



About Our Products

Gemini Valve manufactures 1/4" - 3" manual and pneumatically actuated ball valves and accessories. Through our Service Centers, we can also supply electric actuators for our valves as well as related products. Our valves are primarily intended for General Purpose Industrial 'on / off' applications.

As a domestic manufacturer we have control of the materials and dimensions critical to assuring long reliable life. We work hard to minimize the variance from one piece to the next to assure that all our products offer consistent high performance. If you have found 'cheap' commodity valves and actuators to be expensive over the long run because they don't meet your needs for performance, reliability, and availability, then we can offer you a better value alternative.

Gemini Valve offers several series of ball valves, actuators and accessories to best meet your application requirements. We are pleased to provide you this overview of our products. If you don't see what you're looking for, contact us, we may be able to engineer and manufacture to your application requirements!

76, 86 & 96 Series - 1/4" - 2" Bar Stock Valves

The subtleties of valve design that make a difference are often overlooked by manufacturers of 'commodity' ball valves. At Gemini Valve, all internal components, including the seats, are precisely machined, assuring bubble tight sealing and maximum valve life. Our spring loaded stem seal provides automatic compensation for stem seal wear and thermal expansion and contraction. Each valve is bubble tested to ensure reliable, leak tight performance.

Our 76, 86 & 96 Series ball valve bodies are produced from brass, carbon steel and 316 stainless steel bar stock. Alloy 20[®] and Monel[®] are also available in our 76 Series in 1/2" - 1" sizes. Through use of bar stock, we can offer the economies made possible through high volume production on multiple spindle screw machines as well as the superior integrity of material unique to drawn bar. These valves are offered in sizes of 1/4" - 2" with female N.P.T. or B.S.P.T. pipe threads. Often used for utility services such as air, water, or steam, are also ideal for many other media where positive leak-tight performance is required.

The 76 Series, being a single piece bar stock body design, is the simplest and most economical series to produce. These valves have a compact, single piece body and a reduced port suitable for many applications where flow is not critical. Where maximum flow is a consideration we offer the 86 Series standard port and 96 Series full port models.

These three valve series are ideal for automation with our compact pneumatic actuators or electric actuators provided through our Service Centers. A variety of manual handles are also available.



89 Series - 1/4" - 2" Three Piece Valves

Gemini 89 Series offers 1/4" - 2" three piece ball valves with pipe socket weld, pipe butt weld, female screwed (NPT, BSPT & JIS) end and tube socket weld along with tube compression connections. Standard material of construction is 316 stainless steel.

The 89 Series overcomes many common three piece ball valve installation problems. For example, rotational alignment of the bolt holes is not required at installation of the pipe adapters as with conventional three piece valves. The pipe adapters, although factory assembled as integral units, allow the flanges to rotate independently of the pipe connectors. This construction eliminates the possibility of distortion of the pipe connector sealing face, should the assembly bolts be overtightened.



82 Series - 1/4" - 1" Tube Compression Valves

An excellent alternative to high pressure models for those applications where a pressure rating of 1,000 p.s.i. or less is required. The 82 Series is offered in both brass and 316 stainless steel barstock construction in sizes of 1/4" - 1" OD tube. The compression joint uses the proven twin ferrule design to ensure positive two point sealing between the tube and fitting. In addition to tube x tube connections, the 82 Series also offers tube x threaded including N.P.T, B.S.P.T. and J.I.S. thread standards.



309 Series - 1/2" & 3/4" Diveter / Selector Valves

The 309 Series can be used for either diverter or selector service. This model utilizes a unique 'floating' seat, backed by a Viton® seal which enables the seat to seek the optimum sealing position with relationship to the valve ball providing for leak-tight service. Available in carbon steel and CF8M (316) stainless steel with N.P.T. or B.S.P.T. female pipe threads



98 Series - 2" & 3" Full Port Wafer Style Ball Valves

In the Gemini Valve tradition, the 98 Series wafer style CF8M (316) stainless steel full port ball valves combine the efficient use of materials and application features that offer optimum value for many industrial valve applications.

By installing a 98 Series valve between a pair of ANSI 150# or 300# Class raised face flanges, the valve essentially becomes a conventional three piece ball valve that meets ANSI B16.34 specifications for the rating of the flanges used. Not only does this minimize the cost, it also reduces the weight substantially compared to conventional flanged end valves.

When either electric or pneumatic actuation of 98 Series valves is required, a mounting system is available that assures rigid and precise coupling of the actuator to the valve. The reaction torque is not absorbed by the assembly bolts, thereby avoiding the common problem of the assembly bolts loosening in service.

Accessories including, handles, electric and pneumatic actuators are available.



