

©SBM PTV Pinch Valve enclosed body general situation

The SBM PTV Pinch Valve is a completely enclosed, manually operated valve. Its reliable, maintenance-free design is perfectly suited for tough slurries, abrasives and corrosive chemical applications.

The enclosed body offers protection against moving parts and offers additional safety in the event of sleeve failure. **The heart of the Pinch Valve is a long-lasting, flexible rubber sleeve, available in a wide variety of elastomers suitable for any application.**

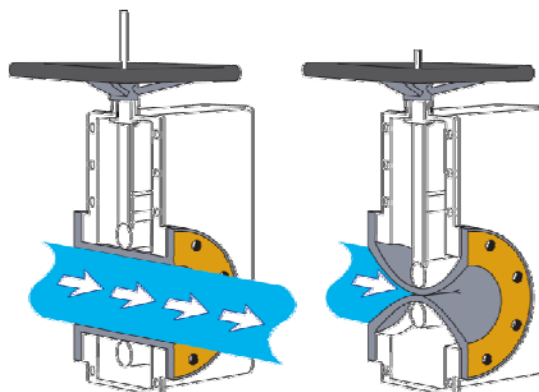
SBM PTV Pinch Valves provide excellent flow control compared to other valves due to their simple yet effective design. With its excellent control characteristics, the Pinch Valve can be used as a manual throttling control valve.



In addition, the sleeve, which is the only part of the valve exposed to the line process, eliminates maintenance and the need for expensive, anti-corrosion body materials.

How it Works:

During operation, two pinch bars squeeze the flexible rubber sleeve, allowing the Pinch Valve to achieve a variable and stable flow rate. Fully open, the valve allows for full, straight through flow, eliminating areas where solids could build up and impair operation. Fully closed, the Pinch Valve maintains complete closure, with no leakage in either direction. Valve operation will not freeze and operating torques remain constant, even if the valve has remained in the open or closed position for years.



◎ **Feature**

1. **Completely enclosed body**

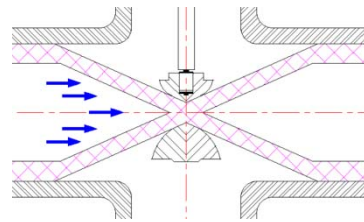
The enclosed body valve is the most common body type. Its enclosed design prevents premature sleeve deterioration and protects the sleeve from the environment, making it extremely safe to operate. Enclosed body pinch valves can be manufactured of cast iron, fabricated carbon steel, aluminum. Valve diameters begin from NPS 1".

2. **Optimum tightness**

Even large solid particles are shut off by the sleeve, which is particularly resistant to abrasion and corrosion, hence shut off without leaks.

3. **Full port, streamlined centerline closure**

Standard full port designs, streamlined centerline closure and Class VI shutoff provide outstanding elastomer wear life as well as precise, repeatable linear flow control.



4. **Self-cleaning, no plugging**

Self-cleaning sleeve provide 100 % tight shut-off even if solids have built up on the sleeve wall. When compressed, any crystallized particles flake off the sleeve surface and are washed downstream.

5. **The sleeves inner lining reinforcing cords**

The sleeve is a reinforced construction making it the pressure containing part of the valve. The quality of the sleeve is crucial to the life time and anti-abrasion characteristics of the Pinch valve, SBM PTV Pinch Valve sleeves guarantee high wear and corrosion resistance, a trouble free operation, and extended lifetime.



6. **Easy maintenance**

The sleeves and other parts can be replaced easily.

