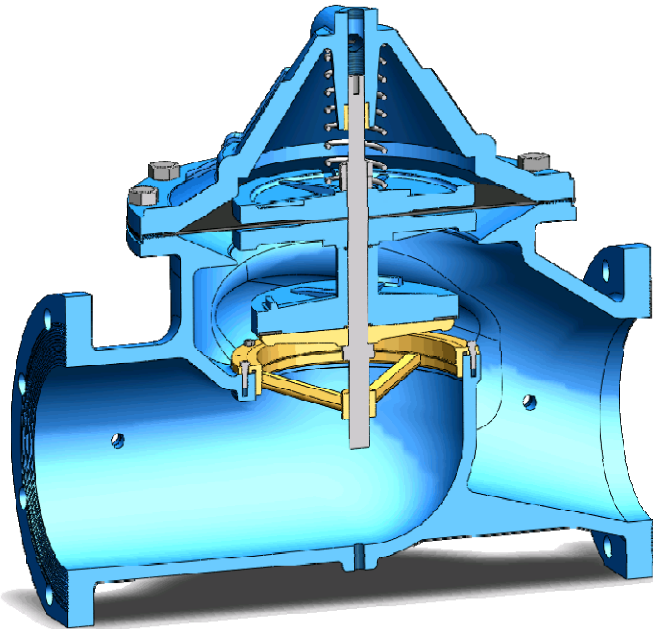


Model C000 Globe Style Main Valve  
Model CA000 Angle Style Main Valve

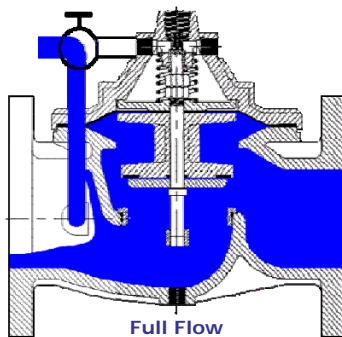


### STANDARD FEATURES

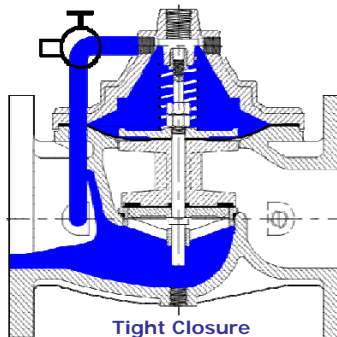
- Fusion Epoxy Coating
- 1-1/4"-10" Unleaded Bronze Valve Trim
- 12"-36" Stainless Steel Valve Trim
- EZ off Jack Screws (Covers & Seat Rings)
- Body Drain Plug
- Rugged Dependability

The Flomatic Model C000/CA000 Main Valve is a self contained hydraulically operated, single diaphragm-actuated globe or angled body valve with no pilot controls. The valve has three major components: the body with a removable seat, the cover with bushing, and the diaphragm assembly. The diaphragm assembly is the only moving part. The cover forms a sealed chamber above the diaphragm to separate operating pressure from line pressure. Long service life and dependable operation are ensured due to packless construction. The valve is designed for use with various types of pressure and/or electric controls to provide the desired control of pressure or flow for a variety of water system applications. The Flomatic Model C000/CA000 is the basic valve used for all Flomatic full port automatic control valves.

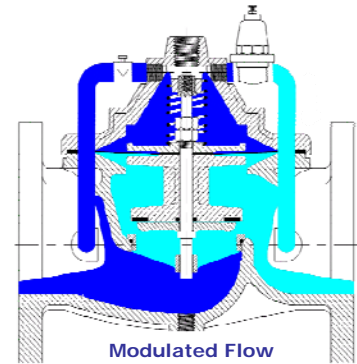
### Principal of Operation



Full flow is achieved by releasing control pressure from the cover chamber to a lower pressure zone which allows line pressure to open the diaphragm assembly.



Tight closure is achieved by applying inlet pressure to the cover chamber to leverage the differential force of the larger diaphragm surface area against the smaller seat area.



Modulating control is achieved by utilizing a pressure regulating control valve to automatically compensate for line pressure fluctuations.

