



Features:

- Dial bore gauges provide a two point contact system for comparative measurement of component holes and will also detect ovality and tapers in bores.
- These instruments are fitted with independent spring loaded centralising mechanisms, which ensure the measurement is taken across the true diameter of the component.
- All instruments are supplied in boxes complete with probes and extensions.

General Specification

Range	Stem Length	Overall Length	Dial Indicator			
			Dial Diameter	Graduations	Reading	Travel
50 to 150	150	340	57	0.01	0 to 100	3

Dimensions : Millimetres

Probe Details

Range	Probe Type	Number of Probes	Probe Ranges	Add. Ext.
50 to 150	Threaded	5	50 to 62, 62 to 74, 74 to 86, 86 to 98, 98 to 100	60

Dimensions : Millimetres

Fixed Probe Type:

1. Remove dial indicator from protective shroud.
2. Insert indicator stem into top of bore gauge.
3. Position indicator into bore gauge stem with one revolution of dial gauge hand. Use knurled thumbscrew on split clamp to clamp indicator.
4. Select probe and shim washer to get nearest to required measurement size.
Example : Measurement size: 2.750 inches
Select probe 2.6 inches shims 0.1 and 0.05 = 2.75 inches
5. Fit shim washers behind datum flange on probe.
6. Remove knurled retaining nut from bore gauge foot and insert probe with shims.
Replace retaining nut and clamp probe positively.
7. At this stage it is necessary to offer the bore gauge to a setting master at the required nominal size.
This can be a ring gauge, caged gauge blocks with protruding end faces or a pre-set micrometer.
8. Insert bore gauge probes into the ring gauge or between the faces of the setting master.
9. Rock bore gauge in ring or between the setting master faces to achieve the reversal point of the indicator hand.
If this does not coincide with the zero on the dial, re-position dial gauge down bore gauge stem to achieve this position.
The final setting of zero can be made by rotating dial gauge bezel so that the zero coincides exactly with the reversal point at the indicator hand.
Re-check in setting gauge.
Finally replace protective shroud and clamp firmly to top of bore gauge stem.

Screwed Probe Type:

1. Remove dial indicator from protective shroud.
2. Insert indicator stem into top of bore gauge.
3. Position indicator into bore gauge stem with one revolution of dial gauge hand. Use thumbscrew on split clamp to clamp indicator.
4. Select a probe with a range which suits the required measurement size.
5. Fit knurled lock nut to probe.
6. Screw probe into bore gauge foot.
7. Select setting master (see previous instructions).
8. Insert bore gauge probes between setting master faces and adjust screwed probe to bring dial gauge hand to zero position.
9. Rock bore gauge probes in ring or between the setting master faces to achieve the reversal point of the dial indicator hand.
10. Fine adjust dial hand to zero by either adjusting screwed probe, moving dial indicator up or down in bore gauge and finally revolving bezel to obtain final zero.

Taking Measurements:

1. Insert pre-set bore gauge into component hole.
2. Rock bore gauge in hole.
3. Note reversal point of dial gauge hand.
4. Add or deduct the variance from zero to the setting master nominal size, to obtain the measured diameter of the component hole.

Part Number Table

Description	Part Number
Dial Bore Gauge, 50 to 150mm	55-200-150

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