

## V- NOTCH BALL VALVE SERIES - 310

### INTRODUCTION

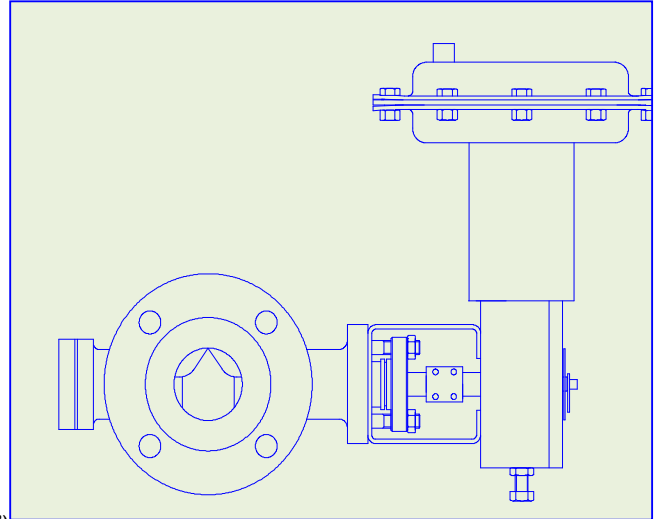
The V-Notch Ball Valve gives non-clogging, high capacity, straight through flow control of fluids containing pulp and paper stock or slurries and fluids containing suspended solids or fibrous materials.

V-Notch Ball Valve is quarter turn valve with a segment Ball. The V-Ball create a wedging and shearing effect prevent the dragging of stock or slurry between the ball and its seal

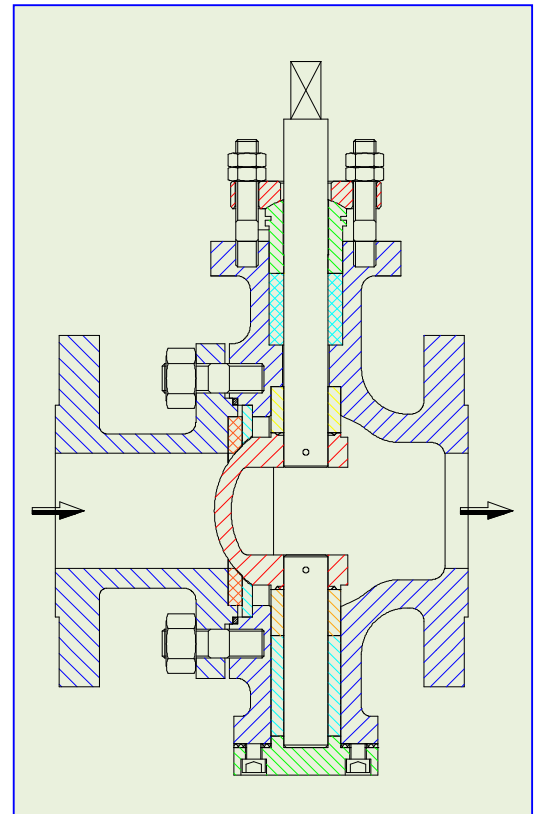
The V- Notch Ball Valves are offered squared and clamped driven shaft plus ball shaft with splined connection designed for zero lost motion for highly accurate positioning and precise control.

### SPECIFICATIONS

<b>DESIGN</b>	: BS. 5351
<b>SIZE</b>	: 15 to 300 mm (1/2" to 12")
<b>RATING</b>	: ANSI 150
<b>END CONNECTION</b>	: Flanged End
<b>F/F DIMENSIONS</b>	: ANSI B-16.10
<b>FLOW CHARACTERISTICS.</b>	: Modified Equal Percentage, Linear, On-Off.
<b>FLOW DIRECTION</b>	: Forward (into convex face of V-ball)
<b>MAX. BALL ROTATION</b>	: 90°
<b>BODY MATERIAL</b>	: Carbon Steel, Stainless Steel, And Alloy Steel etc.
<b>BALL MATERIAL</b>	: CF8M Chrome plated/Alloy steels.
<b>SEAT RING</b>	: PTFE, Carbon Filled Teflon.
<b>BALL RING</b>	: CF8M, Alloy steels.
<b>GASKET</b>	: PTFE, Graphite Laminate.
<b>GLAND PACKING</b>	: PTFE V Rings, Grafoil.
<b>ACTUATOR FORM</b>	: Diaphragm, Rotary, Electric.
<b>ACTUATOR TYPE</b>	: Scotch
<b>DIAPHRAGM</b>	: Nitrile / Neoprene.
<b>SPRING RANGE</b>	: 3 – 15 Psig (0.2 – 1.0 Kg/cm <sup>2</sup> ) : 6 – 30 Psig (0.4 – 2.0 Kg/cm <sup>2</sup> )
<b>AIR SUPPLY</b>	: 20 – 35 Psig (1.4 – 2.5 Kg/cm <sup>2</sup> )
<b>AIR CONNECTION</b>	: 1/ 4" or 1/ 2" NPT
<b>ACCESSORIES OPTIONAL</b>	: ValvePositioner – Pneumatic, Electro Pneumatic, Smart, Airset, Solenoid Valve, Air Lock, Volume Booste, PositionTransmitter, Limit Switches etc. Top or Side Mounted Handwheel



