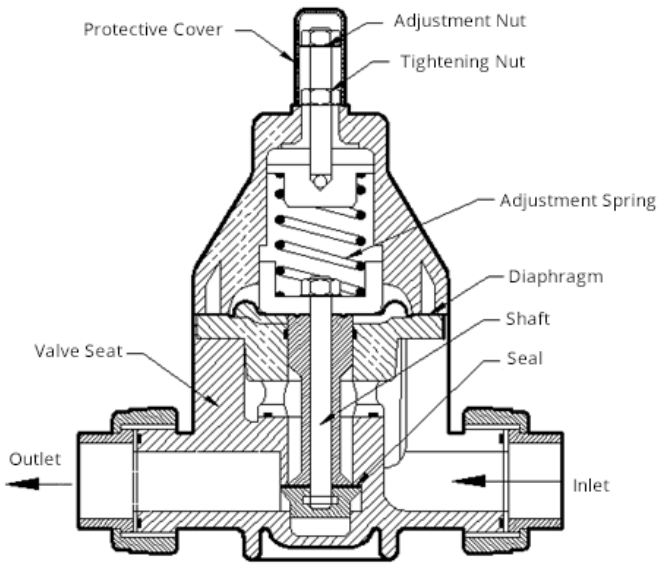
BACK PRESSURE / SAVETY VALVE

Safety Valve is one of the most crucial accessories in a chemical dosing system. It is also referred as pressure relief valve in the industry. Safety valve helps to prevent system being over pressure. In a typical setup, it shall be installed along the return pipeline after the metering pump. While installing a safety valve, it shall be installed as close as possible towards the dosing pump and there should not be any valve in between. When the pressure in the system pipeline exceeds the preset value, the diaphragm and the shaft are jacked up, and the medium is discharged back to the return pipe. The preset value can be adjusted directly on the safety valve itself. The preset value can be adjusted within 0 – 1Mpa by adjusting the adjustable nut. The relief pressure is generally set higher than the system pressure by 0.1-0.2Mpa and not exceeding the maximum pressure of the metering pump.

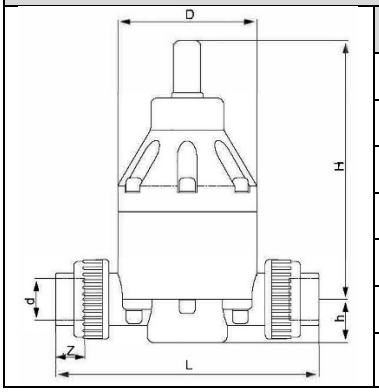
Back pressure valve is very similar to safety valve, but the emphasis is on steady state pressure control instead of on/off actuation. It shall be installed on the positive pressure side along the discharge pipe of the metering pump. A back-pressure valve can prevent the occurrence of siphoning and reduce unstable dosage which is caused by the pressure fluctuation. To adjust the set value, remove the protective cap, rotate the adjusting nut, and set within the range of 0-0.6 MPa. It is commonly used in conjunction with the pulsation damper to reduce the vibration damage towards the system. On the discharge, the flow will be more stable with the installation of back pressure valve.

Features:

- Ensure the system pressure is stable and consistent, prevents over pressurized your system.
- Protect your pumps and ensure system stability.
- With the combination with a dampener,
- Reduce flow fluctuation and protect your system from vibrations caused by the flow fluctuation.
- Diaphragm is made of a combination of PTFE and Rubber. Designed to handle corrosive liquid and ensure top performance sealing without leakage.

