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Product Name :
Modular Pump Test Set

Product Code :
LBNY-0005-16000025



Description :

Torque measurement for the dynamometer is by load cell, whilst speed measurement uses a magnetic type pick up. Pump suction and delivery heads are monitored by pressure transducers and the flowrate in the circuit can be accurately determined using the built in flow meter. The testing of such a wide range of pumps on a single test unit is made possible by the provision of quick release hose and drive couplings together with quick release pump fixing clamps, enabling changeover to be made easily and efficiently. All data is logged and displayed on the P.C. that is supplied with the unit. Data can be exported to a spreadsheet for processing.

A positive displacement Gear Pump is supplied as standard with the following pumps available as optional extras:

A positive displacement Vane Pump 40 lpm at 1500 rpm

A rotodynamic Channel Impeller Pump 26 lpm at 3000 rpm

A rotodynamic Centrifugal Pump - duty point of 120 lpm and 0.5 bar at 3000 rpm (max. flow at zero head 140 lpm, max head at zero flow 1.1 bar at 3000 rpm). A rotodynamic Axial Pump - maximum flow 50-60 lpm at 0.2 bar at 10000 rpm. (max head at zero flow 0.5-1 bar with severe cavitation), impeller diameter 38 mm.

A positive displacement Piston Pump - stroke 19.5 mm, bore 20 mm, flow 19 lpm at 1040 rpm, maximum pressure head 67 bar, limited by relief valve to 5 bar

Experimental Capability:

Determination of volumetric and total efficiency

Variation of pump capacity with speed

Head / flow rate plots at various constant speeds

Measurement of brake power input

Cavitation

Specific speed analysis.

Technical Specification :

Features:

Modular design allows for the quick changeover of pumps

Torque and speed measurement

Positive displacement and roto-dynamic pumps available

Self-contained mobile unit

Suction and delivery throttle valves

Wide range of pump types

Pulse wheel flow meter for flow measurement

Easy and efficient changeover of pump drive and pump circuits

P.C. based data acquisition and display

Inverter controlled AC motors

Trunnion mounted 2kW AC dynamometer.



Laboratory Instrument India