

WATER CONDITIONERS

FC - TIMER INITIATED FCM - METER INITIATED

COMMERCIAL & INDUSTRIAL



APARTMENT BUILDINGS
BOILER TREATMENT
CAR WASHES
COMMERCIAL BUILDINGS
CONDOMINIUMS
FACTORIES
HEALTH CLUBS

HOSPITALS
LAUNDRIES
MOTELS AND HOTELS
NURSING AND REST HOMES
OFFICE BUILDINGS
RESTAURANTS
SCHOOLS

"You never had it so soft!"

Capital Means "Excellence"

Many people have learned from us, and many have tried duplicating us, however there is only one (1) Capital Water Softener. One of the original pioneers in water conditioning, Capital Water Softener, Inc. has been building quality products since 1936. Quality built in to allow quality to come out. As our motto goes, "You never had it so soft!" Only the best are allowed to display the Capital name.

FC & FCM Water Conditioners have a full 2" inlet & outlet for higher service flow rates today's demands call for. Up to 80 G.P.M. hard water by-pass during regeneration for single water conditioning systems or capabilities for no hard water by-pass for twin, twin alternating, and multiple tank systems, simply by changing the service flow piston. The valve is a top mounted valve, thus eliminating more expensive items such as side mounted tanks, diaphragms, solenoids, and stagers. No time consuming wiring is necessary. Completely factory wired for fast and easy installations. The regeneration cycle of the FC water conditioners are timer initiated, with either a 7 or 12 day timer. The regeneration cycle of the FCM water conditioners may be initiated with your choice of either a mechanical Econominder or Microprocessor Demand Metering Systems. Available with either 1" or 2" meters. Both systems capable of demand or immediate regenerations.



The valve is solid brass, with time tested hydraulically balanced piston, seal and spacer concept to pilot service flow.

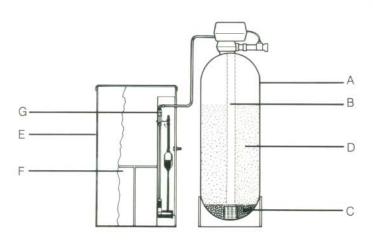
Fully automatic or can be manually placed into regeneration simply by turning the service indicator on the timer clockwise.

Heavy duty drive train for fast and smooth shifting of the service and regeneration valves.

Available in either 24v. 110v. 220v. 50 or 60 Hz.

FC & FCM WATER CONDITIONERS

- A. MINERAL TANK: Fiberglass Reinforced Pressure Vessel manufactured to operate at 150 PSI and 120°F. UL listed, NSF approved.
- B. DISTRIBUTOR SYSTEM: Bottom Stack Slotted Distributor, or Hub Lateral System. For maximum service flow and minimal pressure drop.
- C. UNDERBEDDING: Gravel Underbedding allows full useage of the mineral hed
- D. MINERAL: High Capacity Ion Exchange, FDA approved, U.S. manufactured. Uniform beads for maximum hardness removal and long life.
- E. BRINE TANK: High Density Polyethylene Brine Tank with environmental stress crack properties and dust resistant cover.
- F. SALT GRID: Salt Grid Systems minimizes the salt from bridging and improves the brine concentration to obtain full capacity with each and every regeneration.
- G. FLOAT VALVE: Is a positive shut-off, as well as a salt dosage control. Also works as a secondary shut-off for the brine valve in the main control valve.



OPTIONAL SYSTEM CAPABILITIES

SINGLE TANK SYSTEMS (w/6 options)

- 1. Timer initiated 7 & 12 day
- 2. Econominder System 4 (delayed regeneration)
- 3. Econominder System 4 (immediate regeneration)
- 4. 480 DDS System A (immediate regeneration)
- 5. 480 DDS System B (delayed regeneration)
- 6. 480 DDS System C (preset time regeneration)

TWIN AND MULTIPLE SYSTEMS (w/4 options)

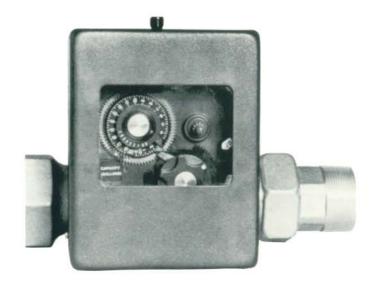
- 1. Timer initiated 7 & 12 day
- W/2 Econominder Meters System 5 Immediate Regeneration w/lockouts. (twin)
- 3. One (1) 480 DDS w/2 Turbines System E/2 (twin)
- 4. One (1) 480 DDS w/3 Turbines System E/3 (tri-plex)

TWIN ALTERNATING SYSTEMS (w/2 options)

- 1. Econominder Meter System 7 (single meter)
- 2. 480 DDS System D/2 (single turbine) NOTE: Only one (1) Brine Tank required.

