

## 'MRO-2.5' Light Commercial Reverse Osmosis Systems



### Overview

Marlo's MRO-2.5 light commercial grade reverse osmosis units combine high quality components with an energy-saving design for a reliable and economical supply of high purity water. The following are just a few of the applications that benefit from the use of RO water.

- Boiler feed
- Spot-free rinse
- Icemaking
- Greenhouses
- Research and medical labs
- Process make-up water
- Humidification
- Ion exchange pre-treatment

### Operating Parameters

- 200 to 2500 GPD Output Capacity
- Operating Pressure: 115-150 psig
- Maximum Recovery: 50%
- Nominal Salt Rejection: 97-99%
- Operating Temperature: 40-85° F (Design: 77° F)
- Minimum Inlet Pressure: 30 psig
- Electrical Requirement: 120 VAC, 1-phase, 60 Hz.
- Inlet Water Quality: Chlorine-Free/Softened
  - 1,000 ppm TDS Max (200-300 GPD)
  - 2,000 ppm TDS Max (500-2500 GPD)

### Materials of Construction

- Powder-coated steel wall-mount bracket (200-300 GPD)
- Powder-coated aluminum frame (500-2500 GPD)
- Membrane Elements:
  - Low Energy, Thin-film Composite (TFC)
- Membrane Housings: PVC
- Piping: Sch 80 PVC
- Tubing: Polyethylene

### Pump and Motor

- Pump: Rotary Vane, Brass Construction
- Motor: ODP, 120 VAC, 1-phase, 60 Hz.

### Standard Features

- 5-micron sediment pre-filter housing
- Activated carbon block pre-filter housing
- Automatic inlet shut-off valve
- Remote machine on/off capability
- Operating pressure gauges
- Concentrate and recycle flow control valves (500-2500 GPD)
- Permeate and concentrate flow meters (500-2500 GPD)
- Low inlet pressure switch (500-2500 GPD)

### Optional Equipment Available

- Deluxe upgrade package (500-2500 GPD):
  - Product water conductivity monitor
  - Stainless steel feed pump
- Frame-mount design (200-300 GPD)
- Pressurized storage vessels
- Atmospheric storage tanks with level control and repressurization pump

# SPECIFICATIONS



Wall-mount



Frame-mount

MODEL MRO-200											
MODEL NUMBER	RATE	CAPACITY	ELEMENT QUANTITY & SIZE (INCHES)	RO FEED	RO REJECT	SYSTEM PIPING CONNECTIONS (INCHES)			PUMP HP	APPROX. SHIP WT. (LBS.)	OVERALL DIMENSIONS (LxWxH) (INCHES)
	GPM	GPD		GPM	GPM	INLET FEED	PERMEATE	RO REJECT			
MRO-200	0.14	200	1	0.44	0.3	1/4" Tube	1/4" Tube	1/4" Tube	N/A	42	7x17x32
			2.5x14								



Wall-mount



Frame-mount

MODEL MRO-300											
MODEL NUMBER	RATE	CAPACITY	ELEMENT QUANTITY & SIZE (INCHES)	RO FEED	RO REJECT	SYSTEM PIPING CONNECTIONS (INCHES)			PUMP HP	APPROX. SHIP WT. (LBS.)	OVERALL DIMENSIONS (LxWxH) (INCHES)
	GPM	GPD		GPM	GPM	INLET FEED	PERMEATE	RO REJECT			
MRO-300	0.21	300	1	0.51	0.3	3/8" Tube	3/8" Tube	1/4" Tube	N/A	50	7x25x32
			2.5x21								



MODEL MRO-500											
MODEL NUMBER	RATE	CAPACITY	ELEMENT QUANTITY & SIZE (INCHES)	RO FEED	RO REJECT	SYSTEM PIPING CONNECTIONS (INCHES)			PUMP HP	APPROX. SHIP WT. (LBS.)	OVERALL DIMENSIONS (LxWxH) (INCHES)
	GPM	GPD		GPM	GPM	INLET FEED	PERMEATE	RO REJECT			
MRO-500	0.35	500	2	0.7	0.35	1" NPT	3/8" Tube	3/8" Tube	0.33	65	14x20x27
			2.5x21								



MODEL MRO-1000											
MODEL NUMBER	RATE	CAPACITY	ELEMENT QUANTITY & SIZE (INCHES)	RO FEED	RO REJECT	SYSTEM PIPING CONNECTIONS (INCHES)			PUMP HP	APPROX. SHIP WT. (LBS.)	OVERALL DIMENSIONS (LxWxH) (INCHES)
	GPM	GPD		GPM	GPM	INLET FEED	PERMEATE	RO REJECT			
MRO-1000	0.7	1,000	3	1.4	0.7	1" NPT	3/8" Tube	3/8" Tube	0.5	70	14x20x27
			2.5x21								



MODEL MRO-1500											
MODEL NUMBER	RATE	CAPACITY	ELEMENT QUANTITY & SIZE (INCHES)	RO FEED	RO REJECT	SYSTEM PIPING CONNECTIONS (INCHES)			PUMP HP	APPROX. SHIP WT. (LBS.)	OVERALL DIMENSIONS (LxWxH) (INCHES)
	GPM	GPD		GPM	GPM	INLET FEED	PERMEATE	RO REJECT			
MRO-1500	1.04	1,500	2	2.08	1.04	1" NPT	3/8" Tube	3/8" Tube	0.75	105	19x23x46
			2.5x40								



MODEL MRO-2500											
MODEL NUMBER	RATE	CAPACITY	ELEMENT QUANTITY & SIZE (INCHES)	RO FEED	RO REJECT	SYSTEM PIPING CONNECTIONS (INCHES)			PUMP HP	APPROX. SHIP WT. (LBS.)	OVERALL DIMENSIONS (LxWxH) (INCHES)
	GPM	GPD		GPM	GPM	INLET FEED	PERMEATE	RO REJECT			
MRO-2500	1.75	2,500	3	3	1.25	1" NPT	3/8" Tube	3/8" Tube	0.75	115	19x23x46
			2.5x40								