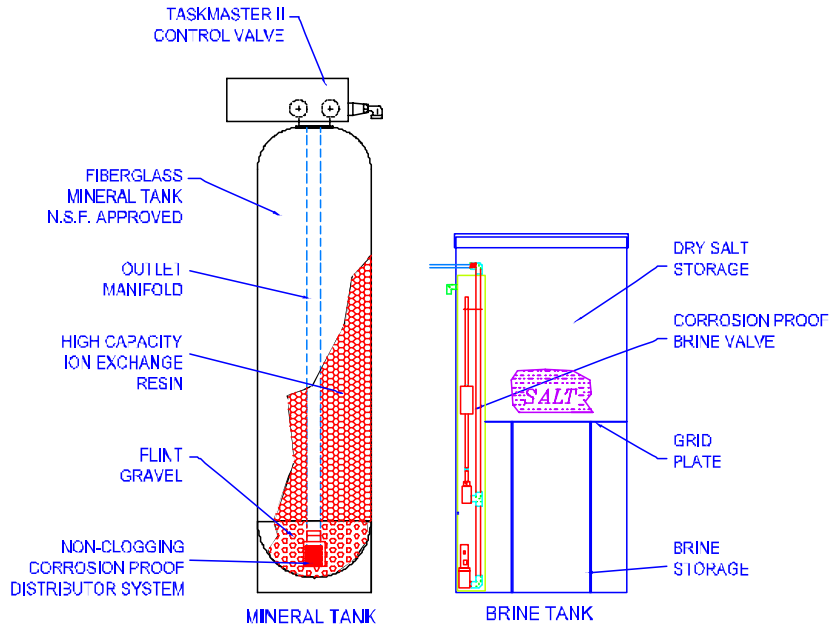


RF Series Water Softeners



STANDARD

TASK MASTER II™ - 1½" VALVE – TOP MOUNT
 6-DAY TIMER
 POLYGLASS™ MINERAL TANKS
 ACCUMATIC™ BRINE SYSTEM.
 RESIN POLYSTYRENE 8% DVB CL
 SINGLE POINT ABS DISTRIBUTOR
 110V, 60Hz, 1Ø

OPTIONS

7-DAY TIMER
 TWIN CONFIGURATION
 TWIN ALTERNATING WITH EDRII
 AND PW SERIES METER
 SHUT OFF KIT (SOK) TO PREVENT
 BYPASS DURING REGENERATION
 PRESSURE GAUGE AND TEST TAP KIT
 SKID MOUNTING
 220V, 50Hz, 1Ø

