

Fluke Process Tools **Accessories**

Technical Data

Pressure Pumps

Fluke 700PTP **Pneumatic Test Pump**

For use with: Fluke 700 Series Pressure Modules and the Fluke 710 Series Pressure Calibrators. **Description:** The Fluke 700PTP is a handheld pressure pump designed to generate either vacuum to -11.6 psi/-0.8 bar or pressure to 360 psi/25 bar. The Fluke 700PTP has two pressure ports:

- 3/8-BSP (ISO228) female parallel thread fitting for the reference gauge or pressure module
- 1/8-BSP (ISO228) female parallel thread fitting for the unit under test

Application: The Fluke 700PTP features an integral pressure adjustment vernier which varies the pressurized volume by 2.0 cc over approximately eleven turns of the vernier knob. The pressure variation achievable with the vernier will depend on the nominal pressure and total pressurized volume, but with a minimum volume and maximum pressure, the vernier provided 360 ± 20 psi adjustment range. With a minimum volume and no pressure applied, the vernier can also be used to provide a 0 to 70" H₂O range. Larger volumes will provide a smaller range of adjustment, but greater resolution. The length of the stroke can be adjusted to limit the maximum output pressure. Maximum output pressure is adjustable from 2.5 psi to 360 psi.

Included:

- 1. Adapter to connect the reference gauge port on the pump body to the 1/4 NPT male fitting on Fluke 700Pxx Pressure Modules (except 700P29, P30, and P31)
- 2. One-meter nylon hose to attach to unit under test port to the unit under test. The hose terminates in a 1/4-BSP (ISO228) female parallel thread fitting
- 3. Adapter to convert the 1/4-BSP female parallel thread fitting to a 1/4 NPT female
- 4. Replacement seal kit (689331)
- 5. Instruction sheet

Material: Nickel plated brass/

anodized aluminum

Dimensions: 8.7" x 4.1" x 2.5" (220 mm x 105 mm x 63 mm) Weight: 1.4 lb (0.65 kg) Warranty: One year

Fluke 700HTP **Hydraulic Test Pump**

For use with: Fluke 700 Series Pressure Modules and the Fluke 710 Series Pressure Calibrators. **Description:** The Fluke 700HTP is designed to generate pressures up to 10,000 psi/700 bar. The Fluke 700HTP has two pressure ports:

- 3/8-BSP (ISO228) female parallel thread fitting for the reference gauge or pressure module
- 1/8-BSP (ISO228) female parallel thread fitting for the unit under test

Note: The user must provide a hose with appropriate end fittings from this port to the unit under test.





Fluke 700HTP

Fluke 700PTP

Use Fluke

accessories

to enhance

of your Fluke

the power

Process

Calibrators



Pressure Pumps (continued)

Application: This pump can provide up to 10,000 psi using distilled water or mineral-based hydraulic oil. The pump is operated by pumping several strokes to prime the system, then switching to high pressure mode when the resistance increases. An integral pressure adjustment vernier knob varies the pressurized volume by 0.6 cc. The pressure variation achievable with the vernier will depend on the nominal pressure and total pressurized volume, but with a minimum volume, the vernier provided 150-3,000 psi (at 150 psi nominal) and 3,000-10,000 psi (at 3,000 psi nominal) adjustment ranges. With a minimum volume and no pressure applied, the vernier can also be used to provide a O to 1.7 psi range. Larger volumes will provide a smaller range of adjustment, but greater resolution.

Included:

- 1. Adapter to connect the reference gauge port on the pump body to the 1/4 NPT male fitting on Fluke 700Pxx Pressure Modules (except 700P29, P30, and P31)
- 2. Adapter to connect the reference gauge port on the pump body to the 1/4 NPT female fitting on the Fluke 700P29, P30, and P31 Pressure Modules
- 3. Adapter to convert the unit under test port to a 1/4 NPT female
- 4. Replacement seal kit (689361)
- 5. Instruction sheet

Material: Stainless steel **Dimensions:** 9.3" x 6.3" x 2.8" (236 mm x 159 mm x 70 mm) Weight: 3.5 lb/1.6 kg Warranty: One year

Fluke 700PRV **Pressure Relief Valve Kit**

For use with: Fluke 700HTP

Hydraulic Test Pump.

