

Standard triaxial cells and accessories

BS 1377:7 | ASTM D2850 | ASTM D4767 | BS 1377:8 | NF P94 070 | NF P94 074 | CEN- ISO/TS 17892-9 | CEN- ISO/TS 17892-8

GENERAL DESCRIPTION

The cell essentially consists of a transparent polycarbonate chamber which has a piston assembly fit to the top and a double flange base fit to the bottom. Three (or six) simple thumbscrew are used to clamp the upper part of the cell to the base, which make assembly and disassembly a very quick and simple operation. The base of the cell has four inlet points for top and drainage/back pressure, cell pressure and bottom drainage/pore water pressure. Two of these are supplied with special no-volume change valves.

Base adapters, plinths, top caps, porous disc, rubber membranes and sealing rings are not included. See accessories.

TECHNICAL SPECIFICATIONS

Cell model	28-WF0410/A	28-WF0411/A	28-WF0416/A
Max. specimen size Dia. x height	50x100	70x140	100x200
Max. working pressure	1700 bar	1700 bar	1700 bar
Max. load on the piston	45 kN	45 kN	45 kN
Max height	380 mm	440 mm	515 mm
Diameter	140 mm	174 mm	200 mm
Weight approx.:	4 kg	7.3 kg	14.3 kg

ORDERING INFO

28-WF0410/A

Standard triaxial cell for 35, 38 and 50 mm dia. samples

28-WF0411/A

Standard triaxial cell for 35, 38, 50 and 70 mm dia. samples

28-WF0416/A

Standard triaxial cell for 70 and 100 mm dia. samples



ACCESSORIES

Triaxial cell specimen base adapters

Each cell has to be completed with the base adapter corresponding to the specimen size as shown in the following tables. All adapters are perforated for bottom drainage/pore pressure measurement and are supplied complete with a solid disc for use in undrained tests.

Cell code	28-WF0410/A	28-WF0411/A	28-WF0416/A
Specimen dia.			
	Adapter codes	Adapter codes	Adapter codes
35 mm	28-WF0410/A1	28-WF0411/A1	-
38 mm	28-WF0410/A2	28-WF0411/A2	-
50 mm	28-WF0410/A3	28-WF0411/A3	-
70 mm	-	28-WF0411/A4	28-WF0416/A1
100 mm	-	-	28-WF0416/A2

Triaxial cell accessories

For specimens	Dia. 35 mm	Dia. 38 mm	Dia. 50 mm	Dia. 70 mm	Dia. 100 mm
For base adapters 28-WF	0420/A1 ¹ 0411/A1	0410/A2 ¹ 0411/A2	0410/A3 ¹ 0411/A3	0411/A4 ¹ 0416/A1	0416/A2 -
Part description	Codes	Codes	Codes	Codes	Codes
Porous top cap	0420/A3	0422/A3	0425/A3	0428/A3	0432/A3
Pair of porous discs	0420/A4	4034	4054	4074	4104
Membrane (10 pcs)	0420/A5	4035	4055	4075	4105
O ring (10 pcs)	0420/7	4036	4056	4076	4106
Membrane stretcher	0420/8	4031/A	4051/A	4071/A	4101/A
O ring placing tool	0420/10	4031/B	4051/B	4071/B	4101/B
Lateral filter drains 50 pieces	0420/A9	4031/E	4051/E	4071/E	4101/E
Filter discs Pack of 100	-	4031/F	4051/F	4071/F	4101/F
Split sand former	0420/A6	0422/A6	0425/A6	0428/A6	0432/A6
Drainage burette	0420/11	0420/11	0420/11	0420/11	0432/11 ²
No-volume change Valve ³	0420/12	0420/12	0420/12	0420/12	0420/12
Split mould	0420/13	0422/13	0425/13	-	-

¹ Depending upon cell model. ² 50 ml model. ³ Complete with connector and 6 mm dia. hose

Note: all accessories are shown in the Widening paragraph.

Cutter, wooden dolly and receivers

Used to produce the soil specimen from a larger sample. Comprising cutter, wooden dolly and receiver. Stainless steel cutter tube and receiver.

