

















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

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27-1505

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S1160

DS7.2 Software-UU/CU/CD Triaxial, Permeability, Consolidation, Direct/Residual Shear, CBR

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### **Digital Tritest 50 Load Frame**

Code: 25-3518/01

Product Group: Digital Tritest 50 Load Frame, CBR Load Frames, Triaxial Load Frames

- Microprocessor control
- Large on-board LED screen display
- Direct entry via a touch sensitive keyboard
- Rapid approach and return to datum of platen
- Fully variable speed, 0.00001 to 9.99999 mm/min
- Samples up to 100 mm diameter

This 50 kN capacity machine, designed primarily for triaxial testing of soil specimens up to 100 mm diameter x 200 mm long, comprises a rigid twin column construction with an integral fully variable microprocessor controlled drive unit and LCD display with a touch sensitive keyboard. The machine is normally bench mounted for ease of installation and operation.

The use of a microprocessor controlled drive system and keyboard entry provides the Digital Tritest 50 with a wide variety of features which include pause and speed reset during test, RS 232C, operator programming of speed and control functions, self test diagnostics and many other features.

A robustly constructed steel case houses the motor drive system with careful attention being given to the prevention of ingress of water or grit. All operating controls are mounted on the front panel of the machine, which is angled and recessed to prevent physical and environmental damage.

#### **Standards**

BS 1377-7, BS 1377-8, BS 1924-2, ASTM D1883, ASTM D2166, ASTM D2850, ASTM D4767, ASTM D7181, AASHTO T99, AASHTO T134, AASHTO T135, AASHTO T136, AASHTO T180, AASHTO T193, AASHTO T208, AASHTO T296, AASHTO T297

#### **Further Information**

Complete with RS 232C interface.

### Specification

Capacity 50kN (11,200 lbf).

Speed Range English mode: 0.000001 to

0.399999 in/min.

Metric mode: 0.00001 to 9.99999 mm/min.

9.99999 11111/111111.

Rapid Approach Speed 1.0 in/min. (25 mm/min.).

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Platen Travel 100mm (3.9"); limit switch

protection.

Platen Diameter 133 mm (5.2")

Vertical Clearance 910 mm, (36 .8") maximum; 305mm, (12") minimum.

Horizontal Clearance 364mm, (15 .3").

Serial Interface RS232C; programmable baud

rate and protocol.

**Overall Dimensions** 500 x 500 x 1,470 mm, (19.7"

w. x 19.7" d. x 57.8" h).

Net 100kg (220 lbs); Shpg. Weight

136kg (300 lbs).



# Distance Piece Stainless Steel for Use with Submerisble Load Cells and Axial Strain Transducers.

Code: 27-1293

Product Group: Submersible Load Transducers, Load

Measurement, Load Measurement

Required when using submersible load cells.

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## **Submersible Load Transducer Assembly 5kN Capacity In Compression.**

Code: 27-1573

Product Group: Load Measurement, Load Measurement, Submersible Load Transducers

- •Eliminates effects of piston friction on readings
- •Unaffected by cell confining pressures
- •Easily installed in triaxial cell
- •Supplied complete with calibration certificate and 5-pin DIN type connector for use with GDU

Submersible Load Transducers are used to measure accurately the axial loads applied to triaxial test specimens. Consisting of a load cell and piston assembly these units replace the standard triaxial cell loading piston. A major advantage is that these transducers measure loads directly on top of the specimen. All transducers are supplied complete with a 5-pin DIN type connector and calibration certificate.

### Specification

Dimensions 75 x 50 mm (dia x h) excluding

piston and adaptor

Overload capacity 150%

Output 26 mv full range

Excitation 10 V DC (15 V DC max)

Non-linearity 0.1% maximum

Hysteresis Deflection 0.1% maximum 0.05 mm at full

load

Side force 50% full scale maximum

without effect 5-pin DIN plug

0 to 50°C

Compensated temperature

range

Connector

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Weight g

850



# **Axial Strain Transducer Assembly 50mm Travel Fitted with 5 Pin Din Plug.**

Code: 27-1617

Product Group: Axial Displacement, Axial Displacement, Displacement Transducers

0 to 50 mm range. For use with Triaxial Cells. •Ideally suited for use with GDU for accurate displacement measurements

- •Models available for use in consolidation, shear, CBR and triaxial test applications
- •Supplied complete with mounting hardware for specified products

Displacement Transducers are used in consolidation, shear, CBR and triaxial test applications for accurate displacement measurements. They are supplied complete with a 5-pin DIN type connector for direct connection to the GDU.

