

SEPURAN[®] N₂

CONTENT

I.	SEPURAN® - N2S Cart 150x1310 A 25	99131448
II.	SEPURAN® - N2SSys 150x1310 P1.5G 6 25EN	99142761
III.	SEPURAN® - N2SSys 150x1310 P1.5G 6 25AS	99142762
IV.	SEPURAN® - N2SSys 150x1310 P1.5G 6 25CN	99142731
V.	SEPURAN® - N2SSys 150x1310 P2.0N 6 25AE	99131450



SEPURAN® N2 Selective Cartridge

SEPURAN® – N2S Cart 150x1310 A 25



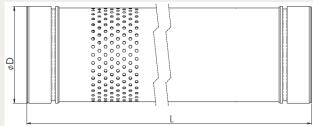
SEPURAN® N2 Selective cartridge (sample picture)

Associated documents:

- User manual SEPURAN® N2 Selective cartridge
- 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



Max diameter – D	154.8 mm 6.09 inch	
Total length - L	1 310 mm 51.57 inch	
Weight	9.3 kg 20.5 lbs	
Drawing number	EVK-Cart_6N-1-C-V02-A	

External material cartridge tube	Aluminium
Operating pressure Permeate side	≥ 0.0 barg ≥ 0.0 psig
Transmembrane pressure	≤ 25.0 bar ≤ 362.6 psi
Max. operating feed pressure ¹	≤ 25.0 barg ≤ 362.6 psig
Max. actual permeate flow rate	≤ 200 Am³/h ≤ 117.8 acfm
To be used with	Pre-treated pressurized air
Other Gases	Contact the supplier
Permitted temperature range	1 - 70°C 34 - 158°F
Inlet air requirements	Particles, aerosols: ISO 8573-1:2010 class [1:-:1]
met an requirements	Condensation of water must be avoided

¹The specified transmembrane pressure (TMP) must not be exceeded under any circumstances.

CHARACTERISTIC PERFORMANCE DATA

	N2 produced in Nm 3 /h at 9.0 barg; 25°C in scfm at 131.0 psig; 77°F 2	Air / N2 ratio
99%	6.5 4.0	2.9
98%	9.0 5.6	2.4
97%	11.3 7.0	2.1
96%	13.7 8.5	2.0
95%	16.2 10.1	1.8

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

PRODUCT CODE	PRODUCT NAME
99131448	SEPURAN® – N2S Cart 150x1310 A 25

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

SEPURAN[®] N₂

Disclaimer

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

Evonik Fibres GmbH

Gewerbepark 4 4861 Schörfling/Austria



SEPURAN® N2 Selective System

SEPURAN® – N2SSys 150x1310 P1.5G 6 25EN



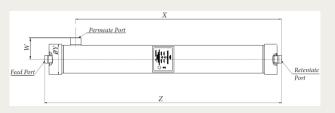
SEPURAN® N2 Selective system (sample picture)

Associated documents:

- User manual SEPURAN® N2 Selective system
- 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	136 mm 5.35 inch
Permeate port - X	1 259 mm 49.57 inch
Max diameter - Y	184 mm 7.24 inch
Total length - Z	1 448 mm 57.01 inch
Feed / Retentate connection	BSPP-Thread 1" and Victaulic 1½"
Permeate connection	BSPP-Thread 1½" and Victaulic 2"
Weight	38.3 kg 84.4 lbs
Drawing number	EVK-Hsg 6N-1 1.5-1.0G 6 25EN-C-V01-A

Design, manufacturing and testing acc. to	EN
External material housing	SS 316 - 1.4404
External material cartridge tube	Aluminium
Operating pressure Feed- / Retentate side	≤ 25.0 barg ≤ 362.6 psig
Operating pressure Permeate side	≥ 0.0 barg ≥ 0.0 psig
Transmembrane pressure ¹	≤ 25.0 bar ≤ 362.6 psi
Max. actual permeate flow rate	≤ 200 Am³/h ≤ 117.8 acfm
To be used with	Pre-treated pressurized air
Other Gases	Contact the supplier
Permitted temperature range	1 - 70°C 34 - 158°F
Inlet air requirements	Particles, aerosols: ISO 8573-1:2010 class [1:-:1]
met an requirements	Condensation of water must be avoided

¹The specified transmembrane pressure (TMP) must not be exceeded under any circumstances.

