

# Elmaspheric

## Leak detector



### Elma Order Nos

elma-spheric	102 4001
Mains plug 210 - 240 V ~	690 070 0000
Mains plug 110 - 130 V ~	690 070 0003
Compressor	on demand
Printer	on demand

Watch leak detector for the professional use. Perfect for watches with or without watch strap. Leak detection through pressure and/or vacuum. Simple handling with 7 predefined universal testing programmes plus one special programme for locating the leaks. 10 additional testing programmes available, adjustable according to individual requirements.

### Product features:

- **Testing principle:** Analysis of the deformation of the watch case by pressure and/or vacuum.
- **Measuring and testing programmes:** Predefined testing programmes: 7 predefined testing programmes, optimized for different watch types. Customer-specified testing programmes: 10 programmes that allow the free selection of testing parameters such as pressure, tolerances, measuring period, etc., with 1 or 2 different testing pressures.  
Leak Finder Programme: special programme for the detection and localization of a leak in the watch under water
- **Vacuum and pressure ranges:** Vacuum: variable between -0.2 and -0.8 bar in steps of 0.1 bar. (vacuum pump integrated). Pressure: variable between 0.2 and 10.0 bar in steps of 0.1 bar. (Connection to a separate compressor required). Accuracy of testing pressure: +/- 5 % of the set filling pressure.
- **Testing period:** Automatic stabilization period: Determination based on the programmed tolerances and depending on the specific properties of the watch tested. Manual setting of the testing period: variable between 10 and 300 s. Automatic repetition of the test when results are not clear
- **Stabilization period:** Automatic stabilization period: automatic transition from stabilization to testing, when the required stability is reached. Manual setting of stabilization period: variable between 10 and 300 s.
- **Setting of tolerances:** Predefined testing programmes: automatic determination based on the specific properties of the watch tested and on the testing pressure.  
Customer-specified measuring programmes: setting of the tolerance by %/min.
- **Measuring of the deformation:** Measuring range: -300 to +1200 µm; Resolution display: 0.1 µm; Resolution sensor: 0.02 µm; Minimum required deformation of watch: with full measuring accuracy: 5 µm; with reduced accuracy: 1.5 µm
- **Maximum watch size:** Diameter: 70 mm; Thickness: 28 mm; Width of watch strap: 85 mm; Height of support: 75 mm
- **Display of results:** Percental regeneration of the deformation referred to one minute of testing period. Range 0 to 9.9 %, resolution 0.1 %. Automatic evaluation leak/no leak. Constant indication of deformation and testing pressure during testing, status indication for testing progress and count-down of remaining testing period. Display of date and time.
- **Interfaces:** USB for PC; RS232 for printer
- **Power supply:** Mains plug 210 - 240 V~. Output: 9 V~ / 1.2 A or: Mains plug 110 - 130 V~. Output: 9 V~ / 1.2 A

### Technical Data

Outer dimensions of unit w/d/h (closed) (mm / inch)	245 / 240 / 240
Weight (kg)	6,1



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