



ENGINE INSTRUMENTS — LEUTERT SERIES

(Engine indicators – Type 30/1)

LEUTERT Engine Indicators have a world-wide reputation for precision accuracy and perfect design

Outstanding Features of LEUTERT Engine Indicators

- Minimum reciprocating mass
- Pressure springs are double-coiled. They operate in tension.
- Pistons, cylinders and springs are detachable and interchangeable.
- Ease and simplicity in handling and operation.
- Rugged design.



| | | | |
|--------------------------|---|------|--------------------------|
| Measuring Range: | see spring table below | | |
| Engine Sizes: | Up to n = 1000 R.P.M. or max dp/dt = 24 x 103 bar/ sec. | | |
| Max Diagram Height: | 30mm | | |
| Max Diagram Length: | 60mm | | |
| Drum Diameter: | Standard | 40mm | - Paper Size: 145 x 45mm |
| | Special Modification | 30mm | - Paper Size: 115 x 45mm |
| Dimension of Instrument: | 120 x 105 x 85mm | | |
| Natural Frequency/ sec.: | 320 / √f +20 (f = measuring scale) | | |
| Standard Connection: | W 27 x 23.75 Dia. 10 T.P.I. | | |
| Weight: | 1.1 kg (without wooden box) | | |
| | 4.0 kg (with wooden box) | | |

| | | Table of Indicator Springs Type 30 | | | | | | | | | | | | | | | | |
|-------------|-------|------------------------------------|------------|----------|----------|----------|-------------|-------------|--------------|--------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
| Piston Size | Ø mm | Part. No. 4611.071. | 02000 | 03000 | 04000 | 05000 | 06000 | 07000 | 08000 | 09000 | 10000 | 11000 | 12000 | 13000 | 14000 | 15000 | 16000 | 17000 |
| | | Spring - No. | 30/1.5 bar | 30/2 bar | 30/3 bar | 30/5 bar | 30/6 bar | 30/10 bar | 30/12 bar | 30/14 bar | 30/16 bar | 30/18 bar | 30/20 bar | 30/25 bar | 30/30 bar | 30/35 bar | 30/40 bar | 30/50 bar |
| 1/1 | 20.27 | Scale mm/bar max preassure_bar | 20 1.5 | 15 2 | 10 3 | 6 5 | 5 6 | 3 10 | 2.5 12 | 2.25 14 | 2 16 | 1.75 18 | 1.5 20 | 1.2 25 | 1 30 | 0.9 35 | 0.6 40 | 0.6 50 |
| 1/2 | 14.33 | Scale mm/bar max preassure_bar | | | | | 2.5 12 | 1.5 20 | 1.25 24 | 1.125 28 | 1 32 | 0.875 36 | 0.75 40 | 0.6 50 | 0.5 60 | 0.45 70 | 0.4 80 | 0.3 100 |
| 1/5 | 9.08 | Scale mm/bar max preassure_bar | | | | | 1 30 | 0.6 50 | 0.5 60 | 0.45 70 | 0.4 80 | 0.35 90 | 0.3 100 | 0.24 125 | 0.2 150 | 0.18 175 | 0.16 200 | 0.12 250 |
| 1/20 | 4.53 | Scale mm/bar max preassure_bar | | | | | 0.25 120 | 0.15 200 | 0.125 240 | 0.113 260 | 0.1 320 | 0.09 360 | 0.08 400 | 0.06 500 | 0.05 600 | 0.045 800 | 0.04 1000 | 0.03 1000 |

Standard Accessories

- 1 wooden case
- 1 spring
- 1 measuring scale
- 1 block indicator paper (40s)
- 1 coil tightening hook
- 1 oil can for polish and links
- 2 screw drivers
- 1 flat pliers
- 1 cylinder spanner
- 1 spanner connection nut
- 1 cylinder cleaner
- 1 stand for instrument
- 1 spring table
- 1 instruction manual