

# HYDROSPHERE TECHNOLOGIES, LLC™



## HYDROSPHERE BW Membranes

HBW-4040

### HYDROSPHERE HBW Membrane Elements

with their hard shell fiberglass exterior, provide outstanding performance for light industrial systems. HYDROSPHERE Membranes are manufactured in a State-of the Art, ISO-9001 -2000 certified automatic rolling facility which provides you with a precise and advanced membrane element. HYDROSPHERE Membranes not only deliver an attractive cost to benefit ratio, but also give you a membrane that has consistently high quality and performance.

### HYDROSPHERE HBW Membrane Elements

can be used in a variety of mid-sized light industrial applications, such as car wash, bottling, manufacturing, water stores, food processing, and many other applications where a reliable performance membrane is needed.

#### HBW MEMBRANE SPECIFICATONS

Model	Part Number	Applied Pressure PSIG (BAR)	Average Permeated Flow GDP (m3/d)	Stable Rejection Rate (%)	Minimum Rejection Rate (%)
BW	HBW-4040	150 (10.3)	2400 (9.1)	99.0	98.5

#### MEMBRANE TYPE

Polyamide Compound

#### EXTREME OPERATION CONDITIONS

Max. Working Pressure **600 psi (4.14 Mpa) (41.4 BAR)**

Max. Feedwater Flow **16 gpm (3.6 m3/h)**

Max. Feedwater Temperature **113 °F (45°C)**

Max. Feedwater SDI **5**

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. Pressure Drop of Single Membrane Element **15 psi (0.1 Mpa) (1.03 BAR)**

#### TESTING CONDITIONS

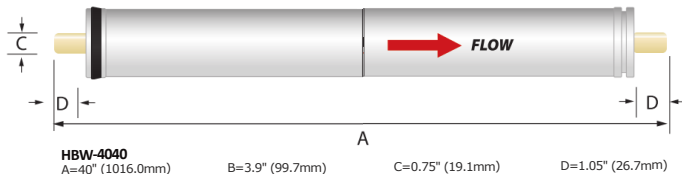
Testing Pressure **150 psi (1.03 Mpa) (10.3 BAR)**

Temperature of Testing Solution **77°F (25°C)**

Concentration of Testing Solution (NaCl) **1500 ppm**

pH Value of Testing Solution **7.5**

Recovery Rate of Single Membrane Element **15%**



#### 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, HYDROSPHERE Technologies, LLC™ 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 HYDROSPHERE Technologies, LLC™ or consult experts proficient in membrane technology. In case the customer fails to follow the operating conditions as specified in this manual, HYDROSPHERE Technologies, LLC™ 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.



This Membrane is Tested and Certified by NSF International against NSF / ANSI Standard 61 for material requirements only.

**COMPONENT\***

MJB 1/16/18