

INSTALLATION, OPERATION AND MAINTENANCE FOR SHARPE® SERIES 17 BUTTERFLY VALVES



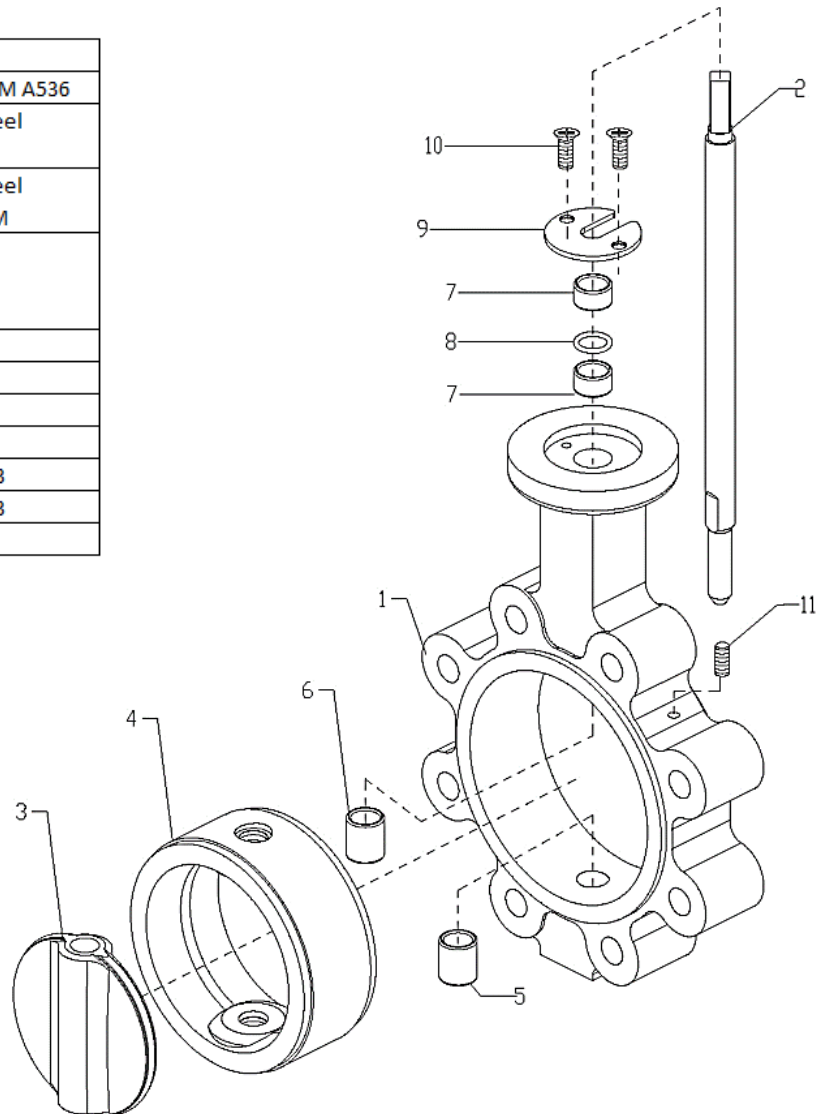
It is the responsibility of the customer to determine the suitability of ASC-ES valves products in their particular application.
Disclaimer: Supplier shall not be liable or responsible for omissions or errors in its bulletin.

Sharpe® Series 17

No	Part Name	Material
1	Body	Ductile Iron ASTM A536
2	Shaft	416 Stainless Steel ASTM A276
3	Disc	316 Stainless Steel ASTM A351 CF8M
4	Seat	EPDM Buna-N Viton*
5	Lower Bushing	PTFE
6	Middle Bushing	PTFE
7	Upper Bushing	PTFE
8	O-ring	NBR
9	Retainer	Steel ASTM A283
10	Retainer Bolts	Steel ASTM A283
11**	Set Screws	Steel

* Optional

** Lug Style Only



INSTALLATION

Sharpe® brand butterfly valves have been designed and engineered to provide a long lasting and trouble-free service when used in accordance with the instructions and specifications herein.

• General

- The following instructions only refer to the Sharpe® brand standard valves as described in this document.
- Keep any protective covering in place until the moment of installation. Valve performance depends upon the prevention of damage to the sealing surfaces. Make sure that the valve completely opens and is free of obstructions.
- When shipped, the valves may contain a silicon based or other lubricant which aids in the assembly of the valve.