Description: The Fluke 700PRV consists of two relief valves (1360 and 5450 psi) to be used with the 700HTP Hydraulic Test Pump. These relief valves will protect the most commonly used

Fluke pressure modules from damage due to accidental over-pressurization. 1/4 BSP male parallel thread to fit Fluke 700HTP.

Application: Repeatability ± 10% of nominal setting. Multiturn adjustment screw to set preload on internal disc springs. **Included**: The 700PRV contains two relief valves.

- One adjustable from 725-2900 psi/50-200 bar (preset at 1360 psi/94 bar)
- One adjustable from 2900-5800 psi/200-400 bar (preset at 5450 psi/376 bar)
- Instruction sheet

Material: Type 303 stainless

steel **Dimensions:** 1.57" L x .87"

diameter (40 mm x 22 mm) Weight: 0.13 lb/60g per relief

valve Warranty: One year

Fluke 700HTH **Hydraulic Test Hose**

For use with: Fluke 700 HTP Hydraulic Test Pump.

Description: The Fluke 700HTH hydraulic test hose is a 10,000 psi, 700 bar working pressure test hose that features stainless steel and nylon construction. The hose uses self-sealing fittings with easy finger tight connections. The hose has very low volumetric expansion and a negligible pressure drop at rated pressures.

Application: The Fluke 700HTH allows connection to a calibra-

tion unit under test from a Fluke 700HTP hydraulic test pump in use with the Fluke 700 series pressure modules. The 700HTH is compatible with water and non-corrosive oil.

Included: Hose and fittings to connect directly to the Fluke 700HTP test pressure port. Output connection is 1/4" NPT female with adapters (2) to convert to 1/4" and 1/8" NPT male. Instruction sheet

Material: Nylon, stainless steel, brass, PFTE, nitrile

Dimensions: Length 1 meter, bore 0.3"/3.2 mm, outer diameter 0.27"/6.9 mm

Weight: 2.2 lbs./1.0kg Warranty: One year

Fluke 700LTP **Low-pressure Test Pump**

For use with: Fluke 700 Series Pressure Modules and the 710 Series Pressure Calibrators **Description:** The Fluke LTP is a hand operated pressure pump designed to generate either vacuum to -12 psi/-.85 bar or pressures to 30 psi/2000 mbar. The Fluke 700 LTP has two pressure ports with push fit connectors. These push fit connectors, one for the reference port for connection to a Fluke 700 series pressure module and one to connect to a unit under test, connect to the supplied test hoses. These test hoses are terminated with 1/4-BSP (ISO228) female parallel thread fittings that can be adapted using the fittings included.







Fluke 700LTP



Pressure and Calibration Accessories

Application: The Fluke 700LTP is primarily intended for low pressure applications. It features a fine adjust vernier with .00145/limbar resolution at low pressures. The pressure variation achievable with the vernier will depend on the nominal pressure and total pressurized volume, but with minimum volume and maximum pressure the vernier provides 30 psi +/- 6 psi. The adjustable pressure relief valve features a slowbleed capability that allows the user to slowly release pressure at a controlled rate to achieve a desired pressure.

- Included:1. Adapter to convert the reference port hose fitting
- Adapter to convert the reference port hose fitting to 1/4" NPT female for connection to 700 series pressure modules (2 included)

to 1/4" ISO tapered female

3. One 1/4 NPT male to 1/8 NPT male adapter

4. One seal kit

5. Instruction sheet in English **Material:** Bright nickel plated brass, clear anodized aluminum **Dimension:** 6.7" x 1.8", 150

mm x 46 mm

Weight: 1.3 lbs./600g Warranty: One year

Fluke 700ILF In-line Filter

For use with: Fluke 717 and 718 Pressure Calibrators **Description:** Use to isolate calibrator from contact with liquids. Input is 1/8" NPT female. Output is 1/8" NPT Male. Application: The Fluke 700ILF can be used to isolate the calibrator from incidental contact with fluids present in the gas medium being measured. Particularly useful with the 718 calibrator to help keep moisture or oils from contaminating the on-board pump. The 1/8" NPT male threaded output threads directly into the 717 and 718 calibrators. Maximum pressure

ris 100 psi. Burst pressure is Pressure Calibrator Pressure Module Pressure Unit Pressure Pressure Pressure Pressure Calibrator Pressure Press

