

XOMOX[®]



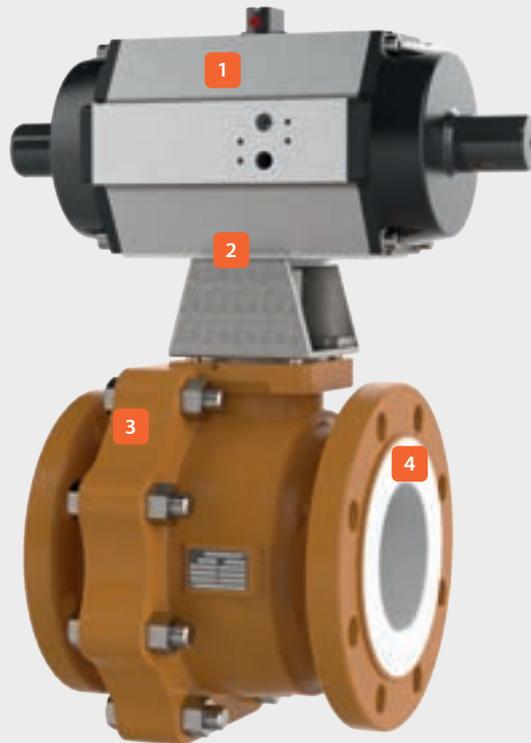
SEAL
THE FUTURE.

XOMOX[®] LINED BALL VALVES SERIES XLB

CRANE[®]

www.cranecpe.com

Low Fugitive Emission



1

Low Emissions

ISO 15848-1 BH C03 SSA0/TA-LUFT 2021
Compliant

2

Low Torque

smaller actuators, reduced costs, space and
weight saving

Actuator Mounting

fully compliant with ISO 5211 allowing use of
standardized mounting kits

3

Compact Design

allows installation in space restricted
areas in parallel piping systems

4

All Wetted Components

are fully lined with permeation resistant PFA
material as a barrier to corrosion.

5

Valve Pressure Classes

EN PN16 and ASME Class 150
JIS 10kg

6

Size Range

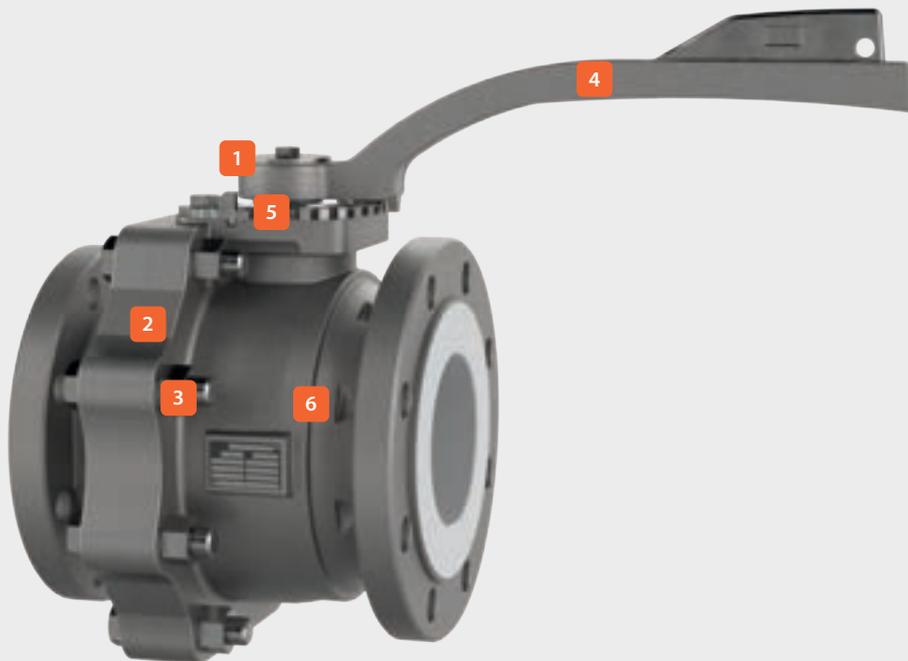
½" / DN15 through
6" / DN150 full port
1½" through 8" reduced port
Other sizes available up to 12" / DN300 (R201/R202)

7

Temperature Range

ASME: -20°F (-29°C) to 400°F (204°C)
EN: -10°C (14°F) to 204°C (400°F)
Above data is for ductile iron lined valves,
see pressure temperature ratings in our
Technical Datasheet brochure for extended
temperature capabilities with alternative
materials

