

PSta30DE-PLC



DIMENSION

| | |
|-------------------------|--|
| Dimensions* | approx. 1200 x 1000 x 1600 mm (L x B x H) |
| Weight | approx. 200 kg |
| Material (wetted parts) | PTFE, EPDM, PP, FEP, PVDF, FPM und Edelstahl (group 316) |

ELEKTRICAL DATA

| | |
|-----------------------------|-------------------------------------|
| Connection for power supply | 400 V / 50 Hz / 3-Phasen / 16 A-CEE |
|-----------------------------|-------------------------------------|

DATA

| | |
|---------------------|--|
| Storage tank | approx.40 l (heatable or coolable with double jacket) |
| Backwasch tank | approx.1 l (PP) |
| Pressure tube for | Spiral wound module 2540 |
| Pressure tube for** | Ceramic- oder hollow fibre module |
| Field of use | MF/NF/UF/RO |
| Temperature range | max. 50 °C |
| Pressure range | 1 – 30 bar |
| Flow rate (feed) | 200 – 2000 l/h |
| Backwash unit | <u>mode:</u> MF/UF (not available with spiral wound module) |

Crossflow principle

mode: MF/NF or MF with backwash
membrane overflow: feed- or concentrate flow rate
control: concentrate flow rate or pressure (feed-, concentrate or transmembrane pressure)

Dead End principle

mode: MF/NF
control: concentrate flow rate or pressure (concentrate or transmembrane pressure)

System control via PLC
 (type Siemens S7 / Profinet)

safety shut-offs and dry run protection (p,T)

The system control via PLC guarantees the performance of long term tests and an independent and safe system operation even without a data logging system.

(The specified technical data are maximum values. They do not coincide all at the same time!)

| SENSORS | MEASURING RANGE | QUANTITY |
|---|--|-------------|
| Pressure | 0 - 40 bar | (5 pieces) |
| Volume flow (feed) (magnetic-inductive flow meter) | 120 - 6000 l/h Minimum conductivity 10 µS/cm (20 µS/cm for purified water) | (1 pieces) |
| Volume flow (permeate) (magnetic-inductive flow meter) | 9,6 - 480 l/h Minimum conductivity 5 µS/cm (20 µS/cm for purified water) | (1 pieces) |
| Level control (in storage tank) | Guided microwave | (1 pieces) |
| Temperature (PT 100) | 0 - 100 °C | (1 pieces) |
| Conductivity measurement in concentrate** | 0,1 µS/cm - 1 S/cm Temperature compensation included | (2 pieces) |
| pH-measurement permeate** | pH-glas electrode | (1 pieces) |

FIELD OF USE

Experiments with different membrane materials and/or module geometries

Experiments for optimization of process parameters in industrial applications

Long-term tests to examine the membranes long-term behavior

Comparison of Dead End- with Crossflow principle

Processing of small amount of raw material in laboratory, technical center or on site

* including control cabinet: 600 x 400 x 800 mm (L x B x H)

** optional available

Schematic view of PSta30DE-PLC

