



IF IT'S WORTH BUILDING, IT'S WORTH TESTING

This wishlist was generated on 05/10/2017, and contains the following Products:

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532-120

**15-Bar Pressure Plate Extractor.**

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532-104

**1-Bar Pressure Plate Cell**

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532-108

**Soil Sample Retaining Rings Pack of 12.**

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532-136

**Combination Manifold.**

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532-111

**Hose Manifold to 5 Bar Extractor.**

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532-112

**Hose Manifold to 15 Bar Extractor.**

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532-180/01

**PM Compressor 220-240V 50Hz 1Ph.**

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532-182

**Connection Set for 532-180 Series.**

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532-100

**5-Bar Pressure Plate Extractor.**

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## 15-Bar Pressure Plate Extractor.

Code: 532-120

Product Group: [Pressure plate extractors](#)

Used to determine - available water capacity, water retentivity, hydraulic conductivity and field capacity.

Applications include - soil classification and survey, optimisation of irrigation and drainage, calibration of soil water and measuring apparatus for field use.

The pressure plate is used to determine soil water retention and suctions greater than 0.4 bar. The apparatus consists of strongly built metal chambers containing one or more ceramic plates, on to which uniform soil samples are placed. Having attained maximum moisture retention (field capacity) the samples within the cells are then subjected to controlled positive air pressures and water is gradually removed. By careful control of pressure, the various equilibrium conditions of pressure and soil water tension or suction are obtained.

The air pressure is provided either from a compressor, compressed air bottle or nitrogen bottle. The air pressure source must always be routed via a pressure regulation manifold.

ELE can supply three types of pressure plate extraction systems, which cover the pressure range 0-15 bar.

## Specification

Capacity	Up to 36 samples
Pressure	0-15 bar (220psi)
Closure	8 bolts with wing nuts; O-ring seal on hinged lid
Outflow	5 ports with outlet tubes NPT outlet
For electrical leads	1/4 inch (6.45 mm)
Internal dimensions	305 mm x 101.6 mm (dia. x depth)
Weight	40.4 kg

## Accessories



## 1-Bar Pressure Plate Cell

Code: [532-104](#)

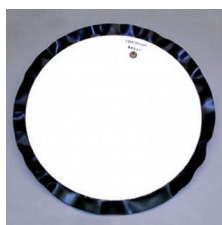
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## 15-Bar Pressure Plate Cell.

Code: [532-120/10](#)

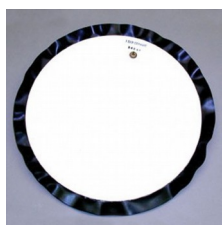
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## 3-Bar Pressure Plate Cell

Code: [532-106](#)

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## 5-Bar Pressure Plate Cell

Code: [532-107](#)

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## Soil Sample Retaining Rings Pack of 12.

Code: [532-108](#)

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## Spares/Consumables



## Hose Manifold to 15 Bar Extractor.

Code: [532-112](#)



## O-Ring Lid Seal Pack of 2

Code: [532-100/10](#)



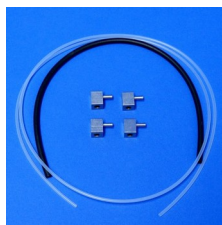
## Outflow tube assembly with seal

Code: [532-120/14](#)



## Plug bolts with seal

Code: [532-120/16](#)



## Right angle outflow adapter kit

Code: [532-120/12](#)

## Alternatives



## 5-Bar Pressure Plate Extractor.

Code: [532-100](#)





## 1-Bar Pressure Plate Cell

Code: [532-104](#)

Product Group: [Pressure plate extractors](#)

Developed from a high fired Alumina body. Extremely porous, inert to most all solutions, possesses hard exterior and interior surfaces, and pure white in colour. Recommended for standard pressure differentials under 1 Bar (14.5 psi). Typical bubbling pressure: 28 - 32 psi. Effective pore size: 2.5 microns. Hydraulic conductivity: .0000086 cm/sec. Approximate porosity: 45% by vol. Flow through.

## Specification

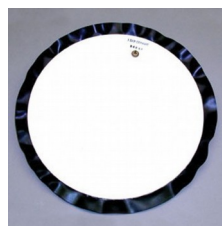
Weight	1.17 kg
Diameter	27.30 cm
Dimensions (l x w x h)	6 x 6 x 2 mm

## Accessories



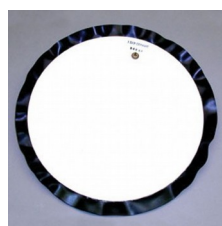
## 15-Bar Pressure Plate Cell.

Code: [532-120/10](#)



## 3-Bar Pressure Plate Cell

Code: [532-106](#)



## 5-Bar Pressure Plate Cell

Code: [532-107](#)

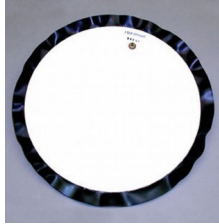
## Alternatives



### 15-Bar Pressure Plate Cell.

Code: [532-120/10](#)

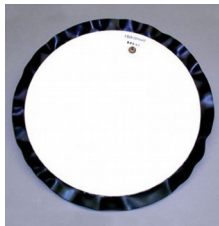
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### 3-Bar Pressure Plate Cell

Code: [532-106](#)

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### 5-Bar Pressure Plate Cell

Code: [532-107](#)





## Soil Sample Retaining Rings Pack of 12.

Code: [532-108](#)

Product Group: [Pressure plate extractors](#)



## Combination Manifold.

Code: [532-136](#)

Product Group: [Pressure plate extractors](#)

This is required to regulate gas pressure source in pressure plate extraction systems.

