

# MICRODYN AQUADYN® UA640 Hollow Fiber UF Modules

MICRODYN AQUADYN® UA640 UF modules feature a 0.025-micron pore size **Polyacrylonitrile (PAN)** hollow fiber membrane potted in a U-shaped arrangement. These modules are most suitable for POE (Point-of-Entry) and commercial water and wastewater treatment systems. They operate at a very low feed pressure due to the high hydrophilicity of PAN membrane, which leads to energy savings. This product specification sheet provides an overview of relevant technical data regarding MICRODYN AQUADYN® UA640 modules.

## MEMBRANE CHARACTERISTICS

<b>Membrane Polymer</b>	Polyacrylonitrile (PAN)
<b>Nominal Pore Size</b>	0.025 µm
<b>Membrane Type</b>	Hollow Fiber
<b>Hollow Fiber Diameter OD/ID</b>	2.1 mm / 1.1 mm (0.083 inch / 0.043 inch)

## MODULE SPECIFICATIONS

<b>Housing Material</b>	uPVC
<b>Membrane Potting</b>	Epoxy
<b>Filtration Flow Path</b>	Out → In
<b>Operating Mode</b>	Dead-End
<b>Preservative</b>	Sodium meta-bisulphite
<b>Nominal Membrane Area</b>	16 m <sup>2</sup> (172 ft <sup>2</sup> )

## OPERATING PARAMETERS

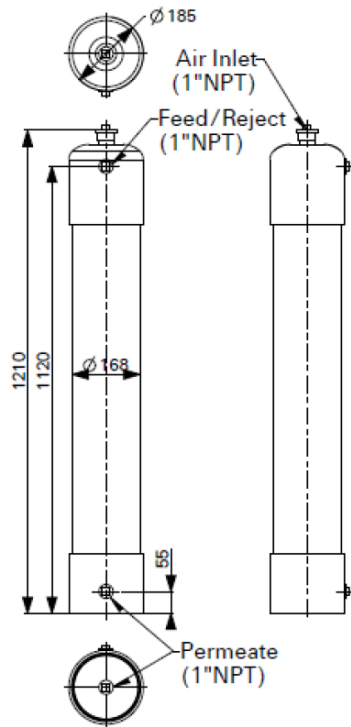
<b>Filtrate Flow Range</b>	0.16 - 1.3 m <sup>3</sup> /h (0.7 - 5.7 gpm)
<b>Maximum Feed Pressure (at 20°C / 68°F)</b>	2.0 bar (29.0 psi)
<b>Maximum Transmembrane Pressure</b>	1.0 bar (14.5 psi)
<b>Maximum Backflush Flow</b>	7.2 m <sup>3</sup> /h (31.7 gpm)
<b>Typical Air Scour Rate</b>	2.4 - 4.8 Nm <sup>3</sup> /h (1.45 - 2.8 scfm)
<b>Maximum Air Scour Pressure</b>	0.5 bar (7.3 psi)
<b>Ph Range for Operation</b>	2.0 - 10.0
<b>Temperature Range</b>	5 - 45°C (41 - 113°F)

## CLEANING PARAMETERS

<b>pH Range</b>	1.0 - 10.0
<b>Max. Temperature</b>	45°C (113°F)
<b>Max. Active Chlorine Concentration</b>	100 ppm
<b>Max. Active Chlorine Exposure</b>	100,000 ppm-hours
<b>Max. Hydrogen Peroxide Concentration</b>	500 ppm
<b>Max. Hydrogen Peroxide Exposure</b>	500,000 ppm-hours



**PHYSICAL DIMENSIONS**



<b>Dry Weight</b>	23 kg (50.7 lb)
<b>Module Diameter</b>	168 mm (6.6 in)
<b>Module Length</b>	1210 mm (47.6in)
<b>Feed / Reject Port</b>	1" NPT
<b>Permeate Port</b>	1" NPT
<b>Air Inlet Port</b>	1" NPT

**IMPORTANT INFORMATION**

**Storage & Handling:**

MICRODYN AQUADYN® UA640 modules must be handled and stored appropriately to ensure proper operation and to prevent membrane damage. Please see MICRODYN AQUADYN® UA640 Product Manual.

**Installation and Start-up:**

MICRODYN AQUADYN® UA640 modules must be installed correctly before start-up. For a detailed installation and start-up procedure, please see MICRODYN AQUADYN® UA640 Product Manual.

**Cleaning:**

MICRODYN AQUADYN® UA640 modules must be cleaned routinely via backwash to ensure proper operation and to prevent membrane damage. Please see MICRODYN AQUADYN® UA640 Product Manual.

MICRODYN-NADIR reserves the right to change specifications without prior notification.

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