

## ELECTRIC HOLE TESTER (EHT) FOR TESTING OF CONDOMS

Valendor's Electric Hole Tester (EHT) fully complies with the specifications in current ISO 4074. It is also designed to comply with all planned and proposed changes to the standard, such as the introduction of Tip Challenge Mode.

### Filling volumes

Software controlled:	100-400ml
Fixed Filling Volumes (accuracy $\pm 10$ ml):	150ml, 200ml, 300ml, 400ml

### Testing

Voltage supply:	$(10 \pm 0.1)$ V
Leak detection threshold:	$(50 \pm 1)$ mV
Theoretical output:	<4s/condom
Continuous testing:	20 min for 315 condoms

**Indication of hole location:** In the Tip Challenge Mode, the location of the hole is shown on the screen.

**Correction of loading errors:** In case of loading error, the individual condom can be replaced with a new one. Note of this is automatically added in the report file.

**Electrolyte volume:** 43 dm<sup>3</sup>

### Physical specifications

Length:	900 mm
Width:	300 mm
Height:	1700 mm

### Material

Material in contact with electrolyte:	PVC and Stainless Steel
Cabinet:	Enamel lacquered, zinc coated steel plate

**Art. No.: 1002**



### Mode of operations

The mode of testing is selected in the software. Either by adjusting the volume in the user interface of the machine or selecting one of the fixed volumes for 150, 200, 300 or 400 ml filling with or without tip challenge.

The operator places the condom on the mount and starts the automatic testing sequence of each individual condom. The condom will be submerged in the electrolyte container below and measured for leaks. If the reading is less than 50 mV, the condom is automatically removed from the holder. After loading the first condom the operator continues with loading number 2, 3 and 4. Before the loading of number 4 is completed, the first test probe is already ready for a new condom, and then number 2 etc.

In case the electrical reading indicates a hole, the condom remains on the holder and can be removed by the operator to verify the possible hole by rolling the condom on absorbent paper.

### Tip Challenge Mode

The Tip Challenge mode is designed to be used to achieve same sensitivity level as when rolling condoms on absorbent paper as per ISO 4074.

The Tip Challenge will pause the submerging movement and let the filled condom hang high enough for only the tip to be submerged in the electrolyte. This will allow the filled volume of water to “challenge” the tip, since the water inside will stretch the latex film of the tip and thereby facilitate detection of holes in this area.



The ability to ad sample to existing files,

makes Valendor's EHT the perfect tester to be used in the in-process control.

### Test data acquisition, analysis, display and storage

All test data are displayed in real-time on a computer monitor. The voltage readings both for Tip Challenge Mode and Standard Mode for each individual condom is saved in data file simultaneous with the reading. That means that no data will be lost in case of power failure. The system produces automatically a test certificate including the name and logo of the laboratory (if desired), all particulars as specified in ISO 4074 as well as the position of the hole. Or any special requests specified by the laboratory. The test data can be exported for further analysis.

Valendor's testing software is fully compatible with Microsoft Office. (Excel, Word, Access).

*VALENDOR reserves the right to modify this specification in part or as a whole*