Proofmaster M



Top-Of-The-Line Instrument in the Family of Leak Test Instruments

Proofmaster M is the instrument of choice whenever an extreme user-friendliness is required. It is the ideal assistant in the repair service, in specialised trade outlets, in manufacturing and in the watch-testing lab. This professional instrument draws the attention by its wholly automated "close and test" sequence, its intuitive operation with a colour touch screen and not least by its excellent design.

The 9 pre-defined programs and the 45 free programmable test programs ensure that all watches will be reliably tested. Tests can be performed with up to three different pressure values (-0.8 to +10 bar). **Quick Select** generates based of the selection of watch characteristics the ideal test program. The instrument, equipped with a USB interface, can be networked by using the optional Proofmaster M/S software.



Technical Data

Measuring principle

Analysis of the watch case deformation under pressure and/or vacuum.

Test programs

Quick Select

Automatic generation of the ideal test program based of the selection of watch characteristics.

Pre-defined programs

Nine pre-defined test programs optimised for different types of watches.

Customer-Specific Test Programs

45 measuring programs in which all measurement parameters and tolerances can be freely selected. Test sequences with 1 to 3 different test pressures. Alphanumeric entry of the watch model.

Leak Finder Program

Special program for the localisation of the watch leakage in the water.

Test cycle

Automatic test cycle with one or two pressures, respectively with vacuum and pressure. Automatic locking and release of the test chamber.

Vacuum and pressure range

Vacuum: selectable from -0.2 to -0.8 bar in steps of -0.1 bar. Pressure: selectable from 0.2 to 10.0 bar in steps of 0.1 bar.

Test time

Automatic determination of the required test time based on the programmed tolerance values, the measurement resolution and the measured deformation. Alternatively, manual entry from 15 s to 600 s. Automatic repetition of measurement in case of ambiguous result.

Stabilisation time

Automatic transition from stabilisation to test once the necessary stability has been reached. Alternatively, manual entry from 15 s to 300 s.

Tolerances

For Quick Select respectively pre-defined programs default values are deposited. Entry in %/min performed manually when customer-specific programs are used.

Measurement of the deformation

Measurement range: -300 to +1000 μ m. Resolution of the display: 0.01 μ m. Resolution of the sensor: typical 0.02 μ m.

Limit of watch size

Diameter: 70 mm. Thickness: 28 mm.

Width due to wristlet: 85 mm. Height of the watch-support: 75 mm.

Display of the results

Regeneration percentage of the deformation for a measuring time of one minute.

Range 0 to 9.9%, 0.1% resolution.

Automatic leak proof/leaky evaluation.

Continuous display during measurement of the deformation and test pressure. Status indication for the examination and countdown counter of the remaining measurement time. Date and time display.

Language choice

English, German, French, Spanish and Italian.

Compressed air connection

Pressure at least 1 bar higher than the required test pressure, maximally 12 bar. Built-in vacuum generator.

Interfaces

USB: for the connection of a PC.

RS232: for the connection of the Witschi thermo printer.

Details

Colour TFT touch screen (320 x 240 dots), illuminated. Plastic housing, anthracite colore.

Front panel: aluminium, colourless anodised.

Test chamber unit: aluminium casting, grey lacquered.

Dimensions: 245 x 240 x 240 mm (w x h x d).

Weight: 6.7 kg.

Mains connection: mains adapter for 230 $V\sim$ or 120 $V\sim$, 1.2 A

Accessories

Compressor JunAir 6-10, 11 bar with safety outlet, water separator and rustproof reservoir 10 l.

Art. 97.91.101

Witschi Thermo printer with Item JB01-MCP7810 graphic mode, universal mains adapter $90 \text{ V} \sim -260 \text{ V} \sim$, cable and 1 paper roll.

Thermo paper, roll. Item JB01-MM58-DPU20-N

Autoprint: PC software to capture and print out the measuring results.

Proofmaster M/S: PC software Item 64.55.792PK1 for parameterisation, storage of the measuring results and recording of the deformation curve. Multichannel from 1 to 8 channels (USB). Traceability by networking (WiCoTrace).



Technical details subject to changes

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