DOVER SUPPLY PTE LTD

ENGINE INSTRUMENT- LEUTERT SERIES
(Digital pressure indicator- DPI-2)

APPLICATIONS:

Electronic indicator to measure dynamic and static pressures. Especially designed to analyze and adjust diesel engines and Fuel injection pressure measurement

FUNCTIONAL CHARACTERISTICS :

The DPI (Digital Pressure Indicator) is a powerful and easy-to-use electronic indication device. It serves to analyze 2- and 4-stroke large diesel engines in connection with the temperature compensated pressure sensor, a specially developed measuring procedure allowing a high-accuracy level with the measuring results.
An optional TDC sensor relates the pressure curve to the crankshaft top position. When using the optional FI-Sensor, the fuel injection pressure is measured. By using the Crank Angle Encoder or Incremental Encoder the pressure values are measured in correlation to the actual crankshaft angle.
While the measuring series is being recorded, the data can be read off the LC display of the handheld DPI unit. After that, the data sets are saved to memory and can be transferred to the PC via the serial interface on completion of the measuring series. The data may be depicted and administered with the DPI software.
In order to connect the pressure sensor, the engine to be analyzed must be equipped with a standard indication valve (Thompson connection).
The DPI system works independently of the mains voltage.

HANDHELD DATA ACQUISITION UNIT

The electronic components of the DPI are located in handy, portable aluminum housing. Figure 2 below shows the handheld data acquisition unit.

Pressure sensor

SENSORS

The DPI system includes the pressure sensor depicted in fig. 1 which serves to determine the cylinder pressure in diesel engines. It is characterized by a high level of precision and rugged design. Additionally, a fuel injection sensor is available to gather the information on the injection process The pressure and the fuel injection sensor are connected to the handheld data acquisition unit by means of an armored cable.

SPECIFICATIONS:

Menu controlled operation
Sufficient memory to analyze up to 32 cylinders
Measurement and display of cylinder pressure in individual cycles or in up to 16 cycles on average
Fuel injection pressure measurement
Storage of motor and measurement parameters
Selection of various filters
High sensitivity through 12-bit A/D converter and sampling frequency up to 16.6 kHz
Real time clock
Integrated rechargeable batteries
Interface for PC (RS 232, adapter for USB)
Top dead center (TDC sensor)
Crank angle encoder
(CAE, necessary for low speed 2-stroke engines only)
Incremental encoder (IE) with up to 2048 steps (for 2-stroke engines only)

** Non-standard specifications from above can be customize on indent basis.
***All information subject to changes without prior notice owning to continuous development.