

Jorlon Diaphragm

Unmatched Durability and Performance

Easily Retrofitted, with no Additional Parts

For regulators purchased after 1991, only the diaphragm needs to be changed to retrofit either SSST or elastomer diaphragms

Versatile Compatibility

Jorlon is PTFE-based, making it compatible with most media, with the exception of fluorinated gases and halogenated fluorocarbons

High Pressure Limits

The Mark 60HP pressure regulator has undergone extensive pressure testing, with the Jorlon diaphragm exceeding the valve's maximum allowable pressure limits. For smaller Mark 60 regulators (2" and below), the design is fully rated to the ANSI 300 Class pressure of 720 psi @ 100°F. The use of Jorlon in the innovative design of the Sliding Gate regulator ensures exceptional performance

Enhanced Droop Performance and Accuracy

Metal diaphragms are significantly more rigid than elastomer diaphragms, which reduces sensitivity and negatively impacts the performance and accuracy of a self-operated regulator. In contrast, the Jorlon diaphragm enhances droop performance when used in place of a stainless steel diaphragm, as its properties more closely resemble those of elastomer materials.

Cost Effective

Jorlon is more cost-effective than almost all other elastomers in smaller sizes, and more affordable than Viton in larger sizes.

High Steam Pressure Capability

Through extensive steam testing of Jorlon in our Mark 60 pressure regulators, we have successfully qualified this material for high-pressure steam service. For Mark 60s sized 2" and below, we recommend using Jorlon in saturated steam service up to 405 psi @ 450°F. For larger Mark 60s, Jorlon has been tested and qualified for saturated steam service up to 125 psi. What does this mean? For low- to medium-pressure steam applications, there is no need to upgrade to a piloted Mark 67 regulator. The 235 psi rating exceeds the highest setpoint available in larger Mark 60 regulators, covering most general steam service applications.

Proven Long-Term Reliability

We have been unable to make this material fail, even under the most demanding conditions. We've tested Jorlon with air, high-pressure steam, and low-pressure steam. The most rigorous test involved a full stroke cycle test at 450°F steam. While SST diaphragms failed after an average of 776 cycles, Jorlon continued to perform without any failure, and we ultimately stopped the test after more than 125,000 full stroke cycles. When tested with 300 psi air, Jorlon lasted well beyond 1,000,000 full stroke cycles, whereas SST diaphragms failed after an average of just 13,000 cycles. Whether used in steam, non-compressible liquid service, or high-cycle gas applications, Jorlon proves to be the superior choice

Lower Cost of Ownership

Jorlon enhances droop performance and increases accuracy, leading to improved productivity and efficiency. With Jorlon, you can utilize 2-1/2" - 4" regulators for steam service without the need for a pilot valve. We can offer non-piloted regulators for steam service up to 260 psi inlet pressure and 100 psi outlet pressure, providing cost savings on both purchase and maintenance.