# SECTION 17 Commercial Water Softeners



#### WATER QUALITY PRODUCTS Catalog 10

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. Watts reserves the right to change or modify product design, construction, specifications or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

### LC-100 Light Commercial Single Tank Softeners (1")



### Ideal for commercial applications with capacities to 120,000 grains.

LC-100 series softeners with Fleck 2750 brass control valves are our best selling light commercial softeners because they are ideal, considering price and performance!

#### **Specifications**

Valve	Fleck 2750 SXT top mount valve
Valve body	Brass
Pipe size	1"
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

#### **Features & benefits**

- Economical pricing!
- Top quality components.
- Models for capacities to 120,000 grains.
- User friendly Fleck 2750 control valves.
- Brine tanks with grid plate for maximum saturation of brine (some models).
- Safety brine valve with air check.

#### Time clock models (with FT2750SE brass valve without flow meter)

Part Number	Capacity Pipe		Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping
	(Max.)	Size (In.)	Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M4040-SE	60,000	1"	12x52	2	10	18x40	400	15-20	15-25	4	200
M4042-SE	90,000	1"	14x65	3	15	18x40	400	18-23	15-25	5	240
M4046-SE	120,000	1"	16x65	4	30	18x40	400	19-25	15-25	7	320

#### Metered models (with FM2750SE brass valve with flow meter)

Part Number	Capacity	Pipe	Mi	ineral Tank		Brine	Tank	Flow Ra	ite & Pressi	ure Drop	Shipping
	(Max.)	Size (In.)	Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M4040B-SE	60,000	1"	12x52	2	10	18x40	400	15-20	15-25	4	200
M4042B-SE	90,000	1"	14x65	3	15	18x40	400	18-23	15-25	5	240
M4046B-SE	120,000	1"	16x65	4	30	18x40	400	19-25	15-25	7	320

### LC-150 Light Commercial Single Tank Softeners (1-1/2")



### Ideal for commercial applications with capacities to 300,000 grains.

LC-150 series softeners with Fleck 2850 brass control valves are suitable for flow rates to 55 GPM. Models with time clock and metered controls are available.

#### **Specifications**

Valve	Fleck 2850 top mount valve
Valve body	Brass
Pipe size	1-1/2"
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

#### **Features & benefits**

- 1-1/2" valves for high flow rates
- Top quality components
- Models for capacities to 300,000 grains
- User friendly Fleck 2850 control valves
- Brine tanks with grid plate for maximum saturation of brine (some models)
- Safety brine valve with air check.

#### Part Number Capacity Pipe Mineral Tank Brine T Flow Rate & Pressure ank Drop Shipping (Max.) Size Size Resin Gravel Size Salt Fill Service Drop Back Weight (In.) Cubic #20 (Lbs.) Flow (PSİ) Wash (Lbs.) Ft. (Lbs.) (GPM) (GPM) M4210SE 60.000 1-1/2" 12x52 18x40 400 15-25 210 2 30 15-20 4 M4214SE 90,000 1-1/2" 14x65 3 60 18x40 400 15-20 15-25 5 240 M4218SE 120,000 1-1/2'16x65 4 80 18x40 400 20-40 15-25 7 320 1-1/2" 25-50 M4222SF 150,000 5 100 24x41 600 15-25 11 380 18x65 M4226SE 210,000 1-1/2" 21x62 7 100 24x50 800 28-53 15-25 13 585 M4230SE 300,000 1-1/2" 24x72 10 200 30x50 1400 30-55 15-25 15 710

#### **Time clock models** (with FT2850 brass valve)

#### **Metered models** (with FM2850 brass valve with flow meter)

Part Number	Capacity	Capacity Pipe		Mineral Tank			Brine Tank		ate & Pressu	ure Drop	Shipping
	(Max.)	Size (In.)	Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M4210BSE	60,000	1-1/2"	12x52	2	30	18x40	400	15-20	15-25	4	210
M4214BSE	90,000	1-1/2"	14x65	3	60	18x40	400	15-20	15-25	5	240
M4218BSE	120,000	1-1/2"	16x65	4	80	18x40	400	20-40	15-25	7	320
M4222BSE	150,000	1-1/2"	18x65	5	100	24x41	600	25-50	15-25	11	380
M4226BSE	210,000	1-1/2"	21x62	7	100	24x50	800	28-53	15-25	13	585
M4230BSE	300,000	1-1/2"	24x72	10	200	30x50	1400	30-55	15-25	15	710

### LC-200 Light Commercial Single Tank Softeners (2")



## Ideal for commercial applications with capacities to 600,000 grains.

LC-200 series softeners with Fleck 2900 brass control valves are suitable for flow rates to 105 GPM. Models with time clock and metered controls are available.

