

PRODUCT INFORMATION
BW-4040



The FROTEC BW(Brackish Water) series of brackish water aromatic polyamide compound membrane element developed by FROTEC Environmental Co.,Ltd.It has the properties of low-pressure operation, high permeate flow and excellent desalination. Besides, it is particularly applicable to fabrication of high-purity water for electronic industry and electric power industry owing to its excellent performance in removing soluble salts, TOC, SiO₂, etc.

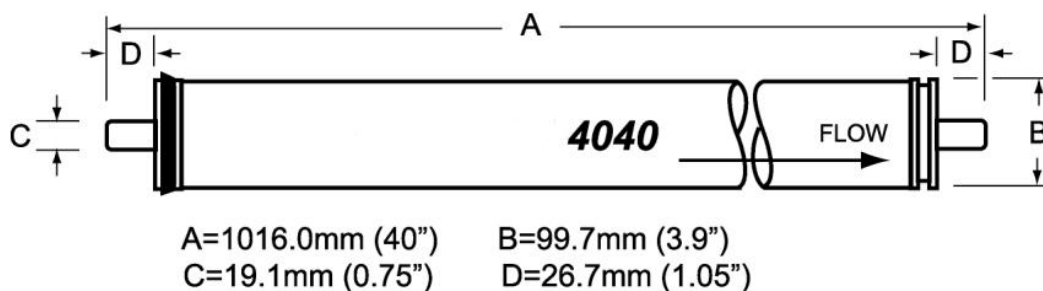
BW series membrane element is suitable for desalination treatment of surface water, groundwater, tap water and municipal water with salt content below 5000ppm.BW series is mainly applicable to treatment of various industrial water such as industrial-purpose pure water, boiler water replenishment in power plant, and can be also applied to such brackish water applications as treatment of high-concentrated saline wastewater and production of beverage-purpose water.

General Information

| | Metric Units | US Units |
|-------------------------|-----------------------|--------------------|
| Membrane area | 7.2 m ² | 78 ft ² |
| Salt rejection,av. | 99.5% | 99.5% |
| Salt rejection,min. | 99.0% | 99.0% |
| Permeate flow rate,av. | 8.7 m ³ /d | 2250gpd |
| Permeate flow rate,min. | 7.5 m ³ /d | 2000gpd |

Element is tested under the following conditions:applied pressure 15.52bar(225psi),NaCl concentration 2000mg/l,operating temperature 25° C (77° F) ,pH 8 and recovery rate 15%.

Element dimension



| | A(Length) | B(Diameter) | C(OD) | D(Length) |
|--------------|-----------|-------------|-----------|-----------|
| Metric Units | 1016 mm | 99.7 mm | 19.1 mm | 26.7 mm |
| US Units | 40 inch | 3.9 inch | 0.75 inch | 1.05 inch |

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Application Data

| | Metric Units | US Units |
|--------------------------------|-----------------------|----------|
| Operating pressure,max. | 41 bar | 600 psi |
| Operating temperature,max. | 45° C | 113° F |
| Feed water SDI,max. | 5 | 5 |
| Feed flow,max. | 3.6 m ³ /h | 16 gpm |
| Concentrate flow,min. | 0.6 m ³ /h | 3 gpm |
| pH range during operating | 3-10 | 3-10 |
| pH range during cleaning | 2-12 | 2-12 |
| Pressure drop per element,max. | 1.0bar | 15 psi |
| Pressure drop per vessel,max. | 3.5bar | 50 psi |
| Chlorine concentration,max. | <0.1 ppm | <0.1 ppm |

Additional Information

- *Treat RO Elements with care;do not drop the element.
- *Each RO Element is wet tested,preserved in a 1% weight sodium bisulfite solution,and vacuum packed in oxygen barrier bags.
- *During storage,avoid freezing and direct sunlight.The temperature should be below 35° C(95° F).

After Installation

- *Keep the RO Element wet,and use a compatible preservative for storage duration longer than 7 days.
- *During the initial start up,discharge the first permeate to drain for 30min.
- *Permeate back pressure should not exceed feed pressure at any time.
- *Consider cleaning,if the pressure drop increased by 20% or water permeability decreases by 10%.
- *Use only chemicals which are compatible with the membrane.