

Jamesbury™ fire truck and pumper valves

Expect quality and performance when you choose Jamesbury brand valves.

Valmet is a worldwide, full-service company dedicated to providing you with the right valve solution. When you choose Jamesbury, branded valves, you are getting more than a competent and dependable partner. You're choosing valve products that clearly exemplify our commitment to developing new and innovative flow valve technologies, materials, components, and manufacturing methods. These aspects are blended successfully in our plants to assure you of the quality that has become our recognized trademark throughout the years.

Legendary reliability leads to lower costs

When it comes to valves, we know that your most important purchase consideration is reliability. The longer a valve performs as designed and without problems, the better. And we believe there are no other valve solutions on the market today that can outperform Jamesbury valves.

How can we make such a bold statement? It's our technology. Innovative sealing designs that eliminate leaks. Seat materials that withstand extraordinary extremes in temperature and pressure. Actuation that provides highest cycle life. All proven in thousands of applications and offering benefits beyond anything offered by our competition.



These are the characteristics for which Jamesbury products have been known, for over 60 years. Today, these characteristics and state-of-the-art networking capabilities are the foundation for a whole range of new solutions designed to answer your growing demands for lowest total cost.

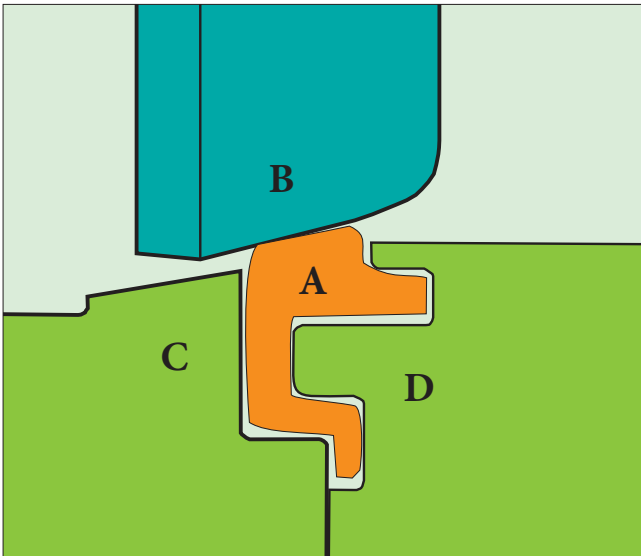


Wafer-Sphere™ - more than just a butterfly valve

The Wafer-Sphere is not just another butterfly valve. It is a high-performance valve that offers significant performance, weight, size, and cost of ownership advantages.

The Jamesbury Wafer-Sphere provides a costeffective solution for a wide range of applications where bubble-tight shut-off is required in manual, automated, and proportional services with temperatures from -320°F to 500°F (-196°C to 260°C) and pressures to 285 psi (19.6 bar).

The Wafer-Sphere high-performance butterfly valve's unique design is an extension of sealing technology. Utilizing an eccentric disc and offset shaft, the design incorporates the flexible-lip sealing system into a lightweight, compact body. The result is tight-sealing, long-lasting, yet lower-cost alternative to gate valves and other rotary valves.

