



Gas Generators

Pneumatech designs and manufactures both standard and engineered on-site gas generator products. Nitrogen and oxygen generators are available with Pressure Swing Adsorption (PSA) technology, resulting in nitrogen purities up to 99,999% and oxygen purities up to 95%. Membrane technology is also offered for nitrogen purity levels up to 99,5%.

Pre-defined high-pressure nitrogen skids have been developed as a plug-and-play solution for various applications like laser-cutting. Our engineering department hence becomes your best partner for all kinds of special requests.

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⁾	SCFM	PCT (%)	95	11	14	17	21	28	34	41	51	55	68	76	93	NA	NA
			99.9	3	4	5	7	9	11	13	16	17	21	24	29	36	39
		PPM (%)	99,999	1	1	2	2	3	4	5	6	6	8	9	11	13	15
Nominal air consumption	SCFM	PCT (%)	95	20	26	31	40	51	63	77	94	103	125	143	175	NA	NA
			99.9	11	14	17	21	28	33	41	50	55	67	80	98	116	130
		PPM (%)	99,999	7	9	11	14	18	22	26	32	35	43	52	64	73	85
Air Factor	-	PCT (%)	95	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.89	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	3.33	3.33	3.18	3.33
		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
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	0.9	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	0.5	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	0.3	0.3	0.3
Length	mm			775	775	775	775	775	775	1400	1400	1400	1400	1400	1400	1400	1400
	Inch			31	31	31	31	31	31	55	55	55	55	55	55	55	55
Width	mm			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	38
Height	mm			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
Mass	Kg			264	277	290	326	359	380	619	647	683	736	865	1038	1211	1211
	Lbs			582	611	639	719	791	838	1365	1426	1506	1623	1907	2288	2670	2670
Inlet and outlet connections	G/ NPT			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

PPNG 6 - 68 S - Nitrogen generator with pressure swing adsorption technology

Features & Benefits

- ▶ Energy saving control
- ▶ Outstanding air factors thanks to back-flow pressurization
- ▶ High-quality, high-efficient Carbon Molecular Sieves selected for the right application
- ▶ Guaranteed purity
 - Zirconia sensors for reliable purity measurement
 - Dedicated high purity variants
 - Purity certificates
- ▶ Designed & tested for cyclic load
- ▶ Reliable, efficient and low-maintenance angle seat valves
- ▶ Carefully designed exhaust silencers resulting in quiet and safe operation of the generator
- ▶ Optimal control and monitoring thanks to Purelogic™ Controller

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



Flow meter



PDP sensor kit

The PPNG 6-68s series provides an efficient source of nitrogen for use in various industries like food and beverage, pharma, electronics and plastics. PPNG nitrogen generators use Pressure Swing Adsorption technology to extract nitrogen molecules from the compressed air; and can reach purities from 95% up to 99,999%. Nitrogen pressures can go up to 12 barg without the need for an additional booster. The air factors of the PPNG6-68s range are outstanding, making the return on investment very attractive compared to traditional gas supply.

With its PPNG 6-68s series, Pneumatech follows the plug and play philosophy. Pressure vessels, valves, exhaust system,

sensors and controls are all integrated within a compact canopy, designed for easy transport, installation and service.

The Purelogic™ is the central brain of the nitrogen generator. It optimizes operating costs thanks to the availability of the energy saving control; ensures maximum reliability by keeping track of the most important parameters of the generator; and offers impressive control and monitoring capabilities.

The optional flow meter and inlet pressure dew point sensor can be added to the scope of supply to further exploit the monitoring capabilities of the Purelogic™ controller.