**V-NOTCH BALL VALVE WITH ACTUATOR**



**V-NOTCH BALL VALVE**

**BUILT IN RELIABILITY**

**DESIGN FEATURES**

- >> A Shearing effect between the ball and seal ensures tight shut-off, even on fibrous slurries.
- >> The unrestricted, straight – through flow design provides high capacity and wide rangeability.
- >> Precise contouring of the V-notch balls provides a nearly equal percentage characteristic.
- >> Replaceable ball seal and back up ring for added rigidity.
- >> Ball machined to a super smooth finish, hard – chrome plated and polished to increase Ball seal life.
- >> High Cv to body size ratio.

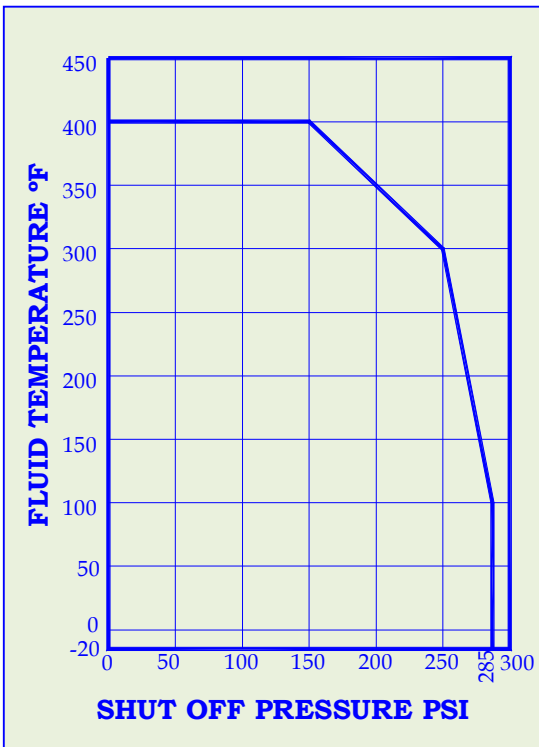
**QUALITY AND PERFORMANCE GUARANTEE**

- >> Produced with Quality Systems accredited to ISO 9001: 2008 by Bureau Veritas.
- >> Full material certification available for all major component Parts.
- >> Full guarantee on design and Performance.
- >> All testing are performed to the requirements of ANSI B16.34.

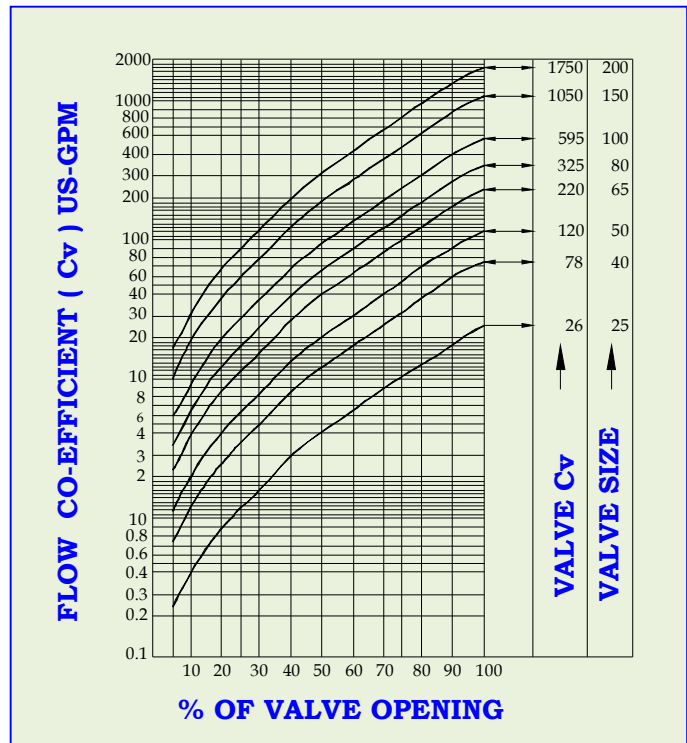
**VALVE SIZING CO-EFFICIENT Cv RATING**

VALVE SIZE	Inches	1/2	1	1.1/2	2	2.1/2	3	4	6	8	10	12
	mm	15	25	40	50	65	80	100	150	200	250	300
Cv (MAX.) AT 90° OPENING		5	26	78	120	220	325	595	1050	1750	2725	3750

