FLUKE®
Calibration

Sales Guide

700HPPK Pneumatic Test Pump Kit

1. Product Positioning

The 700HPPK High Pressure Pneumatic Test Pump Kit is the pressure generation tool preferred by Instrument and Calibration Technicians because it provides rugged portability and safe, clean, quick and easy pressure generation.

2. Typical Applications

The 700HPPK is ideal for the calibration and testing of pressure transmitters, gauges, relief valves, and other similar devices. The 700HPPK provides the portability and ruggedness required for operation in the field but can be used equally well in the shop.

3. Target Customer

The target customer is Instrument & Maintenance Technicians (Field & Insitu Process Facility) as well as Calibration Technicians (Shop or Mobile Indoor). The key market vertical is Gas Transmission in the Oil & Gas Industry. It is used for calibrating or testing devices that require pressures between 4 and 20 MPa (600 and 3000 psi) where gas media is beneficial over a liquid media. This includes vertical markets like aerospace, oil and gas, process, and pharmaceutical.

4. Value Proposition

What does this product do? – Used to generate and adjust pneumatic pressures up to 21 MPa (3000 psi), in the field or in the lab, with no nitrogen bottle or other pressure supply.

What customer problem(s) does it solve? High Pressure Pneumatic calibration/testing is historically difficult and dangerous. This pump makes it simple, easy, and safe

Who uses this product? Calibration Technicians and Test Engineers

Which industries does this product serve? Oil and Gas, process plants, aerospace, and DoD

What specific benefits does the product provide the customer?
Rugged, durable, simple-to-use, safe

Why will the customer buy from us and not the competition (key differentiators)? Rugged, dependable, and easier-to-use

5. Key Selling Points/Points of Differentiation

700HPP and 700HPPK Benefits	
Features	**Benefits**
Max Working Pressure: 21 MPa (3000 psi)	High enough to handle almost any pneumatic pressure application. Makes generation to lower pressures (like 7 MPa, 1000 psi) very easy.
Pressure Generation Time: 20 seconds	Reduces time required to test or calibrate a device. Eliminates the need to bring pressurized cylinders into the field.
Dessicant filter on input protects system from inlet gas contamination	Allows for operation in dirty environments
Design allows for operation on any surface	Pump can be used in the field or in the shop. Table not required.
Portability – collapsible feet, built in handhold, and canvas carrying case	High gas pressure, wherever you need it.

700HPPK Benefits	
Features	**Benefits**
Detachable Calibration Manifold	Allow for both hands-free and ergonomic operation
Fine adjustment control with high resolution adjustment (0.05% of reading)	Simple, precise pressure control ideal for calibration of dial gauges or similar testing
Swivel ¼ NPT female Reference Gauge Connection	Easily switch out reference gauges without the use of PTFE tape or tools
In line filter system	Protects system from contamination coming from the UUT.

6. Competitive Comparison

Make/Model		Maximum Pressure	Portability	Generation Time	Ease of Pressure Generation	Price
Fluke 700HPPK		21 MPa (3000 psi)	Carrying case, easy handhold, can be used on any surface	20 sec	Simple pump action, includes manifold for fine adjustment	3800
Fluke 700HPP		21 MPa (3000 psi)	Carrying case, easy handhold, can be used on any surface, lightweight	20 sec	Simple pump action	2500
Additel 918		10 MPa (1500 psi)	Lightweight, but requires flat surface to operate	Not Specified	Requires flat surface	2350
Additel 920		20 MPa (3000 psi)	Requires flat surface to operate, cumbersome for field operation	40 seconds	Requires flat surface	3795
Easthills PP-4KT		28 MPa (4000 psi)	Can be used in the field, has separate manifold	Not Specified	Non-ergonomic pump technique	3899
GE DPI 612 PFP		10 MPa (1500 psi)	Carrying Case, portable, but requires work surface to properly operate	Not Specified	Large force required to generate high pressures, requires flat surface	3332
GE PV622		10 MPa (1500 psi)	Carrying Case, portable, but requires work surface to properly operate	Not Specified	Large force required to generate high pressures, requires flat surface	2534
Ralston NPAK		21 MPa (3000 psi)	Heavy, includes nitrogen bottle that can cause regulatory concerns	Not Specified	Requires nitrogen bottle to be filled beforehand	3995
Condec Source 3000		21 MPa (3000 psi)	Heavy, includes nitrogen bottle that can cause regulatory concerns	Not Specified	Requires nitrogen bottle to be filled beforehand	4061

