

Sartocheck® 4 plus Filter tester

Quality Assurance at the Highest Level



Product Information

The industry leading Sartocheck® 4 plus Filter tester is the result of Sartorius' 30 years experience in developing automatic filter integrity testers. Valuable productivity-enhancing features and robust build quality have been combined with incredible ease of use to make the Sartocheck® 4 plus Filter tester the only logical choice for integrity testing.

The Sartocheck® 4 plus Filter tester has achieved the highest reliability of the test results. Specific parameters can be set for each individual program in order to detect operator mistakes, thereby eliminating false pass test results:

- Automatic detection of out-of-tolerance net volume (min & max)
- Automatic detection of improper test setup (e.g. closed downstream valve)
- Automatic detection of unstable thermal conditions

The Sartocheck® 4 plus Filter tester also eliminates operator handling errors:

- Barcode scanner for easy and reliable data entry (optional)
- Intelligent selection of test program after scanning 1D or 2D bar codes

The Sartocheck® 4 plus Filter tester also provides the following combination of benefits:

- Large, color touch screen display combined with keypad
- Automated cleaning function eliminates expensive service calls
- Multitasking menu
- Electronic test reports in PDF format
- Dot matrix printer (no thermo paper for longer print preservation)
- SD card reader for easy test program proliferation to other Sartocheck® testers
- Profibus communication (interface as accessory)
- World class documentation, training, applications, and service support
- Fully compliant with 21 CFR Part 11
- Developed in accordance with GAMP 5

Integrity Test Methods

Unparalleled accuracy and repeatability of results is achieved for all test types:

- Bubble point test (BPT)
- Diffusion test (Diff)
- Combined test (Diff + BPT)
- Pressure drop test
- Water intrusion test (WIT)
- Water flow test (WFT)
- Multipoint diffusion test
- Customer-specific tests
- Automatic Test Time function for intelligent shortening and optimization of test times



Barcode Scanning

Using the optional barcode scanner allows easy and error-free entry of filter data into the unit. Sartocheck® 4 plus Filter tester automatically locates the suitable test program that matches the scanned cartridge.

Cleaning Function

The patented cleaning function of Sartocheck® 4 plus Filter tester allows the user to perform reliable cleaning of the complete internal pneumatics even with aggressive cleaning agents (up to 1 M NaOH). This unique feature provides highest security of the integrity testing procedure while eliminating the need for costly down time and service calls.

Network Concept

The network solution for the Sartocheck® 4 plus Filter tester incorporates the TCP-IP and FTP protocol standards, with data being transmitted via the Ethernet standard. Via standard RJ45 connection, all data can be easily uploaded on a FTP server.

Profibus communication can be used to allow bidirectional communication with process control system (PLC, SCADA|DCS or MES) as a basis for complete automation.

Multiunit Concept

In order to increase productivity through parallel filter testing, up to four additional MultiUnits can be easily connected to the Sartocheck® 4 plus Filter tester. This provides the equivalent testing capacity of five Sartocheck® testers operating concurrently at a significant cost savings to the end user.

Qualification

Sartocheck® 4 plus Filter tester ensures that all integrity tests are carried out with highest precision and accuracy. Our comprehensive Sartocheck® 4 plus Filter tester validation documentation and world-class Service Team provide exemplary support for the user.

Technical Specifications

Specifications

Power requirements	100-240 V AC 50 60 Hz
Max. power input	74 watts
Max. operating pressure	9999 mbar 145 psi
Min. inlet pressure	4000 mbar 58 psi
Dimensions (W × D × H1 × H2)	460 × 390 × 140 × 245