CHARACTERISTIC PERFORMANCE DATA

	N2 produced in Nm ³ /h at 9.0 barg; 25°C in scfm at 131.0 psig; 77^*F^2	Air / N2 ratio
99%	6.5 4.0	2.9
98%	9.0 5.6	2.4
97%	11.3 7.0	2.1
96%	13.7 8.5	2.0
95%	16.2 10.1	1.8

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

PRODUCT CODE	PRODUCT NAME
99142761	SEPURAN® – N2SSys 150x1310 P1.5G 6 25EN

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

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

Evonik Fibres GmbH Gewerbepark 4 4861 Schörfling/Austria



SEPURAN® N2 Selective System

SEPURAN® -N2SSys 150x1310 P1.5G 6 25AS



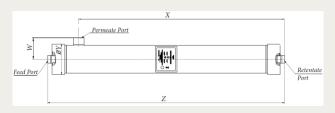
SEPURAN® N2 Selective system (sample picture)

Associated documents:

- User manual SEPURAN® N2 Selective system
- 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	136 mm 5.35 inch
Permeate port - X	1 259 mm 49.57 inch
Max diameter - Y	184 mm 7.24 inch
Total length - Z	1 448 mm 57.01 inch
Feed / Retentate connection	BSPP-Thread 1" and Victaulic 1½"
Permeate connection	BSPP-Thread 1½" and Victaulic 2"
Weight	38.3 kg 84.4 lbs
Drawing number	EVK-Hsg 6N-1 1.5-1.0G 6 25AS-C-V01-A

Design, manufacturing and testing acc. to	ASME / CRN
External material housing	SS 316 - 1.4404
External material cartridge tube	Aluminium
Operating pressure Feed- / Retentate side	≤ 25.0 barg ≤ 362.6 psig
Operating pressure Permeate side	≥ 0.0 barg ≥ 0.0 psig
Transmembrane pressure ¹	≤ 25.0 bar ≤ 362.6 psi
Max. actual permeate flow rate	≤ 200 Am³/h ≤ 117.8 acfm
To be used with	Pre-treated pressurized air
Other Gases	Contact the supplier
Permitted temperature range	1 - 70°C 34 - 158°F
Inlet air requirements	Particles, aerosols: ISO 8573-1:2010 class [1:-:1]
met an requirements	Condensation of water must be avoided

¹The specified transmembrane pressure (TMP) must not be exceeded under any circumstances.

CHARACTERISTIC PERFORMANCE DATA

	N2 produced in Nm ³ /h at 9.0 barg; 25°C in scfm at 131.0 psig; $77^{\circ}F^{2}$	Air / N2 ratio
99%	6.5 4.0	2.9
98%	9.0 5.6	2.4
97%	11.3 7.0	2.1
96%	13.7 8.5	2.0
95%	16.2 10.1	1.8

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

PRODUCT CODE	PRODUCT NAME
99142762	SEPURAN® – N2SSys 150x1310 P1.5G 6 25AS

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

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

Evonik Fibres GmbH Gewerbepark 4 4861 Schörfling/Austria



SEPURAN® N2 Selective System

SEPURAN® – N2SSys 150x1310 P1.5G 6 25CN



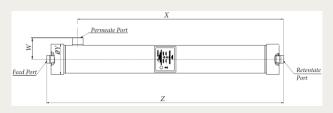
SEPURAN® N2 Selective system (sample picture)

Associated documents:

- User manual SEPURAN® N2 Selective system
- 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	136 mm 5.35 inch
Permeate port - X	1 259 mm 49.57 inch
Max diameter - Y	184 mm 7.24 inch
Total length - Z	1 448 mm 57.01 inch
Feed / Retentate connection	BSPP-Thread 1" and Victaulic 1½"
Permeate connection	BSPP-Thread 1½" and Victaulic 2"
Weight	38.3 kg 84.4 lbs
Drawing number	EVK-Hsg 6N-1 1.5-1.0G 6 25CN-C-V01-A

