A Quick Look
at Swagelok® Pressure Regulators
**Swagelok Pressure Regulators**

Choose from a variety of pressure-reducing, back-pressure, and vaporizing regulators to manage upstream and downstream system pressures in low-, medium-, and high-flow applications. Models feature a piston-type or diaphragm-type design and fine-pitch stem threads for precise control. See the appropriate Swagelok pressure regulator catalog(s) for regulator features,  

<table>
<thead>
<tr>
<th>Pressure-Reducing Regulators:</th>
<th>Diaphragm-Type, Pressure-Reducing Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Provide accurate, consistent delivery pressures to processes and equipment</td>
<td>KPR Series</td>
</tr>
<tr>
<td>- Reduce the likelihood of process variability</td>
<td>- Compact design features a convoluted diaphragm, providing a metal-to-metal seal to help ensure maximum accuracy, stability, and sensitivity</td>
</tr>
<tr>
<td>- Help protect sensitive equipment</td>
<td>KCM Series</td>
</tr>
</tbody>
</table>

### Piston-Type, Pressure-Reducing Models

- **KCP Series**
  - Compact, spring-loaded design features low internal volume

- **KHP Series**
  - High-pressure regulator controls supply pressures up to 10,000 psig (689 bar); self-venting capability enables downstream pressure reduction in a closed loop system

- **KHR Series**
  - Hydraulic pressure regulator operates in systems up to 10,000 psig (689 bar)

- **KPF Series**
  - High flow (C. 1.0) provides minimum droop across the flow range; the balanced poppet design provides high accuracy while maintaining outlet pressures up to 4000 psig (275 bar)

- **KPP Series**
  - Compact, lightweight design is used in liquid or gas applications with up to 6000 psig (413 bar) inlet pressures; provides ideal pressure control solution in high-density OEM equipment

### Diaphragm-Type, Pressure-Reducing Models

- **KPR Series**
  - Compact design features a convoluted diaphragm, providing a metal-to-metal seal to help ensure maximum accuracy, stability, and sensitivity

- **KCM Series**
  - Automatic gas cylinder changeover manifold helps reduce costs associated with system downtime and maintenance expense of continuously monitoring the supply of critical gases

- **KCY Series**
  - Two-stage regulator is designed for applications that require constant outlet pressure when inlet pressures vary, such as cylinder gases

- **KHF Series**
  - High-flow (C. 1.0) regulator provides minimum droop; the balanced poppet design provides pressure regulation accuracy of 0.2 %

- **KLF Series**
  - Low-flow regulator with a large convoluted diaphragm provides high sensitivity control with minimum droop
**Vaporizing Pressure Regulators**
- Vaporize liquid samples or preheat gas samples
- Steam-heated model features low internal volume
- Electrically heated model is ATEX (CENELEC) and CSA certified

Two models are available:

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
</tr>
</thead>
</table>
| **KEV Series** | Electrically heated vaporizing pressure-reducing regulator  
ATEX (CENELEC) and CSA certified for critical/hazardous environments  
Inlet pressures up to 3600 psig (248 bar)  
Direct contact heater design provides maximum thermal efficiency  
Removable heater simplifies cleaning  
Choice of 40, 50, 100, 150, and 200 watt heaters |
| **KSV Series** | Steam-heated, vaporizing, pressure-reducing regulator  
Low internal volume  
Inlet pressures up to 3600 psig (248 bar); outlet pressures up to 500 psig (34.4 bar) |

**Back-Pressure Regulators**
- Provide consistent back-pressure control
- Are available in high back-pressure and high-flow models

**Piston-Type, Back-Pressure Regulators**
- **KCB Series**
  - Compact design offers high sensitivity and set point repeatability
- **KHB Series**
  - High back-pressure regulator provides back-pressure control up to 10,000 psig (689 bar)
- **KPB Series**
  - Compact, lightweight regulator provides back-pressure control up to 4000 psig (275 bar)

**Diaphragm-Type, Back-Pressure Regulators**
- **KBP Series**
  - High-sensitivity back-pressure regulator controls upstream pressures up to 500 psig (34.4 bar)
- **KFB Series**
  - High-sensitivity back-pressure regulator maintains controlled pressures in a high-flow system (Cv up to 1.0)
For more information, visit www.swagelok.com or contact your local, authorized Swagelok Sales and Service Center.