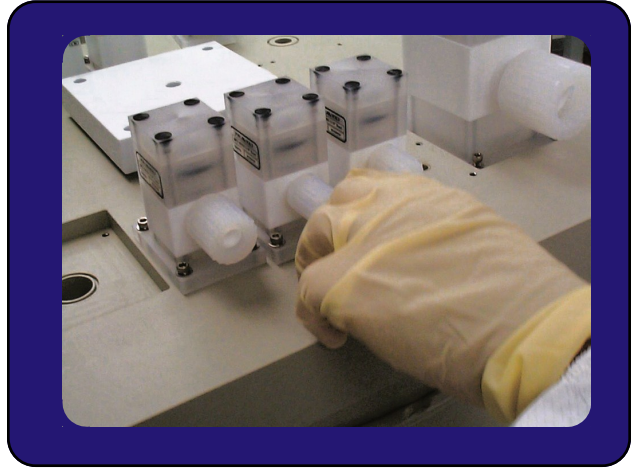


# Dymatrix™ Diaphragm Valves

- Excellent durability and reliability
- Ideal for CMP Slurry, DI water & Chemical Process
- Easily incorporated into OEM equipment
- Specific solutions for your application

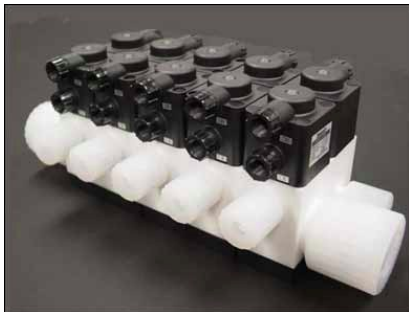


**SDV**  
Single Diaphragm Valve  
On/Off Manual/Pneumatic  
Flare, S-300, FNPT, Tube  
58 psi 1/4" - 1/2"  
43.5 psi 3/4" - 1"



## Single Diaphragm

Single diaphragm valves are an economical solution for a commodity diaphragm valve. SDV offers a large size range with multiple connection options. Available with air actuated, manual multi-turn and toggle actuators.



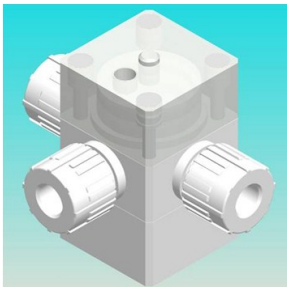
**MPV**  
Multiport Diaphragm Valve  
On/Off Manual/Pneumatic  
Flare, S-300, FNPT, Tube  
72.5 psi 1/4" - 1"



## Multiport Valve Manifolds

The most versatile of all diaphragm valves, offering custom manifolds in a variety of end connections, actuators and options.

Tested at pressure beyond 1,000,000 cycles. Poppet-style diaphragm allows media to recirculate on multiple feed lines while valve remains closed to the point of use.

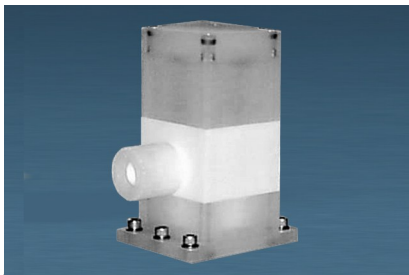


**DIV**  
Diverting Valve  
On/Off Manual/Pneumatic  
Flare, S-300, FNPT, Tube  
72.5 psi 1/4" - 1"



## Diverting Valve

The latest innovation from the Dymatrix Series of valves. True diverting valve was developed for 3-way distribution with a high purity poppet style diaphragm. The small footprint makes the DIV ideal for OEM use.



**SMV**  
Surface Mount Valve  
On/Off Manual/Pneumatic  
Flare, S-300, FNPT, Tube  
72.5 psi 1/4" - 1"



## Surface Mount Valves

Built on the technology found in the multiport valve, this unique design allows for simplified manifold construction, reducing cost and time. Valve changes can be made at any time without having to replace the entire manifold. Ideal for vessels or mixing tanks.

