

ENCAPSULATED WATER TREATMENT SYSTEM

ABSTRACT

5 A water treatment system is provided having an encapsulate manifold with a reverse osmosis cartridge and one or more filter cartridges. The filter cartridge includes a detent for being received within a slot in the manifold head for secure locking engagement. The water treatment system further includes a single probe conductivity monitoring system for monitoring the performance of a reverse osmosis membrane. The water treatment system is also provided in a modular arrangement wherein manifold heads are physically and fluidly coupled together via a clip which interfaces with the modular manifold heads. The water treatment system also allows for a retrofit application to include a permeate pump. The cartridges are also designed to provide a minimum annular inlet gap to minimize spillage during changing of the cartridges.

15 Figure 1