

GENERAL INFO DESIGNED FOR MAINS WATER

# Reverse Osmosis Drinking Water System

225 mm

320 mm

350 mm

380 mm

When only the purest water will do, conveniently on tap. The latest in Reverse Osmosis, a filtration process for high purity water. The ultra-fine membrane operates by rejecting impurities and flushing them out to drain.

This system effectively eliminates 98% of all dissolved impurities, heavy metals, salts, viruses, bacteria, cysts, fluoride, nitrate, chlorine, taste, odour, and chemicals. Only pure, sparkling clear water from your own water supply is left for your health, safety and peace of mind.

### **SPECIFICATIONS RO270** Maximum Flow: 270 litres per day Cartridges Stage 1 filtration MC051 Stage 2 filtration CB951 Stage 3 filtration RET1812-75 Min/Max Temperature: 0 - 30°C 300 - 875 kPa Min/Max Pressure: Maximum Inlet TDS: 2,000 mg/L Maximum Hardness: 171 mg/L - (10 grain) Connection: ½" compression tee Required hole for the tap: 13 mm diameter Warranty: 3 years^

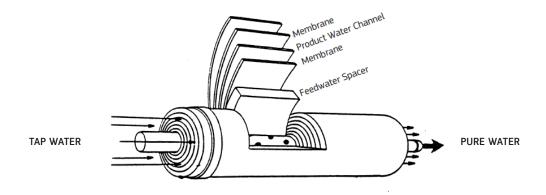
Important Note: Use only genuine Puretec replacement cartridge. ^3 year warranty iss 1 year parts & labour, plus 2 years parts only.

#### **FEATURES & BENEFITS**

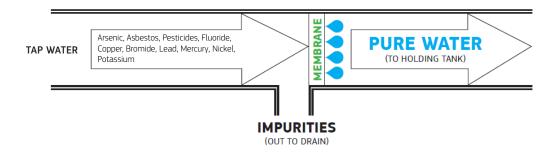
- 0.0005 micron rating for 98% removal of impurities.
- Fluoride & Nitrate removal.
- No bacteria build-up through integrated flushing.
- Improves taste, odour and appearance. Pure, safe water at your fingertips.
- · Simple installation kit including holding tank.
- ¼" turn ceramic disc faucet with LED reminder light.
- · Most advanced and most highly effective purification process.
- Very convenient and no power required.
- · Has minimum care and servicing.
- Low production costs, gives you water of a guaranteed quality for less than 2 cents per litre per day.



### **RO270 REVERSE OSMOSIS FILTRATION TECHNOLOGY**



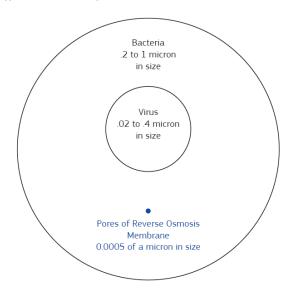
Polluted water is forced by mains water pressure against a semi-permeable membrane. Purified water molecules easily pass through the membrane while pollutants, typically being larger than the pores, cannot pass through and are washed away.

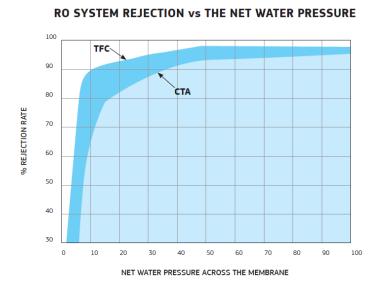


## BACTERIA VS VIRUS SIZE COMPARISON

RO SYSTEM REJECTION VS THE NET WATER PRESSURE

Comparative sizes of the bacteria & virus to the typical ro membrane pores







# REJECTION RATES FOR MEMBRANES

Below are typical average rejection rates for the Thin Film membrane. All results are averaged from tests performed on water at 60 psig and 77°F. NOTE: TF membranes should not be exposed to oxidizers such as chlorine.

CATION REJECTION RATES			
NAME	SYMBOL	PERCENT REJECTION	
Aluminum	Al*3	80-92	
Ammonium	NH <sub>4</sub> <sup>+1</sup>	94-98	
Barium	Ba <sup>+2</sup>	96-98	
Cadmium	Cd <sup>+2</sup>	87-94	
Calcium	Ca+2	95-98	
Trivalent Chromium	Cr+2	95-97	
Hexavalent Chromium	Cr*5	96-98	
Copper	Cu+2	86-92	
Total Hardness	Cat <sup>+2</sup> and Mg <sup>+2</sup>	98-99	
Ferrous Iron	Fe <sup>+2</sup>	98-99	
Lead	Pb <sup>+2</sup>	98-99	
Manganese	Mn <sup>+2</sup>	96-99	
Magnesium	Mg <sup>+2</sup>	94-98	
Mercury	Hg <sup>+2</sup>	96-98	
Nickel	Ni <sup>+2</sup>	93-96	
Potassium	K*1	96-98	
Silver	Ag <sup>+1</sup>	96-98	
Sodium	Na <sup>+1</sup>	96-98	
Strontium	Sr <sup>+2</sup>	96-98	
Zinc	Zn <sup>+2</sup>	98-99	

ANION REJECTION RATES			
NAME	SYMBOL	PERCENT REJECTION	
Arsenate	AsO <sub>4</sub> <sup>-3</sup>	80-95	
Arsenite	AsO <sub>2</sub> <sup>-1</sup>	60-70	
Bicarbonate	HCO <sub>3</sub> <sup>-1</sup>	90-96	
Borate	B <sub>4</sub> O <sub>5</sub> (0H) <sub>4</sub> <sup>-2</sup>	30-70*	
Bromide	Br <sup>-1</sup>	94-96	
Chloride	Cl <sup>-1</sup>	90-95	
Chromate	CrO <sup>-2</sup>	90-98	
Cyanide	CN <sup>-1</sup>	90-95*	
Ferrocyanide	Fe(CN) <sub>6</sub> <sup>-4</sup>	99+	
Fluoride	F <sup>-1</sup>	90-96	
Nitrate	NO <sub>3</sub> <sup>-1</sup>	60-90*	
Phosphate	PO <sub>4</sub> -3	99+	
Selenate	SeO <sub>4</sub> -2	94-97	
Selenite	SeO <sub>3</sub> -2	94-97	
Silicate	SiO <sub>4</sub> -4	95-97	
Sulfate	SO <sub>4</sub> -2	99+	
Sulfite	SO <sub>3</sub> -2	98-99	
Thiosulfate	S20 <sub>3</sub> -2	99+	

ORGANIC REJECTION RATES		
NAME	PERCENT REJECTION	
Acetic Acid	50	
Asbestos	99.9	
Bacteria & Virus	99.9+	
Cyst & Turbidity	99.9	
Detergents	99	
Dyes	99.9	
Formaldehyde	20	
Glucose	99.9	
Lactose Sugar	99.9	
Organic Pesticides	99	
Phenol	50	
Protein	99.9	
Pyrogen	99.9	
Sucrose Sugar	99.9	
Urea	40-60	

\*Bacteria growth through the membrane may occur in time. Organics are also reduced at a comparable rate by carbon adsorption.

LIMITATIONS FOR TF MEMBRANES		
TDS ppm maximum level	2000	
pH Range	3-11	
Pressure Range	35 psi-1 00 psi	
Water Supply	0-1 0 gpg hardness 05 ppm iron	
Temperature Range	Temperature Range 35°F-1 00"F	
Urea	40-60	

NOTE: Recommended hardness for extended product life is zero gpg hardness and zero ppm iron.