

FLUKE®

Fluke-700LTP

Low-Pressure Test Pump

Instruction Sheet

Introduction

The Fluke-700LTP Low-Pressure Test Pump is a portable, dual source of vacuum and pressure. Each pump incorporates a vacuum and pressure selector and fine adjustment control. The pump has the following specifications:

- Output pressure: 0 to 45 psi / 0 to 3 bar
- Output vacuum: 0 to -13 psi / 0 to -900 mbar
- Materials: Bright nickel-plated brass, clear anodized aluminum
- Adjustment: Fine volumetric pressure and vacuum adjuster
- Pressure Relief Valve: Adjustable from 0.7 to 45 psi / 50 mbar to 3 bar
- Construction: Nylon, stainless steel, brass, PTFE, and nitrile
- Dimensions: 150 mm x 46 mm diameter
- Weight: ~600 grams or 1.3 lbs (pump only)

Box Contents

- Fluke-700LTP Low-pressure Test Pump
- Two flexible hoses with two 1/4 in BSP female and two 1/4 NPT female quick-fit connectors
- Seal set
- Adapter: one 1/4 in. NPT male to 1/8 in. NPT male.
- Instruction Sheet

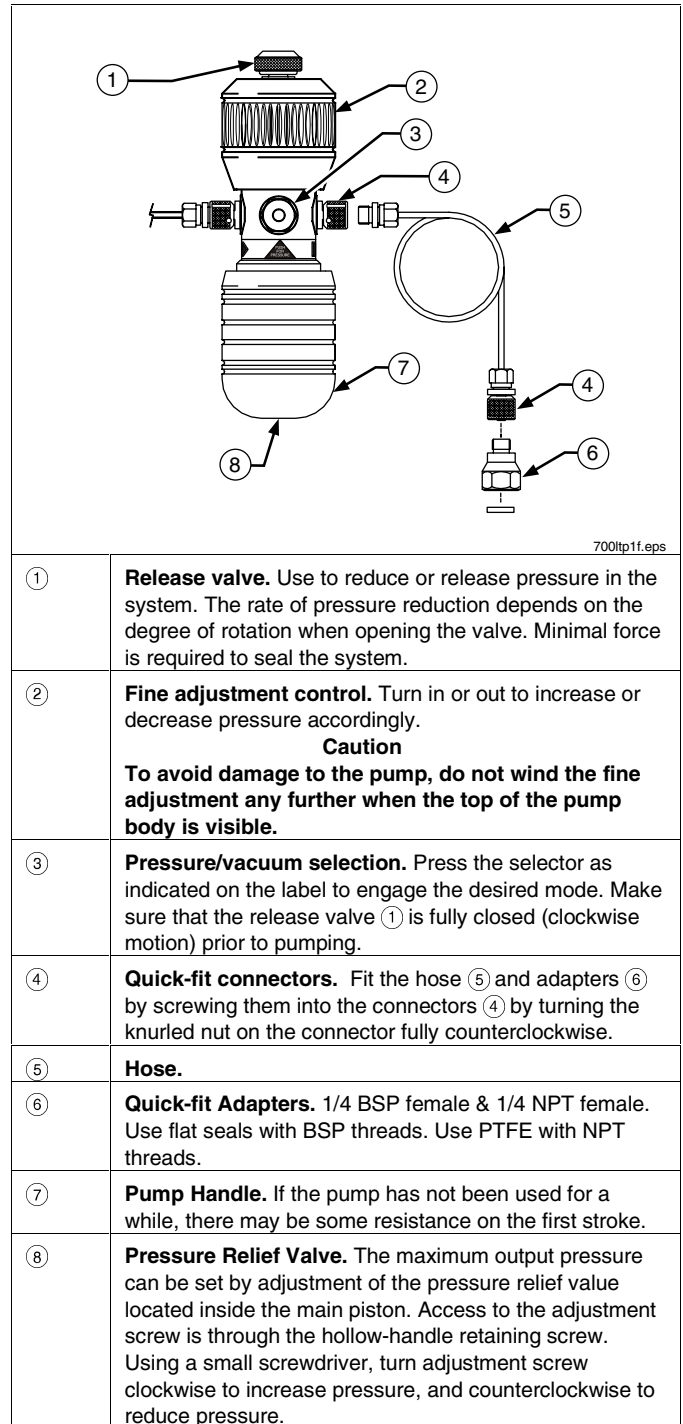
How to Contact Fluke

To contact Fluke, call one of the following numbers:

