

Cv FLOW COEFFICIENT

FLOW DATA

Cv AT 90° – FULLY OPEN VALVE

Size in mm	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	30 750	36 900
Class 150	150	280	760	1360	2220	3600	5200	7200	9600	12550	18900	31400	44900
Class 300	150	280	760	1260	2030	3050	4660	6450	8640	11420	17200	29600	44000

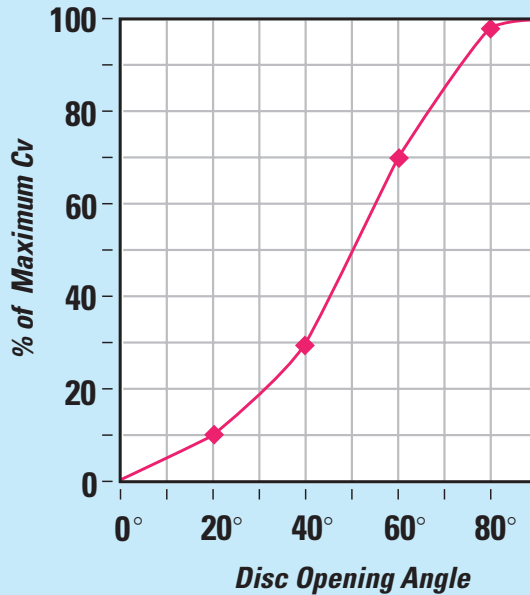
$$Q = C_v \sqrt{\frac{\Delta p}{G_L}}$$

WHERE:

Q = Flow in gpm
(U.S. gallons per minute).

Δp = Pressure drop through
the valve (psi)

G_L = Specific gravity
(for water at 60°F = 1)



Cv for partially open valve

Cv for open
at 80° = 99%
at 60° = 70%
at 40° = 30%
at 20° = 10%

PRESSURE TEMPERATURE RATINGS

PRESSURE/TEMPERATURE RATINGS (ASME B16.34)

TEMP. °F	CLASS 150				CLASS 300				TEMP. °C
	Carbon Steel A 216 Gr. WCB		Stainless Steel A 351 Gr. CF8M		Carbon Steel A 216 Gr. WCB		Stainless Steel A 351 Gr. CF8M		
	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	
-20 to 100	285	19.65	275	18.96	740	51.02	720	49.64	-29 to 38
200	260	17.93	235	16.20	675	46.54	620	42.75	93
300	230	15.86	215	14.82	655	45.16	560	38.61	149
400	200	13.79	195	13.44	635	43.78	515	35.51	204
500	170	11.72	170	11.72	600	41.37	480	33.09	260
600	140	9.65	140	9.65	550	37.92	450	31.03	316
650	125	8.62	125	8.62	535	36.89	445	30.68	343
700	110	7.58	110	7.58	535	36.89	430	29.65	371
750	95	6.55	95	6.55	505	34.82	425	29.30	399
800	80	5.52	80	5.52	410	26.27	415	28.61	427