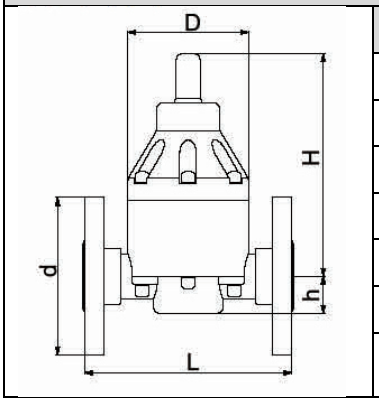


SERIES 186 (STANDARD CONNECTION)



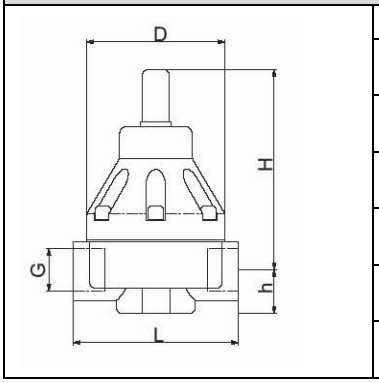
Model	Size	L	H	D	d	z	h
18615	DN15	175	181	82	20	22	27
18620	DN20	174	181	82	25	19	29
18625	DN25	202	198	107	32	21	33
18632	DN32	251	198	107	40	31	35
18640	DN40	285	260	155	50	31	60
18650	DN50	355	260	155	63	39	60
18665	DN65	367	260	155	75	41	65

SERIES 186-F (FLANGE CONNECTION)

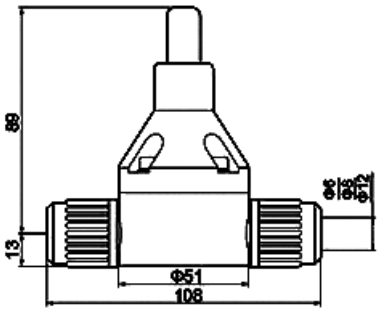


Model	Size	L	D	H	h	d
18615-F	DN15	128	82	181	27	95
18620-F	DN20	130	82	181	29	105
18625-F	DN25	158	107	198	33	115
18632-F	DN32	180	107	198	35	140
18640-F	DN40	220	155	260	60	150
18650-F	DN50	225	155	260	60	165
18665-F	DN65	238	155	260	65	185

SERIES 186-B (STAINLESS STEEL THREADED CONNECTION)



Model	Size	L	D	H	h	G
18615-B	DN15	94	82	140	23	G ½"
18620-B	DN20	95	82	140	23	G ¾"
18625-B	DN25	121	107	160	26	G 1"
18632-B	DN32	121	107	160	26	G 1 ¼"
18640-B	DN40	181	155	207	32	G 1 ½"
18650-B	DN50	181	155	207	32	G 2"

SERIES 186-H (HOSE CONNECTION)	
 	Available Sizes: ϕ6 ϕ 8 ϕ 12 Available Material: PVC PVDF

Material Available	:	UPVC, PPH, CPVC, PVDF, SUS304, SUS316;
Working Pressure	:	0~1.0MPa, 0~1.6Mpa
Inlet/Outlet Size	:	DN15, DN20, DN25, DN32, DN40, DN50, DN65
Connection Type	:	Glue, Threaded, Flange
Diaphragm	:	PTFE + Rubber

PULSATION DAMPENER

A pulsation damper is a common component for eliminating pipe pulsation and it is an accessory that must be provided for a metering pump system. WRS's Pulsation Dampeners are designed to reduce pulsation and vibration in the pipe system that is caused by a metering pump or plunger pump. It ensures a smooth and continuous flow of the system. By removing the pulsation flows, the efficiency and accuracy of the pump system can be increase significantly. On the other hand, it helps to protect the pump, seals, gaskets of the entire systems from vibration and result in a longer lasting safer system. Whether a piston, plunger, air diaphragm, peristaltic, gear, or diaphragm metering pump a WRS Pulsation Dampener placed at the pump's discharge will produce a steady fluid flow up to 99% pulsation free: protecting the entire pumping system from the damaging effects of shock.

- Quick Installation
- In-line Maintenance
- Bodies in a full range of Chemical Resistant materials
- Bladders for even the most corrosive applications
- Produces near steady fluid flow
- 99% pulsation and vibration free
- Protects pumping system from pulsation, water hammer, vibrations, and more.