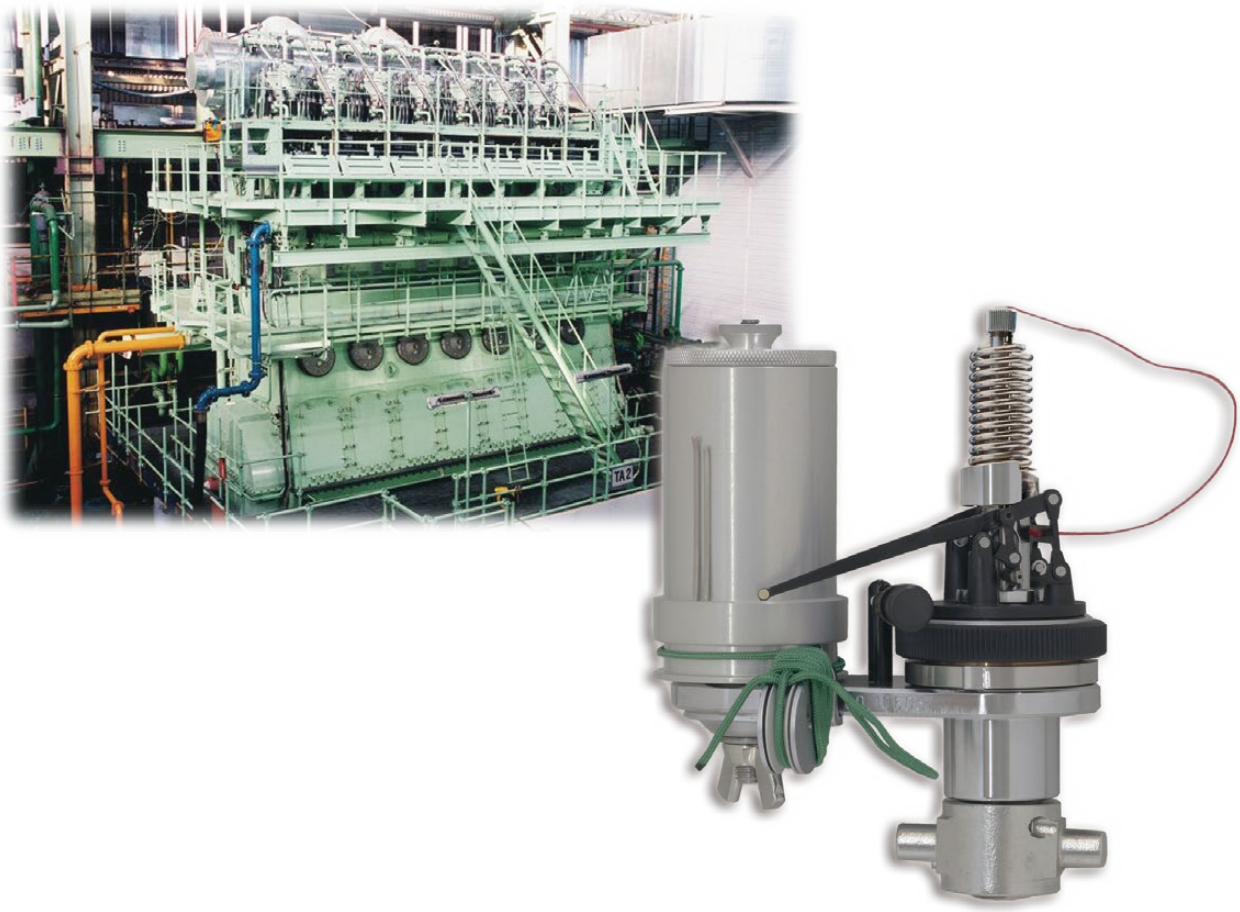
LEUTERT™ Engine Indicator Type 50

System Maihak



Cylinder Pressure Monitoring

The mechanical pressure indicator type 50 measures dynamic pressures. It is especially designed to analyze large two stroke Diesel engines.

Description

Leutert engine indicators are used on diesel engines, gas engines, air compressors, pumps, etc. A metal stylus draws a clear pressure-path diagram which records the pressure curve within the engine cylinders as influenced by the piston stroke. The recording drum can be moved by means of a string, which is pulled manually or by the engine. If the drum is driven by the engine, the diagram may be planimetered.

Our indicators are designed to cover various ranges of speed and rates of pressure-change.

It will always be advisable to operate with small diagrams as far as possible, in consideration of the oscillating masses. In doubtful cases it is suggested to forward particulars of the operating conditions, and on orders to give particulars regarding kind of engine, pressures to be measured, engine stroke and r.p.m.

The selection of the correct indicator size depends not only on the r.p.m but also on the rate of pressure rise at time unit dp/dt. If the above stated limit values are exceeded, the resulting acceleration would cause too high an indication of pressure. Size of piston and spring are selected such that the maximum natural frequency is attained. With regard to the accelerations, for best results the diagram length should be progressively reduced as the r.p.m. approaches the designed maximum of the indicator.

Type 50 complete in wooden box

Features

- Individually calibrated high accuracy heat treated springs
- Unchanged, rugged and proven reliable Maihak design
- Easy and simple operation by unskilled operator
- Cheapest way to analyze your engine
- Ready-to-use equipment

Technical specifications

Measuring range	:	see spring table below
Engine range	:	up to n = 300 rpm or max. dp/dt = 9 x 10^3 bar/sec
Max. diagram	:	50 mm/80 mm (height/length)
Drum diameter	:	50 mm
Paper size	:	180 mm x 65 mm
Dimensions	:	165 mm x 130 mm x 90 mm
Weight	:	1.5 kg (without wooden box) 4.4 kg (with wooden box)
Standard connection	:	W 27 x 1/10"

Standard accessories

1 wooden box, 1 spring, 1 measuring scale, 1 block indicator paper each 40 sheets, 1 cord tightening hook, 1 oil can for piston and links, 1 screw driver, 1 hollow spanner, 1 cylinder cleaner, 1 stand for instrument, 1 tube incl. 5 recording pencils, 1 operating instructions

Table of Indicator Springs Type 50

Piston	Scale	Max. Pressure	Spring-No.	Part-No.
1/10	0.35 mm/bar	140 bar	50 / 14 bar	4651.0.71.14000
1/10	0.30 mm/bar	160 bar	50 / 16 bar	4651.0.71.15000
1/10	0.25 mm/bar	200 bar	50 / 20 bar	4651.0.71.16000
1/10	0.20 mm/bar	250 bar	50 / 25 bar	4651.0.71.17000
1/10	0.15 mm/bar	300 bar	50 / 30 bar	4651.0.71.18000

Piston diameter 6.41 mm

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