LAB ENGINEERING

Email :
purchase@elabengineeringequipments.com
Phone: +91-9811375383

Product Name :	**Product Code :**
Computerized Reciprocating Pump Test Apparatus	TOUR0009

Description :

Computerized Reciprocating Pump Test Apparatus

Technical Specification :

The Computerized Reciprocating Pump Test Apparatus experimental unit provides the basic experiments to get to know the operating behavior and the important characteristic variables of piston pumps.
The test rig consists of a closed water circuit with water tank, a piston pumps with variable speed via a frequency converter and an air vessel.
The piston of the pump is mounted in a transparent housing and can be observed during operation.
The cycle that takes place (intake and discharge of water) can be shown clearly in the p-V diagram.
The pulsating pressure curve of the pump can be damped with the aid of the air vessel.
Flow rate and head are adjusted via a needle valve and overflow valve.
The experimental unit is fitted with sensors for pressure and flow rate.
One pressure sensor measures the pressure at the outlet of the pump; another one measures the pressure in the inside of the cylinder.
The position of the piston rod is measured by an angle sensor.
This allows the determination of the cylinder volume.
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:
Principle of operation of a piston pump
Determination of efficiencies
Recording of pump characteristics

Pressure curves of delivery pressure and cylinder pressure
Influence of pulsation damping
SPECIFICATION:
Gear transmission ratio: 1=7,5
Piston pump :
Speed: 30…180min-1
Max. Flow rate: 135L/h
Max. Head: 40m
Drive motor :
Power: 180W
Measuring ranges :
Pressure (cylinder): 0…5bar
Pressure (outlet): 0…5bar
Crank angle: 0…360°
Flow rate: 0,2…6L/min
230V, 50Hz, 1 phase
230V, 60Hz, 1 phase; 120V, 60Hz, 1 phase