



Specification Language: MTS 240-1.25Q800 Softener

Control Valve

1. Each mineral tank will have one (1) 32 mm (1.25"), Canature WaterGroup 95 series, top mounted, plastic PPO (Noryl) body, motor driven control valve and will be of the piston/seal/spacer type.
2. All the valves will have an electronic slave controller and be interlinked with each other to the separate main controller.
 - a. The interlinking cables will also deliver power to each valve.
3. The control valve will perform backwash, brine draw, slow rinse, rapid rinse and brine tank refill as required.
4. Each control valve will have an integrated turbine meter.
5. Each control valve will indicate the unit address via an LCD display.
6. The control valve has two (2) programmable auxiliary output relays.
7. Each valve comes with one (1) 32 mm (1.25") electronic ball valve to be connected on the outlet side of the valve.
8. All valves will regenerate co-currently.
9. All valves will be NSF/ANSI 44 certified for materials and structural integrity requirements.
10. The control valve will be designed to work at a pressure from 137 – 862 kPa gauge (20 – 125 psig) and from temperatures of 1 °C (34 °F) to 43 °C (110 °F).
11. The control valve and electronics will have a warranty of five (5) years.

Media

1. The Ion exchange resin has a total capacity of 1.9 eq/L in the sodium form.
2. Each mineral tank will have 227 L (8 ft³) of ion exchange media.
3. The ion exchange resin will be WQA certified to NSF/ANSI 44 standards for material requirements only and be compliant with US FDA Code of Federal Regulations, Section, Paragraph 173.25.



4. The ion exchange resin will be Aquafine AQ100-Na.

Mineral Tank

1. All mineral tanks will be 610 mm (24") in diameter and 1829 mm (72") in height.
2. All mineral tanks will be NSF/ANSI 44 certified for Materials and Structural Integrity.
3. The liner material will be made of polyethylene and the outer winding will be made of a high-performance fibreglass and epoxy resin.
4. The maximum operating pressure will be 1034 kPa gauge (150 psig) with an operating temperature range of 1 °C – 49 °C (34 °F – 120 °F) with a maximum vacuum of 127 mm Hg (2.46 psi).
5. The system will contain four (4) mineral tanks.
6. The mineral tank will have a warranty of five (5) years.

Brine Tank

1. Each softener unit will have one (1) brine tank, for a total of four (4) brine tanks with a diameter of 840 mm (33") and a height of 1335 mm (53").
2. Each brine tank includes a salt plate, removable salt lid, brine well, safety float and brine well cap.
3. The brine well will extend above the shoulders of the tank and through the lid enabling salt to be heaped past the shoulders of the tank.
4. The thickness of the brine tank walls will be 6.4 mm (0.25").
5. The brine tank and brine tank accessories will have a warranty of one (1) year.

Controller Programming

1. The master controller will be a separate controller **not** attached to any valve.
2. The master controller will have a color, graphical user interface with a 73 mm (2.875") screen.
3. The main page display will show:
 - a. The total number of units.
 - b. The time of day.
 - c. Total system flow rate.



- d. Remaining system volume.
- e. Softener unit address.
- f. The status of each softener (ON-LINE, Standby or Backwash).
- g. The percent capacity available in each softener.
- h. The flow rate through each softener (if applicable).
- i. Time left in the backwash/regeneration cycle (if applicable).

System Set Up and Operation

1. The system is set up as a demand recall system and will have its regeneration initiated via a totalized hardness calculation.
2. The maximum recommended operating pressure will be 139-689 kPa gauge (20-100 psig).
3. Only the main controller will be connected to an electrical outlet able to supply 120V at 60Hz.
4. Each softener will have a continuous flow rate pressure drop of 103 kPa (15 psi) at a flow rate of 2.02 lps (32 USGPM) and 172 kPa (25 psi) drop at peak flow rates of 2.78 lps (44 USGPM).

System Part Number

The water softener will be a **95MTS 240 -1.25Q800** as manufactured by Canature WaterGroup.