

Allrounder 15



DIMENSIONS

Dimension	approx. 1200 x 1000 x 1850 mm (L x B x H)
Weight	approx. 360 kg
Material (wetted parts)	PVC, PVDF, PFA FEP, PEEK, EPDM and stainless steel (group 316)

ELEKTRICAL DATA

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

Storage tank	70 l (heatable or coolable with double jacket)
Flat sheet membrane tes-cell	270 cm ²
Pressure tube for	Spiral wound modul (2,5") optional: 4" or 19-channel ceramic modul
Pressure tube for	Tubular membrane (6 mm)
Temperature range	60 °C (at 4 bar) < 25 °C (at 15 bar)
Pressure range	1,0 - 15 bar
Flow rate (feed)	0,6 – 3 m ³ /h at 15 bar (centrifugal pump)
Backwash for tubular membrane	PLC (max. feed pressure 4 bar)

Feed & Bleed*

discharge: via conductivity and adjustable valve with rotameter

storage refill: via level sensor and switchable socket

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

OPTIONS

Data acquisition (full-version)	(Option 1)
pH value measurement	(Option 2)
Conductivity measurement	(Option 3)
Feed & Bleed mode (Requirement: conductivity measurement, see Option 3)	(Option 4)

SENSORS	MEASURING RANGE	QUANTITY
Pressure	0 – 16 bar	(4 pieces)
Volume flow (feed) (magnetic-inductive flow-meter)	Minimum conductivity 10 µS/cm (20 µS/cm for purified water)	(3 pieces)
Volume flow (permeate) (magnetic-inductive flow-meter)	Minimum conductivity 5 µS/cm (20 µS/cm for purified water)	(3 pieces)
Level control (in storage tank)	Guided microwave	(1 pieces)
Temperature (in storage tank)	0 – 100 °C	(1 pieces)
Conductivity measurement in concentrate*	1 µS/cm – 2 S/cm Temperature compensation included	(1 pieces)
pH-measurement concentrate*	pH-glas electrode	(1 pieces)

*optional available

FIELD OF USE

- Comparative tests with tubular- and flat sheet membranes at the same time in laboratory scale
- Experiments with technical membrane modules
- Experiments with different membrane materials and/or module shapes
- Experiments for optimization of process parameters in industrial applications
- Concentration experiments

Schematic view of „Allrounder 15“

