

Digital Permeability Meter



1.0 Product Information:

1.1 General Information

This is a precision equipment to measure Permeability of Foundry Sands. By default it can measure absolute permeability of an AFS (Dia. 2"X2") or Metric (Dia. 50mmX50mm) Specimen.

With Help of attachment it can also measure

- Relative Permeability of Moulds (Refer 4.2.1)
- Absolute Permeability of Cores (Refer 4.2.2)
- Absolute Permeability of Un-bonded sand (Refer 4.2.3).

1.2 General Usage

Specimen held in a Tube or accessory is placed on the measuring Rubber Boss. On press of start button, within few seconds the equipment shows Permeability reading.

1.3 Product Data

Product Name:	Digital Permeability Meter
Product Code:	VPD1
Order Reference Code:	V0000107
Electrical Supply Required:	230v 50Hz A.C. (Default) 110v 60 Hz A.C (Optional) Single Phase, Stabilized with Over/ Under Voltage cut-off.
Electrical Plug:	M type : 15 Amp Plug
Typical Maximum Current:	2.2 A at 230V
Compressed air Supply:	Required 2 Kg/cm2 Dry Compressed Air to make the operations fully automatic.

	Optional if Air Drum can be lifted by Operator.
Communication:	• RS485 MODBUS RTU • RS232 Serial • Ethernet (Optional) • CloudSync using V-Sync
Dimensions:	500 X 320 X 460 mm (WXBXH)
Packing Dimensions:	600 mmx 450mm x 625 mm (WXBXH) Typical
Net Weight:	Approximately 25 kg
Gross Weight:	Approximately 30 kg
Colour:	Factory Default
Measuring Range:	0-100 mm WC and Related readings AFS Permeability measurement chart digitally displayed.
Traceable to:	Manufacturers Standards
Least Count:	1 mmWC
Specimen Requirements:	Compression type specimen
Operating Temperature:	0-50°C
Testing Standards:	BIS: Standard AFS: Optional
Calibration Frequency:	22500 nos. of Testing Cycles or Once in Year

2.0 Scope of Supply

2.1 Inclusions in Supply Scope

- Digital Permeability Meter.
- Large Orifice.
- Syphon Pump.
- Calibration certificate.
- Instruction manual.

2.2 Exclusions in Supply Scope

- Precision small orifice. (Part # V4500256)
- Data interfacing accessories.
- Anything that is not covered under Supply scope.

3.0 Recommended Pre-requisite Equipment

[Sand Splitter](#) : To get representative sample ↗

Specimen preparation equipment to make a standard AFS or Metric Compression specimen i.e. AFS (Dia. 2"X2") or Metric (Dia. 50mmX50mm).

4.0 Accessories

4.1 Calibration Kits

There are four types of calibration kits to choose from:

VKPA: With Std. Specimen type for Small Orifice

VKPB: With Std. Specimen type for Large Orifice

VKPC: With Rubber Boss type for Small Orifice

VKPD: With Rubber Boss type for Large Orifice

4.2 Attachments

1. [VPR: Mould Perm Tester](#) ↗
2. [VD: Core Permeability Tube](#) ↗
3. VBP: Base Permeability Tube
4. Small Orifice

5.0 Alternative Equipment

1. [Permeability Meter VP \(For Educational Purposes\)](#) ↗
2. [Electropermeability Meter VEP](#) ↗
3. [VCAT Multi Tester](#) ↗

6.0 Installations Instructions

Required Levelled (2mm) and sturdy platform. (Equipment should be away from external source of vibration or electromagnetic interference.) Other Installation instruction shall be provided along with the equipment.

7.0 Consumables

- Demineralized Water
- Rubber Boss Assembly (Part # V4500259)

8.0 Hazards

Electrical Equipment: Precaution must be taken accordingly.

No other Major Hazards.

9.0 Additional Information

[Link to Web-Page](#) ↗

[Link to Video Demo of Manual Version](#) ↗

Disclaimer: Specifications and design of equipment may change without prior notice.