# Pressure booster system Model 75



Data sheet 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

# Input and output

Pressure booster system, model 75

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.

### 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

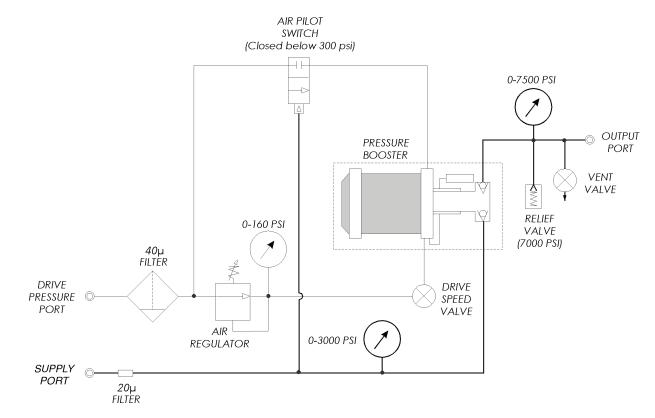
The Model 75 is used to provide a pneumatic pressure supply to the Mensor CPC4000, CPC6050, and CPC8000 pressure controllers, or any system that requires a high pressure supply. It can generate pressure up to 6400 psi.



### Specifications

Model 75	
Input Pressure	300 to 3000 psi unregulated nitrogen
Drive Pressure	100 to 150 psi shop air
Fittings	Supply and output ports are 7/16 - 20 SAE/MS straight threads per MS 16142 and SAE J514 table J. Adapter fittings provided are 1/4" stainless tube fittings with nuts and ferrules.
Filter	40 micron filter mounted after drive pressure port. Removable for cleaning. 20 micron filter mounted after supply pressure port.
Relief Valve	Output relief valve mounted on underside of control panel. Cracking pressure is adjustable.
Dimensions	L 28.25" (71.76 cm) x W 14" (35.56 cm) x H 16.25" (41.28 cm)
Weight	57 lbs. (25.85 kg)

### **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



Model 75 Rack Mount



Model 74

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The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

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