The  
Wet  
Process  
People™

[www.asahi-america.com/Dymatrix-SDV.htm](http://www.asahi-america.com/Dymatrix-SDV.htm)

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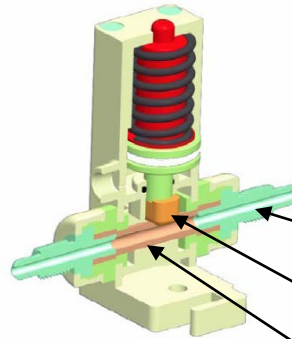


# Dymatrix™ Pinch Valves

- No cohesion or decline in sealing performance
- Ideal for CMP Slurry and DI water
- Easily incorporated into OEM equipment
- Completely flushable in full open position



**PV3**  
Pneumatic Pinch Valve  
On/Off  
1/4" - 1" Flare, S-300,  
FNPT  
43.5 psi



End Connector (PTFE)  
Compressor Shaft (PVDF)  
Tube (PTFE Blend)



**PVM**  
Manual Pinch Valve  
Adjustable Flow  
1/4" - 1" Flare, S-300, FNPT  
72.5 psi



## Straight Flow

The straight flow path applies no stress to the medium. There is almost no influence to the particle size, even with highly coherent fluids such as slurry, it can also be used for DI water. There is no restriction on the flow path which gives a high Cv value and the ability to fully flush.



**PVSL**  
Slow Leak Pinch Valve  
Pneumatic w/ Manual Stop  
1/4" - 1" Flare, S-300, FNPT  
43.5 psi



## Excellent Durability

The use of a pinch seal structure provides superior durability against foreign substances caught in the flow passage. The tube does not break down or shed which proves reliable over 2 million cycles.



**PVEL**  
Electric Pinch Valve  
Precision Flow Control  
1/4" Flare, S-300  
43.5 psi



## Seal Design

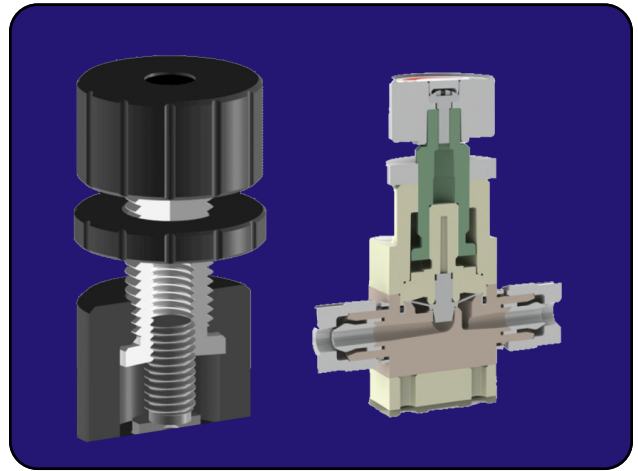
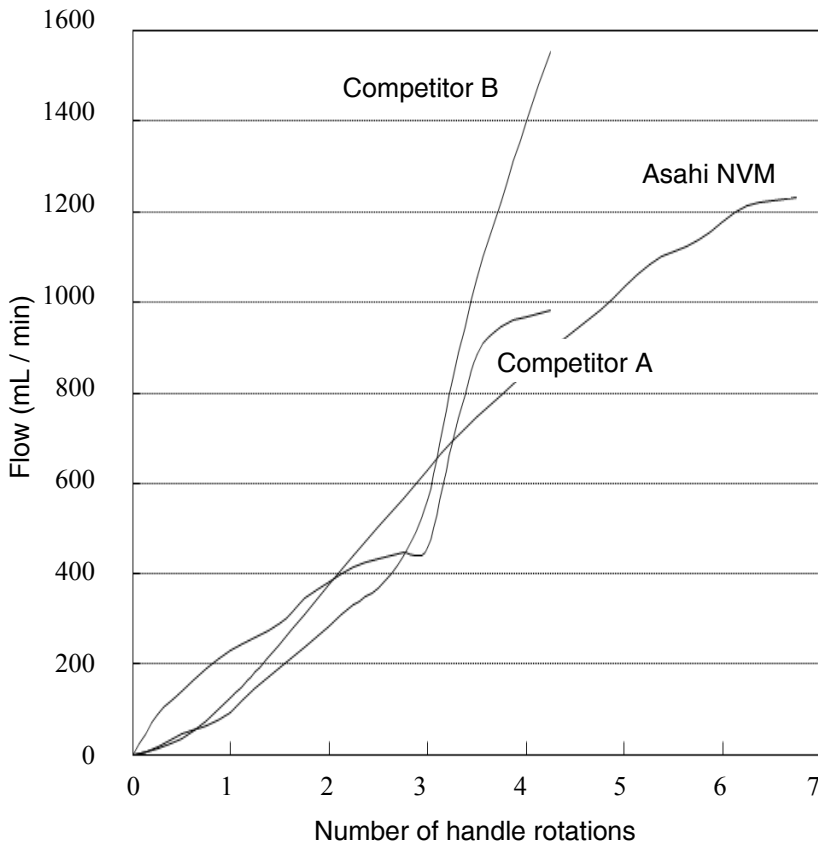
A proprietary PTFE blend tube design provides a full seal without crimping when the valve closes. The tubing completely restores to the original open shape. Slurry evaluation test shows there is no decline in the sealing performance.

