

# PRODUCT DATA SHEET



## Ultrafiltration Modules

### UF Module Mic UF70

## 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 <sup>2</sup>	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)

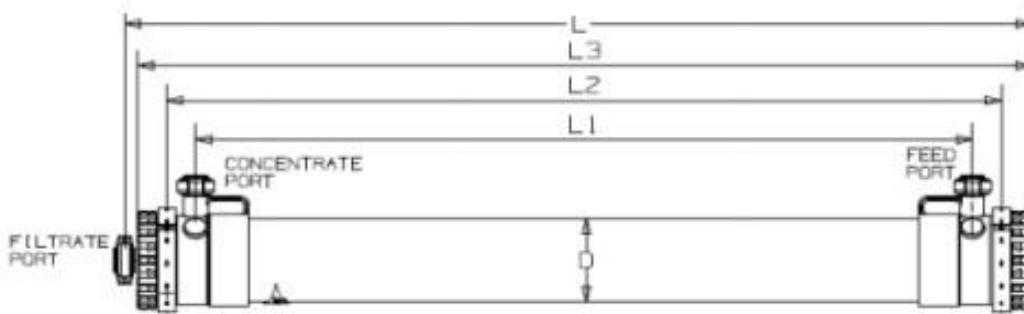
### *Operation*

PARAMETER	UNIT	SPECIFICATION
Operation mod	-	Dead end / crossflow
Temperature	°C	1 - 40
pH	-	2 -11
Filtrate Flux@25°C	L/m <sup>2</sup> h	45 -180
Flow Capacity	m <sup>3</sup> /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
<b>Cleaning</b>		
Max. backwash pressure	bar	2,5
Max. air flowrate	Nm <sup>3</sup> /h	8
<b>Chemically Enhanced Backwash (CEB)</b>		
Sodiumhypochlorite (NaOCl)	mg/l	1000
Sodium hydroxide (NaOH)	mg/l	500
Hydrogen peroxide (H <sub>2</sub> O <sub>2</sub> )	mg/l	100-500
Hydrochloric acid (HCl)	mg/l	1000
Citric acid	%	1-2
Oxalic acid	%	1-2
<b>Cleaning in Place (CIP)</b>		
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 <sup>3</sup> /h	
Preservative Solution	20% glycerol, 80% water, 1 g of Sodium metabisulfide per 100 g solution	



# PRODUCT DATA SHEET



## Ultrafiltration Modules

UF Module Mic UF35

### OVERVIEW

#### Module Specifications

PARAMETER	UNIT	SPECIFICATION
Name of model	-	Mic UF35
Diameter	mm	250
Body and cap material	-	U-PVC
Nozzles	mm	DN50 - Victualic
Potting material	-	Polyurethane

#### Membrane Specifications

PARAMETER	UNIT	SPECIFICATION
Material	-	Modifiziert PVDF
Membrane Type	-	Hollow Fiber UF
Flow Direction	-	
Fiber outside/inside diameter	mm	1,4/0,8
Active surface area	m <sup>2</sup>	35
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 modes	-	Dead end / crossflow
Temperature	°C	1 - 40
pH	-	2 -11
Filtrate Flux@25°C	L/m <sup>2</sup> h	45 -180
Flow Capacity	m <sup>3</sup> /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
<b>REINIGUNG</b>		
Max. backwash pressure	bar	2,5
Max. air flowrate	Nm <sup>3</sup> /h	8
<b>Chemically Enhanced Backwash (CEB)</b>		
Sodiumhypochlorite (NaOCl)	mg/l	1000
Sodium hydroxide (NaOH)	mg/l	500
Hydrogen peroxide (H <sub>2</sub> O <sub>2</sub> )	mg/l	100-500
Hydrochloric acid (HCl)	mg/l	1000
Citric acid	%	1-2
Oxalic acid	%	1-2
<b>Cleaning in Place (CIP)</b>		
Frequency	When the current TMP pressure is 0.9 bar higher than the first TMP Pressure.	
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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 <sup>3</sup> /h	
Preservative Solution	20% glycerol, 80% water, 1 g of Sodium metabisulfide per 100 g solution	

