



**PM-40B Pneumatic Calibration Hand Pump**

**Specifications**

**Media:** Air and compatible gases only  
**Range:** Vacuum to Pressure (28"Hg - 600 PSI / 40 BAR)  
**Connections:** 1/4" NPT/BSP (top) & 1/8" NPT/BSP (side)  
**Materials:** Stainless steel fittings, anodized aluminum housing, plastic/rubber handles, nitrile o-rings.  
**Weight:** 2 lbs (0.91 kg)  
**Warranty:** 2-year "quibble free" warranty.  
 Compatible with all gauges and calibrators. Made in the USA.

**Models**

- MVP-600**.....
- MVP-600KT**..... includes Pump, a black padded canvas case embroidered with orange thread, 2ft non-stretch hose, fittings, additional rubber bonded washers and (2) adaptors.
- MVP-600WIN**..... includes everything in the MVP-600KT plus Winchester Engineering Model 1 Auto Ranging Digital Gauge™ w/ N.I.S.T. certification and versatile hook.
- MVP-600WIN-FIT**..... includes everything in the MVP-600WIN plus Fastest universal quick connect kit and coupler for Swagelok tube fittings.
- MVP-600RK**..... Rebuild Kit for MVP-600 (includes: Bonded Washers, O-Rings, a Schrader Valve, a X-Ring, a Pressure Valve Spring, a Vacuum Valve Spring, a Ring Retain Clip, a Plug Shorty, Krytox High Performance Grease - GPL215, GPL226)

**Maintenance**

No routine maintenance is required. A periodic check of system calibration is recommended, however. While the MVP-600 is field serviceable, it is recommended it be returned to East Hills Instruments if repair is needed.

**Operation**

1. Push the pressure/vacuum valve to the desired function (ex: if pressure generation is desired, the pin should be PUSHED IN on the side of the pump housing bearing the label "PRESSURE").
2. Close the vent knob by rotating it away from the pump housing. Please note that there should be a space between the end of the vent knob and the base of the vernier knob.
3. For high pressure operation, back out the vernier knob until the ring on the vernier shaft is visible. Pump to pressurize. Turn the vernier knob towards the pump housing and the pressure should easily be able to reach 600 psi. Note that for a maximum pressure of 600 psi to be reached, the handles should be 3/4" apart at the closest point. The closer the handles are to each other, the lower the amount of pressure that will be able to be generated.
4. To release pressure slowly, turn the vent knob in towards the pump body. To increase or decrease pressure slightly for minor adjustments, use the vernier knob.

**Points to Remember**

- Insure all gauges and instruments to be calibrated are disconnected from process pressures before connecting the pump. Do not exceed 600 psi (41 bar) as this is the MVP-600's maximum pressure.
- The MVP-600 has 1/8" and 1/4" BSP ports. In order to use NPT fittings, the required NPT to BSP parallel thread adapters need to be installed (Adapters are Included)
- Do not use thread sealant paste or tape on the male adapters (Female adapters may be sealed with paste or tape). Bonded washers (Included) are required to insure a proper seal. To seal the adapters, simply hand-tighten and snug up with a wrench. Do not over-tighten.
- The MVP-600 utilizes a Schrader valve instead of a needle valve. Thus full open or closed is several turns from the end of the travel. Over-tightening does not increase the seal.