

**Nitto**

**HYDRANAUTICS**  
Nitto Group Company

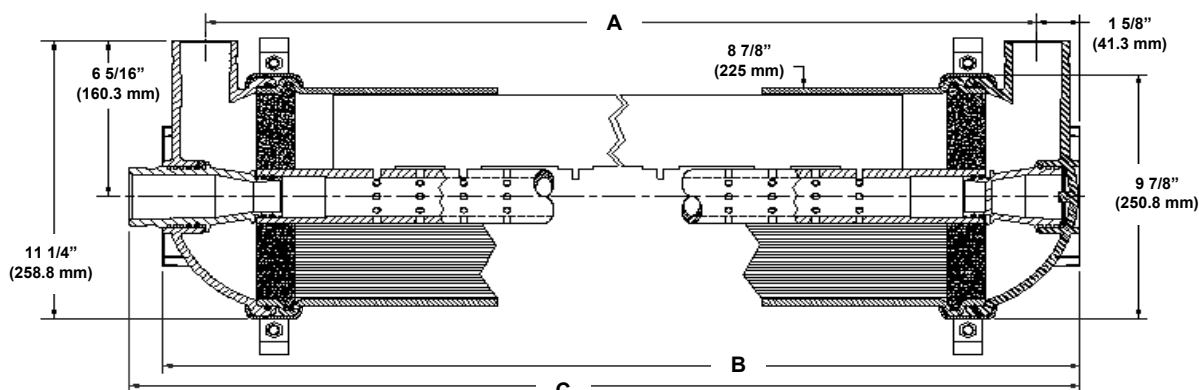
## Capillary Ultrafiltration Module

## HYDRAcap<sup>®</sup> 40-LD

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Performance</b> <sup>†</sup>      | Filtrate Flow:<br>Filtrate Turbidity:<br>Virus removal<br>Bacteria removal  | 5 – 12.3 gpm (1.1 – 2.8 m <sup>3</sup> /h)<br>≤ 0.07 NTU<br>≥ 4 log<br>≥ 4 log  |
| <b>Type</b>                          | Configuration:<br>Membrane Polymer:<br>Nominal Membrane Area:<br>Fiber Dimensions:<br>Pore size:  | Capillary Ultrafiltration Module<br>Hydrophilic Polyethersulfone<br>208 ft <sup>2</sup> (19.3 m <sup>2</sup> )<br>ID 0.047" (1.2 mm), OD 0.08" (2.0 mm)<br>0.02 micron  |
| <b>Application Data</b> <sup>‡</sup> | Typical Filtrate Flux Range:<br>Maximum Applied Feed Pressure:<br>Maximum Transmembrane Pressure:<br>Maximum Backwash Transmembrane Pressure:<br>Instantaneous Chlorine Tolerance:<br>Instantaneous Hydrogen Peroxide Tolerance:<br>Maximum Chlorine Exposure:<br>Maximum Instantaneous Feed Turbidity:<br>Maximum Operating Temperature:<br>pH Operating Range:<br>Cleaning pH Range:<br>Operating Mode: | 35 – 85 gfd (59 – 145 l/m <sup>2</sup> /h)<br>73 psig (5 bar)<br>20 psig (1.4 bar)<br>20 psig (1.4 bar)<br>100 ppm<br>200 ppm<br>100,000 ppm-hrs<br>200 NTU<br>104 °F (40 °C)<br>4.0 - 10.0<br>1.5 – 13.0<br>Inside to Outside Filtration<br>Direct flow or Crossflow |

### Typical Process Conditions

|                                       |   |
|---------------------------------------|---|
| Backwash Flux:                        | 100 – 150 gfd (170 – 255 l/m <sup>2</sup> /h)                                 |
| Backwash Duration:                    | 30 – 60 seconds   |
| Backwash Frequency:                   | 20 – 60 minutes   |
| Chemical Enhanced Backwash Frequency: | 0 – 4 times per day   |
| Chemical Enhanced Backwash Duration:  | 1 – 30 minutes  |
| Disinfection Chemicals:               | NaOCl, H <sub>2</sub> O <sub>2</sub> , ClO <sub>2</sub> or NH <sub>2</sub> Cl |
| Cleaning Chemicals:                   | NaOH, HCl, H <sub>2</sub> SO <sub>4</sub> , or Citric Acid                    |



| A, inches (mm) | B, inches (mm) | C, inches (mm) | Pipe connections | Weight, lbs. (kg) ave. |
|----------------|----------------|----------------|------------------|------------------------|
| 43 (1092)      | 46 1/8 (1172)  | 47 1/4 (1200)  | 2" Victaulic     | 63 (28)                |

### Certifications:

NSF61, CDPH, and ETV-NSF Verification

<sup>\*</sup> At 68°F (20°C).

<sup>\*\*</sup> For 15 minutes or less.

<sup>†</sup> Typical module performance for most feedwaters.

<sup>‡</sup> The limitations shown here are for general use. The values may be more conservative for specific projects to ensure the best performance and longest life of the membrane.

**Notice:** Weight stated is shipping weight including 1L of a 0.95% solution of sodium bisulfite preservative. Hydranautics also offers HYDRAcap<sup>®</sup>40-NON, which is a dummy module with no potting or fiber.

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