

SpiraSep 1060

Ultrafiltration

SpiraSep ultrafiltration (UF) elements feature a vacuum-driven, submerged, backwashable, spiral-wound membrane design with superior operating performance over conventional hollow fiber formats. The unique design characteristics of a spiral-wound membrane with open feed channels allow SpiraSep elements to handle the solids levels seen in high fouling water and wastewater streams. An advanced aeration process combined with periodic backwashing easily removes particulate matter from the membrane surface. The low net driving pressure of an immersed system minimizes energy costs and membrane fouling.

With a design built to handle high fouling water and wastewater streams, SpiraSep elements eliminate the need for extensive pre-treatment for UF systems, such as clarifiers, thus reducing cost, complexity, and footprint. Its ability to directly treat some of the most difficult water and wastewater streams allows SpiraSep to drastically reduce capital and operational costs while simplifying the overall treatment process.

MEMBRANE CHARACTERISTICS

Membrane	UF
Membrane Chemistry	PES / PVDF
Construction	Submerged, Negative Pressure Ultrafiltration Module
Pore Size	0.03µm (PES) / 0.06µm (PVDF)

MODULE SPECIFICATIONS

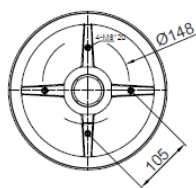
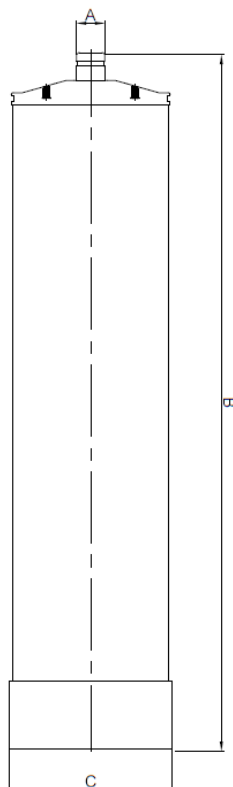
Model	SpiraSep 1060-PES / SpiraSep 1060-PVDF
Feed Channel	90 mil corrugated
Membrane Area-m ² (ft ²)	27.4 (295)

OPERATING PARAMETERS

Transmembrane Pressure Range	0.07-0.7 bar (1-10 psi)
Temperature Range ¹	1-45 °C (34-113 °F)
pH Range ¹	2.0 - 11.0
Applicable Air Scour Rate	5.6 Nm ³ /hr (3.5 scfm)
Cleaning Chlorine Tolerance	1,000 mg/L PES; 2,000 mg/L PVDF
Maximum Feed TSS ²	1,000 mg/L
Maximum Feed Oil & Grease ²	100 mg/L

¹ Temperature, pH limits, and cleaning procedures are further detailed in the SpiraSep 1060 Product Manual.
² Depending on feed water quality and operating conditions.

PHYSICAL DIMENSIONS



FILTER ELEMENT

Dim. A	47.2 mm	1.9 "
Dim. B	1,174.0 mm	46.2 "
Dim. C	273.0 mm	10.8 "
Element Weight	35 kg	77 lbs

IMPORTANT INFORMATION

- Start-up:** MANN+HUMMEL Water & Membrane Solutions recommends an operational sequence that incorporates permeate production, cleaning, and module draining steps.
- Cleaning:** SpiraSep 1060 ultrafiltration elements must be cleaned routinely via backwash, chemically enhanced backwash (CEB), and clean-in-place (CIP) to ensure proper operation and to prevent membrane damage.
- Storage:** SpiraSep 1060 ultrafiltration elements must be stored appropriately to ensure proper operation and to prevent membrane damage.

CUSTOMIZABLE SPECIALTY ELEMENTS

MANN+HUMMEL Water & Membrane Solutions offers a full range of membranes and element designs for challenging water and process applications. Technologies include low-fouling RO, submerged and pressurized UF, continuous high temperature, ultra-high pressure, unique sanitary designs and more. Contact us to customize a product that satisfies your specific requirement

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