

**GENERAL INFO**
**DESIGNED FOR MAINS WATER**

## Reverse Osmosis Drinking Water System

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.

**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.
- ¾" turn ceramic disc faucet.
- 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.


**R0270**

1/2" connection, max. flow: 270 Lpd

**KIT INCLUDES**

- RO system, plumbing kit, auto shut-off valve
- 7-litre storage tank
- Long reach faucet
- Membrane
- Cartridges
- Spanner wrench
- Drain clamp
- Pressure hammer/flow/non-return valve

**Important System Note:**

Reverse osmosis systems are unique in that they flush the impurities away. Therefore every RO system has both pure PRODUCT water and dirty REJECT water. The ratio of product to reject is generally about one to two. The Reject water is usually dispensed down the drain although it can be directed to the garden if desired.

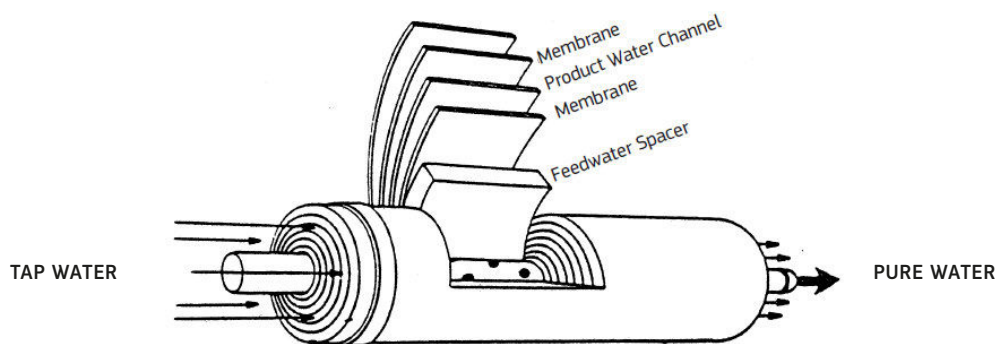
To be environmentally friendly, the Puretec RO system has a built in shut off valve so that when the storage tank is full it stops producing water.

**SPECIFICATIONS**

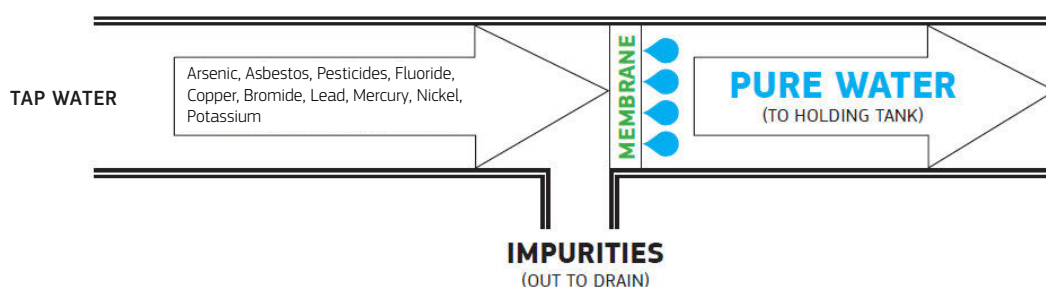
MODEL:	R0270
Maximum Flow:	270 litres per day
Capacity:	8,000 L
Micron Rating:	0.0005
Cartridges	
Stage 1 filtration:	MC051
Stage 2 filtration:	CB951
Stage 3 filtration:	RET1812-75
Min/Max Temperature:	0 - 30°C
Min/Max Pressure:	300 - 875* kPa
Maximum Inlet TDS:	2,000 mg/L
Maximum Hardness:	171 mg/L - (10 grain)
Maximum Silt Density Index:	5
Connection:	13 mm ½" Compression Tee
Required hole for the tap:	13 mm diameter
Warranty:	3 years^

