

Applications

- Enzyme preparation and isolation
- Cell extract preparation
- Bacterial and plant tissue disintegration
- Recovery of intercellular proteins and nucleic acid
- Preparation of viral antigens for EIA test kits
- Membrane preparation for phizobia and pseudomonads
- Disruption of cells for pigment analysis

FRENCH® Press

The best choice for uniform, gentle disruption of cells.



Motor Driven Laboratory Press

The Motor Driven Laboratory Press is easy to operate and offers the advantages of dual-range, single control pressure selection. This provides a regulated working pressure throughout the entire operating stroke, resulting in uniform and complete disruption. Fine control of the internal cell pressure expands the range of the system for use in a variety of different applications.

The FRENCH® Press, manufactured by Thermo Electron, is the primary sample preparation tool in protein studies, extraction of nucleic acids and cell disruption of various prokaryotic and eukaryotic cells, among others. The press provides a rapid and effective mechanism for gentle disruption of cell membranes and walls. This pressure-induced process results in more uniform and complete disruption than possible with other mechanical or ultrasonic methods. The FRENCH Press is capable of exerting of up to 40,000 psi of pressure (highest among the other cell disruptors) resulting in excellent performance.

FRENCH Pressure Cells

Thermo Electron offers two models of FRENCH Pressure Cells with different sample volumes for work with large or small amounts of material. The two models of cells give you a choice of cell volume and working pressures. The 40,000 psi Standard cell has a maximum working pressure of 40,000 psi and a cell capacity of 35 ml. For small sample volumes, Thermo Electron offers the 20,000 psi Miniature cell, which has a cell capacity of 1.4 - 3.7 ml and a maximum working pressure of 20,000 psi.



Rapid Fill Kit

The Rapid Fill Kit accessory is used for fast cell filling, which allows you to process large sample volumes in less time. The Rapid Fill Kit accessory is only available with the 40,000 psi Standard FRENCH Pressure cell (FA-032).

FRENCH® Press Specifications

Specifications

PRESS

Height	FA-078A 34.5" (87.6 cm)
Weight (net)	240 lbs (109 kg)
Weight (shipping)	320 lbs (145 kg)
Dimensions	18.25 x 18.25" (46.4 x 46.4 cm)
Power Required	115 V, 60 Hz or 220 V, 50 Hz

CELL

Diameter	FA-032 (40K Standard) 3" (7.6 cm)
Closed Height	11.38" (28.9 cm)
Open Height	14.25" (36.5 cm)
Sample Capacity	35 ml max
Minimum Volume	
First Run	1.2 ml
Additional Runs	0.7 ml
Maximum Working Pressure	40,000 psi
Bore Size	1" (2.5 cm)
Weight	29 lbs (13.2 kg)

CELL

Diameter	FA-003 (20K Mini) 2.38" OD (6 cm)
Closed Height	6.13" (15.6 cm)
Open Height	8.12 - 8.25" (20.8 - 30 cm)
Sample Capacity	1.4 - 3.7 ml
Minimum Volume	
First Run	0.32 ml
Additional Runs	0.3 ml
Maximum Working Pressure	20,000 psi
Bore Size	0.375" (0.95 cm)
Weight	7 lbs (3.2 kg)



FA-003 (20 k) Mini CELL



FA-032 (40 k) Standard CELL

Ordering Information

FA-032	Standard FRENCH Pressure 40,000 psi Cell with 35 ml capacity, pressure up to 40,000 psi
FA-003	Miniature FRENCH Pressure 20,000 psi Cell with 3.7 ml capacity, pressure up to 20,000 psi. Requires a spacer (FA-010)
FA-078A	Motor Driven Laboratory Press with two ratio and return selector valves, and pressure regulator valve for 50 to 2,500 psi hydraulic pressure. For operation at 115 V, 60 Hz or 220 V, 50 Hz.
FA-080A	FRENCH Press Start Up Set includes FA-078 Motor Driven Laboratory Press, FA-032 40,000 psi Standard FRENCH Pressure Cell and FA-929 Spare Parts Kit.
FA-081A	FRENCH Press Start Up Set includes FA-078 Motor Driven Laboratory Press, FA-003 20,000 psi Miniature FRENCH Pressure Cell and FA-921 Spare Parts Kit.
FA-021	Rapid Fill Kit for FRENCH Pressure Cell (FA-032) and discontinued FA-031, FA-030 and FA-072. Includes all accessories to mount into the laboratory press.

Contact us for additional accessories.

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