7. Common Objections

I use a nitrogen cylinder (or nitrogen cylinder based product) and it's easy and works just fine. Nitrogen cylinders store a large volume of compressed gas and thus, by definition, have a large amount of stored energy. There are numerous regulations regarding the transportation and testing of devices like this. The 700HPPK doesn't have a large volume of compressed gas, making it much safer and eliminates the regulatory challenges.

I use a hydraulic (liquid) hand pump for this pressure range. Hydraulic solutions are quite popular for this pressure range, but they can cause big problems in certain applications. They are inherently messy and can result in contamination of the test process by introducing liquid into a gas system (or the wrong liquid into a liquid system.

It's a bicycle pump. Why should I pay so much for a bicycle pump? While the 700HPP looks like a bicycle pump, it most definitely is not. It goes to higher pressures and can generate lower pressures into large volumes quickly and easily.

8. Product Demonstration

1. The best way to demonstrate the product is to generate pressure with the unit and show how easy it is to generate and fine tune the pressure.
2. Make sure the variable volume is in the middle of its travel so that you can fine tune the pressure later.
3. Close the vent valve at the base of the pump and on the manifold (top valve).
4. Open the manifold isolation valve (bottom valve).
5. Connect a gauge like the 700G or 2700G (with proper range) to the reference test port on the manifold (no PTFE tape required).
6. Make sure the second test port is plugged (capped) or connected to an example DUT.
7. Generate pressure by pumping the pump with full, complete strokes.
8. Once near the desired pressure, close the isolation valve (bottom valve).
9. Fine tune the pressure using the variable volume.
10. Show the pressure is stable.
11. Open the isolation valve and slowly open the vent valve to vent the pressure.

9. Ordering Information

Item #	Model Noun	Description
4784838	700HPPK-NPT	High Pressure Pneumatic Pump/Comparator,21 MPA (3000 psi), NPT
4810501	700HPP-NPT	High Pressure Pneumatic Test Pump, 21 MPA (3000 psi), NPT
4810443	700HPPK-BSP	High Pressure Pneumatic Pump/Comparator,21 MPA (3000 psi), BSP
4810455	700HPP-BSP	High Pressure Pneumatic Test Pump, 21 MPA (3000 psi), BSP
4810462	700HPPK-MET	High Pressure Pneumatic Pump/Comparator,21 MPA (3000 psi), Metric
4810470	700HPP-MET	High Pressure Pneumatic Test Pump, 21 MPA (3000 psi), Metric
4810481	700HPM	High Pressure Pneumatic Calibration Manifold, 21 MPA (3000 psi)
4816055	700HPF-NPT	High-Pressure Premium Fittings, NPT Fittings, 21 MPa (3000 psi)
4816062	700HPF-BSP	High-Pressure Premium Fittings, BSP Fittings, 21 MPa (3000 psi)
4816070	700HPF-MET	High-Pressure Premium Fittings, Metric Fittings, 21 MPa (3000 psi)

10. Schedule

The product ships from the Everett, Washington facility. All items have a 2-week standard lead time.

11. Sales Tools and Marketing Documents/Collateral

For a complete list of available Sales and Marketing Documents, please see the 2271A Launch Page found at http://eu.flukecal.com/700HPPK-Launch-EMEA