

Butterfly Valves

What is a butterfly valve?

A Butterfly valve is a quarter-turn rotary motion valve with advantage of low pressure drop and high-pressure recovery.

What are butterfly valves used for?

Butterfly valves are used to stop, start, and regulate fluid flow.

What is a rubber lined / concentric butterfly valve?

Concentric butterfly valves also known as 'resilient seated' butterfly valves are suitable for a wide range of applications such as cooling water, chemicals, brine, oil mud, hydrocarbons, wastewater, firewater, seawater, natural gas and flare gas amongst many others. The stem is centred in the middle of the disc and the disc centred in the valve body. The disc is constantly in contact with valve seat. Seats can include EPDM, NBR, Viton, Silicon, Teflon, Hypalon and neoprene.

What is a triple offset butterfly valve?

A high performance butterfly valve. This valve has three offsets from the centre. The third offset is the elliptical seat geometry. This along with the two eccentric shaft offsets, allows the disc to seal against the seat with no friction. This seat design allows for uniform sealing, and thus bi-directional tightness at maximum differential pressure.

Why use a triple offset butterfly valve?

The triple offset design is used where bubble tight shut-off, zero leakage is required in common applications such as steam, chemical, refining, and offshore oil and gas. They offer a lower cost, lower torque option, than alternative style metal seated valves. It is low maintenance and offers an extended valve life.

What is a double offset butterfly valve?

A high performance butterfly valve. This valve has two stems offset from the centre. It is capable of providing accurate, stable, throttle flow control.

Are butterfly valves bidirectional?

Butterfly valves can be bi-directional but often have a preferred flow direction. It's strongly recommended to install the valves in the preferred flow direction, as it will extend the valve's life span and will also lower the operating torque. High-performance butterfly valves for hydrocarbon service generally do not have a preferred flow direction and are bi-directional.

Can butterfly valves be used for isolation?

Yes, Triple Offset Butterfly valves can be used for isolation. Triple Offset is a great alternative to the block valve incumbents like gate. If gate was not applicable to process conditions ball valves were utilized.

Triple Offset Butterfly valves have the following but not limited to advantages in this application;

Cost effective, Ease of operation & more readily available than other valve offering. Check out our Triple offset page and contact us further so we can assist you to identify the best solution for your valve needs.

What is a motorized butterfly valve (MOV)?

Motor Operated Valve (MOV) are often called On-Off valves as the motors act to fully open or fully close valves in pipelines. With regards Butterfly valves they fully open or fully close the disc with tight shut off as per plant requirement.

What is a lug type butterfly valve?

The lugged wafer design, butterfly valve is held in place between two pipe flanges by bolts that join the two flanges and pass through threaded holes (or lugs) in the valve's body. This design type can be used for dead-end service.

What is a wafer type butterfly valve?

The wafer type butterfly valve, also known as non-lugged is sandwiched between two pipeline flanges. It may sometimes have unthreaded guiding holes for ease of installation.

What is a flange type butterfly valve?

Flange type or Double Flanged Butterfly valves have two flanges - one either end as opposed to lug type which has one flange in the centre. Flange type have a larger face to face than wafer or lugged. These can be used for dead end service.

How to install butterfly valve?

This can depend on butterfly valve type installing – contact Frenstar for assistance with installation or to request Installation, Operation and maintenance manuals.

Can butterfly valves be used for throttling / flow control?

Butterfly valves can be used in throttling / flow control, or on-off control. High performance butterfly valves are widely used for throttling control.