

Membrane Nitrogen Generator

Nitrogen enriched air purification is easily possible with only a compressed air supply.

Nitrogen concentration:
Max. 99.9 or more
Outlet air flow rate:
20 L/min (ANR)

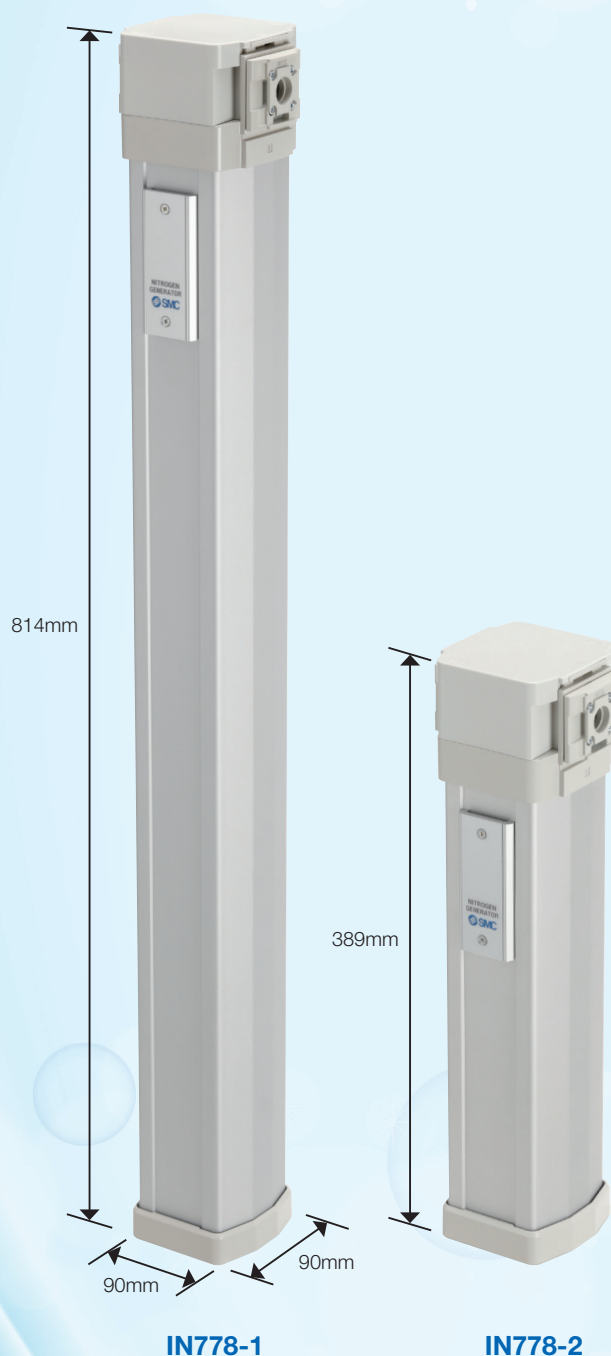
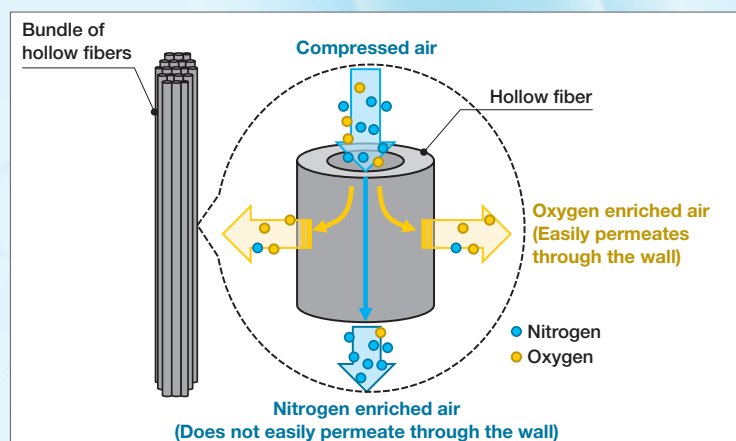
* Inlet air pressure: 0.7 MPa, Inlet air temperature 25°C

