











POREX® TMF 61

TUBULAR MEMBRANE FILTER (TMF) MODULES



Optimal high solids separation at high flux rates

POREX TMF cross-flow tubular membrane modules contain Porex's unique, structural membrane tubes. The superior strength of the membrane/substrate composite allows higher operating and backwash pressures for superior solids removal efficiency, higher flux and reduced system footprint. The structural composite membrane features PVDF membrane anchored to PE substrate.

Chemical resistance

POREX TMF modules are resistant to a broad spectrum of corrosive chemicals and reagents as well as pH ranges of 0 to 14. Typically, pilot feasibility tests are needed to determine the actual TMF module performance under real operating conditions.

TMF Series Features

- Consistent, reliable solid/liquid separations and long service life
- Unique support with PVDF membrane offers high performance tubular membrane with superior operating characteristics
- Three distinct membrane pore sizes available
- Uniform, thermally-bonded omni-directional substrate pore structure provides an optimized support structure for tubular membranes and enchanced membrane durability
- Now available in multiple tube quantitites and diameters for increased surface area and flux

Porex's TMF Business Partner: Danheng

Nanjing Danheng Technology Co., Ltd. (Danheng) is Porex's TMF business partner. Located in Nanjing, China, Danheng is qualified and authorized to build POREX®TMF modules to specified POREX design and following the POREX manufacturing process using POREX manufacture tube membrane. Danheng has been working with POREX TMF water treatment modules for more than 10 years and has experience with serving global customers in TMF applications with design consultation, engineering support, and aftermarket product services. Danheng holds more than 30 patents in industrial water treatment and has in-house testing for R&D and customer process verification.

To purchase Porex TMF modules:

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Operating Specifications					
Pre-Use Wetting Agent	IPA				
Water Flux	>200 GFD (340 LMH)				
Cross Flow Liquid Velocity	10 - 16 ft/sec (3.0 to 4.9 m/s)				
pH Range	0-14				
Max Backpulse Pressure	20 psi (138 kPa) at 25°C				
Max Differential Pressure	120 psi (827 kPa) at 25°C				
Max Solids	18%				
Min Solids	0.25%				
Max Viscosity	50 cp				
Min Viscosity	<1 cp				

Physical Specifications							
Modules							
Housing Diameter	8" Sc40						
Filtrate Port (Qty 2)	ø2.875" x 1.89" L pipe stub						
Retentate Ports	8" pipe Anvil Gruvlok groove						
Mounting Required	Horizontal; 2 point						
Module Length	72" (1829 mm)						
Tubes							
Number of Tubes	61						
Nominal ID	0.5" (12.7 mm)						
Nominal OD	0.79" (20.07 mm)						
Total Active Surface Area	45.75 ft² (4.25 m²)						
Internal Lic	uid Volume						
Filtrate Volume	6.55 gallons (24.78 ltr)						
Concentrate Volume	3.73 gallons (14 ltr)						
Total Volume	10.28 gallons (38.78 ltr)						
Materials of Construction							
Potting	Solvent Cement						
Internal Supports	Polypropylene						
Gasket Material	None						
Preservative	Propylene Glycol						
Membrane	PVDF						



Coupling and Tubing Specifications							
Filtrate Port Vinyl Tubing Specifications							
I.D.	3 in. (76.2 mm)						
O.D.	3 1/2 in. (88.9 mm)						
Wall Thickness	1/4 in. (6.35 mm)						
Approx. Max. Pressure	21 psi at 70°F						
Weight (lbs / 100 ft)	144						
Gruvlok Couplir	ng Specifications						
Gruvlok Model	Anvil 7001 Standard Coupling						
Sized	8 in.						
Standard Gasket	C Style						
Standard Gasket Material	Grade E (EPDM) suitable for most applications						
Approx. Weight Each	21.7 lbs (9.8 kg)						
Vitaulic Couplin	g Specifications						
Victaulic Model	77 or 75 flexible coupling						
Sized	8 in.						
Standard Gasket Material	Grade E (EPDM) suitable for most applications						
Approx. Weight Each	20.8 lbs (9.4 kg)						

Maximum Cleaning Solution Strength					
Bleach (NaOCI)	< 17% to 100°F (38°C)				
Caustic (NaOH)	< 15% to 104°F (40°C)				
Acid (HCI)	< 15% to 140°F (60°C)				
Peroxide (H ₂ 0 ₂)	< 5% to 100°F (38°C)				

TMF Item Numbers								
Item Number	Description	Normal Pore Size (µm)	Maxium Continuous Operating Temperature*	Housing	Substrate Tube	Shipping Dimensions	Shipping Weight	
MME2005661VP (TUF-61 in China)	61 Tube PVC Module / PE 0.5" tube - 0.05 µm	0.05 µm	43°C / 110°F	Grade 1 PVC	UHMWPE	15 x 9.5 x 75.5 in. 380 x 240 x 1918 mm	75 lbs 34 kg	
MME2S01661VP	61 Tube PVC Module / PE 0.5" tube - 0.1 µm	0.1 µm	43°C / 110°F	Grade 1 PVC	UHMWPE	15 x 9.5 x 75.5 in. 380 x 240 x 1918 mm	75 lbs 34 kg	
MME2002661VP	61 Tube PVC Module / PE 0.5" tube - 0.02 µm	0.02 µm	43°C / 110°F	Grade 1 PVC	UHMWPE	15 x 9.5 x 75.5 in. 380 x 240 x 1918 mm	75 lbs 34 kg	

^{*} For operation at higher than listed temperatures, contact Danheng. Note: Rapid temperature changes may potentially cause damage to the TMF modules.

For information on all TMF modules, go to porex.com/TMF To purchase TMF modules, contact Danheng directly

Website: www.njdhkj.cn Email: TMF@njdhkj.cn

