

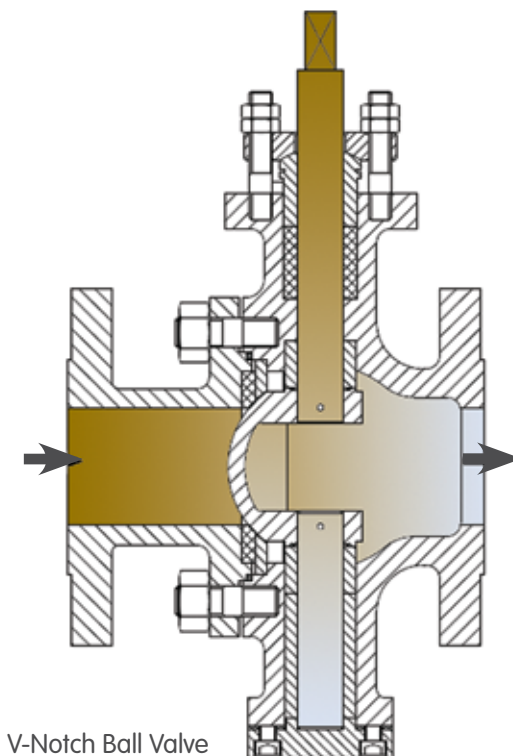
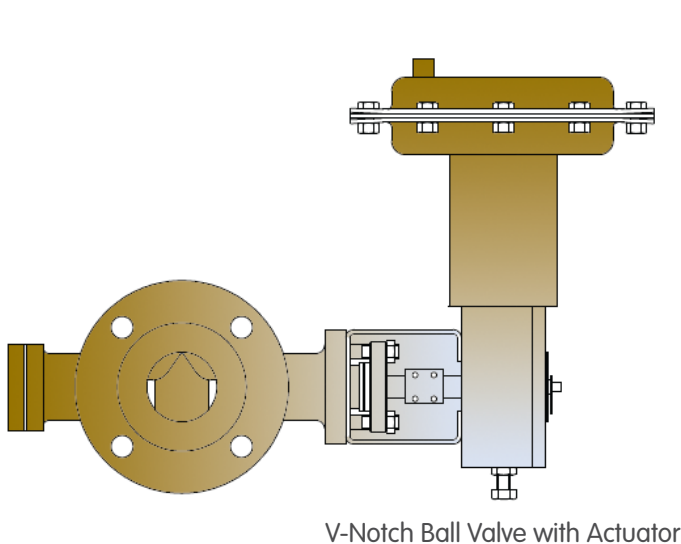
V-Notch Ball Valve - Series 310

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.

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.

Specification

Design	BS. 5351	Gland Packing	PTFE V Rings, Grafoil
Size	25 to 200 mm (1" to 8")	Actuator Form	Diaphragm, Piston, Electric
Rating	ANSI 150 and 300	Actuator Type	Rotary
End Connection	Flanged End	Diaphragm	Nitrile / Neoprene
F/F Dimensions	ANSI B-16.10	Spring Range	3 – 15 Psig (0.2 – 1.0 Kg/cm ²) 6 – 30 Psig (0.4 – 2.0 Kg/cm ²)
Flow Characteristic	Approx. Equal Percentage, Linear, On-Off	Air supply	20 – 35 Psig (1.4 – 2.5 Kg/cm ²)
Flow Direction	Forward (into convex face of V-ball)	Air Connection	1/ 4" or 1/ 2" NPT
Max. Ball Rotation	90°	Accessories	Valve Positioners - Pneumatic, Electro-Pneumatic, Smart Instruments - Airset, Solenoid Valve, Volume Booster, Airlock, Limit Switches
Body Material	Carbon Steel, Stainless Steel, and Alloy Steel etc		Features - Top or Side Mounted handwheel, Limit Stops Removable Blind Head, Steam Jacketing etc
Ball Material	50 to 900 mm (2" to 36")		
Seat Ring	PTFE, Carbon Filled Teflon		
Ball Ring	CF8M, Alloy steels		
Gasket	PTFE, Graphite Laminate		



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.

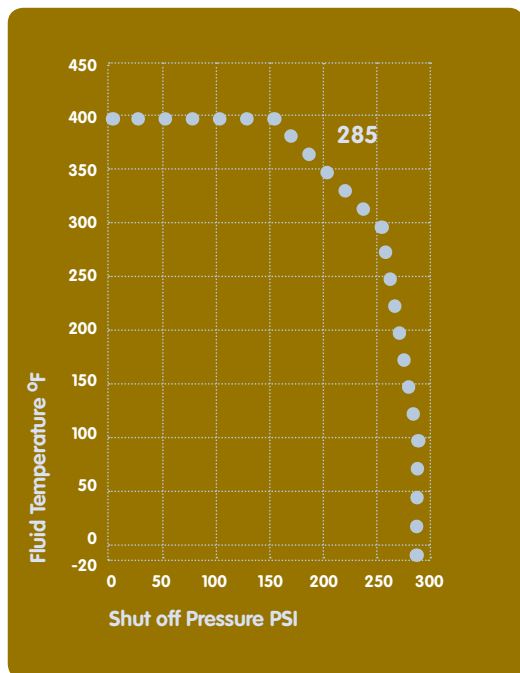
Quality and Performance Guarantee

- Produced with Quality Systems accredited to ISO 9001:2008
- CE marked in accordance with European Pressure Equipment Directive 97/23/EC and ATEX compliant with European directive 94/9/EC.
- 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.