*Important Note: \*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4). Use only genuine Puretec replacement cartridge. ^3 year warranty iss 1 year parts & labour, plus 2 years parts only. Excludes consumables.*

**R0270 REVERSE OSMOSIS FILTRATION TECHNOLOGY**

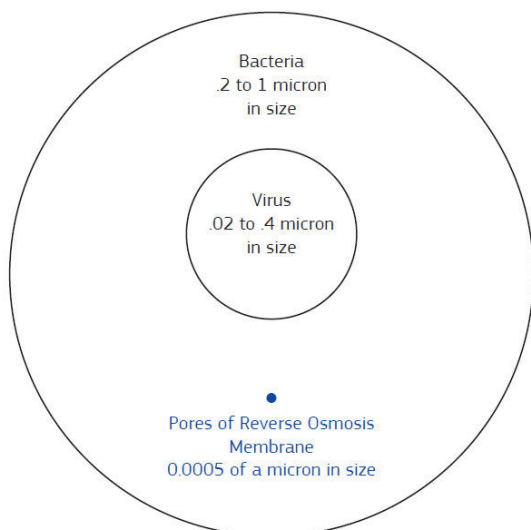


Polluted water is forced by mains water pressure against a semi-permeable membrane. Purified water molecules easily pass through the membrane while pollutants, typically being larger than the pores, cannot pass through and are washed away.



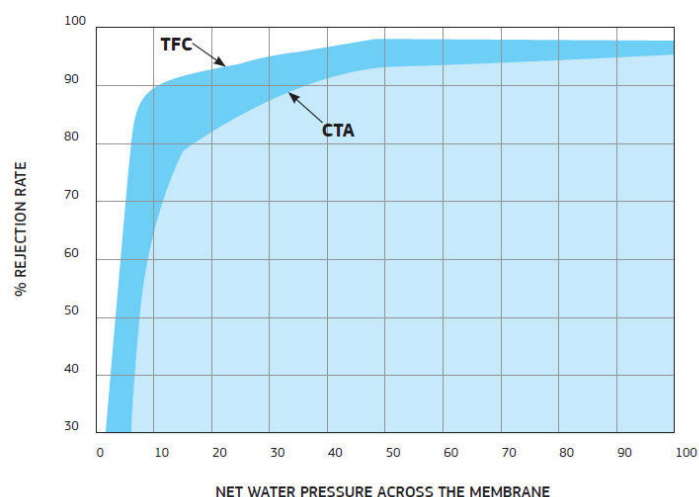
**BACTERIA VS VIRUS SIZE COMPARISON**

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



**RO SYSTEM REJECTION VS THE NET WATER PRESSURE**

**RO SYSTEM REJECTION vs THE NET WATER PRESSURE**



**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 <sup>+3</sup>	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 <sup>+2</sup>	95 - 98
Trivalent Chromium	Cr <sup>+2</sup>	95 - 97
Hexavalent Chromium	Cr <sup>+5</sup>	96 - 98
Copper	Cu <sup>+2</sup>	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 <sup>+1</sup>	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> (OH) <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> <sup>-3</sup>	99+
Selenate	SeO <sub>4</sub> <sup>-2</sup>	94 - 97
Selenite	SeO <sub>3</sub> <sup>-2</sup>	94 - 97
Silicate	SiO <sub>4</sub> <sup>-4</sup>	95 - 97
Sulfate	SO <sub>4</sub> <sup>-2</sup>	99+
Sulfite	SO <sub>3</sub> <sup>-2</sup>	98 - 99
Thiosulfate	S <sub>2</sub> O <sub>3</sub> <sup>-2</sup>	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