7. **Low pressure drop**

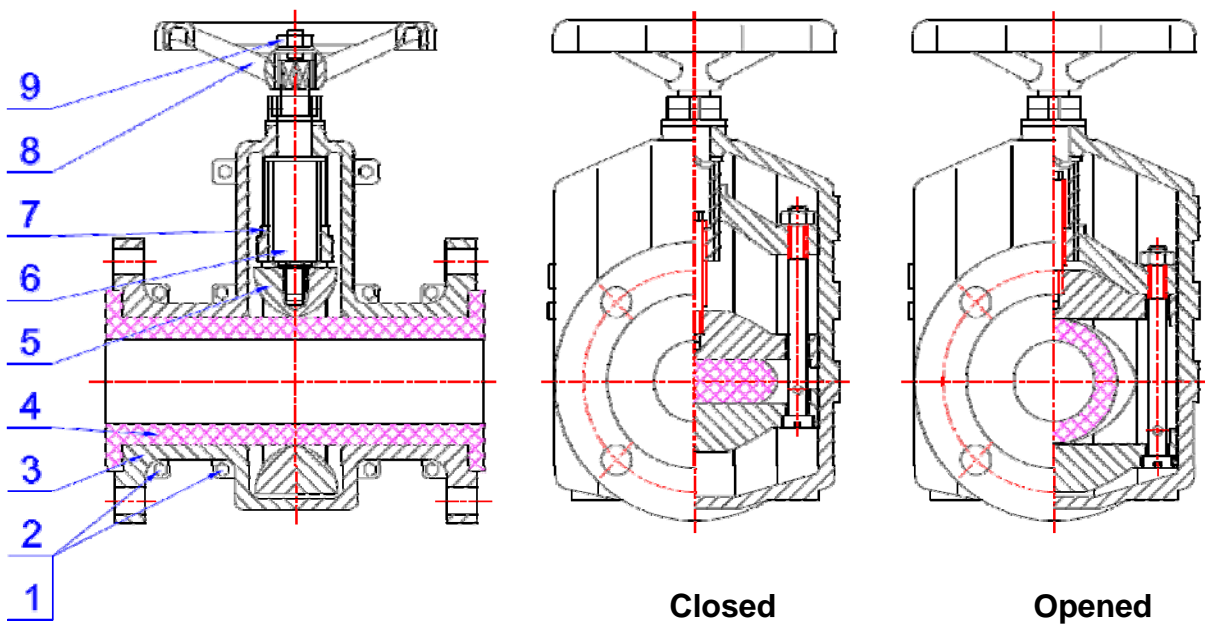
8. **Bi-directional**

Technical Data:

1. Size range: NPS 1"~12"
2. Pressure ratings: 125LB / 150LB
3. Working temperature: -29°C ~ +85°C
4. Working pressure: ≤ 150 PSI
5. Suitable Medium: tough slurries, abrasives, and corrosive chemical applications.
6. Industrial areas: Minerals processing. Metallurgy. Cement and fibrocement. Pigment and granulates. Ceramics-, glass-, plastic industry. Pulp and paper. Sewage water and mud industry. Marble- and granite industry. Tannery. etc
7. Body Material: Cast Iron / Aluminum
14" and larger body sizes are of fabricated steel design.
8. Sleeves Material: NR / NBR / EPDM