Technical specifications for PPNG 6-68 S																	
Specifications	Units	Variant	Product→ Purity ↓	PPNG 6S	PPNG 7S	PPNG 9S	PPNG 12S	PPNG 15S	PPNG 18S	PPNG 22S	PPNG 28S	PPNG 30S	PPNG 37S	PPNG 41S	PPNG 50S	PPNG 63S	PPNG 68S
Nominal free nitrogen delivery ⁽¹⁾	SCFM	PCT (%)	95	13	17	21	26	34	41	51	62	68	83	94	NA	NA	NA
			99.9	3	4	5	7	9	11	13	16	18	22	27	33	35	38
		PPM (%)	99,999	1	1	2	2	3	3	4	5	6	7	8	10	12	14
Nominal air consumption ⁽¹⁾	SCFM	PCT (%)	95	25	33	40	51	65	80	98	120	131	160	181	NA	NA	NA
			99.9	14	18	22	28	36	44	54	67	73	89	107	131	133	152
		PPM (%)	99,999	7	9	11	13	17	21	28	34	37	45	55	67	72	90
Air Factor	-	PCT (%)	95	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	NA	NA	NA
			99.9	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.00	4.00	3.84	4.00
		PPM (%)	99,999	6.8	6.8	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.6	6.6	6.0	6.6
Pressure dewpoint outlet	°C /°F			-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
Maximum pressure drop	barg	PCT (%)	95	0.8	0.8	0.8	1	1	1.1	1.2	1.2	1.2	1.2	1.4	NA	NA	NA
	barg		99.9	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.9	0.9	0.9	1
	barg	PCT (%)	99,999	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7
Length	mm			798	798	798	798	798	798	1422	1422	1422	1422	1422	1422	1422	1422
	Inch			31	31	31	31	31	31	56	56	56	56	56	56	56	56
Width	mm			840	840	840	840	840	840	840	840	840	840	970	970	970	970
	Inch			33	33	33	33	33	33	33	33	33	33	38	38	38	38
Height	mm			2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022
	Inch			80	80	80	80	80	80	80	80	80	80	80	80	80	80
Mass	Kg			244	257	270	306	339	360	599	627	663	716	805	1018	1191	1191
	Lbs			538	567	595	675	747	794	1321	1382	1462	1579	1775	2244	2626	2626
Inlet and outlet connections	G/NPT			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

PPNG SKID - High-pressure nitrogen skid

Are you looking for a true plug-and-play solution that delivers on-site nitrogen at the lowest cost?

Pneumatech has developed compact and pre-commissioned skids in two pressure versions.

The 580 psi version offers high-pressure nitrogen for direct use; with the 4350 psi version you can fill the skid-mounted cylinders to create your own supply. These bottles can serve as your nitrogen back-up supply, but also allow you to downsize your system in case of fluctuating demand. With its supreme efficiency and reliability, ease of use and small footprint, the high-pressure skid is the ideal solution for laser cutting applications.

Standard solution does not fit for your needs?

Do not worry. We at Pneumatech understand that every case is unique especially with high pressure Nitrogen applications. Therefore Pneumatech offers a tailor made solution just for your application.

Please consult with your local Pneumatech contact for more details.

PPNGs nitrogen generator

- ▶ Guaranteed purity
- ▶ Outstanding air factors
- ▶ Energy saving control
- ▶ Optimal control and monitoring thanks to Purelogic™ controller

4-stage filter train for guaranteed purity and reliability

- ▶ General-purpose and high-efficient oil-coalescing filters, activated carbon tower and high-efficient particle filter
- ▶ Guaranteed air quality of class 1:4:1 (according to ISO8573-1:2010) at the inlet of the nitrogen generator