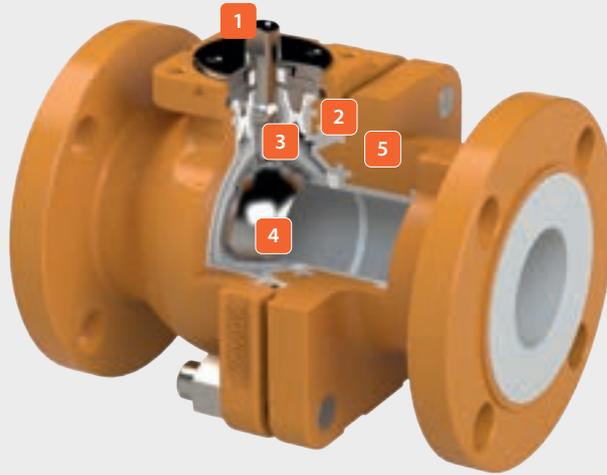
Stainless Steel Configuration



Full Port XLB valves are also available in stainless steel construction with bodies in EN 1.4408 / ASTM CF8M material. Stainless steel valves are designed to maximize cleanliness and minimize areas where contamination could occur. Stainless steel valves also allow for low temperature operation down to -60°C

- 1 Duplex Stainless Steel**
integral lined ball and stem
- 2 Crevice-Free**
body joint connection
- 3 Body joint fasteners**
in stainless steel
- 4 All Stainless Steel Lever**
assembly with latching and locking facility
- 5 Stainless Steel**
stop plate and fasteners
- 6 Body Components**
in stainless steel

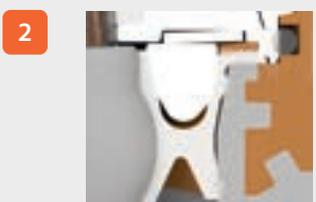
Innovative Stem Sealing System



1 **Live Loaded Packing** achieves ISO 15848-1 BH CO3 SSA0 which provides the highest protection against fugitive emissions with zero adjustments



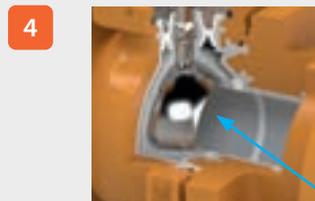
2 **Stainless Steel Lever** latching device minimizes possibility of accidental operation. Locking capability as standard. Made of stainless steel material ideal for corrosive environments.



3 **Patented SX Seal** innovative „pressure assisted“ SX seal device provides the highest protection against fugitive emissions.



4 **Anti blow-out integral ball and stem** retains positive control and minimizes the danger of stem/ball failures due to liner damage at wear points.



5 **Locked in fluoroplastic liner** resists shrinkage and collapse, and permits vacuum applications.

Chemically modified PTFE (CMP) seats provide greater pressure stability at higher temperatures than conventional PTFE.



5 **Metal-to-Metal Contact** at the body joint ensures that no parts of the lining can be crushed or deformed because of forces within the piping system.

Wide Conical Plastic Connection designed to maintain total seal even under extreme thermal cycling.

O-Ring
Viton O-ring - adding another independent seal to atmosphere

Value Propositions

When valves are closed under pressure, the ball is able to float with line pressure and pressurize the downstream seat to further enhance the in-line seal. However, the stem will tend to tilt and can side load conventional packing, leading to potential wear and eventual leakage. The SX seal in the XLB valve moves in conjunction with the spherical portion of the stem, maintaining a constant seal.

XLB dynamic body joint design retains pressure boundary during thermal cycles

The body assembly has metal-to-metal connection that offers resistance against forces that may be created in the pipework. This feature is designed to alleviate deformation and damage to the lining, even under pressure induced stresses. Also, the body joint sealing is provided with taper lining overlap, which is especially effective under high internal pressure and temperature variations.

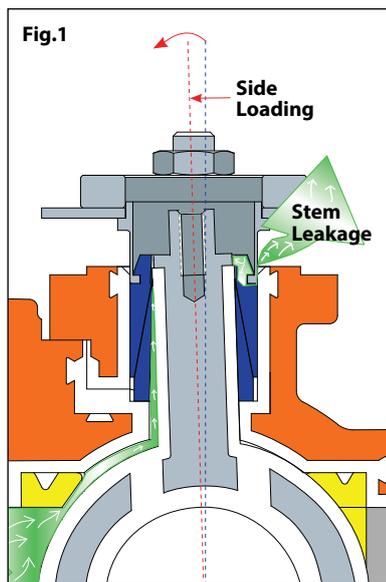


Fig.1: In a conventional valve, moderate stem side loading can lead to significant emissions issues.

Other situations where side loading can occur during valve actuation include heavy manual operation, actuation loads, and misalignment, and abusive contact.