# Specifications

- Model → C & CA

Available Sizes			
Pattern	Flanged	Threaded	Grooved
Globe	1-1/2" - 36"	1-1/4" - 2"	1-1/4" - 1-1/2"
Angle	1-1/2" - 12"	1-1/4" - 2"	N/A

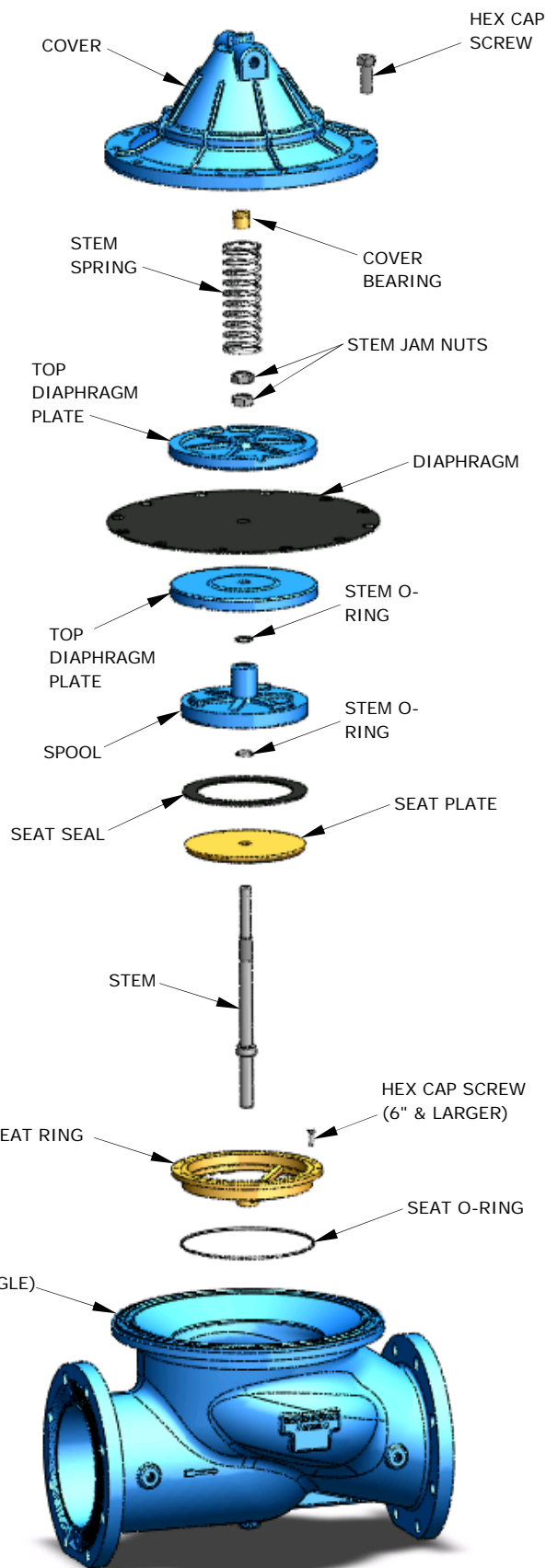
Pressure Class (Maximum Pressure - psi)							
ANSI Standard† B16.42				British Standard† BS4504			
Ductile Iron Grade	150 CLASS	300 CLASS	NPTF	Ductile Iron Grade BS	PN10	PN16	BSPPF
ASTM A536	250 PSI	400* PSI	400* PSI	2789	250 PSI	400* PSI	400* PSI

\*Note: Contact Factory if working pressure exceeds 300 psi  
 †Note: Standards are for flange dimensions only

Material (Standard)			
Component	Valve Size		
	1-1/4" - 4"	6" - 10"	12" - 36"
Body, Cover & Top Cover	ASTM A 536 65-45-12 Ductile Iron		
Spool & Diaphragm Plate	Unleaded Bronze	ASTM A 536 65-45-12 Ductile Iron	
Seat Ring & Seat Plate	ASTM C89833 Unleaded Bronze		ASTM CF8M 316 SS
Stem Bushings	C31400 Bronze or C89833 Unleaded Bronze		
Seat Seal	Buna-N		
Diaphragm	Nylon Reinforced Buna-N		
Stem & Seat O-rings	Buna-N		
Stem	304 Stainless Steel		
Spring	302 Stainless Steel		
Fasteners	18-8 Stainless Steel		
Coating	NSF 61 Approved Fusion Epoxy		

