Founded in England, the first Marwin Valve products were flanged ball valves largely intended for process services. Its product lines quickly expanded to include two-piece, three-piece and multiport valves. In 1998 Marwin Valve became a part of Richards Industries.

Today, Marwin Valve has become the preferred supplier of standard and customized valves for specific applications and processes. Whenever there is a need to control the flow of chemicals, air, gas, steam, sludge and water, there is a Marwin Valve suitable to the task. Few if any manufacturers offer: the variety of standard, metal or special seat configurations; the range of materials from brass and carbon steels to stainless steels and exotic alloys; or the menu of automation and control options.

Marwin Valve has established itself as a leader in the design and manufacture of small size, metal-seated, high-pressure ball valves, along with modulating control and smart valve technology. Among its other application strengths are low-pressure process, air handling, corrosive-erosive service, bubble-tight shut-off and close-coupled actuation.

Marwin Valve – In The Chemical Industry

For more than 40 years Marwin Valve has been serving the flow control needs of chemical, petrochemical, pharmaceutical and polymer manufacturers as well as those of the broader chemical process industries. Marwin Valve's general duty and severe service valves are used in the production, efficient handling and safe transport of many hazardous chemicals where there is no margin for error in application expertise, durability or design.

Product offerings include:

- Two-piece ball valves
- Three-piece ball valves
- Flanged ball valves
- Multi-port valves
- Specialty valves
- Metal seated
- Characterized insert control
- Cryogenic
- Special seated
- Pneumatic and electric actuators
- Positioners, switches and accessories

Fully committed to customer service, Marwin Valve routinely fulfills orders for its standard product offerings within 36 hours of receipt of order. Customers are served with an extensive worldwide network of experienced, knowledgeable representatives.

Note: *Marwin Valve products are available in bronze, carbon steel, stainless steel, duplex steel, Hastelloy®, Monel®, Alloy 20, 254 SMO®, titanium and materials to NACE MR-01-75. Products fire tested to API 607, 4th Edition. Valves meeting ANSI B16.34 design and B16.10, B16.5 dimensional criteria are also available.*

® Hastelloy is a registered trademark of Haynes International, Inc.
® Monel is a registered trademark of International Nickel Co., Inc.
® 254 SMO is a registered trademark of Outokumpu AB.

To learn more about Marwin Valve products and to find the name of a local representative visit: ***www.marwinvalve.com***

MARWINVALVE

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Key markets include: chemical, petrochemical, water resources, oil & gas, refining and power. Other sectors include: paper products, tire and rubber, machinery and electrical equipment, transportation equipment and power generation.

RICHARDS INDUSTRIES

Richards Industries is the parent company of five distinct industrial product lines:

- ***Jordan Valve –***
  Pressure and temperature regulators; pneumatic and electric control valves
- ***Marwin Valve –***
  Ball valves and automated products
- ***Hex Valve –***
  Instrumentation valves and manifolds
- ***Steriflow Valve –***
  Sanitary regulators, control valves and steam traps
- ***Bestobell Steam Traps –***
  Steam traps and steam specialty equipment

Our global network of representatives and distributors is our customers' most valuable resource. With over 200 representatives throughout the world, there is a local rep who will provide hands-on assistance with your application.

To learn more about Richards Industries and our products visit: ***www.richardsind.com***

Bulletin No. M-CPI/2500/1007/B

MARWINVALVE

Servicing the Global Chemical Processing Industry

Quarter-Turn Valves
Automation & Accessories
Specialty Products

Standard Flanged Valves

2000 Series

The Marwin 2000 Series Valve is among the most cost-effective ANSI Class 150 and 300 flanged ball valve in the industry. Designed for process applications, it can handle both chemical isolation and plant utility chores with equal reliability. Its low torque and fully machined ISO 5211 mounting pad make automation both simple and inexpensive.

- Standard port, uni-body, ANSI Class 150
- Full port, split body, ANSI Class 150 and Class 300
- All valves 100% pressure tested
- Vented ball, optional
- API 598 shut-off – *bubble tight*
- Factory-mounted pneumatic and electric actuators available

Available in 1 in (25 mm) to 4 in (100 mm) standard port; ½ in (15 mm) to 6 in (150 mm) full port, ANSI Class 150; 1 in (25 mm) to 6 in (150 mm) full port, ANSI Class 300.

