



Troubleshooting and FAQ

The Aqua Screen® System

Please find answers on Frequently Asked Questions concerning the Aqua Screen® System for the detection of legionella in the following section.

[Is it possible to get more information about the membrane you use for water filtration ?](#)

[Does the membrane retain only vital bacteria?](#)

[Is it possible to have more information on the composition of the membrane?](#)

[Is it possible to test water from cooling systems or other strongly contaminated samples?](#)

[On your protocol you recommend a decontamination of the filtration unit \(funnels, filter holders, adapter\) ?](#)

Is it possible to get more information about the membrane you use for water filtration?

Unfortunately, the membrane composition for the conventional Aqua Screen® System is a production secret. For Aqua Screen® FastExtract we supply commercially available polysulfon membranes, 0.45 µm pore size (ø 47 and 50 mm).

Does the membrane retain only vital bacteria? Is it possible to have more information on the composition of the membrane? How did you demonstrate that your membrane withholds only viable bacteria?

No, our membrane does only detect vital bacteria. This is the benefit of the culture method. The most important point is that free legionella DNA of lysed legionella passes the membrane. Dead legionella particles, which are still complete will stick on the membrane and will be detected. All open legionella particles with burst membranes release their DNA which will pass.

Is it possible to test water from cooling systems or other strongly contaminated samples?

This only works with a prefiltration. By using a standard paper filter you need to add a loss of 10 % to the total number. The filters included in the extraction kits filtrate up to 500 ml, which is more than enough for a good detection. In respect to the Aqua Screen® Fast Extract we also recommend prefiltration, but this system should easily filtrate 1000 ml without difficulties since the membranes are much bigger in diameter.

On your protocol you recommend a decontamination of the filtration unit (funnels, filter holders, adapter) ?

It is crucial to rinse the glass funnels and filter holders with water after using DNA Remo