



Series & Parallel Pump Apparatus (Fixed Speed) (SMT-FM-22-B)

This Series/Parallel Pump Test Rig enables students to measure the pump characteristic curves for centrifugal pumps. The introduction of a second pump to the Hydraulics Bench system allows the study of two pump performances, both in series and parallel operation. The unit is maintenance-free due to its robust construction. As a result of its clear layout, the unit is suitable for demonstrations and for student experiments. This accessory comprises a fixed speed pump assembly with interconnecting pipe works. It is installed with necessary pressure gauges and flowmeter for pump performance study. This unit is mounted on a support plinth which can be used in standalone operation.

TECHNICAL SPECIFICATIONS

Specifications:

- Compact stand-alone unit.
- Two identical centrifugal Pumps.
- Transparent PMMA tank as intake tank.
- Ball valves used to switch between series and parallel operation
- Manometers at inlet and outlet of each pump
- Rotameter for measuring flow rate.

Technical Data:

- Pumps:
 - Centrifugal qty=02
 - Power 1/2hp, 3000rpm
 - Max. flow rate= 35L/min H=30m
- Tank:
 - PMMA with PVC Fittings
- Measuring Instruments
 - Pressure inlet: -1 to 1.5Bar qty=02
 - Pressure Outlet: 0 to 2 Bar qty=01



Experimental Data:

- Investigation of pumps in series and parallel configuration
- Determining the head
- Recording the pump characteristics
- Determining the hydraulic power
- Determining the operating point