# **Specification Language: 105MTS AC24-2.0SC00 Activated Carbon Filter**

## **Control Valve**

1. The mineral tank will have one (1) 50 mm (2“), Canature WaterGroup 105 series, top mounted, plastic PPO (Noryl) body, motor driven control valve and will be of the piston/seal/spacer type.
2. The valve will have an electronic controller with a 4 line display.
3. The control valve will perform backwash and rapid rinse as required.
4. The control valve will have an integrated turbine meter.
5. The valve will be pending NSF/ANSI 44 certification for Materials and Structural Integrity Requirements.
6. 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).
7. The control valve and electronics will have a warranty of five (5) years.

## **Media**

1. The mineral tank will contain 762 mm (30”) bed depth of high quality, NSF approved Activated Carbon.
2. The mineral tank will have graded and washed quartz support bed of 76 mm (3”) gravel above the bottom of the distribution system.

## **Mineral Tank**

1. The mineral tank will be 610 mm (24”) in diameter and 1918 mm (75.5”) 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 one (1) mineral tank.
6. The mineral tank will have a warranty of ten (10) years.

## **System Set Up and Operation**

1. The system is set up as a calendar clock system and will have its regeneration initiated via a system timer.
2. The maximum recommended operating pressure will be 139 - 689 kPa gauge (20-100 psig)
3. Control valve will be connected to an electrical outlet able to supply 120V at 60Hz.
4. Filtered water can be drawn continuously from the filter unit at flows of up to 19 USGPM (1.20 l/s).
5. Able to perform RO pre-treat at 8 USGPM (0.5 l/s) if required.
6. The backwash requirement for the filter is 30 USGPM (1.89 l/s).

## **System Part Number**

The filter will be a **105STS AC24-2.0SC00** as manufactured by Canature WaterGroup.