

# 700HPPK Pneumatic Test Pump Kit

## Technical Data

**Generate 21 MPa (3000 psi) easily in the field, without liquid contamination or the hazard of a pressurized gas cylinder**

The Fluke Calibration 700HPPK Pneumatic Test Pump Kit generates and adjusts pneumatic pressures up to 21 MPa (3000 psi), without requiring a nitrogen bottle or other external pressure supply. It supplies pressure to devices under test (DUTs) that include transmitters, controllers, pilots, digital and analog gauges, and more. It's the perfect solution for generating high pressure in the field, where conditions and operating surfaces can vary.

The 700HPPK is the ideal choice for calibration technicians, test engineers, and instrument technicians working in industries like natural gas transmission and distribution, process, aerospace and defense, who need a simple-to-use, safe and portable pressure source that they can depend on in a wide variety of conditions.

The 700HPPK contains both a calibration manifold and high pressure pump to generate and finely adjust pressures. A second model, the 700HPP, is available for people who only prefer a high pressure source.

### 700HPPK features at a glance

- Generate and adjust pneumatic pressures up to 21 MPa (3000 psi)
- Rugged, portable and stable enough to go anywhere—on any surface
- Reaches pressure in 20 seconds to full scale into a 30 cm<sup>3</sup> volume
- Detachable pressure adjustment system for adjusting pressure, connecting reference and test devices on bench and in field, and isolating and venting pressure
- Easily switch out reference gauges without requiring PTFE tape or tools
- 2-meter (6.5 foot) pressure line and assorted pressure fittings enable a wide variety of possible connections
- In-line filter and desiccant systems protect device from contamination from the DUT





- 1 The desiccant tube protects against contamination from inlet gas.
- 2 The inlet valve (700HPPK only) is conveniently located at the bottom of the calibration manifold. Opening and closing this valve helps to stabilize the pressure faster.
- 3 The vent valve lets you vent the pressure with a simple turn of a knob (HPPK only).
- 4 The pump handle lets you generate pressure easily and without physical straining.
- 5 The variable volume control lets you adjust the pressure and achieve the exact target pressure on the reference gauge (HPPK only).
- 6 The gauge port enables you to connect a reference gauge to the calibration manifold (HPPK only).
- 7 The calibration manifold (700HPPK only) attaches and detaches easily with quick detent pins, so it's easy to set up in the field.
- 8 External line providing simple and fast connection to the Device Under Test.
- 9 Inlet port connecting the pump and adjustment manifold.
- 10 The calibration manifold attaches to the pump bracket.



The 700HPPK features collapsible feet that make it easy to pack away.

### Generate high pressure accurately and safely for a wide workload

The 700HPPK generates pressure up to 21 MPa (3000 psi) within 20 seconds to full scale into a 10 cm<sup>3</sup> volume. A detachable pressure adjustment system and adjustment control knob enables users to make fine pressure adjustments to 0.1% of reading or better.

The 700HPPK includes a 2 meter (6.5 foot) pressure line and assorted pressure fittings, enabling you to connect a wide variety of DUTs for wide workload coverage. In fact, the 700HPPK covers at least five times more workload than standard range pneumatic pumps.

An in-line filter system protects the system against contamination from the unit under test.

### Use the 700HPPK just about anywhere

The 700HPPK is designed to be at home in the lab or the field. Lightweight and portable, it features collapsible feet, built-in handhold, and a canvas carrying case, making it easy to carry to the field.

The 700HPPK works on just about any surface, so you don't need a flat laboratory bench or flat area in the field.

With the 700HPPK, you don't need to carry a lot of extra equipment or accessories. No PTFE tape or extra tools are required thanks to a swivel 1/4 NPT female reference gauge connector that makes switching reference gauges fast and easy.

The pump kit is designed so the calibration manifold attaches and detaches easily via quick detent pins. You won't need to spend a lot of time setting it up or packing it away at the end of the day.