Variable speed compressor with integrated refrigerant dryer

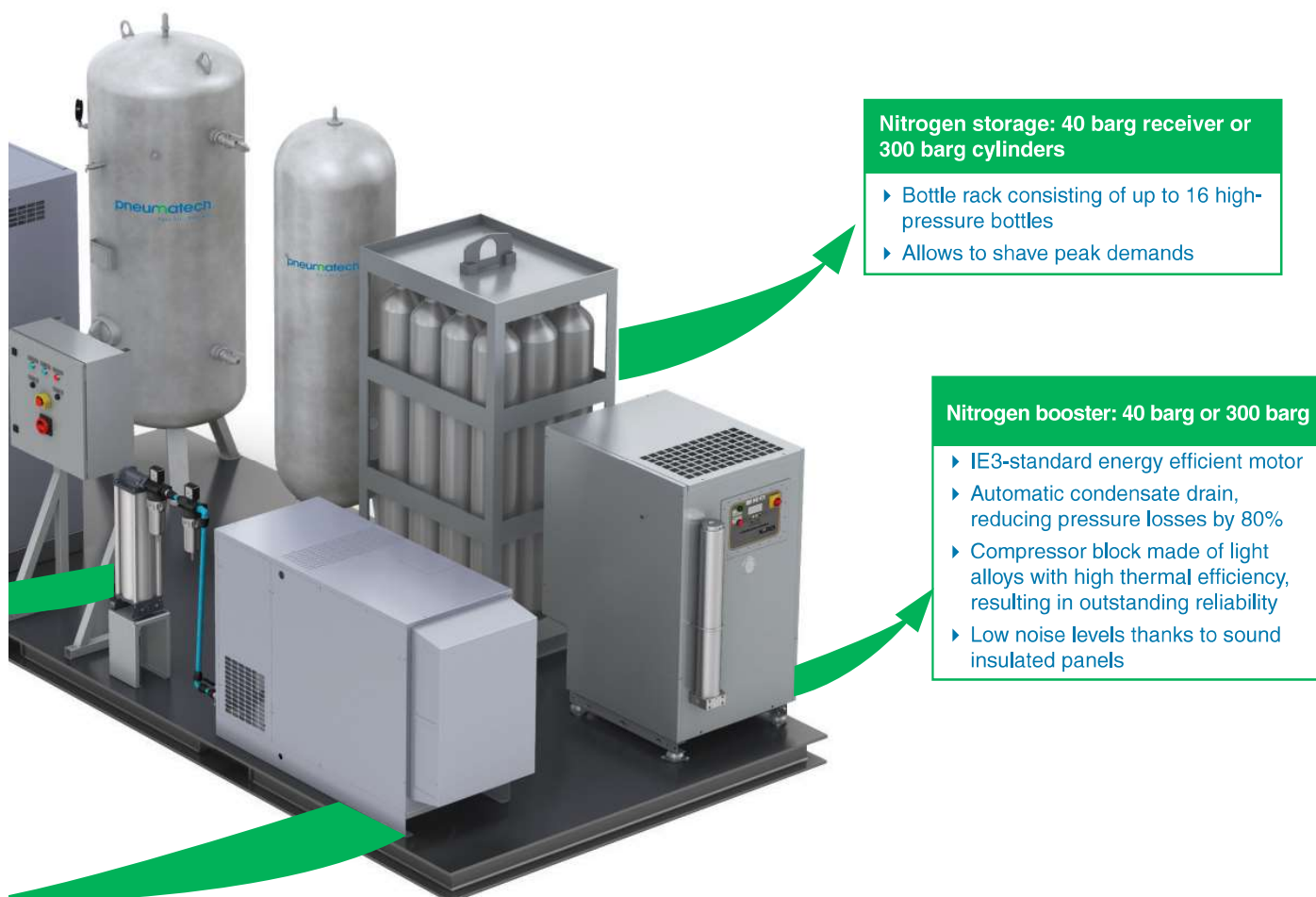
- ▶ Closely follow the air demand by automatic adjustment of the motor speed
- ▶ Direct driven transmission for outstanding energy efficiency and reliability
- ▶ Very quiet operation due to improved noise insulation
- ▶ Compact design, also thanks to integrated refrigerant dryer



Technical specifications for PPNG skid

Pneumatech variant		PPNG SKID 1	PPNG SKID 2	PPNG SKID 3	PPNG SKID 4	PPNG SKID 5	PPNG SKID 6	PPNG SKID 7	PPNG SKID 8
N ₂ Pressure		580 psi	580 psi	580 psi	580 psi	4350 psi	4350 psi	4350 psi	4350 psi
N ₂ Capacity ⁽¹⁾ (SCFM)	99,90%	6	12	25	43	8	12	25	43
	99,99%	3	6	13	24	4	6	13	24
Compressor with Integrated Dryer		10HP	15HP	30HP	50HP	10HP	15HP	30HP	50HP
Filter train		G-C-VT-D	G-C-VT-D	G-C-VT-D	G-C-VT-D	G-C-VT-D	G-C-VT-D	G-C-VT-D	G-C-VT-D
Air receiver		132 gal 11Bar ASME Vessel	132 gal 11Bar ASME Vessel	264 gal 11Bar ASME Vessel	396 gal 11Bar ASME Vessel	132 gal 11Bar ASME Vessel	132 gal 11Bar ASME Vessel	264 gal 11Bar ASME Vessel	396 gal 11Bar ASME Vessel
N ₂ Generator		PPNG9S PPM UL	PPNG18S PPM UL	PPNG37S PPM UL	PPNG68S PPM UL	PPNG12S PPM UL	PPNG18S PPM UL	PPNG37S PPM UL	PPNG68S PPM UL
N ₂ Receiver		132 gal 11Bar CE Vessel	132 gal 11Bar CE Vessel	264 gal 11Bar CE Vessel	396 gal 11Bar CE Vessel	132 gal 11Bar CE Vessel	132 gal 11Bar CE Vessel	264 gal 11Bar CE Vessel	396 gal 11Bar CE Vessel
Particulate Filter		D	D	D	D	D	D	D	D
N ₂ Booster		15 hp 40 barg	15 hp 40 barg	15 hp 40 barg	15 hp 40 barg	10 hp 300 barg	10 hp 300 barg	15 hp 300 barg	2 x 15 hp 300 barg
HP Storage		132 gal/45 barg	132 gal/45 barg	264 gal/45 barg	264 gal/45 barg	2 cylinder 300 barg	12 cylinder rack 300 barg	12 cylinder rack 300 barg	16 cylinder rack 300 barg

