

Technical Specification of Reverse Osmosis Membrane Element

Introduction

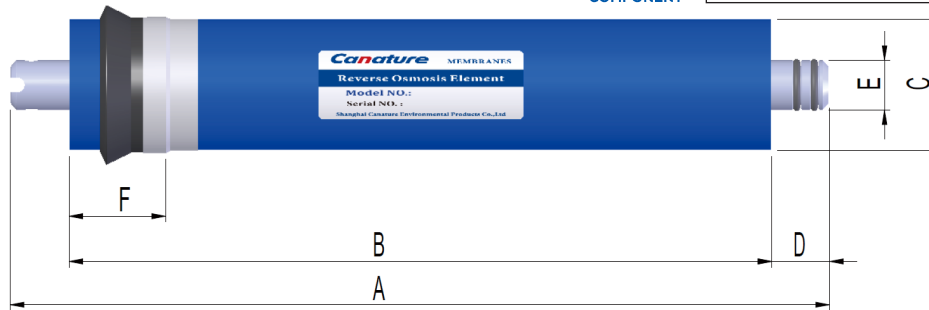
Canature residential RO membrane elements have the characteristics of reliable, consistent and strong anti-pollution and highest quality and suitable for household water purifier, commercial water purifier and hospital and laboratory water purification device.

The tech specification specifies the basic structure, type model, performance, package, transportation, storage and attentions.

Product specifications Membrane Element Figure



The component is Tested and Certified by NSF International against NSF/ANSI Standard 58 for material requirements only.



Product specifications

Model	Series	A	B	C	D	E	F
CN-1812-50	NPI	298	256	φ 42	21	φ 17	35
		298	239	φ 45	22	φ 17	35
	NPD	298	256	φ 42	21	φ 17	35
		298	239	φ 45	22	φ 17	35
	LPI	298	239	φ 45	22	φ 17	35
CN-1812-75	NPI	298	256	φ 45	21	φ 17	35
		298	239	φ 45	22	φ 17	35
	NPD	298	256	φ 45	21	φ 17	35
		298	239	φ 45	22	φ 17	35
	LPI	298	239	φ 45	22	φ 17	35
CN-2012-100	NPI	298	256	φ 47.5	21	φ 17	35
	NPD	298	256	φ 47.5	21	φ 17	35
	LPI	298	239	φ 47.5	22	φ 17	35
CN-2012-150	LPI	298	256	φ 47.5	21	φ 17	35
CN-2812-200	NPI	298	256	φ 67	21	φ 17	35
	NPD	298	256	φ 67	21	φ 17	35
CN-2812-300	NPI	298	256	φ 68	21	φ 17	35
	NPD	298	256	φ 68	21	φ 17	35
CN-2813-400	NPI	334	292	φ 68	21	φ 17	35
	NPD	334	292	φ 68	21	φ 17	35
	LPI	334	292	φ 68	21	φ 17	35
CN-3012-400	NPI	298	256	φ 73.5	21	φ 17	35
	NPD	298	256	φ 73.5	21	φ 17	35
CN-3012-500	NPI	298	256	φ 74	21	φ 17	35
	NPD	298	256	φ 74	21	φ 17	35
CN-3012-600	LPI	298	256	φ 73.5	21	φ 17	35
CN-3013-700	LPI	334	296	φ 72	18	φ 17	35

