

Technical Information

## SEPURAN® N<sub>2</sub> - 6 inch long

## CONTENT

### CARTRIDGE

• **N2 Cart 150x1860 A 16**

SAP-No.: 99133745

Dimension: 6 inch long  
 Operating pressure: ≤ 16 barg | ≤ 232 psig

### SYSTEM

• **N2 C-1-Sys 6L-1 2.5-1.5N A6 S16RA**

SAP-No.: 99166475

Dimension: 6 inch long  
 Feed/Retentate port: 1½" NPT-Thread and Victaulic 2"  
 Permeate port: 2½" NPT-Thread  
 Operating pressure: ≤ 16 barg | ≤ 232 psig  
 Housing material: SS 316 – 1.4404  
 Housing certification: ASME / RINA

• **N2Sys 150x1860 P2.5N 6 16AE**

SAP-No.: 99133947

Dimension: 6 inch long  
 Feed/Retentate port: 1½" NPT-Thread and Victaulic 2"  
 Permeate port: 2½" NPT-Thread  
 Operating pressure: ≤ 16 barg | ≤ 232 psig  
 Housing material: SS 316 – 1.4404  
 Housing certification: PED / ASME / CRN

• **N2Sys 150x1860 P2.5G 6 16CN**

SAP-No.: 99143390

Dimension: 6 inch long  
 Feed/Retentate port: 1" BSPP-Thread and Victaulic 1½"  
 Permeate port: 2½" BSPP-Thread and Victaulic 3"  
 Operating pressure: ≤ 16 barg | ≤ 232 psig  
 Housing material: SS 316 – 1.4404  
 Housing certification: SELO

• **N2Sys 150x1860 P2.5G 6 16AE**

SAP-No.: 99141883

Dimension: 6 inch long  
 Feed/Retentate port: 1" BSPP-Thread and Victaulic 1½"  
 Permeate port: 2½" BSPP-Thread and Victaulic 3"  
 Operating pressure: ≤ 16 barg | ≤ 232 psig  
 Housing material: SS 316 – 1.4404  
 Housing certification: PED / ASME / CRN

## CONTENT

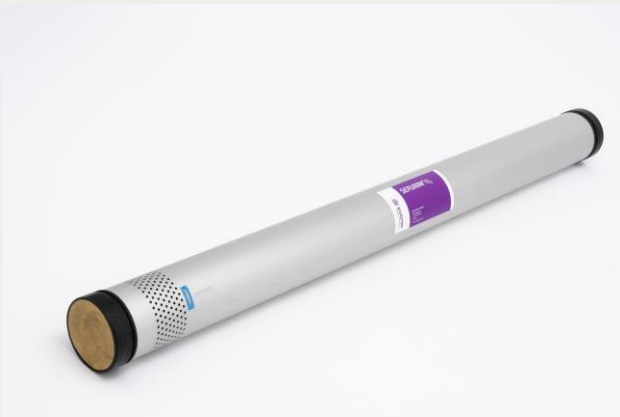
### GLOSSARY PRESSURE EQUIPMENT CERTIFICATION

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® N<sub>2</sub> Cartridge

### SEPURAN® – N<sub>2</sub> Cart 150x1860 A 16



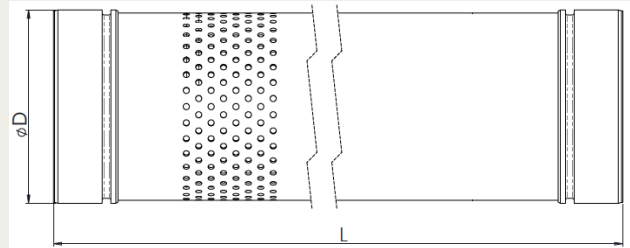
SEPURAN® N<sub>2</sub> cartridge (sample picture)

#### Associated documents:

- User manual SEPURAN® N<sub>2</sub> cartridge
- Technical drawing

**SEPURAN® N<sub>2</sub>** is a hollow fiber membrane gas separator that is used to remove oxygen from compressed air, resulting in N<sub>2</sub> purities between 95–99.5%. The polymer is specially tailored for nitrogen generation. Unlike other gas separation membranes, **SEPURAN® N<sub>2</sub>** 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



<b>Max diameter – D</b>	154.8 mm   6.09 inch
<b>Total length – L</b>	1 860 mm   73.23 inch
<b>Weight</b>	12.2 kg   26.9 lbs
<b>Drawing number</b>	EVK-Cart_6L-1-C-V02-A