Material (Optional)			
Component	Valve Size		
	1-1/4" - 4"	6" - 10"	12" - 36"
Seat Ring & Seat Plate	ASTM CF8M 316 Stainless Steel		Standard
Stem Bushings	316 Stainless Steel		
Seat Seal	EPDM / Viton (Limited Sizes)		
Diaphragm	EPDM / Viton (Limited Sizes)		
Stem & Seat O-rings	EPDM / Viton		

Operating Temperature (Maximum)			
Seal Material	Buna-N	EPDM	Viton
Max Temp ° F	180° F	225° F	350° F



# Functional Data

– Model → C & CA

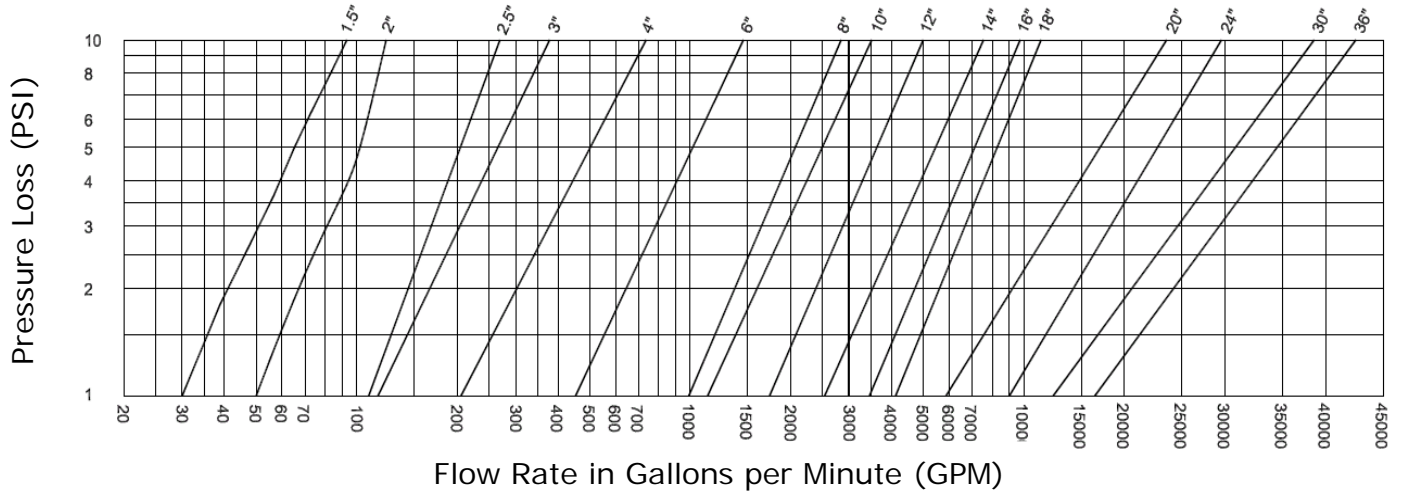
U.S. System: CV = U.S. GPM @ 1 PSI with 60° F Water

