

3" thru 24" (80mm thru 600mm)

Model 45

Description:

The Azure® butterfly valve is a resilient-seated valve designed to meet or exceed AWWA C504 Standards. It can be used in Municipal Water, Wastewater and in many general and industrial service applications. The Azure® butterfly valve is composed of body, shaft, disc, seat, bushing, shaft bearings, manual operator, etc. The manual operator drives the shaft and disc to open/close the valve and control the flow. The Azure® butterfly valve can be used with bi-directional flow.(For dead end service Check with factory). The Ductile Iron Body Flat Faced Flanges are drilled to ANSI B16.5 150# Class bolt hole pattern. Ductile Iron disc with 316 Stainless Steel edge and Buna liner are standard materials. The standard valve ratings are listed below:

Standards / Ratings:

Nominal Diameters	3" (80mm) THRU 24" (600mm)
Max Working Temperature	180° F (80° C)
Max Pressure	200 psi (14 bar) Bidirectional
Flanges Rating	ANSI 150 (B16.1)
Top Mounting	ISO 5211

Drinking Water System Components – Health Effects according to NSF/ANSI 61
 Low Lead Certified according to NSF/ANSI 372

OPTIONAL OPERATING METHODS:

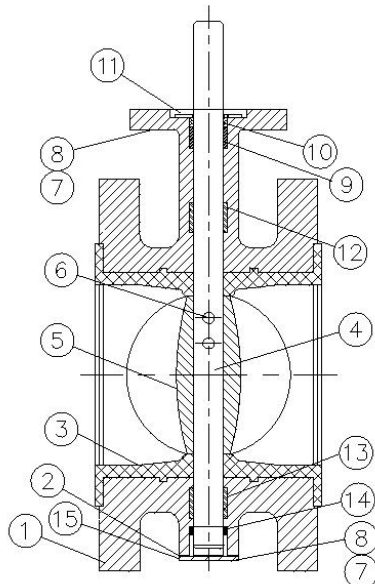
Lever operated: depress the lever and turn it clockwise or counter-clockwise up to 90° then release the lever. (There are 10 locking positions between including 0° and 90°)

- Gear operated: turn the hand wheel to drive the disc to the closed position and control the flow. To close the valve turn the hand wheel clockwise. Chain wheel optional.
- Actuator operated, electric, pneumatic electro-hydraulic or hydraulic.

FEATURES:

Easy installation and maintenance, versatile installation.

- Simple construction. Quick 90° on-off operation.
- Minimized operating torque, energy saving.
- Bubble-tight shut off.
- Flow curve modified linear, excellent regulation performance.
- Extended service, high cycle life.



1	BODY
2	GASKET
3	SEAT
4	SHAFT
5	DISC
6	PIN / NUT / WASHER / O-RING
7	BOLTS
8	WASHER
9	PACKING (V-TYPE)
10	GASKET
11	GARTER SPRING
12	UPPER BUSHING
13	LOWER BUSHING
14	COMBINED RING
15	BOTTOM COVER

High Quality Valves Built to Last...

Fromatic Corp, 15 Pruy'n's Island, Glens Falls, New York 12801
 Phone: 518-761-9797 Fax: 518-761-9798 www.fromatic.com

3" thru 24" (80mm thru 600mm)

Model 45

SHIPMENT / STORAGE / INSTALATION:

- Azure® butterfly valves disc should be opened no more than 3 to 5 degrees during storage or transportation. This is to protect the disc edge from damage.
- Azure® butterfly valves should be stored indoors in a clean, dry place away from UV light.
- Prior to installation verify:
 - That the Azure® butterfly valve selected is correct for the application.
 - That all sealing surfaces are clean, and free from debris.
 - That all scale, debris, foreign materials are removed from piping system.
 - That valve operator (lever, gear or actuator) is properly secured to valve.
 - That Azure® butterfly valve opens and closes freely.
- The Azure® butterfly valve can be installed in vertical or horizontal in the pipeline.
- Flow through the Azure® butterfly valve can be bi-directional.
- Position of Azure® butterfly valve in piping system should allow for ease of operation, maintenance and removal.
- Do not lift the Azure® butterfly valve with chains or straps around the shaft or actuator or thru the waterway.
- Mounting Azure® butterfly valves to the pipeline flanges should be done with bolts only. Studs are not recommended.
- During installation verify:
 - All flange faces must be cleaned to remove any debris, rust, paint runs, anything that will prevent the gaskets from sealing.
 - The piping alignment to Azure® butterfly valve is correct.
 - The Azure® butterfly valve disc is fully closed inside the valve body.
 - A resilient flange gasket is used between the Azure® butterfly valve and the flat faced pipe flanges or equipment flange connection areas.
 - ***When an actuator is mounted on the Azure® butterfly valve, the actuator should not be mounted below horizontal in order to avoid water damage to the actuator that may occur if there is condensation or a water leak that travels along the piping and into the actuator.***
 - The Azure® butterfly disc is interference free from piping components. While flange bolting is finger tight, open disc slowly to check for interference. If no interference return disc to fully closed and finish tightening flange bolts in a crisscross pattern. **If interference occurs check for piping misalignment.** After realigning piping flanges recheck for interference.