1. Flow specified is at the outlet of the PPNGs Generator 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



PPNG 150 - 800 HE - Nitrogen generators 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

- ▶ Nitrogen purity achievable: 95%-99.9% (PCT Variant) & 99.95%-99.999% (PPM variant)
- ▶ Inlet pressure range: 5-10 barg/72-150 psig
- ▶ Ambient temperature range: 5-50°C/41-122°F
- ▶ Required inlet air quality: 1-4-1 according to ISO 8573-1:2010
- ▶ Power supply: 115VAC 60Hz
- ▶ ASME Vessels/cULus Listed
 - CRN options available



Options



Wooden packaging



Outlet PDP sensor

The PPNG150-800 HE series is Pneumatech's premium on-site nitrogen solution for high 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 PPNG150-800 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 PPNG150 - 800 HE												
Specifications	Units	Variant	Product → Purity ↓	PPNG 150 HE	PPNG 200 HE	PPNG 250 HE	PPNG 300 HE	PPNG 350 HE	PPNG 400 HE	PPNG 500 HE	PPNG 650 HE	PPNG 800 HE
Nominal free Nitrogen delivery ⁽¹⁾	SCFM	PCT(%)	95%	276	356	432	509	626	732	946	1200	1526
			99.9%	99	128	156	184	226	264	341	433	550
		PPM	99.999%	44	57	69	81	99	117	149	189	240
Nominal air consumption ⁽¹⁾	SCFM	PCT(%)	95%	521	672	816	962	1183	1384	1787	2267	2883
			99.9%	323	417	506	596	733	857	1107	1404	1786
		PPM	99.999%	222	286	347	409	503	588	767	973	1237
Air factor		PCT(%)	95%	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
			99.9%	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		PPM	99.999%	5.1	5.1	5.1	5.1	5.1	5.1	5.2	5.2	5.2
Pressure dewpoint outlet (°C)		°C/°F		-40	-40	-40	-40	-40	-40	-40	-40	-40
Maximum pressure drop (barg)		PCT(%)	95-99.9%	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1
		PPM	99.95% - 99.999%	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Length	mm			1800	1800	1800	2300	2300	2300	3120	3120	3120
	Inch			70.9	70.9	70.9	90.6	90.6	90.6	122.8	122.8	122.8
Width	mm			2230	2570	2650	2720	2850	2900	3660	3760	3860
	Inch			87.8	101.2	104.3	107.1	112.2	114.2	144.1	148.0	152.0
Height	mm			2610	2640	2625	3020	3050	3040	3970	4175	4405
	Inch			102.8	103.9	103.3	118.9	120.1	119.7	156.3	164.4	173.4
Mass	Kg			3200	3800	4800	6400	7000	7700	10300	12000	14200
	lbs			7054.8	8377.6	10582.2	14109.6	15432.3	16975.6	22707.6	26455.4	31305.6
N2 & Air Receiver size	gallons			793	1057	1321	1585	2113	2113	3170	4227	5283
Nitrogen to buffer connection	ANSI			3"	3"	3"	3"	3"	3"	4"	4"	4"
Nitrogen from buffer connection	ANSI	PCT(%)	95-99.9%	2"	2"	2"	3"	3"	3"	4"	4"	4"
	ANSI	PPM	99.95% - 99.999%	2"	2"	2"	2"	2"	2"	2"	2"	2"
Nitrogen outlet connection	ANSI	PCT(%)	95-99.9%	2"	2"	2"	3"	3"	3"	4"	4"	4"
	ANSI	PPM	99.95% - 99.999%	2"	2"	2"	2"	2"	2"	2"	2"	2"
Waste gas blow-off	mm			315	315	315	400	400	400	600	600	600

