# PRODUCT DATA SHEET

## Ultrafiltration Modules

***UF Module Mic UF70***

microsoll
Water Technologies
Solutions

## OVERVIEW

***Module Specifications***

| PARAMETER | UNIT | SPECIFICATION |
|---|---|---|
| Name of model | - | Mic UF70 |
| Diameter | mm | 250 |
| Body and cap material | - | U-PVC |
| Nozzles | mm | DN50 - Victualic |
| Potting material | - | Polyurethane |

***Membrane Specifications***

| PARAMETER | UNIT | SPECIFICATION |
|---|---|---|
| Material | - | Modified PVDF |
| Membrane Type | - | Hollow Fiber UF |
| Flow Direction | - | |
| Fiber outside/inside diameter | mm | 1,4/0,8 |
| Active surface area | $m^2$ | 70 |
| Nominal MWCO, Dextrane | Dalton | ≤ 150.000 |

***Feed Water Specifications***

| PARAMETER | UNIT | SPECIFICATION |
|---|---|---|
| Temperature | °C | 25(max 40) |
| Particle dimension | µ | < 200 |
| Turbidity | NTU | 50 (max 250) |
| Oil and grease | % | 0 (max 1) |
| pH | - | 6-9 |
| TOC | mg/l | < 10 (max 30) |
| Total Suspended Solid(TSS) | mg/l | 50 (max 80) |
| Chlorine | mg/l | 0,4 (max 150) |

***Operation***

| PARAMETER | UNIT | SPECIFICATION |
|---|---|---|
| Operation mod | - | Dead end / crossflow |
| Temperature | °C | 1 - 40 |
| pH | - | 2 -11 |
| Filtrate Flux@25°C | $L/m^2h$ | 45 -180 |
| Flow Capacity | $m^3/h$ | 2 - 8 |
| Feed water inlet pressure @25°C | bar | 5 |
| TMP | bar | 0,4 - 2 |
| Filtrate water SDI | - | ≤ 2,5 |
| Filtrate Water Turbidity | NTU | ≤ 0,1 |

***Cleaning, Disinfection & Preservative Solution***

| PARAMETER | UNIT | SPECIFICATION |
|---|---|---|
| **Cleaning** | | |
| Max. backwash pressure | bar | 2,5 |
| Max. air flowrate | $Nm^3/h$ | 8 |
| **Chemically Enhanced Backwash (CEB)** | | |
| Sodiumhypochlorite (NaOCl) | mg/l | 1000 |
| Sodium hydroxide (NaOH) | mg/l | 500 |
| Hydrogen peroxide ($H_2O_2$) | mg/l | 100-500 |
| Hydrochloric acid (HCl) | mg/l | 1000 |
| Citric acid | % | 1-2 |
| Oxalic acid | % | 1-2 |
| **Cleaning in Place (CIP)** | | |
| Frequency | When the current TMP pressure is 0.9 bar higher than the first TMP Pressure. | |
| Operation duration | Circulation or Filling method, 2 hours | |
| Chemical cleaning solutions (up to pollutant) | 0.1% NaOH + 0.2% NaOCl 0.2% HCl, 2% Citric acid, 2% Oxalic acid | |
| Cleaning flowrate per module | 1-2 $m^3/h$ | |
| Preservative Solution | 20% glycerol, 80% water, 1 g of Sodium metabisulfide per 100 g solution | |