#### **Specification**

Construction Fully encapsulated electronics, sealed in a stainless steel case

Excitation 10V DC
Connector 5-pin DIN type
Mounting bracket Included as standard

Weight kg 0.45

### Spares/Consumables



**CBR Displacement Transducer** 

Code: 27-1706

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## **Pressure Transducer Assembly 1700Kpa** Fitted with 5 Pin DIN Plug.

Code: 27-1633

Product Group: Pressure Measurement, Tri-Flex 2 One-Cell Permeability Test System, Pressure Transducer

Pressure Transducers are used to measure the cell, pore and back pressures during triaxial testing. Assemblies are supplied complete with a de-airing block, valve, 5-pin DIN plug connector and calibration certificate

## Specification

Construction Excitation Output Thread

Stainless Steel 10 V DC 143 mV full range 1/4" BSP



## **Volume Change Transducer Assembly 80ml Capacity Maximum Working** Pressure 1700KPa

Code: 27-1641

Product Group: Volume Change Measurement, Tri-Flex 2 One-Cell Permeability Test System, Volume Change Measurement, Volume Change Transducer

- •Reversing valves to increase capacity
- •Steel case for wall mounting and access to piping
- •Supplied complete with calibration certificate

The Volume Change Transducer provides continuous measurements of volume change during the triaxial test. The assembly includes a valve to reverse the flow through the unit, providing increased capacity.

### **Specification**

Maximum Pressure 250 psi (1,700 kPa).

Excitation 10V DC.

Output 1.25 Volts full range. 80 cc x 0.1 cc sensitivity. Capacity Case Steel; hinged for access to

piping.

Connector 5-Pin DIN type.

**Overall Dimensions** 9" w. x 7" d. x 14 -1/2" h. (229 x

178 x 368 mm).

Weight Net 11 lbs. (5 kg).



# Universal Pump and Pressure Indicating Panel 1700Kpa.

Code: 26-1880

Product Group: Modular Pressure Panel System

This is the main pressure display in the system for monitoring various pressures and also provides fine control of the pressure within the system using the rotary hand pump. The unit is fitted with a dual calibrated 250 mm diamter pressure gauge, four inlet/outlet no-volume change valves, screw controlled rotary hand pump, water reservoir and isolating valves. The unit is housed in a hinged case for wall or bench mounting. By using an isolating valve the panel may be used to monitor cell or back pressure. 1700 kPa and 250 lbf/in2.

### Spares/Consumables



Pressure Gauge 1700Kpa (250Psi) 250mm Diameter.

Code: 26-1865/10

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## **Pneumatic Pressure Reducing Panel. Provides Two Independent Pressure** Outlets 1000 kPa Max.

Code: 26-1760

Product Group: Air/Water Pressure Systems - up to

1000 kPa

Comprising two constant pressure reducing valves with inlet water trap and pressure indicator. The unit allows a maximum output pressure of 1000 kPa. Maximum input pressure should not exceed 1400 kPa. The panel has an inlet connector to accept Nylon tubing from the air compressor and two 6 mm outlets for connecting Bladdertype Air/Water Pressure Assemblies. An outlet connector is fitted for the connection of an additional panel using Nylon tubing to increase the total capacity of the system. This outlet is blanked off when not required.

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## **Bladder-Type Air/Water Pressure Assembly. 1000 Kpa Maximum Working** Pressure.

Code: 26-1746

Product Group: Air/Water Pressure Systems - up to

1000 kPa

With transparent plastic chamber for operating continuously at pressures up to 1000 kPa. A length of tubing is provided for connecting the air/water cylinder outlet to a pressure measuring system.

- Used to supply hydraulic pressure from a pneumatic pressure source.
- Prevents air entering the hydraulic pressure system.
- Maximum working pressure 1000kpa.
- Supplied with connectors and tubing for fitting to pressure measuring systems.