29 Pressure Modules

Fluke offers a family of 29 Pressure Modules to address gage, differential, absolute, vacuum, and dual (compound) applications to 10,000 psi/700 bar.

For detailed specifications and applications, ask for Application Note 1281620.

375 psi. Maximum flow is 10 SCFM and filtration to 1 micron. Included: One disposable filter Dimensions: 2.125" x 1.875" Weight: 4.1 oz./115g

Fluke 700PCK Pressure Calibration Kit

For use with: Fluke 700 Series

Pressure Modules.

Description: The Fluke 700PCK makes it possible to calibrate your pressure modules at your facility using your own precision pressure standards.

Application: When installed on your PC, the Windows®-based software easily steps you through an as-found verification, a calibration adjustment, and an as-left verification. Calibration data is captured for import to your database. A 386 or better PC running Windows 3.1 or better is required, along with a precision pressure standard with an uncertainty of less than 1/4 that of the pressure module being verified.

Included: The kit consists of a power supply, an interface adapter, appropriate cables, and Fluke 700PC Pressure Module Calibration Software.

Warranty: One year

Calibration and Process Calibrator Accessories

Fluke 787CAL Calibration Module

For use with: Fluke 787 ProcessMeter™ and MET/CAL Software, version 6.0.

Description: The Fluke 787CAL module permits users and service facilities to perform automated MET/CAL verifications and calibrations of the Fluke 787 ProcessMeter.™

Application: The calibration module provides a 9 volt dc supply to the 787. At the same time, it facilitates RS232 communication from the PC running MET/CAL to the 787 over the battery leads of the 787.

Included: A calibration manual,

Included: A calibration manual MET/CAL procedures, and an interface module that permits serial communication between a 787 and a PC.

Note: An installation of MET/CAL Calibration Software plus appropriate calibration equipment must be provided by the user.

Required Calibration Equipment for use with the Fluke 787CAL Calibration Accessory: Fluke Model 5500 or 5520 Calibrator HP3458 DMM or **HP34401 DMM, Fluke 5440A-7002 Test Lead set Fluke RS43 Null Modem Cable Personal Computer, 486 or better, IBM compatible Fluke MET/CAL Calibration Software, Version 6.0 or later **HP34401 for use only with 5520A only 5500A requires HP3458 DMM

Fluke 700-IV Current Shunt

For use with: Fluke 701, 702, and 740 Series Documenting Process Calibrators.

Description

Conversion factor: 10 mV = 1 mA Accuracy (% of input, 1 year): 0.025%

Input current: 0 to 55 mA Input resistance: 250Ω , nominal Output resistance: 10Ω , nominal Accuracy specification applies from +18°C and 28-50°C Maximum input voltage: 30V dc **Application:** Use the Fluke 700-IV Current Shunt to calibrate and troubleshoot mA/mA devices. On a 741 or 743 Documenting Process Calibrator, Source mA and Measure V dc. The custom units function of the calibrator automatically provides the correct conversion, and directly displays/captures the current in mA.

Included: Shunt, instruction

sheet.