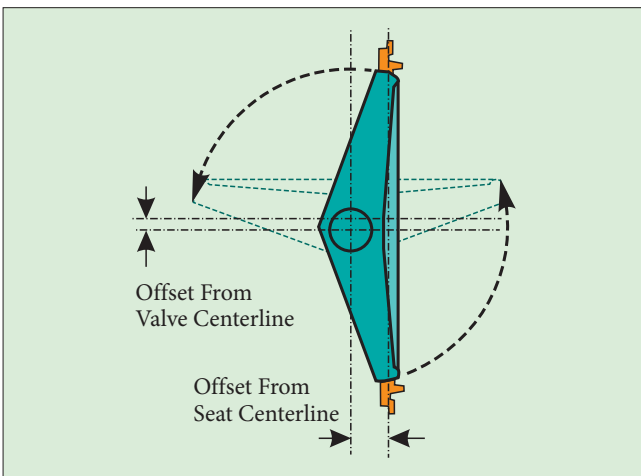


Leak-tight shut-off

Sealing in a gate valve is done by jamming a metal solid or split wedge into a metal seat or cavity. The effectiveness of the seal therefore is subject to the condition of the mating metal surfaces and the cleanliness of the gate. In practice, tight sealing of a gate valve is uncertain. Typically, the gate valve experiences leakage from minor erosion of the wedge or seal area. The Wafer-Sphere valve flexible lip polymeric and eccentric disc sealing system experiences none of these problems. The polymeric seat is flexible and forgiving and protected from erosion. The eccentric design eliminates wear points during cycling and its camming action effects sealing with consistent torque. The result is leak-tight shut-off for thousands of cycles before simple seat replacement is required.

The unique seal

Unlike most butterfly valves, the Wafer-Sphere one-piece all-polymer seat does not rely on a squeegee seal and liner, seal backup spring or O-rings for a bubble tight shut-off. The Wafer-Sphere seal uses a flexible lip (A) which is pressure energized to move against the outer edge of the disc (B)—which is spherical segment—to create a bi-directional seal. The body (C) and insert (D) hold the seat in position and shield it from flow, protecting it from abrasion and erosion. Simply stated, the seat flexes rather than deforms unlike type BFV liners that experience scuffing, beading and eventual tearing, providing long life shut-off.



Double offset design

The unique sealing system also incorporates a double eccentric disc and shaft design to further extend the effectiveness of the seat. This unique offset design transmits a camming action to the disc and swings the disc completely away from the seat, no jamming or squeegeeing. This design eliminates wear points around the disc at the top and bottom of the seat. When closed, the disc cams tightly into its seat to create a double-tight seal. The combination of the double-off-set disc and the flexible-lip seat are especially effective in a full range of applications from high vacuum (1×10^{-5} Torr) to 1480 psi (102.1 bar).

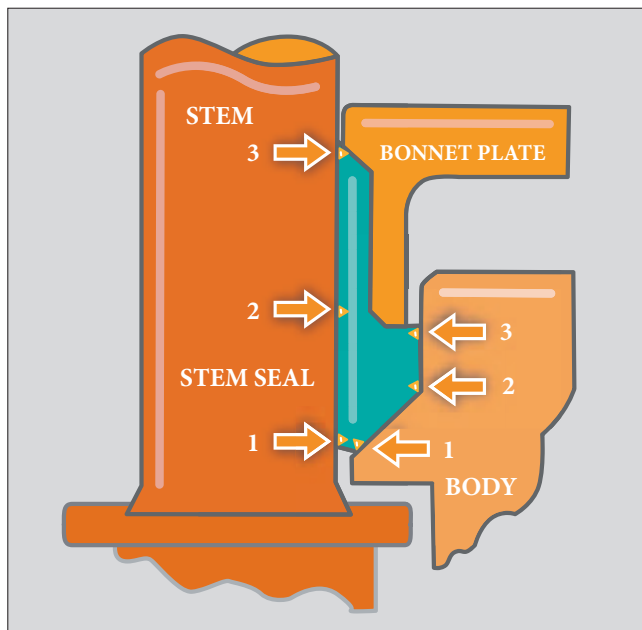
Jamesbury ball valves - unmatched performance and reliability

Ask anyone which brand of ball valve continues to stand the test of time, and the answer you will hear most often is Jamesbury valves. For over half a century, Jamesbury valves have consistently been the most preferred brand for ball valves. It's not hard to see why. After all, we just about invented sealing technology with the introduction of the flexible-lip seat design. More than any other innovation, this revolutionized the industry and, perhaps more important, valve dependability.

Our technology leadership didn't stop there. We have gone on to develop the next generation of valve sealing technology that expands seat performance far beyond the boundaries of traditional solutions. The result is a valve that has demonstrated significant life-cycle improvements and extraordinary cost savings.

