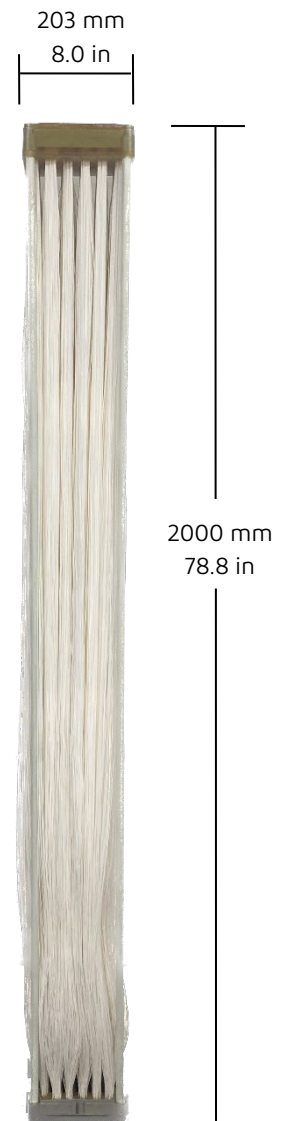


SPECIFICATION SHEET

MEMCOR® B50N Membrane Filtration Module

B50N MODULE SPECIFICATIONS

| Parameter | Details |
|---|---|
| Module Operating Process | Submerged Ultrafiltration |
| Application | Membrane Bioreactor (MBR) Systems |
| Membrane Type | Hollow Fiber |
| Filtration Flow Direction | Outside to Inside |
| Backwash Type | Relaxation |
| Membrane Material | PVDF (Polyvinylidene Fluoride) |
| Other Wetted Module Components | Polyurethane, Fibreglass, Polyamide, Silicone Rubber, SS316 |
| Nominal Membrane Pore Size | 0.04 μm |
| Part numbers | GMID: 00012090869 Smart PN: 118322 |
| Nominal Membrane Area | 50 m ² / 538 ft ² |
| Nominal Module Length (Overall) | 2000 mm / 78.8 in |
| Nominal Module Pot Dimensions (Overall) | 203 mm x 203 mm / 8.0 in x 8.0 in Square |
| Approximate Module Mass | 23 kg / 51 lb |



B50N MODULE OPERATING SPECIFICATIONS

| Parameter | Details |
|---|---|
| Operating Temperature Range | > 0 to 40 °C / > 32 to 104 °F (Must not be exposed to freezing conditions) |
| Temperature Range for Transportation and Storage | Preferred range 5 to 25 °C / 41 to 77 °F Allowable range > 0 to 40 °C / > 32 to 104 °F (shipment/storage in a temperature controlled container (or reefer) at 20 °C / 68 °F recommended). Modules must not be exposed to freezing conditions and must remain moist at all times. |
| Typical Feed pH Range | 6.0 – 9.0 pH ^{Note i} |
| Allowable pH Range for Cleaning | 2.0 – 10.5 pH typical |
| Typical Maximum Available Trans-Membrane Pressure (TMP) in Filtration | 50 kPa / 7.3 psi ^{Note ii} |
| Maximum Allowable TMP at any time | +75 kPa / +11 psi to -110 kPa / -16 psi |
| Typical target chlorine concentration during cleaning: | |
| - Maintenance Wash | 200 – 600 mg/L @ 20 °C / 200 – 600 ppm @ 68 °F |
| - CIP | 500 - 1000 mg/L @ 20 °C / 500 – 1000 ppm @ 68 °F |
| Maximum chlorine concentration during cleaning | 1500 mg/L @ 20 °C / 1500 ppm @ 68 °F ^{Note iii} |
| Maximum total chlorine exposure | 1,000,000 mg.h/L @ 25 °C / 1,000,000 ppm.h @ 77 °F ^{Note iv} |

Notes:

- i. Exposure to chloramines is not recommended in feeds below 6.5 pH.
- ii. Maximum available filtration TMP is based on a number of variables including atmospheric pressure, module submergence depth and filtrate pump NPSH requirement. The actual value may vary slightly from that shown.
- iii. The recommendation for maximum chlorine cleaning solution concentration is to account for an initial rapid consumption of chlorine at the start of a MW or CIP cleaning cycle. The targeted chlorine cleaning solution concentration is then typically 200 to 1000 ppm for the remainder of the cycle.
- iv. Please consult DuPont Water Solutions for additional guidance on exposure limits and for operation at different temperatures.