

# Proofmaster® M Automat



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

Proofmaster M Automat 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 on 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 on 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 10 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 10 s to 600 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 µm.  
Resolution of the display: 0.01 µm.  
Resolution of the sensor: typical 0.02 µm.

### 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: 245x240x240 mm (w x h x d).  
Weight: 6.7 kg.  
Mains connection: mains adapter for 230 V~ or 120 V~, 1.2 A.

### Accessories

Compressor JunAir 6-10, 11 bar with safety outlet, water separator and rustproof reservoir 10 l.	97.91.101
Thermo printer Bluetooth	Art. JB01-SLK-TE25-SS
Autoprint: PC software to capture and print out the measuring results.	64.55.901PK1
Proofmaster M/S: PC software for parameterisation, storage of the measuring results and recording of the deformation curve. Multichannel from 1 to 8 channels (USB). Traceability by networking (WiCoTrace).	64.55.792PK1