The right valve for the right job

- Standard-port design offers high-flow capacity for control of fluids.
- Many body, trim, and seat options are available to handle a variety of applications and demanding critical services.
- Available in 1/2" through 2" (DN 15 – 50) full bore three piece thread end or socket weld end design rated up to 1000 psi and 1/4" – 2" (DN 15 – 50) full bore two piece thread end design rated up to 2000 psi. Flanged designs also available.
- Flexible lip design provides reliable, bidirectional shut-off.



Patent pending stem seal has 3 engineered sealing zones to provide multiple barriers for long term sealing.



Our flexible-lip seat design revolutionized valve dependability.

Valve options - standing the test of time



Series 3 ball valve

Series 3 ball valves have a 3-piece, threaded or socket-weld body design. A range of construction materials provides years of continuous, reliable service in a wide variety of applications. Seat material options handle the vast majority of commonly encountered fluids up to full body rating, including saturated steam up to 250 psi (17 bar). The large port size provides high flow, while minimizing pressure drop. The standard body caps of the Series 3C socket-weld valves are 316 (CF3M) stainless steel when a 316SS valve is specified.

Series 3 ball valves				
Sizes	Max. pressure	Maximum temperature	Body/Trim materials ¹	Bulletin
1/2" – 2" (DN15 – 50)	1000 psi (69 bar)	500°F (260°C)	Carbon steel 316SS	B105-4



The Eliminator™ ball valve

The Eliminator ball valve incorporates large standard ports, fire-tested performance, rugged actuator support, and flexible-lip seats to provide application versatility that goes beyond many other low-cost valves. It is either CWP-rated with cold working pressures of up to 2000 psi (138 bar) or ASME Class 600 rated up to 1480 psi (102 bar).

Eliminator standard port ball valves				
Sizes	Max. pressure	Maximum temperature	Body/Trim materials	Bulletin
1/4" – 2" (DN8 – 50) CWP	2000 psi (138 bar)	500°F (260°C)	Carbon steel 316SS Monel	B101-2
1/4" – 2" (DN8 – 50) ASME-600	1480 psi (102 bar)			



Series 815 Wafer-Sphere butterfly valve

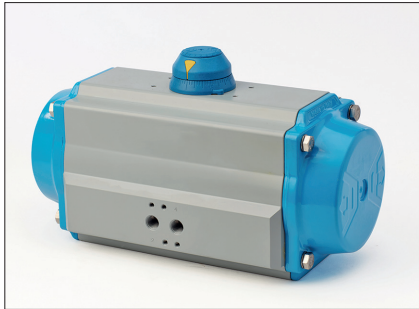
Series 815 valves are available in wafer and single-flanged lugged designs for dead-end service for ASME class 150 pressure class applications. The 815L series are best suited for applications where exposed bolts are undesirable.

ASME Class 150 series 815 butterfly valves						
Sizes	Body style	Max. press.	Max. temp.	Body/Trim materials	Seat materials	Bulletin
2 1/2 – 30" (DN65 – 750)	Wafer	285 psi (19.6 bar)	500°F 260°C	Carbon steel 316SS Monel	Teflon® Xtreme™ UHMW	W101-6
2 1/2 – 60" (DN65 – 1500)	Lugged					

Provided with square drive stem for direct actuator mounting to save space.

Actuator options

Maximizing cycle life and improving efficiency



Valv-Powr™ VPVL actuator

The Valv-Powr VPVL actuator is suitable for all process applications. It is a favorite in the chemical industries because of its compact design. It offers several added corrosion treatments such as electroless nickel, hard anodized protection, and PTFE coating.

Valv-Powr VPVL Model C				
Type	Action	Operating pressure	Torque output	Bulletin
Pneumatic Rack & Pinion	Double acting or pring return	30 to 116 psi (2 to 8 bar)	2.5 to 5300 ft-lb (3.2 to 7187 N-m)	A111-5



LCR series electric actuator

LCR offers simple, economical, compact and reliable automatic control of quarter-turn valves.