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

PMNG 1-3 - Nitrogen generator with membrane technology

Features & Benefits

- ▶ High Quality membrane separator
 - Superior membrane constructed from high quality Aluminum with technically advance fiber.
 - N₂ Generation is achieved without any moving part
 - Outstanding performance for 90-99,5% Nitrogen separation
- ▶ Simple, reliable and user friendly
 - All-in-one plug & play solution
 - All filters integrated in enclosed canopy design
 - Instant supply of nitrogen
 - No specialist installation or commissioning
- ▶ 3-stage pre-filtration integrated in the canopy
- ▶ No power supply required thanks to Pneumatic controlled valves & battery-powered nitrogen analyzer
- ▶ Guaranteed purity
 - Nitrogen analyzer (battery powered) with auto-calibration button (optional)
 - Purity controller to ensure constant N₂ purity at all times
- ▶ Compressed Air savings when desired purity is reached
 - Economizer (pneumatic) automatically stops air consumption when target pressure is reached

General Specifications

- ▶ Membrane Nitrogen Generators
- ▶ Nitrogen purity achievable: 90%-99.5%
- ▶ Inlet pressure range: 4-13 bar/60-189 PSI
- ▶ Inlet temperature range: 5-50°C/41-122°C
- ▶ Required inlet air quality: 1-4-1 according to ISO 8573-1:2010



Options



Economizer



Nitrogen analyser
(battery powered)



Mobile
version

Pneumatech's new smaller range of PMNG nitrogen generators utilizes proprietary membrane separation technology. Membrane generators are an excellent choice in low (90%) to medium (99.5%) purity applications such as tire inflation, fire prevention, tank blanketing and pipeline drying. Nitrogen pressures can go up to 12 bar (g) without the need for an additional booster.

Engineered for simplicity, durability and ease of use make the PMNG what we believe to be the most user friendly unit in the market. All pre-filters and controls are included inside the canopy. Only a supply of dry compressed air is needed to get nitrogen at the outlet of the generator. Also the start-up procedure of the PMNG is made so straightforward that it does not require any specialist.

Pneumatech offers a purity controller that delivers true consistent purity downstream in ANY flow situation. Our simple design allows adjustments to be made easily, with a single screw. The purity is reliably monitored thanks to the optional battery operated Nitrogen Analyser. The optional Economiser system is designed to save the utility costs of operating the compressor and reduces the wear and tear on Air and Nitrogen Systems.

This cost effective solution from Pneumatech significantly reduces Nitrogen costs over traditional sources of Nitrogen supply.

Technical specifications for PMNG 1-3					
Specifications	Units	Product→ Purity ↓	PMNG 1	PMNG 2	PMNG 3
Nominal air consumption	SCFM	90%	9	18	27
		95%	6	11	17
		96%	5	11	16
		97%	4	9	13
		98%	4	8	10
		99%	4	7	11
		99.5%	3	7	10
Nominal free nitrogen delivery	SCFM	90%	6	12	18
		95%	3	6	8
		96%	2	5	7
		97%	2	4	6
		98%	1	3	4
		99%	1	2	3
		99.5%	1	2	3
Air factor	-	90%	1.5	1.5	1.5
		95%	2.1	2.1	2.1
		96%	2.3	2.3	2.3
		97%	2.3	2.3	2.3
		98%	2.7	2.7	2.7
		99%	3.4	3.4	3.4
		99.5%	4.0	4.0	4.0
Pressure dewpoint outlet	°C /°F		-40	-40	-40
Length	mm		560.0	560.0	560.0
	Inch		22.0	22.0	22.0
Width	mm		285.0	285.0	285.0
	Inch		11.0	11.0	11.0
Height	mm		1150.0	1150.0	1150.0
	Inch		45.0	45.0	45.0
Mass	Kg		60.0	62.0	65.0
	Lbs		132.3	136.7	143.3
Inlet connections	G		G1/2"	G1/2"	G1/2"
Outlet connections	G		G1/2"	G1/2"	G1/2"

1. Flow is measured at reference conditions: 1 Bar(a) and 20°C at operating pressure of 8 bar (g), inlet temperature 20°C & Air Inlet Quality of ISO 8573-1:2010 class 1-4-1.