OPERATING CONDITIONS

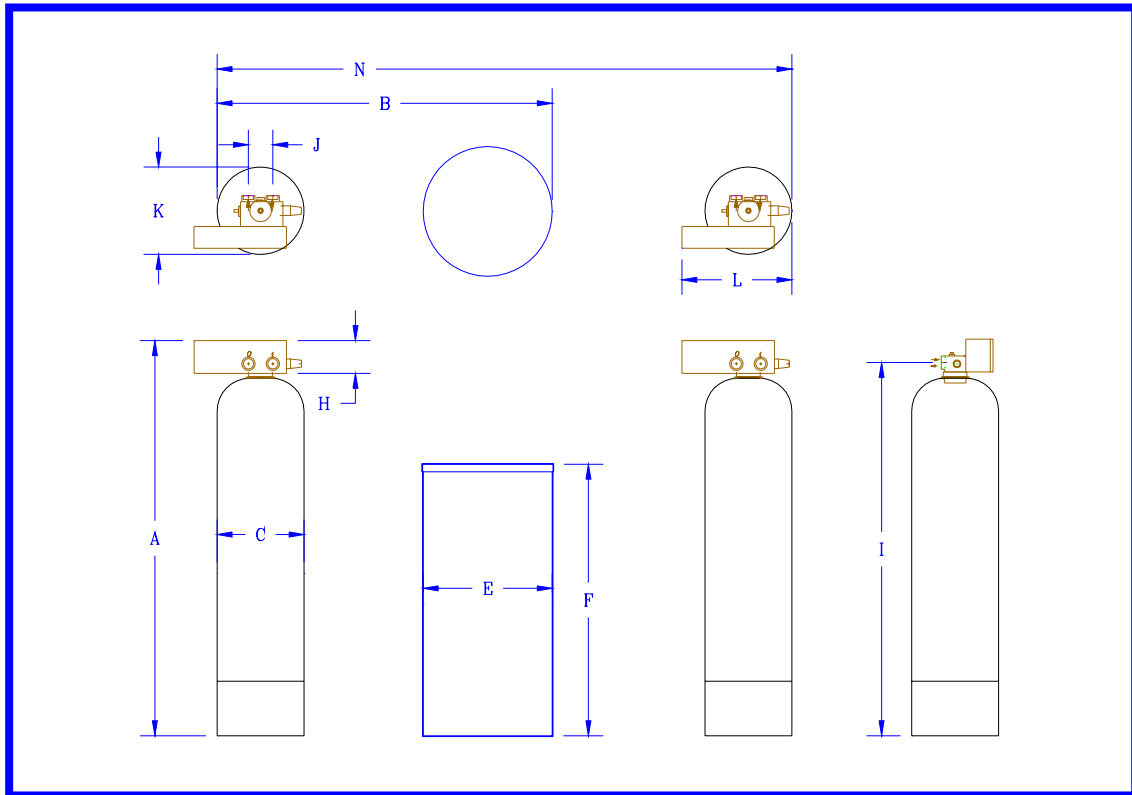
25 TO 100 PSI ♦ 100°F

RF SERIES APPLICATION TABLE - DISCONTINUED

Model ¹	50	70	100	120	150	240	300	450
Mineral Tank	12x52	13x54	14x65	16x65	21x62	24x72	30x72	36x72
Resin Volume (ft ³)	1 ½	2 ¼	3 ¼	4	5	8	10	15
Gravel (lbs)	15	30	40	55	140	200	250	300
Brine Tank	18x40	18x40	24x40	24x40	24x40	24x50	24x50	30x50
Salt Storage (lbs)	320	320	500	500	500	580	580	900
Brine Valve (in)	¾	¾	¾	¾	¾	¾	¾	½
Capacity (Kgr)	49	69	100	130	153	245	293	432
Salt per Regen (lbs)	29	29	66	66	66	106	106	145
Continuous Flow ² (gpm)	15	23	32	40	50	61	61	61
Peak Flow ³ (gpm)	23	34	49	60	71	81	81	81
Backwash Rate ⁴ (gpm)	4	4	5	6	10	15	25	35
Height ⁵ (in)	59	61	72	72	69	78	82	82
Depth (in)	18	24	24	24	24	24	30	36
Width (in)	36	43	44	46	51	54	60	72
Twin Width ⁶ (in)	54	62	64	68	78	84	96	114
Single Weight (lbs)	300	350	420	495	665	925	1095	1395
Twin Weight ⁶ (lbs)	440	565	705	845	1185	1380	2115	2625

- Capacities are based on 20 gpg hardness at intermittent flow rates and are 95% of laboratory results.
- Continuous flow rates are based on 10 gpm per cubic foot of mineral or a 15 psi pressure drop, whichever is less.
- Peak flow rates are based on 15 gpm per cubic foot of mineral or a 25 psi pressure drop, whichever is less.
- Drains must be able to dispose of water at the listed rate for up to 20 minutes.
- Dimensions listed are actual unit height. Add at least one foot for loading mineral tanks.
- A twin unit includes two mineral tanks and one brine tank.

RF SERIES DIMENSIONS



RF SERIES DIMENSIONS - INCHES

Model	A	B	C	E	F	H	I	J	K	L	N
50	59	36	12	18	40	6 ½	54 ¼	4 ½	12	18	54
70	61	43	13	24	40	6 ½	56 ¼	4 ½	13 ½	18	62
100	72	44	14	24	40	6 ½	67 ¼	4 ½	14	18	64
120	72	46	16	24	40	6 ½	67 ¼	4 ½	15	18	68
150	69	51	21	24	40	6 ½	64 ¼	4 ½	17 ½	18	78
240	78	54	24	24	50	6 ½	73 ¼	4 ½	19	18	84
300	82	60	30	30	50	6 ½	74 ¼	4 ½	30	18	96
450	96	72	36	36	48	6 ½	74 ¼	4 ½	36	18	114

RF SERIES DIMENSIONS - CENTIMETERS

Model	A	B	C	E	F	H	I	J	K	L	N
50	159.9	94.4	30.5	45.7	101.6	16.5	138.4	11.4	30.5	45.7	137.2
70	154.9	109.2	33.0	61.0	101.6	16.5	142.9	11.4	34.3	45.7	157.5
100	182.9	111.8	35.6	61.0	101.6	16.5	170.8	11.4	35.6	45.7	162.6
120	182.9	116.8	40.6	61.0	101.6	16.5	170.8	11.4	38.1	45.7	172.7
150	175.3	129.5	53.3	61.0	101.6	16.5	163.2	11.4	44.4	45.7	198.1
240	198.1	137.2	61.0	61.0	127.0	16.5	186.1	11.4	48.3	45.7	213.4
300	208.3	152.4	76.2	76.2	127.0	16.5	188.6	11.4	76.2	45.7	243.8
450	243.8	182.9	91.4	91.4	121.9	16.5	188.6	11.4	91.4	45.7	289.6

NOTE: A – HEIGHT⁵, E – DEPTH, B – SINGLE WIDTH, N – TWIN WIDTH⁶
SPECIFICATIONS LISTED ARE NOT SKID MOUNTED SYSTEMS.
SKID DIMENSIONS GIVEN UPON REQUEST.

