

DATA SHEET

Liquid Limit (Cone Penetrometer Devices)



Liquid limit penetrometer (model 22-T0029/D) with 22-T0029/1 cone and 22-T0029/3 cup

General description

The cone penetrometer apparatus is used to determine the moisture content at which clay soils pass from a plastic to a liquid state and it is used also for the determination of undrained shear strength.

Two versions available: the standard 22-T0029/D and the semi-automatic 22-T0029/E.

The penetrometer has a cast iron base with leveling screws, digital penetration measurement gauge 0.01 mm precision, release button and automatic zeroing. It is provided with lead screw gear arrangement, Leveling screws, Spirit level. The head can be clamped at any desired height. A rack and pinion and pointer assemble provides fine adjustment of the cone tip to sample. It incorporates a clutch mechanism which makes reading of penetration and subsequent resetting a simple and accurate operation.

The semi-automatic model is complete with automatic controller, which automatically releases the plunger by a magnetic device, complete with micrometer vertical adjustment and adjustable electronic timer of the fall time. The electronic timer allows the user to set up and read the fall time of the needle during testing.

Penetration cones and sample cups has to be ordered separately. See accessories.

- Weight approx.: 8.5 kg

Main features

- Cast iron base with leveling feet
- Digital penetration measurement gauge 0.01 mm precision
- Micrometer vertical adjustment device
- Automatic zeroing
- Electronic release mechanism (22-T0029/E model only)

Standards

- BS 1377:2
- UNE 7377

DATA SHEET

- UNE 7002
- EN 12697-24 Annex B
- NF P94-052-1
- DIN 18122
- EN 17892-12
- EN 17892-6



Penetrometer for liquid limit determination, semi-automatic model
22-T0029/E



22-T0029/4



22-T0029/1

DATA SHEET



22-T0029/7



22-T0029/5



22-T0029/2

DATA SHEET



22-T0029/8

Products

22-T0029/D

Digital liquid limit penetrometer with micrometric vertical adjustment.

22-T0029/E

Digital electronic semi-automatic penetrometer complete with micrometer vertical adjustment and adjustable electronic timer of the fall time. 230 V, 50-60 Hz, 1 ph.

22-T0029/EZ

Digital electronic semi-automatic penetrometer complete with micrometer vertical adjustment and adjustable electronic timer of the fall time. 110 V, 60 Hz, 1 ph

Accessories and consumables

86-D1332

Aluminium box dia 75 x 50 mm

22-T0029/1

Penetration cone 30° tip and 80g of weight

22-T0029/2

Test cone gauge for 30° tip angle core to EN17892:6 (Thickness 2.50 mm)

22-T0029/3

Penetration sample cup

22-T0029/4

Penetration test cone 60° (total weight of the slider assembly is 60 g)

22-T0029/5

Test cone gauge for 22-T0029/4.

22-T0029/7

Penetration test cone 30° x 100g

22-T0029/8

DATA SHEET

Penetration test cone 30° x 400g

22-T0029/9

Test cone gauge for 30° tip angle core to BS 1377:2

22-T0029/2A

Test cone gauge for 30° tip angle core to EN17892:12 (Thickness 2.20 mm)