• Safety Precautions

- Before removing valve from pipeline: media flowing through a valve may be corrosive, toxic, flammable, or of a contaminant nature. Where there is evidence of harmful fluids having flowed through the valve, the utmost care must be taken. It is suggested that at least the following safety precautions should be taken when handling the valves. More precautions may be required, refer to the media's Safety Data Sheet for additional precautions.
 1. Always wear eye shields
 2. Always wear gloves and overalls
 3. Wear protective footwear
 4. Wear protective headgear
 5. Ensure that running water is easily available
 6. Have suitable fire extinguisher ready if the media is flammable
- By checking line gauges, ensure that no pressure exists on either the upstream or the downstream sides of the valve.
- Ensure that any media is properly released.
- Ideally, the valve should be decontaminated before handling. It must be cleaned and decontaminated before it gets returned if being sent back for warranty evaluation.

OPERATION

- Sharpe® brand valves are designed to be used under normal conditions and in accordance with the Sharpe® valves published pressure/temperature charts.
- Any media which might solidify, crystallize or polymerize should not be allowed to stand in the valve cavities unless regular maintenance is provided.

• Operation

- The valve can be supplied with several different means to operate it:
 - Lockable lever handle
 - Gear operator
 - Electric actuator
 - Pneumatic actuator

STORAGE

- Valves shall be stored in a dry warehouse, with the disc at 5°-10° open.
- For long term storage, valves shall be checked and cycled periodically. They should also be cleaned to remove dirt and foreign material that has collected. Special care shall be taken for the cleanliness of seat surfaces, to prevent damage to the seat and disc.

INSTALLATION

- ASC Engineered Solutions cannot anticipate all of the situations a user may encounter while installing and using the valve.
- The user must know and follow all applicable industry specifications and government regulations for the safe installation and use of these valves.
- Only qualified personnel or technicians who are trained for maintenance work and have read the instructions are to install the valve.
- Misapplication of the product may result in injuries or property damage of which ASC Engineered Solutions is not liable for.
- Before installing the valves:
 - The pipes must be flushed clean of dirt, burrs and welding residues, or you will damage the seat and sealing surfaces of the disc.
 - Check the valve identification tag and valve product sheet carefully to verify that it is the correct valve for the application.

- Check the inside passage and seal surface of the valve. Clean as necessary to remove all dirt and foreign material making sure not to damage any of the surfaces.
- Valves should be installed using good pipe fitting practices.
 - Make sure the flange on the valve matches the mating pipe flange size and bolting pattern.
 - Align the valve in an orientation that is convenient to operate, maintain, and change the valve.
 - Make sure avoid damaging the flange sealing surface of the valve when putting it into the pipeline joint.
 - Bolt the valve into place, using an appropriate bolt material for the application, in a diagonal sequence using even force per the torque table in this manual.
 - Valves should be slightly cracked open with the disc off the seat during installation.
 - However, the disc must not protrude beyond the outer sealing surface of the valve to prevent it from getting damaged when installing the valve.
 - Refer to the valve's product sheet for size and number of bolts required.
 - The actual final length of the bolts is the responsibility of the end user to determine based on their specific application and mating components.
 - It is important not to overtighten the bolts because it can cause seat leakage and damage. Never exceed the maximum bolt torque per the bolt torque table in this manual.
 - The design of the seat eliminates the need for additional flange gaskets.
 - Lug style valves are suitable for dead end service.
 - Verify the valve rotates and operates correctly. If the valve is equipped with an actuation package refer to the IOM for the specific actuator for guidance on how to set and use it.
 - It is **HIGHLY** recommended that the valve be flushed out in the open position to prevent accidental damage to the internal components and surfaces from any debris in the pipeline.

MAINTENANCE

• General

- Sharpe® brand valves are designed to have a long, trouble-free life.
- The following checks should, however, help to extend valve life or reduce plant problems.

• Leakage at Pipeline Joint

- Test for tightness of the connecting bolts. If loose, tighten with a wrench making sure not to exceed the maximum bolt torque per the bolt torque table in this manual. Excessive force will only damage the connection.

• In-Line Leakage

- Check that the valve is fully closing and that there is no debris in the way preventing sealing. If it is closing and the surfaces are clean, leakage may be due to a damaged seat or disc sealing surface and it will be necessary to replace the valve.
 - ASC Engineered Solutions does not offer any repair parts for the Series 17 butterfly valve. So if anything breaks or wears out beyond the warranty period replacing the valve is recommended.

• Stem Seal Adjustment:

- If leakage is evident from the stem seal area, replacement of the valve will be necessary because the stem sealing is not adjustable or replaceable.

• Bolt Torque Table:

Valve Size (in)	Minimum Bolt Torque (ft-lbs)	Maximum Bolt Torque (ft-lbs)
2 - 4	20	70
5 - 8	30	120
10 & 12	50	200
14 & 16	70	240
18 & 20	100	380
24 & 30	140	520
36 - 48	200	800