

NFM-100 Nitrogen Gas Separation Hollow Fibre Membrane Cartridge

The NFM-100 is a compact, high-capacity hollow fibre membrane cartridge that delivers a reliable, instant, and continuous supply of nitrogen on demand. Built upon Parker's highest quality hollow fibre membrane technology, it efficiently separates nitrogen from a clean compressed air source to achieve purities from 99.5% to 95.0%.

Compared to the next best-selling alternative, the NFM-100 provides significantly more gas from a single cartridge, minimizing footprint and the number of cartridges required to meet system design. With a wide operating range of 5 to 65°C and 4 to 13 barg, the NFM-100 delivers versatile performance across demanding environments.

The NFM-100 is well suited to fixed and mobile installations in industries including food and beverage, oil and gas, marine, mining, and transportation offering dependable on-demand nitrogen generation that supports uptime, simplifies logistics, and streamlines OEM and skid integrations.

Key features and benefits include:

- **Lowest Total Cost of Integration**

Higher capacities result in reduced number of membrane cartridges meaning less housings, pipework, fittings and cost.

- **Energy Savings**

Parker's hollow fibre membrane is the most permeable membrane available allowing operation at lower pressures which requires less energy meaning there is no need for high pressure compressors.

- **Long Service Life**

Parker's hollow fibre membranes have a long life expectation of more than 10 years.

- **Reliable Performance**

Due to Parker's innovative ageing process, the membrane cartridge performance won't decrease over time.



Minimum Outlet Flow Rate

Inlet Pressure		Purity vs Minimum Nitrogen Outlet Flow Rate											
		99.5%		99.0%		98.0%		97.0%		96.0%		95.0%	
bar(g)	psi(g)	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm
5.0	72.5	14.1	8.3	21.4	12.6	32.6	19.2	43.2	25.4	53.7	31.6	64.8	38.1
6.0	87.0	18.2	10.7	27.4	16.1	41.8	24.6	55.2	32.5	68.6	40.4	83.1	48.9
7.0	101.5	22.3	13.1	33.6	19.8	51.0	30.0	67.3	39.6	83.9	49.4	101.7	59.8
8.0	116.0	26.2	15.4	39.6	23.3	60.2	35.4	79.5	46.8	99.4	58.5	120.2	70.7
9.0	130.5	30.2	17.8	45.6	26.8	69.3	40.8	91.8	54.0	114.5	67.4	138.6	81.6
10.0	145.0	34.0	20.0	51.4	30.2	78.2	46.0	103.8	61.1	129.5	76.2	156.2	91.9
11.0	159.5	38.2	22.5	57.6	33.9	87.5	51.5	115.9	68.2	144.6	85.1	174.6	102.8
12.0	174.0	42.2	24.8	63.6	37.4	96.6	56.9	128.0	75.3	159.7	94.0	192.8	113.5
13.0	188.5	46.2	27.2	69.6	41.0	105.7	62.2	140.1	82.4	174.8	102.9	211.1	124.2

m³ reference to standard conditions, 20°C, 1013mbar(a) and 0% relative water vapour pressure
For performance figures at other purities and/or pressures, please contact Parker.

Temperature Correction Factors

Temperature		Minimum Outlet Flow Rate Temperature Correction Factors					
°C	°F	99.5%	99.0%	98.0%	97.0%	96.0%	95.0%
5.0	41.0	0.95	0.90	0.90	0.90	0.90	0.90
10.0	50.0	0.97	0.95	0.95	0.95	0.95	0.95
20.0	68.0	1.00	1.00	1.00	1.00	1.00	1.00
30.0	86.0	1.00	1.03	1.05	1.05	1.05	1.05
40.0	104.0	1.00	1.05	1.10	1.10	1.10	1.10
50.0	122.0	1.00	1.05	1.10	1.10	1.15	1.10
60.0	140.0	1.10	1.15	1.20	1.20	1.25	1.20

Operating Parameters

Minimum Inlet Air Quality	ISO 8573-1: 2010 Class 2.4.1	
Minimum Operating Pressure	5.0 bar(g)	72.5 psi(g)
Maximum Operating Pressure	13.0 bar(g)	188.5 psi(g)
Minimum Operating Temperature	5.0°C	41.0°F
Maximum Operating Temperature	65.0°C	149.0°F
Maximum Pressure Drop	0.2 bar(g)	2.9 psi(g)

Weight & Dimensions

Material	Aluminium	
Length	1653.2 mm	65.1"
Diameter	152.4 mm	6.0"
Weight	11 kg	24.3 lbs

Please contact Parker for housing design and intergration pack.

Part Number Configurator

Configurator	N	F	M	-	1	0	0	-				-			-	C	-	0	0	A	