



Triaxial Cells

ASTM D-2850, D-4767; AASHTO T-296, T-297; BS-1377.

- **Working pressures up to 250 psi (1,700 kPa).**
- **All around visibility.**
- **Double drainage.**
- **Accepts a wide range of platen sizes.**

ELE Triaxial Cells are designed to meet the requirements of the modern soils laboratory. Three quick release tie rods are used to attach the cylinder and head assembly to the base. The high quality finish between the piston and the head, the use of an O-ring seal, and special lubricant reduce friction levels and eliminate water leakage.

Each cell has five base ports; two for top drainage/backpressure, two for bottom drainage/pore pressure, and one for confining pressure. Two no-volume change valves and an anvil for strain indicator/transducers are supplied as standard.

Specifications

Max. Working Pressure.	250 psi (1,700 kPa).
Max. Piston Load.	10,100 lbf. (45 kN).
Max. Specimen Size.	EI25-4047: 2" (50 mm) diam. x 4" (100 mm) l. EI25-4117: 2.8" (70 mm) diam. x 5.6" (140 mm) l. EI25-4157: 4" (100 mm) diam. x 8" (200 mm) l.
Required Clearance.	EI25-4047: 15" (380 mm) vertical; 6.1" (155 mm) horizontal. EI25-4117: 17" (430 mm) vertical; 7.1" (180 mm) horizontal. EI25-4157: 20.3" (515 mm) vertical; 10" (255 mm) horizontal.
Weights.	EI25-4047: Net 8.8 lbs. (4 kg). EI25-4117: Net 16 lbs. (7.3 kg). EI25-4157: Net 31.5 lbs. (14.3 kg).

Ordering Information

Note: Shown with base pedestals; not included, order separately.

- EI25-4047.** 2" (50 mm) Triaxial Cell.
- EI25-4117.** 3" (70 mm) Triaxial Cell.
- EI25-4157.** 4" (100 mm) Triaxial Cell.

Accessories

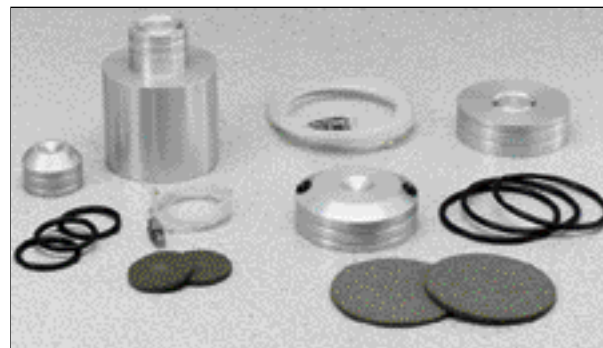
- EI25-4520.** No-Volume Change Valve.
- EI25-4200.** Piston Restraint Clamp. Used to lock loading piston in position.
- EI25-8080.** Grease Gun. Includes one tube of Silicone Grease Lubricant.

Triaxial Cell Accessories

ASTM D-2850, D-4767; AASHTO T-296, T-297; BS-1377.

Triaxial Cell Model

	EI25-4047	EI25-4117	EI25-4157
Base Pedestals:			
1.4" (35 mm)	EI25-4164	EI25-4170	--
1.5" (38 mm)	EI25-4166	EI25-4172	--
50 mm	EI25-4168	EI25-4174	--
70 mm	--	EI25-4176	EI25-4182
2.8"	--	EI25-4178	EI25-4184
100 mm	--	--	EI25-4186
4.0"	--	--	EI25-4188
Specimen Caps: (Caps include one Drainage Line)			
1.4" (35 mm)	EI25-4250	EI25-4250	--
1.5" (38 mm)	EI25-5050	EI25-5050	--
50 mm	EI25-5430	EI25-5430	--
70 mm	--	EI25-6430	EI25-6430
2.8"	--	EI25-6630	EI25-6630
100 mm	--	EI25-7590	EI25-7590
4.0"	--	EI25-7730	EI25-7730
Drainage Lines:			
1.4" (35 mm)	EI25-4250/10	EI25-4250/10	--
1.5" (38 mm)	EI25-5050/10	EI25-5050/10	--
50 mm	EI25-5430/10	EI25-5430/10	--
70 mm	--	EI25-6430/10	EI25-6430/10
2.8"	--	EI25-6630/10	EI25-6630/10
100 mm	--	EI25-7590/10	EI25-7590/10
4.0"	--	EI25-7730/10	EI25-7730/10