TRI-PLEX ALTERNATING SYSTEM

1. 480 DDS System D/3



ECONOMINDER METER

	SPECIFICATIONS	
PIPE SIZE: FLOW RANGES: ACCURACY:	MODEL 2750 1" .5-40 GPM ±5%	MODEL 3100 2" 3-150 GPM ±5%
N	METER GALLON RANG	ES
STANDARD RANGE: EXTENDED RANGE:	360- 5,100 gal. 1,800-25,500 gal.	1,250- 21,250 gal. 6,250-106,250 gal.

NEMA 13 ENCLOSURE OPTIONAL

480 DDS MICROPROCESSOR

SPECIFICATIONS				
TURBINE SIZES:	1"	2"		
FLOW RANGES:	.25-50 GPM	2-250 GPM		
ACCURACY:	±3%	±3%		

METER RANGE: Up to one million (1,000,000) gallons.

CIRCUITRY: Two (2) circuit boards, a powerboard with solid-state output switches and a microprocessor logic board with six (6) element LED digital display. Three (3) push buttons for user interface.

READOUTS: Remaining volume of water, volume setting, flow rate (GPM) and unit status. (Time of day and time of regeneration in Systems B and C.)

ENCLOSURES: NEMA 1 Standard Dust Resistant NEMA 4 Moisture Resistant



SPECIFICATIONS

MODEL FC-FCM	MINERAL TANK INCHES	BRINE TANK INCHES	SALT CAPACITY STORAGE LBS.	SHIPPING WEIGHT LBS. SINGLE	SHIPPING WEIGHT LBS. TWIN	MODEL FCM METER SIZE
64 2"	13 x 54	24 x 41	525	265	490	1"
96 2"	14 x 65	24 x 41	525	320	600	1" - 2"
128 2"	16 x 65	24 x 41	525	425	800	2"
160 2"	21 x 62	24 x 50	510	555	1065	2"
200 2"	21 x 62	24 x 50	510	610	1175	2"
256 2"	24 x 71	30 x 48	700	750	1480	2"
320 2"	24 x 71	30 x 48	700	900	1750	2"
480 2"	30 x 72	39 x 48	1000	1415	2750	2"
640 2"	36 x 72	39 x 48	1000	1825	3490	2"

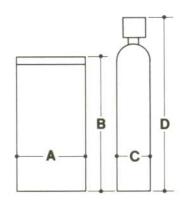
CAPACITY CHART

MOD FC-F	100	GRAVEL LBS.	RESIN CU. FT.	RATED CAPACITY LOW SALT GRAINS @ LBS.	RATED CAPACITY MEDIUM SALT GRAINS @ LBS.	RATED CAPACITY HIGH SALT GRAINS @ LBS.	FLOW RATES CONTINUOUS 15 PSI DROP	FLOW RATES PEAK 25 PSI DROP	BKW GPM
64	2"	35	2.00	42,000 @ 12	48,000 @ 16	64,000 @ 30	40	56	Δ
	2"	39	3.00	63,000 @ 18	72,000 @ 24	96,000 @ 45	39	54	5
128	2"	50	4.00	84,000 @ 24	96,000 @ 32	128,000 @ 60	47	64	7
160	2"	80	5.00	105,000 @ 30	120,000 @ 40	160,000 @ 75	67	85	10
200	2"	80	6.25	133,000 @ 38	150,000 @ 50	200,500 @ 94	61	76	10
256	2"	100	8.00	168,000 @ 48	192,000 @ 64	256,000 @ 120	74	97	15
320	2"	100	10.00	210,000 @ 60	240,000 @ 80	320,000 @ 150	68	91	15
480	2"	175	15.00	315,000 @ 90	360,000 @ 120	480,000 @ 225	84	105	25
640	2"	275	20.00	420,000 @ 120	480,000 @ 160	640,000 @ 300	87	110	30

NOTE: OPERATING CONDITIONS

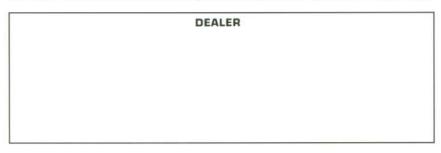
- 1. Temperature not to exceed 100°F and should not be subject to freezing.
- 2. Water pressure, minimum 25 PSI and maximum 120 PSI.
- 3. The pipe size for the drain line should be the same size as the female connection.
- 4. Always provide a three (3) way by-pass system.

DIMENSIONS



	MOD FC-F	100	Α	В	С	D	
	64	2"	24	41	13	67	
	96	2"	24	41	14	78	
	128	2"	24	41	16	78	
	160	2"	24	50	21	76	
	200	2"	24	50	21	76	
	256	2"	30	48	24	86	
	320	2"	30	48	24	86	
	480	2"	39	48	30	92	
	640	2"	39	48	36	94	
_							

DUE TO CONTINUOUS PRODUCT IMPROVEMENT, SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



WARRANTY

2 YEARS — ALL PARTS 10 YEARS — MINERAL TANK 10 YEARS — BRINE TANK





MANUFACTURED BY:

CAPITAL WATER SOFTENER, INC. 2096 HELENA ST. MADISON, WI 53704

608-241-1511 IN STATE 800-472-3283 OUT OF STATE 800-558-3283