### Spares/Consumables



**Pneumatic Pressure Reducing Panel. Provides Two Independent Pressure Outlets 1000 kPa Max.** 

Code: 26-1760



Replacement Bladder Wide Neck (38mm ld)

Code: 26-1746/10

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## **Air Compressor**

Code: 83-1730/01

Product Group: Air Compressors, Air/Water Pressure

Systems - up to 1000 kPa

### **Further Information**

\*\*NOT AVAILABLE FOR SALE IN THE USA\*\*

## **Specification**

Dimensions (l x w x h) 483 x 457 x 864 mm

Free air delivery 2.0 cfm
Receiver capacity 50 litres
Maximum pressure 1000 kPa
Continuous working pressure 700 kPa

Electrical supply 220 – 240 V AC

1 ph 50 Hz

Water Trap No Weight 57 kg

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# **De-Aired Water Apparatus 15 Litre Capacity**

Code: 25-1833/01

Product Group: De-Aired Water

This compact self-contained unit will de-air water quickly and efficiently down to levels of dissolved oxygen acceptable for geotechnical test methods. Air is removed from the water by a vacuum system, which continuously circulates the water in the tank. The unit is supplied with a clear water container, which will hold a maximum of 15 litres of water. Input and output lines are formed using standard 6 mm tube connectors.

### **Standards**

BS 1377-1

## Specification

Dimension

380 x 356 x 470 mm (l x w x h).

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## Nylon Tubing 6mm Od 3500Kpa.

Code: 26-1926

Product Group: Permeability of Rock, Volume Change

Measurement

6 mm outside diameter x 4 mm inside diameter. For use up to a pressure of 3500 kPa. Priced per metre.



## **Nylon Tubing 30 Metre Length.**

Code: 26-1769

Product Group: Air/Water Pressure Systems - up to

1000 kPa

30 metre length. For pressures up to 1700 kPa. Used for connecting Air Compressors to Pneumatic Pressure Reducing Panels, or for connecting two Pressure Reducing Panels together.

## **Further Information**

Nylon tubing 30 metres with pressure fittings.



## 50mm Triaxial Cell 1700Kpa with 5 Pressure/ Drainage Ports. Supplied with Two Valves.

Code: 25-4047

Product Group: Triaxial Cell, Triaxial Cells

- Working pressure up to 1700 kPa
- All round visibility
- Sample sizes 38 to 100 mm diameter
- Rapid assembly and dismantling
- Accepts a range of interchangeable submersible load transducers

This range of precision made triaxial cells has been designed to meet the requirements of the modern soils laboratory. The cells have been treated to minimise corrosion. Particular attention has been paid to the quality of finish between the piston and the head. Final assembly includes the fitting of an O-ring seal and the use of special lubricant to reduce friction to a minimum and eliminate water leakage.

The piston load capacity is designed to accept high horizontal forces which may be present during the final stages of a test. Each cell has five take-off positions drilled in the base for top drainage/back pressure, pore water pressure and bottom drainage. Two no-volume change valves and an anvil for strain gauge/transducer datum are supplied for fitting to the cell.

A feature of these cells is that they all accept a single diameter piston. The internal height is such that a range of submersible load transducers can be fitted without any modification. Each cell will accept a range of base adaptors and various accessories for testing a wide range of specimens

#### **Standards**

BS 1377, ASTM D2850, ASTM D4767, AASHTO T296, AASHTO T297

### **Specification**

Cell size 50 mm

Max specimen size 50 x 100 mm

Working pressure 1700 kPa

Max piston load 45 kN

Vertical clearance required 380 mm

Horizontal clearance required 155 mm

Weight kg 4

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# 38mm/1.5 Inch Base Adaptor for 50mm Cells.

Code: 25-4166

Product Group: Base Pedestals, Specimen Base

Adaptors

38mm/1.5 Inch Base Adaptor with Twin Pore Pressure Ports for 50mm Cells.

### **Standards**

BS 1377, ASTM D2850, ASTM D4767, AASHTO T296, AASHTO T297



## **Membrane Placing Tool 35mm/38mm.**

Code: 25-4290

Product Group: Membrane Placing Tools, O-Ring

Placing Tools

Membrane Placing Tool For 35Mm/1.4 Inch And 38Mm/1.5 Inch Samples.

