

PPNG 6 - 68 HE - Nitrogen generator with Pressure Swing Adsorption technology

Features & Benefits

- ▶ Advanced energy saving control
 - Reduced air consumption at low nitrogen demand
 - Also compensates for altering ambient conditions and purity settings
 - No compressed air use when no nitrogen is consumed
- ▶ Outstanding air factors thanks to back-flow pressurization
- ▶ High-quality, high-efficient Carbon Molecular Sieves selected for the right application
- ▶ Guaranteed purity
 - Automatically regulates to the requested nitrogen pressure and purity
 - Zirconia sensors for reliable purity measurement
- ▶ Designed & tested for cyclic load
- ▶ Optimal control and monitoring thanks to Purelogic™ Controller
 - Self-protective monitoring of the feed air quality
 - Feed-air blow-off in case of contamination
 - Nitrogen flow, purity and pressure measured and controlled
 - Automatic start-up

General Specifications

- ▶ Pressure Swing Adsorption (PSA) nitrogen generators - extruded profile design
- ▶ Nitrogen purity achievable: 95% - 99.9% (PCT Variant) & 99.95%-99.999% (PPM variant)
- ▶ Inlet pressure range: 4-13 barg / 60-189 psig
- ▶ Inlet temperature range: 5-60°C / 41-140°F
- ▶ Required inlet air quality: 1-4-1 according to ISO 8573-1:2010
- ▶ Power supply: 115-230VAC / 50-60Hz



Options:



Wooden packaging

The PPNG6-68HE series is Pneumatech's premium on-site nitrogen solution for low to medium flows, with best-in-class performance and the most complete scope of supply.

The generator has outstanding air factors at full load thanks to the use of highly efficient Carbon Molecular Sieves (CMS) and back-flow pressurization.

The air consumption is also optimized at reduced nitrogen flow or pressure demands, thanks to the advanced energy saving algorithm, which automatically adjusts the cycle times of the generator.

The control and monitoring capabilities of the PPNG6-68 HE are truly impressive. Purity is guaranteed at all times by opening the consumer valve only at the requested purity level and flushing nitrogen when purity is not reached. Feed air quality is controlled by monitoring temperature, pressure and PDP. The feed air is blown off in case of contamination. All risks of possible CMS damage are eliminated thanks to the automatic start-up feature.

Technical specifications for PPNG 6 - PPNG 68 HE

| Specifications | Units | Variant | Product → Purity ↓ | PPNG 6 HE | PPNG 7 HE | PPNG 9 HE | PPNG 12 HE | PPNG 15 HE | PPNG 18 HE | PPNG 22 HE | PPNG 28 HE | PPNG 30 HE | PPNG 37 HE | PPNG 41 HE | PPNG 50 HE | PPNG 63 HE | PPNG 68 HE | |
|---|--------------------------|---------|--------------------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----|
| Nominal free nitrogen delivery ^[1] | m³/hr | PCT (%) | 95 | 18.4 | 23.4 | 28.8 | 36.4 | 46.8 | 57.2 | 70.2 | 86.0 | 93.6 | 114.8 | 128.9 | 157.7 | NA | NA | |
| | | PPM (%) | 99.9 | 5.8 | 7.2 | 9.0 | 11.5 | 14.8 | 18.0 | 22.0 | 26.6 | 29.2 | 35.6 | 40.7 | 49.7 | 61.9 | 66.6 | |
| | m³/hr | PCT (%) | 99.999 | 1.9 | 2.5 | 2.9 | 4.0 | 5.0 | 6.1 | 7.9 | 9.7 | 10.4 | 13.0 | 15.8 | 19.4 | 22.7 | 25.9 | |
| | | PPM (%) | 99.999 | 12.2 | 15.5 | 19.1 | 24.1 | 31.3 | 38.2 | 44.3 | 54.0 | 59.0 | 72.4 | 88.6 | 108.4 | 124.2 | 144.4 | |
| Nominal air consumption | m³/hr | PCT (%) | 95 | 33.8 | 43.6 | 53.3 | 67.7 | 87.1 | 106.6 | 130.7 | 159.8 | 174.2 | 213.1 | 243.7 | 298.1 | NA | NA | |
| | | PPM (%) | 99.9 | 18.0 | 23.4 | 28.4 | 36.4 | 46.8 | 56.9 | 69.8 | 85.7 | 93.2 | 114.1 | 135.7 | 166.0 | 196.9 | 221.0 | |
| | - | PCT (%) | 99.999 | 12.2 | 15.5 | 19.1 | 24.1 | 31.3 | 38.2 | 44.3 | 54.0 | 59.0 | 72.4 | 88.6 | 108.4 | 124.2 | 144.4 | |
| | | PPM (%) | 99.999 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.5 | 5.6 | |
| Air Factor | - | PCT (%) | 95 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.89 | 2 | NA | NA |
| | | 99.9 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.33 | 3.33 | 3.18 | 3.33 | |
| | | 99.999 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.5 | 5.6 | | |
| | Pressure dewpoint outlet | °C / °F | | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | |
| Maximum pressure drop | PCT (%) | 95 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 0.9 | NA | |
| | | 99.9 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | |
| | PCT (%) | 99.999 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | |
| Length | mm | | 775 | 775 | 775 | 775 | 775 | 775 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | |
| | Inch | | 31 | 31 | 31 | 31 | 31 | 31 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | |
| Width | mm | | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 970 | |
| | Inch | | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 38 | |
| Height | mm | | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | |
| | Inch | | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | |
| Mass | Kg | | 264 | 277 | 290 | 326 | 359 | 380 | 619 | 647 | 683 | 736 | 865 | 1038 | 1211 | 1211 | 1211 | |
| | Lbs | | 582 | 611 | 639 | 719 | 791 | 838 | 1365 | 1426 | 1506 | 1623 | 1907 | 2288 | 2670 | 2670 | 2670 | |
| Inlet and outlet connections | G/ NPT | | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | |

1. Flow is measured at Reference Conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 20°C & Air Inlet Quality of ISO 8573-1:2010 class 1-4-1