Warranty: One year

Fluke 700BCW Bar Code Wand

For use with: Fluke 743
Documenting Process Calibrator.
Description: This Hewlett
Packard HBSW-8200 Bar Code
Wand reads eight common bar
code symbologies. Code 39,
Interleave 2 or 5, UPC A and E,
EAN 8 and 13, Codabar, Code
128, Code 11, Code 93, and MSI
Code. Programmable via bar
code labels or escape sequences. LED indicates when a bar
code has been correctly decoded. Resolution, 0.0075" (.19
mm). Usable from -20 to 65°C,

in ambient light to 100,00 lux. EMI compliance per FCC part 15 Class B. ESD immunity, 25 kV. **Application:** Supports the scanned entry of procedure identification, tag ID, serial number, and operator ID to a Fluke 743 Documenting Process Calibrator.

Included: Bar code wand with integrated decoding circuity, holder, and users manual; a Fluke 700BCA Bar Code Adapter, and instruction sheet in English, French, German, Italian, and Spanish.

Material: Polycarbonate wand,

sapphire tip.

Dimensions: 6.3" L x 0.9" diameter (160 mm x 23 mm). Coiled cable extends to approximately 100" (2.5m).

Weight: 6 oz/160g Warranty: One year

Fluke 700BCA Bar Code Adapter

For use with: Fluke 743 Documenting Process Calibrator.

Description: Shielded four conductor cable terminated with a 9-socket D-subminiature connector and a 9-pin D-subminiature connector.

Application: Provides interconnection and pin translation between a Fluke 743 Documenting Process Calibrator and a Hewlett Packard HBSW-8200 Bar Code Wand.

Included: Interface cable, (calibrator to bar code wand),







Fluke 700BCW



and instruction sheet inEnglish, French, German, Italian, and Spanish.

Material: Black PVC cable and housings, tin plated shells, gold plated copper contacts.

Dimensions: Overall length

approximately 6" (15 cm) Warranty: One year

Fluke 700TC1 Thermocouple Mini-Plug Kit (11 types)

For use with: Fluke 700 or 740 Series Documenting Process Calibrators, Fluke 714 Thermocouple Thermometer.

Description: A kit of 10 miniplug connectors supporting each of the thermocouple types supported by the Fluke 700 or 740 Series Documenting Process Calibrators.

Application: Terminate user-supplied thermocouple wire to permit connection to a process calibrator.

Included mini plugs

Type J (black), one
Type K (yellow), one
Type T (blue), one
Type E (purple), one
Type R/S (green), one
Type B or Cu (white), one
Type L (J-DIN) (blue), one
Type U (T-DIN) (brown), one
Type C (red), one
Type N (orange), one

Material: Thermoplastic plug bodies; contacts of appropriate thermocouple metallurgy.

Warranty: One year

Fluke 700TC2 Thermocouple Mini-Plug Kit Type J, K, T, E, R/S

For use with: Fluke 700 or 740 Series Documenting Process Calibrators, Fluke 714 Thermocouple Thermometer.

Description: A kit of seven mini-plug connectors supporting six of the most popular thermo-

couple types.

Application: Terminate user-supplied thermocouple wire to permit connection to process calibrator.

Included mini plugs
Type J (black), two
Type K (yellow), two
Type T (blue), one
Type E (purple), one
Type R/S (green), one
Material: Thermoplast

Material: Thermoplastic plug bodies; contacts of appropriate thermocouple metallurgy.
Warranty: One year

BP7217 Ni-Cd Battery Pack

For use with: Fluke 700 or 740 Series Documenting Process Calibrators.

Description: 7.2V 1700 mA-hour rechargeable Ni-Cd battery pack. Application: Provides typical 8-hour battery life when used in 700 or 740 Calibrators. Included: One battery pack. Material: Six 1.2V dc Ni-Cd cells in custom-molded ABS/

PC-blend case.

Dimensions: 7.1" x 2.2" x .9" (150 mm x 56 mm x 22 mm)

Weight: 11 oz/310g Warranty: One year

BP7235 NiMH Battery Pack

For use with: Fluke 700 or 740 Series Documenting Process Calibrators, requires BC7217

charger

Description: 7.2 V 3500 mA-hour rechargeable NiMH battery

pack.

Application: Provides typical 16 hour battery life when used in 700 or 740 calibrators.