### **Standards**

ASTM D2850, ASTM D4767, ASTM D5084, AASHTO T296, AASHTO T297, ASTM D7181



# **Suction Membrane Device 38mm/1.5 Inch Diameter.**

Code: 25-5100

Product Group: Suction Membrane Devices, Suction

Membrane Device

Suction Membrane Device For 38Mm/1.5 Inch

Samples.



# Two-Way Split Former 38mm/1.5 Inch Diameter.

Code: 25-5120

Product Group: Two-way Split Formers, Two-Way

Split Formers

Two-Way Split Former For 38Mm/1.5 Inch Samples.



## Pressure Pad 38mm/1.5 Inch Diameter.

Code: 25-5050

Product Group: Pressure Pads

38 mm / 1.5 Inch diameter pressure pad. The pad shall have two empty ports and will come complete with two blanking plugs, plastic tubing and connector. Suitable For both drained and undrained tests.

#### Standards

ASTM D2850, ASTM D4767, ASTM D7181, AASHTO T296, AASHTO T297



## Rubber Membrane 38mm/1.5 Inch Diameter, Pack of 10.

Code: 25-5061

Product Group: Rubber Membranes

Rubber Membrance For 38Mm/1.5 Inch Samples

(Pack Of 10).

#### **Standards**

AASHTO T296, AASHTO T297, ASTM D2850, ASTM D4767, ASTM D5084, ASTM D7181



## Membrane Sealing Ring 38mm/1.5 Inch Diameter. Pack of 10.

Code: 25-5081

Product Group: Membrane Sealing Rings

Membrane Sealing Ring 38Mm Diameter (Pack Of

10).

#### **Standards**

AASHTO T296, AASHTO T297, ASTM D2850, ASTM D4767, ASTM D5084



## Porous Disc 38mm/1.5 inch Diameter. Pack of 2.

Code: 25-5181

Product Group: Accessories for CU/CU effective

stress, Porous Stones

Porous disc for 38 mm/1.5 inch samples (Pack of 2).

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# Filter Paper Drain 38mm/1.5 inch Diameter. Pack of 50.

Code: 25-5200

Product Group: Accessories for CU/CU effective

stress, Filter Paper Drains

Filter paper drain 38 mm diameter (Pack of 50).



# **Piston Restraint Clamp for Ele Triaxial Cells**

Code: 25-4200

Product Group: Aggressive Materials, General Cell

Accessories

For ELE Triaxial Cells Manufactured From July 1996.

### **Standards**

BS 1377, ASTM D2850, ASTM D4767, AASHTO T296, AASHTO T297

### **Further Information**

To lock the loading piston into position



## **Valve No Volume Change 1/4 Inch BSp** Fitted with 6 mm Connector and Integral **Sealing Ring.**

Code: 25-4520

Product Group: General Cell Accessories, Accessories for CU/CU effective stress

### Standards

ASTM D2850, ASTM D4767, ASTM D7181, AASHTO T296, AASHTO T297



# Consolidation Frame One Dimensional Consolidation Incremental Loading Device.

Code: 25-0402

Product Group: Consolidation Apparatus, Table Top Consolidation Apparatus

- High capacity 8800 kPa on 50 mm diameter specimens using 11:1 beam ratio
- Triple beam ratio, 9:1, 10:1, 11:1
- Compact unit ensures maximum space saving

The ELE Oedometer is rigidly constructed to ensure minimum frame distortion. The frame is designed to load the specimen through a yoke assembly and one of three alternative beam ratios. The beam is fitted with a counterbalance weight and beam support jack. The cell platform will accept the complete range of ELE consolidation cells and is fitted with a central spigot to ensure accurate centring of the cell under the loading yoke. Dimensions without hanger 711 x 203 x 508 mm (l x w x h). Weight 22 kg.

#### **Standards**

ASTM D2435, ASTM D4546, AASHTO T216, ASTM D3877, BS 1377-5

#### **Further Information**

Supplied without dial gauge and weights.

#### **Specification**

Load Capacity 48 tons/sq. ft. (5,14 8 kPa) on

2.5" (63 mm) diam. samples.