PMNG 5 - 75 S - Nitrogen generator with membrane technology

Features & Benefits

- ▶ Energy-saving control
- ▶ Proprietary membrane technology ensuring lasting performance
 - No aging
 - No heater
- ▶ Guaranteed purity
 - Reliable purity measurement
 - Easy to set up the device for purity levels between 95% and 99.5%
- ▶ All-in-one plug & play solution
 - All filters integrated in enclosed canopy design
 - No buffer vessels required
 - Instant supply of nitrogen
 - No specialist installation or commissioning
- ▶ Optimal control and monitoring thanks to Purelogic™ Controller

General Specifications

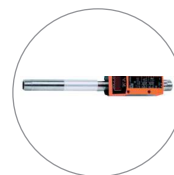
- ▶ Membrane Nitrogen Generators
- ▶ Nitrogen purity achievable: 95%-99.5%
- ▶ Inlet pressure range:
4-13 barg/60-189 psig
- ▶ Inlet temperature range:
5-50°C/41-122°F
- ▶ Required inlet air quality:
1-4-1 according to ISO 8573-1:2010
- ▶ Power supply: 115-230VAC/50-60Hz



Options



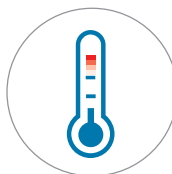
Oil indicator



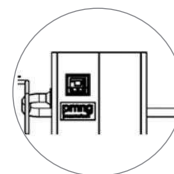
Flow sensor



PDP sensor kit



High ambient
temperature
software



Permeate vent kit

Pneumatech's PMNG nitrogen generators utilize proprietary membrane separation technology. Membrane generators are an excellent choice in low (95%) to medium (99,5%) purity applications such as tire inflation, fire prevention, tank blanketing and pipeline drying. Nitrogen pressures can go up to 12 barg without the need for an additional booster.

With the PMNG, on-site nitrogen supply becomes exceptionally convenient. All pre-filters and controls are included inside the canopy. Only a supply of dry compressed air and electricity is needed to get nitrogen at the outlet of the generator. An outlet buffer vessel is not required, which results in significant space

savings and easy installation. Also the start-up procedure of the PMNG is made so straightforward that it does not require any specialist.

Thanks to the Purelogic™ controller, the PMNG offers impressive control and monitoring capabilities. Various pressure and temperature sensors ensure that the membranes are used in the right working conditions. The nitrogen purity can easily be set with the purity regulator and is reliably monitored. The optional pressure dew point (PDP) sensor and oil indicator sensor safeguard air purity of class 1:4:1 according to ISO8573-1:2010 at the inlet of the membranes.

Technical specifications for PMNG 5-75 S									
Specification	Unit	Product→ Purity ↓	PMNG5s	PMNG10s	PMNG15s	PMNG30s	PMNG45s	PMNG60s	PMNG75s
Nominal free nitrogen delivery ⁽¹⁾	SCFM	95%	7	14	25	49	74	99	124
		96%	6	11	20	41	61	82	102
		97%	4	9	16	32	48	64	80
		98%	3	6	12	24	35	47	59
		99%	2	4	7	14	20	27	34
		99,5%	1	3	4	9	13	17	22
Nominal air consumption ⁽¹⁾	SCFM	95%	18	37	64	129	193	257	321
		96%	17	34	61	122	184	245	306
		97%	16	31	56	113	169	225	281
		98%	14	28	50	101	152	202	252
		99%	13	26	43	86	128	171	214
		99,5%	13	25	37	74	110	147	184
Air factor		95%	2,6	2,6	2,6	2,6	2,6	2,6	2,6
		96%	3	3	3	3	3	3	3
		97%	3,5	3,5	3,5	3,5	3,5	3,5	3,5
		98%	4,3	4,3	4,3	4,3	4,3	4,3	4,3
		99%	6,3	6,3	6,3	6,3	6,3	6,3	6,3
		99,5%	8,5	8,5	8,5	8,5	8,5	8,5	8,5
Pressure dewpoint outlet	°C / °F		-40	-40	-40	-40	-40	-40	-40
Length	mm		820	820	820	820	820	820	820
	inch		32,3	32,3	32,3	32,3	32,3	32,3	32,3
Width	mm		772	772	772	1470	1470	1470	1470
	inch		30,4	30,4	30,4	57,9	57,9	57,9	57,9
Height	mm		2090	2090	2090	2090	2090	2090	2090
	inch		82,3	82,3	82,3	82,3	82,3	82,3	82,3
Mass	Kg		259	268	285	445	497	535	571
	Lbs		571	590	628	981	1096	1179	1259
Inlet connections	G/NPT		1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2" - 1"	1 1/2" - 1"
Outlet Connections	G/NPT		1/2"	1/2"	1/2"	1"	1"	1"	1"

