

PREMET®

Type L, LS and XL Electronic Indicators

PREMET Indicators

- robust
- precise
- reliable
- easy handling
- approved quality



Standard version
with integrated pressure
sensor

NEW FEATURES!

- Higher resolution
- Optional vibration monitoring



Optional version:
Pressure sensor with armoured wire.

PREMET Indicators

are designed and manufactured for use on diesel and gas engine applications for the marine market and mobile and stationary power stations.

The equipment is not affected or restricted by heavy fuel oil.

Main applications:

- Combustion engines
- Compressors
- Hydraulic-equipments
- Steam piston engines
- Integral motors

PREMET Indicators

are measuring and recording precisely with the highest resolution

- Peak of pressure-pmax
- Course of pressure p/alpha
- Max. increase in pressure dp/da

You can analyse:

- Indicated power (KW/hp)
- Mean indicated pressure (MIP)
- Power distribution
- Ignition-pressure distribution
- Revolution (rpm)

PREMET Indicators

meet the highest Quality performances:

- GL-Type approved
- CE-approval
- Approval according to ISO 9001 (LRQA Lloyds)

Quality with the experience of 15 years development and manufacturing of electronic indicators, 90 years experience of mechanical indicators.

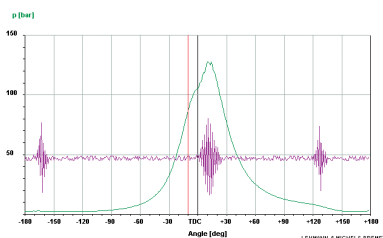


Since 1911
Measuring
Instruments

PREMET®

PREMET software offers several diagrams to analyse combustion and pressure changes in the cylinders. By using the cursor it is possible to move along any curve and to receive the exact measured values shown in the table. A series of measurements is comparable to any other series of measurements without any restrictions. The PREMET software includes a compression program to send data files per e-mail or satellite fast and effectively.

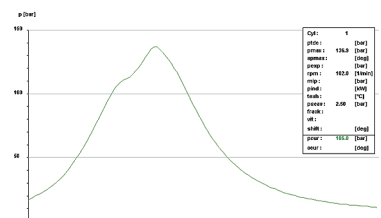
NEW! The PREMET indicators now have even higher resolution and feature an optional vibration diagram. In order to measure vibration an ACL-sensor (acceleration sensor measuring the transfer of energy within and through a conductor) is needed. A vibration diagram displaying valve opening, combustion and valve closing is provided to ease identifying of malfunctions. Some common problems like broken piston rings, liners or valves can easily be indicated.



