

# AQUADYN® UA420

## Hollow Fiber UF Modules

AQUADYN® UA420 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 POU (Point-of-Use), 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 AQUADYN® UA420 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>	Reinforced PP
<b>Membrane Potting</b>	Epoxy
<b>Type of Filtration</b>	Out → In Dead-End
<b>Operating Mode</b>	Dead-End
<b>Preservative</b>	Sodium meta-bisulphite
<b>Nominal Membrane Area</b>	6 m <sup>2</sup> (65 ft <sup>2</sup> )

### OPERATING PARAMETERS

<b>Maximum Filtrate Flow</b>	0.72 m <sup>3</sup> /h (3.2 gpm)
<b>Maximum Feed Pressure (at 20°C / 68°F)</b>	4.0 bar (58.0 psi)
<b>Maximum Transmembrane Pressure</b>	3.0 bar (43.5 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



UA420-E

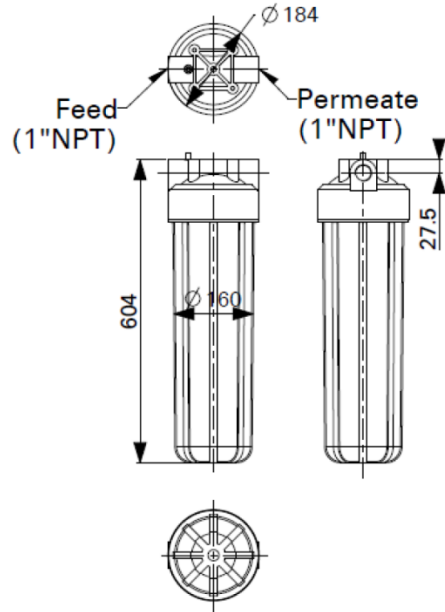


UA420-BT



UA420-BB

**PHYSICAL DIMENSIONS**



<b>Dry Weight</b>	8 kg (17.6 lb)
<b>Module Diameter</b>	160mm (6.3in)
<b>Module Length</b>	604mm (23.8in)
<b>Feed Port</b>	1" NPT
<b>Permeate Port</b>	1" NPT
<b>UA420-E</b>	Fiber element only
<b>UA420-BT</b>	Transparent housing
<b>UA420-BB</b>	Blue housing

**IMPORTANT INFORMATION**

**Storage & Handling:**

AQUADYN® UA420 modules must be handled and stored appropriately to ensure proper operation and to prevent membrane damage. Please see AQUADYN® UA420 Product Manual.

**Installation and Start-up:**

AQUADYN® UA420 modules must be installed correctly before start-up. For a detailed installation and start-up procedure, please see AQUADYN® UA420 Product Manual.

**Cleaning:**

AQUADYN® UA420 modules must be cleaned routinely via backwash to ensure proper operation and to prevent membrane damage. Please see AQUADYN® UA420 Product Manual.

MANN+HUMMEL Water & Fluid Solutions reserves the right to change specifications without prior notification.

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