

Atlas Copco

PSA Nitrogen Generators

NGP Series (capacity 1 - 300 l/s; flow 4 - 1100 Nm³/h; purity 95% - 99.999%)



Atlas Copco's new nitrogen generator uses Pressure Swing Adsorption technology to isolate nitrogen molecules from other molecules in compressed air. Oxygen, CO₂, water vapor and other gasses are adsorbed. The result is virtually pure nitrogen at the outlet of the generator. The NGP series are a very cost-efficient source of nitrogen used in various industries like food and beverage, metal processing, electronics, and many others.

Features and Benefits

Ready to Use

- Only requires a supply of dry compressed air
- Plug-and-play
- No specialist installation or commissioning
- Fully automated and monitored including oxygen sensor as standard
- Performance guaranteed independent from temperature

Cost Savings

- Low installation and running cost – highly efficient technology
- No additional costs such as order processing, refills and delivery charges
- Virtually service free
- Quick pay back – often less than a year

Exceptional Convenience

- Continuous availability (24 hours a day, 7 days a week)
- Risk of production breakdown due to gas running out is eliminated

Desired Purity

- Nitrogen supply according to your need: from 95% to 99.999%
- Very easy to set up the device for other purity levels

High Flow Capacity

- The wide product range and nitrogen flows up to 1100 Nm³/h make the new NGP series ideal for applications such as food processing, pharmaceutical, metal industry, oil & gas, marine, packaging and many more

Technical Specifications

| 99.50% | Nitrogen capacity* | | | Air consumption | | |
|----------|--------------------|-------|--------------------|-----------------|--------|--------------------|
| | l/s | cfm | Nm ³ /h | l/s | cfm | Nm ³ /h |
| NGP 4 | 1.1 | 2.4 | 4.0 | 4.0 | 8.5 | 14.40 |
| NGP 9 | 2.5 | 5.3 | 9.0 | 8.3 | 17.7 | 30.00 |
| NGP 11 | 3.1 | 6.5 | 11.0 | 10.0 | 21.2 | 36.00 |
| NGP 15 | 4.2 | 8.8 | 15.0 | 15.0 | 31.8 | 54.00 |
| NGP 21 | 5.8 | 12.4 | 21.0 | 20.0 | 42.4 | 72.00 |
| NGP 30 | 8.3 | 17.7 | 30.0 | 28.3 | 60.0 | 102.00 |
| NGP 40 | 11.1 | 23.5 | 40.0 | 39.2 | 83.0 | 141.00 |
| NGP 47 | 13.1 | 27.7 | 47.0 | 43.0 | 91.1 | 154.80 |
| NGP 62 | 17.2 | 36.5 | 62.0 | 52.5 | 111.2 | 189.00 |
| NGP 73 | 20.3 | 43.0 | 73.0 | 60.0 | 127.1 | 216.00 |
| NGP 92 | 25.6 | 54.1 | 92.0 | 90.0 | 190.7 | 324.00 |
| NGP 112 | 31.1 | 65.9 | 112.0 | 106.7 | 226.0 | 384.00 |
| NGP 185 | 51.4 | 108.9 | 185.0 | 165.0 | 349.6 | 594.00 |
| NGP 250 | 69.4 | 147.1 | 250.0 | 226.9 | 480.8 | 817.00 |
| NGP 420 | 116.7 | 247.2 | 420.0 | 396.7 | 840.5 | 1428.00 |
| NGP 550 | 151.4 | 320.8 | 545.0 | 510.0 | 1080.6 | 1836.00 |
| NGP 900 | 250.0 | 529.7 | 900.0 | 800.0 | 1695.0 | 2880.00 |
| NGP 1100 | 305.6 | 647.4 | 1100.0 | 1066.7 | 2260.1 | 3840.00 |

* Performance +/- 5%.

Reference conditions:

| | |
|------------------------------|-----------------------|
| Ambient temperature | 20°C |
| Ambient pressure | 1013 mbar |
| Unit inlet temperature | 20°C |
| Inlet pressure | 7.5 bar(g) |
| Unit outlet nitrogen purity | 99.50% |
| Compressed air inlet quality | ISO8573-1 class 1-4-1 |

Outputs

| | |
|--|-----------|
| Maximum compressed air inlet temperature | 45°C |
| Maximum ambient temperature | 45°C |
| Minimum compressed air inlet temperature | 5°C |
| Minimum ambient temperature | 0°C |
| Minimum compressed air inlet pressure | 4 bar(g) |
| Maximum compressed air inlet pressure | 10 bar(g) |
| Minimum nitrogen purity | 95% |
| Maximum nitrogen purity | 99.999% |

