

Technical Information

SEPURAN® N₂ - 2 inch standard

CONTENT

MODULE

• **N2 50x610 P0.5N P 10**

SAP-No.: 99139665

Dimension:	2 inch standard
Feed/Retentate port:	½" NPT-Thread
Permeate port:	½" NPT-Thread
Operating pressure:	≤ 10 barg ≤ 145 psig
Housing material:	PVC / Aluminium / SS304 – 1.4301
Housing certification:	PED – Art. 4 (3)

• **N2 50x610 P0.5N A 12**

SAP-No.: 99139664

Dimension:	2 inch standard
Feed/Retentate port:	½" NPT-Thread
Permeate port:	½" NPT-Thread
Operating pressure:	≤ 12 barg ≤ 174 psig
Housing material:	Aluminium / SS304 – 1.4301
Housing certification:	PED – Art. 4 (3)

CONTENT

GLOSSARY PRESSURE EQUIPMENT CERTIFICATION

EN ... PED	- European Pressure Equipment Directive 2014/68/EU
AS ... ASME	- ASME Boiler and Pressure Vessel Code Section VIII, Div.1
CN ... SELO	- China Special Equipment Licensing Office (SELO)
AE ... PED / ASME	- European Pressure Equipment Directive 2014/68/EU, ASME Boiler and Pressure Vessel Code Section VIII, Div.1
CA ... ASME / CRN	- ASME Boiler and Pressure Vessel Code Section VIII, Div.1 and Canadian Registration Number (CRN)
EC ... PED / ASME / CRN	- European Pressure Equipment Directive 2014/68/EU, ASME Boiler and Pressure Vessel Code Section VIII, Div.1 and Canadian Registration Number (CRN)
NR ... ASME / NR13	- ASME Codes and National Regulation 13

Technical Information

SEPURAN® N₂ Module

SEPURAN® – N₂ 50x610 P0.5N P 10



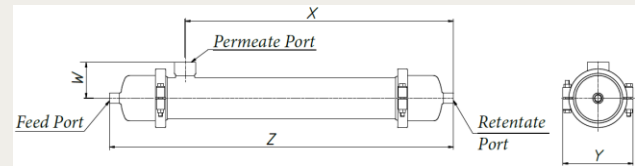
SEPURAN® N₂ module (sample picture)

Associated documents:

- User manual SEPURAN® N₂ module
- Technical drawing

SEPURAN® N₂ is a hollow fiber membrane gas separator that is used to remove oxygen from compressed air, resulting in N₂ purities between 95–99.5%. The polymer is specially tailored for nitrogen generation. Unlike other gas separation membranes, **SEPURAN® N₂** membranes are characterized by a very high flow capacity with a very good air factor, resulting in the optimization of compression and operating cost.

DIMENSIONS



Permeate port – W	50 mm 1.97 inch
Permeate port – X	524 mm 20.63 inch
Max diameter – Y	117 mm 4.61 inch
Total length – Z	614 mm 24.17 inch
Feed / Retentate connection	NPT-Thread ½"
Permeate connection	NPT-Thread ½"
Weight	1.9 kg 4.2 lbs
Drawing number	EVK-Mod C2N-1 1/2-1/2N P-C-V01-A

For more specific dimensions of the system, please use the corresponding technical drawing.

SPECIFICATIONS

Design, manufacturing and testing acc. to	PED – Art. 4 (3)
External material housing	PVC / Aluminium / SS304 – 1.4301
Operating pressure Feed- / Retentate side	≤ 10.0 barg ≤ 145.0 psig
Operating pressure Permeate side	≥ 0.0 barg ≥ 0.0 psig
Max. actual permeate flow rate	≤ 4.5 Am ³ /h ≤ 2.7 acfm
To be used with	Pre-treated pressurized air
Permitted temperature range	1 – 40°C 34 – 104°F
Inlet air requirements	Particles, aerosols: ISO 8573-1:2010 class [1:-:1] Condensation of water must be avoided

CHARACTERISTIC PERFORMANCE DATA

	N2 produced in Nm ³ /h at 7 barg; 25°C in scfm at 102 psig; 77°F ²	Air / N2 ratio
99%	0.47 0.29	3.8
98%	0.68 0.42	3.0
97%	0.87 0.54	2.6
96%	1.07 0.66	2.3
95%	1.27 0.79	2.1

The composition of the product was determined by measurement of the residual oxygen content. The “N2 produced” value is the inert gas content. The pressure is the retentate pressure, namely N2 produced stream discharge pressure. The inlet air divided by “N2 produced” gives the air factor or air/N2 ratio. The lower the air factor, the lower the investment and operating costs.

CAUTION

Nitrogen gas is colorless, odorless and nonflammable. It is non-toxic but may cause asphyxiation by displacement of oxygen. Ensure proper ventilation. Oxygen is a colorless, odorless and oxidizing gas. It is non-toxic, but at high concentrations in the atmosphere it accelerates combustion and increases the risk of fire and explosion of combustible or flammable materials.

OPERATION

The proper operation of **SEPURAN® N2** modules is described in the associated user manual.

PRODUCT CODE	PRODUCT NAME
99139665	SEPURAN® – N2 50x610 P0.5N P 10

² Norm = 0°C, 1 atm | 32°F, 1 atm;
Standard = 15.5°C, 1 atm | 60°F, 1 atm

Disclaimer

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Evonik (China) Co., Ltd.

Unit D1-0-1005A, No. 5 Building, 19 Dongfang East Road,
Chaoyang District
100600 Beijing, P.R.China

sepuran@evonik.com
www.evonik.com/sepuran
www.membrane-separation.com

Technical Information

SEPURAN® N₂ Module

SEPURAN® – N₂ 50x610 P0.5N A 12



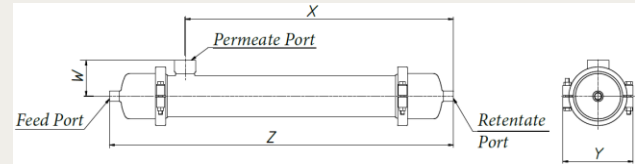
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DIMENSIONS



Permeate port – W	28 mm 1.10 inch
Permeate port – X	514 mm 20.24 inch
Max diameter – Y	117 mm 4.61 inch
Total length – Z	614 mm 24.17 inch
Feed / Retentate connection	NPT-Thread ½"
Permeate connection	NPT-Thread ½"
Weight	2.3 kg 5.1 lbs
Drawing number	EVK-Mod C2N-1 1/2-1/2N A-C-V01-A

For more specific dimensions of the system, please use the corresponding technical drawing.

SPECIFICATIONS

Design, manufacturing and testing acc. to	PED – Art. 4 (3)
External material housing	Aluminium / SS304 – 1.4301
Operating pressure Feed- / Retentate side	≤ 12.0 barg ≤ 174.0 psig
Operating pressure Permeate side	≥ 0.0 barg ≥ 0.0 psig
Max. actual permeate flow rate	≤ 4.5 Am ³ /h ≤ 2.7 acfm
To be used with	Pre-treated pressurized air
Permitted temperature range	1 – 70°C 34 – 158°F
Inlet air requirements	Particles, aerosols: ISO 8573-1:2010 class [1:-:1] Condensation of water must be avoided

CHARACTERISTIC PERFORMANCE DATA

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Chaoyang District
100600 Beijing, P.R.China

sepuran@evonik.com
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