**STANDARD FLANGE SIZE & QUANTITIES OF BOLTS FOR INSTALLATION:
 (FOR REFERENCE ONLY)**

SIZE		Flange 125# / 150#			
in	mm	QTY	Bolt Ø	Bolt Length	Torque (ft/lbs)
3	80	4	5/8	2-1/2	25-100
4	100	8	5/8	3	25-100
5	125	8	3/4	3	30-150
6	150	8	3/4	3-1/4	30-150
8	200	8	3/4	3-1/2	40-150
10	250	12	7/8	3-3/4	45-200
12	300	12	7/8	3-3/4	65-200
14	350	12	1	4-1/4	80-300
16	400	16	1	4-1/2	90-300
18	450	16	1-1/8	4-3/4	100-450
20	500	20	1-1/8	5	120-425
24	600	20	1-1/4	5-1/2	150-600

- After installation Azure® butterfly valve disc should be in open position for initial system pressure testing.

High Quality Valves Built to Last...

Flomatic Corp, 15 Pruy'n's Island, Glens Falls, New York 12801
 Phone: 518-761-9797 Fax: 518-761-9798 www.flomatic.com


3" thru 24" (80mm thru 600mm)

Model 45

- Recommended routine inspection checks should include:
 - Verification by visual inspection that valve seat and flange sealing surfaces are in good condition.
 - Verification that the valve operator is in working condition.
 - After inspection/maintenance verify that valve is opening and closing smoothly.
 - After inspection/maintenance verify that valve is leak tight in closed position.

REMOVING VALVE FROM SYSTEM:• **WARNING !**

Loosening the bolts on a pressurized valve/system can cause the valve to shift and release uncontrolled pipeline fluid/pressure. This can cause personal injury and/or pipeline damage.

- Relieve the pressure from the system and make sure to drain the pipeline before loosening valve bolting.
- Close the Azure® butterfly valve disc before removing from between the pipe flanges.
-  If the Azure® butterfly valve has an electric actuator make sure to turn off and lock out the power before removing or servicing.
- If the actuator is powered, disconnect and lock out any electric, pneumatic or hydraulics to prevent injury and/or accidental operation.
- Support the Azure® butterfly valve, remove the bolts completely then remove the Azure® butterfly valve from the pipeline.



Do not lift by the stem – this will damage the Azure® butterfly valve and void the warranty.

TROUBLE SHOOTING:

PROBLEM	REASON	POSSIBLE SOLUTION
Valve does not fully close	Debris wedged between disc and seat or stop is not adjusted correctly	Open valve to flush out debris or adjust the close stop
Leakage at sealing surface	Seat damaged, disc damaged or dirt between disc and seat	Replace seat or disc, clean the sealing surface
Leakage at the shaft	The seat shaft hole damaged, or O-ring damaged	Replace seat or O-ring
Leakage at flange end	The bolt did not contact tightly, or not uniform, or seat damaged	Tighten bolts or replace the seat.



Warning: Working pressure, temperature, media must match valve capability or valve/piping damage can occur.

- Max Working pressure and temperatures must not exceed valve maximums.
- Temperature above 100° F. will de-rate max pressure capability. Check with factory for correct rating.
- Media must be compatible with body, seat, seals and disc material.

Flomatic Valves is not responsible for the loss caused by the usage beyond the valve capabilities.

NOTES:

Limited One Year Warranty: Flomatic valves are guaranteed against defects of material or workmanship when used for the services recommended. If, in any recommended service a defect develops due to material or workmanship, and the device is returned, freight prepaid, to Flomatic Corporation within 12 months from date of purchase, it will be repaired or replaced free of charge. Flomatic Corporations' liability shall be limited to our agreement to repair or replacement of valve only ©2019

High Quality Valves Built to Last...

Flomatic Corp, 15 Pruyn's Island, Glens Falls, New York 12801
 Phone: 518-761-9797 Fax: 518-761-9798 www.flomatic.com