Technical Datasheet

Dynamic Cone Penetrometer

(PR) PRIMERE



Portable device for dynamic penetrometric tests

Description

The DPM30 penetrometer allows exclusively continuous dynamic penetrometric tests to be performed. For the dynamic tests, the penetrometer is equipped with a 66 pound (30 kg) hammer with a 7.87 inch (200 mm) stroke, operated by a hydraulic motor. It is driven by a motor-pump unit, where the motor can be either electric (220v or 110v) or a gas engine. A hydraulic extractor is used to extract rods, lining tubes and samplers. The penetrometer is controlled via a pedal-operated distributor. The hydraulic connections on the various components use quick connectors.

Advantages

- A power supply suited to any application
- For the dynamic tests, the penetrometer is equipped with a 66 pound (30 kg) hammer with a 7.87 inch (200 mm) stroke, operated by a hydraulic motor. It is driven by a motor-pump unit, where the motor can be either electric or gasoline-powered.

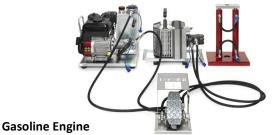
The DPM30 can be used not only for dynamic tests, but also for soil sampling with limited disturbance, which guarantees improved ability to interpret the penetrometric data.

Included with a Penetrometer purchase (base set-up):

- 1 Percussion System with 30Kg hammer
- 1 Power unit (Gas or Electric)
- 1 Pedal Command unit with quick Coupling tubes
- 1 Hydraulic Extraction unit 5 ton (rod puller)

Included accessories:

- 1 Rod Extraction Clamp
- 20 Rod 20x1000 mm (39.3 inches)
- 2 Drive Cap 30 x 50 mm
- 2 Expendable Point Holder for rod
- $1-Box\ of\ 120\ pcs$ Expendable drive tips
- 10 Drive Cone 10cm2, 60, M14
- 1 tool kit



Part	Weight
Gasoline Engine-Pump Unit	71.2 lbs (32.3 kg)
Percussion System	104.7 lbs (47.5 kg)
Hydraulic Extractor	35.3 lbs (16 kg)
Pedal-Operated Distributor	21.4 lbs (9.7 kg)
TOTAL	232.6 lbs (105.5 kg)



Electric Engine

Part	Weight
Gasoline Engine-Pump Unit	84.9 lbs (38.5 kg)
Percussion System	104.7 lbs (47.5 kg)
Hydraulic Extractor	35.3 lbs (16 kg)
Pedal-Operated Distributor	21.4 lbs (9.7 kg)
TOTAL	264.3 lbs (111.7 kg)

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Hammer	Fall height	Rods	Cone
66 lb (30 kg)	7.87 inch (200 mm)	.79 inch (Ø 20 mm)	1.6 inch ² (10 cm ²) 60°

Gasoline Engine*

Туре	Single-cylinder, 4 stroke, unleaded gas, forced air-cooling w/ muffler
Starter	Hand starter
Power	2.94 kW (4 HP) @ 3060 rpm
Displacement	7.74 in ³ (127 cm ³)
Torque	66 inch / pound (0.76 kgm, 7.5Nm) @ 3060 rpm
Air Filter	Pre-filter & cartridge filter
Consumption	Variable from 1.22 to 0.32 gallons per hour (0.54 to 0.14 liters per

^{*} Gas unit cannot be sold or used in California

Electric Motor

Туре	Asynchronous single-phase engine
Absorbed watts	1700
Current used	115Vac AC 60 Hz
Power	1.7 kW (2.3 Hp) @ 3420 rpm
Ignition controls	Integrated electrical box with emergency push buttons
Connection to the mains	The box has a built-in 2-pole plug (plus ground). A 20A and 130V 2-pole plug is always supplied (plus ground).

Hydraulic System

Circuit capacity	0.26 Gallons (1 liter)
Maximum operating pressure	2176 psi (150 bar, 15000 kPa)
Pumps	No. 1
Filter	Cartridge filter with 25µm filtering capacity

Hydraulic extractor

Maximum extraction speed	0/1.584 inches per second
	(0/4 centimeters per second)
Hydraulic extractor piston stroke	11.42 inches (290 millimeters)

Refueling

Fuel tank capacity	1 gallon (3.8 liters)
Hydraulic oil tank capacity	2.1 gallons (7.8 liters)



Accessories

Rod Extraction Clamp: Item #12646

Rod Ø 20 x 1000 mm (39.3 inches), M14: Item #12647

Drive cap ø 30 x 50mm, M14 Item #12648



Expendable point holder for rod ø 20 mm, M14
Item #12649

Expendable drive tips 10cm², angle 60° - box of 120
Item #12650

Drive cone 10cm², 60°, M14 Item #12651

Pagani Soil Sampler 030 x 220 Item #12711





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