USA: 1-888-99-FLUKE (1-888-993-5853)
 Canada: 1-800-36-FLUKE (1-800-363-5853)
 Europe: +31 402-675-200
 Japan: +81-3-3434-0181
 Singapore: +65-738-5655
 Anywhere in the world: +1-425-446-5500

Visit us on the World Wide Web at:

www.fluke.com



| | |
|---|--|
| ① | Release valve. Use to reduce or release pressure in the system. The rate of pressure reduction depends on the degree of rotation when opening the valve. Minimal force is required to seal the system. |
| ② | Fine adjustment control. Turn in or out to increase or decrease pressure accordingly. Caution To avoid damage to the pump, do not wind the fine adjustment any further when the top of the pump body is visible. |
| ③ | Pressure/vacuum selection. Press the selector as indicated on the label to engage the desired mode. Make sure that the release valve ① is fully closed (clockwise motion) prior to pumping. |
| ④ | Quick-fit connectors. Fit the hose ⑤ and adapters ⑥ by screwing them into the connectors ④ by turning the knurled nut on the connector fully counterclockwise. |
| ⑤ | Hose. |
| ⑥ | Quick-fit Adapters. 1/4 BSP female & 1/4 NPT female. Use flat seals with BSP threads. Use PTFE with NPT threads. |
| ⑦ | Pump Handle. If the pump has not been used for a while, there may be some resistance on the first stroke. |
| ⑧ | Pressure Relief Valve. The maximum output pressure can be set by adjustment of the pressure relief value located inside the main piston. Access to the adjustment screw is through the hollow-handle retaining screw. Using a small screwdriver, turn adjustment screw clockwise to increase pressure, and counterclockwise to reduce pressure. |

Guidelines for Use

1. Connect a pressure calibrator or pressure module to the quick-fit connector (4) at the end of one of the flexible hoses (5).
2. Connect the unit under test to the quick-fit connector (4) at the end of the second flexible hose (5), choosing correct adapters (6) and seals.
3. Screw fine adjustment control (2) in fully.
4. Screw fine adjustment control (2) out 4-6 full turns.
5. Screw pressure release valve (1) in fully, tightening to ensure good seal.
6. Operate handle (7) until the pressure is close to that finally required.

Notes

- *The pressure may settle for up to one minute after increasing pressure due to the thermodynamic effects, settling of seals and expansion of the flexible hose.*
- *On very high resolutions such as 1 mbar or 0.1 inches of water, small movements of the tubing may result in noticeable pressure changes.*

Caution

To avoid damage to the pump, do not wind the fine adjustment (2) any further when the top of the pump body is visible.

7. Turn the fine adjustment control (2) in to increase pressure or out to decrease pressure until required pressure is reached.
8. Reduce pressure by careful use of the pressure release valve (1).
9. Achieve vacuum using the above procedure with the pressure / vacuum selector (3) pushed completely towards the vacuum position.

Caution

To avoid damage to the sealed joints, do not attempt to tighten other fittings to the pump.

When testing for leaks, you may notice that air is drawn in or expelled from around the pressure / vacuum selector. This is normal and should cause no concern.

If the pump appears to lose pressure, then the procedure above should be repeated, ensuring new seals are used, adapters are tightened sufficiently and the pressure release valve (1) is tightened firmly. The connections to the handheld test system are sealed with O-ring or bonded seals and should not leak.

Replacement Parts

- Hose Assembly, Fluke PN 2029186
- Seal Kit, Fluke PN 202164

Limited Warranty & Limitation of Liability

This Fluke product will be free from defects in material and workmanship for one year from the date of purchase. This warranty does not cover fuses, disposable batteries or damage from accident, neglect, misuse or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke's behalf. To obtain service during the warranty period, send your defective calibrator to the nearest Fluke Authorized Service Center with a description of the problem. THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY. Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

Fluke Corporation
P.O. Box 9090
Everett, WA 98206-9090
U.S.A.

Fluke Europe B.V.
P.O. Box 1186
5602 B.D. Eindhoven
The Netherlands