

# 3" to 24" Series 800 Butterfly Valve Disc Angle vs. Flow Coefficient (C<sub>V</sub>)

GA-S800-HL1 Rev B

## DISC ANGLE FROM CLOSED

Size	10°	20°	30°	40°	50°	60°	70°	80°	90°
3"	<1	3	28	43	65	91	113	147	186
4"	<1	4	34	76	135	222	312	355	378
6"	4	87	131	201	306	428	533	690	874
8"	6	104	291	446	679	950	1183	1532	1939
10"	8	128	337	723	1253	1754	2184	2828	3580
12"	10	142	415	804	1456	2491	4305	6069	6700
14"	91	985	1477	2264	3446	4824	6005	7778	9845
16"	124	1373	2060	3159	4807	6730	8378	10850	13734
18"	542	1738	2607	3997	6082	8515	10600	13728	17377
20"	921	2203	3304	5066	7710	10794	13437	17402	22028
24"	1521	2868	4302	6597	10038	14053	17494	22656	28679

The Flow Coefficient (C<sub>v</sub>) of a valve is a relative measure of its efficiency at allowing fluid flow. In more practical terms, the Flow Coefficient (C<sub>v</sub>) is the volumetric flow rate of water (in US gallons per minute at 60°F) that will flow through the valve at a 1 PSI pressure drop across the valve.

The formula is  $Q = C_v (\Delta P)^{1/2}$  where:

- Q = Flow, US GPM
- C<sub>v</sub> = Flow Coefficient
- ΔP = Pressure Drop, PSI