

RAJEEV & Company

(An ISO 9001:2015 Company)

Manufacturers Of **KAVAATA BALL VALVES**

(423, Nazar Camp Cross 3, Main Road, Vadgaon, Belagavi, INDIA 590005)

Flow Co-efficient or (C_v) Co-efficient

C_v coefficient represents the flow required to produce 1 BAR pressure drop across the valve. It is possible to calculate the pressure drop across a known valve by using Cv table and predetermined characteristic of the pipeline (e.g. line size and specific gravity of the fluid). Conversely, it is possible to calculate the required valve size for an acceptable pressure drop under a prescribed flow condition. Formulas below show the relationships between the pipeline variables. Based on Cv factors provided, the user may work in Imperial units or Metric (SI) units as shown below:

$$Q = 14.4092 C_v \sqrt{\frac{\Delta P}{G}}$$

or

$$C_v = 0.0694 Q \sqrt{\frac{G}{\Delta P}}$$

In Term of Metric (SI) Units

Q = Rate of Flow in Litres/min

ΔP = Pressure Drop (BAR)

G = Specific Gravity (Water = 1.0)

c_v = Valve Flow Coefficient

FLOW COEFFICIENT VALUES FOR KAVAATA BALL VALVES

FORGED CARBON STEEL (REDUCED BORE)

TYPICAL C _v	SIZE				
	15RB	20RB	25RB	40RB	50RB
	23	11	32	80	120
PORT SIZE IN MM	13	13	20	32	38

INVESTMENT CAST 3 PIECE DESIGN (FULL BORE)

FLANGED/ SCREWED/ SOCKET WELD ENDS

TYPICAL C _v	SIZE								
	15FB	20FB	25FB	40FB	50FB	80FB	100FB	150FB	200FB
	26	50	94	260	480	1300	2300	5400	10000
PORT SIZE IN MM	13	19	25	38	50	75	100	150	200

