

'MR' Series Water Softener Systems



Overview

The Marlo 'MR' Series water softener system offers the commercial or institutional facility a robust and efficient solution for reducing mineral scale, soap usage, and energy consumption in their plumbing and other water-using equipment.

The standard, all-steel exterior design will be reliable for many years of service. A modular platform allows for single, twin, or triplex tank designs to be easily configured to meet the exact flow requirements matched with the incoming water quality. Numerous custom engineered options are available to meet most specifications.

Standard Features

- Carbon steel resin tanks with epoxy-lined interior
- Water activated diaphragm style control valves
- Volume and/or time initiated regeneration cycle
- Polyethylene brine tank assembly with injector
- Sodium form cation exchange resin
- Inlet/Outlet tank sampling valves
- Water hardness testing kit
- Factory Hydro-tested at 100 psig

Materials of Construction

- Resin Tanks: Carbon steel with Safety Blue exterior paint
- Tank Lining: NSF 61 rated epoxy coating
- Exterior Piping: Galvanized steel pipe & cast iron fittings
- Internal Distributors: Sch 80 PVC/ABS
- Control Valves: Painted cast iron body

Instrumentation / Controls

- Marlo MX-III electronic system controller
- Time or metered control with bypass for single tank
- Alternating or parallel progressive metered control for twin and triple tank units
- NEMA-4X electrical enclosures
- Signet paddle-type flow sensors
- Inlet/Outlet pressure gauges

Operating Parameters

- Inlet Pressure: 30-100 psig
- Electrical: 120 VAC, 1-Ph, 60Hz
- Temperature: 35-110 °F

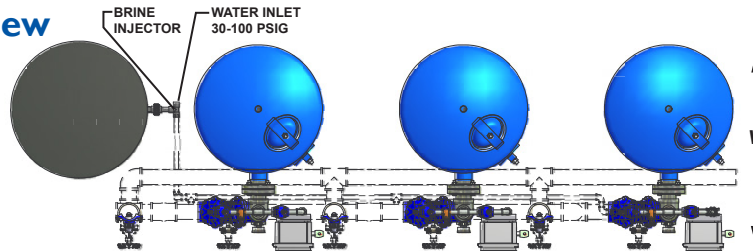
Options Available

- Skid mounted, pre-piped, pre-wired systems
- ASME code stamped resin tanks
- Allen-Bradley PLC systems
- Alternate water meter types
- Brine pump systems
- PVC or CPVC exterior piping
- Copper or Stainless steel exterior piping
- Stainless steel internal distributor piping
- Butterfly control valves (air operated)
- 'SRS' Salt Recycling Systems
- Online hardness monitor

