

PSta15-PLC



DIMENSION

Dimensions	approx. 3600 x 1000 x 1600 mm (L x B x H)
Weight	approx. 350 kg
Material (wetted parts)	PTFE, EPDM, PVC, PP, FEP and stainless steel (group 316)

ELEKTRICAL DATA

Connection for power supply	400 V / 50 Hz / 3-phase / 16 A-CEE
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DATA

Cycle and rinsing tank	approx. 180 l (PVC)
Permeate tank	approx. 250 l (PP, PVC)
Pressure tube for	Spiral wound module 2540
Field of use	NF/UF
Temperature range	max. 50 °C at 4 bar < 25 °C at 15 bar
Pressure range	1 – 15 bar
Flow rate (feed)	200 – 2000 l/h

Feed & Bleed

discharge: via conductivity and adjustable valve with rotameter

refill: via level sensor and switchable socket

System control via PLC
(type Siemens S7 / Profinet)

safety shut-offs and dry run protection (p,T)
regulation on pressure
regulation on permeate volume flow

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 - 20 bar	(4 pieces)
Volume flow (feed) (magnetic-inductive flow meter)	120 - 6000 l/h Minimum conductivity 10 μ S/cm (20 μ S/cm for purified water)	(1 pieces)
Volume flow (permeate) (magnetic-inductive flow meter)	4,8 - 240 l/h Minimum conductivity 5 μ S/cm (20 μ S/cm for purified water)	(1 pieces)
Volume flow (Feed & Bleed) (rotameter)	10 – 10 l/h	(1 pieces)
Level control (in cycle and rinsing tank)	Guided microwave	(1 pieces)
Temperature (PT 100)	0 - 100 °C	(1 pieces)
Conductivity measurement in concentrate	0,1 μ S/cm - 1 S/cm Temperature compensation included	(4 pieces)

FIELD OF USE

Comparison of different membrane types in spiral wound modules

Experiments for optimization of process parameters in industrial applications

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

Concentration experiments

Cleanability experiments of membranes

Production and/or experiments in the system bypass

Diafiltration

Feed & Bleed experiments

Schematic view of PSta15-PLC

