



## Midisart® Test Manifold 10x

### Product Information

Small venting filters like Midisart® are often used in large quantities. If tested one by one, integrity testing takes a lot of time (10–15 min). The Midisart® Test Manifold improves the efficiency when performing Bubble Point Tests with automated integrity testers like the Sartochek® 4 plus by 90% without compromising safety. It provides easy, reliable and fast testing of 10 filters in parallel.



### The Midisart® Family

Midisart® 2000 and Midisart® BV are sterilizing grade air filters (filtration area 20 cm<sup>2</sup>) for venting of e.g. small vessels and bio-reactors. To ensure highest quality, 100% of the filters are integrity tested after production. For confirming filter integrity after use, specific post use tests have to be performed. Due to the hydrophobic character of the membrane a Bubble Point Test with 60% IPA/water mixture is recommended.

### 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 such 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. Sartochek® 4 plus), which gives reliable information regarding the integrity of all 10 filters. When the test result is "test passed", all 10 filters are intact. A failed test indicates that at least one filter is defect. The failed device can be identified by air bubbles coming out of a connected tubing lying in a water bath. This one can be pneumatically decoupled using a valve. Another test will confirm the integrity of the remaining 9 filters. 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 Data

### 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	Staubli (RBE03 male)
Closure system	Clamp
Gasket materials	EPDM
Order code	1Z-LB-0002

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