

NitroFlow

Nitrogen Gas Generators

The cost-effective, reliable and safe solution for medium nitrogen requirements.

NitroFlow nitrogen gas generators from Parker produce nitrogen gas from compressed air and offer a cost-effective, reliable and safe alternative to traditional nitrogen gas supplies such as cylinder or liquid.

Nitrogen is used as a clean, dry, inert gas primarily for removing oxygen from products and/or processes.

NitroFlow provides an on-demand, continuous source of nitrogen gas which can be used in a wide range of industries such as food, beverage, laboratory, chemical, electronics, transportation and oil and gas.



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Features:

- Available as low pressure (LP) and high pressure (HP) versions
- NitroFlow LP requires only electrical power in order to produce nitrogen
- NitroFlow HP Can operate from a standard factory compressed air supply
- Delivers 5% down to 0.5% oxygen content, without the need for any additional purification
- Built-in oxygen analyser for continuous purity monitoring
- Alarm capabilities
- User friendly control interface
- Compact design
- Minimal maintenance
- Easy installation

Benefits:

- **Up to 90% cost savings***
Typical capital pay-back is achievable within 12-24 months
- **Energy savings**
NitroFlow HP does not require an inlet air heater and can operate from a standard factory compressed air supply
- **Convenient and safe**
The easy to use system is simple to install, requires minimal maintenance and eliminates safety hazards associated with traditional gas supplies
- **Space saving design**
The compact design means the system demands less floor space
- **Reduced carbon footprint**
The elimination of cylinder deliveries and transportation means carbon footprint can be reduced

* Typical cost savings achieved in comparison to cylinder or liquid supply



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Product Selection

Performance data for HP models is based on 7 bar g (100 psi g) air inlet pressure and 20° - 30°C air inlet temperature. Consult Parker for performance under other specific conditions. NitroFlow LP has a in-built compressor requiring normal clean ambient air at 10°C - 35°C, < 90% relative humidity

| Oxygen Content | | | | | | | |
|----------------|--------------------|------|------|------|------|------|------|
| Model | Unit | 0.5% | 1.0% | 2.0% | 3.0% | 4.0% | 5.0% |
| Nitroflow LP1 | m ³ /hr | 1.1 | 1.5 | 2.2 | 2.7 | 3.1 | 3.5 |
| | cfm | 0.65 | 0.9 | 1.3 | 1.6 | 1.8 | 2.1 |
| Nitroflow LP2 | m ³ /hr | 2.2 | 3.0 | 4.5 | 5.3 | 6.0 | 6.8 |
| | cfm | 1.3 | 1.6 | 2.6 | 3.1 | 3.5 | 4.0 |
| Nitroflow LP3 | m ³ /hr | 3.4 | 5.3 | 6.6 | 7.8 | 9.0 | 10.2 |
| | cfm | 2.0 | 3.1 | 3.9 | 4.6 | 5.3 | 6.0 |
| Nitroflow LP4 | m ³ /hr | n/a | n/a | n/a | 10.3 | 12.0 | 13.6 |
| | cfm | n/a | n/a | n/a | 6.1 | 7.0 | 8.0 |
| Nitroflow HP1 | m ³ /hr | 1.7 | 2.5 | 3.8 | 5.0 | 6.3 | 7.5 |
| | cfm | 1.0 | 1.5 | 2.2 | 3.0 | 3.7 | 4.4 |
| Nitroflow HP2 | m ³ /hr | 3.4 | 5.0 | 7.6 | 10.0 | 12.6 | 15.0 |
| | cfm | 2.0 | 3.0 | 4.5 | 6.0 | 7.4 | 9.0 |
| Nitroflow HP3 | m ³ /hr | 5.1 | 7.5 | 11.4 | 15.0 | 18.9 | 22.5 |
| | cfm | 3.0 | 4.4 | 6.7 | 9.0 | 11.1 | 13.3 |

m³ reference standard = 20°C, 1013 millibar(a), 0% relative water vapour pressure.

Technical Data

| | LP1 | LP2 | LP3 | LP4 | HP1 | HP2 | HP3 |
|----------------------------|---------------------------|-------|---------------------|-------|--|-----|-----|
| Temperature Range | 10°C – 35°C Ambient | | | | 10°C - 40°C Compressed Air Inlet | | |
| Nitrogen Outlet Pressure | 2 bar g | | | | Air inlet minus 2 bar g | | |
| Air Inlet Pressure Range | N/A - built in compressor | | | | 5 - 13 bar g | | |
| Air Inlet Quality | Pressure Dewpoint | | | | < +5°C | | |
| | Particulate | | | | 5 Micron | | |
| | Oil | | | | < 3.0mg/m ³ | | |
| Electrical Supply | 230VAC/1ph/50Hz | | 400VAC/3ph+N+E/50Hz | | 100-115-230VAC/1ph/50Hz-60Hz | | |
| Power Consumption | 1.7kW | 3.2kW | 4.8kW | 6.3kW | 30W | | |
| Inlet / Outlet Connections | Nitrogen and Permeate G1 | | | | Air Inlet, Nitrogen Outlet and Permeate G1 | | |

Weights and Dimensions

| Model | Height (H) | | Width (W) | | Depth (D) | | Weight | |
|---------------|------------|------|-----------|------|-----------|------|--------|-----|
| | mm | in | mm | in | mm | in | kg | lb |
| Nitroflow LP1 | 1224 | 48.2 | 540 | 21.3 | 725 | 28.5 | 150 | 331 |
| Nitroflow LP2 | 1224 | 48.2 | 540 | 21.3 | 725 | 28.5 | 200 | 441 |
| Nitroflow LP3 | 1224 | 48.2 | 810 | 31.9 | 725 | 28.5 | 320 | 706 |
| Nitroflow LP4 | 1224 | 48.2 | 810 | 31.9 | 725 | 28.5 | 370 | 816 |
| Nitroflow HP1 | 1224 | 48.2 | 270 | 10.6 | 725 | 28.5 | 85 | 187 |
| Nitroflow HP2 | 1224 | 48.2 | 270 | 10.6 | 725 | 28.5 | 95 | 209 |
| Nitroflow HP3 | 1224 | 48.2 | 270 | 10.6 | 725 | 28.5 | 105 | 232 |

Also available, NitroSource and NitroFlow Basic membrane technology in addition to MIDIGAS and MAXIGAS PSA technology. To ensure the best solution is selected, please contact Parker.

For information on extended warranty and preventative maintenance contract availability, please contact your local sales office or visit www.parker.com/pfs

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