



## ENGINE INSTRUMENTS- LEUTERT SERIES (Engine indicators- Type 50Z1)

### Applications:

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



### Specifications:

Measuring Range: see spring table below  
 Engine Sizes: Up to n = 400 R.P.M. or max dp/dt = 18 x 103 bar/ sec.  
 Max Diagram Height: 50mm  
 Max Diagram Length: 80mm  
 Drum Diameter: Standard 50mm - Paper Size: 180 x 65mm  
 Special Modification 40mm - Paper Size: 145 x 65mm  
 Dimension of Instrument: 165 x 130 x 90mm  
 Natural Frequency/ sec.: 270 / √f (f = measuring scale)  
 Standard Connection: W 27 x 23.75 Dia. 10 T.P.I.  
 Weight: 1.5 kg (without wooden box)  
 4.4 kg (with wooden box)

Table of Indicator Spring Type 50ZI																		
Piston Size	Ø mm	Part. No 4651.071	03000	04000	05000	06000	07000	08000	09000	10000	11000	12000	13000	14000	15000	16000	17000	18000
		Spring- No	50/2 bar	50/2.5 bar	50/3 bar	50/4 bar	50/5 bar	50/6 bar	50/7 bar	50/8 bar	50/10 bar	50/11 bar	50/12 bar	50/14 bar	50/16 bar	50/20 bar	50/25 bar	50/30 bar
1/1	20.27	Scale mm/bar	2 5	20	16	1 2	1 0	8	7	6	5	4.5	4	3.5	3	2.5	2	1.5
		max pressure bar	2	2.5	3	4	5	6	7	8	10	11	12	14	16	20	25	30
1/5	9.06	Scale mm/bar								1.2	1	0.9	0.8	0.7	0.6	0.5	0.4	0.3
		max pressure bar								40	50	55	60	70	80	100	125	150
1/10	6.41	Scale mm/bar								0.6	0.5	0.45	0.4	0.35	0.3	0.25	0.2	0.15
		max pressure bar								80	100	110	120	140	160	200	250	300
1/20	4.53	Scale mm/bar								0.3	0.25	0.02 5	0.2	0.17 5	0.15	0.12 5	0.1	0.07 5
		max pressure bar								16 0	200	220	240	280	320	400	500	600

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

\*\* Non-standard specifications from above can be customize on indent basis.

\*\*\* All information subject to changes without prior notice owing to continuous development