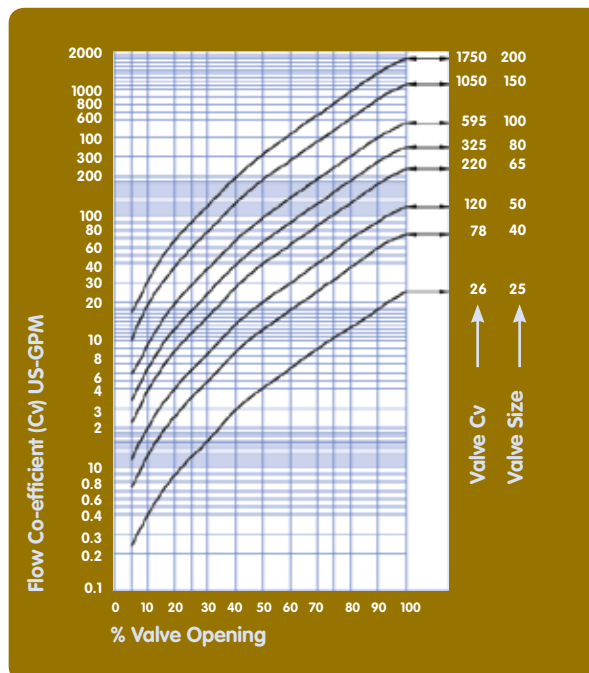
Valve Sizing Co-efficient Cv Rating

Valve size	ins	1	1.1/2	2	2.1/2	3	4	6	8
	mm	25	40	50	65	80	100	150	200
Cv(max.) at 90° opening		26	78	120	220	325	595	1050	1750

Pressure / Temperature for PTFE Ball Seals



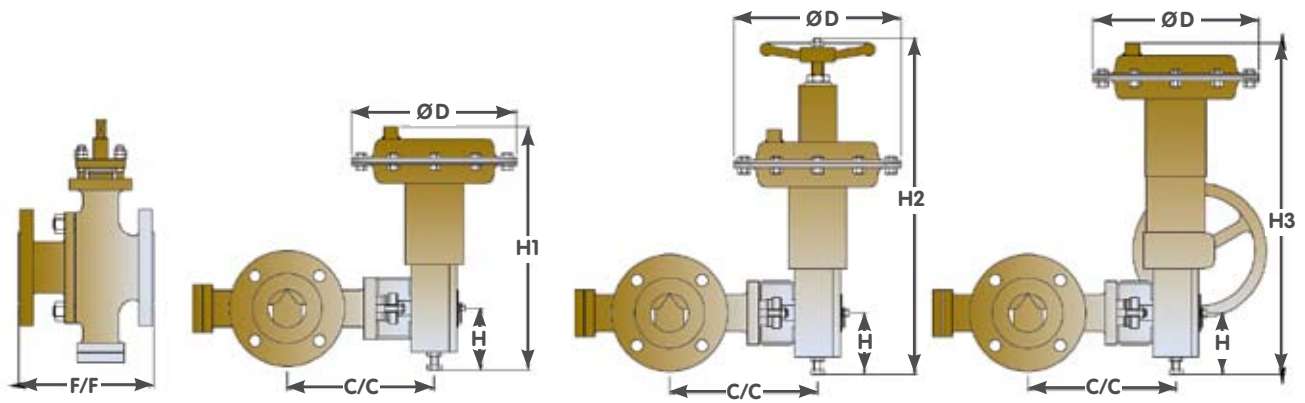
Flow Characteristic Curves 90° of Opening



Installation

- 1) 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.
 - 2) Necessary clearance should be provided above the actuator to permit servicing.
 - 3) The flange bolts are to be tightened evenly to avoid placing strain on the body.
 - 4) The inlet of air pressure regulator (Air set) should be connected to the pneumatic supply line.
 - 5) Supply pressure to the diaphragm actuator should be either 1.5 kg/cm² (20psig) or 2.5 kg/cm² (35 psig) as per indication on the nameplate.
 - 6) For cylinder actuator, supply pressure specified.
 - 7) For control applications, the air set and valve positioner are mounted, piped and adjusted at the factory.
- Final Check**
- 1) After installation, check the valve operation for full stroke as indicated on the nameplate, check for leaks in air line connection.
 - 2) Open and close the valve two or three times to ensure proper operation.
 - 3) Before commissioning the process flow, it is essential to flush clean the piping properly. Ball valves require minimum maintenance for its operation.
 - 4) Apply a few drops of oil on the exposed guides and bushings, Hand wheel, if present, must be greased periodically.

Mounting Dimensions for V-Notch Ball Valve



Valve size	Actuator model	Face to face		C/C	Ø D	H	H1 STD	H2 TMH	H3 SMH
		ANSI 150	ANSI 300						
25	PDS-055-90°	127	165	250	286	125	500	750	775
40	PDS-055-90°	165	190	280	286	125	500	750	775
50	PDS-055-90°	178	216	280	286	125	500	750	775
65	PDS-095-90°	190	241	315	371	125	525	775	800
80	PDS-095-90°	203	283	315	371	125	525	775	800
80	PDS-140-90°	203	283	335	443	443	725	1075	1000
100	PDS-140-90°	229	305	360	443	443	725	1075	1000
150	PDS-140-90°	267	403	415	443	443	825	1225	1150
150	PDS-300-90°	267	403	425	616	616	925	925	1300
200	PDS-300-90°	292	419	510	616	616	975	925	1300