1. Flow is measured at Reference Conditions: 1 bara and 20°C at operating pressure of 8 barg, inlet temperature 20°C & Air Inlet Quality of ISO 8573-1:2010 class 1-4-1

PPOG 1 - 120 - Oxygen generator with pressure swing adsorption technology

Features & Benefits

- ▶ Energy saving control
- ▶ High-quality, high-efficient zeolite, selected for the right application
- ▶ Guaranteed purity
 - Zirconia sensors for reliable purity measurement
- ▶ Designed & tested for cyclic load
- ▶ Optimal control and monitoring thanks to Purelogic™ Controller
- ▶ Available with IEC and CSA/UL approvals

General Specifications

- ▶ Pressure Swing Adsorption (PSA) Oxygen Generators - welded vessels
- ▶ Oxygen purity achievable: 90%-95%
- ▶ Inlet pressure range:
4-7.5 barg /58-109 psig
- ▶ Inlet temperature range:
5-45°C/41-113 psig
- ▶ Required inlet air quality:
1-4-1 according to ISO 8573-1:2010
- ▶ Power supply: 115-230VAC/50-60Hz
- ▶ ASME Vessels/cULus Listed
 - CRN options available



Options



Seaworthy packaging



PDP sensor kit



Oxygen
buffer vessels



Pneumatech gives oxygen to your business. With the PPOG range, Pneumatech offers an attractive replacement for traditional oxygen supply with very interesting returns on investment. The PPOG1-120 series uses Pressure Swing Adsorption technology to extract oxygen from compressed air, resulting in oxygen purity levels up to 95%.

The PPOG1-120 range is a welded vessel design, designed and tested for cyclic load. The Purelogic™ is the central brain of the generator. It optimizes operating costs thanks to the availability of the energy saving control; ensures maximum reliability by

monitoring the most important parameters of the generator; and offers impressive control and monitoring capabilities.

The calibrated flow meters are part of the standard scope of supply, in order to facilitate the start-up process and to provide transparency of the actual oxygen consumption. The optional oxygen buffer vessel is equipped with a pressure regulator, manometer and dust filter. Each of these components is approved for high-purity oxygen use. The optional inlet pressure dew point sensor provides additional security in case the upstream dryer would fail.

