

'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-II 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

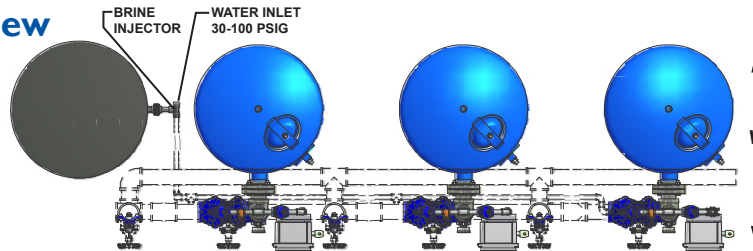
Options Available

- 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

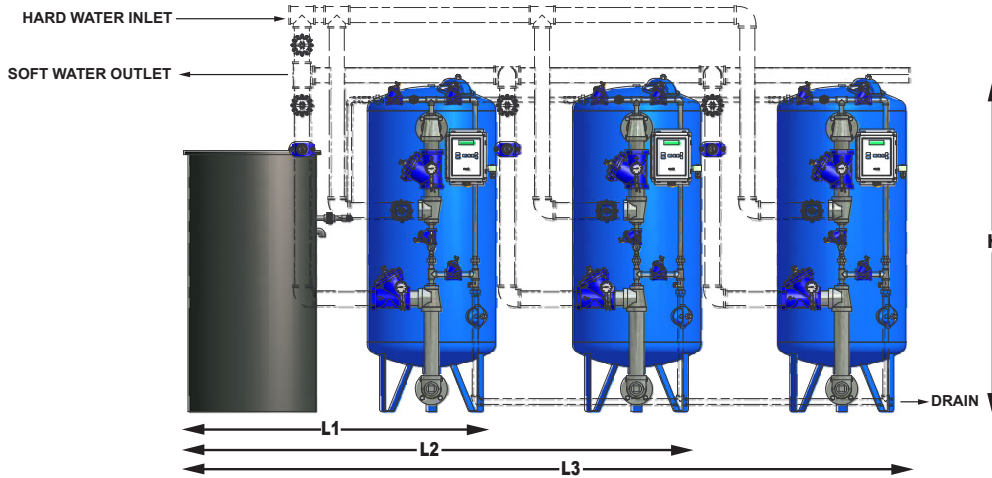
Specifications

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			55	78		1-1/2	1							71x34x70	107x34x70	145x34x70	721	1,369	2,090
MR-150-2	150,000	100,000	69	97	10	2	1	5	20 x 54	24 x 50	700	9	23	71x34x70	107x34x70	145x34x70	754	1,430	2,184
MR-210-1-1/2			64	86		1-1/2	1							73x39x71	113x39x71	157x39x71	919	1,762	2,681
MR-210-2	210,000	140,000	80	110	15	2	1	7	24 x 54	24 x 50	600	5	14	73x38x71	113x38x71	157x38x71	946	1,814	2,760
MR-210-2-1/2			115	160		2-1/2	1							73x41x74	113x41x74	157x41x74	1,000	1,900	2,900
MR-300-1-1/2	300,000	200,000	68	92	20	1-1/2	1	10	30 x 54	24 x 60	600	4	10	76x44x75	121x44x75	175x44x75	1,426	2,732	4,158
MR-300-2			92	125		2	1							76x44x75	121x44x75	175x44x75	1,428	2,738	4,166
MR-300-2-1/2	300,000	200,000	140	190	20	2-1/2	1	10	30 x 54	24 x 60	600	4	10	76x48x79	121x48x79	175x48x79	1,458	2,785	4,243
MR-300-3			165	230		3	1							76x48x79	121x48x79	175x48x79	1,533	2,936	4,469
MR-450-1-1/2	450,000	300,000	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			82	115		2	1							82x44x79	127x44x79	181x44x79	1,753	3,351	5,104
MR-450-2-1/2	450,000	300,000	120	170	20	2-1/2	1	15	30 x 60	30 x 60	1000	4	11	82x48x79	127x48x79	181x48x79	1,776	3,408	5,184
MR-450-3			140	190		3	1							82x48x79	127x48x79	181x48x79	1,826	3,504	5,330
MR-600-2	600,000	400,000	110	125	30	2	1-1/2	20	36 x 60	39 x 60	1900	6	15	94x51x86	148x51x86	208x51x86	2,460	4,722	7,182
MR-600-2-1/2			140	190		2-1/2	1-1/2							94x54x86	148x54x86	208x54x86	2,460	4,781	7,241
MR-600-3	600,000	400,000	175	250	30	3	1-1/2	20	36 x 60	39 x 60	1900	6	15	94x54x86	148x54x86	208x54x86	2,533	4,863	7,396
MR-750-2			90	116		2	1-1/2							94x51x98	148x51x98	208x51x98	2,833	5,440	8,273
MR-750-2-1/2	750,000	500,000	140	190	30	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			160	230		3	1-1/2							94x54x98	148x54x98	208x54x98	2,970	5,581	8,551
MR-900-2	900,000	600,000	105	133	45	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			150	218		2-1/2	2							103x60x88	163x60x88	229x60x88	3,378	6,488	9,807
MR-900-3	900,000	600,000	188	279	45	3	2	30	42 x 60	42 x 60	1900	4	10	103x60x88	163x60x88	229x60x88	3,416	6,598	10,014
MR-1050-2			95	124		2	2							111x58x103	171x58x103	237x58x103	3,650	7,049	10,699
MR-1050-2-1/2	1,050,000	700,000	145	210	45	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			173	259		3	2							111x60x103	171x60x103	237x60x103	3,726	7,218	10,944

'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.