

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
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DATA

Storage tank	approx. 40 l (heatable or coolable with double jacket)
Backwash 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

