

Coating Thickness Measurement

MiniTest 70E / 70B
MiniTest 650E / 650B



Focusing on the substance

- Gauges for use on the shop floor, in the automotive or other industries and quality inspection
- High degree of ergonomics, technology and product quality
- For all non-magnetic layers such as paint, enamel, chrome, galvanic zinc plating on steel
- For all insulating coatings such as paint, anodizing, ceramics on non-ferrous metals such as aluminium, copper, zinc die cast, brass, etc.

Single-button operation – switch on and take readings

MiniTest 70E and MiniTest 70B

Especially designed for quick and easy non-destructive coating thickness measurement, the economical and basic models **MiniTest 70E** and **70B** are suitable for all non-magnetic coatings applied on steel and insulating coatings applied on non-ferrous-metals.

Focusing on easy operation, the small and handy gauges are the ideal tool for the mobile on-site use. No prior knowledge or instructions are required: Just switch on and proceed on measurement. The acquisition of a reading is confirmed by an audible signal.

A built-in dual sensor FN is available to identify the substrate material. According to the material, the gauge will automatically set to the matching measuring principle: magnetic induction or eddy-currents.

Supply schedule

- Gauge with built-in sensor
- 1 AA (Mignon) battery
- 2 zero reference plates
- operating instructions
- 1 control standard
- belt pouch

Technical Data

| | 70E FN | 70B FN |
|-------------------------------------|---|---|
| Measuring range | F: 0...3 mm / 120 mils N: 0...2.5 mm / 100 mils | F: 0...3 mm / 120 mils N: 0...2.5 mm / 100 mils |
| Measuring uncertainty | ± (3 µm + 5 % of reading) ± (0.12 mils + 5 % of reading) | ± (2 µm + 3 % of reading) ± (0.08 mils + 3 % of reading) |
| Resolution | 2 µm / 0.08 mils | 1 µm / 0.04 mils |
| Geometry of measuring sample | | |
| Curvature radius, convex | > 50 mm / 2" | > 10 mm / 0.4" |
| Curvature radius, concave | > 100 mm / 4" | > 50 mm / 2" |
| Diameter of measuring spot | > 50 mm / 2" | > 50 mm / 2" |
| Minimum substrate thickness | F: 0.7 mm / 28 mils N: 0.1 mm / 4 mils | F: 0.7 mm / 28 mils N: 0.1 mm / 4 mils |
| Units of measurement | metric / imperial (user selectable) | metric / imperial (user selectable) |
| Calibration procedure | factory calibration | factory calibration, zero calibration |

MiniTest 650E and MiniTest 650B

The robust models **MiniTest 650E** and **650B** are particularly suited for the rough environment in the industrial corrosion protection. Thanks to their rugged design, these wear-resistant coating thickness gauges provide reliable high-accuracy readings throughout an extended service life. Particularly adapted to harsh working environments, the two models are most convenient for use in the automotive industry, in ship-yards, steel and bridge construction. Their rubber protection and durable housing provide excellent protection against shocks and impacts.

The models **MiniTest 650E F and MiniTest 650B F** measure all non-magnetic coatings such as paint, enamel, chrome or galvanic zinc plating on steel whereas the dual models **MiniTest 650E FN and B FN** are also suited for all insulating coatings on non-ferrous metals such as paint, anodizing, or ceramics applied to aluminium, copper, zinc die-cast, brass, etc.

The external, extremely wear-resistant one-pole measuring sensor connects to the gauge via a one-meter cable. The dual sensor FN identifies the ferrous or non-ferrous substrate and automatically adjusts to the correct measuring mode. The measuring principle conforms to DIN, ISO, BS and ASTM.

Supply schedule

- Gauge incl. sensor
- 3 AAA batteries
- 1 and/or 2 zero reference plate(s)
- control standard
- operating instructions
- soft pouch

Technical Data

| | 650E | | 650B | |
|-------------------------------------|---|--------------------|---|--------------------|
| | F | FN | F | FN |
| Gauge type | | | | |
| Measuring range | 0...3 mm / 120 mils | 0...2 mm / 80 mils | 0...3 mm / 120 mils | 0...2 mm / 80 mils |
| Measuring uncertainty | ± (3 µm + 5 % of reading) ± (0.12 mils + 5 % of reading) | | ± (2 µm + 3 % of reading) ± (0.12 mils + 5 % of reading) | |
| Resolution | 2 µm / 0.08 mils | | 1 µm / 0.04 mils | |
| Geometry of measuring sample | | | | |
| Curvature radius, convex | > 50 mm / 2" | | > 10 mm / 0.4" | |
| Curvature radius, concave | > 100 mm / 4" | | > 50 mm / 2" | |
| Diameter of measuring spot | > 50 mm / 2" | | > 50 mm / 2" | |
| Minimum substrate thickness | F: 0.70 mm / 28 mils N: 0.1 mm / 4 mils | | F: 0.7 mm / 28 mils N: 0.1 mm / 4 mils | |
| Units of measurement | according to model µm/ mm or mils/inch | | according to model µm/ mm or mils/inch | |
| Calibration | factory calibration | | factory calibration, zero calibration | |

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