- Compact and easy to use at point of use
- Not subject to the Japan High Pressure Gas Safety Act
- No power supply required
- No need for gas cylinder replacement
- Modular connection type
- Outlet side compressed air purity class (Humidity)"2"

* For IN778-1

■ Nitrogen Enriched Air Production Principle

The membrane of the Membrane Nitrogen Generator is made of many hollow fibres which allow Oxygen to easily permeate through the fiber wall, but not Nitrogen.



IN778-1/IN778-2

Specifications

Model		IN778-1	IN778-2
Operating condition range	Fluid	Air	
	Ambient and operating temperatures	-5 to 50 °C (No freezing or concentration)	
	Proof pressure	1.5 MPa	
	Max. operating pressure	1.0 MPa	
	Min. operating pressure	0.3 MPa	
	Inlet side compressed air purity class ^{Note 1)}	ISO 8573-1 : 2010 [1 : 6 : 1]	
Basic performance	Inlet air temperature	25 °C	
	Inlet air pressure	0.7 MPa	
	Nitrogen concentration ^{Note 2)}	99.9%	98%
	Inlet air flow rate	148 L/min (ANR)	59 L/min (ANR)
	Nitrogen enriched outlet air flow rate	20 L/min (ANR)	20 L/min (ANR)
Weight		6.4 kg	3.2 kg

Note 1) The compressed air purity class is indicated based on ISO 8573-1: 2010 Compressed air-Part 1: Contaminants and Purity classes.

Note 2) The Nitrogen concentration refers to the concentration of the main components of air, other than oxygen.

The main components of compressed air are Nitrogen, Oxygen, Carbon Dioxide, Argon and Water Vapor.

Characteristic Value

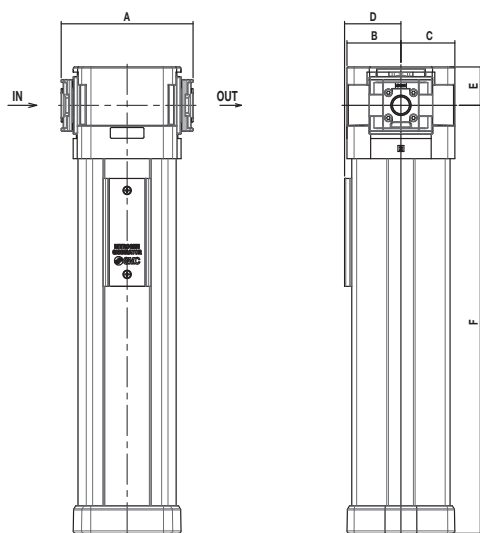
Inlet air conditions: Pressure at 0.7 MPa, Temperature at 25°C

Nitrogen concentration [%]	Model			
	IN778-1		IN778-2	
	Inlet air flow rate L/min (ANR)	Outlet flow rate L/min (ANR)	Inlet air flow rate L/min (ANR)	Outlet flow rate L/min (ANR)
99.9	148	20	41	4.5
99	151	40	50	13
98	155	51	59	20
97	177	69	67	26
96	195	84	74	32
95	213	100	81	38
90	335	211	129	81

The inlet air flow rate is the guideline value when the outlet flow rate is set.

If the product is used in conditions different to the listed characteristic values, please contact our sales representatives for characteristic values.

Dimensions



Model	A	B	C	D	E	F
IN778-1	110	45	45	47	32	782
IN778-2						357

How to Order

IN778-1

Nitrogen concentration ^{Note 3)}

1	99.9% or more
2	98% or more

Note 3) When the outlet air flow is 20 L/min (ANR)

Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.

SMC Corporation <https://www.smcworld.com>

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.
© 2025 SMC Corporation All Rights Reserved

D-TS