

A-T Controls, Inc.

9955 International Blvd. • Cincinnati, Ohio 45246 Phone: 513.247.5465 Fax: 513.247.5462

www.atcontrols.com

Author: RSS No.: DI00036
Date Created: 11/28/2018
Date Modified: 07/01/2021

Dead-End Service Butterfly Valves

Dead-End service with butterfly valves is the ability to remove, or not connect, the downstream flange while maintaining connection and pressure on the upstream flange. To achieve this without any additional components, the valve first must be a threaded lug type. A wafer type butterfly valve cannot be used alone for dead-end service because it requires a flange on both sides in order to sandwich mount the valve and ensure proper operation.

A-T Controls offers two types of butterfly valves that are dead-end service capable; the NS Series resilient seated butterfly valve and the Power-Seal Series high performance butterfly valve.

NS Series Resilient Seated Butterfly Valve

The NS Series resilient seated butterfly valve is a general application, bi-directional valve; meaning that it is capable of dead-end service in either direction. This valve is available in a ductile iron or stainless steel body with various seat and disc material options. The vulcanized molded seat design of this valve is what gives the valve its bi-directional dead-end service capability and ensures all components will be secured in place when the downstream flange is removed.

Power-Seal High Performance Butterfly Valve

The Power-Seal high performance butterfly valve features a double offset. Due to this offset, the valve has a preferred flow direction in which the retainer ring must be oriented upstream. This valve is only dead-end service capable in this preferred flow direction. It is extremely important that the valve is not used for dead-end service with the retainer ring downstream, because the bolts used to hold on the retainer will not be suitable to hold pressure from the upstream side.

Valve Packages

NS Series Butterfly Valves

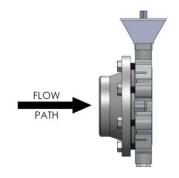
- 2"-24" Class 150 Lug
- Various body, disc, and seat materials available
- Bi-Directional dead-end service
- Maximum Pressure:
 - o 2"-12": 225 PSIG
 - o 14"-24": 150 PSIG
- Manual Handle & Gear, Pneumatic, and Electric operators available

Power-Seal Butterfly Valves

- 2"-48" Class 150 & 300 Lug
- P1S, P1F, P1M, & P1H (various body & seat materials available)
- Dead-End Service in preferred direction only
- Manual Handle & Gear, Pneumatic, and Electric operators available

The dead-end service rating for both of these valves follows the standard operating pressures and temperatures given in the catalog. For more information on these valves, please visit our website at a-tcontrols.com.

Dead-End Service Examples



Power—Seal High Performance Butterfly Valve (Preferred Flow Direction with Retainer Ring Upstream ONLY)



NS Series Resilient Seated
Butterfly Valve
(Bi-Directional)

