

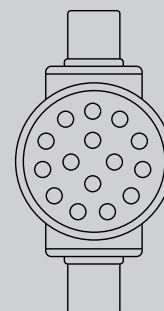
## POREX® TMF 15-Tubular Membrane Filter (TMF) Modules

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 bonded to PVDF substrate or anchored to PE substrate.

### 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
- Sintered PVDF substrate with PVDF membrane offers high temperature and improved chemical compatibility (pH range of 0–14)
- PVDF/PVDF composite option offers increased abrasion resistance and enhanced membrane durability
- Three distinct membrane pore sizes available on two different substrate options
- Uniform, thermally-bonded omni-directional substrate pore structure provides an optimized support structure for tubular membranes and enhanced membrane durability
- Now available in multiple tube quantities and diameters for increased surface area and flux



### 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.

For additional information on our TMF Tubular Membrane Filters call 866-515-7783 or visit our web site at [www.porexfiltration.com](http://www.porexfiltration.com).

### Operating Specifications

Pre-Use Wetting Agent	IPA
Water Flux	>200 GFD (340 LMH)
Cross Flow Liquid Velocity	10 – 16 ft/sec (3.5 to 5.6 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	4" Sc40
Filtrate Port (Qty 2)	ø1.5" x 1.75" L tube stub
Retentate Ports	4" pipe Anvil Grivlok groove
Mounting Required	Horizontal; 2 point
Module Length	72" (1829 mm)
Tubes	
Number of Tubes	15
Nominal ID	0.5" (12.7 mm)
Nominal OD	0.79" (20.07 mm)
Total Active Surface Area	11.25 ft <sup>2</sup> (1.05 m <sup>2</sup> )
Internal Liquid Volume	
Filtrate Volume	1.53 gallons (5.79 ltr)
Concentrate Volume	0.92 gallons (3.48 ltr)
Total Volume	2.45 gallons (9.27 ltr)
Materials of Construction	
Potting	Solvent Cement
Internal Supports	Polypropylene
Gasket Material	None
Preservative	Propylene Glycol
Membrane	PVDF

## POREX® TMF 15-Tubular Membrane Filter (TMF) Modules

Maximum Cleaning	Solution Strength
Bleach (NaOCl)	< 17% to 100°F (38°C)
Caustic (NaOH)	< 15% to 104°F (40°C)
Acid (HCl)	< 15% to 140°F (60°C)
Peroxide (H2O2)	< 5% to 100°F (38°C)

### Coupling and Tubing Specifications

Filtrate Port Vinyl Tubing Specifications	
I.D.	2 in. (50.8 mm)
O.D.	2 1/2 in. (63.5 mm)
Wall Thickness	1/4 in. (6.35 mm)
Approx. Max. Pressure	21 psi at 70° F
Weight (lbs / 100 ft)	89
Gruvlok Coupling Specifications	
Gruvlok Model	Anvil 7001 Standard Coupling
Sized	4 in.
Standard Gasket	C Style
Standard Gasket Material	Grade E (EPDM) suitable for most applications
Approx. Weight Each	10 lbs (4.5 kg)
Vitauclic Coupling Specifications	
Victaulic Model	77 or 75 flexible coupling
Sized	4 in.
Standard Gasket Material	Grade E (EPDM) suitable for most applications
Approx. Weight Each	6 lbs (2.7 kg)

Item Number	Description	Nominal Pore Size (µm)	Maximum Continuous Operating Temperature*	Housing	Substrate Tube	Shipping Dimensions (inch) (mm)	Shipping Weight (lbs) (kg)
MME2005615VP	15 Tube PVC Module / PE 0.5" tube - 0.05µm	0.05µ	43°C / 110°F	Grade 1 PVC	UHMWPE	6 x 6 x 75 153 x 153 x 1905	26.7 12.11
MME2S01615VP	15 Tube PVC Module / PE 0.5" tube - 0.1µm	0.1µ	43°C / 110°F	Grade 1 PVC	UHMWPE	6 x 6 x 75 153 x 153 x 1905	26.7 12.11
MME2S05615VP	15 Tube PVC Module / PE 0.5" tube - 0.5µm	0.5µ	43°C / 110°F	Grade 1 PVC	UHMWPE	6 x 6 x 75 153 x 153 x 1905	26.7 12.11
MME2005615VC	15 Tube CPVC Module / PE 0.5" tube - 0.05µm	0.05µ	43°C / 110°F	CPVC	UHMWPE	6 x 6 x 75 153 x 153 x 1905	27.9 12.66
MME2S01615VC	15 Tube CPVC Module / PE 0.5" tube - 0.1µm	0.1µ	43°C / 110°F	CPVC	UHMWPE	6 x 6 x 75 153 x 153 x 1905	27.9 12.66
MME2S05615VC	15 Tube CPVC Module / PE 0.5" tube - 0.5µm	0.5µ	43°C / 110°F	CPVC	UHMWPE	6 x 6 x 75 153 x 153 x 1905	27.9 12.66
MMV2005615VP	15 Tube PVC Module / PVDF 0.5" tube - 0.05µm	0.05µ	60°C / 140°F	Grade 1 PVC	PVDF	6 x 6 x 75 153 x 153 x 1905	35.4 16.06
MMV2S01615VP	15 Tube PVC Module / PVDF 0.5" tube - 0.1µm	0.1µ	60°C / 140°F	Grade 1 PVC	PVDF	6 x 6 x 75 153 x 153 x 1905	35.4 16.06
MMV2S05615VP	15 Tube PVC Module / PVDF 0.5" tube - 0.5µm	0.5µ	60°C / 140°F	Grade 1 PVC	PVDF	6 x 6 x 75 153 x 153 x 1905	35.4 16.06
MMV2005615VC	15 Tube CPVC Module / PVDF 0.5" tube - 0.05µm	0.05µ	80°C / 176°F	CPVC	PVDF	6 x 6 x 75 153 x 153 x 1905	36.6 16.6
MMV2S01615VC	15 Tube CPVC Module / PVDF 0.5" tube - 0.1µm	0.1µ	80°C / 176°F	CPVC	PVDF	6 x 6 x 75 153 x 153 x 1905	36.6 16.6
MMV2S05615VC	15 Tube CPVC Module / PVDF 0.5" tube - 0.5µm	0.5µ	80°C / 176°F	CPVC	PVDF	6 x 6 x 75 153 x 153 x 1905	36.6 16.6

\* For operation at higher than listed temperatures, contact your Porex representative. Note: rapid temperature changes can damage the Filter Modules.



### Porex Filtration

500 Bohannon Road  
Fairburn, GA 30213 USA

T +1 770.515.7700

US Toll Free +1 866.515.7783

F +1 770.515.7799

E info@porexfiltration.com

www.poroxfiltration.com  
info@poroxfiltration.com

© 2012 Porex Corporation. Porex is a registered trademark and MacroFlow is a trademark of Porex Corporation. All Rights Reserved. PFD-056-060209-00