Features

- Type of membrane used : Neophil® hollow fiber, the permanent hydrophilic membrane material that lowers the fouling tendency and ensures a stable filtration process
- Type of filtration : Dead end Outside/In Ultrafiltration
- % off bacterias : 99.9999 %
- % stopping viruses : 99.99 %
- Pore size : 0.015 µm

Treatment capacity / Operational

	Aquamem R2	Aquamem R4	Aquamem R8
Maximum continuous rated flow (l/mn)	20	40	80
Maximum rated peak Flow (l/mn)	40	80	160
Width Height Depth	76 cm 115 cm 27 cm	76 cm 115 cm 27 cm	150 cm 115 cm 27 cm

Maximum pressure : 6 bar
Maximum temperature of water : 35°C
Voltage : 230 V

The Aquamem R unit requires no electricity to filter your water. The only electric demand is during automatic self-cleaning of the unit.

AQUAMEM-R Units are automatically controlled by a micro controller. As part of a professional or a domestic use, but inside a building, all components are mounted on a stainless steel frame designed for wall mounting. However, different versions and finishes are available depending on the destination and end use.

Applications

Bacterial protection and purification of tap water, rainwater and also surface and underground water on modified specific versions.

Standard version

Individual houses, residences, hotels, sports centers, SMEs, craftsmen...

Specific version

Hospitals, Clinics, Care Centers...

Specific and portable version

NGOs, Base Camp, Military, Civil Security...

Aquamem R
polymem

www.polymem.fr

Polymem November 2019

Aquamem R
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The solution for safe and pure water

Ultrafiltration unit for water bacteriological securing and purification

Residences - Houses - Hotels
Sports Centers - Hospitals - Clinics
Care Centers - SMEs - Craftmen

- High performance filtration
- Easy installation and maintenance
- Fully automated
- BPA and BPS free
- International Approvals for UF modules

Ultrafiltration unit for water clarification and bacteriological securing

Ultrafiltration was firstly developed in the 70's for liquid treatment, with its strong development for drinking water at a large scale, ultrafiltration on hollow fiber membrane is now known as a clean, efficient and inexpensive technique for water purification in domestic and industrial fields.

It often replaces more conventional treatments as well as microfiltration because of its ability to eliminate not only small particles but also pathogenic including microorganisms, viruses, pyrogens and some dissolved organic species.

Moreover, **membrane technology does not require the addition of chemicals** to compensate turbidity variations that may occur depending on the different seasons. So ultrafiltration is a purely physical process that generates no by-products and can treat any water quality with the same action for clarification – removing of biocontaminants.

Ultrafiltration in few words...

Membrane
A hollow fiber membrane is a small plastic tube of less than one millimeter in diameter and several tens of centimetres long, whose walls are porous. The pores of the S2 Polymem membrane are of a size of 0.01 µ, which is 10,000 times thinner than a human hair. **Suspended solids but especially micro-organisms and viruses are fully retained on the outer surface of the fibers.**

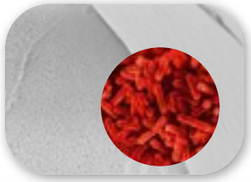
Modules (or cartridges)
Polymem ultrafiltration cartridges are composed of thousands of these small tubes called hollow fibers, thus offering a **large filtration area** to handle large flows.

Low Pressure Process
Ultrafiltration is a filtration process where the driving force is the water supply pressure (ideally 3 bars). The pressurized water enters the module and the water produced (called filtrate or permeate) crosses the barrier that constitutes the membrane. The retained substances are captured on the membrane surface and are periodically eliminated from the module during backwash. This backwash consumes very little water and lasts about one minute per cartridge. It is fully managed by the controller unit.

Polymem membranes

are used worldwide for large municipal water purification facilities of several million liters per day.
Polymem now proposes to small communities, craftmen and individuals to take advantage of this new technology.

Aquamem R range comes in four models: R2, R4 and R8 to be chosen depending on the desired production capacity from 1,200 to 4,800 liters / hour. Specific versions of this device can also be developed for specific needs.



An efficient treatment

Ultrafiltration totally clarifies the water and ensures the release of bacteria, viruses, particles, pollen, parasites, algae representing a risk to human health. Large organic pollutants and a large part of colloidal minerals are removed. **The dissolved minerals useful to the body are preserved.**

An easy to use device

Economical
With low maintenance, this unit is self-cleaning (cleaning of the membranes with reversed flow).

PLC Management
Cleanings are automatic

Compact and easy to install
The Aquamem R is simply fixed to the wall and is connected to the water intake pipe of the building.

A validated and approved product

The Polymem membranes equipping Aquamem R units are approved by:

- **NSF / ANSI 61 (USA)***
- **ETV / EPA**
- **CDHS**
- **ACS of the French Ministry of Health**

Polymem is a world leader in the manufacture of ultrafiltration hollow fibers for the treatment of drinking water for municipalities, industries or individuals especially with AQUAMEM-R units.

*components sold in combination with the certified modules have not been evaluated to the respective Standard.