

Product Name :
Astra Scientific Multi Pump Test Rig

Product Code :
Fluid Mechanics Lab0021



Description :

Astra Scientific Multi Pump Test Rig

Technical Specification :

DESCRIPTIONS:

The designed and developed experimental Multi pump test rig is used for metering in many process-engineering areas. In food technology, for example, multi pumps enable the precise observation of mixing ratios in order to ensure consistent high quality of the products. In addition, pumps are leak-free and thus prevent germs from entering the piping system. This ensures that the high hygiene requirements that apply in food technology are observed. The pump in SMT-FM-41 has three pump heads. Each pump head conveys water from the feed tank into a tank with scale. The common stroke rate of the three pump heads is set at the switch box. The stroke of each pump head is set directly at the pump. Three overflow valves enable the user to set a counter pressure for each pump head. Manometers indicate the pressures on the intake and delivery side of each pump head. This enables students to examine the effect of the counter pressure on the flow rate and the mixing ratio. A stopwatch for the determination of the flow rate using the scaled tanks is included in the scope of delivery.

The microprocessor-based measuring technique is well protected in the housing. The measured values are transmitted directly to a PC via USB where they can be analyzed using the software included.

FEATURES:

- Measuring examination of a multi pump.
- Pump with 3 heads.
- Common stroke rate adjustable for all 3 heads.
- Stroke individually adjustable for each head.
- Tank to determine the flow rate.
- 4 manometers to measure the pressure on the intake and delivery side
- 1 feed tank.

SPECIFICATIONS:

- Pump:

Max. Head: each approx.10m.

Max. Suction head: each approx. 3m.

Flow Rate: 3x 0...18L/h.

- Volumetric tank 5L.
- Feed tank: 60L.
- 3 overflow valves:
- Adjustable pressure range: each 2...6bar.
- Measuring ranges:

Pressure (delivery side): 3x 0...10bar.

Pressure (intake side): 3x -1...0bar.

- Stroke rate: 1x 0...100min-1.
- Level 3x 0...20cm.
- 230V, 50Hz, 1 phase



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