

Product Name :
Centrifugal Pump Test Bed

Product Code :
CHINAELABC2590006



Description :

Centrifugal Pump Test Bed

Technical Specification :

The Advanced Centrifugal Pump Test Rig is a self-contained unit operated on closed circuit basis containing a sump tank.

The set-up consists of a Centrifugal pump coupled with a DC Motor.

Power input to the DC Motor is varied by means of a Thruster controlled DC Drive to vary the RPM of motor.

A RPM Indicator with Proximity sensor indicates the RPM of Pump.

Flow of water is measured by using measuring tank and stopwatch.

Vacuum gauge is fitted on suction line and Pressure gauge is fitted on delivery line to measure the pressure.

Centrifugal pumps are turbo machines that are used for conveying fluids.

The unit can be used to study a centrifugal pump and to record a typical pump characteristic curve.

The experimental unit includes a self-priming centrifugal pump, a ball valve on the outlet side and manometers on the inlet and outlet side.

An asynchronous motor drives it.

The speed is infinitely adjustable by using a frequency converter.

A ball valve is used to adjust the head.

The experimental unit is positioned easily and securely on the work surface of the pump draws in water from the tank on the flow rate is determined volumetrically by flowing back into the measuring tank.

FEATURES:

Characteristic curve of a centrifugal pump

Investigation of a centrifugal pump

Drive with variable speed via frequency converter

Determining the flow rate
Recording the pump characteristics for different speeds
Power and efficiency curves
Measuring the electrical drive power
Ball valve to adjust the head
Manometers on the inlet and outlet side of the pump
Digital display of speed and power
Measuring the inlet and outlet pressure
Determining the hydraulic power
Calculating the efficiency

SPECIFICATION:

Centrifugal pump, self-priming
Max. Flow rate: 3000L/h
Max. Head: 36,9m

Asynchronous motor:
Nominal power: 370W

Measuring ranges:

Pressure (outlet side): -1...5bar
Pressure (inlet side): -1...1,5bar
Speed: 0...3000min⁻¹
Power: 0...1000W
230V, 50Hz, 1 phase



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