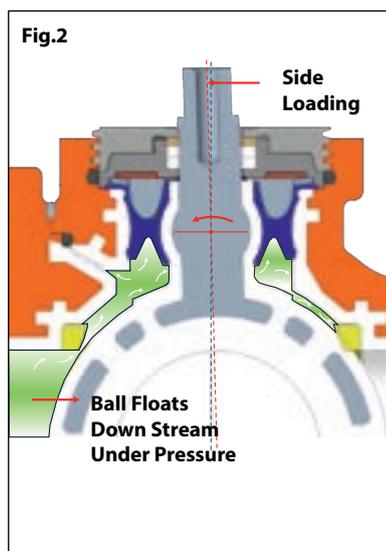


Fig.2: The XLB valve's pressure assisted SX seal stays in constant contact with stem spherical seal surface to significantly reduce the chance of atmospheric leakage.

- 1 Metal-to-Metal Body Joint
- 2 Metal Body Centering
- 3 Lining Overlap
- 4 Temperature Increases
- 5 Temperature Decreases

Options and Accessories

Material and Liner Options

Low Temperature Carbon Steel Body



- All full port configurations available
- Low service temperatures below -20°F/-29°C
- Extremely cold environments below -20°F/-29°C

Antistatic-PFA Lining



- All sizes and configurations available
- Applications that cause potential electrostatic
- Complies with ATEX, European Directive 94/9/EC

PVDF-Lining



- All sizes and configurations available
- Halogen applications
- Service temperatures limited to 130°C/266°F

Operator Options

Standard Locking Lever



- Stainless steel for corrosive environments
- Lockable as standard
- Spring-loaded latching mechanism

Oval Handle



- Optional for sizes up to DN40 (1 1/2")
- Stainless steel for corrosive environments
- Compact design discourages accidental operation

Stem Extension



- Standard stem extensions in stainless steel
- Provides necessary clearance for operators in insulated pipeline installations
- Used with lever, gear or automated packages

Automated Valve



- XLB valves can be automated with manual, pneumatic or electric actuators.
- Actuator mounting dimension in accordance with ISO 5211
- Low torque allows for economical automation solutions

AAR Approved



Xomox lined ball valves are compliant with AAR (Association of American Railroads) standards

Applications

XLB valves offer economical solutions for the vast majority of chemical applications while maintaining the highest possible degree of performance in terms of in-line leakage and fugitive emissions.

They are commonly used within the following industries:

- Chlor-Alkali
- Industrial Inorganic Chemicals
- Metal and Mining
- Pharmaceutical
- Nitrogen and Phosphatic Fertilizers
- Petroleum Refining

Within these industries, XLB valves have superior performance in the following applications

- Chlorine
- Brine
- Benzene
- Bromine
- Sulfuric Acid
- Nitric Acid
- Hydrochloric Acid
- Phosphoric Acid
- Sea Water

Visit our website, www.cranecpe.com, to view these and other lined products, applications, brochures, certification, documents and more.

Applications

Function	On / Off	●
	Throttling	●
	Diversion	●
Media Type	Clean Liquids & Gases	●
	Dirty Liquids & Gases	●
	Corrosive Liquids & Gases	●
	Hazardous Liquids & Gases	●
	Viscous Liquids	●
	Scaling Liquids & Slurries	●
	Abrasive Slurries	●
	Fibrous Slurries	●
	Dry Materials	●
	Vacuum Service	●
Application Requirements	High Flow Capacity	●
	Low Torque	●
	Fugitive Emissions Control	●
	Reduced Maintenance	●
	Extended Service Life	●
	Sizes	½" - 6" DN15 - DN150
	Pressure Ratings	Class 150 / PN16
	High Temperature (ASME/EN)	400°F / 204°C
	Low Temperature (EN)	-10°C / 14°F
	Low Temperature (ASME)	-20°F / -29°C
	Key Benefit	Safety / Economy

● Superior Performance

● Limited Application

● Not Applicable

Source: CRANE Engineering

Lined Products



Stainless steel lined plug valves



3 Way lined plug valves



Lined plug valve with ISO 5211 mounting



Lined plug valves, PN 16, class 150 and 300

LINED PLUG VALVES



Y Pattern ball check valves



Vertical and horizontal poppet check valves



Spring assisted check valves



Swing check valves

LINED CHECK VALVES



Fully lined sampling valves



Fully lined sight glass



Fully lined strainer and filters



In-line ball check valves

LINED ACCESSORIES

Visit our website www.cranecpe.com for additional product info.



Fully PFA lined butterfly valves



XLD Wafer

LINED BUTTERFLY VALVES

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