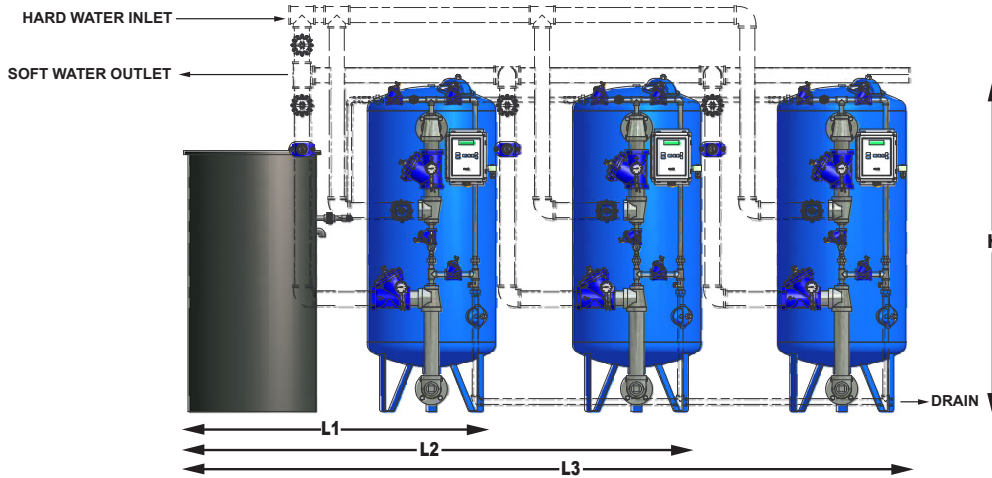
Specifications

CATALOG NUMBER	EXCHANGE CAPACITY (Grains) SALT USAGE (Pounds) ①		FLOW RATES			PIPE SIZE		RESIN	TANK SIZES		SALT STORAGE	REGENERATION PER SALT REFILL		OVERALL DIMENSIONS (INCHES) ③			SHIPPING WEIGHT (LBS) ⑤		
			SERVICE		BACK WASH	SERVICE	DRAIN		SOFTENER	BRINE				SINGLE (L1xWxH)	TWIN (L2xWxH)	TRIPLE (L3xWxH)	SINGLE	TWIN	TRIPLE
	MAX.	MIN.	CONT. GPM ②	PEAK GPM ②				GPM			INCHES	INCHES	CU. FT.						
MR-150-1	150,000	100,000	32	42	10	1	1	5	20 x 54	24 x 50	700	9	23	71x34x70	107x34x70	145x34x70	708	1,345	2,053
MR-150-1-1/2			75	30		55	78							1-1/2	1	71x34x70	107x34x70	145x34x70	721
MR-150-2	210,000	140,000	69	97	15	2	1	7	24 x 54	24 x 50	600	5	14	71x34x70	107x34x70	145x34x70	754	1,430	2,184
MR-210-1-1/2			105	42		64	86							1-1/2	1	73x39x71	113x39x71	157x39x71	919
MR-210-2	300,000	200,000	80	110	20	2	1	10	30 x 54	24 x 60	600	4	10	73x38x71	113x38x71	157x38x71	946	1,814	2,760
MR-210-2-1/2			105	42		115	160							2-1/2	1	73x41x74	113x41x74	157x41x74	1,000
MR-300-1-1/2	450,000	300,000	68	92	20	1-1/2	1	15	30 x 60	30 x 60	1000	4	11	76x44x75	121x44x75	175x44x75	1,426	2,732	4,158
MR-300-2			150	60		92	125							2	1	76x44x75	121x44x75	175x44x75	1,428
MR-300-2-1/2	750,000	500,000	140	190	30	2-1/2	1	25	36 x 60	39 x 60	1900	6	15	76x48x79	121x48x79	175x48x79	1,458	2,785	4,243
MR-300-3			150	60		165	230							3	1	76x48x79	121x48x79	175x48x79	1,533
MR-450-1-1/2	600,000	400,000	63	90	20	1-1/2	1	15	30 x 60	30 x 60	1000	4	11	82x45x79	127x45x79	181x45x79	1,753	3,333	5,086
MR-450-2			225	90		82	115							2	1	82x44x79	127x44x79	181x44x79	1,753
MR-450-2-1/2	750,000	500,000	120	170	30	2-1/2	1	25	36 x 72	39 x 60	1700	4	11	82x48x79	127x48x79	181x48x79	1,776	3,408	5,184
MR-450-3			375	150		140	190							3	1	82x48x79	127x48x79	181x48x79	1,826
MR-600-2	900,000	600,000	110	125	20	2	1-1/2	15	36 x 60	39 x 60	1900	6	15	94x51x86	148x51x86	208x51x86	2,460	4,722	7,182
MR-600-2-1/2			300	120		140	190							2-1/2	1-1/2	94x54x86	148x54x86	208x54x86	2,460
MR-600-3	750,000	500,000	175	250	30	3	1-1/2	25	36 x 72	39 x 60	1700	4	11	94x54x86	148x54x86	208x54x86	2,533	4,863	7,396
MR-750-2			375	150		90	116							2	1-1/2	94x51x98	148x51x98	208x51x98	2,833
MR-750-2-1/2	900,000	600,000	140	190	20	2-1/2	1-1/2	25	36 x 72	39 x 60	1700	4	11	94x54x98	148x54x98	208x54x98	2,863	5,470	8,363
MR-750-3			450	180		160	230							3	1-1/2	94x54x98	148x54x98	208x54x98	2,970
MR-900-2	1,050,000	700,000	105	133	20	2	2	30	42 x 60	42 x 60	1900	4	10	103x58x88	163x58x88	229x58x88	3,340	6,429	9,769
MR-900-2-1/2			450	180		150	218							2-1/2	2	103x60x88	163x60x88	229x60x88	3,378
MR-900-3	750,000	500,000	188	279	30	3	2	25	42 x 60	42 x 60	1900	4	10	103x60x88	163x60x88	229x60x88	3,416	6,598	10,014
MR-1050-2			525	210		95	124							2	2	111x58x103	171x58x103	237x58x103	3,650
MR-1050-2-1/2	1,050,000	700,000	145	210	20	2-1/2	2	35	42 x 72	50 x 60	2300	4	10	111x60x103	171x60x103	237x60x103	3,688	7,108	10,737
MR-1050-3			525	210		173	259							3	2	111x60x103	171x60x103	237x60x103	3,726

'MR' Series - Top View



'MR' Series - Front View



Notes

- ① Maximum capacity based on 30,000 grains per cubic foot of resin when regenerated with 15 lbs. salt . Minimum capacity based on 20,000 grains per cubic foot of resin when regenerated with 6 lbs. salt.
- ② At pressure loss not exceeding 15 psi.
- ③ At pressure loss not exceeding 25 psi.
- ④ Dimensions are estimate only. Actual dimensions may vary based on job-site space limits and piping layout. Allow a minimum of 24" above height dimension for resin loading. Use of ASME rated tanks may add up to 12" of tank height.
- ⑤ Shipping weights are estimate only. Weights include resin and support gravel, which are added to the tanks after installation.