Technical specifications for PPOG 1-120																						
Specifications	Units	Product Purity ↓	PPOG 1	PPOG 1.5	PPOG 2	PPOG 3	PPOG 4	PPOG 5	PPOG 6	PPOG 8	PPOG 11	PPOG 12	PPOG 14	PPOG 17	PPOG 20	PPOG 26	PPOG 33	PPOG 39	PPOG 50	PPOG 63	PPOG 93	PPOG 120
Nominal free oxygen delivery ⁽¹⁾	SCFM	90%	1	2	2	3	4	5	6	8	11	12	14	17	21	27	33	39	50	63	93	120
		93%	1	1	2	3	3	4	5	8	11	11	13	16	19	25	31	38	47	60	91	111
		95%	1	1	2	2	3	4	5	7	9	11	12	15	19	23	29	34	44	55	84	103
Nominal air consumption	SCFM	90%	13	18	22	32	43	61	61	93	113	129	151	194	216	305	374	471	578	733	1099	1322
		93%	13	18	21	32	39	59	60	86	111	126	144	188	209	302	356	460	568	719	1150	1311
		95%	13	17	21	31	39	58	60	83	101	122	140	184	205	295	345	449	539	683	1114	1293
Average air / oxygen ratio		90%	11.1	10.0	9.7	12.0	11.1	13.1	10.7	11.1	10.4	10.8	11.0	11.3	10.4	11.5	11.3	12.1	11.5	11.7	11.8	11.0
		93%	13.5	11.8	10.4	12.6	12.0	13.8	11.5	10.9	10.3	11.1	11.4	11.6	10.8	12.0	11.6	12.2	12.2	12.0	12.6	11.8
		95%	14.0	12.3	10.5	13.1	12.2	14.1	12.3	11.5	11.1	11.3	11.7	11.9	11.0	12.8	12.0	13.4	12.3	12.4	13.2	12.6
Pressure dewpoint outlet (°C)	°C / °F		-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
Oxygen outlet quality			ISO8573-1:2010 Class 1-2-1																			
Length	mm		600.0	600.0	750.0	750.0	850.0	850.0	1120.0	1120.0	1190.0	1230.0	1230.0	1640.0	1765.0	1960.0	1960.0	1960.0	2470.0	2920.0	2470.0	2920.0
	Inch		23.6	23.6	29.5	29.5	33.5	33.5	44.1	44.1	46.9	48.4	48.4	64.6	69.5	77.2	77.2	77.2	97.2	115.0	97.2	115.0
Width	mm		757.0	757.0	770.0	770.0	848.0	848.0	875.0	875.0	924.0	943.0	947.0	1108.0	1135.0	1175.0	1175.0	1175.0	1305.0	1440.0	2610.0	2880.0
	Inch		29.8	29.8	30.3	30.3	33.4	33.4	34.4	34.4	36.4	37.1	37.3	43.6	44.7	46.3	46.3	46.3	51.4	56.7	102.8	113.4
Height	mm		1467.0	1489.0	1801.0	1801.0	1630.0	1630.0	1962.0	1962.0	2252.0	2278.0	2678.0	2450.0	2492.0	3094.0	3094.0	3592.0	3097.0	3280.0	3097.0	3280.0
	Inch		57.8	58.6	70.9	70.9	64.2	64.2	77.2	77.2	88.7	89.7	105.4	96.5	98.1	121.8	121.8	141.4	121.9	129.1	121.9	129.1
Mass	Kg		193.8	226.8	324.8	330.6	412.6	412.6	723.0	735.0	1009.3	1192.3	1321.2	2359.3	2632.7	3150.0	3150.0	3681.0	4908.0	6489.0	9746.0	12470.0
	Lbs		427.3	500.0	716.1	728.9	909.6	909.6	1593.9	1620.3	2225.1	2628.5	2912.7	5201.4	5804.1	6944.6	6944.6	8115.2	10820.3	14305.8	21486.2	27491.6
Inlet connections	G/ NPT		G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G 3/4"	G 3/4"	G1"	G1"	G1"	G1 1/2"	G1 1/2"	DN50	DN50	DN50	DN50	DN50	2xDN50	2xDN50
Outlet connections	G/ NPT		G3/8"	G3/8"	G3/8"	G3/8"	G3/8"	G3/8"	G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"	2xG3/4"	2xG3/4"

1. Flow is measured at Reference Conditions: 1 bara and 20°C at operating pressure of compressed air of 6 barg and oxygen pressure at the outlet 4.5 barg, inlet temperature 20°C & Air Inlet Quality of ISO 8573-1:2010 class 1-4-1

Oxygen solutions

Pneumatech offers packaged solutions for on-site oxygen generation, which guarantee peace-of-mind and quick returns compared to traditional oxygen supply.

A typical lineup consists of a compressor, a refrigerant dryer, filters, buffer vessels and a PPOG oxygen generator; and can be completed with a high-pressure oxygen booster and a bottle filling station. These can be containerized or skid-mounted, depending on the application and the needs.



DO YOU KNOW THAT?

Our boosters are available in 3 kW to 15 kW models and can safely and reliably boost oxygen, nitrogen, helium or argon up to 200 barg / 2900 psig. By boosting a gas to these high pressures, you can bottle the gas you generate. This is particularly interesting to cover peak demand or as emergency back-up.



Pneumatech's on-site oxygen systems generate oxygen from 90% up to 95% purity, and are thus compliant with European pharmacopeia and United States Pharmacopeia (USP). Our production locations are moreover certified according to ISO 13485, the international quality management system for medical devices.