**PRESSURE / TEMPERATURE  
FOR PTFE BALL SEALS**

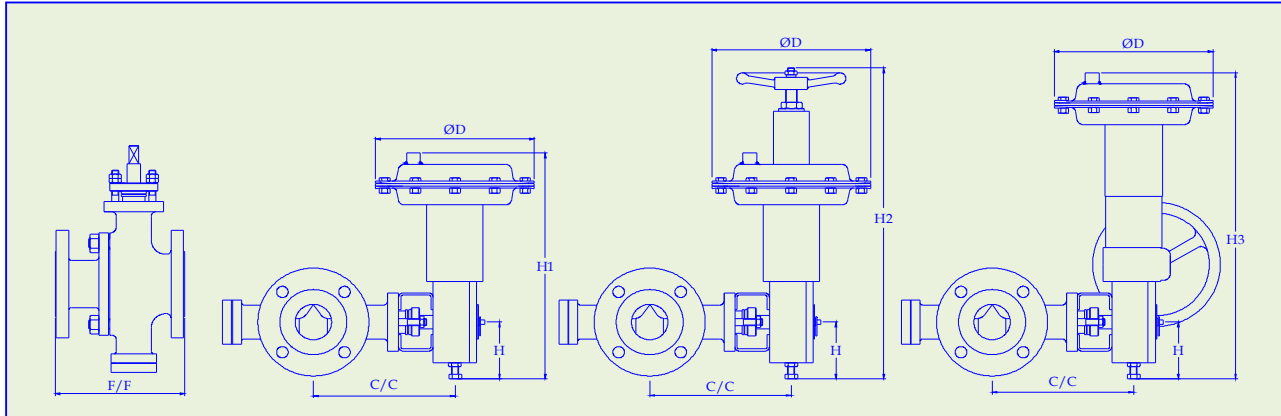


**FLOW CHARACTERISTIC CURVES  
90° OPENING**



**BUILT IN RELIABILITY**

### MOUNTING DIMENSIONS FOR V-NOTCH BALL VALVE



VALVE SIZE	ACTUATOR MODEL	FACE TO FACE	C / C	Ø D	H	STD	TMH	SMH
		ANSI 150				H1	H2	H3
15	PDS-030-90°	108	188	218	85	328	488	---
25	PDS-055-90°	127	248	286	100	432	639	635
40	PDS-055-90°	165	280	286	100	432	639	635
50	PDS-055-90°	178	273	286	100	432	639	635
65	PDS-095-90°	190	301	371	100	466	673	670
80	PDS-095-90°	203	301	371	100	466	673	670
80	PDS-140-90°	203	306	443	160	657	944	907
100	PDS-140-90°	229	368	443	160	657	944	907
150	PDS-140-90°	267	396	443	170	667	954	917
150	PDS-300-90°	267	430	616	190	768	N/A	1073
200	PDS-300-90°	292	502	616	190	768	N/A	1073
250	PDS-300-90°	330	530	616	190	768	N/A	1073
300	PDS-300-90°	356	553	616	190	768	N/A	1073

#### INSTALLATION

The valve should preferably be installed with actuator vertically above or below the valve body. It can be installed in a horizontal or angled position if actuator is suitably supported. Necessary clearance should be provided above the actuator to permit servicing. The flange bolts are to be tightened evenly to avoid placing strain on the body. The inlet of air pressure regulator (Air set) should be connected to the pneumatic supply line. Supply pressure to the diaphragm actuator should be either 1.5 kg/cm<sup>2</sup> (20 psig) or 2.5 kg/cm<sup>2</sup> (35 psig) as per indication on the nameplate. For cylinder actuator, supply pressure specified. For control applications, the air set and valve positioner are mounted, piped and adjusted at the factory.

#### FINAL CHECK

After installation, check the valve operation for full stroke as indicated on the nameplate, check for leaks in air line connection. Open and close the valve two or three times to ensure proper operation. Before commissioning the process flow, it is essential to flush clean the piping properly. Ball valves require minimum maintenance for its operation. Apply a few drops of oil on the exposed guides and bushings, Hand wheel, if present, must be greased periodically.

The Company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice.



Plot No: A-35, Road No. 10, Wagle Industrial Estate,  
Thane – 400 604, India.

Phone: +91 22 2583 8371, 2583 8372, Fax : +9122 2583 8373  
E-Mail: [info@pneuconvalves.com](mailto:info@pneuconvalves.com) Web: [www.pneuconvalves.com](http://www.pneuconvalves.com)

**BUILT IN RELIABILITY**