# Dymatrix™ Needle Valve

- True Linear Flow
- Panel mount for easy installation
- PTFE diaphragm isolates media from stems
- Straight, Horizontal & Vertical L available



**NVM**  
Manual Needle Valve  
Fine Regulation  
Flare, Baseplate  
1/4" - 1/2"  
72.5 psi

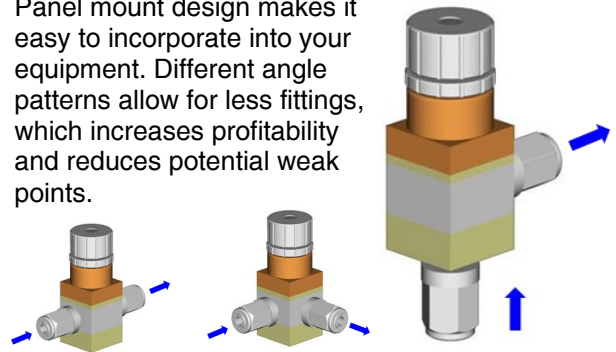


## Linear Flow

Special diaphragm needle shape, in conjunction with dual stems create true linear flow. Easy to adjust to the desired flow rate without spiking like standard needle valves.

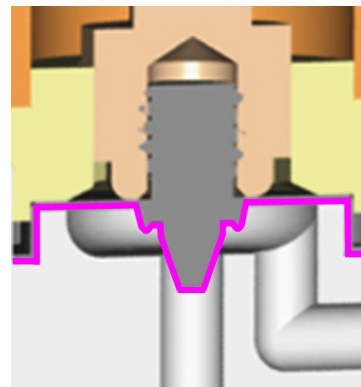
## Configurations

Panel mount design makes it easy to incorporate into your equipment. Different angle patterns allow for less fittings, which increases profitability and reduces potential weak points.



## Diaphragm Design

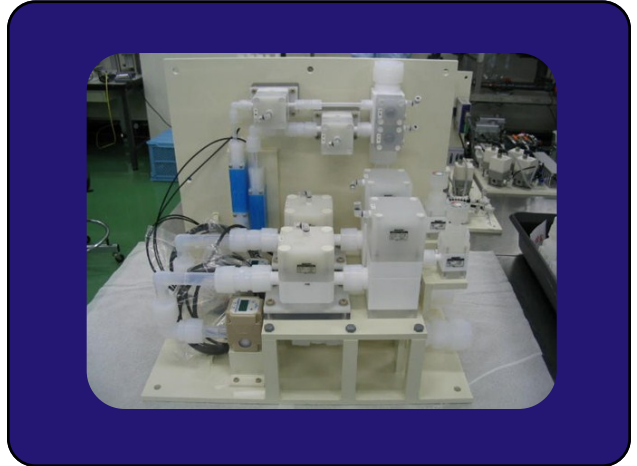
Unique diaphragm design keeps media from contacting the dual stems, resulting in an ultrapure valve. A sealing cone is placed around the needle to protect the PTFE needle tip and



completely stop flow when closed. All PTFE wetted parts provide excellent chemical compatibility.

