Water Conditioner Specifications

50 Series	53MAQ[1]	53BEQ[1,2]	53MXQ[1]	53MDQ	52AMQ[1]	52APQ[1]	52AKQ	52AJQ[3]
Max Compensated Hardness–gpg (g/L)	90 (1.5)	90 (1.5)	110 (1.9)	90[4] (1.5)	90 (1.5)	90 (1.5)	90 (1.5)	60 (1.0)
Iron (ppm)[5] ferrous-clear water Maximum ferrous iron reduction[6]–ppm	0	0	12[5]	0	12[5]	2-12[5,7]	15	5
Minimum pH–standard units	7	7	7	7	7	7	7	6.3
Tannin–ppm	0	0	0	0–2	0	0	0	0
Sulfur–ppm-SulfurStat	0	0	0	0	0	0-5[7]	0	0
Maximum Chlorine–ppm	0	3	0	0	0	0	0	0
Filtration-nominal rating–microns	20	25	20	20	20	20	20	20
Media Amount Compartment #1[8]–lb (kg)	1.5 (0.7)	2.0 (0.9)	1.5 (0.7)	1.5 (0.7)	Empty	Empty	Empty	Empty
Media Amount Compartment #2[8]–cu. ft. (L)	Empty	0.4 (11.3)	0.6 (17)	0.3 (8.5)	6 lb (2.7 kg)	27 lb (122.2 kg)	0.4 (11.3)	0.4 (11.3)
Media Amount Compartment #3 Fine Mesh Cation Resin–cu. ft. (L)	1.06 (30)	1.06 (30)	1.06 (30)	1.06 (30)	1.06 (30)	1.06 (30)	1.06 (30)	1.06 (30)
Backwash Rate @ min. water pressure maximum flow to drain–gpm (L/min)	2.4[9] (9.1)	3[9] (11.4)	2.4[9] (9.1)	2.4[9] (9.1)	5[9] (18.9)	Empty[9,10]	7[9] (26.5)	7[9] (26.5)
Brine Line Flow Control Refill–gpm (L/min)	0.5 (1.9)	0.5 (1.9)	0.5 (1.9)	0.5 (1.9)	0.5 (1.9)	0.5 (1.9)	0.5 (1.9)	0.5 (1.9)
Water Pressure–min–max psi (bar)	20–120 (1.4–8.3)	20–120 (1.4–8.3)	20–120 (1.4–8.3)	20–120 (1.4–8.3)	20–120 (1.4–8.3)	30–120 (2.1–8.3)	30–120 (2.1–8.3)	30–120 (2.1–8.3)
Flow Rate @ 15 psi (1.0 bar) drop-as tested by Hague–gpm (L/min)[11]	11.8 (44.7)	13 (49.2)	10.8 (40.9)	10.5 (39.7)	12.2 (46.2)	12.7 (48.1)	10.6 (40.1)	12.5 (47.3)
Pressure Drop in psi (bar) @ Service Flow Rate of 8 gpm (30.3 L/min)	8.0 (0.6)	6.8 (0.5)	9.8 (0.7)	12 (0.8)	7.8 (0.5)	6.0 (0.4)	10 (0.7)	11 (0.8)
#1 Setting–Salt lb/grains (kg/grams) removed	1.1/6000 (0.5/389)	1.1/6000 (0.5/389)	1.7/9300 (0.8/603)	NA	1.1/5700 (0.5/369)	NA	NA	NA
#2 Setting–Salt lb/grains (kg/grams) removed	2.7/12,600 (1.2/816)	2.7/12,600 (1.2/816)	4.2/19,700 (1.9/1277)	NA	2.7/12,000 (1.2/778)	NA	NA	2.7/12,000 (1.2/778)
#3 Setting–Salt lb/grains (kg/grams) removed	6.2/24,600 (2.8/1590)	6.2/24,600 (2.8/1590)	9.6/38,300 (4.4/2482)	8.5/23,400 (3.9/1520)	6.2/23,400 (2.8/1520)	6.2/23,400 (2.8/1520)	6.2/23,400 (2.8/1520)	6.2/23,400 (2.8/1520)
#4 Setting–Salt lb/grains (kg/grams) removed	9.3/32,100 (4.2/2080)	9.3/32,100 (4.2/2080)	14.4/50,100 (6.5/3250)	10.7/30,300 (4.9/1960)	9.3/30,300 (4.2/1960)	9.3/30,300 (4.2/1960)	9.3/30,300 (4.2/1960)	9.3/30,300 (4.2/1960)
#1 Salt Setting–Total length of reg. Min/gal (L)	25/21 (25/79.5)	25/23 (25/87)	36/26 (36/98)	NA	25/31 (25/117)	NA	NA	NA
#2 Salt Setting–Total length of reg. Min/gal (L)	28/22 (28/83)	28/24 (28/91)	39/28 (39/106)	NA	28/32 (28/121)	NA	NA	34/70 (34/265)
#3 Salt Setting–Total length of reg. Min/gal (L)	32/24 (32/91)	31/27 (31/102)	46/31 (46/119)	47/31 (47/117)	31/35 (31/132)	37/78 (37/295)	37/78 (37/295)	37/78 (37/295)
#4 Salt Setting–Total length of reg. Min/gal (L)	36/26 (36/100)	36/29 (36/110)	53/35 (53/132)	64/39 (64/148)	36/37 (36/140)	41/80 (41/303)	41/80 (41/303)	41/80 (41/303)
Shipping weight–lb (kg)	135 (61)	152 (69)	168 (76)	152 (69)	140 (64)	167 (76)	160 (73)	180 (82)
Bacteriostatic-KDF® Process Media[11]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

