

# RO-Flow™ Filtration Fabrics

## Water Filtration Permeate Carrier Fabrics

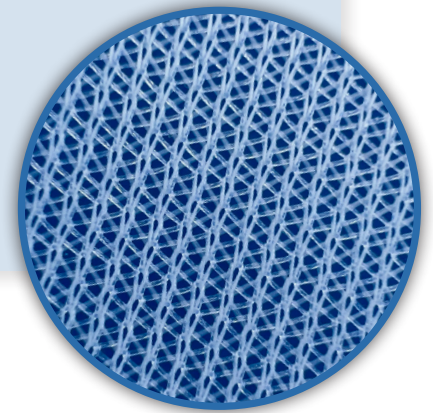
### TECHNICAL DATA SHEET

#### Advanced Material Solutions: RO-Flow™ High-Performance Water Filtration Permeate Carrier Fabrics

Shawmut manufactures RO-Flow™ high-performance water filtration permeate carrier fabrics using antimony-free, bicomponent yarn in our state-of-the-art Park Avenue Technical Center in Burlington, North Carolina.

Our dedication to innovation goes beyond fabrication, integrating advanced technology like digital rapid inspection with image processing, defect detection, and machine learning. This guarantees unmatched quality control, complementing our extensive engineering experience to deliver standard and customized solutions tailored precisely to your needs.

RO-Flow Permeate Carrier Fabrics are Federal Drug Administration (FDA) compliant and certified by the National Sanitation Foundation (NSF) and KIWA.



#### Features and Benefits

RO-Flow Permeate Carrier Fabrics are designed for maximum channel integrity. Their strength and durability hold up after intensive service, resulting in a consistently high flow rate over an extended period of time. RO-Flow fabrics can be built with a thinner construction that increases the number of possible wraps around the membrane. The wider channels on RO-Flow Permeate Carriers yield greater fluid volume output and an increased and more efficient flow rate than other permeate carrier fabrics.

The hybrid tricot design offers flexibility that supports membrane customization while exceptional channel integrity minimizes compression and flow loss over time. Adhering to our custom design specifications and engineered to exceed typical standards, our proprietary RO-Flow fabrics incorporate heat-treated bicomponent yarn to fuse the fibers without the need for harsh chemicals or epoxy, making for a safer, more eco-friendly alternative.

#### Industries and Applications

The fibers used to produce RO-Flow Permeate Carrier Fabrics are custom developed for drinking water, desalination, dairy products, wine and even natural gas. Applications include microfiltration, nanofiltration, ultrafiltration and reverse osmosis. Applications for reverse osmosis water purification range from municipal treatment facilities to naval vessels. While the purification of brackish water and saltwater is the primary application for reverse osmosis, the process can also be used in a number of other industries, including food, beverage and pharmaceutical processing.

## STANDARD PRODUCT DETAILS

RO-Flow™ High-Performance Water Filtration Permeate Carrier Fabrics					
Model #	Thickness (mils)	Courses per Inch (CPI)	Wales per Inch (WPI)	Weight (oz/yd <sup>2</sup> )	Application
A1466	10	48	60	4.60	Seawater desalination, high pressure
A1604K	9.5	46	60	3.60	High pressure
A1663	12	33	34	3.70	Brackish
A1670	10	35	34	2.60	Brackish, low pressure
A1715	9	44	46	2.60	Brackish, medium pressure
A1673*	9.6	52	40	2.65	Specialty
A1675*	14	29	34	3.25	Specialty

\*Covered by US Patent # 9,636,637 B2: The patented bicomponent multi-filament/mono-filament hybrid tricot knit uses less material to achieve greater results, with an innovative design that delivers firmness, stability, and maximum permeability.

### Built to Your Specifications

Shawmut's world-class design, engineering, technical, and program management staff are available for customer collaboration and accelerated product development to manufacture RO-Flow to meet your specifications. In-house pressure testing to validate constructions with specific membrane service requirements (pressure/flow rates) is available.

**Country of Origin:** Made in the USA

**Construction Type:** Polyester and/or polypropylene

**Construction Options:** Knit fabrics designed for low- or high-pressure filters

**Fiber Options:** Bicomponent yarn, bicomponent/mono-filament blend, and bicomponent/multi-filament polyester

**Slitting Capabilities:** Minimum of 10", up to a maximum of 42" (*custom widths available*)

**Roll Size:** Yards per roll and width can be varied as necessary



Contact Shawmut today for technical assistance to order RO-Flow™ High-Performance Water Filtration Permeate Carrier Fabrics

Phone: 336-221-2144

Email: [FabricSales@ShawmutCorporation.com](mailto:FabricSales@ShawmutCorporation.com)