

**SPX** Process Equipment

- Filter unit for Bran+Luebbe On-line Monitors
- for municipal and industrial waste water treatment plants

The UltraFiltration unit provides a clean sample stream for on-line monitors and is specially designed for difficult samples such as waste water with a high content of solids or bacteria.

## Ultrafiltration





## Ultrafiltration

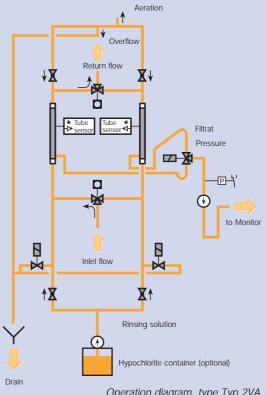
All particles with a molecular weight >20,000 are retained by the membrane filter. When the filter surface becomes blocked, operation switches to the second filter tube and the first one is cleaned.

Filter changeover and cleaning can be manual or automatic, depending on the model.

## **Operation**

A sample pump (side or immersed type) provides a continuous stream of sample at 8 m³/h through one filter tube while the other tube is in stand-by. The filter tubes operate under virtually zero pressure conditions. The filtrate pump has two functions: It determines the filtrate volume and supplies the Monitor with the necessary sample pressure.

Several models are available with different levels of automation. Each one can be upgraded to a higher model type if requirements change.



Operation diagram, type Typ 2VA

Filters for different requirements.

- Type 2H Manual filter change, manual cleaning manual valves
- Type 2HSP Manual filter change, cleaning pump manual valves, 1 hypochlorite container,
  - 1 pump

Type 2HA Automatic filter change, manual cleaning electric changeover

valves, manual valves

- Type 2HASP Automatic filter change, cleaning pump electric changeover valves, manual valves 1 hypochlorite container, 1 pump
- Type 2VA Automatic filter change, automatic cleaning electric changeover valves. electric shut off valves, no-return vlaves. 1 hypochlorite container, 1 pump

## Technical data

No. of filter tubes 2, alternate operation

Separation separates solids, colloids and large molecules Mol. W >20000

Chemical resistance pH 2 - 12

Sample temperature max. 45°C

Sample pressure

max. 2 bar

Filtrate volume approx. 2 l/h, depending on filtrate pump

Environmental temperature 0 - 45°C

Cleaning interval depends on sample contamination: typically 1 - 4 weeks Option sample supply pump

Design side-channel or immersion type

Pump power 8 m<sup>3</sup>/h

Delivery head max. 30 m

Suction head max. 2 m

Weight approx. 33 kg

Dimensions (HxWxD) 2000 x 500x160 mm