



Advanced Filter Integrity Test System Bubble Point & Pressure Decay Technology



The KLABS FITS - Filter Integrity Test System is a high-performance solution designed for critical filtration validation in pharmaceutical, biotechnology, and laboratory environments. Built with industrial-grade components and intelligent control, it ensures reliable, repeatable, and compliant filter integrity testing.



PRODUCT HIGHLIGHTS

- High accuracy measurement ($\pm 1\%$ FS)
- Dual testing modes: Bubble Point & Pressure Decay
- Intuitive 4.5" TFT Touch Screen Interface
- Real-time monitoring of pressure & bubble point
- Stainless steel (SS 316) hygienic construction
- Multi-filter compatibility (disc & cartridge)
- Operator & batch traceability
- Integrated report printing capability
- RS-232 connectivity for data integration

WHY FILTER INTEGRITY TESTING MATTERS

Filter integrity testing is a critical quality assurance step that ensures:

- No leaks or defects in membrane filters
- Compliance with regulatory standards
- Consistent filtration performance
- Product safety in sterile application

TESTING TECHNOLOGIES

- Bubble Point Test (BPT)
- Determines maximum pore size
- Widely used in sterile filtration validation

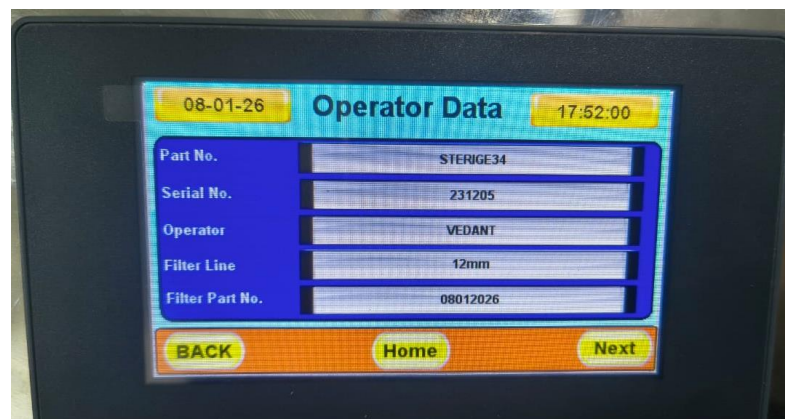


Pressure Decay Test

- Measures pressure drop over time
- Identifies leaks or pinholes
- Ideal for routine QC testing

APPLICATION AREAS

- Pharmaceutical Manufacturing
- Biotechnology & Life Sciences
- Sterile Filtration Validation
- Microbiology Laboratories
- Water & Environmental Testing
- Food & Beverage Industry



Technical Specifications

Parameter	Specification
Test Range	0 - 6 bar / 0 - 100 psi
Accuracy	±1% Full Scale (FS)
Display	4.5" TFT Touch Screen
Pressure Units	PSI / mbar
Power Supply	230 VAC ±10%, 50 Hz
Air Supply Requirement	4 - 6 bar (Oil-free Air / Nitrogen)
Maximum Pressure	< 80 psi
Operating Temperature	5 - 40 °C
Humidity	≤ 80% RH (Non-condensing)
Disc Filters	25, 47, 90, 142, 293 mm
Cartridge Filters	Standard cartridge filters
Membrane Types	PES, PVDF, Nylon, PTFE, MCE
Wetted Parts	SS 316
Tubing	PU / PTFE
Seals & O-rings	Silicone / Viton
Enclosure	Stainless Steel

SMART USER INTERFACE

- Set upper & lower bubble point limits
- Live pressure monitoring
- Digital data entry (operator, batch, filter details)
- PASS/FAIL result display
- Guided step-by-step operation

DATA & REPORTING

- Comprehensive test data logging
- Printable reports including:
 - Operator Name
 - Filter Details
 - Batch Information
 - Pressure Values
 - Test Results (PASS/FAIL)

Data Printing

The KLABS integrity tester can carry out the printing function in two conditions.

The first one is as follows: when the test of the basic bubble point, enhanced bubble point, diffusion flow or water immersion testing method is carried out by the instrument, the test result interface will be popped up, and the current test results can be printed automatically or manually (pressing the button of “print”).

The other one is carried out by printing from the historical records.

As the printer belongs to a slow mechanical response device, so please patiently wait for the printing process after pressing the button of “print

OPERATING CONDITIONS

- Temperature: 5 - 40°C
- Humidity: ≤ 80% RH (Non-condensing)

SAFETY & RELIABILITY

- Pressure release safety mechanism
- Grounded electrical design
- Oil-free gas operation
- Stable and safe testing environment

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KLABS
Semi-Automatic Bubble Point Tester
Flow / Bubble Point Test Report
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Report No.      : 001
Model          :
Part No.       :
Serial No.     :
Operator       :
Production Area :
Filter Line    :
Product Name   :
Product Batch No. :
Filter Part No. :
No. of Filters :
Filter Serial No. :
Filter Housing :
Test Gas       : Air / N2
Minimum BP    :
Max Pressure  :
Set Pressure   :
Pressure Units : mbar / psi
Result        : PASS / FAIL
Outside Limit : Yes / No
Measured      :
Test Completed On :
Comments:
Signature: _____
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