

Quality Engineered Thermoplastic Valves & Controls

for corrosive & ultra-pure liquids

- VALVES
- GAUGE GUARDS
- SIGHT GLASSES
- METERING PUMPS



- PVC
- Corzan™ CPVC
- Polypropylene
- PTFE
- Kynar® PVDF



PLAST-O-MATIC
VALVES, INC.



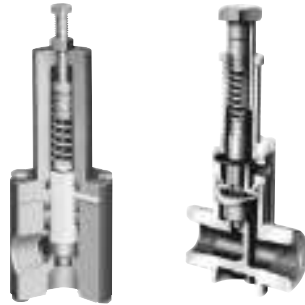
PRESSURE RELIEF AND REGULATOR VALVES

RELIEF, BY-PASS, ANTI-SIPHON & BACK PRESSURE VALVES



SERIES "RVDT" QUICK OPENING

PTFE diaphragm provides the ultimate in corrosion resistance and contamination-free sealing. No wetted elastomers. Patented FAIL-DRY® safety feature. For highly aggressive and ultra-pure liquid applications. PVC, Polypropylene, PVDF (Kynar®), PTFE. Sizes: 1/4" to 2".



SERIES "RVT" & "RVDM" GRADUAL OPENING

Prevent overpressures, maintain back pressures or automatic by-pass in vessels and piping. Series RVT angle pattern has non sticking PTFE shaft. Series RVDM in-line pattern has a frictionless rolling diaphragm design for sensitive operation. Settings from 5 to 100 PSI. FAIL-DRY®, 1/2" - 2". Series RVD angle pattern diaphragm design (not shown) 1/8" - 1/2" NPT, 5 to 150 PSI. Series RVTX offered in 3" NPT.

PRESSURE REGULATING VALVES



SERIES "PR", "PRH", "PRM", "PRE" AND NEW ULTRA-PURE "PRU"

Accurately reduce and regulate steady or varying inlet pressures and maintain a constant predetermined maximum outlet set pressure. Ultra-pure Series PRU features no wetted elastomers. Regulator settings from 5 to 125 PSI. Sizes 1/4" to 3".

SOLENOID VALVES

COMPACT



SERIES "EAST" DIRECT OPERATING-NORMALLY CLOSED TRUE-BLUE™ PTFE BELLOWS SOLENOID VALVE

This compact, new model provides a cost effective solution for high pressure rated applications, where space is limited. Patented FAIL-DRY® safety design. For virtually all type solutions: acids, caustics, solvents, chlorine solutions and ultra-pure liquids. 2,000,000 cycle life. Sizes 1/4" and 1/2". Cv of 0.5 with 3/16" orifice; 0.8 with 1/4" orifice. Economical Series WCM available; wetted core design.

HIGH FLOW



SERIES "PS" PILOT OPERATED SOLENOID VALVES

High pressure, high flow capability. Inlet pressures 5 to 140 PSI, backpressures to 70 PSI. Cv's from 5.2 to 80. Patented FAIL-DRY® safety design. PTFE bellows barrier type seal. For all type solutions. Sizes 1/2", to 3".

MULTI-PURPOSE



SERIES "EASMT" & "EASYMT" DIRECT OPERATING-NORMALLY CLOSED PTFE BELLOWS SOLENOID VALVE

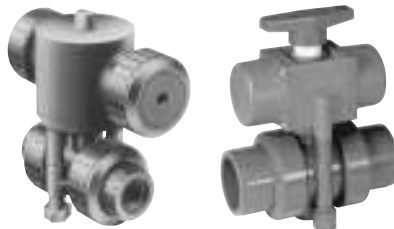
For severe service applications with virtually all solutions (acids, caustics, etc.). Unique "Bellows" design provides dynamic barrier seal, prevents leaking of emissions. 2,000,000 cycle life. FAIL-DRY® safety design. Sizes 1/4" to 1". Cv from 1.1 to 4.7, orifice from 3/8" to 11/16". Three-way solenoid valve is Series THP.

