

Technical Information

SEPURAN® N₂ – 2 inch short

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Technical Information

SEPURAN® N₂ Module

SEPURAN® – N₂ 50x360 P0.5N P 10



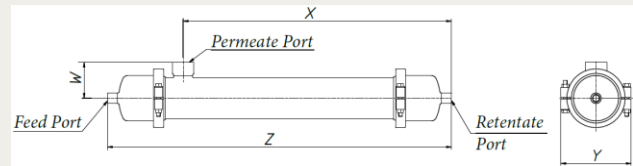
SEPURAN® N₂ module (sample picture)

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	274 mm 10.79 inch
Max diameter – Y	117 mm 4.61 inch
Total length – Z	364 mm 14.33 inch
Feed / Retentate connection	NPT–Thread ½"
Permeate connection	NPT–Thread ½"
Weight	1.6 kg 3.5 lbs
Drawing number	EVK–Mod C2S–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%	0.18 0.11	4.2
98%	0.26 0.16	3.2
97%	0.34 0.21	2.8
96%	0.42 0.26	2.5
95%	0.50 0.31	2.2

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
99139663	SEPURAN® – N2 50x360 P0.5N P 1.0

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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Technical Information

SEPURAN® N₂ Module

SEPURAN® – N₂ 50x360 P0.5N A 12



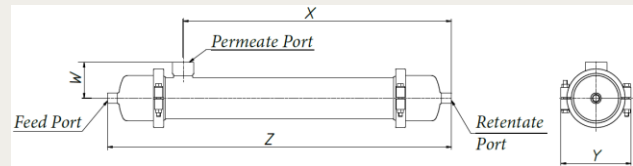
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DIMENSIONS



Permeate port – W	28 mm 1.10 inch
Permeate port – X	264 mm 10.39 inch
Max diameter – Y	117 mm 4.61 inch
Total length – Z	364 mm 14.33 inch
Feed / Retentate connection	NPT-Thread ½"
Permeate connection	NPT-Thread ½"
Weight	2.0 kg 4.4 lbs
Drawing number	EVK-Mod C2S-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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PRODUCT CODE	PRODUCT NAME
99139681	SEPURAN® – N2 50x360 P0.5N A 12

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Standard = 15.5°C, 1 atm | 60°F, 1 atm

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