Loading Beam Cast aluminum;

counterbalanced; 9:1,10:1 and

11:1 ratios.

Frame Cast aluminum; integral beam

support jack; plated steel and

platform.

Dimensions 203 x 711 x 508 mm, (8" w. x

28" d. x 20" h).

excluding weight hanger.

Weight (Net 30 lbs). 13 .6 kg; Shpg. 40

lbs. (18.1 kg).

#### Spares/Consumables

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## Electronic Digital Indicator, 0.600"/15 mm range

Code: 88-4210

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## Set of Weights 100Kg Total Weight.

Code: 25-0408

Product Group: Consolidation Apparatus 9 x 10 kg, 1 x 5 kg, 2 x 2 kg, 1 x 1 kg.

### Standards

ASTM D2435, ASTM D4546, AASHTO T216, ASTM D3877, BS 1377-5



# **Consolidation Cell/ Oedometer Complete** 75mm Diameter Sample

Code: 25-0503

Product Group: Table Top Consolidation Apparatus, BS EN consolidation cells and accessories, Pneumatic Consolidation Apparatus, Fixed Ring Consolidation

### Specification

Application BS/EN 10:1 Specimen Dia 75 mm Specimen area 4418 mm<sup>2</sup> Beam ratio 9:1 Load kg 1 Stress 20 kPa Typical max stress 3.2 MPa Stress for 1 kg m<sup>2</sup> 20 kPa Application BS Specimen Diameter 75 mm Specimen Area 4418 mm<sup>2</sup> Beam Ratio 10:01 Load 1 kg Stress 20 kPa Typical Maximum Stress 3.2 MPa Stress for 1 kg 20 kPa

## Spares/Consumables



75mm Dia Upper and Lower Porous Stones for Use on EL25-0503 Series Cell.

Code: 25-0503/13



**Cutting Ring 75mm Cell.** 

Code: 25-0506

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## **Calibration Disc 75mm Cell**

Code: 25-0509

Product Group: BS EN consolidation cells and accessories, Fixed Ring Consolidation

**Standards** BS 1377-5

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## **Consolidation Transducer Assembly 10mm Travel Fitted with 5 Pin Din Plug.**

Code: 27-1649

Product Group: Displacement Measurement, Displacement Transducers, Vertical settlement measurement

Fitted with 5 pin DIN plug.

## **Specification**

Construction Fully encapsulated electronics, sealed in a stainless steel case

Excitation 11 V DC
Connector 5-pin DIN type
Mounting bracket Included as standard

Weight kg 0.45

## Spares/Consumables



**CBR Displacement Transducer** 

Code: 27-1706

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#### **Digital Direct/Residual Shear Apparatus** Complete with Lever Loading Assembly. 220-240V 50/60Hz 1Ph.

Code: 26-2114/01

Product Group: Direct/Residual Shear Apparatus, **Direct/Residual Shear Apparatus** 

- Microprocessor control
- Large on-board LCD screen display
- Direct entry via touch sensitive keyboard
- Rapid approach and return to start datum
- Fully variable speed, 0.00001 to 9.99999 mm/minute
- · Accepts specimens up to 100 mm square

The ELE Direct Shear Apparatus accepts specimens 60 mm, 100 mm square or 2.5 inches in diameter. The use of a microprocessor controlled drive system and keyboard entry gives the apparatus a wide range of features that include pause and speed reset during test, RS 232C interface, operator programming of speed and control functions, self test diagnostics and many other features. A return to start datum provides a positive means of reversing the shearbox when either preparing for a new test or continuing with residual testing procedures.

Safety forward/reverse travel limit switches are fitted as standard and monitored through the electronics system control.

The electronics are housed in a modern moulded shroud, which includes a large LCD display and keyboard entry. The apparatus is enclosed in a robustly constructed case, has been designed for floor mounting and is supplied complete with carriage, loading hanger and 10:1 lever loading device.

#### **Standards**

ASTM D3080, AASHTO T236, BS 1377, EN 1997-2

#### **Further Information**

for 220 - 240 V AC, 50 - 60 Hz, 1 ph.