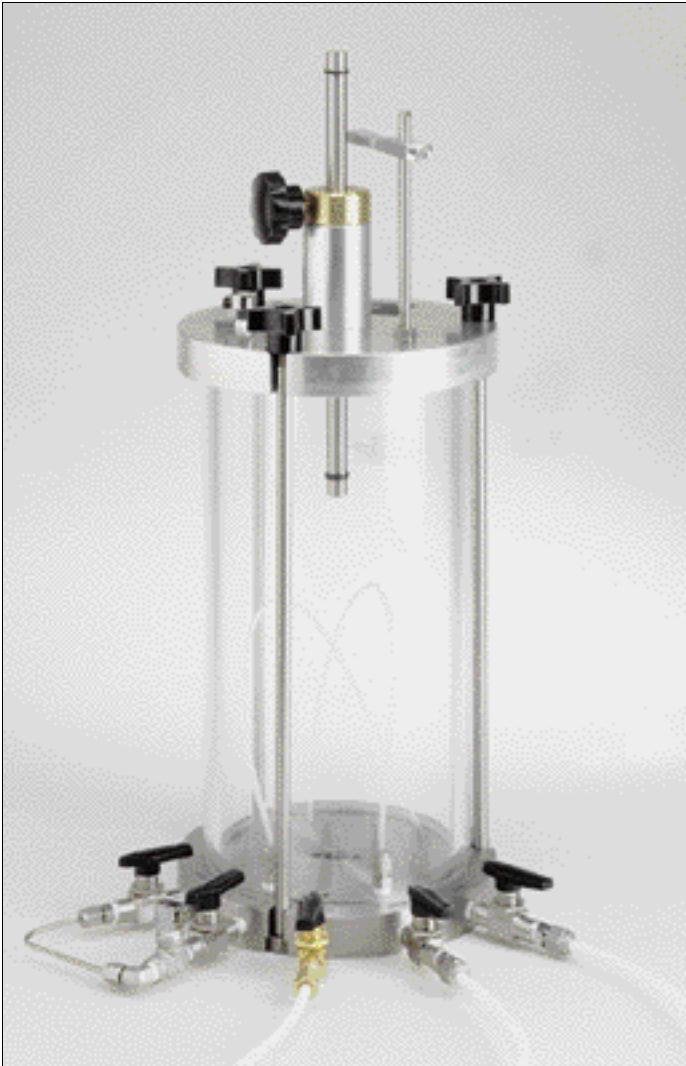


Specimen Diameter

	1.4" (35 mm)	1.5" (38 mm)	50 mm	70 mm	2.8"	100 mm	4.0"
Porous Stones (Pack of 2)	EI25-4461	EI25-5181	EI25-5561	EI25-6561	EI25-6721	EI25-7661	EI25-7761
Sealing Rings (Pack of 10)	EI25-4281	EI25-5081	EI25-5461	EI25-6461	EI25-6641	EI25-7631	EI25-7631
Filter Paper Drains (Pack of 50)	EI25-4880	EI25-5200	EI25-5580	EI25-6580	EI25-6580	EI25-7670	EI25-7670
Filter Paper Discs (Pack of 100)	--	--	--	EI25-6585	EI25-6585	--	--
Membrane Testers	EI25-4263	--	--	EI25-6443	EI25-6443	EI25-7623	EI25-7623
Rubber Membranes (Pack of 10)	EI25-4261	EI25-5061	EI25-5441	EI25-6441	EI25-6441	EI25-7621	EI25-7621
Length:	5.9" (150 mm)	5.9" (150 mm)	7.8" (200 mm)	9.8" (250 mm)	9.8" (250 mm)	13" (330 mm)	13" (330 mm)
Thickness:	0.012" (0.3 mm)	0.012" (0.3 mm)	0.016" (0.4 mm)	0.016" (0.4 mm)	0.016" (0.4 mm)	0.02" (0.5 mm)	0.02" (0.5 mm)

Special Note:

All porous stones have a high permeability to water in the order of 2×10^{-8} ml/s and a very low air-entry value.



Tri-Flex 2 Triaxial Cell

ASTM D-2850, D-4767, D-5084; AASHTO T-296, T-297.

- **Working pressures up to 150 psi (1,034 kPa).**
- **Low friction piston assembly.**
- **All around visibility.**
- **Double drainage.**
- **Accepts a wide range of platen sizes.**

The Tri-Flex 2 Triaxial Cell incorporates many features that promote ease in specimen preparation and installation. The cell consists of an aluminum alloy head assembly with a piston assembly that features the use of linear bearings for virtually, friction-free movement. A stainless steel base assembly with no-volume change type valves at all specimen inflow and outflow ports provides additional corrosion resistance and prevention of pressure changes during test procedures.

Through the use of the cell's optional specimen caps and base pedestals, specimens ranging in size from 1.4" (35 mm) to as large as 4" (102 mm) in diameter can easily be tested.

Specifications

Max. Working Pressure.	150 psi (1,034 kPa).
Max. Piston Load.	10,100 lbf. (45 kN).
Specimen Size.	1.4" (35 mm) to 4" (102 mm) diam. using optional cap and base accessories, not included.
Head Assembly.	Anodized aluminum with quick-disconnect fill/vent port and dial gauge support assembly.
Piston Assembly.	Sealed, with linear bearings and piston locking clamp.
Base Assembly.	Stainless steel with four stainless steel no-volume change ball valves at inflow and outflow ports and one brass ball valve at the lateral port. All included tubing is of either stainless steel or Teflon construction.
Dimensions.	Approx. 8" diam. x 18" h. (203 x 458 mm) excluding valves.
Weight.	Net 25 lbs. (11.3 kg).

Ordering Information

EI25-4159.

Accessories

EI25-4159/10.	1.4" Acrylic Specimen Cap and Base Pedestal Set.
EI25-4159/11.	2.8" Acrylic Specimen Cap and Base Pedestal Set.
EI25-4159/12.	4.0" Acrylic Specimen Cap and Base Pedestal Set.
EI25-4461.	1.4" Porous Stones. Pack of 2.
EI25-6721.	2.8" Porous Stones. Pack of 2.
EI25-7761.	4.0" Porous Stones. Pack of 2.
EI25-4261.	1.4" Membranes. Pack of 10.
EI25-6441.	2.8" Membranes. Pack of 10.
EI25-7621.	4.0" Membranes. Pack of 10.
EI25-4281.	1.4" Membrane Sealing Rings. Pack of 10.
EI25-6641.	2.8" Membrane Sealing Rings. Pack of 10.
EI25-7631.	4.0" Membrane Sealing Rings. Pack of 10.
EI25-6585.	2.8" Filter Paper Discs. Pack of 100.