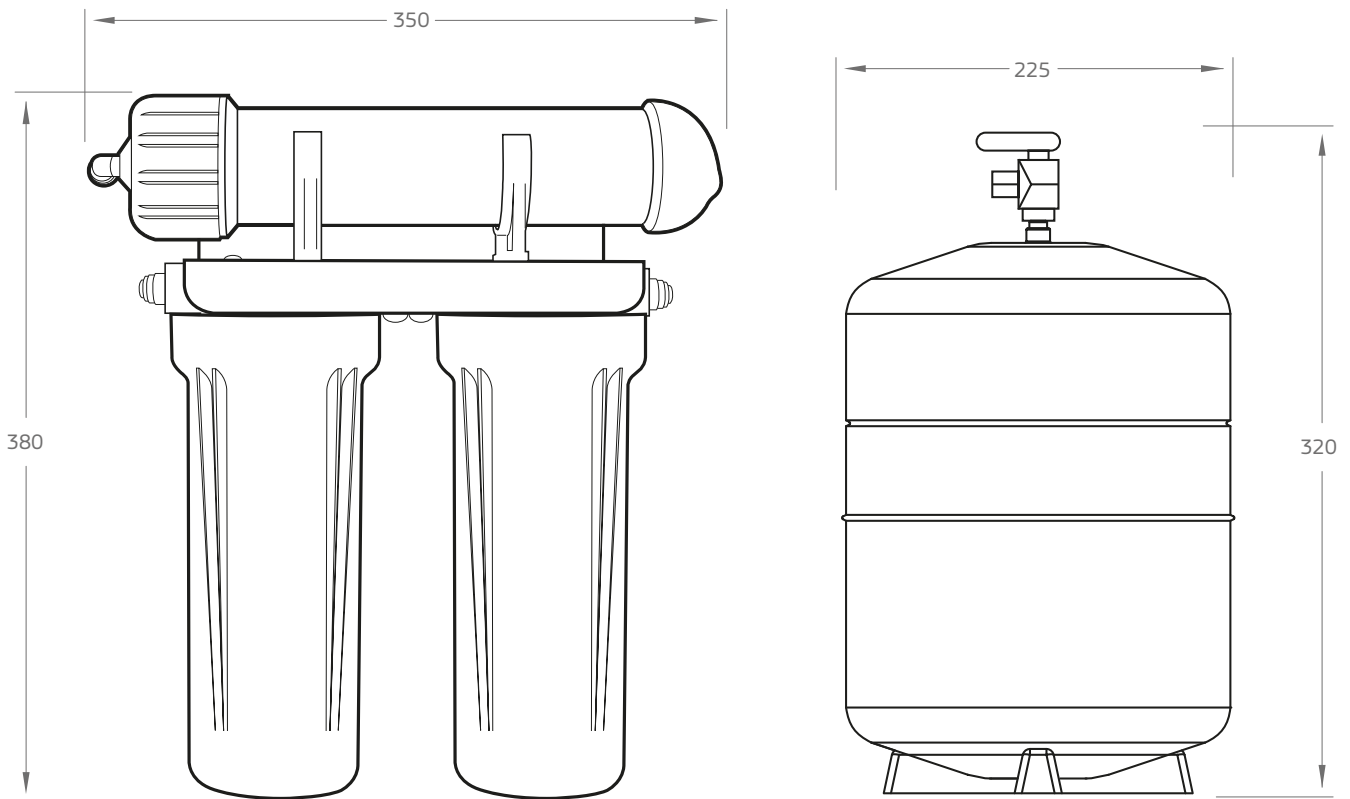
\*Bacteria growth through the membrane may occur in time. Organics are also reduced at a comparable rate by carbon adsorption.

**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 0-0.05 ppm iron 5 NTU
Temperature Range	0°C - 38°C
Urea	40 - 60

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

**PRODUCT DIMENSIONS** Measurements in Millimetres (mm)



**Note:**

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2. This document and all its contents are copyright protected. All rights are reserved, particularly alteration, translation and reproduction using electronic systems.
3. ^Warranties in this document cover parts for the period stated and include cover for parts and labour for the first year where applicable, subject to approval. Excludes consumables.

Our Water Filtration Specialists can provide you with advice to suit your needs.