

DATA SHEET

RNS MHU – 01

12 August 2019

LAB SCALE 1m² AGMG / PGMD

| | |
|--------------------------------|---|
| Intended use | membrane distillation, airgap or permeate gap |
| | Multi-channel flat sheet |
| Effective membrane surface | 1 m ² |
| Flux | Approximately 3 – 8 kg / m ² / hr |
| Conductivity | Pure distillate 1 – 5µS/cm |
| Flow | 400 – 600 ltr/hr |
| Flow direction | Counter current |
| Characteristics | |
| Membrane | 0.2µm ePTFE Membrane, Thickness 69 µm |
| Spacer membrane channel | 2mm Polypropylene |
| Spacer distillate channel | 0,75mm Polypropylene |
| Spacer contactor | 2 mm Polypropylene |
| Contactor | Tri-laminate PET – Aluminium – PET 30 µm |
| Housing Characteristics | |
| Housing material | stainless / steel |
| Potting material | Epoxy |
| Connectors | Polypropylene Ø 25mm |
| Dry weight | 15 kilo |
| Max. working | < 1,0 Bar @ 70°C |
| Max. working temperature | 70°C |
| Dimensions | 300 x 120 x 600mm (LxWxH) |
| Storage transport temperature | 5 – 70°C |
| Pressure frame | Panel formwork or skid is always needed |



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Excellent separation quality

- Pure distillate 1 - 5 μ S/cm
- Flux 3 – 8 kg / m² / hr
- 100% rejection of non-volatile components possible

Very high corrosion resistant

- Use of advanced materials and polymers

Superior cost efficiency

- Simplicity of the system
- Low pressure technology
- Less fouling
- Less chemicals for cleaning
- € 0,60- € 1,0 per m³ (mass production of the units)

High energy efficiency

- Low electrical energy consumption 0,6 – 1,5 kWh/m³
- Thermal energy consumption 22 - 95 kWh/m³ (reuse of waste heat or alternative energy sources)

Very good scalability

- Modular set-up
- Small footprint of the compact unit

Particularly suitable for water with high saline content

- Seawater
- Concentrated seawater
- Treating > 250 grams per liter , up till crystallisation

High yield and reliable operation

- Simplicity of the distillation process and system