PENTAIR

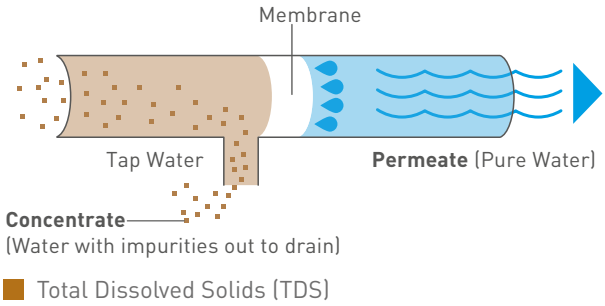
RESIDENTIAL RO MEMBRANES

THE HEART OF YOUR RO SYSTEM

Designed for residential applications, these elements are using the industry leading state of the art TLC (Thin Layer Composite) membrane technology.
Each element is required to meet our factories strict performance requirements, for a 100% customer satisfaction.

REVERSE OSMOSIS PRINCIPLE OF OPERATION

FROM TAP WATER TO PURE WATER



TLC RO MEMBRANES

TLC (Thin Layer Composite) range is made of 5 reverse osmosis membranes which will allow to cover any types of needs from the customer. Dimensions of these membranes are standard; they will fit into any reverse osmosis systems from the market.

Model	Part n°	Specifications							Dimensions (cm)				
		Flow rate*	Rejection*	Maximum Pressure	Maximum Temperature	pH	Hardness	Free chlorine	A	B	C	D	E
TLC-24	655006-00	24 gpd (91 lpd)											
TLC-36	655007-00	36 gpd (136 lpd)											
TLC-50	555694-00	50 gpd (189 lpd)	98%	6.9 bar	49°C	4-11	17°F	0.1 ppm	4.55	29.85	25.40	2.22	1.72
TLC-75	555693-00	75 gpd (284 lpd)											
TLC-100	655045-00	100 gpd (378 lpd)											

* Nominal performances are based on a 500 ppm softened tap at 4.5 bar, 25°C, **15% recovery** after 24 hours, individual element flux may vary ± 15%.

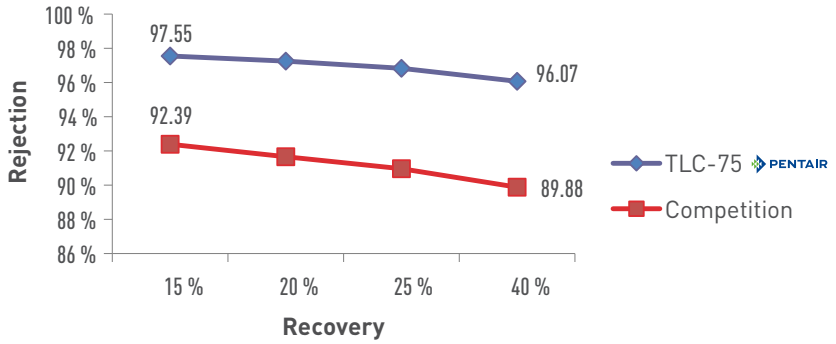
100% dry membranes: Maximum shelf life

Each RO membrane is individually packed **dry**. We're not adding any chemical preservative, avoiding the risk of bacterial contamination, which can happen when the preservative is expired. If properly stored the shelf life of our RO membranes is **almost endless!**

High rejection stability even at high input TDS

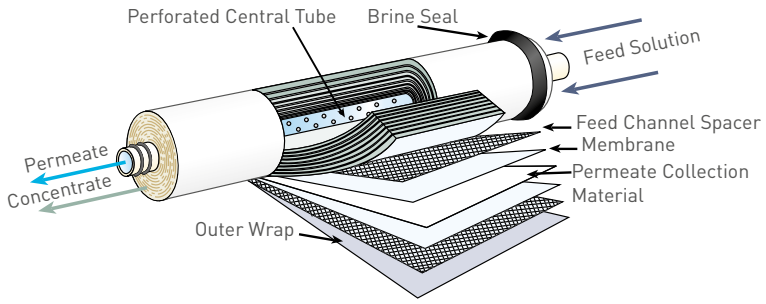
Whatever the amount of total dissolved solids from the inlet water, TLC membranes will always give **optimal performances**.
When compared with a membrane from competition, we can clearly see that Pentair's TLC 75 will give better results: the rejection will remain stable between 96 and 98% even at 1000 ppm whereas it will be lower (89 to 92%) for the membranes from competition*.

* Results obtained from internal testing **(more testing results are available upon request)**



Rejection rate at 3.5 bar feed pressure and 1000 ppm of TDS

RO MEMBRANE'S CONSTRUCTION



GLOSSARY

- **Rejection**: percentage of total dissolved solids removed from the inlet water. T**he higher the rejection is, the better the membrane performs**.
- R**ecovery**: quantity of permeate produced compared with the quantity of concentrate rejected to the drain. **The higher the recovery is, the lower the rejection is**.