## Specifications

|                                                            | 700HPP                           | 700HPPK                            |
|------------------------------------------------------------|----------------------------------|------------------------------------|
| Maximum working pressure                                   | 21 MPa<br>3000 psi               |                                    |
| Time to generate full scale pressure with 10 cc volume (s) | 20                               |                                    |
| Weight                                                     | 5.5 kg (12.2 lbs)                | 7.2 kg (15.8 lbs)                  |
| Dimensions                                                 | 66 x 25 x 13 cm (26 x 10 x 5 in) | 66 x 30.5 x 13 cm (26 x 12 x 5 in) |
| Reference gauge connection                                 | 1/4 NPT, quick connect           |                                    |
| Inlet supply contamination protection                      | Desiccant filter                 |                                    |
| DUT contamination protection filter                        | —                                | 100 micron                         |
| Fine adjustment resolution                                 | —                                | 0.05 % reading                     |
| Maximum leak rate (with isolation valve closed)            | —                                | 0.01 % reading                     |
| Supplied test port adapters                                | NPT: 1/8, 1/4 NPT                |                                    |
|                                                            | BSP: 1/8, 1/4 BSP                |                                    |
|                                                            | MET: M14, M20, 1/4 NPT           |                                    |

## Ordering information

| Models                          | Description                                                                                                                                                                                                                                                    |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 700HPPK-NPT                     | High Pressure Pneumatic Pump/Comparator, 21 MPa (3000 psi), NPT                                                                                                                                                                                                |
| 700HPP-NPT                      | High Pressure Pneumatic Test Pump, 21 MPa (3000 psi), NPT                                                                                                                                                                                                      |
| 700HPPK-BSP                     | High Pressure Pneumatic Pump/Comparator, 21 MPa (3000 psi), BSP                                                                                                                                                                                                |
| 700HPP-BSP                      | High Pressure Pneumatic Test Pump, 21 MPa (3000 psi), BSP                                                                                                                                                                                                      |
| 700HPPK-MET                     | High Pressure Pneumatic Pump/Comparator, 21 MPa (3000 psi), Metric                                                                                                                                                                                             |
| 700HPP-MET                      | High Pressure Pneumatic Test Pump, 21 MPa (3000 psi), Metric                                                                                                                                                                                                   |
| <b>Included with all models</b> | <ul style="list-style-type: none"> <li>• Canvas carrying bag</li> <li>• High pressure pneumatic quick service kit (seals for pump)</li> <li>• Dry pac refill</li> <li>• Silicone grease</li> <li>• High pressure hose</li> <li>• Test port adapters</li> </ul> |
| <b>Accessories</b>              |                                                                                                                                                                                                                                                                |
| 700HPM                          | High Pressure Pneumatic Calibration Manifold, 21 MPa (3000 psi)                                                                                                                                                                                                |
| 700HPF-NPT                      | High Pressure Premium Fittings, NPT Fittings, 21 MPa (3000 psi) Includes 3/8 NPT male, 1/2 NPT male, 1/2 NPT female, 1/4 NPT male swivel, 1/4 NPT female swivel                                                                                                |
| 700HPF-BSP                      | High Pressure Premium Fittings, BSP Fittings, 21 MPa (3000 psi) Includes 3/8 BSP male, 1/2 BSP male, 1/8 BSP female, 1/4 BSP male swivel, 1/4 BSP female swivel                                                                                                |
| 700HPF-MET                      | High Pressure Premium Fittings, Metric Fittings, 21 MPa (3000 psi) Includes 1/8 NPT male, M20 male swivel, 1/4 NPT male X M20 female                                                                                                                           |

## 2700G Reference Pressure Gauge

Provides best-in-class 0.02 % FS accuracy

Available in ranges up to 70 MPa (10,000 psi)

Can be used with 700HPPK Test Pump Kits for a complete pressure calibration solution



## 700G Precision Pressure Gauge Calibrator

Provides 0.05 % accuracy in ranges up to 70 MPa (10,000 psi)

Work safely in classified areas known to include explosive gasses

Can be used with 700HPPK Test Pump Kits for a complete pressure calibration solution



The pump kit is designed so the calibration manifold attaches and detaches easily via quick detent pins.



**Fluke Calibration.** Precision, performance, confidence.™

|            |    |             |          |          |      |          |
|------------|----|-------------|----------|----------|------|----------|
| Electrical | RF | Temperature | Humidity | Pressure | Flow | Software |
|------------|----|-------------|----------|----------|------|----------|