



## Pressurized UF Specification

### 10" Module Series - NIPS

Memstar pressurized ultrafiltration (UF) hollow fiber modules utilize our advanced, engineered 10" module designs and NIPS PVDF fiber technology, providing customers products that are cost effective, high performing, and reliable. Our pressurized UF modules with NIPS PVDF are used in hundreds of plants globally to remove suspended solids, including bacteria, viruses, and organic and inorganic compounds. Typical applications include the treatment of surface water and seawater for RO pretreatment.

### Key Features and Benefits

- **Outside to in filtration** = Wider operating window allowing for higher turbidity feeds
- **Extreme oxidant tolerance** = Long life, challenging applications
- **Industry leading membrane surface area** = Fewer racks, smaller footprint
- **No backwash** = High recovery (>97% typical), less waste, lower CAPEX

### Module Specifications

| Module Type                                                 | UF-1010E                      | UF-1015E            | UF-1020E            |
|-------------------------------------------------------------|-------------------------------|---------------------|---------------------|
| Membrane Material                                           | PVDF (NIPS)                   |                     |                     |
| Nominal Pore Size (um)                                      | 0.04                          |                     |                     |
| Filtration Mode                                             | Outside-in                    |                     |                     |
| Housing Material                                            | uPVC/ABS                      |                     |                     |
| Potting Material                                            | Epoxy/Polyurethane            |                     |                     |
| Filtration Surface Area (m <sup>2</sup> )[ft <sup>2</sup> ] | 55 [592]                      | 80 [861]            | 120 [1,290]         |
| Typical Filtrate Flowrate (m <sup>3</sup> /hr) [gpm]        | 3 - 3.9 [13 - 17]             | 4.4 - 5.6 [19 - 25] | 6.6 - 8.4 [29 - 37] |
| Column volume (L) [gal]                                     | 25 [6.6]                      | 40 [10.6]           | 55 [14.5]           |
| Weight (kg) [lbs]                                           | 35 [77]                       | 44 [97]             | 54 [119]            |
| L1 (mm) [inches]                                            | 1,073 [42.2]                  | 1,606 [63.2]        | 2,106 [82.9]        |
| L2 (mm) [inches]                                            | 1,195 [47]                    | 1,730 [68.1]        | 2,230 [87.8]        |
| L3 (mm) [inches]                                            | 79 [3.1]                      |                     |                     |
| L4 (mm) [inches]                                            | 45 [1.8]                      |                     |                     |
| L5 (mm) [inches]                                            | 172 [6.8]                     |                     |                     |
| R (mm) [inches]                                             | 250 [9.8]                     |                     |                     |
| A                                                           | Feed/Drain Port - DN50        |                     |                     |
| B                                                           | Filtrate Port - DN50          |                     |                     |
| C                                                           | Concentrate Bleed Port - DN50 |                     |                     |
| D                                                           | Air Inlet Port - Ø25/19       |                     |                     |



