

Overview

Crystar® modules represent the next generation of liquid microfiltration technology. Equipped with consistent and high quality silicon carbide (SiC) membranes, these modules can filter demanding liquids at unparalleled levels of efficiency. The modules operate in dead-end configuration and can be installed in usual rack designs for several water treatment applications. By combining the unique SiC properties with a robust and well-engineered glass fiber reinforced polymer housing, Crystar® FT modules set a new benchmark for liquid microfiltration in various applications.

Key Benefits

- Robust and durable materials thanks to the outstanding properties of silicon carbide as well as glass fiber reinforced polymer.
- High filtration flow rates thanks to high permeate fluxes and low fouling propensity.
- Reduced energy consumption thanks to unmatched SiC permeability and optimized hydraulic design allowing for low filtration pressures.
- Compact installation in usual rack designs.
- High water recovery and productivity thanks to low water consumption, fast and effective backwash operations (10 – 60 liters of water per filtration module per backwash).
- Several options for efficient chemical cleaning and chemically enhanced backwash procedures.

Applications

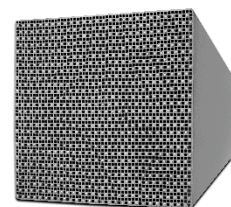
- Drinking water production
- Preparation of high purity industrial process water
- Pre-treatment before RO/NF processes
- Industrial & municipal wastewater
- Filtration of swimming pools

Solve your liquid filtration challenges with Crystar® FT – Contact us!

Figures



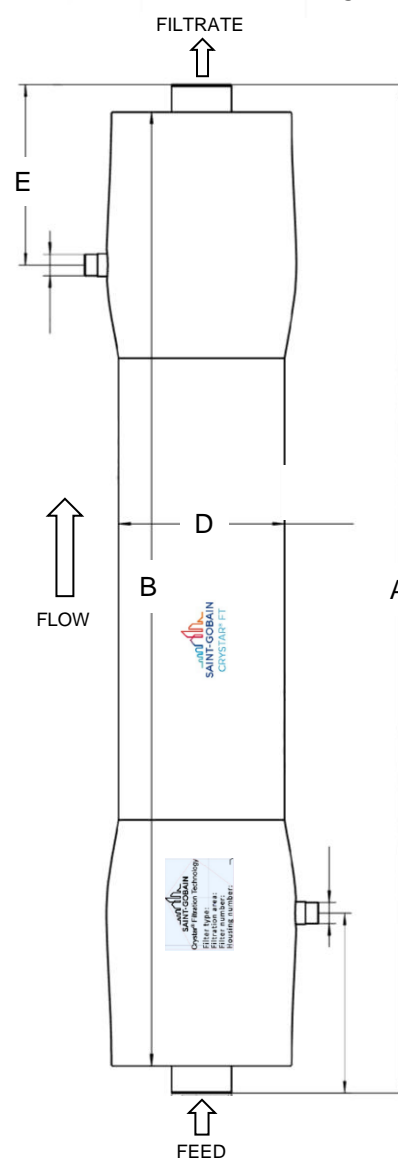
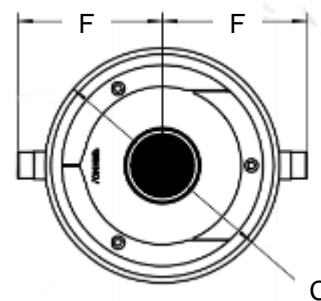
GRP Housing



Crystar® Dead-End Membrane with Honeycomb Structure

External Dimensions

Fitting Feed / Permeate* (Qty 2), PVC-U DIN 8062		3.5 in	90 mm
Side Port (Qty 2), PVC-U DIN 8062		1.3 in	32 mm
Length	A	59.7 in	1517 mm
	B	56.5 in	1435 mm
Outer Diameter	C	11.2 in	285 mm
	D	9.8 in	249 mm
Side Ports Position	E	10.7 in	271 mm
	F	6.9 in	175.5 mm



Specifications

Membrane Material	Silicon Carbide (>99%)		
Membrane Pore Size**	HiPur: 0.25 µm HiFlo: 4.0 µm		
Filtration Area	118.4 / 172.4 ft ²	11 / 16 m ²	
Channel Hydraulic Diameter	0.1 in	1.9 mm	
Vessel Materials	<ul style="list-style-type: none"> • GRP shell • PVC-U connections • Stainless steel fixtures 		
Weight	Drained	99.2 lbs	45 kg
	Full	209.4 lbs	95 kg
Module Hold Up Volume	13.2 gal	50 L	

Operating Parameters***

pH Range	Continuous operation	2 – 12	
	Chemical cleaning	1 – 13	
Max. operating Temperature	Continuous operation	104 °F	40°C
	Chemical cleaning	150 °F	65 °C
Typical Filtrate Flow Rate	HiPur A+: 5 to 10 m ³ /h HiFlo A+: 10 to 20 m ³ /h		
Recommended Diff. Pressure Range	2.9 – 22.0 psi	0.2 - 1.5 bar	
Recommended Backwash Pressure	36.3 psi	2.5 bar	
Typical Backwash Flow Rate	30 – 60 m ³ /h		
Air Backwash	2 – 3 bar for 5 – 10 sec		
Typical water consumption per backwash	10 to 60 liters		

* Different dimensions upon request.

** Measurement by mercury intrusion.

*** Operating parameters will strongly depend on feed water composition and characteristics, as well as type of dead-end filter. Please consult us for additional information.

Saint-Gobain IndustrieKeramik Rödental GmbH

Oeslauer Straße 35, 96472 Rödental • Germany
P: +49 (0) 9563 724 0 • Fax: +49 (0) 9563 724 356 • crystartf@saint-gobain.com

www.crystarfiltration.saint-gobain.com

PERFORMANCE CERAMICS & REFRACTORIES

