Pressure booster system
Model 75

Applications

- Supply pressure to high pressure controllers
- Pressure source to 6400 psi
- System supply pressure

Special features

- Boosts bottle nitrogen pressure to 6400 psi
- 300 - 3000 psi input pressure
- Operator control panel
- Input and output gauges
- Built in 40 micron filter on drive supply port
- Built in 20 micron filter on supply port

Description

Design
The Model 75 Pressure Booster System is a single piston air driven gas compressor designed for boosting bottle nitrogen up to 6400 psig. The unit is mounted in a roll-bar frame and includes an operator control panel, with gauges for supply pressure and output reference pressure, and an output vent valve. Safety features include internal stainless steel tubing rated to four times expected pressure, an auto shut-off valve and an output relief valve.

Application
The Model 75 is used to provide a pneumatic pressure supply to the Mensor CPC4000, CPC6050, and CPC8000 pressure controllers, or any system that requires a high pressure supply. It can generate pressure up to 6400 psi.

Input and output
The Model 75 requires a drive pressure input from shop air and supply pressure input from bottled nitrogen or another inert gas. The output pressure is adjusted by a knob on the drive pressure regulator. A nitrogen pressure regulator is not required as the unit will function with any supply gas pressure from 300 to 3000 psig. The auto shut-off valve shuts down the system if bottle pressure is less than 300 psig.

Response time
The time for the output of the Model 75 to reach the desired pressure will vary with the volume to be filled and/or the available pressure at the nitrogen bottle connected to the supply input. Typical response with 2500 psig supply pressure is approximately 6 piston strokes per 100 cc of volume on output at 2 seconds per piston stroke.
Specifications

<table>
<thead>
<tr>
<th>Model 75</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Pressure</strong></td>
</tr>
<tr>
<td><strong>Drive Pressure</strong></td>
</tr>
<tr>
<td><strong>Fittings</strong></td>
</tr>
<tr>
<td><strong>Filter</strong></td>
</tr>
<tr>
<td><strong>Relief Valve</strong></td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
</tr>
</tbody>
</table>

Pneumatic Schematic

Alternate Configurations

The Model 75 is also available in a rack mount version (Model 75 Rack Mount) and a medium pressure version (Model 74) that boosts shop air or nitrogen to 1500 psi. Contact Mensor Custom Solutions for complete specifications.