Metric System: Cv = LPS @ 1 kPa with 15° C Water

Equivalent Lengths of Pipe are determined from the formula:  $L = Kd/12f$

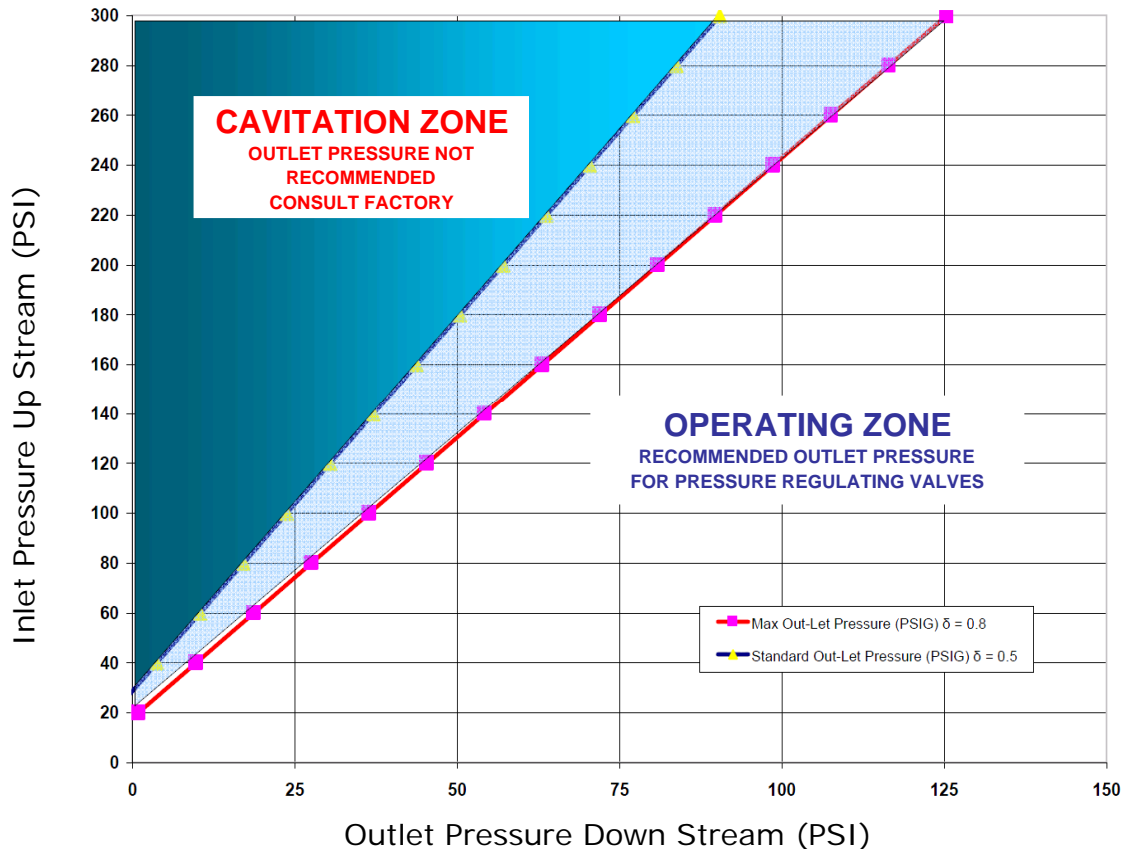
Valve Size	Inches	1.5	2	2.5	3	4	6	8	10	12	14	16	18	20	24	30	36
	mm	40	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
Cv Factor	Gal/Min	29	48	110	110	205	462	980	1165	1234	2546	3465	4125	5917	9000	12000	16500
	Litres/Sec	1.83	2.96	6.94	6.94	12.93	29.15	61.8	73.5	103.34	160.63	218.6	260.25	373.31	567.82	757.1	1041.01
Equivalent Length of Pipe	Feet	42	57	70	85	113	170	228	286	338	395	450	513	569	683	932	1118
	Meters	12.8	17.4	21.3	25.9	34.4	51.8	69.5	87.2	103	120.4	137.2	156.4	173.4	208.2	284	340.8

