

# XOMOX®

## XOMOX® LINED BUTTERFLY VALVES SERIES XLD



## OPERATING AND MAINTENANCE INSTRUCTIONS

CRANE®

v in

[www.cranecpe.com](http://www.cranecpe.com)

## Table of Contents

General Info .....	3
Flange Bolt Selection Guide .....	5
Maintenance and Repair .....	7

# General Information

## **Danger**

**READ INSTRUCTIONS BEFORE INSTALLING OR USING THIS VALVE.** Failure to follow instructions could result in death or serious injury. If there are any questions, contact your XOMOX Representative or the factory at 513-745-6000.

## Storage

## **Danger**

**LINER DAMAGE.** XOMOX® Lined Butterfly valves are shipped with the disc slightly open and must remain in this position for storage. Always store the valves in their original packing with the flange protectors in place until the valve is ready for use. Never store the valve unprotected. Damage to the PFA liner could create a leak path resulting in death, serious injury or property damage.

## Installation

1. The XOMOX® Lined Butterfly valve is designed for installation between ANSI B 16.5, Class 150 flanged piping systems.

The valve may be installed independent of the direction of flow and may be mounted in any position between the flanges.

### Recommendation:

If the media flowing in the pipe contains abrasive particles such as a slurry, the valve should be mounted with the shaft in the horizontal position with the lower half of the disc opening downstream in order to extend the valve's service life.

2. All types of flanges are permissible if clearance is provided for the swing of the disc and support is provided for the valve seat and liner.
3. Check the valve tag before installation to ensure that the pressure rating and materials of construction are compatible with the intended service conditions.
4. Use of flange gaskets is recommended to protect the valve liner during installation.
5. Check the adjoining pipelines and remove any material that could damage the valve liner.

6. The valve must be in a closed position (with the disc slightly open) during all handling and installation operations.

This is necessary to protect the sealing edge of the disc from any damage during handling and installation.

**Note:** Sealing edge damage may cause in-line leakage

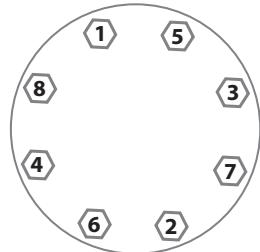
**Note:** Fittings such as tees and elbows cannot be bolted directly to the valve. Spacers must be used to create the permissible clearance from the fitting.

7. The valve liner should be kept clean. Any dirt or debris left in the valve can scratch the liner or the sealing edge of the disc. Note: A scratched liner or sealing edge may cause in-line leakage.

## **Danger**

**FLANGE LEAKAGE.** During installation **DO NOT** allow the valve liner to catch on the mating pipe I.D. and fold over. This could damage the liner and could create flange leakage resulting in death, serious injury or serious property damage.

8. Proper alignment of the valve in mating flanges is required during installation. After installation between the flanges the valve must be checked in order to see if it is centered within the bolt circle of the flange and that the disc can be rotated through the 90 degrees without any interference.
9. The flange bolts must be tightened in a criss-cross manner.



For recommended torque values, consult the appropriate lined-pipe installation instructions.

**NOTE:** Failure to follow this procedure may cause liner damage and impair the function of the valve.

## General Information

 **Caution**

**VALVE DAMAGE.**

**DO NOT** exceed recommended torque values.  
Personal injury and property damage may occur.

10. If the valve is to be removed from the pipeline for any reason, the valve must be closed before any of the flange bolts are loosened. The valve must remain in a closed position until it is completely removed from the pipeline.

 **Danger**

**LINER DAMAGE.**

**DO NOT** run sharp instruments between the valve and liner or between the liner and pipe flanges. This could result in damage to the liner, creating a leak path.  
Death, serious injury, or property damage could occur.