# Dymatrix™ Regulators & Flow Control

- Precise and accurate control over pressure via pneumatic control
- Fluctuations in pressure are instantly adjusted
- Flow control for blend processing
- Point of use regulation



## Pressure Regulator

HPR-L series pressure regulators instantly control fluctuations in pressure due to the quick response of the valve. The pressure does not spike, even just after the pump turning on. Sophisticated diaphragm design precisely maintains pressure. Balance out diaphragm pumps prior to reaching the point of use.

## Manual Pressure Regulator

HPRL-M series pressure regulators offer the same technology found in the pneumatic version, with manual adjustment. Easy to operate and simple to install. Adjust pressure by rotating the handle. Once the desired pressure is set, it automatically controls fluctuations.

## Slurry Pressure Regulator

The internal structure is proprietary simple and prevents clogging and cohesion in CMP slurry applications. Pneumatically controlled to provide adjustments in pressure. In case of failure, the valves shuts off flow.

## Constant Flow Valve

The CFV incorporates an orifice into the PTFE diaphragm. Easier system design by eliminating concerns about pressure fluctuations due to pipe length and back pressure.



**HPR-L**  
Pressure Regulator  
Full shut off (fail close)  
Flare, S-300, FNPT, Tube  
72.5 psi 1/8" - 1"  
5 cc/min—100 lpm



**HPRL-M**  
Pressure Regulator  
Full shut off (fail close)  
Flare, S-300, FNPT, Tube  
72.5 psi 1/4" - 1/2"  
400 cc/min—15 lpm



**HPR-S**  
Slurry Pressure Regulator  
Flare, S-300, FNPT, Tube  
72.5 psi 1/4" - 1/2"  
50 cc/min - 5 lpm



**CFV**  
Constant Flow Valve  
Full shut off  
Flare, S-300, FNPT, Tube  
72.5 psi 1/4"  
10 cc/min - 2 lpm



# Dymatrix™

## PVC Valves

- Specialty PVC valves based on Dymatrix technology provides proven results
- Large size range, small footprints
- True union connections for easy installation



**HDV12/AD16**  
**Diaphragm Valve**  
**Socket, Threaded, Flanged**  
**72.5 psi 15 - 25mm**  
**58 psi 32 - 50mm**

DI Water Chemical Air Shut



**HDV-W**  
**Water Hammer - Less**  
**Socket, Threaded, Flanged**  
**72.5 psi 15 - 25mm**  
**58 psi 32 - 65mm**

DI Water Chemical Air Shut



**QDV**  
**Quick Drain Valve**  
**Socket, Threaded, Flanged**  
**2.9 psi 40 - 100mm**  
**PVC & PP**

DI Water Chemical Air Shut



**BVX**  
**Ball Valve Flare**  
**Flare, S-300, Hose Barb**  
**1/2" x 1/4", 3/8", 1/2"**  
**3/4" x 3/4" & 1" x 1"**  
**72.5 psi**

DI Water Chemical Shut

### Diaphragm Valve

HDV12 and AD16 diaphragm valves are the first PVC valves designed from the ground up to be an actuated valve. This compact valve is ideal for PVC skid fabrications and water stands. Many options are available in addition to the standard valve.

### Water Hammer Valve

Based on the successful HDV12, the HDV-W is designed to combat the effects of potential water hammers. This valve's diaphragm is designed to remain sealed even when pressure and flow fluctuates downstream. A simple way to protect your upstream equipment.

### Quick Drain Valve

Plunger-style valve installs inline without taking up additional space for its integral double acting actuator. True union design can be installed with ease. Available in PP and PVC.

### Ball Valve Connector

Easily incorporate tubing into your existing system. The ball valve is socket welded into PVC, PP and PVDF pipe and the tubing connection is added to the other side. Experience the security of proven leak proof ball valve connections, now for your tubing adapters.