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Product Name :
Single-Cylinder Combustion Engine

Product Code :
LBNY-0005-1120003



Description :

The system comes complete with instrumentation, including rpm measurement, torque (from which power can be calculated), airflow and exhaust temperature. This multi-purpose test rig is designed to accept a series of gasoline and diesel engines available separately. It utilizes an eddy-current dynamometer to provide a variable load on the engine, enabling the characteristic power and torque curves to be reproduced in the laboratory dependent upon which sensor options are ordered. This provides real-time monitoring of the various sensors, with a wide range of data logging and graphical display options. Both the dynamometer and throttle can be controlled electronically, which makes installation into a closed test cell straightforward, and enables remote operation. Other optional sensors can be purchased to further enhance the teaching capabilities of the including cylinder pressure sensors and fuel consumption.

The unit is designed to be linked to the user's computer or touch screen, linked to supplied software with sophisticated control and data acquisition.

The whole system is designed to be linked to a computer using the software provided.

Technical Specification :

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Petrol Engine

Displacement: 163cm

Power output: 4.8HP (3.5kW)

Diesel engine

Displacement: 243cm

Power output: 4.8HP (3.5kW)

Dynamometer Data

Cooling: Air-cooled

Features:

Determination of specific fuel consumption (option)

Definition and use of an electronic cylinder pressure indication system (option)

Determination of volumetric efficiency and lambda (fuel-air ratio)

Plotting of torque and power curves

Determination of the frictional power of the engine

Cylinder pressure measurements

Exhaust calorimetry

P-V diagram (optional sensor required).



Laboratory Instrument India