Example of product type model specification: 1812-50-NPI

18 12 - 50 - NPI or NPD

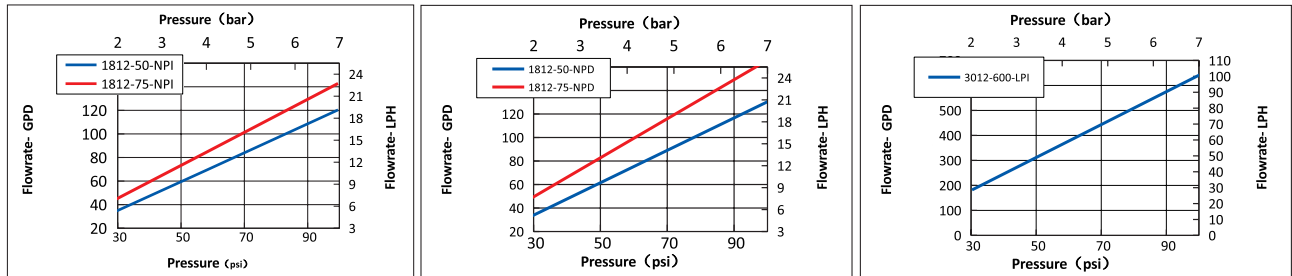
- 18 — Model of membrane sheet
- 12 — Average Permeate flow, 50GPD
- 50 — Length of membrane element, 12inch
- NPI or NPD — OD of membrane element, 1.8inch

Typical Product Performance

Model	Series	Average Permeate Flow (GPD)	Stabilized Salt Rejection (%)	Solution (ppm, NaCl)	pH	Pressure (psi)	Temp (°C)	Recovery (%)
CN-1812-50	NPI	50	96	250	7	60	25	15
	NPD	50	96	250	7	60	25	15
	LPI	50	96	250	8	50	25	15
CN-1812-75	NPI	75	96	250	7	60	25	15
	NPD	75	96	250	7	60	25	15
	LPI	75	96	250	8	50	25	15
CN-2012-100	NPI	100	96	250	7	60	25	15
	NPD	100	96	250	7	60	25	15
	LPI	100	96	250	8	50	25	15
CN-2012-150	LPI	150	96	250	7	60	25	15
CN-2812-200	NPI	200	96	500	7	100	25	15
	NPD	200	96	500	7	100	25	15
CN-2812-300	NPI	300	96	500	7	100	25	15
	NPD	300	96	500	7	100	25	15
CN-2813-400	NPI	400	96	500	7	100	25	15
	NPD	400	96	500	7	100	25	15
	LPI	400	96	500	8	85	25	15
CN-3012-400	NPI	400	96	500	7	100	25	15
	NPD	400	96	500	7	100	25	15
CN-3012-500	NPI	500	96	500	7	100	25	15
	NPD	500	96	500	7	100	25	15
CN-3012-600	LPI	600	96	500	7	100	25	15
CN-3013-700	LPI	700	96	500	7	100	25	15

Note: Permeate flow for warranty evaluation may vary $\pm 15\%$

Influence of Pressure on Permeate flow



Operating Limits

Maximum Operating pressure.....150 psi
 Maximum Operating temperature.....45 °C
 Maximum Inflow SDI155

Free Chlorine Tolerance ≤ 0.1 ppm
 pH range, Continuous operating.....4-11
 pH range, Chemical cleaning.....2-11.5

Additional Important Information:

- Inspect packaging is in good condition before usage. Store in cool, dry place out of direct sunlight. Avoid freezing.
- It is recommended that systems using these elements rinse the elements for 24 hours, prior to first use, to meet NSF/ANSI 58 Standard.
- The first full tank of permeate must be discarded. Do not use this initial permeate for drinking water or food preparation.
- To ease installation, it is recommended to use a lubricant safe for indirect water contact on all seals. Potential options include water and glycerin based lubricants.
- Rotate the element about a quarter turn to ease installation and removal of the element. Ensure good interface between the o-rings and brine seal with their connection surfaces.
- Keep elements moist at all times after initial wetting.
- To prevent biological growth during prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution.
- Rinse out the preservative before use.
- The membrane shows some resistance to short-term attack by chlorine (hypochlorite). Continuous exposure, however, may damage the membrane and should be avoided.
- If operating limits and guidelines given in this Product Information Bulletin are not strictly followed, the Limited 1 Year Warranty will be null and void. Use of any such chemicals or lubricants will void the Limited Warranty.