

Nitrogen generators with pressure swing adsorption technology

PPNG 6-90 HE



The PPNG 6-90 HE is Pneumatech's premium low-to medium-flow PSA nitrogen generator. It gives you best-in-class performance, efficiency, and purity, and an extruded profile design for superior reliability and a long lifetime. An innovative PSA cycle, highly efficient Carbon Molecular Sieves (CMS), and our unique Variable Flow Saver technology ensure maximum energy savings and sustainability.

PSA nitrogen generation

The PPNG HE uses Pressure Swing Adsorption (PSA) technology to separate nitrogen from compressed air. As the air passes through a vessel filled with Carbon Molecular Sieves (CMS), the oxygen and other trace gases in the air are adsorbed by the CMS, leaving only nitrogen with a purity of up to 99.999% to reach the outlet.

Features and benefits:

- Outstanding air factors with innovative PSA cycle design
- High-quality Carbon Molecular Sieves offer highest efficiency on the market
- Variable Flow Saver decreases air consumption at low nitrogen demand, reducing it to zero when no nitrogen is consumed
- Purity selection up to 99.999%
- Guaranteed purity thanks to automatic regulation and zirconia sensors
- Designed and tested for cyclic load
- Optimal control thanks to Purelogic™ Controller
- Remote monitoring and connectivity with ICONS

General specifications

- Pressure Swing Adsorption (PSA) nitrogen generator with extruded profile design
- Nitrogen purity achievable: 95%-99.9% (PCT) & 99.95%-99.999% (PPM)
- 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: 115V AC/230V AC & 50/60Hz
- IEC, UL and CRN approvals

Best-in-class PSA performance

Guaranteed purity



- To protect your production, the minimum purity setting blows off nitrogen if your selected purity is not reached
- Zirconia sensors provide reliable purity measurement

Long lifetime



- A host of protective features ensure a long lifetime of the machine and the CMS.

Efficiency

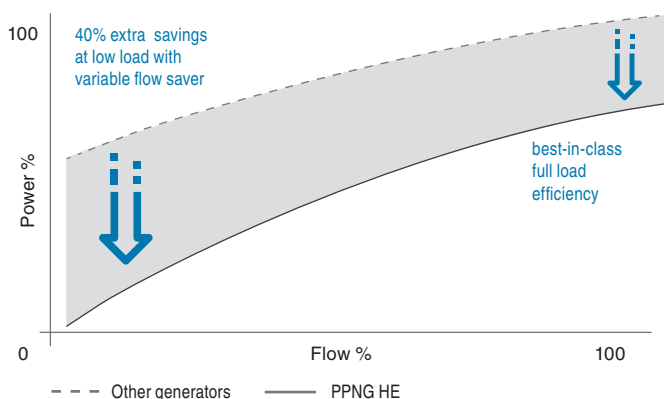


- Our innovative PSA cycle and high-quality CMS deliver best-in-class efficiency to keep your energy costs and emissions low.

Advanced Purelogic™ Controller



- Self-protective monitoring of the feed air quality
- Feed-air blow-off in case of off-spec conditions
- Nitrogen flow, purity and pressure measurement and control
- Automatic start-up
- Optional 24/7 ICONS remote monitoring of flow, pressure, purity and all other key data in real time



VFS: 40% savings at low load



Traditional nitrogen generators maintain a constant PSA cycle, regardless of the nitrogen demand. Thanks to the Variable Flow Saver algorithm, the PPNG HE is able to match the lower demand by adapting the PSA cycle and the feed air intake. The result: you enjoy up to 40% additional energy savings.

Technical specifications for PPNG 6-90 HE

Specifications	Variant	Product → Purity ↓	Units	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 65 HE	PPNG 75 HE	PPNG 90 HE
Nominal free nitrogen delivery (1)	PCT(%)	95%	Nm³/hr	18.2	23.4	28.7	36.4	46.9	57.3	70.3	86.0	93.8	114.7	128.9	157.7	184.8	211.4	264.3
		99.5%		8.1	10.4	12.7	16.2	20.8	25.5	31.3	38.2	41.7	51.0	57.5	70.3	90.2	102.1	127.7
		PPM		1.9	2.5	3.0	3.8	4.9	6.0	8.0	9.7	10.6	13.0	15.9	19.5	26.3	29.8	37.2
Pressure dewpoint outlet			°C/°F	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
Length			mm	775	775	775	775	775	775	1400	1400	1400	1400	1400	1400	1421	1421	1421
			inch	31	31	31	31	31	31	55	55	55	55	55	55	56	56	56
Width			mm	840	840	840	840	840	840	840	840	840	840	970	970	970	970	970
			inch	33	33	33	33	33	33	33	33	33	33	38	38	38	38	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	266	279	292	326	352	379	608	648	681	734	764	1039	1140	1140	1560
			lbs	586	615	644	719	776	836	1340	1429	1501	1618	1684	2291	2513	2513	3439
Inlet connections PCT			G/NPT	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25
Outlet connections PCT			G/NPT	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25
Inlet connections PPM			G/NPT	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN32	DN32	DN32
Outlet connections PPM			G/NPT	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN15	DN15	DN15

(1) Flow is measured at reference conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 20°C/68°F & air inlet quality of ISO 8573-1:2010 class 1-4-1

Options

Outlet dewpoint sensor

Monitors the outlet nitrogen pressure dewpoint for critical applications.

External room oxygen monitor

Measures the oxygen level in a room to ensure safety.

Low ambient temperature version

Allows the generator to run in temperatures down to -10°C/14°F.

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