## Headloss Chart



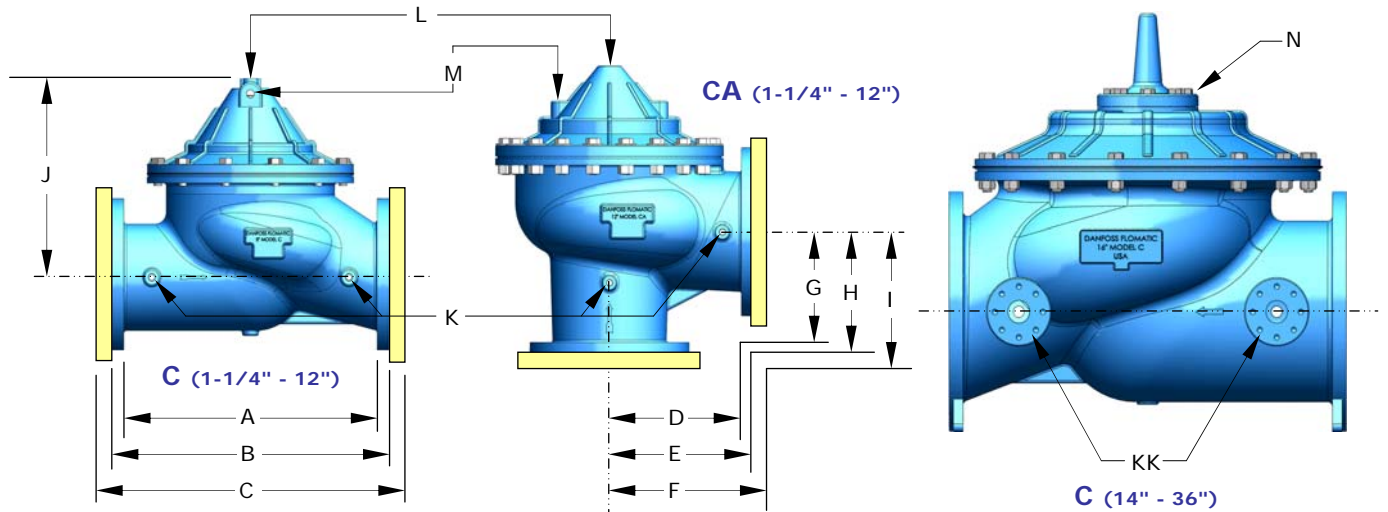
## Cavitation Chart

(Inlet Pressure vs. Outlet Pressure)



# Dimensions

- Model → C & CA



VALVE SIZE (Inches)		1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
A	Globe Grooved	8.50	8.50															
A	Globe Threaded	7.25	7.25	9.38														
B	Globe 150#		8.50	9.38	11.00	12.00	15.00	20.00	25.38	29.75	34.00	39.00	41.38	46.00	52.00	61.50	63.75	76.00
C	Globe 300#		9.13	10.00	11.63	13.25	15.38	21.00	26.38	31.13	35.50	40.50	43.50	47.63	53.63	63.24	65.50	76.00
D	Angle Threaded	3.25	3.25	4.75														
E	Angle 150#		4.00	4.75	5.50	6.00	7.50	10.00	12.75		17.00							
F	Angle 300#			5.00		6.38	7.81	10.50	13.25		17.75							
G	Angle Threaded	1.88	1.88	3.25														
H	Angle 150#		4.00	3.25	4.00	4.00	5.00	6.00	8.00		13.75							
I	Angle 300#			3.50		4.38	5.31	6.50	8.50		14.50							
J	Cover to Center	5.75	5.75	4.69	6.38	6.44	8.00	15.81	17.06	17.19	19.50	24.00	29.25	39.00	42.00	44.00	49.75	62.00
K	Body Tapping (NPT)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	1	1	1	1	1	1	1-1/2	2
KK	Body Flange (ANSI 300#)										1-1/4	2	2	2	2	2	4	4
L	Cover Center Port (NPT)	1/4	1/4	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4	3/4	1-1/2	1-1/2
M	Cover Port Size (NPT)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/4	3/4	3/4	3/4	1	1	1-1/2	1-1/2
N	Cover Flange (ANSI 300#)											3	4	4	6	8	10	12
LBS.	Approx. Ship Wt. (Pounds)	16	16	24	57	59	127	303	500	815	1040	1360	1750	2535	3315	5270	8034	12223

VALVE SIZE (mm)		32	40	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
A	Globe Grooved	216	216															
A	Globe Threaded	184	184	238														
B	Globe 150#		216	238	279	305	381	508	645	756	864	991	1051	1168	1321	1562	1619	1930
C	Globe 300#		232	254	295	337	391	533	670	791	902	1029	1105	1210	1362	1606	1664	1930
D	Angle Threaded	83	83	121														
E	Angle 150#		102	121	140	152	191	254	324		432							
F	Angle 300#			127		162	198	267	337		451							
G	Angle Threaded	48	48	83														
H	Angle 150#		102	83	102	102	127	152	203		349							
I	Angle 300#			89		111	135	165	216		368							
J	Cover to Center	146	146	119	162	164	203	402	433	437	495	610	743	991	1067	1118	1264	1575
K	Body Tapping (NPT)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	1	1	1	1	1	1	1-1/2	2
KK	Body Flange (ANSI 300#)										1-1/4	2	2	2	2	2	4	4
L	Cover Center Port (NPT)	1/4	1/4	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4	3/4	1-1/2	1-1/2
M	Cover Port Size (NPT)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/4	3/4	3/4	3/4	1	1	1-1/2	1-1/2
N	Cover Flange (ANSI 300#)											3	4	4	6	8	10	12
LBS.	Approx. Ship Wt. (Kgs.)	7	7	11	26	27	58	137	227	370	472	617	794	1150	1504	2390	3644	5544



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C000/CA000 Technical Data  
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MADE IN THE U.S.A.