

ML RO 100, ML RO 300

TECHNICAL DATA

Reverse osmosis system for elimination (> 95 %) of salts and minerals from main water with a capacity of 634 GPD and 1743 GPD respectively.

The systems are developed by ML System with focus on reliable and hygienically correct solutions.

The systems are fitted on frames with a separate reservoir tanks and all components are assembled, tested, and ready to use.



Fig 1. ML RO 300

ML RO 100 and ML RO 300 are equipped with the following components:

Standard:

- PLC control
- Separate pump provides 58 psi output pressure
- Reservoir tank closed with 0.2 μ m breathing filter
- Overflow protection
- Type approved water meter for produced permeate
- 5 μ m filtration of the tap water
- Pressure switch for protection of pump
- Operational hour meter
- Stop cock for RO water

Options:

- Active carbon filter
- UV system for sterilization of water
- Conductivity meter/alarm
- Dosage unit for regulation hardness

Benefits:

- Delivered on frame and with separate reservoir tank
- Fully assembled and tested
- All components exposed to water are made of corrosion resistant material
- The hoses are stainless steel braided or high-pressure hoses

ML RO 100, ML RO 300

TECHNICAL DATA

| Specifications: | ML RO 100 | ML RO 300 |
|--|-----------------------------------|-----------------------------------|
| Capacity*: | 0.44 GPM at 59 °F | 1.2 GPM at 59 °F |
| Permeate quality: | 5 < EC < 30 µS/cm | 5 < EC < 30 µS/cm |
| Permeate/concentrate ratio | approx. 50 / 50 % | approx. 50 / 50 % |
| Reservoir tank: | 13 gallons | 13 gallons |
| Size, frame: (LxWxH) | 34 x 28 x 63 inches | 34 x 28 x 63 inches |
| Weight: | 242 lb. | 253 lb. |
| Sound pressure level: | < 75 dB | < 75 dB |
| Supply voltage: | 3x480 VAC+GND+N, 60Hz, 1.6kW, 20A | 3x480 VAC+GND+N, 60Hz, 2.1kW, 20A |
| | 3x230 VAC+GND+N, 50Hz, 1.6kW, 16A | 3x230 VAC+GND+N, 50Hz, 2.1kW, 16A |
| | 3x208 VAC+GND+N, 60Hz, 1.4kW, 20A | 3x208 VAC+GND+N, 60Hz, 1.8kW, 20A |
| Dissolved salt removal: | > 95 % | > 95 % |
| Water connection, tap water: | 3/4" RG | 3/4" RG |
| Water connection, RO-water: | 3/4" RG | 3/4" RG |
| Water connection, drainage: | 3/4" RG | 3/4" RG |
| Outgoing pressure, RO-water: | 43.5 – 60.9 psi (3.0-4.2 bar) | 43.5 – 60.9 psi (3.0-4.2 bar) |
| * Capacity may vary depending on the quality of the tap water and decreases by approximately 3 % per decrease in °F of the temperature of the water. | | |

| Pre-Conditions: | ML RO 100 | ML RO 300 |
|-----------------------|---|--|
| Water supply: | Drinking water quality, 36-101 psi (2.5-7 bar) @ 0.88GPM | Drinking water quality, 36-101 psi (2.5-7 bar) @ 2.6GPM |
| Hardness: | Max. 20 gr/gal | Max. 20 gr/gal |
| Conductivity: | 250-1000 µS/cm | 250-1000 µS/cm |
| Free chlorine: | Max. 0.1 mg/l | Max. 0.1 mg/l |
| TDS: | Max. 625 mg/l | Max. 625 mg/l |
| Silt index: | Max. 3 | Max. 3 |
| KMnO4: | Max. 10 mg/l | Max. 10 mg/l |
| Fe: | Max. 0.2 mg/l | Max. 0.2 mg/l |
| Mn: | Max. 0.05 mg/l | Max. 0.05 mg/l |
| NTU: | Max. 1.0 | Max. 1.0 |
| Temperature: | Max. 59 °F | Max. 59 °F |