

Nitrogen generator

NitroFlow®



NitroFlow HP



NitroFlow LP

NitroFlow®

Mid-size generator range

Features

- Available as low pressure (LP) and high pressure (HP) versions
- NitroFlow LP requires only electrical power in order to produce nitrogen
- NitroFlow HP can work with an existing central compressed air system or dedicated compressor
- Unlimited nitrogen supply
- Minimal maintenance
- Touch screen interface
- Easy installation

Product description

Parker nitrogen generators are based on Parker hollow fibre membrane technology, which makes it possible to separate air into nitrogen and an oxygen-enriched stream.

NitroFlow is available in both low pressure (LP) and high pressure (HP) ranges. Using NitroFlow LP when no pressure is needed and opting for NitroFlow HP when the application requires for high pressure or when nitrogen storage is needed.

The NitroFlow LP range has built-in compressors to produce nitrogen from ambient air simply by connecting to a main voltage power source. A unique process and system design eliminates the need for condensed water removal and draining, ensuring the longest compressor and membrane life.

The NitroFlow HP range requires compressed air either from a central system, or from a dedicated compressor. An optional additional storage vessel enables variable or peak consumption to be handled.

NitroFlow will automatically switch on and off, depending on the nitrogen demand. With low running costs, NitroFlow offers an unlimited, virtually maintenance-free and reliable source of nitrogen.

NitroFlow LP unit

- Integrated compressors
- Low pressure nitrogen up to 2 bar(g)
- Plug and play
- Silent and vibration free
- No condensate formed

NitroFlow HP unit

- High quality integrated compressed air filtration
- Works with standard compressed air house system 7 bar(g) or dedicated compressor
- Modular design, unit can grow with your factory

Touch screen interface

- Easy user interface
- Extensive alarm and datalog functions
- Remote control option
- Data communication
- Multi-language operation

Modern design

- Robust construction
- Digital interface
- Easily expandable

Easy installation

- Connect power source
- Connect air supply
- Vent permeate
- Fork-lift truck access points

Maintenance

- Easy access
- Maintenance indication
- Yearly filter exchange
- Compressor requires no maintenance

Specifications

Minimum nitrogen production capacity
Capacity [Nm³/hr] at nominal conditions: ambient temperature 20°C, ambient pressure 1013 mbar(a)

NitroFlow LP with built-in compressors

Nitrogen purity %	99.5%	99%	98%	97%	96%	95%	93%
NitroFlow LP 1	1.1	1.5	2.2	2.7	3.1	3.5	4.1
NitroFlow LP 2	2.2	3.0	4.5	5.3	6.0	6.8	8.0
NitroFlow LP 3	3.4	5.3	6.6	7.8	9.0	10.2	12.2
NitroFlow LP 4				10.3	12.0	13.6	16.4

NitroFlow HP for connection to external compressed air supply at 7 bar(g) nominal inlet pressure

Nitrogen purity %	99.5	99	98	97	96	95
NitroFlow HP 1	1.7	2.5	3.8	5.0	6.3	7.5
NitroFlow HP 2	3.4	5.0	7.6	10.0	12.6	15.0
NitroFlow HP 3	5.1	7.5	11.4	15.0	18.9	22.5

For calculation of the capacity of the NitroFlow HP at feed pressures other than the nominal feedpressure: multiply the nominal capacity by the correction factor for the pressure at the inlet of the NitroFlow HP.

Pressure bar(g)	5	6	7	8	9	10	11	12	13
Correction factor	0.65	0.8	1	1.15	1.3	1.5	1.65	1.8	2

Technical data

Data/Generator	LP1	LP2	LP3	LP4	HP1	HP2	HP3
Max. delivery pressure	2.0 bar(g)				Inlet pressure minus pressure drop (2 bar max.)		
Air quality	Normal clean ambient air – relative humidity: < 90%				Residual oil content < 3.0 mg / m³ Pressure dewpoint < 5°C		
Temperature	10 – 35°C				10 – 40°C		
Connections	Nitrogen and permeate outlet: 1"				Air inlet, nitrogen and permeate outlet: 1"		
Noise level	< 65 dBA				< 45 dBA		
Electrical data	230 Vac / 50 Hz		3 x 400 Vac / 50Hz+N+PE		120-230 Vac / 50-60 Hz		
Power consumption	1.5 kW	3.0 kW	4.5 kW	6.0 kW	30 W		
Output signals	Oxygen %, outlet pressure: analogue 4-20 mA – Alarm: potential free relay (max. 25 V)						
Input	Digital input: switch on/off						
Dimensions	1224 x 725 x 540 mm		1224 x 725 x 810 mm		1224 x 725 x 270 mm		
Weight	150 kg	200 kg	320 kg	370 kg	85 kg	95 kg	105 kg

	LP1	LP2	LP3	LP4	HP1	HP2	HP3
Part numbers	99.5% - 99%	99.5% - 99%	99.5%	159.004031	159.004032	159.004033	159.004034
	159.004537	159.004538	159.004539				
	98% - 93%	98% - 93%	99% - 93%				
	159.004028	159.004029	159.004030				
Maintenance kits – yearly	159.004425				159.004045		
Oxygen transmitter	159.002284 - replace every 3 years						

Reference condition for Nm³ = 20°C and 1013 mbar(a)