For All Models:
Use clean white pellet, cube-style, or solar salt.
Drain Line (Minimum I.D.) 1/2-inch (1.3 cm)
Height–inches (cm) 38–1/4 (97)
Salt storage capacity–lb (kg) 200 (90)
Electrical rating: 115V, 60 cycle
Valve Inlet/Outlet–1 inch
Water Temperature (Min-Max) 40°–120°F (4°–49°C)
Floor Space–inches (cm) 15 x 30 (38 x 76)
Brine & Rinse total–gpm (L/min) 0.75 (2.5)
Brine Draw–gpm (L/min) 0.25 (0.9)
Rinse–gpm (L/min) 0.5 (1.5)
Iron reduction to 0.3 ppm or less
(Not certified by WQA.)
*Listed with the U.S. EPA as a Bacteriostatic Device U.S. EPA # 54369-OH-001. Not certified by WQA.

[1] Models 53MAQ, 53BEQ, 53MXQ, 52AMQ and 52APQ are certified by WQA for barium and radium reduction as verified and substantiated by test data. All other models are not certified by WQA and make no health claims.
[2] Municipally supplied chlorinated water only.
[3] Calcite will add additional hardness to water before softening.
[4] Any hardness over 10 gpg (0.17 grams/liter) will increase the chance of calcium carbonate precipitation. As the hardness increases so does the chance of this precipitation. Must use citric acid to regenerate along with salt.
[5] Regeneration every 96 hours is required when iron is present in the raw water supply unless noted otherwise. Use Salt Setting #3 or #4.
[6] Iron reduction claims limited to 5 ppm in the state of Wisconsin.
[7] Must have a minimum of 2 ppm iron and a minimum of 200 ppm TDS.
[8] When adding media in the field, check for proper settings. (See *Water Conditioner Specifications*, above.)
[9] Rate of flow must be verified at the end of 1/2-inch I.D. drain line.
[10] This model has no backwash flow control button or retainer. Must have a minimum of 7 gpm @ 30 psi (26.5 L/min @ 2.1 bar) available for proper backwash.
[11] For the purposes of plumbing appliance sizing, only the rated service flow rate and corresponding pressure loss may be used. Prolonged operation of a water softener at flow rates exceeding the tested service flow rate of 8 gpm (30.3 L/min) may compromise performance.

Reduction capabilities for specific contaminants verified by test data.

Name of Substance	USEPA Max. Contaminant Level	pH	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 ± 0.5	10.0 gpm (37.9 L/min)	35 ± 5 psig (2.4 ± 0.3 bar)
Radium 226/228	5 pCi/L	7.5 ± 0.5	10.0 gpm (37.9 L/min)	35 ± 5 psig (2.4 ± 0.3 bar)