Code	Size (dia.x h)	Spare cutter tube	Spare dolly
Complete set	mm	Code	code
28-WF0420/9	35x70	28-WF0420/91	28-WF0420/91
28-WF4031/G	38x76	28-WF0422/91	28-WF0422/92
28-WF4051/G	50x100	28-WF0425/91	28-WF0425/92
28-WF4071/G	70x140	28-WF0428/91	28-WF0428/92
28-WF4101/G	100x200	28-WF0432/91	28-WF0432/92



Other accessories

28-WF4005/39

Platen adapter to fit 28-WF0410/A standard triaxial cell on Tritech 50 and 100 frames.

86-D0845

Water-repellent grease. 1 kg box

28-WF0420/15

Greaser for triaxial cells

28-WF0490/1

Flaring tool

28-WF0490

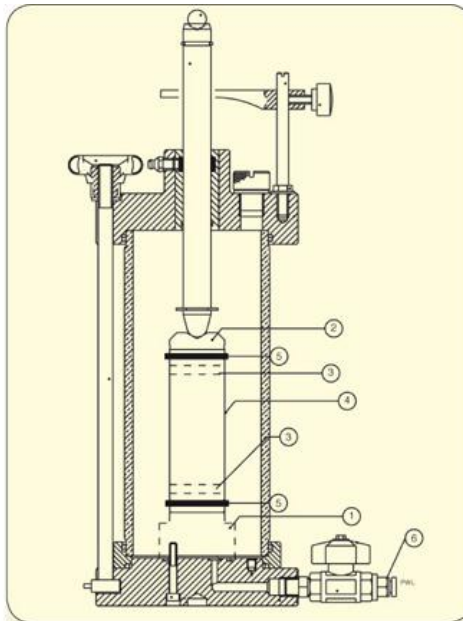
Nylon tubing 6x4 mm dia., 20 m coil.



28-WF0416/A, 28-WF0411/A, 28-WF0410/A



28-WF0420/9 Sample preparation set: cutter, wooden dolly and receiver.



- 1** Base adapter
- 2** Porous top cap
- 3** Porous disc
- 4** Rubber membrane
- 5** Sealing rings
- 6** No-volume change valve

Cell schematic view

Other accessories

- **28-WF4005/39** Platen adapter to fit standard triaxial cells on Triotech 50 or Triotech 100
- **86-D0822** Vaseline oil. 1 kg bottle
- **86-D0845** Water-repellent grease. 1 kg box
- **28-WF0420/15** Greaser for triaxial cell
- **28-WF0490/1** Flaring tool
- **28-WF0490** Nylon tubing 6x4 mm dia., 20 m coil

- 8 Split sand former.** A specially designed piece of equipment for use when preparing non-cohesive soils which otherwise could not be mounted in a triaxial cell.
- 9 Drainage burette. 10 ml.** Used to prepare non-cohesive specimens by applying a negative pressure to the base of the specimen and for measuring drainage into and out of the specimen when testing with the specimen open to the atmosphere. Supplied with connections for triaxial cell.

- 10 O-ring placing tool.** To fit the sealing ring with the minimum disturbance to the sample.
- 11 No-volume change valve.** Identical to the two valves supplied with the triaxial cells and used for measuring pore pressure and when fitting the drainage burette.
- 12 Split mould.** Used for trimming the ends of soil specimens.

Legend

- 1 Base adapter.** Used to adapt the triaxial cell for use with the selected sample size. Supplied complete with a plain base cap.
- 2 Porous top cap.** Used to evenly apply the loading over the whole cross sectional area of the sample when drainage to the top of the sample is required. Includes a nylon tube and connector for the base drainage line.
- 3 Porous disc.** Used as a filter ensuring that the passage of water into and out of the sample is evenly spread over the whole cross sectional area. Two required.
- 4 Rubber membrane.** Provides a protective water proof sheath around the sample. Made of rubber latex and supplied in packs of 10.
- 5 Sealing rings.** Used to seal the membrane against the plinth and the top cap at either end of the sample. Supplied in packs of 10.
- 6 Membrane stretcher.** Used to pull open the membrane to allow it to be easily placed over the specimen without any disturbance.
- 7 Filter paper drains.** Used as side drains when specimens have low permeability. They are particularly useful when saturating clays before consolidation and shearing. Pack of 50.



Triaxial cells accessories