BALL VALVES



TRUE-BLUE™ SERIES "MBV" TRUE UNION MANUAL BALL VALVES

This engineered valve offers bubble-tight sealing and easy turning with perfectly machined, polished smooth ball. Designed with trunnion to keep ball centered, reinforced shaft to eliminate breakage and dual seals to insure reliability. PTFE seats are back-loaded with O-rings for reduced torque and longer seat life. Every valve is built ready to accept actuation in just minutes with no special tools or changes, and they are built for long cycle life. PVC, CPVC, PP, and PVDF; three-way Series TMBV available in PVC and CPVC. Sizes: 1/2" through 2".



SERIES "ABV" & "ABR" - 2-WAY SERIES "TABV" & "TABR" - 3-WAY AIR TO AIR OR SPRING RETURN PNEUMATIC ACTUATED BALL VALVES

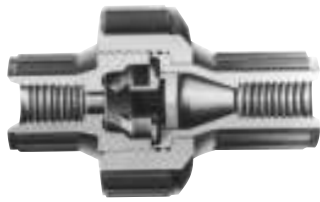
Rugged engineered thermoplastic construction - ideal for corrosive atmospheres. Compact, light weight assembly for reduced piping stress. Simple attachment to True Blue™ Ball Valve body mounting lugs. Manual override standard on most models. Spring Return options, Limit Stops and Switches available. ABV for sizes 1/2", 3/4" and 1"; Rack and Pinion ABR for sizes 1 1/4", 1 1/2" and 2".



TRUE-BLUE™ SERIES "EBV" 2-WAY & "TEBV" 3-WAY ELECTRICALLY ACTUATED BALL VALVES

Thermally protected, heavy-duty motor with 7 second cycle time. Designed to meet NEMA IV standards. Rugged all plastic construction - ideal for corrosive atmospheres. For use with computer-controlled automated systems. Compact design with manual override, position and motor running lights standard. Simple attachment to the valve body mounting lugs. Two actuator sizes for the valve range of 1/2" through 2".

CHECK VALVES • VACUUM BREAKERS



SERIES "CKM" DIAPHRAGM & SERIES "CKS" SELF-CLOSING CHECK VALVES

Leak-proof check valves prevent reverse flow of extremely corrosive and ultra-pure liquids. Self-sealing designs allow mounting in any position. Unique molded diaphragm in sizes 1/4", 1/2", 3/4" and 1"; self-guided poppet in 1 1/2", 2" and 3". Both styles are normally closed, operate silently, and seat in the same location everytime.



SERIES "VBM" & "VBS" VACUUM BREAKERS

Protective vacuum breakers eliminate unwanted siphonage or collapsing of storage tanks. Sensitive molded diaphragm offers normally closed operation and will respond to a minimum of vacuum; however, they are not recommended for protection of thin-wall tanks. Sizes 1/2", 3/4" and 1" NPT. New Series VBS features normally-closed design, higher capacity in sizes 1 1/2", 2" and 3" NPT.

HOT NEW PRODUCTS



**SERIES "PRA" AIR LOADED PRESSURE REGULATOR
SERIES "PRS" PRESSURE STABILIZER**

Outperforms spring loaded regulators through improved response to pressure changes; pressure is maintained without sacrificing flow. Incorporates the patented FAIL-DRY® safety feature. Regulator settings from 5 to 125 PSI. Sizes 1/4" to 3". Used with the patented Stabilizer® Series PRS, the PRA will perform with virtually zero drop off from set pressure. Performance rivals exotic control valves but at much lower costs.

AIR & GAS VENTING



SERIES "ARV" AIR RELEASE VALVE

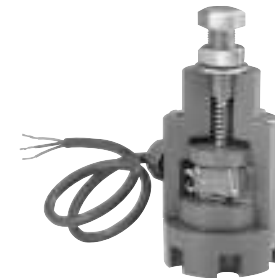
For high-capacity venting of gas at system start-up. Unique self-guided poppet assures minimal emission of system liquid and seals more reliably than ball-type designs. Closes at 0 PSI as long as liquid is present; bubble-tight seal at 10-15 PSI. PVC and CPVC in 1/2", 3/4" and 1" NPT connections.

