

## Automotive Fuel Cell Blowers

Barber-Nichols, Inc. (BNI) is an industry leader in the design and manufacture of hermetically sealed, centrifugal air supply and anode gas recirculation blowers for automotive fuel cells. From standard laboratory models to custom engineered prototypes, BNI can deliver your solution. Options include 12 - 600 VDC power and either air or liquid cooling. Let us put more than 40 years of high-speed turbomachinery experience to work on your challenging fuel cell blower performance and packaging requirements.



Air-Cooled Blower

### Blower Features

- Flow Rates from 5 to 45 l/sec (10 to 90 ACFM) and a Head Rise to 3,700 m [12,100 ft] in a High-Speed Compact Package Provide Performance Flexibility
- Variable Speeds up to 50,000 rpm and a 10:1 Turndown Ratio Accommodate Idle to Full Load Conditions
- Hermetically Sealed Designs Assure Hydrogen Containment for the Life of the Bower
- A Low-Friction Coating and Generous Partial Emission Impeller Clearances Permit Moisture Drainage for Freeze Protection
- A Corrosion Resistant Coating Permits Aluminum Construction Which Minimizes Weight and Maximizes Heat Dissipation
- A Fully Integrated Communication Area Network (CAN) Controller Permits On-Board Diagnostic Monitoring While Minimizing Size
- Automotive EMI/EMC Compliance Assures Vehicle Compatibility
- Mean Time Between Maintenance (MTBM) Exceeds 5,000 Hours
- High Temperature (425°C [800°F]) Designs are Also Available

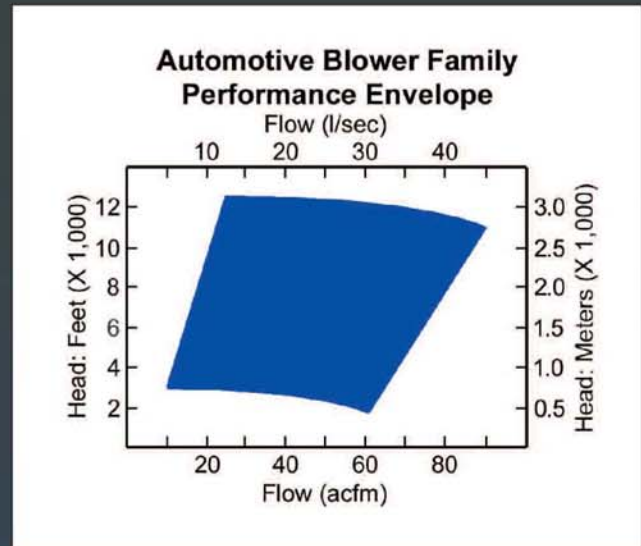


## Program Types

As a specialty equipment manufacturer, BNI can provide a variety of design, prototype, and production unit products to support your program. Options include:

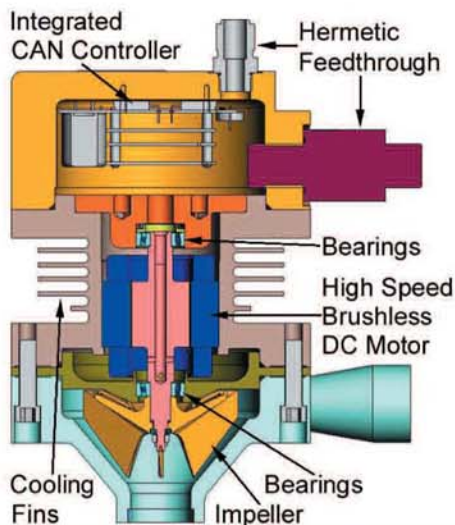
- Standard and Custom Engineered Blowers for Dynamic Laboratory Testbed Applications
- Prototype Blowers for Vehicle Development
- Production Blowers for Vehicle Programs

BNI is an AS9100 & ISO9001 registered company that has been manufacturing cutting edge turbomachinery and related equipment for the aerospace, automotive, and



electrical power industries since 1966. All blowers provided by BNI come with a standard 12/18 month parts and service warranty, and extended warranties are available upon request. Call to learn how a BNI air supply or anode gas recirculation blower can improve your fuel cell performance.

### Air-Cooled Blower Sectional



Liquid-Cooled Blower

*Barber*



*Nichols*