Design, manufacturing and testing acc. to	SELO
External material housing	SS 316 - 1.4404
External material cartridge tube	Aluminium
Operating pressure Feed- / Retentate side	≤ 25.0 barg ≤ 362.6 psig
Operating pressure Permeate side	≥ 0.0 barg ≥ 0.0 psig
Transmembrane pressure ¹	≤ 25.0 bar ≤ 362.6 psi
Max. actual permeate flow rate	≤ 200 Am³/h ≤ 117.8 acfm
To be used with	Pre-treated pressurized air
Other Gases	Contact the supplier
Permitted temperature range	1 - 70°C 34 - 158°F
Inlet air requirements	Particles, aerosols: ISO 8573-1:2010 class [1:-:1]
inlet air requirements	Condensation of water must be avoided

¹The specified transmembrane pressure (TMP) must not be exceeded under any circumstances.

CHARACTERISTIC PERFORMANCE DATA

	N2 produced in Nm ³ /h at 9.0 barg; 25°C in scfm at 131.0 psig; 77°F ²	Air / N2 ratio
99%	6.5 4.0	2.9
98%	9.0 5.6	2.4
97%	11.3 7.0	2.1
96%	13.7 8.5	2.0
95%	16.2 10.1	1.8

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

PRODUCT CODE	PRODUCT NAME
99142731	SEPURAN® – N2SSys 150x1310 P1.5G 6 25CN

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

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

Evonik Fibres GmbH Gewerbepark 4 4861 Schörfling/Austria



SEPURAN® N2 Selective System

SEPURAN® – N2SSys 150x1310 P2.0N 6 25AE



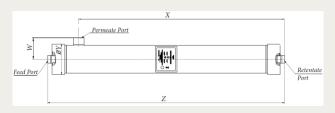
SEPURAN® N2 Selective system (sample picture)

Associated documents:

- User manual SEPURAN® N2 Selective system
- 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	131 mm 5.16 inch
Permeate port - X	1 259 mm 49.57 inch
Max diameter - Y	184 mm 7.24 inch
Total length - Z	1 448 mm 57.01 inch
Feed / Retentate connection	NPT-Thread 1" and Victaulic 1½"
Permeate connection	NPT-Thread 2"
Weight	39.3 kg 86.6 lbs
Drawing number	EVK-Hsg 6N-1 2.0-1.0N 6 25AE-C-V01-A

Design, manufacturing and testing acc. to	EN / ASME / CRN
External material housing	SS 316 - 1.4404
External material cartridge tube	Aluminium
Operating pressure Feed- / Retentate side	≤ 25.0 barg ≤ 362.6 psig
Operating pressure Permeate side	≥ 0.0 barg ≥ 0.0 psig
Transmembrane pressure ¹	≤ 25.0 bar ≤ 362.6 psi
Max. actual permeate flow rate	≤ 200 Am³/h ≤ 117.8 acfm
To be used with	Pre-treated pressurized air
Other Gases	Contact the supplier
Permitted temperature range	1 - 70°C 34 - 158°F
Inlet air requirements	Particles, aerosols: ISO 8573-1:2010 class [1:-:1]
Inlet air requirements	Condensation of water must be avoided

¹The specified transmembrane pressure (TMP) must not be exceeded under any circumstances.

CHARACTERISTIC PERFORMANCE DATA

	N2 produced in Nm ³ /h at 9.0 barg; 25°C in scfm at 131.0 psig; 77°F ²	Air / N2 ratio
99%	6.5 4.0	2.9
98%	9.0 5.6	2.4
97%	11.3 7.0	2.1
96%	13.7 8.5	2.0
95%	16.2 10.1	1.8

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

PRODUCT CODE	PRODUCT NAME
99131450	SEPURAN® – N2SSys 150x1310 P2.0N 6 25AE

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

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

Evonik Fibres GmbH Gewerbepark 4 4861 Schörfling/Austria

