

# THE PMI ADVANCED CONSTANT AND FALLING HEAD PERMEAMETER

## CFHP-100A

The PMI Advanced Constant and Falling Head Permeameter conforms to standard ASTM D2484.



Not just products...*solutions!*



# Description

The PMI Advanced Constant Head Liquid Permeameter measures the flow rate of liquid through a bed of material when the head pressure of liquid is maintained constant. The equipment feeds the liquid at sufficient rate with overflow arrangement so as to maintain constant head of liquid above the sample column. Flow through liquid is weighed as a function of time to provide the flow rate and hence the liquid permeability.

Our Falling Head Liquid Permeameter measures the flow rate of liquid through a bed of material as the head pressure of liquid changes. The equipment brings a head of liquid column and lets it flow through the sample. Flow through liquid is weighed as a function of time and the height of water column is measured at the same time to provide the flow rate and hence the liquid permeability at various head pressures

# Principle of Operation

## Constant Head Permeability

Permeability using the Constant Head method uses the following formulas to compute flow rate:

$$Q = KA \frac{b}{L}$$

$$K = \frac{QL}{Ab}$$

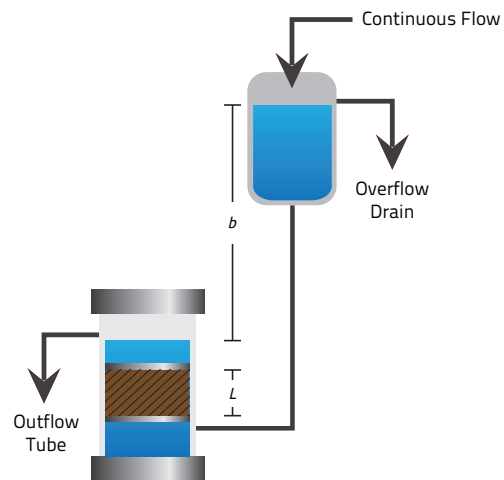


Figure 1  
Principle of Constant Head Permeability

## Falling Head Permeability

Permeability using the Falling Head method uses the following equation to compute flow rate:

$$K = \left( \frac{r_{tube}}{r_{column}} \right)^2 \left( \frac{L}{t} \right) \ln \left( \frac{b_0}{b_1} \right)$$

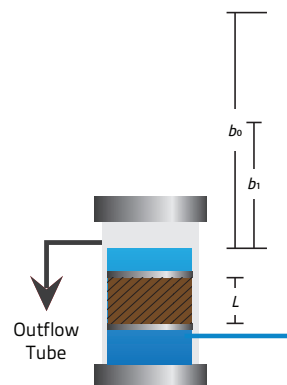


Figure 2  
Principle of Falling Head Permeability

## Sales & Services

Our sales team is dedicated to helping our customers find which machine is right for their situation. We also offer custom machines for customers with unique needs. To find out what we can do for you, contact us.

We are committed to customer support including specific service products, short response times & customer specific solutions. To quickly & flexibly meet our customer's requirement, we offer a comprehensive range of services.



*Customize your machine today!*



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