THE STABILIZER
Precise, Dynamic Control of Air-Loaded Valves

The Stabilizer is a closed-loop, proportional controller. It maintains process fluid pressure at a constant, preset value by modulating air pressure to the regulator. The Stabilizer is designed for use with air-loaded pressure regulators, control valves, pinch valves, pressure retaining valves...virtually any pneumatically actuated valve.

Superior Features of Series PRS

- Used with an Air-Loaded Regulator, Series PRS reacts instantly to fluctuations in pressure, significantly enhancing the accuracy of the air-loaded regulator - downstream pressure has virtually no deviation from set pressure.
- Desired pressure is maintained without sacrificing flow. Performance rivals control valves, at much lower cost.
- Ideal for applications with changing pressure requirements.
- Can be conveniently teed into piping at desired control point, or may be mounted at a more convenient location and connected with tubing for process pressure sensing.
- Easy to set; adjustable from 5 PSI to 100 PSI.
- Teflon® diaphragm for critical ultra-pure and corrosive liquid applications.
- No wetted metal or elastomer parts.

MATERIALS OF CONSTRUCTION & PIPING CONNECTIONS:

Process fluid connection is 1/2" male NPT threaded. Standard Air connections are 1/8" female NPT. Connection to regulator valve air chamber should be 1/4" or larger tubing. Standard air chamber material is PVC. End caps are available in Grade 1 Type 1 PVC, Natural Polypropylene, Kynar® PVDF and Teflon. Standard seal material is a Teflon diaphragm backed with Viton. Adjusting bolt and external fasteners are stainless steel. A Buna-N rubber seal is used in the air chamber. For connection types and materials other than listed, please consult factory.

PERFORMANCE:

The Air-Loaded Regulator Graph, at right, compares performance with and without The Stabilizer. Note that the pressure axis in this graph shows only 16 psig of the total range; this was done to better illustrate the effectiveness of The Stabilizer. With this limited range, however, competitive regulators are below the scale and therefore are not plotted.

PLAST-O-MATIC VALVES, INC.
1384 Pompton Avenue, Cedar Grove, New Jersey 07009-1095
(973) 256-3000 • Fax (973) 256-4745 • www.plastomatic.com
SPECIFICATIONS:

Control Pressure Range: 5 - 100 PSIG (0.3 - 6.9 BAR)
Minimum Air Pressure: Set Pressure + 15 PSI (1.0 BAR)
Minimum Process Fluid Supply Pressure: Set Pressure + All Downstream Pressure Drops to Control Point + 15 PSI

Air Pressure Ports: 1/8" NPT, female
Process Fluid Port: 1/2" NPT, male

Temperature/Pressure Rating:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Maximum Air Pressure</th>
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<th>Maximum Air Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>77°F (25°C)</td>
<td>125 PSIG (8.6 BAR)</td>
<td>140°F (60°C) max. operating</td>
<td>33 PSIG (2.5 BAR)</td>
</tr>
<tr>
<td>104°F (40°C)</td>
<td>83 PSIG (5.7 BAR)</td>
<td>40°F (5°C) min. operating</td>
<td>125 PSIG (8.6 BAR)</td>
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</tbody>
</table>

 SERIES PRS MODEL NUMBERS

<table>
<thead>
<tr>
<th>Liquid Connection</th>
<th>PVC</th>
<th>Natural Polypro</th>
<th>Kynar® PVDF</th>
<th>Teflon®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model # with standard Teflon diaphragm and PVC air chamber</td>
<td>PRS-T-PV</td>
<td>PRS-T-PP</td>
<td>PRS-T-PF</td>
<td>PRS-T-TF</td>
</tr>
</tbody>
</table>

TYPICAL INSTALLATION SCHEMATICS:

SERIES PRS DIMENSIONS:

AUTHORIZED PLAST-O-MATIC DISTRIBUTOR

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