Enclosures: Designed to meet Nema4/4X

LCR-Series				
Type	Action	Input voltages Available	Torque output	Bulletin
Electric	Reversible	24/115/230 VAC 12/24 VDC	150 – 600 in-lb (17 – 68 N-m)	A203-1

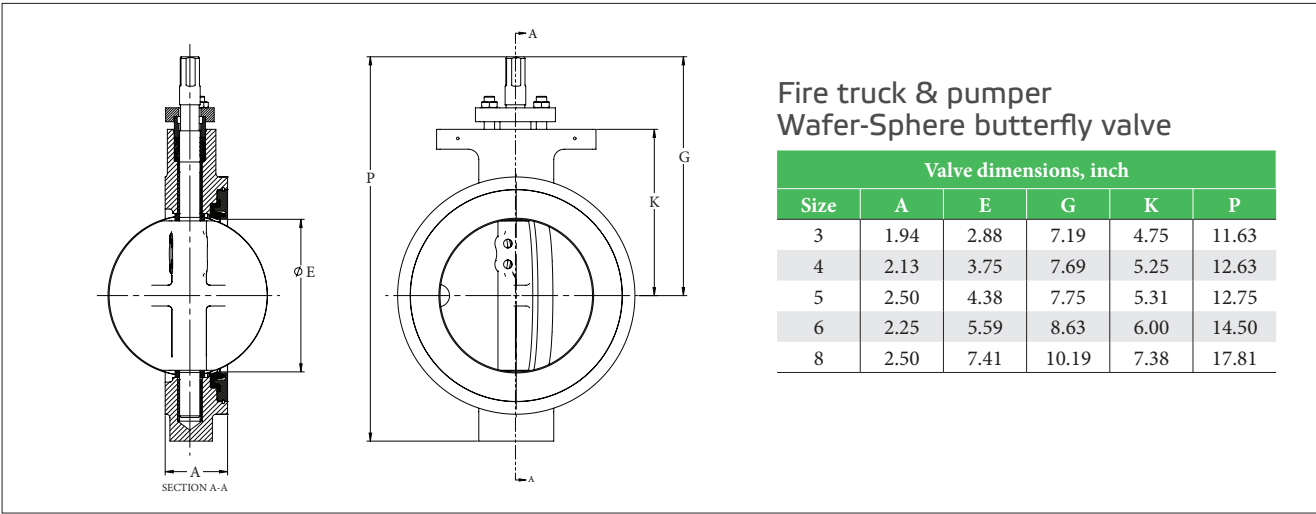
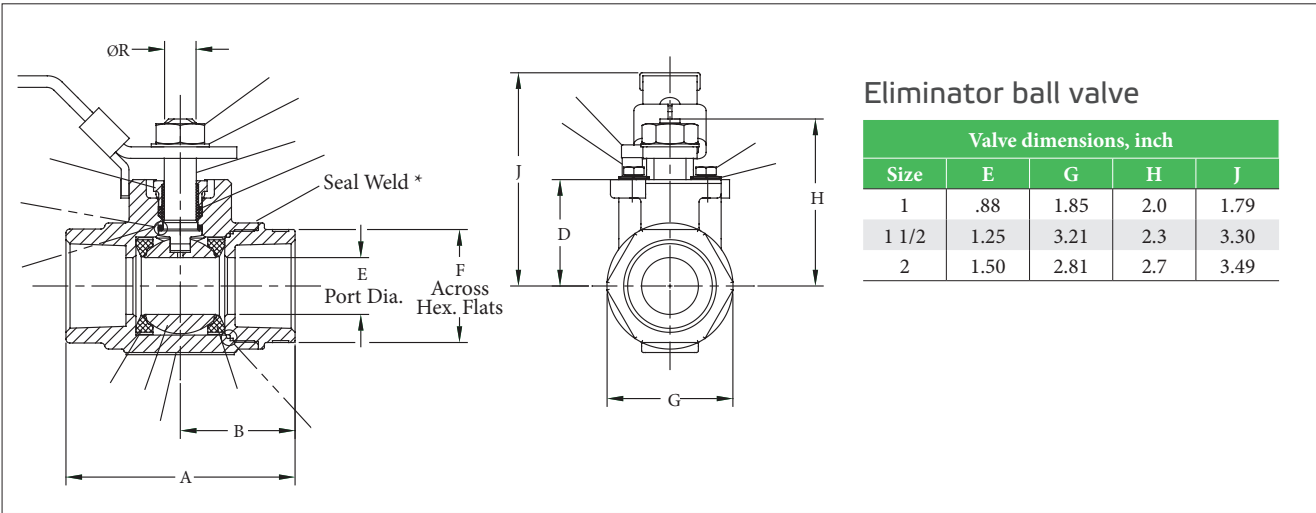
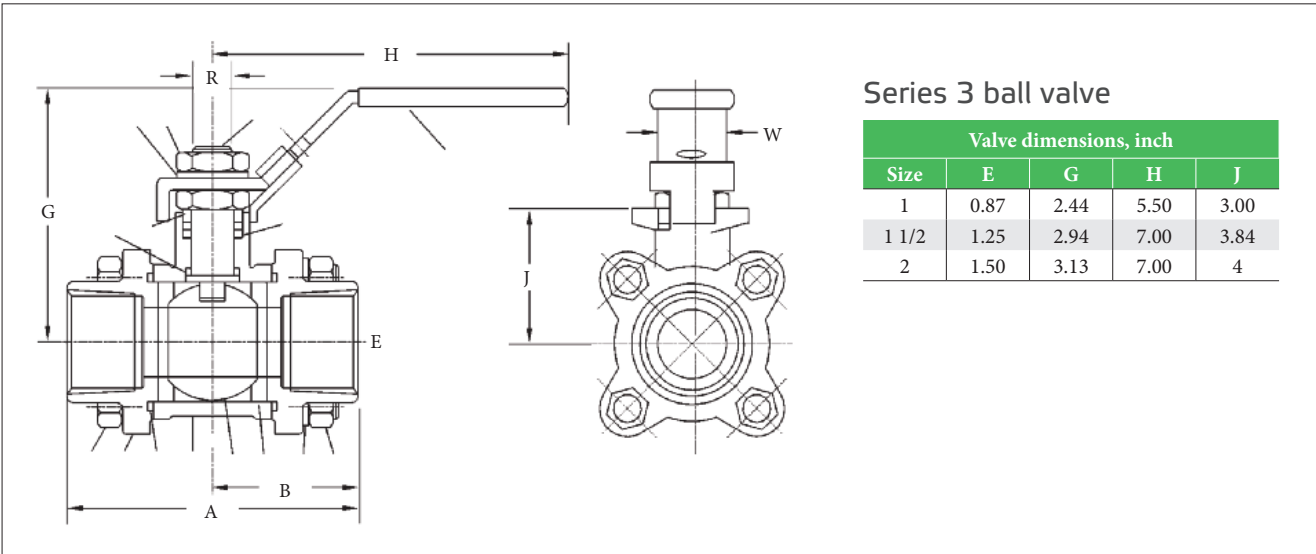