5801/6801 Series

These soft seated valves are available in both full and standard port construction with ANSI Class 150 and 300 flanges. They are designed and manufactured to ANSI B16.34 and API 598. They are fire tested to API 607, 4th Edition, and meet ANSI B16.10 and B16.5 dimensional criteria. Specially designed seats provide tight shut-off and low torque. Standard features include:

- Anti-static devices
- Blow-out proof stems
- Compliance to NACE MR-01-75
- Integral ISO 5211 mounting pad

Available in carbon steel and stainless steel. Standard port sizes ½ in (15 mm) to 10 in (250 mm); full port sizes ½ in (15 mm) to 8 in (200 mm).

5000/6000 Series

Fire tested to API 607, 4th Edition, these uni-body high-performance valves are built to the same design standards and criteria as the 5801/6801 Series. The encapsulated (pocketed and recessed) soft seats are available in PTFE, reinforced PTFE, Delrin®, PEEK, UHMWPE and other non-metallic materials. Wide range of alloy materials include duplex steels, Monel®, Hastelloy®, Alloy 20, 254 SMO, titanium and other nickel alloys.

The 5000F/6000F full port, split body models are available with characterized balls for precise flow control allowing high-pressure drop capability with straight-through flow and bubble-tight shut-off.

® Delrin is a registered trademark of the DuPont Company.
® Monel is a registered trademark of the International Nickel Co., Inc.
® Hastelloy is a registered trademark of the Haynes International, Inc.

High-Performance Valves

3000 Series

Marwin's 3000 Series high-performance, three-piece ball valve delivers bubble-tight shut-off in chemical feed systems. Its deep pocketed, encapsulated resilient seats prevent extrusion from pressure and fluid flow. Seat materials include a wide variety of options, such as PTFE, PFA, UHMWPE, Kynar® and PEEK, to best match corrosion-resistance needs.

- Triple stem seal packing for improved dynamic sealing
- Live-loaded PTFE/Grafoil® packing for low emissions
- High integrity double body seals
- Individually bolted end caps
- Three-piece valve assembly for easy in-line maintenance
- ISO 5211 mounting pad for easy automation
- API 607 fire test certified
- API 598 shut-off – *bubble tight*
- Factory mounted pneumatic and electric actuators available
- Pressures to 4000 psi (275 bar); temperatures to 600°F (315°C)
- High alloy/exotic metals offered

Available in ½ in (15 mm) to 4 in (100 mm) standard port; ½ in (10 mm) to 3 in (80 mm) full port. All end connections available – NPT/BSPT, extended SWE and BWE through ANSI/DIN flanged (RF, FF, RTJ) and double block and bleed.

® Grafoil is a registered trademark of Union Carbide Corporation.
® Kynar is a registered trademark of Pennwalt Corporation.

MS3000 Series Metal Seat

This metal or carbon seated valve is engineered for high temperature and wear applications with ANSI Class IV and available API 598 bubble-tight shut-off.

- Extended bonnet
- Enhanced packing
- Dual body seals

Available in sizes ¼ in (10 mm) through 2 in (50 mm), this valve handles pressures to 990 psi (68 bar) and temperatures to 1000°F (538°C).

CV3000 Series

This characterized control valve allows precise flow control with high-pressure drop capability and straight-through flow with bubble-tight shut-off. High C_V (K_V) with increased rangeability. The throttling element is a characterized metal insert located behind the upstream seat. Metal encapsulated soft seats prevent cold-flowing under adverse temperature, pressure or modulating service conditions. Delivers low operating torque with less hysteresis. Wide variety of standard and exotic alloys available for body and insert. Reinforced PTFE, PFA, Kel-F, UHMWPE, Delrin®, PEEK or customer specification seat materials. Available in sizes ½ in (10 mm) through 4 in (100 mm).

10000 Series

Engineered for high-pressure applications, this soft seated valve is capable of pressures up to 6000 psi (415 bar) and temperatures to 600°F (315°C). It features built-in versatility with a center section capable of accepting flanged, socket weld, butt weld or threaded end pieces. A wide variety of end connections including integral extended ends with "heat sink" construction allow in-place welding. Numerous seat, seal and body materials are available.

Available in sizes ¼ in (10 mm) through 2 in (50 mm) (Sch. 160 pipe bore); 3 in (80 mm) (same bore as 2 in valve).

MS10000 Series Metal Seat

Compliant with ANSI B16.34 design criteria, this metal seated valve is engineered for high-pressure/temperature applications with API 598 bubble-tight shut-off. Features extended bonnet for pipe insulation and enhanced packing, stem and handle for demanding service applications. It is ideal for water, gas or steam applications for pressures to 3700 psi (255 bar) and temperatures to 1000°F (538°C).