RF Series Specification - DISCONTINUED

Mineral Tank. The mineral tank shall be "polyglass" consisting of an inner shell of virgin polyethylene and an external shell of continuous fiberglass roving. Tanks shall be rated at 150 psi operating pressure, 120°F operating temperature with 4"-8 UN threaded top opening.

Internals. The distributor shall be a 2½" Ø single point molded distributor head with 2½" of slotted length and a 1½ inch female socket welded connection. The slots shall be 0.012" - 0.016" wide to retain mineral and the total slot area shall be equal to or larger than the unit pipe size. The distributor pipe shall be 1½ inch schedule 40 white PVC.

Media. The resin shall be sodium form polystyrene 8% divinyl benzene cross linked resin with clear spherical beads. Resin beads shall be 16-50 US Standard Mesh with a particle size range of 0.3 to 1.2 mm. The resin shall be clean and packaged in sealed plastic bags weighing 55 lbs or less.

Underbedding. The bottom of this mineral tank shall be filled above the distributor with #20 graded washed flint gravel sieved between 1/8" and 1/16".

Brine System. The brine system shall be of the Accumatic™ high grid plate design. The brine tank shall be blow molded or rotationally molded HDPE, including a cover. The system shall include a SCH 80 PVC float operated brine valve to control refill shut-off and refill flow rate. Brine volume is to be repeatedly accurate within 10% and not dependent on salt bed void space for brine volume. Brine draw is to volumetrically controlled, not timed.

Control Valve. The main control valve(s) shall be the Task Master II™ controlled by a time clock to actuate the cycles of backwash, brine, slow rinse, fast rinse, and service. The control valve(s) shall be Task Master II™ 5-Cycle, 100 psi, multi-port control valve(s) with machined brass body, stainless steel piston assembly, Noryl® inserts, Buna-N seals, service and regeneration lights, drive motor assembly, and NEMA 3 enclosure (120VAC/60Hz/3Amps). The valve shall operate with a single motor driven, cam positioned, piston. The valve shall be of a single piston design and not use multiple plungers or diaphragm valves. Each control valve shall be equipped with "Service" and "Regeneration" indicator lights. The valve shall be equipped with threaded ¼" FNPT ports for the installation of sample taps and pressure gauges. (Taps and gauges are optional.) Hard water bypass shall be available during all regeneration cycles at 70 gpm or at the peak flow rate of the unit, at a pressure drop less than 25 psi, whichever is less. Simplex units shall bypass during regeneration unless optional shut off kits are provided.

Simplex. Simplex systems shall have regeneration initiated by one (1) 6-day time clock or timer controller (standard) designed to allow up to daily regenerations at a set time of day and also control the duration of each of the cycles of regeneration. (Note: Seven-day timer allowing day of week selection is optional.) Regeneration shall also be manually initiated by advancing the timer knob per operating instructions.

Twin. Twin systems shall consist of two mineral tanks with attached control valves and one brine tank with a brine director. Regeneration initiation shall be by 6 or 7-day timers on each unit. Simultaneous regeneration of twin units shall be prevented by an interconnecting wire between the valves. No external relays or other devices shall be required. (This feature is called "Regeneration Lockout".) Twin units shall bypass during regeneration unless optional shut off kits are specified.

Twin Alternating. Twin alternating systems shall consist of two mineral tanks with attached control valves with ARC timers, one brine tank with brine director, one EDRII controller, one PW series flow meter and one shut off kit. Regeneration initiation and meter display shall be provided by the EDRII - Electronic Demand Regeneration Controller. Twin alternating units operate so that once a predetermined amount of water has passed through the PW series flow meter the EDRII initiates regeneration of the exhausted unit placing its twin in service. The timer shall be an Automatic Regeneration Controller (ARC) Timer, which, controls only the softening cycles. The brine director

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shall be a SCH 80 PVC shuttle type valve operating so that only one of the twin units shall draw brine at a time. A single brine valve shall service both softeners. The shut off kit shall consist of a diaphragm valve, solenoid, and wiring to prevent hard water bypass during regeneration. For RF systems the valve shall be 1 ½”.

Operating Conditions. Maximum temperature shall be 100°F. Pressure shall be 25 to 100 psi.

Other items. A standard soft water soap test kit shall be provided. A complete set of instructions, including installation, loading, start-up, adjustments, servicing, and a parts list shall be provided with the equipment.

Qualifications. A company that has continuously manufactured water softeners for at least twenty (20) years shall construct this equipment.

Shut off kit. Hard water bypass during regeneration shall be prevented by a shut off kit to include a cast iron body diaphragm valve (DM Series) and a three-way solenoid valve with wiring and conduit to connect to Task Master II™.

Pressure gauge and test tap kit. A kit containing two liquid filled, stainless steel pressure gauges with 2 ½” Ø face, two brass ball valve sample taps with hose barb connections and associated brass connection fittings shall be provided for mounting in the 1/4" FNPT predrilled and tapped ports in the inlet and outlet of the Task Master II valve.



**RF WITH TASKMASTER II DISCONTINUED
SEE CAT 211**