MGR series manual actuator

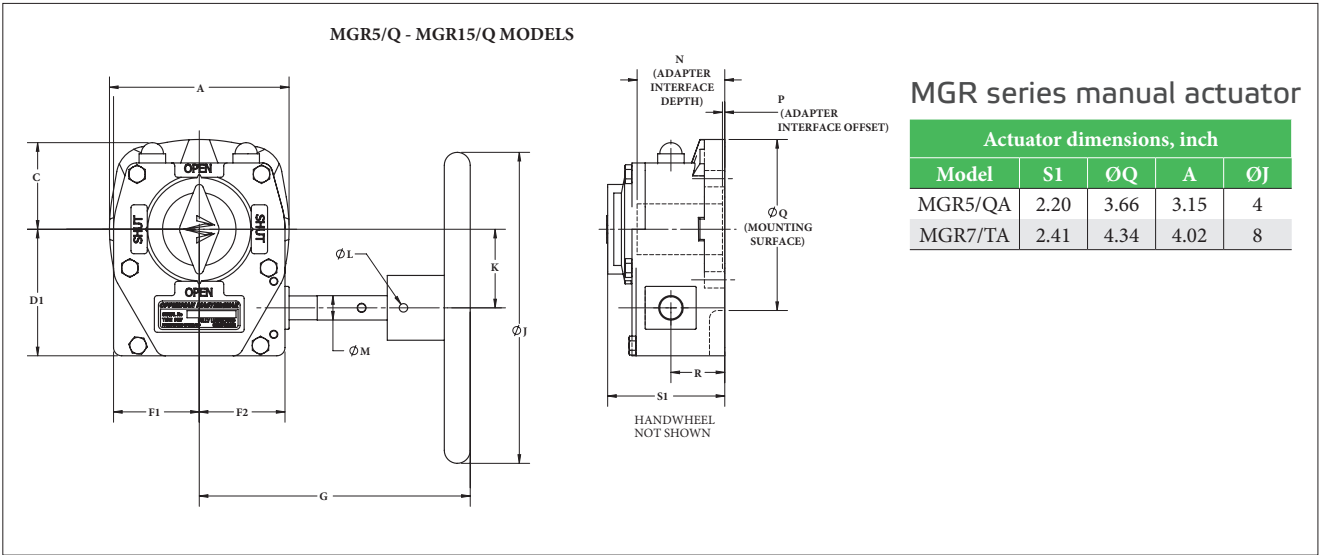
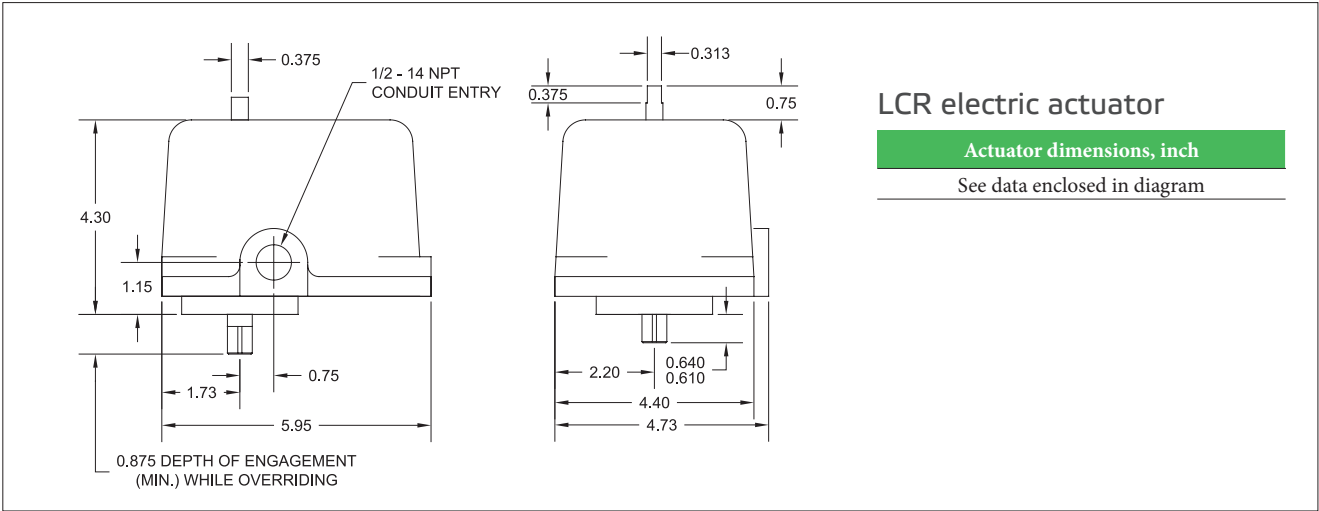
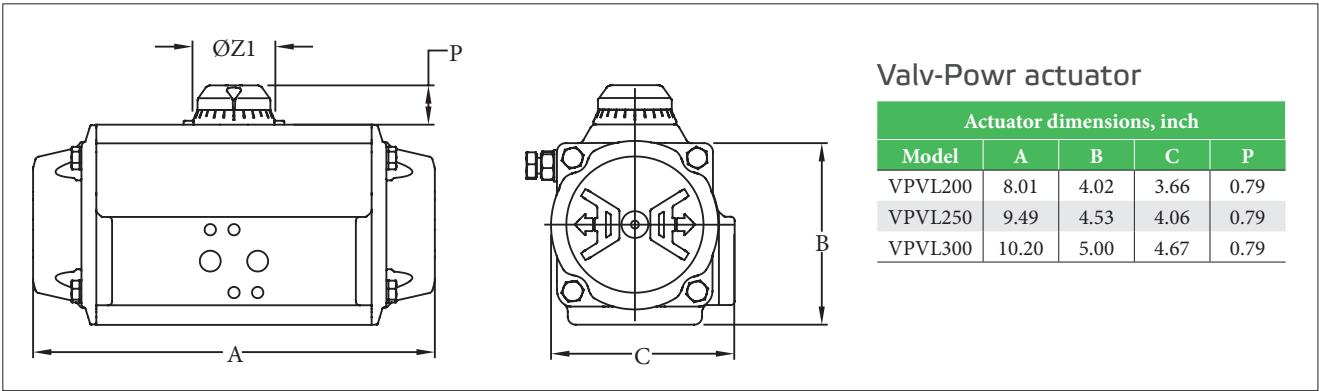
MGR series actuators are fully enclosed, weather-proof, all-cast-iron and carbon-steel construction. They are factory lubricated for their lifetime, requiring no future lubrication. Each unit includes a pointer to indicate valve position.

