

















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

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Soil Hydrometer Type 152H ASTM/Aashto Graduated -5 to + 60G/Litre.

Code: 24-4640

Product Group: ASTM Soil Hydrometers, Soil

Hydrometers

Graduated -5 to +60 g/litre.

Standards

BS 1377, EN 1997-2, ASTM D422, ASTM E100, AASHTO T88

Specification

Construction
Scale
Calibration
Weight

Molded, seamless.
Bouyoucos; double scale.
At 68°F.
Net 4 oz. (113 g).

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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

o boils with wing hats, O-m

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

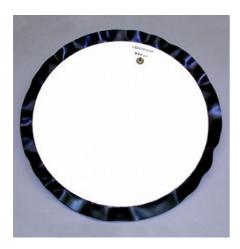
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5-Bar Pressure Plate Cell

Code: 532-107

Product Group: Pressure plate extractors

Developed from a complex mixture of ball clays into a fired ceramic body. Good porosity and good hydrologic flow capability. The material is very hard and brownish-white in colour, is not recommended for fluid sampling. Recommended for specialised applications where the pressure differentials are under 5 Bar (72.5 psi). Typical bubbling pressure: 80 psi. Effective pore size: 0.5 micron. Hydraulic conductivity: .000000121 cm/sec. Approximate porosity: 31% by vol. Flow through.

Specification

Weight 1 kg
Diameter 27.30 cm

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Soil Sample Retaining Rings Pack of 12.

Code: 532-108

Product Group: Pressure plate extractors

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Hose Manifold to 5 Bar Extractor.

Code: 532-111

Product Group: Pressure plate extractors

1.5m long.





Hose Manifold to 15 Bar Extractor.

Code: 532-112

Product Group: Pressure plate extractors

1.5m long.

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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







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 Weight 1 to 75 psi 12 kg

Dimensions 685 x 483 x 330 mm







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 75 dB 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

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Oil capacity 0.13 I
Oil top-up quantity 0.05 I
Max. mains fusing (slowblow or 16 amp

gl glass)

Max. rated current6.2 ampRated power1.1 kWRated speed2850 rpmProtection classIP54

Max. cut-in frequency 30 times / hour





Connection Set for 532-180 Series.

Code: 532-182

Product Group: Pressure plate extractors







Electronic Balance - 4600 g x 0.01 g

Code: 78-5456/01

Product Group: Electronic Balances

Further Information

Not available for sale in the USA

Specification

Capacity resolution 4500 g x 0.01 g Pan size 160 x 160 mm

Mains and battery No

Dimensions (w x d x h) 220 x 310 x 90 mm

Weight 6 k

Weighing units g, kg, lb, lb:oz, oz, ozt, T,

custom unit.

Repeatability 0.02 g

Power supply 100-240V, 50/60Hz, 1pH

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