

SIMPLE HANDLING
NO NEED FOR INSTALLATION

Digital Pressure Indicator DPI



Cylinder Pressure Monitoring

The Digital Pressure Indicator DPI measures dynamic pressures. It is designed to analyze the internal combustion curve of large two and four stroke diesel engines. The measurement is performed via an indicator valve.

Description

The electronic pressure indicator DPI, also known as pressure mean indicator, is designed to measure dynamic cylinder pressures of large two- and four-stroke Diesel and gas engines.

It is a state-of-the-art MIP-system with a very convincing price-performance ratio. The high accuracy data collected by the DPI is essential for optimizing engines' performance and reducing emissions.

The self-explanatory handling of the Leutert pressure indicator allows even unexperienced operators to take successful measurements in few minutes.

Following values can be monitored by using the DPI:

- Power/MIP calculation
- P-Max
- PV-plot
- P-comp
- DP (Derivative plot)
- RPM

The DPI is the most straightforward solution to reach optimum performance of your engine.

Every single device is being tested and calibrated according to our ISO 9001 quality standards and will be supplied with a calibration certificate proving the accuracy of the device.

Features

- No need to install TDC sensors on the engine for power calculation
- Easy handling and Plug'n'Play installation of the software and hardware results in less user related problems
- Excellent price-performance ratio
- No copy limitations of the software
- Usage of standard batteries (easily replaceable by user)
- Continuous operation of more than 6 hours
- High accuracy
- Usage of a high quality sensor

Pressure sensor

The heart of the instrument is the pressure sensor. It is characterized by a high level of precision and rugged design. Using the latest technology its accuracy and lifetime are setting the standard.

The type of quartz sensor used for the DPI has passed trials of 16,000 hours non-stop operation and is accepted world wide by all engine manufacturers. Furthermore the sensor has a calibration interval of approx. 8,000 hours.



Pressure sensor

Hand-held data acquisition unit

A battery powered hand-held provides important data for engine diagnostics and condition monitoring directly at the point of use. Its electronics are incorporated in a tough water resistant body.



Hand-held data acquisition unit

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Technical Specifications

Pressure range	0 to 300 bar
Engine range	50 to 5,000 rpm
Battery capacity	> 6 hrs
Operating temperature	0 to 55°C hand-held unit 0 to 350°C pressure sensor (short-term higher)
Weight (approx.)	440 gr handheld unit 470 gr pressure sensor
Dimensions	211 x 100 (81) x 45 (26) mm hand-held unit Ø = 60 mm , L = 210 mm pressure sensor
Accuracy	< 0.5%
A/D sampling precision	16 bit (0.0092 bar/sample)
Memory capacity	50 engines, 24 cylinders each
Battery type	Standard AA (4 pcs.), rechargeable
Battery charging	via USB or adapter
Display	20 x 4 alphanumeric, backlight, high contrast
Standard connection	W 27 x 1/10"



DPI protective cover (optional)

Comparison of Leutert Indicators

	DPI	Type50	MSI-3
Software based power/MIP calculation	✓	○ ¹⁾	—
Analyzing Software	✓	—	—
Electronic data transfer & sharing	✓	—	—
P-Max	✓	✓	✓
PV-Plot	✓	✓	—
P-comp	✓	✓	—
DP (Derivative plot)	✓	—	—
RPM	✓	—	—
Suitable for 2- & 4-stroke engines	✓	✓ ²⁾	✓

- ¹⁾ Using Planimeter with manual calculation, and engines fitted with an indicator drum drive
²⁾ Choose correct indicator type according to RPM range



Manual available in English, Russian, Mandarin,
and Spanish