

Most Comprehensive Offering for HVAC Applications



Butterfly Valve

The Belimo Advantage

Butterfly Valves are fundamental components in large hydronic systems. Unfortunately, most butterfly valves are less than ideal – they leak, their running times are not optimized for HVAC applications, they are heavy, it's hard to access wiring, and they cannot be put into operation quickly.

Belimo's butterfly valve series are the exception; with a complete range of resilient seat, grooved, and high-performance butterfly valve assemblies, sizes from 2" to 24", and variety of actuator control signal inputs to meet all your needs. Belimo assemblies offer zero leakage along with NEMA 2 or 4X rated actuator enclosures, designed to provide ease of installation, application flexibility, longevity, and reliability. Fail-safe actuators are available on butterfly valves up to 12" for emergency control sequences. Typical applications include chiller and boiler isolation, cooling tower isolation, summer/winter change-over control, large air handler coil control and primary bypass to maintain minimum water flow to a chiller or boiler plant.

→ Resilient Seated Butterfly Valves Efficient Solution

Belimo HD/L series lug resilient seated butterfly valves are designed to meet the needs of HVAC and commercial applications requiring zero leakage. The large Cv values provide an economical control valve solution for larger flow applications used in ANSI flanged piping systems. The technologically advanced L series butterfly valve assembly is designed specifically for HVAC applications; it offers an intelligent, energy efficient, and reliable high flow solution with a focus on ease of installation, application flexibility, and longevity.

- Manual handles available for isolation applications
- Saves energy with up to 80% less power consumption with PR/PKR actuator than currently available solutions
- Zero leakage improves system performance with self-adjusting actuator close-off and unique seat and disc design ensures positive valve sealing while maintaining low seating torque on 2-way models
- Easy troubleshooting with the PR/PKR unique position indicator, viewable from long distances and any angle
- Elongated valve neck provides thermal isolation to reduce heat transfer and condensation build-up on the actuator
- EPDM valve liner provides superior close-off and lower torque requirements



Sizes: 2" to 24" (2-way & 3-way)

ANSI 125/150 flange design

Stainless steel disc and stem standard

Ductile iron ASTM A536

Close off up to 200 psi

Media temp -22°F to 250°F [-30°C to 120°C]

→ Grooved Butterfly Valves Quick and Easy Connections without Welding

Grooved Victaulic® butterfly valve series are engineered and manufactured for dependable, trouble-free performance offering superior flow control and durable, long-lasting reliability. The unique design of the offset disc provides increased flow with a longer life expectancy than most conventional valves, due to the tapered disc engaging the seat only at the beginning or end of the stroke.

- No welding is required making it a perfect retrofit solution for buildings where welding is not allowed
- Quick and easy connections with fewer bolts to tighten and no loose parts offering faster installation
- Full bi-directional shut-off and dead-end service capabilities to the full pressure rated up to 300 psi
- Cartridge style seat incorporates an elastomer bonded to a phenolic stabilizing ring, eliminating elastomer movement and reducing seat tearing or fatiguing due to bunching
- Five bushing design completely isolates the valve shaft from the body, resulting in increased control of the valve disc, lower valve seating torque, and longer valve life



Sizes: 2" to 12" (2-way & 3-way)

Grooved ANSI / AWWA (C606)

Electrolysis nickel coated disc and stainless steel stem

Ductile iron ASTM A536, 300-pound body

Close off 200 psi (for most combinations)

Media temp -22°F to 250°F [-30°C to 120°C]

→ High-Performance Butterfly Valves Precise Control for High-Velocity Applications

SHP butterfly valve assemblies are designed for high-performance shut-off, modulating and isolation service. The machined seat design and blow out proof solid shaft provides better torque consistency which results in longer actuator life and leakage rating Class IV per ASME FCI 70-2. Designed for use in ANSI Class 150 and ANSI Class 300 piping systems and supplied standard lug style body designs with range abilities of 100:1, 0% leakage ratings, and a maximum valve velocity of 32 FPS. Configurations are available for harsh conditions and applications requiring nominal pressure and temperature ratings.

- Underbody seat and double offset, disc design ensures positive valve sealing to ensure leak free performance
- Machined seat design and blow out proof solid shaft provides better torque consistency
- Steam service to 50 psi inlet pressure
- Unique seat and disc design provides bi-directional bubble-tight shutoff at rated pressure/temperatures
- Soft seat design ensures self-energized seal with minimal wear
- Full lug body design cast in carbon steel for superior performance



Sizes: 2" to 30" (2-way & 3-way)

ASME/ANSI 150 or ASME/ANSI 300

Stainless steel disc and stainless steel stem

Carbon steel full lug

Close off 285 or 600 psi

Media temp -22°F to 400°F [-30°C to 200°C]


Intelligent Butterfly Valve Assemblies

The resilient seated, grooved, and high-performance butterfly valve with PR actuator series are designed specifically to meet the needs of HVAC applications requiring zero leakage. The assemblies provide simplified setup, diagnostics and superior application data access with BACnet and Near Field Communication built-in.

Configuration	Size		Resilient Seat		Grooved		High Performance		
	Inches	DN	Non Fail-Safe	Fail-Safe	Non Fail-Safe	Fail-Safe	Non Fail-Safe	Fail-Safe	
	2-Way	3-Way	2	50	■	■	■	■	■
2½			65	■	■	■	■	■	■
3			80	■	■	■	■	■	■
4			100	■	■	■	■	■	■
5			125	■	■	■	■	■	■
6			150	■	■	■	■	■	■
8			200	■	■	■	■	■	■
10			250	■	■	■	■	■	■
12			300	■	■	■	■	■	■
14			350	■	■	■	■	■	■
16			400	■	■	■	■	■	■
18			450	■	■	■	■	■	■
20			500	■	■	■	■	■	■
24			600	■	■	■	■	■	■

■ Available with PR and or PKR actuation offering:

- 100% duty cycle rating for increased actuator life
- Saves energy with up to 80% less power consumption and reduces transformer and wiring costs
- Self-adjusting close-off design provides zero leakage and improves system performance
- Industry leading fail-safe function and universal power supply input 24-240 VAC / 24-125 VDC provides application flexibility
- Unique position indication is viewable from long distances and any angle for easy troubleshooting
- BACnet and NFC provide simplified setup and diagnostics, as well as superior application data access




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