M-Series			
Type	Action	Torque output	Bulletin
Manual gear operated	Handwheel	111 – 19177 ft.lb (150 – 26 000 N-m)	A100-3

Valve dimensions



Actuator dimensions



How to order valves

3 A/C ball valve

This is an example of a 2" size with a standard-bore NPT body style with carbon steel body, 316 stainless steel ball and stem, PTFE/PTFE seats and seals, and standard stainless steel bolting:

2 3A – 2236 TT-3

See Bulletin B105-4 for complete ordering options.

Eliminator ball valve

This is an example of a 1 1/2" Eliminator Model B valve with 316 stainless steel body, 316 stainless steel ball and stem, PTFE/PTFE seats and seals:

1-1/2 9N B – 36 36 TT B

See Bulletin B101-2 for complete ordering options.

Fire truck and pumper Wafer-Sphere butterfly valve

This is an example of a 6" Fire Truck & Pumper Wafer-Sphere valve with carbon steel body, 316 stainless steel disc, 17-4PH shaft, PTFE/PTFE seat and seal:

6 815W – 17 22 HB TT

See Bulletin W101-6 for complete ordering options.

How to order actuators

Valv-Powr actuator

This is an example of a VPVL250 actuator, 18.0 ft•lbs @ 60psi spring return, hard anodized PTFE coated body, polyester coated endcaps, standard temperature rating:

VPVL 250 SR4/5 BD

See bulletin A111-5 for complete ordering options.

LCR electric actuator

This is an example of an LCR electric actuator, 300 in•lbs of torque, 2 auxilliary limit switches, 12VDC:

LCR300S2S12DC

See bulletin A203-1 for complete ordering options.

MGR series manual actuator

This is an example of a MGR manual gear actuator with 111 ft-lbs of torque and 4" handwheel.

MGR5/QA

See bulletin A100-3 for complete ordering options.

Subject to change without prior notice.

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