Pneumatic Actuators

Gemini A500 & 400 Series pneumatic actuators are designed to be used with our 76, 86, 96, 309 and 89 Series Ball Valves. Our Actuated Ball Valves offer a unique combination of the three elements required for long trouble free life - a premium quality ball valve, a quality actuator designed to meet the torque requirements of the valve and a mounting bracket and connection that assures alignment and rigidity.

Gemini Actuator mounting is the key element of our pneumatically actuated ball valves. A good valve and actuator, poorly mounted, results in an inferior actuated valve. The Gemini coupling eliminates this possibility with the 'missing link' i.e., the actuator shaft is precisely coupled directly to the valve stem, thereby eliminating misalignment and backlash often found with the commonly used tongue and groove connecting linkage. The valve stem nut is held within the actuator shaft. These features, combined with a rigid mounting bracket, result in a pneumatically actuated ball valve that minimizes backlash, assures optimum stem seal life and prevents any possibility of stem nut back off.

Available with pilot valves and limit switches.

A500 Series

The A500 Series Actuators represents the combination of the latest in machining technology and our more than twenty five years experience in producing high performance pneumatic actuators.

The A500 Series offers a 50 psi spring-return model. This model enables spring to open or close without loss of output torque from the air operated side. This is achieved by two lightweight Zytel housed spring modules, one on each end of the actuator, that are fully compressed by diaphragm operated pistons.

All A500 Series Actuators are designed to operate using an air supply of 50 - 125 psi. The air can be delivered by direct mounting pilot valves having NAMUR interfaces or from remote pilot valves connected via means of 1/8" NPT ports in the actuator face plates. Gemini Valve 4GP Series four way solenoid operated pilot valves are available for NAMUR interface mounting.

Special brackets and pinion shaft extensions are available for mounting the Gemini Valve LS-1 limit switch assemblies, as well as auxiliary equipment, such as positioners and signal transmitters requiring NAMUR standard interface mounting compatibility (VDI / VDE 3845).

400 Series

Gemini Pneumatic Actuator's simple rack and pinion design, made possible through unique manufacturing techniques, results in a bar stock actuator which is compact, efficient and trouble free. A spring return option extends the capability of the design to meet the needs of those services requiring a spring action to either open or close the valve. Conversion from double acting to spring return simply requires the replacement of the end cap with a spring module. All actuators are factory lubricated so that there is no need for lubricated air. All threaded mounting bolt holes in the aluminum components have self locking stainless steel inserts to assure strong, positive fastening.



Electric Actuators

Gemini Valve offers the 600 Series electric actuators for use with all sizes of the Gemini 76, 82, 86, 96, 309 and 89 Series ball valves. Both models come standard with an effective and reliable manual override. The push-button operated override with exclusive fold-out lever handle allows the user to disengage the drive train and effortlessly turn the valve. The override system will automatically re-engage the drive train in the proper orientation when power is reconnected. For our 2 and 3 inch full port 98 Series wafer valves we offer the 92 Series.

Options include up to four limit switches to signal accessory devices, heater & thermostat, and voltages of 24, 120, 240 VAC, and 12 & 24 VDC (120VAC is standard).



Limit Switches for Gemini Pneumatic Actuators

The Gemini LS-1 Limit Switch easily mounted to any Gemini 400 or A500 Series pneumatic actuators, provides means to display valve position remotely or to interconnect the valve with associated equipment such as pumps or other valves. The LS-1 is totally enclosed and UL Listed for applications where a dusttight or weathertight enclosure is required as well as in those applications where general purpose enclosures will serve.



Pilot Valves for Gemini Pneumatic Actuators

For our customers who are not familiar with pneumatic actuators, they generally require a 3-way (for spring return models) or 4-way (for double-acting models) solenoid valve. Essentially, the solenoid valve, commonly referred to as the pilot valve, is energized by an electrical signal which then allows the air to flow into the actuator causing 90 degree rotation of the actuator and valve. Upon de-energizing, the action is reversed.



The Gemini models 4GP 4-way, & 3GP 3-way pilot valves, are the ideal operators for Gemini Valve pneumatic actuators. A single air connection and DIN style electrical connection are all that is required to complete the automated ball valve package. Available in many popular AC & DC voltages as well as CE marked coils. The 4GP & 3GP Series utilizes a flush mount NAMUR compatible interface to provide a space-efficient design which quickly and easily mounts to all Gemini NAMUR style actuators. The standardized interface allows the ball valve to be configured to normally open or normally closed operation. For applications requiring remote mounting of the pilot valve, we offer several name brands. Please contact us for our current offerings.

Don't See What Your Looking For....

Gemini Valve is continually adding new products and features to our product line. If you don't find what your looking for please contact us for the latest offerings. If we don't offer it we should be able to refer you to someone who can.



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