

ULTRADYN™ FE10-FC-FUS5082

Ultrafiltration Modules

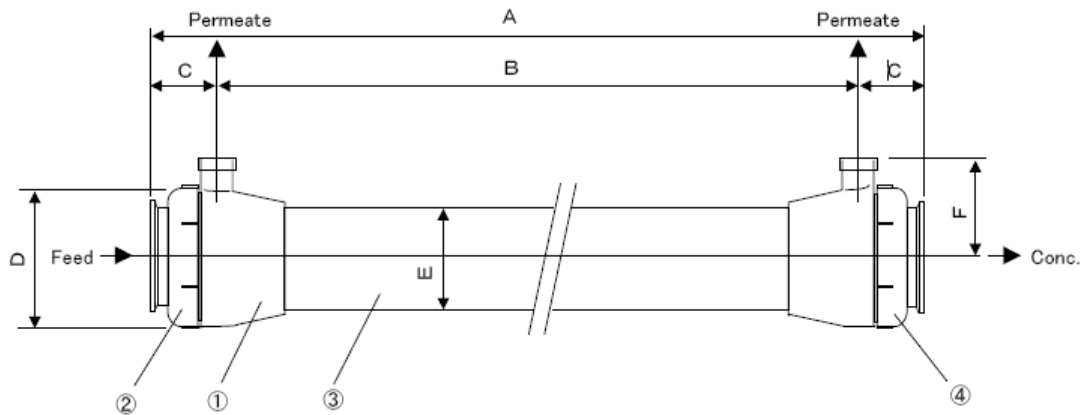
High mechanical strength, backwashable membrane in a wide range of membrane types make ULTRADYN™ hollow fiber modules suitable for all applications requiring a high level of purification and high packing density. ULTRADYN modules are available with polyethersulfone (PES), polyacrylonitrile (PAN) and cellulose tri-acetate (CTA) hollow fiber membrane types and in configurations that can be sterilized with hot water up to 98 °C, eliminating bacterial growth and preventing fouling.

ULTRADYN modules are available with a hollow fiber inner diameter range from 0.5 to 1.4 mm, and module size range from 0.1 m² to 17 m². ULTRADYN hollow fiber modules have proven particularly successful in applications such as wine filtration, pure water filtration, pharmaceuticals, electronics, and surface water treatment.

MEMBRANE CHARACTERISTICS

| | |
|------------------------------------|------------------------|
| Membrane Chemistry | Polyethersulfone (PES) |
| Molecular Weight Cut-Off | 500,000 Dalton |
| Hollow Fiber Inner Diameter | 0.8 mm |

PHYSICAL DIMENSIONS



| | A | B | C | D | E | F |
|--------------------------------|--------------|------------|------------|-----------|----------|----------|
| Dimension - mm (inches) | 1,126 (44.3) | 985 (38.8) | 70.5 (2.7) | 130 (5.1) | 89 (3.5) | 85 (3.3) |

| Item | Description | Material | Quantity |
|------|-------------------|---------------------|----------|
| 1 | Nozzle cap | Polysulfone | 2 |
| 2 | Cap | Polysulfone | 2 |
| 3 | Case | Polysulfone | 1 |
| 4 | O-Ring type WG-21 | Fluoro-rubber (FPM) | 2 |
| - | Potting Resin | Epoxy Resin | - |

ACCESSORIES

| Item | Description | Material | Quantity |
|------|------------------------|---------------------------------|----------|
| 1 | Feed/Conc. port joints | Polyvinyl chloride (PVC), TS 40 | 2 |
| 2 | Permeate port joints | Polyvinyl chloride (PVC), TS 25 | 2 |
| 3 | O-Ring type G-95 | Fluoro-rubber (FPM) | 2 |
| - | For V-band fitting | | - |

OPERATING PARAMETERS & MODULE SPECIFICATIONS

| | |
|--|--|
| Membrane Area | 5.0 m ² (54 ft ²) |
| Standard Water Flux^a | 5.3 m ³ /h (23 gpm) |
| Shipping Water Flux^a | 4.4 m ³ /h (19.4 gpm) |
| Maximum Feed Inlet Pressure^b | 6 bar (87 psi) |
| Maximum Transmembrane Pressure | 3 bar (44 psi) |
| Maximum Temperature | 98°C (208°F) |
| Applicable pH range | 1 - 13 |
| Standard Inlet Feed Flow^c | 3.8 m ³ /h (16.7 gpm) |
| Operating Weight | 9.0 kg (19.8 lb) |
| Shipping Weight | 3.0 kg (6.6 lb) |
| Standard Preservative | Pure water (sterilized with 0.005 % w/v sodium hypochlorite) |
| Feed/Conc. Connectors | V band coupling |
| Permeate Connectors | 25 A |

a Initial water flux by dead end filtration with pure water under TMP 0.1 MPa at 25°C.

b Standard condition is adjusted to 1 m/sec feed velocity. The optimum velocity is different for each application.

c This value is applicable at 25°C.

d Maximum pressures depend on operating temperature. See instruction manual for further information.

* DAICEN Membrane Systems Ltd. is the manufacturer of the ULTRADYN modules and markets and distributes them under the registered trademark MOLSEP®.

CUSTOMIZABLE SPECIALTY ELEMENTS

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

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