Patent Pending



SERIES "DGV" CONTINUOUS DEGASSING VALVE

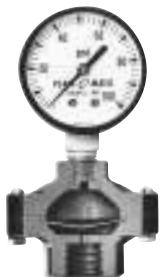
To vent trace amounts of gas as it occurs during system operation. Polypro float closes valve as liquid rises, opens when float chamber fills with gas. No internal or external metal components; ideal for aggressive environments. Maximum operating pressure 100 PSI. PVC or CPVC body materials with 1/4" NPT connection; 1/8" NPT vent port.



SERIES "SWT" PRESSURE SWITCH

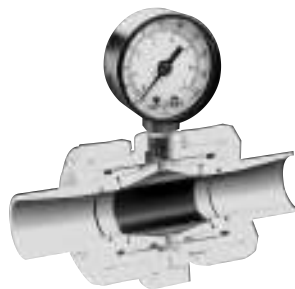
Used to signal equipment when pressure in a piping system either rises or falls to a set pressure; adjusts easily with adjusting screw. Maximum operating pressure of 150 psi. Features NEMA 4X design, patented FAIL-DRY® safety vent, PTFE diaphragm, and all -plastic grip. Snap-action 16 Amp/3 terminal switch is standard; 25 Amp and low deadband 3 Amp switches optional. All are UL recognized and CSA approved. PVC with 1/2" NPT connection.

GAUGE GUARDS



**SERIES "GGM" CHEMICAL GAUGE GUARDS
SERIES "GGME" MINIATURE DIAPHRAGM SEAL**

Protects instruments from corrosion and clogging while maintaining high accuracy. Unique optional "Snubber" insert reduces pressure pulsations, provides even, more precise readings and reduces needle-fluctuation damage. Available with or without pressure or vacuum gauges. Inlet 1/2". Gauge connection 1/4" or 1/2". Compact diaphragm seal Series GGME also for pressure or vacuum.



SERIES "GGMU" ULTRA PURE GAUGE GUARDS

Unique in-line design eliminates "dead leg" that can harbor bacterial growth and contamination. Unpigmented thermoplastic material. Special flexible elastomer spool separates system liquid from gauge fill liquid and assures accurate readings. Adaptable to existing piping systems. Sizes: 1/2" to 2".

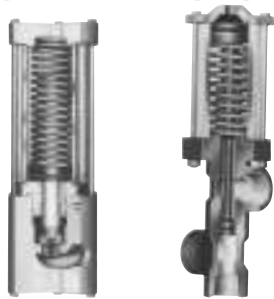
Breakthrough Design...



SERIES "LMBV" LATERAL REDUCING BALL VALVE

Revolutionary ball valve adapter eliminates weakness inherent to lateral drops; installs easily into your tee without additional fittings. Also an ideal replacement for costly zero dead-leg valves. 1/2" - 2" Ball Valves sizes. 3/4" - 3" tee adapters standard; other sizes consult factory. Available in PVC, CPVC, PVDF and natural polypropylene, socket or butt fusion.

AIR OPERATED SHUT-OFF & DIVERTER VALVES • MANUAL SHUT-OFF VALVES



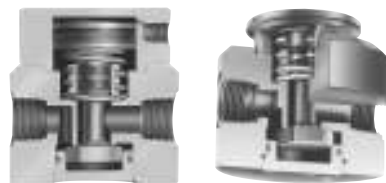
SERIES "BST" SHUTOFF VALVES AND SERIES "F" DIVERTER VALVES AUTOMATIC, AIR OPERATED

Shutoff valves (2-Way) normally closed or normally open, air by air, line pressure by air operation. Diverter valves (3-Way) direct flow. One (or two) common inlet(s) to two (or one) common outlet(s). FAIL-DRY® design and clear acrylic air cylinder shows valve position, standard on all. Sizes 1/2" through 2".