Included: One battery pack Material: Six 1.2 V dc NiMH cells in custom-molded ABS/

PC-blend case

Dimensions: 7.1" x 2.2" x 0.9" (150 mm x 56 mm x 22 mm)

Weight: 11 oz./310g Warranty: One year



Fluke BP7217



Fluke BP7235







Fluke 700TC2

Process Calibrator Accessories (continued)

BE9005 120 Battery Eliminator

For use with: Fluke 700 or 740 Series Documenting Process Calibrators.

Description: 7.5V dc battery eliminator for operation of calibrator from 120 volt ac line. UL/CSA recognized.

Application: For use in North America; 120V ac 60 Hz lines. **Dimensions:** 3.8" x 2.5" x 2.2" (96 mm x 63 mm x 56 mm);

72" (1.8m) cord Weight: 1 lb/0.5 kg Warranty: One year

BE9005 220 Battery Eliminator

For use with: Fluke 700 or 740 Series Documenting Process Calibrators.

Description: 7.5V dc battery eliminator for operation of calibrator from 230 volt ac line; VDE and/or TÜV approved.

Application: CEE-7 input connector, used primarily in continental Europe; 230V ac 50 Hz

Dimensions: 3.8" x 2.5" x 1.9" (96 mm x 63 mm x 48 mm);

72" (1.8m) cord **Weight:** 1 lb/0.5 kg Warranty: One year

BE9005 240 **Battery Eliminator**

For use with: Fluke 700 or 740 Series Documenting Process Calibrators.

Description: 7.5V dc battery eliminator for operation of calibrator from 230 volt ac line. BABT approved.

Application: BS-1363 input plug, used primarily in UK, China, and Hong Kong; 230V ac 50 Hz lines.

Dimensions: 3.8" x 2.5" x 2.3" (96 mm x 63 mm x 58 mm);

72" (1.8m) cord Weight: 1 lb/0.5 kg Warranty: One year

BC7217 Battery Charger

For use with: BP7217 NiCd and BP7235 NiMH Battery Packs. Description: Battery charger UL, CSA, MITI, DEMKO, FINKO, SEMKO recognized. CE compliant. EMI per FCC part 15 Class B.

Application: Replaces BC7210 Battery Charger. Select 120 volt version for use in North America. Select INTL version for use outside of North America. Line voltage 100 to 250V ac, freguency 50 to 60 Hz. IEC 320 inlet, line cord will be provided based on country of destination. **Included:** Battery charger base,

power supply. Dimensions:

Power supply: 3.9" x 2.6" x 1.6" (100 mm x 66 mm x 41 mm;

72" (1.8m) cord

Warranty: One year

Charger base: 4.6" x 4.1" x 2.7" (116 mm x 104 mm x 58 mm) **Weight:** 1.7 lb/0.78 kg





Fluke BE9005 220

Fluke BE9005 240



C700 Hard Carrying Case (700 Series)

For use with: Fluke 700 or 740 Series Documenting Process Calibrators.

Description: Hard carrying case with custom-cut foam liner. **Application:** Cutouts to hold one documenting process calibrator, one Fluke Pressure Module, one BC7210 Battery Charger, one spare BP7217 Battery Pack, and test leads. Material: Exterior: Blow-molded charcoal gray polyethylene with textured surface. Interior: Black, die-cut polyurethane foam. Handle: Molded polyethylene. Latches: Zinc-plated steel. **Dimensions:** 18.5" x 15.6" x 5.0" (47 cm x 40 cm x 14 cm)

Weight: 2 lb/0.9 kg

Warranty: One year

C781 Soft Carrying Case

For use with: Fluke 700 or 740 Series Documenting Process Calibrators. Also fits DSP-100 CableMeter® or DSP-200 CableAnalyzer[™] and Fluke 860 Series Graphical Multimeters. Description: Rugged, closefitting fabric carrying case for documenting process calibrator. A separate, detachable pouch holds test leads and accessories. Application: Designed to be worn on a belt. Remove the calibrator from the C781 for use. Material: Black woven nylon, black vinyl, with yellow Fluke logo panel.

