



# IMI PBM S-Split Body Rising Stem Sampling Valve

## General:

This Installation, Operation, and Maintenance manual is for the safe use of IMI PBM S- Split Body rising stem sampling valves. Please read the instructions carefully and save them for future reference.

## Installation:

The S- Split Body Rising Stem Sampling Valve is a valve that is used for taking samples from a line or tank. Install the valve using appropriate joint seals and fittings. The valve can be installed in any orientation compatible with taking a sample.

Connect a suitable sampling container or connection to the outlet nozzle of the valve. To open the valve, turn the knob counter-clockwise. The valve will be completely open in about three turns of the knob. An internal stop in the valve will limit open travel. For throttling, open the valve only to the position needed to obtain the desired flow. To close the valve, turn the knob clockwise until the valve seats

## In-Service Adjustments:

Should seat leakage develop, turn the knob slightly clockwise and the leakage should stop. If leakage continues, the seat may be damaged and need replaced. Should leakage occur past the O-ring seal, the seal should be replaced as it is probably damaged. Note that this seal is normally not wetted. It is wetted only when taking a sample.

## Autoclaving:

The valve may be autoclaved at temperatures up to 300 degrees F° (148.8 degrees C°). It may be autoclaved fully assembled in either the open position, mid-position, or closed position. In addition, the valve parts can be autoclaved in a disassembled condition.

## Disassembly of the valve:

1. Drain the tank, then ensure valve is in the open position.
2. Loosen and remove the clamp securing the bonnet to the body, then pull the bonnet free of the body. Remove the gasket from between the body and the bonnet.
3. Remove the retaining clip from the knob and remove the metal nameplate.
4. Unthread and remove the knob, then remove the stem from the bonnet by pulling on the seat end of the stem.
5. Remove the O-ring from the stem. The O-ring should be inspected for damage and wear. If it is not damaged or worn it should be suitable for re-use.
6. Remove the seat from the stem. The seat will have to be pried loose and will not be reusable. The seat was press fit onto the stem. Removal of the seat will enlarge the hole diameter through the seat which will affect the fit on the stem. For this reason the seat should not be reused, despite what may appear to be a suitable appearance. A reused seat is vulnerable to breaking free of the stem making the valve incapable of sealing.



## WARNING

For your safety and protection it is important that the following precautions be taken prior to working on the valve.

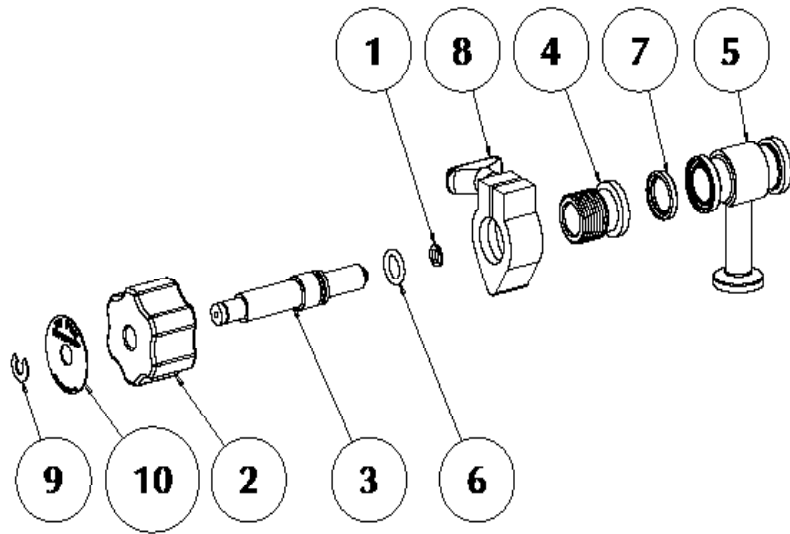
1. Depressurize and drain the line.
2. Cycle the valve to relieve any pressure trapped in the valve.
3. Disconnect any air and electrical connections to the valve assembly.
4. Know what the media is in the line and wear appropriate protective clothing and equipment. Obtain appropriate MSDS sheets.
5. To ensure safe product selection and operation, it is the responsibility of the process system designer and end user to determine the appropriate compatible materials of construction and adequate product ratings for the process system. Process system designer, installer, and end user are responsible for proper installation, operation, and maintenance.
6. When disposing of Teflon parts, do not incinerate or subject to open flames.

# Process Automation

## Reassembly of the valves:

1. Clean all metal parts before starting re-assembly.
2. Install the o-ring into the groove on the stem.
3. Place the seat on a clean table with the angled side facing the table and push the end of the stem through the hole in the seat.
4. The seat will now be affixed to the stem. To insert the seat into its groove in the stem, simply push it into the groove in the stem using one's fingers.
5. Insert the stem into the body allowing the O-ring to enter the body, then install the bonnet onto the stem with the gasket between the body and the bonnet.
6. Install the clamp and tighten.
7. Thread the knob onto the body, then install the nameplate over the end of the stem and secure the knob to the stem using the retaining clip.
8. Close the valve by turning the knob clockwise.
9. The valve is now fully assembled.

Part List	
Item	Description
1	Seat
2	Knob
3	Stem
4	Bonnet
5	Body
6	O-Ring
7	Gasket
8	Clamp
9	Rotor Clip Retaining Ring
10	Nameplate



Repair Kit (V-TEF™/ FKM)	Repair Kit (V-TEF™/ EPDM)	Stem (316L S/S)
S-KIT-A	S-KIT-B	S-HLA002

### Notes for Table Above:

1. Standard repair kits include 1 V-TEF™ seat, 1 FKM or EPDM O-ring, and 1 gasket. Consult factory for other O-Ring and gasket material options.
2. Replacement parts are one each per part number.

### Material Definitions:

TF V-TEF™ Chemically modified polytetrafluoroethylene