There are 3 types available to cover all requirements and they enable precise control of pressure.

Pressure manifolds are an essential component in pressure plate extraction systems. They are required to control the air pressure, from a compressor or compressed air vessel, into the extractor. ELE can supply three different types to cover all requirements.

Low pressure manifold: for 0-5 bar systems.

Low to high pressure manifold: for 1-15 bar systems.

Combination manifold: for both 0-5 and 1-15 bar systems running in parallel.

The combination manifold combines both the low pressure and low to high pressure manifolds.

## Specification

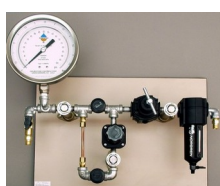
Pressure Range	1 to 75 psi
Weight	12 kg
Dimensions	685 x 483 x 330 mm

## Alternatives



## Low Pressure Manifold

Code: [532-110](#)



## Low to high pressure manifold.

Code: [532-128](#)



## Hose Manifold to 5 Bar Extractor.

Code: [532-111](#)

Product Group: [Pressure plate extractors](#)



## Hose Manifold to 15 Bar Extractor.

Code: [532-112](#)

Product Group: [Pressure plate extractors](#)



## PM Compressor 220-240V 50Hz 1Ph.

Code: [532-180/01](#)

Product Group: [Pressure plate extractors](#)

IDEAL FOR PRESSURE PLATE EXTRACTION SYSTEMS.

ELECTRICALLY POWERED AND FULLY CE ACCREDITED

CONFORMS TO EC DIRECTIVE 98/37/CE

This unit provides compressed air for all ELE's pressure plate apparatus. The compressor is designed for sustained, continuous operation and provides up to 20 bar operating pressure.

These compressors are compact and can be transported easily by one person. The compressor consists of motor and block, which is cast in one piece. This improves heat dissipation considerably. Pistons, piston rings, con-rod, bearings and crank flange have been designed with efficiency and durability in mind. Valves in the compressor block are machined in non-corrosive stainless steel and the valve reeds are fitted with heat dissipating lift limiters. This ensures air-tight valves and longer life.

The robust electric motor features strengthened bearings and a generously-sized winding. This lengthens motor life considerably. The motors start without problem even if the supply voltage is low.

Every compressor is filled with special, temperature resistant top performance lubricating fluid. The result is almost no oil carbon deposits on the valves.

This compressor must be used in conjunction with a manifold assembly if intended for use in pressure plate extraction systems.

## Specification

Max. gauge working pressure	20 bar
Weight	29.5 kg
Dimensions	525 x 260 x 430 mm
Air receiver capacity	4 litres
Highest sound pressure value	75dB when tested to DIN 45635
Theoretical inlet capacity	160 l/ min
Free air delivered	20 bar (at 8 bar working pressure)
No. of cylinders	1
Speed	2850 rpm

# Product Sheet

www.ele.com  
+44 (0) 01525 249 200



Oil capacity	0.13 l
Oil top-up quantity	0.05 l
Max. mains fusing (slowblow or gl glass)	16 amp
Max. rated current	6.2 amp
Rated power	1.1 kW
Rated speed	2850 rpm
Protection class	IP54
Max. cut-in frequency	30 times / hour

## Accessories



### Connection Set for 532-180 Series.

Code: [532-182](#)



## Connection Set for 532-180 Series.

Code: [532-182](#)

Product Group: [Pressure plate extractors](#)





## 5-Bar Pressure Plate Extractor.

Code: 532-100

Product Group: [Pressure plate extractors](#)

Used to determine - available water capacity, water retentivity, hydraulic conductivity and field capacity.

Applications include - soil classification and survey, optimisation of irrigation and drainage, calibration of soil water and measuring apparatus for field use.

The pressure plate is used to determine soil water retention and suctions greater than 0.4 bar. The apparatus consists of strongly built metal chambers containing one or more ceramic plates, on to which uniform soil samples are placed. Having attained maximum moisture retention (field capacity) the samples within the cells are then subjected to controlled positive air pressures and water is gradually removed. By careful control of pressure, the various equilibrium conditions of pressure and soil water tension or suction are obtained.

The air pressure is provided either from a compressor, compressed air bottle or nitrogen bottle. The air pressure source must always be routed via a pressure regulation manifold.

ELE can supply three types of pressure plate extraction systems, which cover the pressure range 0-15 bar.

## Specification

Capacity	4 pressure plate cells. (Up to 48 samples)
Pressure	0-5 bar extractor (75psi)
Closure	6 bolts with wing nuts; O-ring seal on lid
Support Clips	Stainless steel, adjustable
Outflow	4 tube assemblies with 3 plug bolts; screw into side wall
Dimensions	30cm dia x 22cm deep
Weight	10 kg

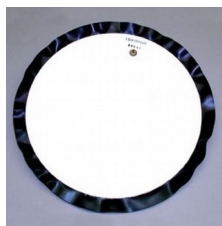
## Accessories



## 1-Bar Pressure Plate Cell

Code: [532-104](#)

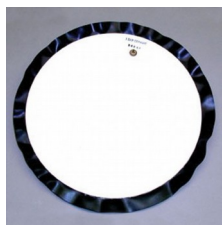
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## 3-Bar Pressure Plate Cell

Code: [532-106](#)

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## 5-Bar Pressure Plate Cell

Code: [532-107](#)

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## Soil Sample Retaining Rings Pack of 12.

Code: [532-108](#)

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## Spares/Consumables



## O-Ring Lid Seal Pack of 2

Code: [532-100/10](#)

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## Alternatives



## 15-Bar Pressure Plate Extractor.

Code: [532-120](#)