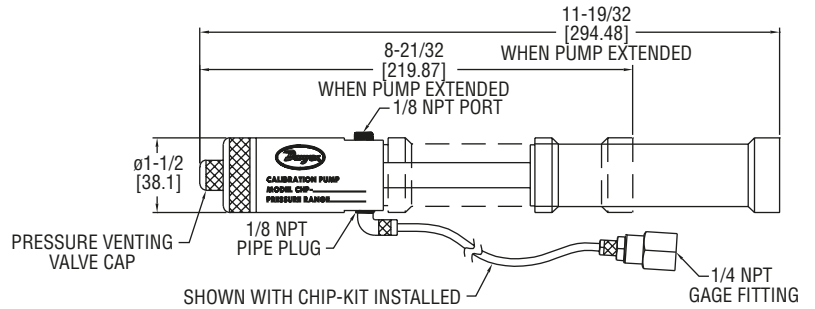




Series CHP Pneumatic Hand Pump

Specifications - Installation and Operating Instructions Bulletin TE-CHP



The Series CHP Pneumatic Hand Pump is the most dependable and rugged pump for applications up to 100 psi or 28.8" Hg Vacuum. The durable Acetal plastic and anodized aluminum construction prevents body heat transfer, resulting in drift-free, accurate readings. The Series CHP is equipped with oversized check valves in order to provide smooth and controlled operation. Dual O-Rings on all pistons ensure the pump to be leak-free. The unit includes a 2 foot long hose, 1/8" female NPT gauge fitting, and 1/8" NPT pipe plug. An optional hose kit is available so that a tee is not required when connecting a sensor and a calibrator. The Series CHP is ideal for checking calibration of pressure or vacuum gauges, switches, or transmitters.

SPECIFICATIONS

Output Range: CHP-P: 0 to 100 psi; CHP-V:0 to -28.8" Hg.

Process Connection: Two 1/8" female NPT parts, one with a removable plug.

Materials: Acetal plastic and anodized aluminum.

Pressure Limit: 150 psig.

Temperature Limit: Not to exceed 150°F.

Displaced Volume: Approximately 4 in³.

Dimensions: 9" length x 1.5" diameter.

Weight: 1.5 lb (680 g).



CAUTION

INSURE ALL GAUGES AND INSTRUMENTS TO BE CALIBRATED ARE DISCONNECTED FROM PROCESS PRESSURES BEFORE CONNECTING PUMP. THE MAXIMUM PUMP DESIGN PRESSURE IS 150 PSIG. CONNECTION TO A PRESSURE SOURCE GREATER THAN 150 PSIG COULD CAUSE SERIOUS INJURY.

OPERATION

Pressure Venting Valve Cap:

The small, knurled pressure relief knob relieves pressure from the pump. Turning the knob counterclockwise allows the system to vent in increments as small as 0.01" of H₂O. Do not over tighten the valve. See Figure 1.

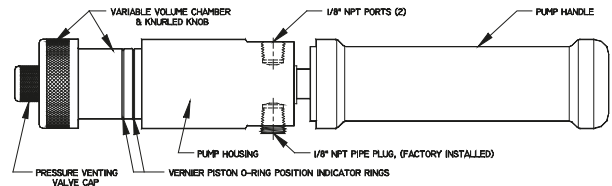


Figure 1

Variable Volume Chamber:

By holding the pump housing and turning the vernier knob, the pump can be adjusted to accurate pressure or vacuum settings. For extremely low pressure calibrations, turn the vernier knob almost all the way in. The pump can be adjusted in ranges less than 1" H₂O.

NOTE: There are two warning rings on the vernier knob column. The first is a warning and the second is that you have gone too far. In either event, no loose parts will fall out.

Pump Housing:

There are two 1/8" female NPT ports on the pump housing. A pressure gauge can be attached to the 1/8" NPT port directly or using the included 2 foot hose and 1/8" NPT fitting. The other port can be plugged or a second gauge can be connected using the CHP-KIT.

Fittings:

Series CHP Pneumatic Hand Pumps have unique fittings and tubing. To reattach tubing to any fitting, heat the tubing end with a heat gun or boiling water to soften it. With a twisting action, connect the tubing to the fitting.

INSTALLATION

Pump Handle Assembly & Pump Piston:

To switch operation of the pump or pump piston between vacuum and pressure, refer to Figure 2, "PUMP HANDLE ASSEMBLY."

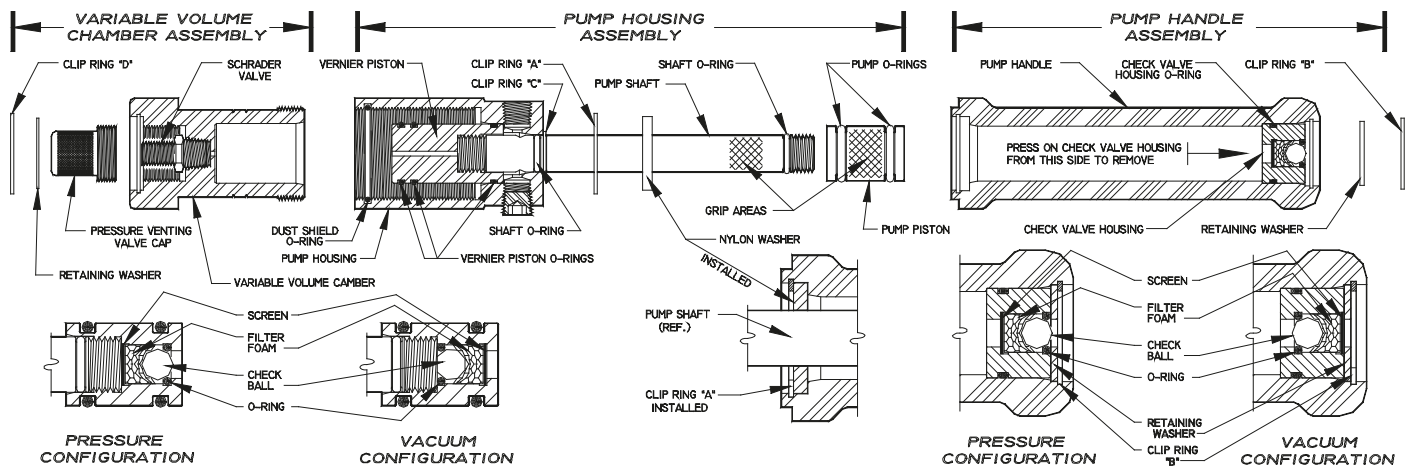


Figure 2

PUMP CLEANING

Once the pump is disassembled, use a clean cotton cloth or paper towel with Isopropyl Alcohol to clean off any remaining lubricant residue. If process fluids have contaminated the pump, please call technical support for instructions.

MAINTENANCE

Upon final installation of the Series CHP Pneumatic Hand Pump, no routine maintenance is required. A periodic check of system calibration is recommended. The Series CHP is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.