#### **Specifications**

Valve	Fleck 2900 top mount valve (2")
Valve body	Brass
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

#### **Features & benefits**

- 2" valves for high flow rates
- Top quality components
- Models for capacities to 600,000 grains
- User friendly Fleck 2900 control valves
- Brine tanks with grid plate for maximum saturation of brine (some models)
- Safety brine valve with air check.

Part Number	Capacity Pipe		N	/lineral Tan	k	Brine Tank		Flow Ra	ite & Pressi	ire Drop	Shipping
	(Max.)	Size (In.)	Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M4043-29NT	90,000	2"	14x65	3	60	18x40	400	15-30	15-25	5	265
M4047-29NT	120,000	2"	16x65	4	80	18x40	400	20-40	15-25	7	350
M4048-29NT	150,000	2"	18x65	5	100	24x41	600	57-65	15-25	10	400
M4052-29NT	210,000	2"	21x62	7	100	24x50	600	60-77	15-25	13	600
M4058-29NT	300,000	2"	24x72	10	200	30x50	1200	74-97	15-25	15	710
M4059-29NT	450,000	2"	30x72	15	400	39x48	2200	80-100	15-25	25	1160
M4060-29NT	600,000	2"	36x72	20	500	39x48	2200	84-105	15-25	35	1560

#### Time clock models (with FT2900 brass valve)

#### Metered models (with FM2900 brass valve with flow meter)

Part Number	Part Number Capacity Pipe		I	/lineral Tan	k	Brine Tank		Flow Ra	Shipping		
	(Max.)	Size (In.)	Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M4043B-29NT	90,000	2"	14x65	3	60	18x40	400	15-30	15-25	5	265
M4047B-29NT	120,000	2"	16x65	4	80	18x40	400	20-40	15-25	7	350
M4048B-29NT	150,000	2"	18x65	5	100	24x41	600	57-65	15-25	10	400
M4052B-29NT	210,000	2"	21x62	7	100	24x50	600	60-77	15-25	13	600
M4058B-29NT	300,000	2"	24x72	10	200	30x50	1200	74-97	15-25	15	710
M4059B-29NT	450,000	2"	30x72	15	400	39x48	2200	80-100	15-25	25	1160
M4060B-29NT	600,000	2"	36x72	20	500	39x48	2200	84-105	15-25	35	1560

### LC-300 Light Commercial Single Tank Softeners (3")



### High flow commercial softeners with capacities to 1,050,000 grains.

LC-300 series softeners with Fleck 3900 brass control valves are suitable for flow rates to 280 GPM. Models with time clock and metered controls are available.

#### **Specifications**

Valve	Fleck 3900 top mount valve
Valve body	Brass
Pipe size	3"
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

#### **Features & benefits**

- 3" valves for high flow rates.
- Top quality components.
- Models for capacities to 1,050,000 grains.
- 3900 controller operates on demand.
- Brine tanks with grid plate for maximum saturation of brine (some models).
- Safety brine valve with air check.

#### Time clock models (with FT3900 brass valve)

Part Number	Capacity Pipe		Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping
	(Max.)	Size (In.)	Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M4110-39NT	300,000	3"	24x72	10	200	30x50	1400	120-170	15-25	15	1070
M4112-39NT	450,000	3"	30x72	15	400	39x48	2200	158-212	15-25	25	1600
M4114-39NT	600,000	3"	36x72	20	500	39x60	2700	185-250	15-25	35	2015
M4116-39NT	900,000	3"	42x72	30	700	42x60	3100	200-268	15-25	45	3245
M4118-39NT	1,050,000	3"	48x72	35	900	50x60	4500	213-280	15-25	60	4295

#### Metered models (with FM3900 brass valve with 3" strap on sensor)

Part Number	Capacity Pipe		Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping
	(Max.)	Size (In.)	Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M4110B-39NT	300,000	3"	24x72	10	200	30x50	1400	120-170	15-25	15	1070
M4112B-39NT	450,000	3"	30x72	15	400	39x48	2200	158-212	15-25	25	1600
M4114B-39NT	600,000	3"	36x72	20	500	39x60	2700	185-250	15-25	35	2015
M4116B-39NT	900,000	3"	42x72	30	700	42x60	3100	200-268	15-25	45	3245
M4118B-39NT	1,050,000	3"	48x72	35	900	50x60	4500	213-280	15-25	60	4295



#### **Our Most Efficient Models**

Water softeners with Fleck 9500 control valves offer twin-alternating meter initiated operation, resulting in 24/7soft water capability. Check out the features, specifications, benefits and options described below.