#### **Specification**

Sample Size Accepts either 2.42 ", 2.5"

> diam.; 60 mm square samples using accessory shear box assemblies, not included. Variable in either English or

Speed Range

Metric units

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between 0.000001"

(0.00001 mm) to 0.399999"

(9.99999

mm) per minute.

Shear Force 1,000 lbf. (4.5 kN) maximum. Vertical Load 2,200 lbf. (10.0 kN) using 10:1

lever ratio.

Dimensions 44.7" l. x 12 .6" w. x 49.6" h.

(1,135 x 320 x 1,260 mm).

Weight Net 181 lbs. (82 kg).

#### Spares/Consumables



Dial Indicator - 1.0" Range

Code: 88-4100



Electronic Digital Indicator, 0.600"/15 mm range

Code: 88-4210



**Vertical Dial Indicator, English** 

Code: 25-0445

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## S-Type Load Cell 5 kN.for Use with Direct/ Residual Shear Machine. Fitted with 5 Pin Din Plug.

Code: 27-1561

Product Group: Measurement of Load (Shear Stress), Load Measurement

- •Repeatability better than  $\pm$  0.02% of rated output
- •Non-Linearity better than ± 0.03% of rated output
- •Supplied complete with 5-pin DIN type connector for connection to GDU

Ideally suited for a wide range of applications, ELE S-type load cells provide high accuracy and minimum deformation. Various models are available, with the necessary adaptors, for use with ELE Triaxial Load Frames, Multiplex 50/Marshall Test 50/CBR Test 50 and Direct Shear machine.

Standards

BS 1377, ASTM D3080



## Set of Weights 50 kg Slotted.

Code: 26-2132

Product Group: Application of Normal Stress

Normal stress is applied to the specimen through the lever loading device and the appropriate slotted weights



## Specimen Cutter 60mm Sq.

Code: 26-2185

Product Group: Shearbox Assemblies- Accessories

and Spares

#### **Standards**

ASTM D3080, AASHTO T236

## Spares/Consumables



## Specimen Cutter 100mmsq.

Code: 26-2201



## **Specimen Cutter 2.5 Inch Diameter.**

Code: 26-2217

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#### Horizontal Displacement Transducer Assembly 15mm Travel 5 Pin Din Plug Mounting Pillar

Code: 27-1697

Product Group: Displacement Transducers, Measurement of Horizontal and Vertical Movement, Displacement Measurement

- •Ideally suited for use with GDU for accurate displacement measurements
- •Models available for use in consolidation, shear, CBR and triaxial test applications
- •Supplied complete with mounting hardware for specified products

Displacement Transducers are used in consolidation, shear, CBR and triaxial test applications for accuratevdisplacement measurements. They are supplied complete with a 5-pin DIN type connector for direct connection to the GDU.

#### **Specification**

Construction Fully encapsulated electronics,

sealed in a stainless steel case

Excitation 13 V DC

Connector 5-pin DIN type

Mounting bracket Included as standard

Weight kg 0.45

Construction Fully encapsulated electronics,

sealed in a stainless steel

case.

Excitation 10vDC.

Connector 5-Pin DIN type.

Mounting Bracket Included as standard. Weight Net 1 lb. (0.45 kg).

#### Spares/Consumables



#### **CBR Displacement Transducer**

Code: 27-1706

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#### Vertical Displacement Transducer Assembly 15mm Travel with 5 Pin Din Plug Bracket for Shear Box

Code: 27-1689

Product Group: Displacement Transducers, Measurement of Horizontal and Vertical Movement, Displacement Measurement

0 to 10 mm range. For use with Direct/Residual Shear Machines. •Ideally suited for use with GDU for accurate displacement measurements

- •Models available for use in consolidation, shear, CBR and triaxial test applications
- •Supplied complete with mounting hardware for specified products

Displacement Transducers are used in consolidation, shear, CBR and triaxial test applications for accuratevdisplacement measurements. They are supplied complete with a 5-pin DIN type connector for direct connection to the GDU.

#### **Specification**

Construction Fully encapsulated electronics,

sealed in a stainless steel case

Excitation 12 V DC

Connector 5-pin DIN type

Mounting bracket Included as standard

Weight kg 0.45

Construction Fully encapsulated electronics,

sealed in a stainless steel

case.

Excitation 10vDC.

