

# 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.
  - N<sub>2</sub> 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 N<sub>2</sub> 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)

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	Nm <sup>3</sup> /hr	90%	15.48	30.96	46.44
		95%	9.72	19.44	29.16
		96%	9	18	27
		97%	7.56	15.12	22.68
		98%	6.84	13.68	16.92
		99%	6.12	12.24	18.36
		99.5%	5.76	11.52	17.28
Nominal free nitrogen delivery	Nm <sup>3</sup> /hr	90%	10.08	20.16	30.24
		95%	4.68	9.36	14.04
		96%	3.96	7.92	11.88
		97%	3.24	6.48	9.72
		98%	2.52	5.04	7.56
		99%	1.8	3.6	5.4
		99.5%	1.44	2.88	4.32
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.