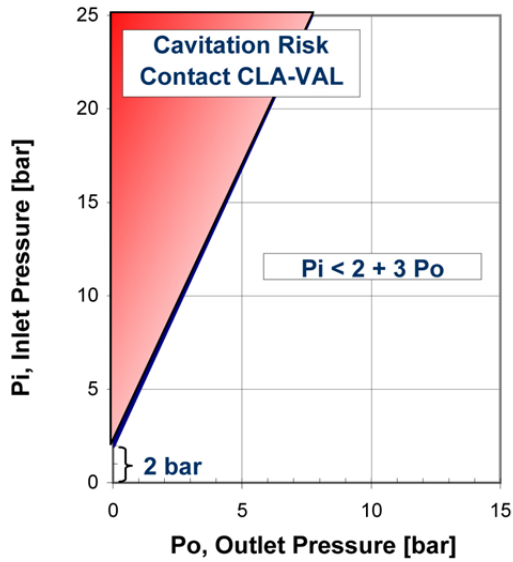


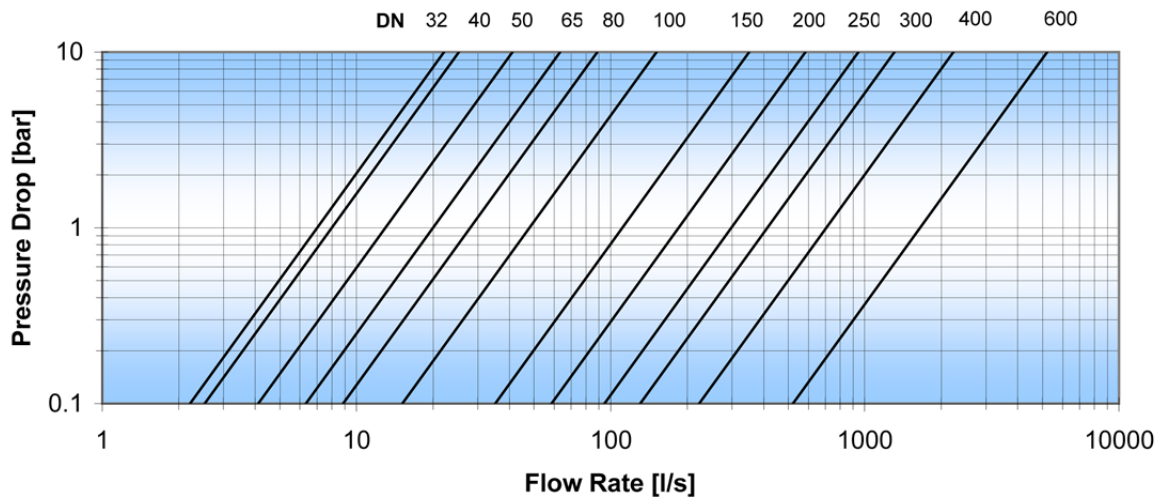
► Cavitation / Flow Chart



● Valve Sizing Example

Pipe Diameter : 100 [mm] } **GE DN 100 [mm]**
 Peak Flow : 20 [l/s]

Inlet Pressure : 15 [bar] } **Below Cavitation Risk**
 Outlet Pressure : 5 [bar]



► Notes

- Diagram to be used as a guide only.

► More Information

- Quick Valve Selection
- Sizing Software

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► To obtain a more accurate calculation please contact CLA-VAL

▶ Performance Chart

Flanged [mm]	DN	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Screwed [in]	DN	1 1/4"	1 1/2"	2"	2 1/2"	3"	-	-	-	-	-	-	-	-	-	-	-
Hytrol GE																	
Kv (m3/h)		26	28	47	72	101	173	-	400	666	1076	1490	-	2542	-	-	5940
Cv (l/s) @ 1 bar		7	8	13	20	28	48	-	111	185	299	414	-	706	-	-	1650
ζ (-)		2.6	4.9	4.6	5.5	6.4	5.4	-	5.1	5.8	5.4	5.8	-	6.3	-	-	5.9
Normal Flow (l/s)																	
@ velocity 1 m/s		0.6	1	1.6	2.7	4	6	-	14	25	39	56	-	100	-	-	226
@ velocity 3 m/s		to 2.4	to 3.8	to 6	to 10	to 15	to 24	-	to 53	to 94	to 147	to 212	-	to 377	-	-	to 848
Max. Flow (l/s)																	
Continuous @ v=4 m/s		3	5	8	13	20	31	-	71	126	196	283	-	502	-	-	1130
Intermittent @ v=5.5 m/s		4	7	11	18	28	43	-	97	173	270	389	-	691	-	-	1554

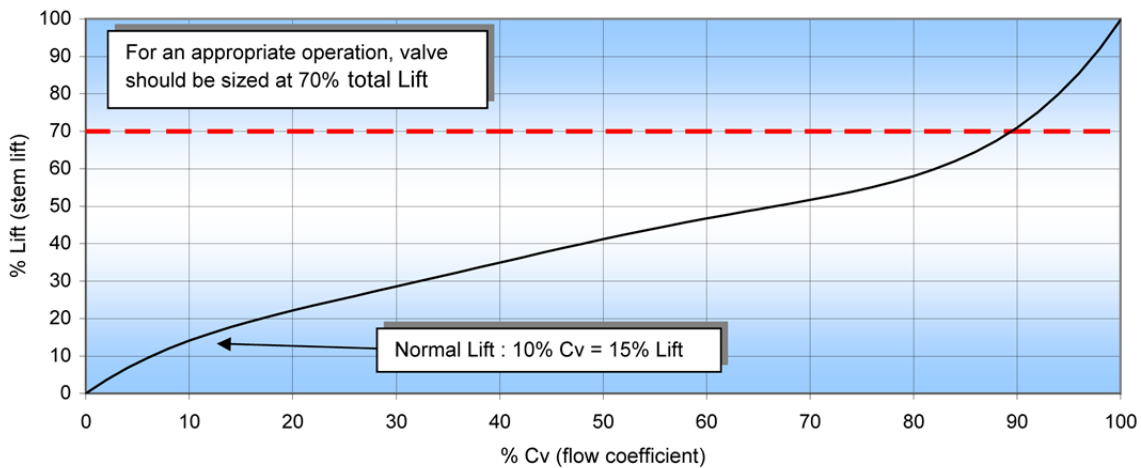
$$Q = Kv \sqrt{\Delta p}$$

$$Q = Cv \sqrt{\Delta p}$$

$$\Delta H = \zeta \frac{v^2}{2g}$$

Q : rate of flow (m3/h)
Kv : flow coefficient (m3/h)
Cv : flow coefficient (l/s)
Δp : head loss (bar)

ΔH : head loss (m)
v : average pipe velocity (m/s)
g : gravitational constant (9.81m/s²)
ζ : resistance coefficient (-)



▶ Notes

- Kv or Cv = m3/h or l/s @ 100kPa (1 bar) head loss with 15°C water (valve totally open).
- Minimum Opening Pressure : 0.2 [bar].
- Minimum Differential Pressure : 0.5 [bar].

▶ More Information

- Quick Valve Selection
- Sizing Software

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▶ For lower opening Pressure or differential pressure, please contact CLA-VAL