High Flow Switchover

The 677 Series Switchover is an automatic switchover system designed to supply a continuous, high flow of high purity, non-corrosive gas. Based on the technology of the 67S regulator, the switchover offers high flow with relatively low static, ensuring optimal gas usage from the source.

Typical Applications
- Tube trailer supply systems
- Cylinder cradle supply systems
- High pressure backup to a bulk cryogenic source
- High flow skid applications

Features
- **67S Series Regulators**
  - Low static design
- **Stainless Steel Bodies and Bonnets**
  - Rugged, high purity design
- **User-Friendly**
  - One knob switches cylinder priority
- **Optional Line Regulator**
  - Stable line pressure during change over
- **Optional Remote Alarm**
  - Easy integration with Altos system
  - CE marked universal voltage alarm
- **Optional Purge Valves**
  - Allows purging after cylinder change over
- **Optional Outlet Valve**
  - Allows isolation of pipeline

Materials
- **Bodies**
  - 316L stainless steel barstock
- **Bonnets**
  - 316L stainless steel barstock
- **Seats**
  - Viton® or Chloroprene
- **Dynamic Cartridges**
  - 316L stainless steel barstock
- **Internal Seals**
  - PTFE and Viton
- **Filters**
  - 40 micron 316L stainless steel

Specifications
- **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR)
- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)
- **Gauges**
  - 2" (53mm) diameter stainless steel
- **Outlet Connection**
  - 1/2" MPT (without line regulator)
  - 1/2" FPT (with line regulator or outlet valve)
- **Transducers**
  - 0-6000 PSIG (4-20 mA output)
  - Optional intrinsically safe models
- **Cv**
  - 2.3
- **Weight (677 39E2-001R)**
  - 37 lbs. (16.8 kgs)
Pressure Differential Switchovers

**Ordering Information**

<table>
<thead>
<tr>
<th>Series 677</th>
<th>Nominal Switchover Pressure</th>
<th>A: Inlet Assembly and Orientation</th>
<th>B: Line Regulator and Outlet Assembly</th>
<th>C: Assembly</th>
<th>D: Inlet Connections</th>
<th>CON</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>3: 305 PSIG (21 BAR)</td>
<td>0: Bottom inlets</td>
<td>0: No line regulator or outlet valve</td>
<td>1: 0-4000 PSIG/0-28,000 kPa gauges no alarm capability</td>
<td>-001: 1/2” FPT</td>
<td>R: Viton*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4: 430 PSIG (30 BAR)</td>
<td>1: Side inlets</td>
<td>1: 0-125 PSIG (0-9 BAR)</td>
<td>2: 0-4000 PSIG/0-280 BAR gauges no alarm capability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: 680 PSIG (47 BAR)</td>
<td>6: Bottom inlets with inlet valves</td>
<td>2: 0-250 PSIG (0-17 BAR)</td>
<td>G: 0-4000 PSIG/0-280 BAR gauges with Altos 2 alarm and standard transducers (not intrinsically safe)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: 680 PSIG (47 BAR)</td>
<td>7: Side inlets with inlet valves</td>
<td>3: 0-500 PSIG (0-34 BAR)</td>
<td>J: 0-4000 PSIG/0-280 BAR gauges with standard transducers (not intrinsically safe) - alarm not included</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8: Bottom inlets with inlet valves and purge valves</td>
<td>C: Outlet valve only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9: Side inlets with inlet valves and purge valves</td>
<td>D: 0-125 PSIG (0-9 BAR) with outlet valve</td>
<td>N: 0-4000 PSIG/0-280 BAR gauges with intrinsically safe transducers and barriers - alarm not included</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E: 0-250 PSIG (0-17 BAR) with outlet valve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F: 0-500 PSIG (0-34 BAR) with outlet valve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: Intrinsically safe transducers and barriers are required for flammable gas service or for use in hazardous environments.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Maximum Suggested Flow Rate (Nitrogen)**

<table>
<thead>
<tr>
<th>Nominal Switchover Pressure</th>
<th>Outlet Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 PSIG (4.5 BAR) A = 3</td>
<td>3600 SCFH (1700 LPM)</td>
</tr>
<tr>
<td>305 PSIG (21 BAR)</td>
<td>4300 SCFH (2000 LPM)</td>
</tr>
<tr>
<td>430 PSIG (30 BAR) A = 4</td>
<td>4600 SCFH (2150 LPM)</td>
</tr>
</tbody>
</table>

Note: The maximum flow rate assumes a 20% drop in line pressure from a static condition and standard laboratory conditions. For example, to achieve the flow rate for 60 PSIG (4.5 BAR) listed above, the outlet regulator would be set at 75 PSIG (5.4 BAR).