

The Jorlon™ Diaphragm

Aseptic and reliable valve components are extremely important in the pharmaceutical industry. And because they see the most wear, automated control valve and regulator valve diaphragms are particularly vital. Without a reliable diaphragm, the dependability of your aseptic process could be in serious jeopardy.

THE COST OF FAILURE

Unscheduled shutdowns can result in 2 weeks to a month of downtime — no production!

A catastrophic diaphragm failure will distribute pieces of the diaphragm throughout the aseptic piping system to all points downstream of the valve, putting final drug substance quality at risk.

Complete processing systems must be **shut down**.

Drug batch(es) may be **destroyed**. The extent of particulate contamination must be determined.

Depending on time of failure, valve location in the product train, and contaminant dispersion, the **batch history must be audited** to determine the extent of contamination over production time.

2-4 WEEKS
OF DOWNTIME



What can you do to prevent this?

Jorlon™ is a structurally modified, non-laminated, pure PTFE diaphragm material that provides a sterile barrier between the process and outside environment, and increases the life of your control valves and regulators.

CHANGE-OUT TIMELINE

Conventional laminate diaphragms

3-12 months

Mark 978 Jorlon™ Diaphragm

4 years*



*Customer's reliability engineer believes he can extend the change-out timeline to 7 years.

HOW IT'S MADE

PTFE is formed in a proprietary process to create a solid diaphragm. The product is thoroughly tested for durability, making sure you get the best results possible.

Jorlon™ is warranted for a lifetime of use on:

- ✓ Mark 95 BPRVs
- ✓ Mark 95AA PBRVs
- ✓ Mark 96 PRVs
- ✓ Mark 96A PRVs
- ✓ Mark 96AA PRVs
- ✓ Mark 978 Control Valves
- ✓ JSHM Hand Metering Valve
- ✓ J-Series Gas Regulators

WHERE IT'S USED

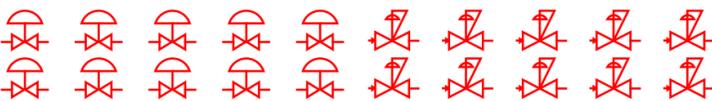
Product applications

Used in biopharma applications including:



Customer use

Tens of thousands of Steriflow valves with Jorlon™ Diaphragms have been installed in FDA-approved systems and facilities.



Maintenance

Jorlon™ reduces the need for **excessive preventive maintenance**.



A customer with a 200+ regulator population reported a **9-year period without a single regulator maintenance event**.

SUCCESSFULLY TESTED

Cycle testing

Successfully tested on a variety of Steriflow valves on 45 psig (3 bar) continuous steam service to over

1 million
FULL STROKE CYCLES

The valves were successfully tested with an **ADDITIONAL**

100 STEAM & VACUUM CYCLES

Lab testing

Lab tests comparing Jorlon™ to 316L diaphragms show continued life after **EXCEEDING THE SST FAILURE CYCLE** count by more than

100x

Jorlon™ has successfully tested **NITROGEN PRESSURE** to over

1200 psi



Steriflow Valve's Jorlon™ Diaphragm is FDA- and USP-certified, ADI/TSE-free, and incredibly dependable, lasting years longer than laminated diaphragms.

With a Jorlon™ Diaphragm, you can diaphragm change-out times, and realize the benefits of a regulator and control valve that