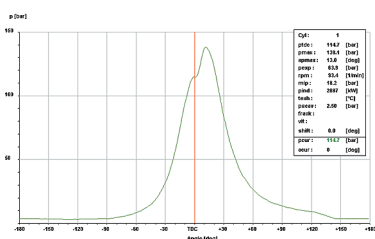
Vibration diagram



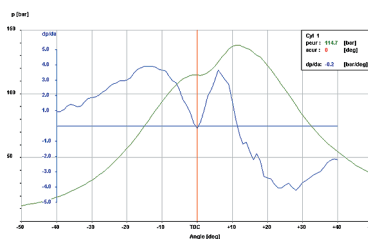
Pmax



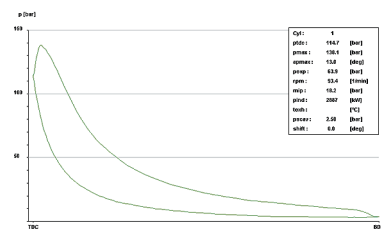
Pressure vs. time



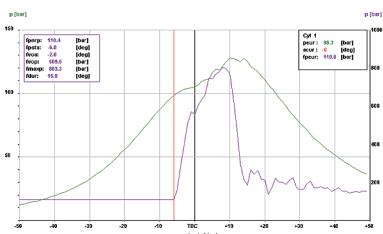
Pressure vs. crank angle



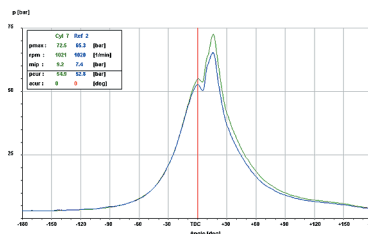
Pressure rise vs. crank angle



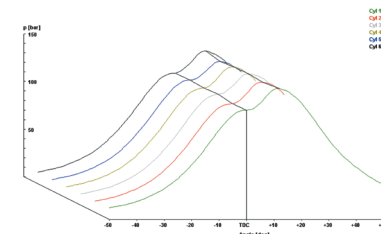
Power diagram



Combustion + Injections Diagram



Reference comparison



3-D Diagram



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PREMET	L	L(h)	LS	LS(h)	XL	XL(h)	XL-MS	XL-MS(h)
Power diagram vs. crank angle curve					●	●	●	●
Comparison with reference measurements			●	●	●	●	●	●
Pmax	●	●	●	●	●	●	●	●
Revolution	●	●	●	●	●	●	●	●
Measurement of injection pressure (fuel)			◐	◐	◐	◐	◐	◐
Acceleration monitoring (ACL)			◐	◐	◐	◐	◐	◐
Pressure vs. time			●	●	●	●	●	●
Deviation of pressure peak vs. crank angle					●	●	●	●
Compensation of torsional force					●	●	●	●
Compensation of torsional vibration							●	●
Units in different languages			●	●	●	●	●	●
Pressure sensor with armoured cable (h)		●		●		●		●
TDC-Sensor					●	●	●	●
TDC-Sensor with 360° resolution impulse sensor							●	●
TDC-Control by software					●	●	●	●

Keylegend: Standard ● Optional ◐

	Analyse software	Printer	Order no.	Model (h) with armoured cable, order no.
PREMET L	Not available	Not available	28040005	28040006
PREMET LS	DOS/Win 95 up to XP	Optional	28040003	28040078
PREMET XL	DOS/Win 95 up to XP	Optional	28040016	28042055
PREMET XL-MS	DOS/Win 95 up to XP	Optional	28040325	28040326
PREMET XL-**/Fuel	DOS/Win 95 up to XP	Optional	On request	On request
PREMET XL-**/ACL	DOS/Win 95 up to XP	Optional	On request	On request



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Technical Data	L	LS	XL	XL-MS	XL-**(fuel)
Range of ignition pressure	0 to 250 bar	0 to 250 bar	0 to 250 bar	0 to 250 bar	0 to 250 bar
Range of injection pressure	not included	not included	not included	not included	to 1600 bar
Range of revolutions (rpm)	40 to > 1.800	40 to > 1.800	40 to > 1.800	40 to > 1.800	40 to > 1.800
Max. no. of cylinders	20	20	20	20	20
Max. no. of measurements/cylinder	20	20	20	20	20
GL type approval	●	●	●	●	●
Manufactured acc. ISO 9001	●	●	●	●	●
CE - approval	●	●	●	●	●
Compensation of temperature	●	●	●	●	●
Type of accumulator	Ni-MH	Ni-MH	Ni-MH	Ni-MH	Ni-MH
Max. battery capacity	ca. 120 Cyl.	ca. 120 Cyl.	ca. 120 Cyl.	ca. 120 Cyl.	ca. 120 Cyl.
PC-interface	○	●	●	●	●
Software	○	incl.	incl.	incl.	incl.
Direct print	○	Option	Option	Option	Option
Stainless steel-housing with isolated thermogrip	●	●	●	●	●
Display backlight	●	●	●	●	●
Temperature change corrected pressure sensor	●	●	●	●	●
Accuracy	better than 1,6	better than 1,6	better than 1,6	better than 1,6	better than 1,6

Keylegend: yes ● no ○

Your support service:



Subject to change without notice