Dimensions:

Primary compartment: 10.3" x 5.6" x 1.8" (26 cm x 14 cm x 5 cm). Detachable accessory pouch: 7.5" x 5.6" x 1.0"

(19 cm x 14 cm x 3 cm) **Weight:** 8 oz/230g Warranty: One year

C789 Soft Carrying Case

For use with: Fluke 701, 702, and 740 Series Documenting Process Calibrators. Also fits DSP-100 CableMeter® or DSP-200 CableAnalyzer™ and Fluke 860 Series Graphical Multimeters.

Description: Rugged, threecompartment fabric carrying case for documenting process calibrator and accessories. Center zippered compartment holds the calibrator, while zippered side compartments are suitable for leads, pressure modules, or spare batteries. A flat pocket on the back surface is ideal for a manual or notebook.

Application: Front access flat allows the calibrator to be used while in the C789 Case. Designed to be carried over one shoulder.

Included: Case, detachable handle, and detachable

shoulder strap.

Material: Black woven nylon, black vinyl, with yellow Fluke logo panels.

Dimensions: 11.8" x 10.0" x 3.3"

(30 cm x 25 cm x 8 cm) **Weight:** 1.5 lb/700g Warranty: One year



BC7217

Fluke C789, C700, C781



General-Purpose Accessories

	743B/ 744	741B	712	714	715	717	787	87	51/52	16	123
Fluke 700Pxx Pressure Modules ¹	•	•				•					
BP7217 NiCd Battery Pack	•	•									
BP7235 NiMH Battery Pack	•	•									
BE9005 Battery Eliminator	•	•									
BC7217 Battery Charger	•	•									
Fluke 700BCW Bar Code Wand	•										
Fluke 700BCA Bar Code Adapter	•										
Fluke 700TCI and TC2 Thermocouple Plug Kits	•	•		•							
80CJ-M and 80CK-M Mini-Connectors	•	•		•					•	•	
80PK Thermocouple Probes (all)	•	•		•					•	•	
Fluke 700-IV Current Shunt	•	•			•		•	•		•	•
Fluke 700PMP Pressure Pump	•	•				•					
Fluke 700PTP Pneumatic Test Pump	•	•				•					
Fluke 700HTP Hydraulic Test Pump	•	•				•					
Fluke 700LTP Low Pressure Test Pump	•	•				•					
Fluke 787CAL Calibration Kit							•				
80T-IR Infrared Probe	•	•			•		•	•		•	•
80PK-IR Infrared Probe	•	•		•					•	•	
80TK Thermocouple Module	•	•			•		•	•	•	•	•
80T-150U Universal Temperature Probe	•	•			•		•	•	•	•	•
TL20/22/24/26/28 Lead Sets	•	•	•		•	•	•	•		•	•
TL70A and Y8140A Lead Sets	•	•	•		•	•	•	•		•	
AC20 and AC80 Clips	•	•	•		•	•	•	•		•	•
TP20 Industrial Test Probes	•	•	•		•2	•	•3	•3		•	
80i-400 AC Current Clamp	•	•			2		•3	•3			
i410 AC/DC Current Clamp	•	•			•	•	•	•		•	•
i1010 AC/DC Current Clamp	•	•			•	•	•	•		•	•
C10 Holster and C12A Case										•	
C25/C28/C90/C100/C800 Cases			•	•	•	•	•	•			
C781 Soft Carrying Case	•	•									
C789 Soft Carrying Case	•	•									•
C700 Hard Carrying Case	•	•									
C120 and C125 Case											•
80K-6 and 80K-40 High Voltage Probes	•	•					•	•			•
83RF and 85RF High Frequency Probes	•	•					•	•		•	•
PV350 Pressure Vacuum Module	•	•			•		•	•		•	•
Fiber Optic Meter (FOM)	•	•			•		•	•		•	•

 $^{^{\}mathrm{1}}$ Ask for Application Note 1281620

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 $^{^{2}}$ DC current only

³ 20A ac minimum