

**CITY OF PORT ST. JOE, FLORIDA  
NOTICE TO RECEIVE SEALED BIDS  
RFP 2017-16**

**SURFACE WATER TREATMENT PLANT 144 MICRO MEMBRANE FILTER MODULES**

Sealed bids for the City of Port St. Joe for Surface Water Treatment Plant 144 Micro Membrane Filter Modules will be received at City Hall, 305 Cecil G. Costin Sr., Blvd., Port St. Joe, Florida 32456 up until 3:00 PM EST, Friday, December 8, 2017. Bids will be publicly opened and acknowledged, Friday, December 8, 2017, at 3:05 PM EST, in the City Commission Conference Room.

Bids shall be submitted in a sealed envelope, plainly marked with bidder's name, address, date and time of opening, and RFP number for "Surface Water Treatment Plant 144 Micro Membrane Filter Modules."

**DESCRIPTION OF WORK:** A complete Micro Membrane Filter Module Specification Sheet is available on the City's website at [www.cityofportstjoe.com](http://www.cityofportstjoe.com) .

For questions concerning this Bid, please contact Surface Water Treatment Plant Superintendent Larry McClamma at 850-229-1421.

The City of Port St. Joe reserves the right to accept or reject any and all Statements of Bids in whole or in part, to waive informalities in the process, to obtain new Statements of Bids, or to postpone the opening pursuant to the City's purchasing policies. Each Statement of Bid shall be valid to the City of Port St. Joe for a period of sixty (60) days after the opening.

**The City of Port St. Joe is an Equal Opportunity, Affirmative Action Employer**

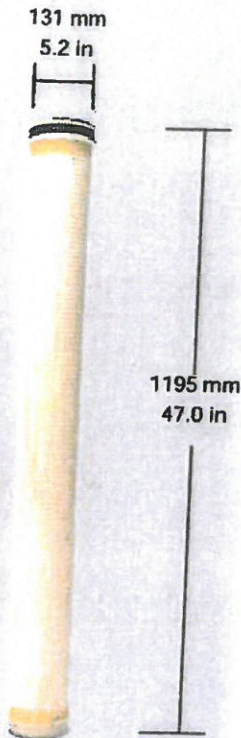
NOTICE TO PUBLISHER: This legal ad is to appear on November 16, 2017, and November 23, 2017, in the Star News Paper.

Publish November 19, 2017, in the News Herald.

Please forward the original "Proof of Publication" and the invoice to:

**The City of Port St. Joe**  
Attn: Charlotte Pierce, City Clerk  
P.O. Box 278  
Port St. Joe, FL 32457

# MICRO MEMBRANE Module Specification



MODULE SPECIFICATIONS	
Parameter	Details
Module Operating Process	Submerged Ultrafiltration
Typical Applications	General Applications
Membrane Type	Hollow Fiber
Filtration Flow Direction	Outside to Inside
Backwash Type	Air Scour with Liquid Backwash
Membrane Material	PVDF (Polyvinylidene Fluoride)
Other Wetted Module Components	Polyurethane, Polyethylene, Polyamide, EPDM
Nominal Membrane Pore Size	0.04 $\mu\text{m}$
Nominal Membrane Area	23 m <sup>2</sup> / 250 ft <sup>2</sup>
Nominal Module Length (Overall)	1195 mm / 47.0 in
Nominal Module Diameter (Overall)	131 mm / 5.2 in
Approximate Module Mass	6.8 kg / 15 lb

OPERATING SPECIFICATIONS	
Parameter	Details
Operating Temperature Range	> 0 to 35 °C / > 32 to 95 °F
Temperature Range for Transportation and Storage	Preferred range 5 to 25 °C / 41 to 77 °F, allowable range > 0 to 35 °C / > 32 to 95 °F (shipment/storage in a temperature controlled container (or reefer) at 20 °C / 68 °F recommended). Modules must remain moist at all times.
Typical Feed pH Range	6.0 – 9.0 pH <sup>Note i</sup>
Allowable pH Range for Cleaning	2.0 – 10.0 pH typical <sup>Note ii</sup>
Typical Maximum Available Trans-Membrane Pressure (TMP) in Filtration	85 kPa / 12.3 psi <sup>Note iii</sup>
Maximum Allowable TMP at any time	$\pm$ 150 kPa / $\pm$ 22 psi
Typical chlorine concentration during cleaning (MW or CIP)	50 – 200 mg/L @ 25 °C / 50 – 200 ppm @ 77 °F <sup>Note iv</sup>
Maximum chlorine concentration during cleaning	1000 mg/L @ 25 °C / 1000 ppm @ 77 °F <sup>Note iv</sup>
Maximum total exposure to chlorine during cleaning	500,000 mg.h/L @ 25 °C / 500,000 ppm.h @ 77 °F <sup>Note iv</sup>
Maximum separate exposure to chlorine in feed or during storage	< 1 mg/L average, < 5 mg/L maximum, pH > 6.5 @ 25 °C < 1 ppm average, < 5 ppm maximum, pH > 6.5 @ 77 °F 100,000 mg.h/L @ 25 °C / 100,000 ppm.h @ 77 °F <sup>Note iv</sup>
Maximum separate exposure to chloramines in feed or during storage	< 2.5 mg/L average, < 5 mg/L maximum, pH > 6.5 @ 25 °C < 2.5 ppm average, < 5 ppm maximum, pH > 6.5 @ 77 °F 150,000 mg.h/L @ 25 °C / 150,000 ppm.h @ 77 °F <sup>Note iv</sup>

- i. Exposure to chlorine or chloramines is not recommended in feeds below 6.5 pH.
- ii. Occasional brief exposure during chlorine cleans to pH 10.5 is acceptable.
- iii. 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.