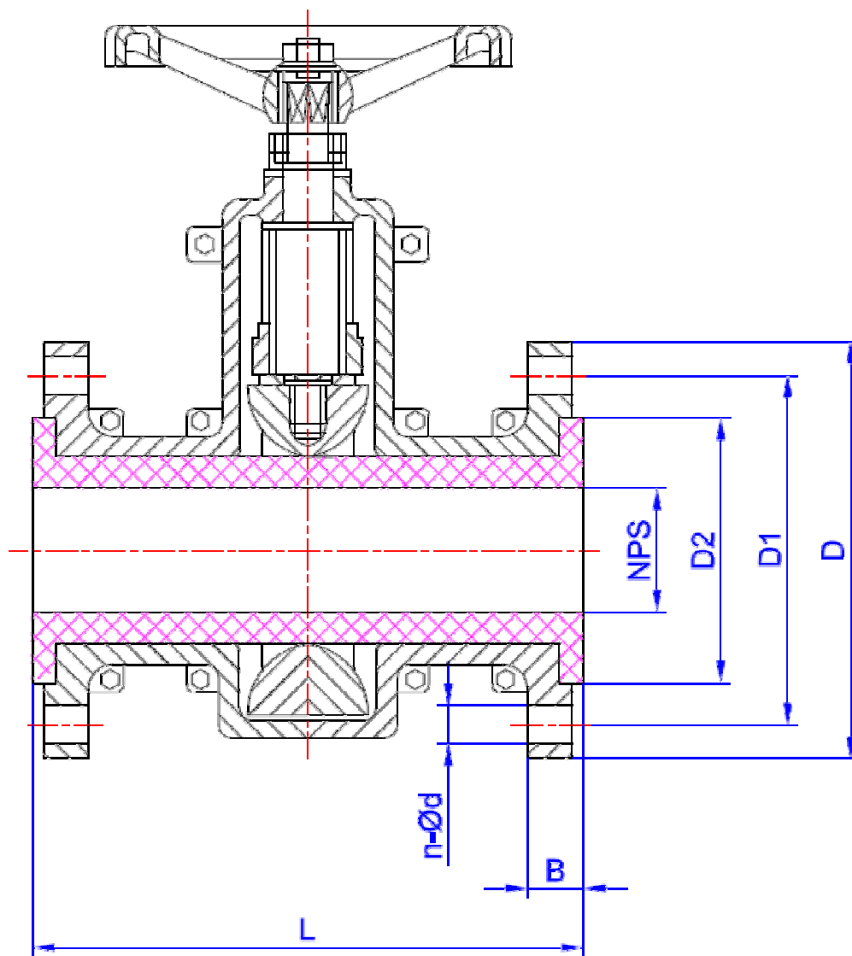
◎ **Performance Standard:**

1. Design & Manufacture standard as to: ASME B16.34
2. Face to Face dimension standard as to: MFR-STD
3. Flange dimension conforms as to: ASME B16.5
4. Testing And Inspection as to: API 598
5. Pressure-temperature conforms as to: ASME B16.34



Part List of SBM PTV Pinch valve enclosed body

No.	Name	Material	Standard
1.	Body Bolt	B7	ASTM A193
2.	Body Nut	2H	ASTM A194
3.	Body	Cast Iron	ASTM A126 Gr.B
		Aluminum	ASTM B108
4.	Sleeve	NR / NBR / EPDM	MFR-STD
5.	Closure	Carbon Steel	AISI 1025
6.	Stem	Carbon Steel	AISI 1025
7.	Retainer Steel Bar	Carbon Steel	AISI 1025
8.	Handwheel	Ductile Iron	ASTM A536
9.	Stem nut	2H	ASTM A194



Main Dimension of SBM PTV Pinch valve enclosed body

Flanged ends RF ASME B16.5 125LB / 150LB

NPS	L	D	D1	D2	B	N-Ød	Weight (Kg)
1"	145	Ø110	Ø79.4	Ø51	13	4 - 1/2" - Unc	5.5
1 1/4"	160	Ø115	Ø88.9	Ø64	14.5	4 - Ø16	6.8
1 1/2"	180	Ø125	Ø98.4	Ø73	16	4 - Ø16	8
2"	210	Ø150	Ø120.7	Ø92	17.5	4 - Ø19	13.5
2 1/2"	250	Ø180	Ø139.7	Ø105	21	4 - Ø19	17
3"	300	Ø190	Ø152.4	Ø127	22.5	4 - Ø19	23.5
4"	350	Ø230	Ø190.5	Ø157	22.5	8 - Ø19	27
5"	430	Ø255	Ø215.9	Ø186	22.5	8 - Ø22	46
6"	500	Ø280	Ø241.3	Ø216	24	8 - Ø22	59
8"	650	Ø345	Ø298.5	Ø270	27	8 - Ø22	107
10"	800	Ø405	Ø362.0	Ø324	29	12 - Ø25.5	186
12"	950	Ø485	Ø431.8	Ø381	31	12 - Ø25.5	215

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Cv values for SBM PTV Pinch valve enclosed body NPS 1"~12" (Standard full port)

