

# MemTeck<sup>™</sup> Domestic Low Pressure (DLP)

KEY FEATURES	Applications
<ul> <li>The Domestic Low Pressure (DLP) membrane has key features of:</li> <li>Low operation pressure 65 Psi,</li> <li>High salt rejection</li> <li>High permeate flow,</li> <li>These membranes are designed for domestic/commercial water treatment applications, such as the treatment of tap water, low salinity waters for home, residence, hospital, laboratory, shop, store</li> </ul>	<ul> <li>The <b>DLP</b> series of low-pressure elements is generally suitable for treating:</li> <li>Domestic water</li> <li>Tap water</li> <li>Low salinity Brackish water,</li> <li>Laboratory</li> <li>Shop, Store</li> <li>Hospital</li> </ul>

### **Typical Properties**

Product	Act17ive Membrane Area ft² (m²)	Permeate Flow Rate GPD	Stabilized Salt Rejection %
DLP-50	4 (0.4)	50	99.5
DLP-75	4 (0.4)	75	99.5
DLP-100	5(0.5)	100	99.5
DLP-125	5(0.5)	125	99.5
DLP-200	10(1)	200	99.5
DLP-300	14 (1.4)	300	99.5
DLP-400	16(1.6)	400	99.5

1. Test conditions: 1000 ppm NaCl, 65 psig (4.56 bar), pH 8, 77°F (25°C), 15 % recover.

Test conditions: 1000 ppm NaCl, 65
 Minimum salt rejection is 99 %.
 Individual elements may have diffe

3. Individual elements may have different permeate flows by +/15%.

## **Element Dimensions**





## **Operation Specifications and cleaning limits\***

Membrane Materials	Polyamide Thin-Film Composite
Maximum Operating Temperature <sup>a</sup>	113°F (45°C)
Maximum Pressure Drop	15 psig (1.0 bar)
pH Range	2 - 11
Maximum Feed Silt Density Index (SDI)	SDI 5
Free Chlorine Tolerance	< 0.1 ppm

1. Over pH 10, the maximum continuous temperature is  $95^{\circ}F$  ( $35^{\circ}C$ ).

2. In certain conditions, free chlorine and other oxidizing agents can cause premature membrane failure.

## **General Information**

- 1. After initial wetting, keep elements moist at all times
- 2. The limited warranty will be null and void if the operating limits and guidelines are not strictly followed.
- 3. For the purpose of preventing biological growth during prolonged system operation shutdowns, membrane elements should be immersed in a preservative solution
- 4. The customer is fully responsible for the effects of incompatible chemicals and lubricants on elements
- 5. The maximum pressure drop across an entire pressure vessel (housing) is 50 psi (3.4 bar).
- 6. Always avoid static backpressure on the permeate side
- 7. The permeate obtained from the first hour of operation should be discarded.
- 8. Make sure there are no abrupt changes in pressure or crossflow
- 9. During start-up, shutdown, cleaning, or other sequences, spiral elements should be protected from damage. It is recommended to gradually transition from a standstill to an operating state during startup:
- 10. The feed pressure should be gradually increased over a 30-60-minute period
- 11. The crossflow velocity should be gradually increased over 15-20 seconds to reach the set operating point.
- 12. It is crucial that the system is designed and operated correctly in order to reduce cysts and pathogens effectively.
- 13. The permeate obtained from the first hour of operation should be discarded.

#### **Important Information**

- 14. To prevent membrane damage due to overfeeding or hydraulic shock, it is essential to start up reverse osmosis water treatment systems properly. As a result of following the proper start-up sequence, system water quality and productivity goals can also be achieved.
- 15. Pretreatment of the membrane, loading of the membrane elements, instrument calibration, and other system checks should be completed before starting the system

#### **Regulatory Note**

Please check the application status of this product before **using** or selling it; some countries may restrict the use of this product in drinking water.



**Product Data Sheet** 





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