



Midisart Test Manifold 10x



Background Information

Small venting filters like Midisart 2000 are often used in large quantities. As for larger filter elements, the requirements on integrity testing get more and more important. The integrity testing procedure takes time and when dozens of filters are used and tested every day, it makes sense to make the testing procedure more efficient.

A single Bubble Point Test can easily take 10–15 minutes. The Midisart Test Manifold can be used to test 10 filters in parallel which simply leads to a reduction of test time by 90 %.

About Midisart 2000

Midisart 2000 is a small venting filter (filtration area 20 cm²) which is used e.g. to vent small bioreactors. An extremely hydrophobic membrane material (PTFE) is used in order to avoid blocking and to guarantee continuous air flow even at high humidity.

The Bubble Point Test is recommended for testing those small filters on integrity. The hydrophobic character of the membrane requires wetting with e.g. 60 % IPA | water mixture.

Bubble Point Test

The Bubble Point Test is a well accepted method for testing sterilizing grade filters for integrity. The Bubble Point is defined as the test pressure at which the liquid inside the pore structure of a wetted membrane is actively removed by overcoming the capillary forces. Therefore, the Bubble Point depends on the diameter of a pore.

As soon as the BP is higher than the given minimum BP, the membrane is within its specification and sterility of the filtrate is guaranteed.

Application

The Midisart Test Manifold was developed in order to test these small venting filters using a parallel approach. After wetting the filters with IPA | water mixture a Bubble Point Test is started via a standard automatic integrity tester (e.g. Sartocheck 4), which gives reliable information regarding the integrity of all 10 filters. When the test result is "test passed", all 10 filters are intact. As soon as a test is failed, at least one defect filter is amongst the tested filters.

Each Midisart can be pneumatically decoupled using a valve. Since each outlet is equipped with a separate valve, the manifold can also be used for testing less than 10 filters.

Proven Efficiency and Safety

It has been shown that the filter with the lowest Bubble Point strictly defines the Bubble Point of the complete arrangement when filters are tested in parallel. When a single defect Midisart 2000 filter is tested together with 9 intact filters, the test will definitely fail. Therefore, the user can be sure to have highest safety even when using this economic, time-saving parallel approach.

Technical specifications

Max. allowed test pressure	6 bar
Material of construction	Stainless Steel (316L)
Surface finishes	Ra <0.5 µm internal epol. Ra <1.6 µm epol.
Dimensions	1100 mm length
Weight	13.5 kg
Connector	Stäubli (RBE03 male)
Closure system	Clamp
Gasket materials	EPDM
Order code	1Z-LB-0002

Sartorius Stedim Biotech GmbH
August-Spindler-Strasse 11
37079 Goettingen, Germany
Phone +49.551.308.0
Fax +49.551.308.3289
www.sartorius-stedim.com

USA Toll-Free +1.800.368.7178
UK +44.1372.737159
France +33.442.845600
Italy +39.055.63.40.41
Spain +34.91.3586102
Japan +81.3.3740.5407

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