

Sample filtration with PMC-R system

for inlet, aeration and outlet of wastewater treatment plants



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Vers.: 19032026



PMC-R system with backflushable filter disc

Sample filtration for inlet, aeration and outlet of wastewater treatment plants

Backflushable, compact and highly efficient

Application

Designed for use in the inlet, aeration and outlet, the PMC-R system proves to be the ALLROUNDER for very reliable wastewater sample filtration. Combined with On-line analyzers, it is used for reliable plant control of, for example, aeration or precipitant-dosing.

System cabinet

The submerged PMC disc is connected to the permeate pump via the suction line. A vacuum is generated with the help of this diaphragm pump integrated in the system cabinet. This draws off the permeate by the PMC disc and transports it to the analyzer via the pressure line. The automatic back-flushing with filtrate is freely adjustable depending on the boundary conditions. The vacuum can be read off the pressure gauge as a contamination indicator. The PMC-R system thus guarantees a continuous supply of sample to the analyzer.

PMC disc

The disc consists of a special inorganic membrane material. The fine pores, including the dirt-repellent surface, achieve surface filtration. As a result, the membrane is very easy to clean manually, even apart from the backflushability. Depending on the operating conditions, chemical cleaning may be necessary from time to time. The membrane surface area and therefore also the performance can be increased very easily by adding another disc using a PMC multi-adaptor.

Basin bracket

The stainless steel/aluminum basin bracket is supplied with a base and is easy to install. The bracket can be swiveled and adjusted in height using a quick-release fastener, which ensures both easy maintenance and quick replacement of the PMC disc.

Tank system

The tank system is supplied with water from the medium to be sampled using a pump provided by the customer. This continuously pumps raw water into the tank. The flow around the disc prevents coarse dirt sediments and a high flow rate guarantees a rapid exchange of raw water from the tank contents. The surplus raw water is discharged without pressure by the overflow. The membrane surface area can also be increased in the tank version using a PMC multi-adaptor and an additional PMC disc.



Advantages

- periodic backflushing
- simple filter change
- low weight of the filter disc
- low dead times
- long service life
- easy cleaning
- long distances to the measuring device possible

Technical data

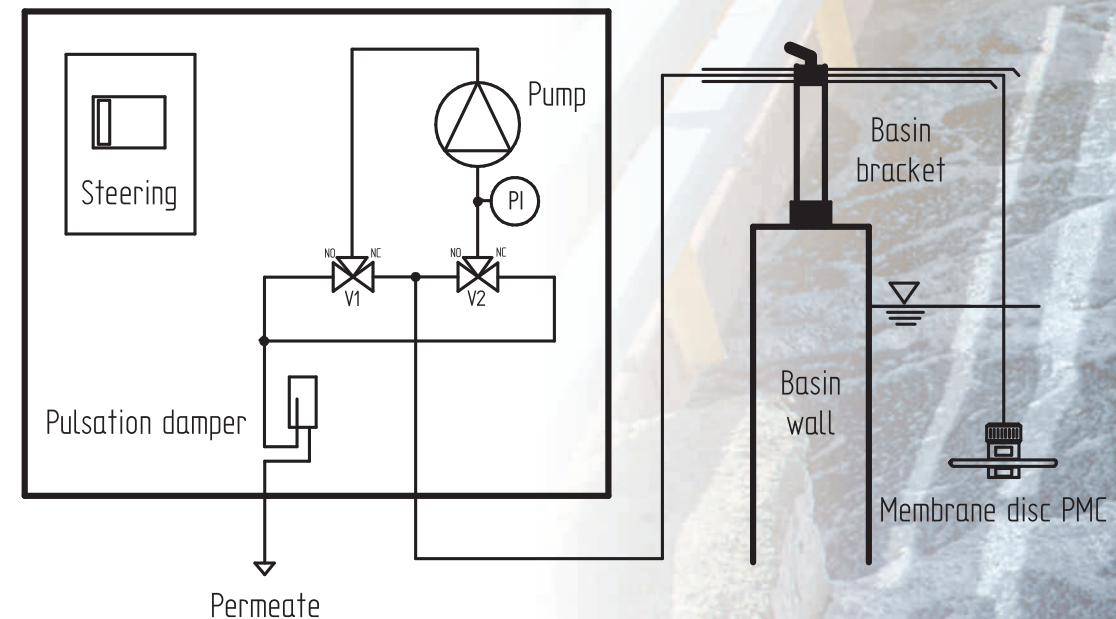
Operating data:

- electrical connection: 230 V / 50 Hz or 110 V / 50 Hz
- membrane area: 360 cm² (per PMC disc)
- operating temperature: -20°C till +45°C
- pore size: 0.45µm

- solids-free sample
- high operational reliability
- for outdoor installation with heating
- basins and channel use
- suitable for SBR processes
- tank installation possible
- easy maintenance

Materials:

- probe housing: PVC
- sealings: EPDM, FKM
- pump: PP, FKM, PTFE
- membrane material: modified ceramic



Membrane surface increase



PMC disc



PMC cleaning set

