

The Model 3750 is engineered to perform - even in the harshest environments. Constructed with stainless steel and advanced corrosion protection on all wetted components, rugged impact-resistant controls, and wear-resistant seals and control surfaces, the Model 3750 is purpose-built for all of your real-world applications. In fact, the Model 3750 is the US Navy's hand pump of choice for shipboard calibration on all of its ships and submarines.

The Model 3750 Portable Pressure Calibrator can be incorporated into existing pressure calibration systems or Raptor Scientific can provide you with a custom-configured pressure calibration system complete with all the equipment necessary to perform precision pressure calibrations to your requirements.

Designed with the US Navy shipboard calibration workload in mind, the Model 3750 is rugged, reliable and built to last. With proper maintenance and scheduled service, the Model 3750 is under warranty for 25 months of trouble-free performance.



Model 3750 Hand Pump

Features & Benefits

- Dual piston volume adjuster
- Ouick disconnect socket assembly
- Fluid reservoir for hydraulic pressure testing
- Bleed valve with bubble-tight control and nocrush knob clutch
- 140 degree rotating pump head
- Pneumatic and hydraulic pressure output from one pump
- Advanced corrosion-resistant materials and coatings
- Redesigned pump controls
- Proprietary elastomeric seals
- Industry best 25 month warranty

The Model 3750 offers greater:

- **Responsiveness:** a unique twist selector valve transfers knob rotation into linear motion, letting you flip easily between pressure and vacuum modes
- **Reliability:** Advanced o-ring sealing technology delivers reliable, leak-free operation from vacuum to 10,000 psi
- Control: Integrated pressure relief valve/bleed control makes downscale
 pressure adjustments easy with bleed rates less than 0.1psi/sec. A "no-crush"
 knob clutch prevents over-tightening and increases valve seat life. Our bubbletight needle valve offers precise pneumatic and hydraulic pressure control.
- Precision: Redesigned pump controls let you quickly calibrate set points in both pneumatic and hydraulic applications. Dual piston technology features coarse and fine vernier volume adjusters, enabling the operator to choose coarse control for large pressure changes or fingertip fine adjustment to dial in pressure test points by as little as 0.001psi.
- Durability: Advanced corrosion-resistant materials and coatings on all wetted components mean lasting performance, even under extreme conditions.







Model 3750

Portable Pressure Calibrator Kit

Kit components include:

- Muli-function Hand Pump
- Hand Pump Hydraulic Reservoir
- Third Gen. Digital Pressure Gauges (4 each, 0.1% IV)
- High Pressure Test Hoses (3 & 6 foot lengths)
- Stainless Steel Adapter Fittings Kit
- Fluid Trap

- Hand Tools
- Accessory Kit
- Rugged Storage Case
- Operational Backpack Configuration









Specifications

13.25" x 8" x 5.25" Hand Pump Dimensions:

Hand Pump Weight: 2.90 lbs. Weight with Hydraulic Reservoir: 3.5 lbs.

Pressure Connections:

Supper Pressure Quick Disconnect Reference Port:

Pressure Output: 1/4" 37° JIC Male,

Other configurations available

Operating Pressure and Control:

Discharge Pressure (pneumatic): 0 to 500 psig

Discharge Pressure (hydraulic): Adjustable up to 10,000 psig

with HPDX Configuration

Hydraulic Fluid: Distilled Water

(recommended when using the pump for both pneumatic and hydraulic service) 28.5" Hg Max @ atmospheric

Vacuum:

pressure of 29.92"Hg

Pressure Relief Valve

150 psi - 10,100 psi

Adjustable Range:

Pneumatic Pressure $\pm 0.001 \, psi$

Control Resolution:

Hydraulic Pressure ± 0.1psi

Control Resolution:





