



ECOSOFT MO-3 reverse osmosis system

PURPOSE. Ecosoft MO-3 is an industrial reverse osmosis system for purification of brackish water. Ecosoft RO systems feature simple and effective design for high recovery low energy operation.

MAIN SPECIFICATIONS:

| | |
|--|------------------------|
| Nominal capacity ¹ | 3.0 m ³ /h |
| Permeate recovery rate ¹ | 75% |
| Electrical requirements | 400 V, 50 Hz (3 phase) |
| Power requirements | 4 kW |
| Membrane elements | Dow Filmtec™ 3 pcs |
| Crate dimensions (Height x Width x Depth) | 2.2x2.1x1.3 m |

¹ At 15°C, 2000 ppm feed water, ±10%

Purified water is used in most sectors of industry.

Main applications of Ecosoft RO systems include:

| | |
|--------------------|------------------------------|
| Steam boilers | Semiconductor industry |
| Agriculture | Heating and cooling circuits |
| Chemical industry | Pharmaceutical industry |
| Food industry | Galvanic and electroplating |
| Textile industry | Utility water treatment |
| Insulation glazing | Laundry and car wash |
| Desalination | Drinking water bottling |

ASSETS OF ECOSOFT RO SYSTEMS

- Energy efficiency with Filmtec™ XLE membranes and Grundfos® CR pump
- Reliable operation thanks to high quality parts and equipment
- Individual project evaluation per request
- CE label for electrical safety compliance
- ISO 9001 certified factory



MAIN EQUIPMENT.

| |
|---|
| DOW Filmtec™ XLE membranes |
| Grundfos CR pump |
| Danfoss motorized valves |
| Honeywell regulating valves |
| Ecosoft RO controller |
| Praher and John Guest pipe, fitting, and valves |
| Sediment pre-filters |
| 3 pressure switches |
| Float switch |
| Conductivity probe |
| Anti-vibration pressure gauges and rotameters |
| Powder coated steel frame |