SERIES "BSD" MINIATURE AIR OPERATED DIAPHRAGM VALVE

Long cycle life and compact design. Excellent for ultra-high purity or highly corrosive liquids. Body is PVC (other materials also available) with a PTFE diaphragm. Million-cycle design. Connections can be female socket, female threads, or nipples. Patented FAIL-DRY® safety feature. Smooth internal cavities to avoid dead corners. Sizes 1/4" to 2". 1/8" NPT air connection. Standard is normally closed spring return. Series TUCA is 3-Way Miniature Diaphragm Valve.



RUGGED, HIGH PRESSURE SERIES "BSR" AIR-OPERATED SHUTOFF VALVES "MFR" MANUAL SELF-CLOSING VALVES

BSR air-operated valves are normally-closed, ideal for purity and corrosive applications. MFR palm or foot operated valves are the answer for applications where hand or hands must be kept free for other functions. BSR and MFR feature low friction design, bubble-tight seal, no wetted metals. 1/2" and 3/4" sizes. C_v 2.5 and 5.0; 150 PSI max; vacuum service available.

FLOW & LEVEL INDICATORS



SERIES "GX" & "GY" SIGHT GLASS FLOW INDICATORS

For safe, positive indication of flow and clarity of corrosive or ultra-pure liquids. Available with vinyl streamers to help detect flow. Series "GX" has only an acrylic cylinder wall for economy. Series "GY" has an acrylic outer cylinder protecting a Pyrex inner cylinder. Sizes 1/2" to 3" NPT.



SERIES "GYW" WAFER SIGHT GLASSES

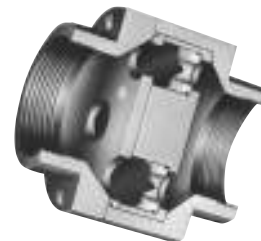
Offers safe and positive indication of flow or clarity of corrosive or ultra-pure liquids in larger piping systems. Double wall construction. Fits between standard companion flanges. Sizes 1 1/2" to 8" pipe.



SERIES "GL" SIGHT GLASS LEVEL INDICATORS

For safe, positive indication of exact level in tanks. Double acrylic and Pyrex® wall construction for maximum safety and corrosion resistance. In nominal lengths of 1, 2, 3 and 4 feet.

FLOW CONTROL



SERIES "FC" FLOW CONTROL VALVES

Automatic valves to maintain a constant flow regardless of inlet pressure changes between 15 and 100 PSI. No metal in contact with liquid. Flow rates from 1/4 to 120 GPM. Sizes 1/4" to 3".

SPIGOT ENDS



SPIGOT END CONNECTORS

1/2" through 3" in natural polypro, PVDF and PVC Installed by Plast-O-Matic. Other special connections available.

METERING PUMPS



SERIES "VPA" DUAL CYLINDER, AIR OPERATED FILLING AND METERING PUMP

Self-priming pumps deliver exact quantities of highly corrosive liquids. Features FAIL-DRY® design. Pneumatically operated, with adjustable discharge rates. Capacities of 7, 10, 32 and 128 oz. per stroke. Other capacities available on request.

CUSTOM DESIGNS

CUSTOM DESIGN & MANUFACTURING

In addition to our line of standard products, Plast-O-Matic is called upon to provide customized valves and controls for our customers. Illustrated are various examples of these specialized thermoplastic units which have been designed, engineered and manufactured to provide solutions for specialized applications. Request Special Product Program information.



FAIL-DRY® CONCEPT

FAIL-DRY® is a Plast-O-Matic patented design safety feature describing the unique concept of having a vented chamber separating two sealed sections of a valve or pump. In the event of lower (primary) seal failure, an upper (secondary) seal will continue to keep the operating media dry. Only controls with the patented FAIL-DRY feature offer this unique protection. FAIL-DRY permits a valve or pump to remain functioning after a primary seal failure, thereby keeping the process cycle or system operating until maintenance can be scheduled. This avoids costly emergency shut-downs.