

Series 4483 IOM

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INSTALLATION, OPERATION AND MAINTENANCE FOR SHARPE® SERIES 4483 GLOBE VALVES



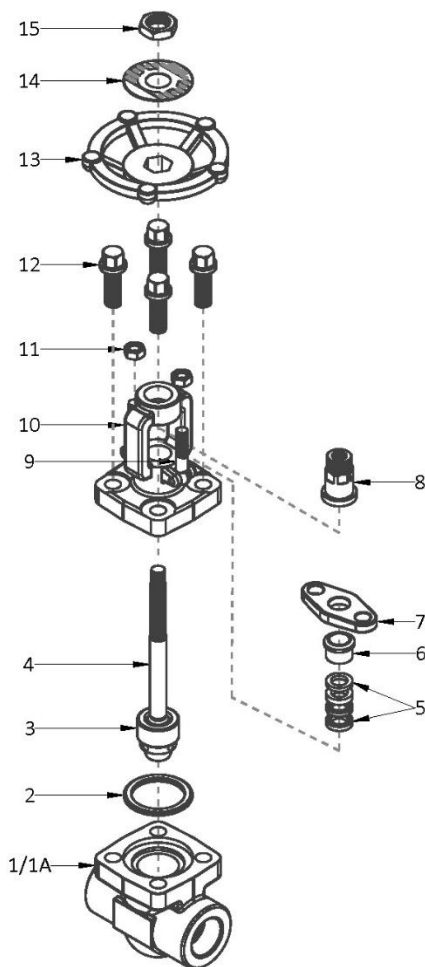
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It is the responsibility of the customer to determine the suitability of ASC-ES valves products in their particular application.
Disclaimer: Supplier shall not be liable or responsible for omissions or errors in its bulletin

Sharpe® Series 4483

Series 4483 - ¼"- 2"



No	Part Name	Qty	Material
1	Body	1	316L Stainless Steel ASTM A182 or Forged Steel ASTM A105N
1A	Seat (Not Shown)	1	Stellite
2	Gasket	1	316 + Graphite or 304 + Graphite*
3	Disc	1	316 Stainless Steel or 410 Stainless Steel*
4	Stem	1	316 Stainless Steel or 410 Stainless Steel*
5	Packing	4	Graphite
6	Packing Gland	1	316 Stainless Steel or 2HM Steel ASTM A194*
7	Gland Flange	1	304 Stainless Steel or Carbon Steel ASTM A105N*
8	Stem Nut	1	316 Stainless Steel or 410 Stainless Steel*
9	Gland Studs	2	B8M Steel or 410 Stainless Steel*
10	Bonnet	1	316L Stainless Steel or Carbon Steel ASTM A105N*
11	Gland Nut	2	Gr8 Steel or 2HM Steel ASTM A194*
12	Body Bolt	4	B8M Steel ASTM A193 or B7M Steel ASTM A193*
13	Hand Wheel	1	Carbon Steel
14	Name Plate	1	Aluminum
15	Hand Wheel Nut	1	Carbon Steel

Note:

* Used on Carbon Steel Valves

INSTALLATION

Sharpe® brand globe 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 the protective covering in place until the moment of installation. Valve performance depends upon the prevention of damage to the sealing surfaces. Upon removal of the cover, make sure that the valve is completely open and free of obstructions.
- When shipped, the valves may contain a silicon based 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.

OPERATION

- Sharpe® brand valves are designed to be used under normal conditions and in accordance with Sharpe® valves published pressure/temperature charts.
 - Valves are metal seated so, per the testing standard, there is an allowable through leakage.
- Any media which might solidify, crystallize or polymerize should not be allowed to stand in the valve cavities unless regular maintenance is provided.

• Operation

- Turn the hand wheel clockwise to close the valve.
- Turn the hand wheel counter-clockwise to open the valve.

STORAGE

- Valves shall be stored in a dry warehouse, with end covers installed.
- For long term storage, valves shall be checked periodically, and cleaned to remove dirt and foreign material. 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 seats and sealing surfaces.
 - Check the valve identification tag 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.

- These valves should be installed using good pipe fitting practices.
- For threaded ends
 - It is recommended to use the correct quantity of a suitable joint compound or PTFE tape on the pipe threads for ease of fit-up and sealing.
- For socket weld ends
 - Be sure the ends of the pipe that are to be welded are clean to the bare metal. Any contaminants in the weld area could cause porosity in the weld.
 - Prior to welding, the valve should be partially closed and remain there until cooled.
 - Where possible, attach the electrical ground to the adjoining pipe on the same side of the valve as the weld being made. Do not attach the ground to the handwheel or upper structure of the valve as arcing across the valve seating surfaces could occur.
 - Position the valve in your piping scheme, being sure you achieve the standard end gap from the end of the pipe to the end of the valve.
 - Tack weld the valve in place.
 - Immediately cool all portions of valve and pipe so the parts are cool to the touch. Non oily shop air or air convection can accomplish this.
 - Tightly wrap a damp cotton shop towel or cloth around the valve exposing the ends needing welding and the handle.
 - Alternate weld passes end to end allowing the valve and weld to cool between passes. Cool the valve and weld by using a damp cotton shop towel or cloth or by quenching with cool water until the entire valve and weld area is cool to the touch.
 - Remove the cloth that is wrapped around the body of the valve.
 - It is **HIGHLY** recommended that the valve be flushed out in the open position after welding prior to any operating to prevent accidental damage to the internal components and surfaces.

MAINTENANCE

• General

- Sharpe® 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

- *Threaded Valves:* Test for tightness of screwed thread. If loose, tighten with standard wrench - excessive force will only damage the connection. Normal jointing materials should be used in the correct quantity.
- *Welded Valves:* Examine welds for leakage point.

• In-Line Leakage

- Check that the valve is fully closing. If it is, leakage amounts greater than the allowable 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 4483 globe 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 packing area, tighten the gland nuts 1/8 turn each. If the leakage persists, repeat tightening. If leakage cannot be corrected by tightening the gland nuts, replacement of the valve will be necessary.