#### **Specifications**

Valve	Fleck 9500 mechanical or digital valve
Electrical	120 Volt 60 Hz standard
Valve body	Brass
Distributor	1.9" O.D., 1.5" pipe
Types	1.5" meter immediate initiated
Connection	1.5" FNPT
Mineral Tank	Corrosion resistant FRP
Brine Tank	Fully assembled polyethylene
Media	High capacity cation resin

#### **Features & benefits**

- Top quality components.
- High efficiency, no reserve capacity required.
- Digital SE version includes attached 24V transformer.
- Mechanical version includes 1.5" brass meter.
- SE digital version includes 1.5" plastic meter.
- Capacities up to 300,000 grains per regeneration.
- Decorative mineral tank jacket options available.
- Multiple brine tank options available.
- Safety brine valve with air check included.

Part Number	Capacity @ 15 Lbs. / Cu. Ft.	Media (Cu. Ft.)	Mineral Tank	Brine Tank	Dry Salt (lbs.)	Flow Rate (GPM)	Ship Wt. (Lbs.)
M2218SE	60,000	2	(2)12x52	24X41	600	13 TO 19	370
M2220SE	90,000	3	(2)14x65	24X41	600	14 TO 21	550
M2222SE	120,000	4	(2)16x65	24X41	600	15 TO 21	720
M2224SE	150,000	5	(2) 18X65	24X41	600	15 TO 21	900
M2228SE	210,000	7	(2) 21X62	24X50	800	17 TO 22	1215
M2235SE	300,000	10	(2) 24X72	30X50	1200	17 TO 24	1750

### Twin softeners with metered Fleck 9500 brass valves (1-1/2")

### Heavy-Duty Steel Tank Commercial Softeners



### Heavy duty softeners for heavy duty commercial applications!

Suitable for commercial applications ranging from 300,000 to 1,200,000 grains of hardness removal capacity and flow rates to 280 GPM. Models with time clock and meters available.

#### **Specifications**

Valve	(See below).			
Valve body	Brass.			
Pipe sizes	2" and 3" (see below).			
Types	Time clock (meter optional).			
By-pass	None			
Mineral tanks	Epoxy lined steel interior.			
Brine tanks	Brine maker / salt storage is PE.			
Brine supply	Automatic brine refill.			
Media	Cation resin; high capacity			

#### Features & benefits

- · Regeneration by time clock or meter
- · Automatic brine refill by timer or controller
- Models for capacities to 1,200,000 grains
- Fleck control valves
- Steel tanks rated for 100 psi
- Exterior tanks primed for protection
- Face piping is galvanized
- Electronic controls are available
- All systems shipped with high capacity Cation resin

#### Heavy-duty steel tank commercial softeners

Part	Fleck	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping
Number	Valve No.			Size	Resin Cubic Ft.	Gravel 1/4x1/8 / #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Weight (Lbs.)
M5076-29	2900	300,000	2"	20x60	10	100 / 100	30x50	900	68-94	15-25	15	1930
M5078-29	2900	450,000	2"	30x60	15	200 / 100	39x48	2200	72-102	15-25	25	2525
M5080-31	3150	600,000	2"	36x60	20	200 / 200	39x48	2200	78-107	15-25	35	2700
M5080-39	3900	600,000	3"	36x60	20	200 / 200	39x48	2200	185-250	15-25	35	2850
M5082-31	3150	900,000	2"	42x60	30	400 / 300	42x60	3000	84-118	15-25	45	4650
M5082-39	3900	900,000	3"	42x60	30	400 / 300	42x60	3000	200-268	15-25	45	4800
M5084-31	3150	1,200,000	2"	48x60	40	600 / 400	50x60	4500	87-120	15-25	60	4950
M5084-39	3900	1,200,000	3"	48x60	40	600 / 400	50x60	4500	213-280	15-25	60	4100

**Note:** All units are shipped from the factory, set at minimum capacity and minimum salt usage to reduce salt usage by 40%. Use the minimum capacity when sizing systems to gain salt savings, if desired. Water quality, TDS and other factors will influence performance and flow rates. End users should prepare a complete water analysis and consult the distributor, dealer or factory for technical support.

ASME mineral tanks, twin, triplex, quadplex models available.

Limited warranty: Softener components carry a one year limited warranty from installation date. Beginning of warranty period shall not exceed six months from manufacturing date.