

# ULTRADYN™ FE10-FC-FUS0382

## Ultrafiltration Modules

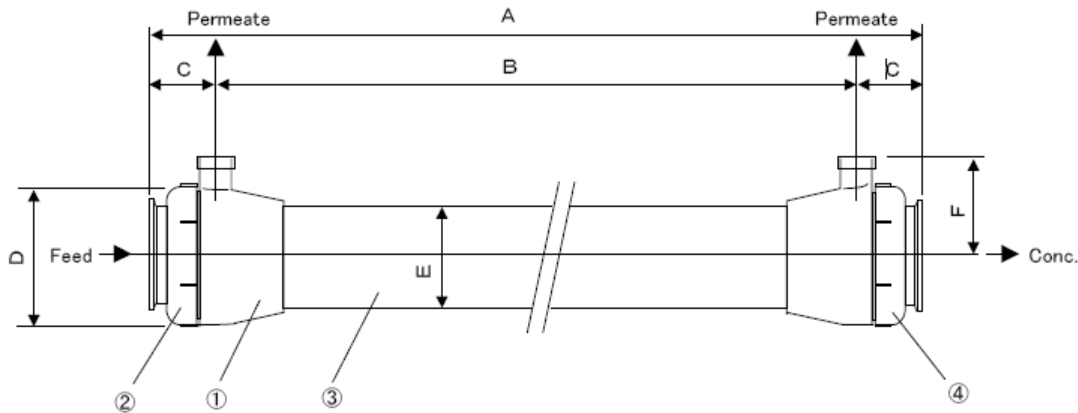
High mechanical strength, backwashable membrane in a wide range of membrane types make ULTRADYN™ hollow fiber modules suitable for all applications requiring a high level of purification and high packing density. ULTRADYN modules are available with polyethersulfone (PES), polyacrylonitrile (PAN) and 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 m<sup>2</sup> to 17 m<sup>2</sup>. ULTRADYN hollow fiber modules have proven particularly successful in applications such as pure water filtration, pharmaceuticals, electronics, and surface water treatment.

### MEMBRANE CHARACTERISTICS

|                             |                  |
|-----------------------------|------------------|
| Membrane Chemistry          | Polyethersulfone |
| Molecular Weight Cut-Off    | 30,000 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 <sup>2</sup> (54 ft <sup>2</sup> ) |
| Standard Water Flux <sup>a</sup>         | 2.3 m <sup>3</sup> /h (10 gpm)           |
| Shipping Water Flux <sup>a</sup>         | 1.7 m <sup>3</sup> /h (7.5 gpm)          |
| Maximum Feed Inlet Pressure <sup>b</sup> | 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 <sup>c</sup>    | 3.8 m <sup>3</sup> /h (16.7 gpm)         |
| Operating Weight                         | 9.0 kg (19.8 lb)                         |
| Shipping Weight                          | 3.0 kg (6.6 lb)                          |
| Standard Preservative                    | 1000 ppm Benzoic acid                    |
| 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

MICRODYN-NADIR 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 MICRODYN-NADIR to customize a product that satisfies your specific requirements.

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