

# ULTRADYN™ FE10-FC-FUY15E1

## Ultrafiltration Modules

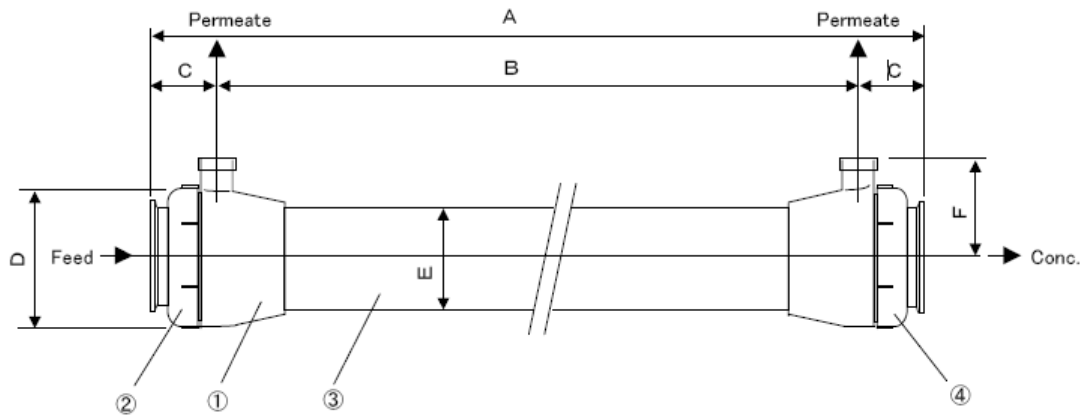
High mechanical strength, backwashable membrane in a wide range of membrane types make ULTRADYN™ hollow fiber modules suitable for all applications requiring a high level of purification and high packing density. ULTRADYN modules are available with polyethersulfone (PES), polyacrylonitrile (PAN) and 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 wine filtration, pure water filtration, pharmaceuticals, electronics, and surface water treatment.

### MEMBRANE CHARACTERISTICS

<b>Membrane Chemistry</b>	Polyacrylonitrile (PAN)
<b>Molecular Weight Cut-Off</b>	150,000 Dalton
<b>Hollow Fiber Inner Diameter</b>	1.4 mm

### PHYSICAL DIMENSIONS



	A	B	C	D	E	F
<b>Dimension - mm (inches)</b>	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**

<b>Membrane Area</b>	3.0 m <sup>2</sup> (32.3 ft <sup>2</sup> )
<b>Standard Water Flux<sup>a</sup></b>	1.5 m <sup>3</sup> /h (6.6 gpm)
<b>Shipping Water Flux<sup>a</sup></b>	1.2 - 1.8 m <sup>3</sup> /h
<b>Maximum Feed Inlet Pressure<sup>b</sup></b>	6 bar (87 psi)
<b>Maximum Transmembrane Pressure</b>	3 bar (44 psi)
<b>Maximum Temperature</b>	45°C (113°F)
<b>Applicable pH range</b>	2 - 11
<b>Standard Inlet Feed Flow<sup>c</sup></b>	3.8 m <sup>3</sup> /h (16.7 gpm)
<b>Operating Weight</b>	9.0 kg (19.8 lb)
<b>Shipping Weight</b>	3.0 kg (6.6 lb)
<b>Standard Preservative</b>	Pure water (sterilized with 0.005 % w/v sodium hypochlorite)
<b>Feed/Conc. Connectors</b>	V band coupling
<b>Permeate Connectors</b>	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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