TRIAXIAL CELLS

Triaxial cells are provided in two different dimensions, mod. S305 and S306. Top and low cell caps are made in aluminium corodal alloy and the transparent cell cylinder is in high resistant acrylic material. The cell can be easily assembled and disassembled by means of quick clamping rods. In order to reduce as much as possible friction, a particular care is deserved during loading ram realisation. The low cell cap is supplied with **"four inlet valves"**: back pressure, low drainage, pore pressure, cell pressure.
In order to measure the specimen axial deformation, an adjustable dial gauge or a displacement transducer is also provided.

Note: No top caps, base adapters, rubber membranes and sealing rings, porous stones, dial gauges, etc. are included and **"should be ordered separately"**. In the table all accessories for triaxial cells are listed.

S305 with accessories

S306

Models:	**S305***	**S306****
Max. specimen size mm	Ø 70x140	Ø 100x200
Max. cell pressure	1700 kPa	1700 kPa
Overal dimensions mm	Ø 280x480	Ø 310x540
Weight kg	8	16

* Note: Cell S305 can be also used also for specimens dia. 50x100 and 38x76 mm with accessories of suitable diameter, but it is not suitable for 100x200 mm samples.

** Note: Cell S306 can be also used also for specimens dia. 70x140, 50x100 and 38x76 mm with accessories of suitable diameter.

MAXIMUM REACHABLE VERTICAL TOTAL STRESS:

Sample	**Ø 38x76 mm**	**Ø 50x100 mm**	**Ø 70x140 mm**	**Ø 100x200 mm**
Cell **S305**	~ 44 MPa	~ 25 MPa	~ 13 MPa	–
Cell **S306**	~ 44 MPa	~ 25 MPa	~ 13 MPa	~ 6 MPa

Note: Be aware that not all proving rings or load cells are suitable for all reachable axial force.
See "measure of the axial force applied" section, pag. 452

Accessories for Triaxial Cells:	Ø 38x76 mm	Ø 50x100 mm	Ø 70x140 mm	Ø 100x200 mm
Rubber membrane (pack of 10)	**S310**	**S310-01**	**S310-02**	**S310-03**
"O" ring (pack of 10)	**S311**	**S311-01**	**S311-02**	**S311-03**
Membrane stretcher	**S312**	**S312-01**	**S312-02**	**S312-03**
Split former	**S313**	**S313-01**	**S313-02**	**S313-03**
Top cap with drainage	**S314**	**S314-01**	**S314-02**	**S314-03**
Base adapter for cell. mod. S305	**S315**	**S315-01**	**S315-02**	–
Base adapter for cell. mod. S306	**S315-04**	**S315-05**	**S315-06**	**S315-07**
Porous disc (2 pcs)	**S316**	**S316-01**	**S316-02**	**S316-03**
Perspex plain disc (2 pcs)	**S317**	**S317-01**	**S317-02**	**S317-03**
"O" ring for base adapter	**S318**	**S318-01**	**S318-02**	**S318-03**
Filter paper for lateral drainage (50 pcs)	**S319**	**S319-01**	**S319-02**	**S319-03**
Filter paper for base (100 pcs)	**S320**	**S320-01**	**S320-02**	**S320-03**
Stainless core cutter	**S122-13**	**S122-14**	**S122-15**	**S122-16**
Dolly for extraction	**S123-13**	**S123-14**	**S123-15**	**S123-16**
Drainage burette, 10 ml. cap.	**S321**	**S321**	**S321**	–
Drainage burette, 50 ml. cap.	–	–	–	**S322**
Nylon tube dia. 6x4 (20 mt.)	**S325**	**S325**	**S325**	**S325**
Terminal for connection tube (10 pcs)	**S326**	**S326**	**S326**	**S326**
Flaring tool	**S327**	**S327**	**S327**	**S327**
Vaseline oil (1 kg)	**S328**	**S328**	**S328**	**S328**
Silicon grease (1 kg)	**S329**	**S329**	**S329**	**S329**
Grease pump	**S330**	**S330**	**S330**	**S330**
Null displacement valve (spare)	**S331**	**S331**	**S331**	**S331**

ACCESSORIES DESCRIPTION:

RUBBER MEMBRANE, to isolate the specimen from cell water.

"O" RING, to seal the membrane around the top cap and the base adapter.

MEMBRANE STRETCHER, to stretch the membrane during its positioning, avoiding to disturb the specimen.

SPLIT FORMER, to prepare coarse grain soil specimens. It is made of two aluminium halves.

TOP CAP WITH DRAINAGE, to load the whole cross section area of specimen when drainage is required. It is made of anodized aluminium. Connector is provided.

BASE ADAPTER, used to adapt the triaxial cell to the specimen diameter. It is made of aluminium.

POROUS DISCS, to allow the drainage in or out of the specimen in the whole cross sectional area, toward the top cap and the lower base. Two pieces are required. They are made of phosphor bronze.

PERSPEX PLAIN DISCS, to replace porous discs in undrained tests. Two pieces are required. They are made of 10 mm. thick Perspex.

FILTER PAPER FOR LATERAL DRAINAGE, for lateral drainage on low permeability specimens.

FILTER PAPER FOR BASE, to avoid passages of soil particles into the porous stones.

CORE CUTTER, to cut soil cohesive specimens in correct diameters from bigger samples. It is made of stainless steel with a cutting edge.

DOLLY FOR EXTRACTION, to extrude the specimen from the core cutter.

DRAIN BURETTE, to prepare coarse grain specimens by applying a negative pressure to the base of the specimen and to measure the water volume change in or out the specimen during testing with specimen open to the atmosphere. Two models are available: 10 ml. capacity for specimens up to 70 mm. dia. and 50 ml. for specimens up to 100 mm. dia. It is supplied with cell rod and cell couplings.

"O" RING FOR BASE ADAPTER, to seal the membrane on the base adapter and the top cap.

FLARING TOOL, to cut and prepare the ends of nylon tubes which have to be fixed to the suitable connectors.