

Two-Way Valves

An Industry Standard

The standard Aquasyn two-way valve is available in sizes 1/4" to 6" and can be supplied in any number of configurations with options involving body type, diaphragm type, end connections and surface finish. Whether combined with our manual bonnets featuring smooth operating high temperature plastic handwheels or our pneumatic actuators, Aquasyn's innovative design capabilities set us apart.

Please see ordering information on page 16 for a range of options or contact us with any special requirements you may have.



Quality

Our two-way weir type diaphragm valves feature robust construction, precision machining and state of the art surface finishes, with ASME-BPE compliant chemistry.

Machining

All of Aquasyn's two-way and special configuration valve bodies are machined from 316L austenitic stainless steel bar stock. No castings are used whatsoever.

Traceability

Aquasyn valves are fully traceable with Material Test Reports (MTRs) and Heat Numbers provided as standard procedure.



Please ask us how our extensive custom design and fabrication capabilities can assist you in providing unique solutions for your process requirements.



Features

- BPE Compliant machined bar stock bodies with controlled Sulfur (0.005-0.010%) Ferrite < 0.5%
- Integral valve body sealing ridge prevents excessive entrapment of process media
- Sizes from 1/4" to 6" provide process application flexibility
- Exterior body surfaces radiused and sloped promote cleanability by wash-down or COP methods
- Fully traceable bodies insure ease of validation/documentation
- Drain angle marks etched on end connections insure self-draining alignment
- Surface finishes available from 25Ra to 5Ra, mechanical and electropolished
- Exotic materials including Hastelloy¹ AL6XN² and Titanium available upon request
- Hygienic clamp, butt weld, orbital weld and special end connections available

¹Hastelloy is a trademark of Haynes International
²AL6XN is a trademark of Allegheny Ludlum

Manual Bonnet Assemblies

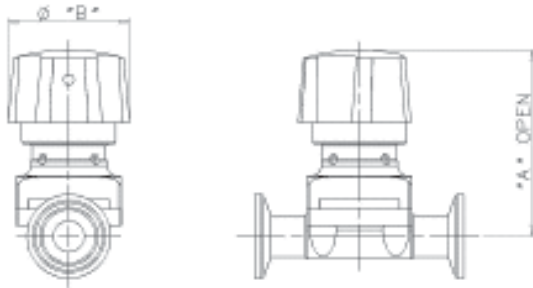


Features

- Readily cleanable exterior
- Fully autoclavable
- Patented Tork-Tite® feet provide consistent fixed diaphragm position
- Stainless steel internals
- Ergonomic performance plastic handwheel
- Fully formed compressor exactly matches weir profile for tight shut-off, smooth operation
- Custom bonnet options include: O-ring sealed, COP service, submersible and other specials
- Special stem threading options available for manual flow control
- Fixed internal travel stops
- Adjustable travel stop available

Trouble Free

Aquasyn bonnets are designed and manufactured from stainless steel to provide long, trouble free service. All internal parts are machined to exacting tolerances for smooth and consistently reliable operation. Our patented Tork-Tite® feet on the bonnet corners and compressors, which are precisely machined and finished to match the profile of the weir on the valve body, insure a fixed diaphragm position to provide consistent zero leakage closure and repeatable flow control characteristics.

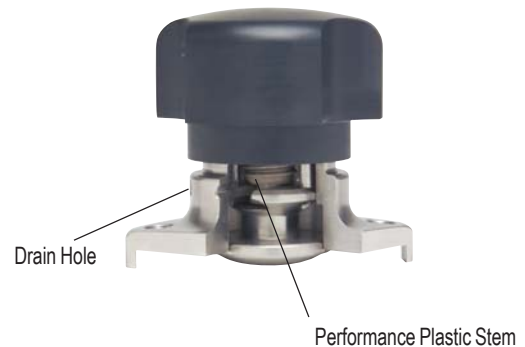


Dimensions

Size	"A"	Ø "B"
¼" - ½"	2.25"	1.25"
¾"	3.00"	2.00"
1"	4.25"	3.20"
1½"	5.63"	4.20"
2"	7.00"	5.00"

Submersible Bonnet

The Aquasyn patent-pending submersible bonnet assembly has been developed to meet the needs of recent developments in biopharm cleaning protocols. Designed to provide trouble free performance in demanding COP applications, these bonnets are fully drainable, autoclaveable, and incorporate a non-galling performance plastic stem. Available in size ¼" through 2", the bonnet provides a compact, lightweight solution to complement Aquasyn's range of diaphragm valves.



Pneumatic Valve Actuation

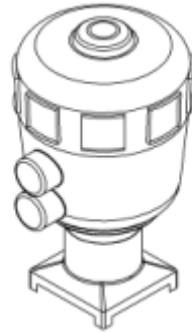


Performance

As with other Aquasyn components, our pneumatic actuators provide design and construction which meet or exceed industry standards. The actuators feature lightweight performance plastic housings, precision stainless internals, and O-rings machined and molded to tight tolerances. Only high quality materials are used for long, trouble free performance.

Features

- Compact lightweight design
- Choice of spring return or double acting operation
- Selected limit switch options available
- Banjo mount solenoid options available
- NAMUR adaptor available
- High cycle life
- Integral controlled travel stop



Control

Like our manual bonnets, all actuated bonnets feature our patented Tork-Tite® feet and cover a complete range of automation requirements from basic on/off service to fine modulating control.



Positioner

The positioner serves to position pneumatically actuated diaphragm valves.

The positioner is an electropneumatic position controller for the pneumatically actuated

continuous diaphragm valve. The device includes the following main function groups: a feedback/positional transducer, an electropneumatic system and a microprocessor electronic system. The feedback/positional transducer measures the actual position of the continuous valve. The microprocessor electronic system continuously compares the actual position (actual valve) with a desired position value that was preset via the standard signal input and supplies the result to the position controller. If an error exists, the electropneumatic system causes the actual position to be appropriately corrected.



Stroke Limiter



Electrical Position Feedback



Intrinsically Safe Control On/Off Head



Electrical Feedback Switch



Manual Override