



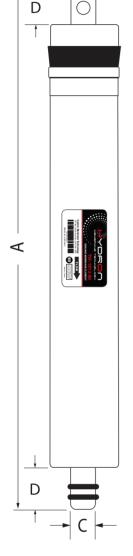
TW-1812-50 - DATA SHEET HYDRON RESIDENTIAL/LIGHT COMMERCIAL MEMBRANES

UNIVERSAL WATER



HYDRON Residential/Light Commercial Membrane Elements are a reliable alternative for your residential/light commercial and small system membrane needs HYDRON Membranes are manufactured in a State-of-the-Art, ISO-9001-2000 certified automatic rolling facility, providing you with a precise and advanced membrane element that not only delivers an attractive cost to benefit ratio, but also gives you a membrane that has consistently of high quality and performance.

HYDRON Residential/Light Commercial Membrane Elements can be used in a variety of smallsize system applications, such as household water purification, laboratory, hydroponics, hospital, and many other applications where a reliable, performance membrane is needed.



A = 11.68" (296.7 mm) B = 1.796" (45.61 mm) C = 0.687" (17.46 mm) D = 0.8125" (20.63 mm)





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

COMPONENT

| MEMBRANE TYPE | Polyamide Compound |
|---------------|--------------------|
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TESTING CONDITIONS

> Max. Working Pressure

| > Testing Pressure | 60 psi | (0.41 MPa) (4.1 bar) |
|--|---------|----------------------|
| > Temperature of Testing Solution | 77 °F | (25 °C) |
| > Concentration of Testing Solution (NaCl) | 250 ppm | |
| > pH Value of Testing Solution | 7.5 | |

EXTREME OPERATION CONDITIONS

> Recovery Rate of Single Membrane Element 15%

| > Max. Feedwater Temperature | 113°F | (45 °C) |
|---|----------|----------------------|
| > Max. Feedwater SDI | 5 | |
| > Single Membrane Max. Pressure Drop | 10 psi | (0.07 MPa) (0.7 bar) |
| Residual chlorine Concentration of Feedwater | <0.1 ppm | |
| pH Range of Feedwater during Continuous Operation | 3~10 | |
| pH Range of Feedwater during Chemical Cleaning | 2~12 | |
| > Max. Temperature for Continous | | |
| Operation above pH 10 | 95 °F | (35°C) |

300 psi

(2.07 MPa) (20.7 bar)

| Model | Applied | Average Permeated | Stable Rejection |
|------------|--------------------|-------------------|------------------|
| # | Pressure psi (bar) | Flow gpd (m ³/d) | Rate (%) |
| TW-1812-50 | 60 (4.1) | 50 (0.19) | 97.5 |

IMPORTANT INFORMATION

Under certain conditions, the presence of free chlorine and other oxidizing agents will cause premature membrane failure. Since oxidation damage is not covered under warranty, HYDRON recommends removing residual free chlorine by pre treatment prior to membrane exposure. Any specific application must be limited within the extreme operating conditions. We strongly recommend you to refer to the latest edition of technology manual and design guide prepared by HYDRON Membrane Technology or consult experts proficient in membrane technology. In case the customer fails to follow the operating conditions as specified in this manual, HYDRON Membrane Technology will assume no liability for all results. The permeate flow listed in the table is the average value. The permeate flow of single membrane element is within a tolerance not exceeding ±20% of nominal value. Discard the RO-filtered water produced during the first one hour after system start-up. During storage time and run time, it is strictly prohibited to dose any chemical medicament that may be harmful.

LIT-TW-1812-50-DS 10/03/18