Available in Class 1500 ¼ in (10 mm) to 1 in (25 mm); Class 900 1¼ in (35 mm) through 3 in (80 mm).

Multi-port Valves

For mixing and diverting applications with "L" port or "T" balls, bottom or side entry, flanged or threaded end connections.

- 3L/T2Q33 – 3-way L or T port with ISO 5211 mounting pad
- 3L/T2S33 – 3-way L or T port trunion ball valve with ISO 5211 mounting pad
- 3T3100/3L3200 – 3-way brass bottom entry, T port transflow mixing valve or L port non-transflow diverting valve
- 3T3300/3L3400 – 3-way brass, T or L port with threaded-in end connections and ISO 5211 mounting pad
- 3T3700/3L3800 – 3-way, stainless steel, T port or L port with threaded-in end connections and ISO 5211 mounting pad

Standard Service Three-Piece Ball Valves

4700 Series

This versatile 2000 WOG rated valve is standard with API 607, 4th Edition Fire Test qualifications and ISO 5211 mounting pad with an integral locking lever. Incorporating the leading technology in valves of this class, the 4700 Series features full port carbon steel or stainless steel body construction with a choice of PTFE or glass, carbon or stainless steel reinforced PTFE seats.

Available in sizes ½ in (15 mm) through 4 in (100 mm).

Complementary Valves

- KF8900 Series – 1000 WOG stainless steel valve with cavity filler seats and quick disconnect ends for sanitary service. Integral ISO 5211 mounting pad
- 8700 Series – 1000 WOG carbon steel or stainless steel valve with integral 5211 mounting pad
- 4600 Series – 600 WOG brass valve for common fluid control applications

Standard Service Two-Piece Ball Valves

DM 9000 Series

900 WOG stainless steel ball valve features O-ring energized PTFE seats for low torque and long seat life. ISO 5211 direct mount actuator pad allows economical automation with either pneumatic or electric actuators. This full port valve provides bi-directional operation to assure leakproof sealing with flow in either direction for common fluid control applications.

Available in ½ in (15 mm) through 2 in (50 mm) sizes.

Complementary Valves

- 9000 Series – 1000 WOG valve with carbon steel or stainless steel body and glass reinforced PTFE seats
- 600 Series – 600 WOG brass valve with PTFE seats in sizes ¼ in (10 mm) through 4 in (100 mm) sizes
- DM 600 Series – 600 WOG in standard and full-port flow designs

Plant Utility Valves

600 Series

Two-piece 600 WOG, low-cost brass valve for most common fluid control applications. Features PTFE seats, standard chrome-plated brass and optional stainless steel trim. NPT, solder end connections.

- Locking lever
- API 598 shut-off – *bubble tight*

Available in ½ (15 mm) to 2 in (50 mm) standard port; ½ (10 mm) to 4 in (100 mm) full port.

Complementary Valves

- 9000 Series – 1000 WOG valve with carbon steel or stainless steel body and glass reinforced PTFE seats
- 2000 Series – ANSI Class 150 and 300 standard service valve

Automation and Accessories

UT Series Pneumatic Actuators

A full range of double acting and spring return actuators designed to NAMUR for air supply ports and accessory mounting. ISO 5211 base mounting patterns. Twin rack and pinion design for constant torque output with balanced internal forces. Compact, robust design ensures long life. Twelve sizes available: double-acting output torques to 36,600 in-lb; spring return spring break torques to 16,700 in-lb. Maximum working pressure to 115 psi (8 bar). Standard temperature rating of -4°F (-20°C) through 180°F (85°C) with lower and higher temperature versions available.

2-IQ Series Smart Valve Positioners

This smart positioner has superior accuracy, long-term reliability and ease of use. It is available with or without Profibus PA and is designed to easily accept optional modules for alarms, HART communication and positioner feedback. The 2-IQ Series Smart Positioner provides excellent performance in combination with Marwin UT Series pneumatic actuators. Features include:

- Automatic five-step positioner setting
- Four modes of operation – automatic, manual, configuration, initialization
- Very low air consumption when idle
- Fully integrated valve block for compactness
- Continuous display review

ER Series Electric Actuators

High-quality, economically priced, reversing quarter-turn actuators are ideal for automating ball and butterfly valves. Thirteen sizes from 100 in-lb to 14,000 in-lb.

Accessories

- NEMA 4 and 7 enclosures
- Limit switches
- Solenoids
- Rotary positioners
- Gear operators
- Custom configurations