

PRISM[®] Nitrogen Membranes

The reliable, low-maintenance option

“Our nitrogen generators can only meet arduous requirements by using the most reliable membrane separators at the heart of the plant—from Air Products PRISM Membranes.”

*Glyn Evans
Manufacturing
Manager
Chemitrol Process
Equipment Limited*



An Overview

Air Products' PRISM membranes provide an economical and low-maintenance method for nitrogen generation. These membranes, containing the latest state-of-the-art hollow fiber, are available to original equipment manufacturers and others who package their own nitrogen systems. We have been working with OEM partners since the 1980s, and we are committed to helping our partners succeed in the marketplace.

Our evolving technology allows the widest range of membrane customization, including special lengths, diameters, and materials. We offer the broadest size range of nitrogen membranes in the industry, with performance guaranteed up to 99.9 percent purity, and we offer a broad range of flow rates, from 0.2 to 100 standard cubic feet per minute (scfm) per membrane.

Drawing upon our decades of experience in membrane technology and industrial gases, our design and application engineers will work with you to maximize the many advantages of PRISM nitrogen membranes.



Applications Proven with PRISM Nitrogen Membranes

- Controlled atmosphere for fruit storage
- Tire filling
- Plastic injection molding
- Food packaging
- Analytical equipment purging
- Inerting and blanketing for chemical storage/transport
- Pipeline purging

Key Benefits of Membrane Technology

- Easy to operate
- Low maintenance
- Uninterrupted nitrogen supply
- Flexibility to adjust purity
- Lightweight
- Turndown capability

Advantages of PRISM Nitrogen Membranes

- Proven history of reliability in the field
- More tolerant of particulate dust than other brands
- Able to withstand liquid water

Our membrane fiber is analyzed throughout the manufacturing process to ensure high-quality PRISM nitrogen membranes.

- Less pretreatment required as compared to other brands
- Consistent product quality
- Highest operating pressure and temperature capabilities in the industry
- Experienced staff for process design support
- Large production capacity to meet high-volume orders
- Wide variety of sizes and configurations to minimize your system cost

The Simple Solution

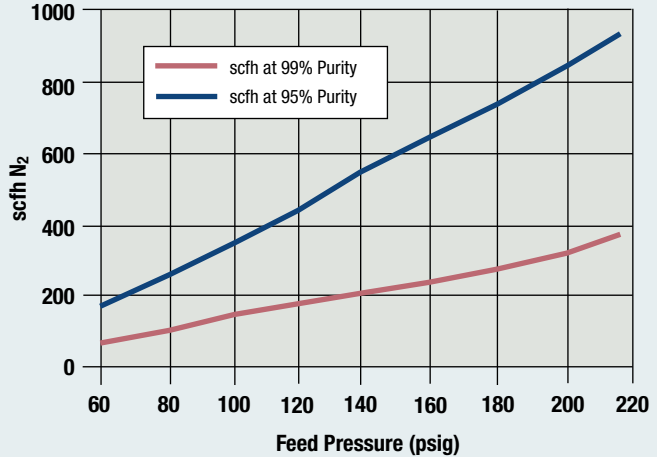
PRISM nitrogen membranes are the most maintenance-free method of on-site nitrogen production. Thousands of customers have enjoyed the simplicity of nitrogen produced from PRISM membranes throughout the last 20+ years. Membrane separators work on the principle of understanding and controlling the permeation rates of different gases. The “work” of separating the gases is performed with no moving parts and no disposables to replace. With proper prefiltration, membranes have shown lifetimes in the field of over ten years!

PRISM nitrogen membranes are rated for operation at 300 psig and 150°F. Higher pressures increase efficiency, and higher temperatures increase productivity. Our staff of engineers can easily assist you in determining the optimum operating point for your application.

PRISM nitrogen membrane separators are available in a wide variety of sizes and flow capacities. A sample of the performance of our PA4050-P1 nitrogen membrane is shown in Figure 1.

Figure 1

PA4050-P1 Performance at 115°F



PRISM nitrogen membranes can operate at a wide range of purities, pressures, and temperatures. This flexibility allows customers to optimize their system designs.

For More Information

For more information about our PRISM nitrogen membranes, visit our website at the web address shown below, or contact us by phone, fax, or e-mail at our location below.

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