NEW

GREEN RO (GRO) ENCAPSULATED MEMBRANES

GRO (Green RO) membranes are available for 3 types of flow rate: 36, 50 and 75 gpd. They provide high quality reverse osmosis water while **wasting 3 times less water to the drain.**

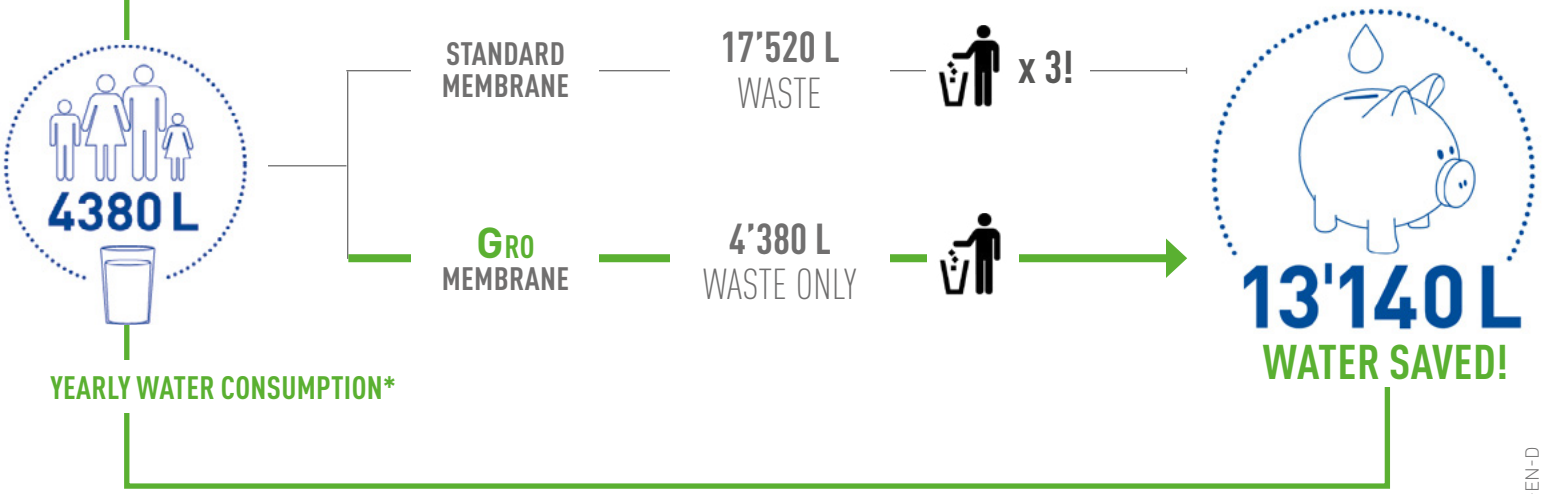
Model	Part n°	Specifications							Dimensions (cm)	
		Flow rate*	Rejection*	Maximum Pressure	Maximum Temperature	pH	Hardness	Free chlorine	A	B
GRO-36EN	4002573	36 gpd (136 lpd)								
GRO-50EN	4002574	50 gpd (189 lpd)	96%	6.9 bar	49°C	4-11	17°F	0.1 ppm	6.35	38.45
GRO-75EN	4002575	75 gpd (284 lpd)								

* Nominal performances are based on a 500 ppm softened tap at 4.5 bar, 25°C, **50% recovery** after 24 hours. Individual flux may vary +/- 15%

INNOVATIVE DESIGN...

HIGH PERFORMANCE UPGRADE...

...and 50% RECOVERY RATE:



* for drinking and cooking purposes

MKT-BRO-011-EN-D

IMPORTANT INFORMATION

Filters and membrane elements are not to be installed on microbiologically unsafe water supplies. TLC and GRO membranes are not certified to sanitize water, remove cysts, bacteria, or viruses. Filter and membrane element performances can be affected by fluctuations in water quality.

The TLC-100 is Tested and Certified by NSF International against NSF/ANSI Standard 58 for material requirements only. The TLC-24, TLC-36, TLC-50, and TLC-75 are tested & certified by NSF/ANSI to standard 58 for the reduction of Arsenic, Barium, Cadmium, Chromium (Hexavalent), Chromium (Trivalent), Copper, Turbidity, Fluoride, Lead, Radium 226/228, Selenium & TDS

The GRO-36EN, GRO-50EN and GRO-75EN are Tested and Certified by NSF International against NSF/ANSI Standard 58 for materials and structural integrity requirements

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