# Flange Bolt Selection

## ANSI Flange Bolt Selection Guide

### Wafer Style (Flangeless) Figure XLD11, Class 150

Valve Size	Qty	Torque* (Nm [in-lbs])	Thread Size
2	4	35 [26]	5/8-11
3	4	55 [41]	5/8-11
4	8	40 [29]	5/8-11
6	8	75 [55]	3/4-10
8	8	100 [74]	3/4-10
10	12	110 [81]	7/8-9
12	12	130 [96]	7/8-9
14	12	140 [103]	1-8
16	16	135 [100]	1-8
18	16	200 [147]	1-1/8-8
20	20	175 [129]	1-1/8-8
24	20	260 [192]	1-1/4-8

### Lug Style (Single Flange) Figure XLD21, Class 150

Valve Size	Qty	Torque* (Nm [in-lbs])	Thread Size
2	4	35 [26]	5/8-11
3	4	55 [41]	5/8-11
4	8	40 [29]	5/8-11
6	8	75 [55]	3/4-10
8	8	100 [74]	3/4-10
10	12	110 [81]	7/8-9
12	12	130 [96]	7/8-9
14	12	140 [103]	1-8
16	16	135 [100]	1-8
18	16	200 [147]	1-1/8-8
20	20	175 [129]	1-1/8-8
24	20	260 [192]	1-1/4-8

\* Torque values are those typically used in industry as standard for lightly lubricated B7 bolts/studs. (0.14 friction factor)

## DIN Flange Bolt Selection Guide

### Wafer Style (Flangeless) Figure XLD11, Class 150

Valve Size	Qty	Torque* (Nm [in-lbs])	Thread Size
2	4	35 [26]	5/8-11
3	4	55 [41]	5/8-11
4	8	40 [29]	5/8-11
6	8	75 [55]	3/4-10
8	8	100 [74]	3/4-10
10	12	110 [81]	7/8-9
12	12	130 [96]	7/8-9
14	12	140 [103]	1-8
16	16	135 [100]	1-8
18	16	200 [147]	1-1/8-8
20	20	175 [129]	1-1/8-8
24	20	260 [192]	1-1/4-8

### Lug Style (Single Flange) Figure XLD21, Class 150

Valve Size	Qty	Torque* (Nm [in-lbs])	Thread Size
2	4	35 [26]	5/8-11
3	4	55 [41]	5/8-11
4	8	40 [29]	5/8-11
6	8	75 [55]	3/4-10
8	8	100 [74]	3/4-10
10	12	110 [81]	7/8-9
12	12	130 [96]	7/8-9
14	12	140 [103]	1-8
16	16	135 [100]	1-8
18	16	200 [147]	1-1/8-8
20	20	175 [129]	1-1/8-8
24	20	260 [192]	1-1/4-8

\* Torque values are those typically used in industry as standard for lightly lubricated B7 bolts/studs. (0.14 friction factor)

# Maintenance and Repair

## Maintenance

XOMOX® Figure XLD11 and Figure XLD21 Lined Butterfly valves are designed and built to provide virtually maintenance-free service.

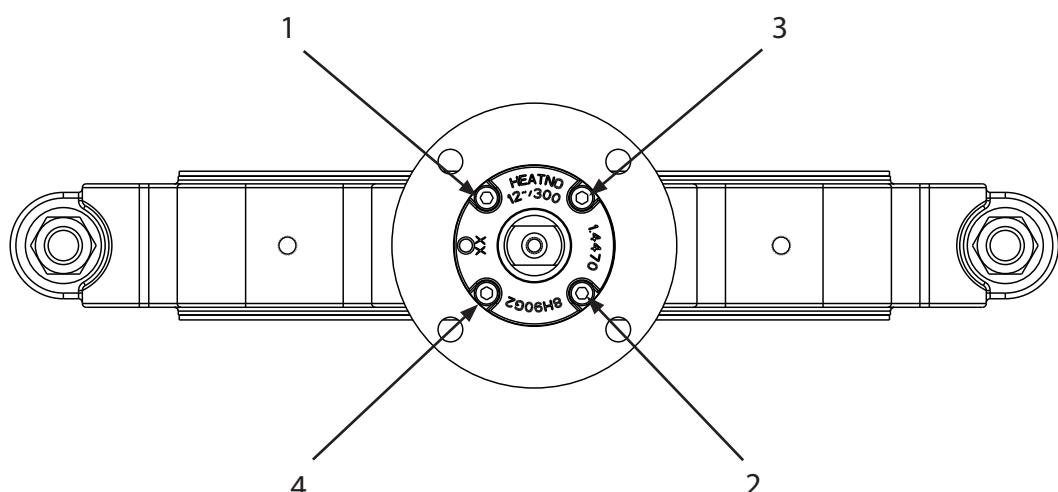
Applied within their temperature and pressure limitations and properly operated, they will require minimum attention.

