

DATA SHEET

Standard Penetrometers



Digital standard penetrometer complete with micrometer vertical adjustment

General description

Cast iron base with leveling screws, digital penetration measurement gauge 0.01 mm precision, release button, automatic zeroing. Semi-automatic model 81-B0101/E is supplied 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, according to EN 1426, ASTM D5, AASHTO T49. Both models are fit with a micrometer vertical adjustment device. Needles, cups, thermometer and mirror are not included and have to be ordered separately. See accessories.

The instrument 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 needle or cone tip to sample. It incorporates a clutch mechanism. Which makes reading of penetration and subsequent resetting a simple and accurate operation. The electronic timer allows the user to set up and read the fall time of the needle during testing.

The test should be performed placing the penetration cup in thermostatically controlled water, using a suitable device as our water bath with thermoregulator and immersed probe (see accessories).

- Weight approx.: 8.5 kg

Main features

- Digital penetration measurement
- Complete with micrometer vertical adjustment
- Semi-automatic version with automatic controller, complete with micrometer vertical adjustment and adjustable electronic timer of the fall time
- Digital circulation water bath with cooling coil and immersion probe available. An additional water chiller is available but not strictly necessary
- The electronic timer allows the user to set up and read the fall time of the needle during testing

Standards

- EN 1426

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- ASTM D5
- AASHTO T49



Digital electronic semi-automatic penetrometer complete with micrometer vertical adjustment and adjustable electronic timer of the fall time



81-B0100/D Digital standard penetrometer and 81-PV0102 thermostatically controlled digital water bath with thermoregulator and immersion temperature probe



81-B0101/E Digital electronic semi-automatic penetrometer and 81-PV0102 digital water bath with thermoregulator and immersion temperature probe

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Products

81-B0100/D

Standard digital penetrometer with micrometer vertical adjustment and digital penetration measurement

81-B0101/E

Digital electronic semi-automatic penetrometer complete with micrometer vertical adjustment and adjustable electronic timer of the fall time, according to EN 1426, ASTM D5, AASHTO T49. 230 V, 50-60 Hz, 1 ph

81-B0101/EZ

Digital electronic semi-automatic penetrometer complete with micrometer vertical adjustment and adjustable electronic timer of the fall time, according to EN 1426, ASTM D5, AASHTO T49. 110 V, 60 Hz, 1 ph

Accessories and consumables

81-B0100/1

Mirror with adjustable holder

81-B0109

Transfer dish with support

81-B0110/A

Sample cup dia 55x35 mm. Kit of 6.

81-B0110/B

Aluminium cup dia 70x45 mm. Set of 6

81-B0113

Penetration needle made from hardened polished stainless steel. Univocally traceable by engraved serial number. Conforming to ASTM D5 and EN 1426. Supplied with conformity certificate.

81-B0113/A

Penetration needle made from hardened polished stainless steel. Univocally traceable by engraved serial number. Set of 3. Conforming to ASTM D5 and EN 1426. Supplied with conformity certificate.

81-B0113/1

Penetration needle, fully hardened, tempered and polished stainless steel. Conforming to ASTM D5 and EN 1426. Supplied complete with official UKAS Verification Certificate

81-B0115

Standard penetration cone

81-PV0102/A

Water bath for penetration test complete with internal water coil, support for specimen and water connections. To be used with external chiller series 81-PV0102/CHx

81-PV0102/CH

Water chiller, with temperature controller with $\pm 0,1$ °C accuracy and fluid temperature range between 5 and 30 °C. Suitable for chilling penetrometer water baths or temperature controlled setting time tests. 230V/50-60Hz/1ph

81-PV0102/CHZ

Water chiller, with temperature controller with $\pm 0,1$ °C accuracy and fluid temperature range between 5 and 30 °C. Suitable for chilling penetrometer water baths or temperature controlled setting time tests. 110V/60Hz/1ph

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82-B0100/6MF

Thermometer IP 38C range + 23 to 27°C, mercury free with alternative liquid

82-B0122/4MF

Thermometer ASTM S63C, range -8 to +32°C, mercury free with alternative liquid

82-B0125/2MF

Saybolt thermometer ASTM 17C, range +19 to +27°C, mercury free with alternative liquid.

81-PV0102

Water bath for bitumen penetration tests, including heating controller and cooling coil, immersion temperature probe, internal support grid and connections to mains water. Temperature range 25 to 60 ± 0.1 °C. 230 V, 50-60 Hz, 1 ph

81-PV0102/Z

Water bath for bitumen penetration tests, including heating controller and cooling coil, immersion temperature probe, internal support grid and connections to mains water. Temperature range 25 to 60 ± 0.1 °C. 110 V, 60 Hz, 1 ph