# 'MRO-4-LP' Low Pressure Reverse Osmosis Systems



#### **Overview**

Marlo's MRO-4-LP low pressure 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**

• Operating Pressure: 125-150 psig

• Nominal Recovery: 65–75%

• Nominal Salt Rejection: 95–99%

• Operating Temperature: 35–85° F

• Design Temperature: 77° F

• Minimum Inlet Pressure: 30 psig

• Inlet Water Quality: Chlorine-Free/Softened

• Electrical Requirements: 220 VAC, 1-phase, 60 Hz.

#### **Materials of Construction**

• Frame: Painted carbon steel

• Membrane Elements: Thin-film Composite (TFC)

• Membrane Housings: FRP

• Piping: Sch 80 PVC

• Tubing: Polyethylene

## **Pump and Motor**

• Pump: 304SS Multi-Stage Centrifugal

• Motor: ODP, 220 VAC, 1-phase, 60 Hz.

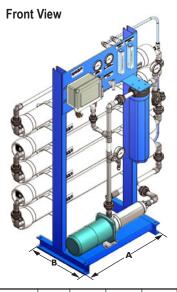
#### Standard Features

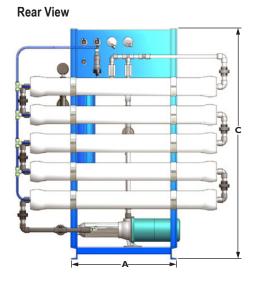
- 5-micron sediment pre-filter housing
- Automatic inlet shut-off valve
- Solid-state digital controller
- Product water conductivity monitor
- Operating pressure gauges
- Product and concentrate flow meters
- Concentrate and recycle flow control valves
- Low inlet pressure switch with shutdown alarm

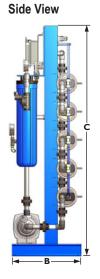
# **Optional Equipment Available**

- Pressurized storage vessels
- Atmospheric storage tanks with level control and repressurization pump
- Water softeners and carbon filter pretreatment
- Skid mounted packages with pre/post treatment equipment

## **SPECIFICATIONS MRO-3600-4-LP THROUGH MRO-9000-4-LP SERIES**

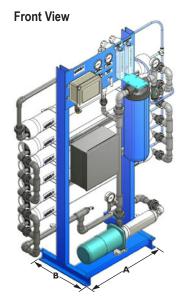


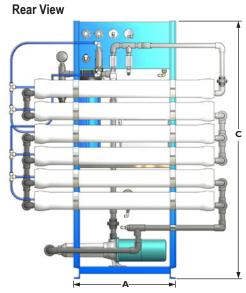


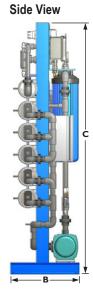


	Design	Capacity				System Piping Connections			Nominal				Dimensions		
Model No.	(gpm)	(gpd)	Element Quantity	1	RO Reject (gpm)	Inlet Feed	Product	Reject	Operating Pressure	Pump Hp	Approx. Ship Wt.	Approx. Operating Wt.	Length A	Width B	Height C
MRO-3600-4-LP	2.5	3,600	2	3.3–3.8	0.8-1.3	¾" FNPT	½" Tube	½" Tube	125 psi	1	375 lb.	425 lb.	56"	17"	57"
MRO-5400-4-LP	3.8	5,400	3	5.0-5.8	1.2–2.0	¾" FNPT	½" Tube	½" Tube	125 psi	1	425 lb.	475 lb.	56"	17"	57"
MRO-7200-4-LP	5.0	7,200	4	6.7–7.7	1.7–2.7	¾" FNPT	½" Tube	½" Tube	125 psi	1	475 lb.	525 lb.	56"	17"	57"
MRO-9000-4-LP	6.3	9,000	5	8.4–9.7	2.1–3.4	¾" FNPT	½" Tube	½" Tube	125 psi	1	525 lb.	575 lb.	56"	17"	57"

### SPECIFICATIONS MRO-10800-4-LP THROUGH MRO-16200-4-LP SERIES







	Design	Capacity	Element RO Feed RO Reject			System Piping Connections			Nominal				Dimensions		
Model No.	(gpm)	(gpd)	Llement	(gpm)	(gpm)	Inlet Feed	Product	Reject	Operating Pressure	Pump Hp	Approx. Ship Wt.	Approx. Operating Wt.	Length A	Width B	Height C
MRO-10800-4-LP	7.5	10,800	6	10–11.5	2.5–4	1" FNPT	1" FNPT	1" FNPT	125 psi	1.5	575 lb.	650 lb.	56"	18"	66"
MRO-12600-4-LP	8.8	12,600	7	11.7–13.5	2.9-4.7	1" FNPT	1" FNPT	1" FNPT	125 psi	1.5	625 lb.	700 lb.	56"	18"	66"
MRO-14400-4-LP	10.0	14,400	8	13.3–15.4	3.3-5.4	1" FNPT	1" FNPT	1" FNPT	125 psi	1.5	675 lb.	750 lb.	56"	18"	66"
MRO-16200-4-LP	11.3	16,200	9	15–17.4	3.7-6.1	1" FNPT	1" FNPT	1" FNPT	125 psi	1.5	725 lb.	800 lb.	56"	18"	66"