All XOMOX Lined Butterfly valves are factory tested for tight shutoff. The primary seal to atmosphere is factory tested for zero leakage.

The secondary seal to atmosphere is self-adjusting (live loaded) and provides excellent sealing to the atmosphere, meeting ISO 15848-1 standards of BH-CO3-SSA0.

The valve stem sealing system allows for 3 mm of adjustment. This can be done by turning the four adjustment bolts 1/4 turn at a time in the order show below until desired results are achieved. It is recommended to cycle the valve a few times after adjustment to allow the stem packing to settle.

If you have any questions or concerns, consult your XOMOX Representative or the Factory at 513-745-6000.



# Maintenance and Repair

## New Valve Warranty

Factory and service center repaired valves are tested to the same specifications as new valves. Repaired valves carry the standard new valve warranty.

Shipments to XOMOX Service Centers must be prepaid. Return shipments will be f.o.b. XOMOX Service Center. See our web site for XOMOX Service Center locations.

Notice: When shipping, I.C.C. regulations require that all valves be thoroughly decontaminated and depressurized prior to shipment. The customer must provide certification that these regulations have been adhered to and that valves shipped to XOMOX Service Centers are completely free of hazardous liquids or gases.

## PRODUCT RESPONSIBILITY

Xomox's concern for product performance extends to the product's period of service. We feel it is important for users to also be aware of their responsibilities. Our products are manufactured and used in numerous applications with a wide variety of service conditions. While general guidelines are often furnished, it obviously is not possible to provide complete and specific performance data for every conceivable service condition. Therefore, the end user must assume final responsibility for proper evaluation, application and performance of all products. The contents of this document are presented for information purposes only. Every effort has been made to ensure accuracy. This information is not intended to be construed as warranties or guarantees, expressed or implied, nor imply use applicability, for products or services described herein. We reserve the right to modify or improve the designs and specifications of such products at any time without notice. As the manufacturer, Xomox sells its products and services pursuant to its standard terms and conditions of sale, including its limited warranty, copies of which are available upon request. Xomox limits its liability specifically to the replacement or repair of defective items, or to a refund or same. Xomox does not accept liability for any incidental or consequential damages.



---

**CRANE CHEMPHARMA & ENERGY**

Xomox International GmbH & Co.OHG  
Von-Behring-Straße 15  
88131 Lindau (Bodensee)  
Germany  
Tel.: +49 8382 702-0

Xomox Corp.  
4444 Cooper Road,  
Cincinnati, OH 45242  
USA  
Tel.: (513) 745-6000

---

Crane Company, and its subsidiaries cannot accept responsibility for possible errors in catalogues, brochures, other printed materials, and website information. Crane Company reserves the right to alter its products without notice, including products already on order provided that such alteration can be made without changes being necessary in specifications already agreed. All trademarks in this material are the property of the Crane Company or its subsidiaries. The Crane and Crane brands logotype (ALOYCO®, BAUM®, CENTER LINE®, CRANE®, CRYOWORKS®, DEPA®& ELRO®, DOPAK®, DUO-CHEK®, FLOWSEAL®, GYROLOK®, GO REGULATOR®, HOKE®, JENKINS®, KROMBACH®, NOZ-CHEK®, PACIFIC®, RESISTOFLEX®, XOMOX®, SAUNDERS®, STOCKHAM®, TECHNIFAB®, TEXAS SAMPLING®, WESTLOCK CONTROLS®, WTA®, and XOMOX®) are registered trademarks of Crane Company. All rights reserved.