



## PRESSURE CALIBRATION HAND PUMPS

### Available Models

**PSI-PP1**

**PSI-PP2**

**PSI-PP3**

**PSI-PP3-L**

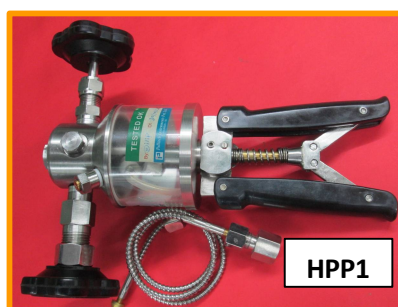
**PSI-HPP1**

When calibrating pressure metering instruments including pressure gauges and pressure calibrators, it is essential that a stable pressure source of generating requisite pressure is available at hand. Polltech provides four hand operated pumps to fulfill this need. Model PSI-PP1, PSI-PP2, Model PSI-PP3 are pneumatic pumps and generate pneumatic pressure up to 25 kg/cm<sup>2</sup>. They are also useful for generating vacuum up to 70/80 % of the atmospheric pressure. Model PSI – HPP1 is a hydraulic pump and is used for generating high pressures up to 550 kg/cm<sup>2</sup> which are not possible by hand operated pneumatic pumps.

All four pumps are manually operated and require no electrical power making them useful for testing of mechanical and electronic pressure gauges even when power is unavailable.

### Salient Features

- ☞ Dual source of pressure and vacuum
- ☞ Manually operated. Require no electrical power
- ☞ Simple one hand operation
- ☞ Coarse and fine control for adjusting pressure to desired accuracy
- ☞ Pneumatic pumps for low pressures up to 25 kg/cm<sup>2</sup>
- ☞ Hydraulic pumps for high pressure up to 550 kg/cm<sup>2</sup>



## Description

**Polltech Model PSI-PP1 Pneumatic Hand Pump** is the most dependable and rugged pump for applications up to 100 psi or 24" Hg Vacuum. The anodized aluminum honed tube construction is mounted on a sturdy stand to prevent body heat transfer, resulting in drift-free, accurate readings. The PP1 is equipped with dual pistons ( coarse and fine ) in order to provide smooth and controlled operation. Dual O-Rings on all pistons ensure the pump to be leak free. The unit is fitted with a tee to provide direct connection to a pressure meter / gauge and a calibrator. The PP1 is ideal for checking calibration of pressure or vacuum gauges, switches, or transmitters.



**The Model PSI- PP3 and PSI-PP3L are Low Pressure Calibration Pumps**, similar in construction to model PSI PP-1, with only one piston with fine control. These hand pumps have a pressure range of 30 psi; uses air as the media, and can adjust the pressure easily with great stability. The pumps have a heat-insulator between the cover and pressure chamber to lessen the heat effect during the micro-pressure calibration. The adjusting resolution is about 0.1 Pa. These features make the PP3 ideal for calibrating low pressure transducers, precision pressure gauges, Magnehlic gauges and other pressure instruments. The PP 3L has been specially designed for low pressure differential gauges since it has two compartment. This helps in reducing the effect of temperature and barometric pressure changes .The PP3 is provided with two ferrule-less connectors while PP3L has four connectors for fast instrument connect and disconnect.



**The Model PSI- PP2 and HPP1 are High Pressure Calibration Pumps.** The PP2 model is designed for pneumatic applications for a pressure range of 350 PSIG while HPP1 is a hydraulic type suitable for pressure applications upto 550 kg/cm<sup>2</sup>. Both the pumps use multiple strokes to generate high pressure and are also provided with a variable stroke adjustment in addition to a fine adjustment valve. A set of BSP adaptors and a flexible hose connection (PSI-PP2) are standard accessories.



### Detailed Technical Specifications:

Model →	Model PSI – PP1	Model PSI – PP2	Model PSI – PP3	Model PSI – HPP1
Specifications ↓				
Maximum Pressure	100 PSIG	350 PSIG	30 PSIG	700 kg/cm <sup>2</sup>
Operation Action	Two Knob-Screws	Scissor-Spring	Knob- Screw	Scissor-Spring
Pressure Media	Air			Distilled water
Maximum Vacuum Generated	80% of atmospheric pressure		70% of atmospheric pressure	80% of atmospheric pressure
Controls	Coarse & Fine Control		Fine Control	Coarse & Fine Control
Wetted parts	Anodized Aluminum		Anodized Aluminum	SS 304 & Acrylic
'O' Rings	Neoprene			
Outlet Connection	2 ferule-less Union	2 standard ¼" BSP (M)	2 standard ferule-less Union	¼" BSP Male
Size	250 x 140 x110 mm	230x 130x70 mm	200(L) x 85 dia mm	300 x 150 x 80 mm
Weight	1.6 Kg	1 Kg	1.15 Kg	1.7 Kg
Reservoir Capacity	Not applicable			100 ml

### Related Products

**Digital Pressure Calibrator** Model PSI – PC1

**Digital Alarming Pressure Gauge** Model PSI – DPG1

**Digital Barometric Pressure Indicator** Model PSI – BPI 1

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**INDUSMATION LLC**

**Engg. & Marketing Off:** 3837 Pine Valley Dr. Plano, TX 75025 USA

**Phone:** 631-901-8857 **Email:** [info@indusmation.com](mailto:info@indusmation.com)

[www.indusmation.com](http://www.indusmation.com)

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