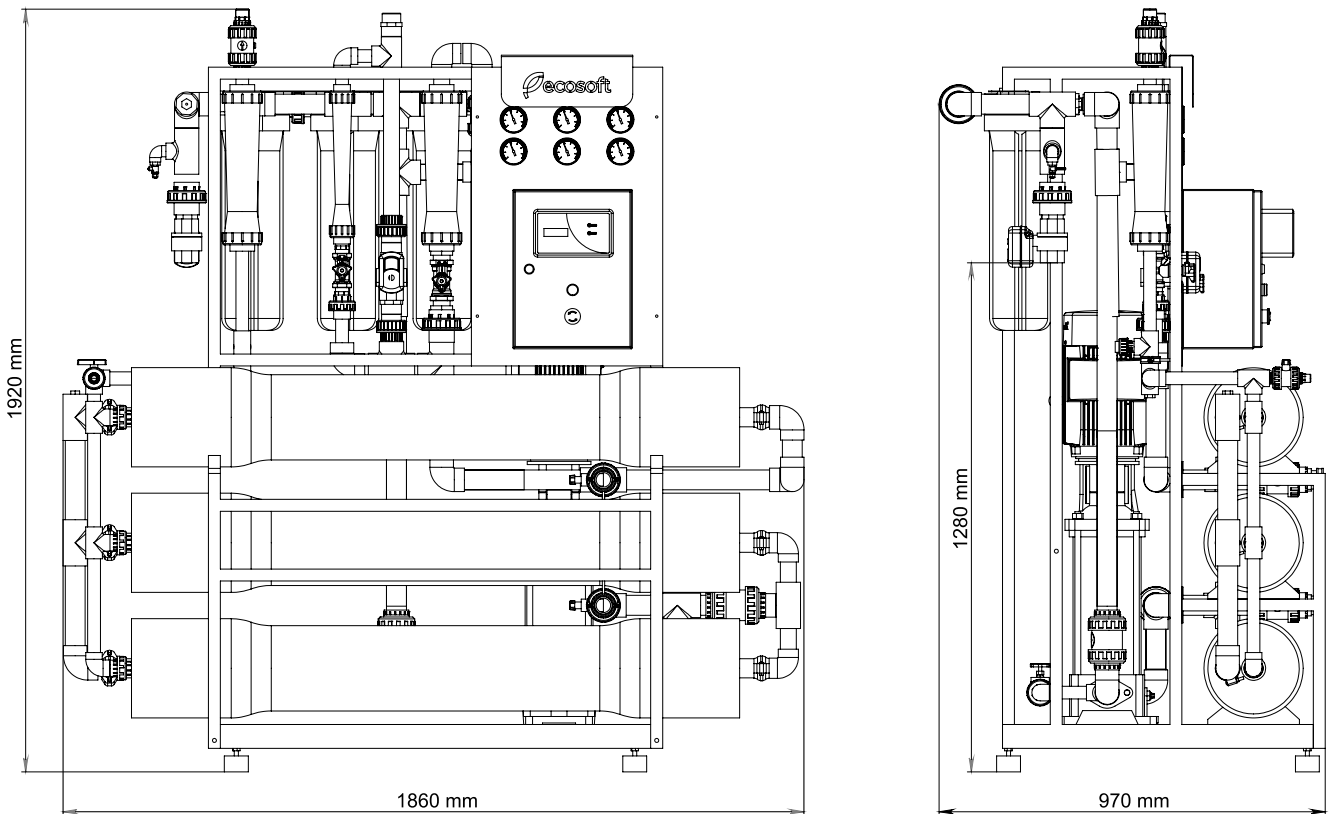


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OPTIONS.

| | |
|--|---|
| Special purpose DOW Filmtec™ membranes | — For problem water with high nitrate, ammonium, TDS, TOC or other water quality issues |
| EMEC dosing pump | — For hard water or other water quality issues |
| Permeate rinse | — Prolongs membrane life and extends runtime before membrane clean (CIP) |
| Raw water blending | — Corrects purified water analysis and increases total flow rate |

DIMENSIONS¹.



¹ Above dimensions are not binding and may vary within 30 mm



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EXTENDED SPECIFICATIONS.

| | | |
|--------------------------------------|---------------------|--------------------------|
| Pump power | | 4 kW |
| Inlet pressure of water ¹ | | 2...4 bar |
| Operating pressure | | 7...10 bar |
| Maximum pressure | | 14 bar |
| Influent flow rate during service | | 4...5 m ³ /h |
| Influent flow rate during rinse | | 8...10 m ³ /h |
| Connection port sizes: | — feed water | DN40 |
| | — permeate | DN25 |
| | — concentrate | DN40 |
| Clean-In-Place port sizes: | — in (feed) | DN40 |
| | — out (concentrate) | DN40 |
| | — out (permeate) | DN15 |
| Dimensions (Height x Width x Depth) | — product | 1.95×1.9×1.0 m |
| | — crate | 2.2×2.1×1.3 m |
| Weight | — product | 450 kg |
| | — crate | 570 kg |

¹ stable pressure (±0.5 bar) within specified limits is required for sustainable operation

FEED WATER REQUIREMENTS.

| | | |
|---|------------------------|---|
| 1 | Total Dissolved Solids | < 3000 mg/L (ppm) |
| 2 | Hardness ² | < 150 mg/L CaCO ₃ (ppm CaCO ₃) |
| 3 | Iron | < 0.1 mg/L (ppm) |
| 4 | Manganese | < 0.05 mg/L (ppm) |
| 5 | Hydrogen Sulfide | none |
| 6 | Silica ² | < 20 |
| 7 | Chlorine | < 0.1 mg/L (ppm) |
| 8 | Silt Density Index | < 5 mg/L (ppm) |

² higher value can be treated with antiscalant