Measuring Ranges

Test pressure	100-8000 mbar 1.5-116 psi
Pressure drop	1-2000 mbar 0.01-29 psi

System inlet volume

With int. reference vessel	14 L
With ext. reference vessel	150 L

Operating Conditions

Ambient temperature	+15°C to +35°C
Rel. humidity	10 - 80%

Touch Screen

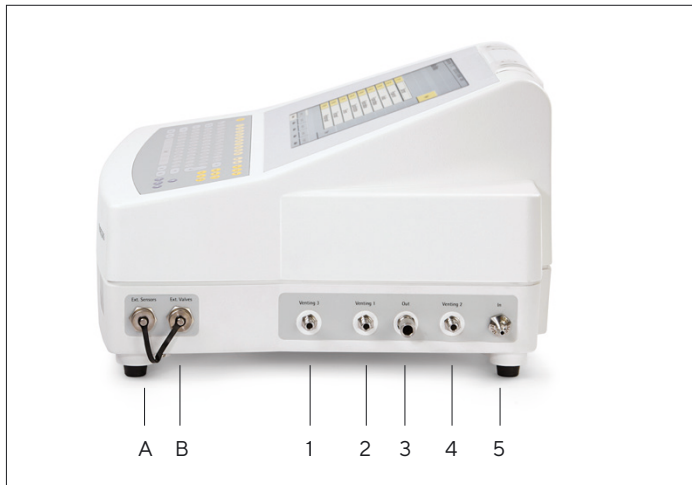
Size	10.4" TFT
Features	256 colors

Measuring Accuracy

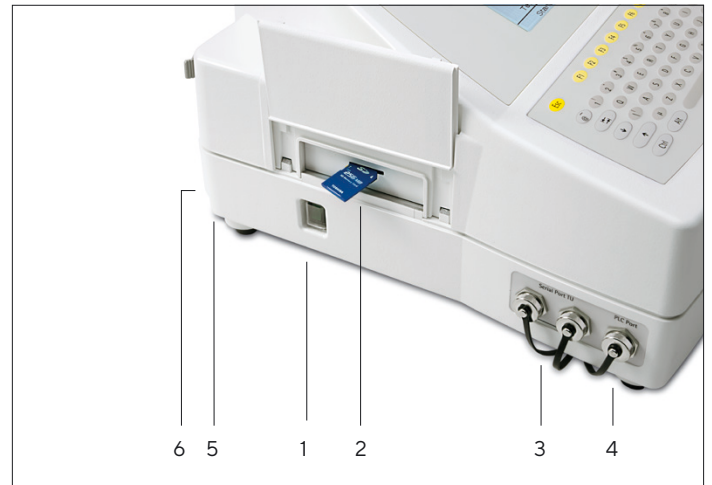
Pressure	± 0.1 % full scale
Pressure drop	± 1 mbar (0.015 psi)
Volume determination	± 4 %
Diffusion	± 5 %
Water intrusion	± 5 %
Bubble point	± 50 mbar ± 0.7 psi

Communication Ports

Serial port TU	RS232
Serial port MU	RS485
PLC port	binary signals, 12 pins
Network	RJ45
Language Options	English French German Italian Spanish



- A: External sensor
- B: External valves
- 1: Ext. reference tank
- 2: Venting 1
- 3: Out
- 4: Venting 2
- 5: Compressed Air in



- 1: Main switch
- 2: SD card reader
- 3: Serial port, TU
- 4: PLC port
- 5: RJ45 network
- 6: Port for optional barcode scanner

Ordering Information

Equipment Supplied

Description	Order Number
Sartocheck® 4 plus Filter tester	26288---FT
Inlet tubing for compressed gas	18104
Outlet tubing	18103
Ribbon cassette	6982141
Rolls of printer paper	6982142
Test certificate	
Calibration certificate	
Installation and operating instructions	
Validation package for filter tester	26288---VPFT
Power cord	Country-specific

Accessories

Description	Order Number
Barcode scanner	26288---BS
Filter tester, MultiUnit	26288---FM
Bag tester, MultiUnit	26288---BM
External pressure transducer	1ZE---0018
Set for external venting (1 valve)	1ZE---0025
Valve set for external filling (WIT)	1ZE---0026

Serial port interface cable TU TU	
0.5 m	1ZE---0008
2 m	1ZE---0009
5 m	1ZE---0010
Network cable	
2 m	1ZE---0029
5 m	1ZE---0030
10 m	1ZE---0031
20 m	1ZE---0032
Cleaning kit	26288---CK
Pressure tank for cleaning	26288---PV
External reference vessel (10 L)	16288---RV
Profibus interface	26288---PI
Validation packages	
Filter tester	26288---VPFT
Filter tester, MultiUnit	26288---VPFM
Bag tester	26288---VPBT
Bag tester, MultiUnit	26288---VPBM
Cleanroom venting adapter	1ZE---0021
Midisart test manifold, 10×	1Z-LB-0002
WIT trolley, fully steam-sterilizable	17005A--L---5501

Sales and Service Contacts

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