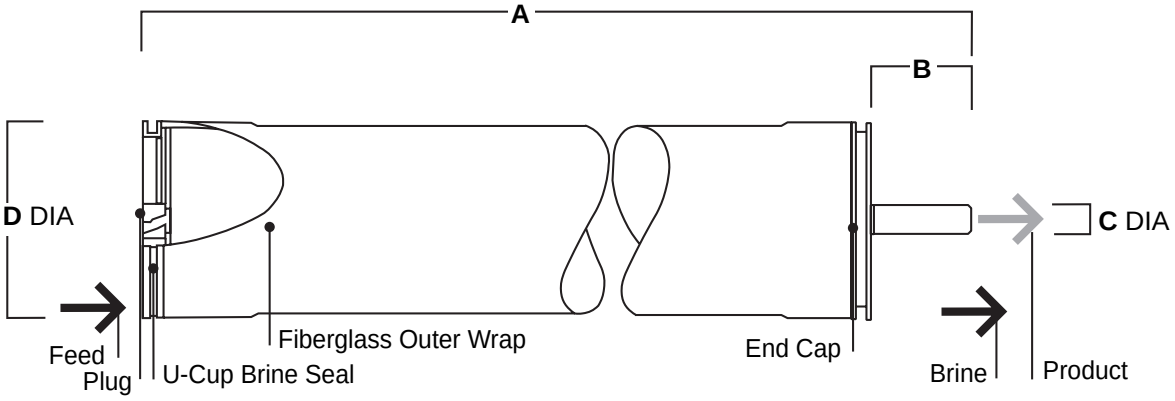
FILMTEC Membranes

FILMTEC® 4.6" Tapwater RO Elements

Product Specifications

Product	Product Water Flow Rate (gpd)	(m³/d)	(l/h)	Salt Rejection Minimum (%)	Typical Field (%)
TW30HP-4611	1200	4.54	189	97.5	99.0
TW30-4619	1450	5.49	229	98.0	99.0
TW30HP-4641	3800	14.38	599	97.5	99.0

1. Permeate flow and salt rejection based on the following test conditions: 2000 ppm NaCl, 225 psi (1.6 MPa), 77°F (25°C), pH 8, and recovery as indicated below.
2. Flow rates for individual elements may vary -15%/+25% for TW30-4619 and -15%/NUL (NUL: No Upper Limit) for TW30HP-4611 and TW30HP-4641.
3. Sales specification may vary slightly as design revisions take place.



Operating Limits

Membrane Type.....Thin-Film Composite
Maximum Operating Pressure.....600 psi (4.1 MPa)
Maximum Feed Flow Rate .....See note 4
pH Range, Continuous.....2 to 11
pH Range, Cleaning Cycle (30 min.) .....1 to 12
Maximum Operating Temperature .....113° F (45 °C)
Maximum Feed Turbidity.....1 NTU
Maximum Feed Silt Density Index .....SDI 5
Free Chlorine Tolerance .....<0.1 ppm

Single-Element Recovery (Permeate Flow to Feed Flow)	Recovery	Dimensions – Inches (mm) A	B	C	D
TW30-4611	0.05	11.45 (291)	1.05 (27)	0.75 (19)	4.61 (117)
TW30-4619	0.08	19.30 (490)	–	0.75 (19)	4.61 (117)
TW30-4641	0.15	41.31 (1049)	2.19 (55)	0.75 (19)	4.61 (117)

4. Maximum Feed Flow: 13 gpm (3.0 m³/h) for TW30HP-4611 and 18 gpm (4.1 m³/h) for TW30-4619 and TW30HP-4641.
5. Element to fit 4.6-inch I.D. pressure vessel.

1 inch = 25.4 mm

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For more information about FILMTEC membranes,
call Dow Liquid Separations:
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Australia . . . . . .(+61) 2-9776-3226
http://www.dow.com/liquidseps

Important Operating Information

1. Keep elements moist at all times after initial wetting.

2. If operating specifications given in this Product Information bulletin are not strictly followed, the limited warranty will be null and void.

3. Permeate obtained from first hour of operation should be discarded.

4. To prevent biological growth during storage, shipping or system shutdowns it is recommended that FILMTEC elements be immersed in a protective solution. The standard storage solution contains 1.5 percent (by weight) sodium metabisulfite (food grade).

5. Elements must be in use for at least six hours before formaldehyde is used as a biocide. If the elements are exposed to formaldehyde before being in use for this period of time, a loss in flux may result.

6. The membrane shows some resistance to short-term attack by chlorine (hypochlorite). Continuous exposure, however, may damage the membrane and should be avoided.

7. The customer is fully responsible for the effects of incompatible chemicals on elements. Their use will void the element limited warranty.

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