Connector 5-Pin DIN type.

Mounting Bracket Included as standard. Weight Net 1 lb. (0.45 kg).

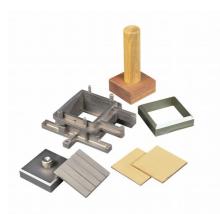
#### Spares/Consumables



#### **CBR Displacement Transducer**

Code: 27-1706

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#### **Shear Box Assembly 60mm Sq.**

Code: 26-2181

Product Group: Shear Box Assemblies, Shear Box Assemblies

- •Manufactured from corrosion resistant materials
- •Sample size 60 x 60mm x 25mm high meeting BS 1377
- •Incorporates PTFE faced box separation screws to reduce friction
- •Supplied complete with upper and lower porous plates and loading pad
- •Suitable for guick undrained or drained/residual tests

#### **Standards**

BS 1377, EN 1997-2, ASTM D3080, AASHTO T236

#### **Further Information**

All shearbox assemblies are designed to fit the carriage of 26-2114 series Digital Direct/Residual Shear Apparatus. They are supplied complete with three porous plates, one retaining plate and a loading pad. The three sizes supplied comply with the relevant requirements of BS 1377 and ASTM D3080. All assemblies can be used for guick shear tests or drained/residual shear tests.

Optional accessories are available including specimen cutters and extrusion tools.

#### **Specification**

Specimen area 60 x 60 mm

Specimen thickness 25 mm

Weight kg 2

Relevant standard BS 1377

Spares/Consumables



Porous Plate 60mm Sq.

Code: 26-2181/10

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## Specimen Cutter 60mm Sq.

Code: 26-2185



## Specimen Extrusion Tool 60 mm sq.

Code: 26-2189



## GDU 8 Channel Data Acquisition Unit 220-240 V 50/60 Hz, 1 Ph.

Code: 27-1500/01

Product Group: Data Logging with the GDU, Geotechnical Data Acquisition Unit (GDU), Automatic Data Acquisition - CBR, Automatic Data Acquisition -Triaxial, Automatic Data Acquisition - Consolidation, Automatic Data Acquisition - Direct Shear

The GDU is a stand-alone, multi-tasking, multi-channel data logger, that is reliable and powerful, enabling it to co-ordinate test data from the range of ELE transducers required for various test methods.

The ELE Geotechnical Software package (DS7.1), in conjunction with the GDU and a range of transducers, are the two central components required to create a modern turnkey soil testing system. Being fully modular it can be adapted to a wide range of soil testing laboratory configurations.

- For performing CBR, Consolidation, Direct/Residual Shear and Total & Effective Stress Triaxial tests
- 8 Channels expandable to 32 for performing multiple, concurrent tests for cost savings
- Independent signal conditioning on each channel to maintain data accuracy
- Field-upgradeable software, meaning no downtime for future software and functionality upgrades
- Extended warranty.

#### **Specification**

**Dimensions** 

Case Aluminum, free standing;

houses power supply, analog to digital conversion module and an 8-channel analog input

module with transducer

energization.

Sockets Standard 5-pin DIN type. Input Range  $\pm$  5 volts to  $\pm$  10 mV full scale.

Transducer Supply 10vDC.

12.8" w. x 14.3" d. x 6.1" h. (325 x 363 x 155 mm).

Weight Net 14.08 lbs. (6.4 kg).

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# 8-Channel Expansion Analog Input Module

Code: 27-1505

Product Group: Geotechnical Data Acquisition Unit

(GDU)

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#### DS7.2 Software-UU/CU/CD Triaxial, Permeability, Consolidation, Direct/Residual Shear, CBR

Code: S1160

Product Group: DS7, DS7.2 Geotechical Software General Module

- Programs available for Triaxial, Permeability Consolidation, Direct/Residual Shear and CBR tests
- Full support for Windows 7 and MS Word 2007/2010
  - Accurate and repeatable test procedures
  - 24 hour unsupervised logging
- Eliminate the possibility of errors while taking manual readings
- Tests are run with step-by-step instructions selectable between BS and ASTM/AASHTO standards
- Automatic report generation in accordance with the above standards
- Real-time graphical outputs to both screen and printer as required

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