

**Product Name :**  
Deep Bed Filter Column**Product Code :**  
ALABS-A104-427**Description :****Deep Bed Filter Column**

The laboratory scale Deep Bed Filter Column has been designed to operate identically to full scale granular filters. Using the same bed depth and filter media, tests on this unit provide operational data which may be scaled up to full size. Pilot trials of possible filter designs for water and sewage works can be made reliably at low cost.

**Capabilities:**

- Measuring how fast total head loss increases with filtration run time
- Measuring pressure drop profiles through the filter bed
- Measuring suspension concentration profiles through the filter bed
- Demonstration of reversed flow fluidisation and backwashing
- The column may be readily adapted for absorption and ion exchange studies.

**Description:**

The

Deep Bed Filter Column is a clear acrylic unit about 1.5m high with flanged end pieces to allow easy access. The medium is supported on a corrosion resistant gauze mesh below which is packed 1kg of 10mm Ballotini to ensure good wash water distribution. Slotted sampling tubes inserted through the wall penetrate into the media, and are fitted with control valves so that suspension samples can be taken isokinetically. Plain tubes also penetrate the medium through the wall to transmit pressure to a manometer system.

These

sampling and manometer probes are located at 20mm depth intervals, but staggered in position, over 0.8m depth. Consequently, complete profiles of concentration changes in the suspension and of pressure variation can be measured during filter operation.

The column can be operated as a pressure filter up to 1 barg. The service system supplied comprises a pump, sump tanks, flow controller, Rotameter, control valves, tubing, sampling tubes and bank of water differential manometers.

**Technical Details:**

- Filter column: Clear acrylic, 100mm internal dia. x 1350mm long
- Gauze mesh size: 0.35mm
- Sump tanks: 2 – capacity 350 litres each
- Flow meter range: 0.5 – 5.0 litres/min
- Manometers: 41 tube multi-bank
- Pump rating: 0.37kW



## Equipments Exporters

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