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

## SPECIFICATIONS

<b>External material cartridge tube</b>	Aluminium
<b>Operating pressure Permeate side</b>	≥ 0.0 barg   ≥ 0.0 psig
<b>Transmembrane pressure</b>	≤ 16.0 bar   ≤ 232.0 psi
<b>Max. operating feed pressure<sup>1</sup></b>	≤ 16.0 barg   ≤ 232.0 psig
<b>Max. actual permeate flow rate</b>	≤ 250 Am <sup>3</sup> /h   ≤ 147.3 acfm
<b>To be used with</b>	Pre-treated pressurized air
<b>Other Gases</b>	Contact the supplier
<b>Permitted temperature range</b>	1 – 70°C   34 – 158°F
<b>Inlet air requirements</b>	Particles, aerosols: ISO 8573-1:2010 class [1:-:1] Condensation of water must be avoided

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

## CHARACTERISTIC PERFORMANCE DATA

	<b>N2 produced</b> in Nm <sup>3</sup> /h at 7.0 barg; 25°C   in scfm at 102.0 psig; 77°F <sup>2</sup>	<b>Air / N2 ratio</b>
<b>99%</b>	27.5   17.2	3.7
<b>98%</b>	39.0   24.4	2.9
<b>97%</b>	49.7   31.1	2.5
<b>96%</b>	60.6   37.9	2.3
<b>95%</b>	72.3   45.2	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** cartridges is described in the associated user manual.

PRODUCT CODE	PRODUCT NAME
99133745	SEPURAN® – N2 Cart 150x1860 A 16

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

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## Technical Information

# SEPURAN® N<sub>2</sub> System

## SEPURAN® – N2 C-1-Sys 6L-1 2.5-1.5N A6 S16RA



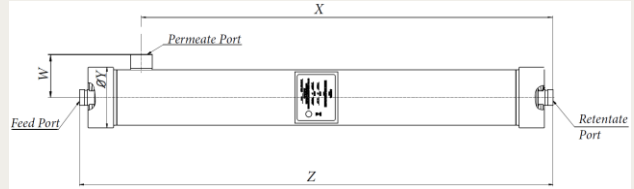
SEPURAN® N<sub>2</sub> system (sample picture)

### Associated documents:

- User manual SEPURAN® N<sub>2</sub> system
- Technical drawing

**SEPURAN® N<sub>2</sub>** is a hollow fiber membrane gas separator that is used to remove oxygen from compressed air, resulting in N<sub>2</sub> purities between 95–99.5%. The polymer is specially tailored for nitrogen generation. Unlike other gas separation membranes, **SEPURAN® N<sub>2</sub>** 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



<b>Permeate port – W</b>	131 mm   5.16 inch
<b>Permeate port – X</b>	1 809 mm   71.22 inch
<b>Max diameter – Y</b>	184 mm   7.24 inch
<b>Total length – Z</b>	1 998 mm   78.66 inch
<b>Feed / Retentate connection</b>	NPT-Thread 1½" and Victaulic 2"
<b>Permeate connection</b>	NPT-Thread 2½"
<b>Weight</b>	48.2 kg   106.3 lbs
<b>Drawing number</b>	EVK-Hsg 6L-1 2.5-1.5N 6 16RA-C-V01-A

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

## SPECIFICATIONS

<b>Design, manufacturing and testing acc. to</b>	ASME / RINA
<b>External material housing</b>	SS 316 – 1.4404
<b>External material cartridge tube</b>	Aluminium
<b>Operating pressure Feed- / Retentate side</b>	≤ 16.0 barg   ≤ 232.0 psig
<b>Operating pressure Permeate side</b>	≥ 0.0 barg   ≥ 0.0 psig
<b>Transmembrane pressure<sup>1</sup></b>	≤ 16.0 bar   ≤ 232.0 psi
<b>Max. actual permeate flow rate</b>	≤ 250 Am <sup>3</sup> /h   ≤ 147.3 acfm
<b>To be used with</b>	Pre-treated pressurized air
<b>Other Gases</b>	Contact the supplier
<b>Permitted temperature range</b>	1 – 70°C   34 – 158°F
<b>Inlet air requirements</b>	Particles, aerosols: ISO 8573-1:2010 class [1:-:1] Condensation of water must be avoided

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

## CHARACTERISTIC PERFORMANCE DATA

	<b>N2 produced</b> in Nm <sup>3</sup> /h at 7.0 barg; 25°C   in scfm at 102.0 psig; 77°F <sup>2</sup>	<b>Air / N2 ratio</b>
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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** systems is described in the associated user manual.

PRODUCT CODE	PRODUCT NAME
99166475	SEPURAN® – N2 C-1-Sys 6L-1 2.5-1.5N A6 S16RA

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



## PRODUCT KEY TRANSLATION

Trademark	Product Group	Product Name	Product Generation	Product Design	Dimension	Housing Generation	Permeate Port	Feed- / Retentate Port	Connection Type	Material Cartridge	Material Housing	Transmembrane Pressure	max. Pressure Housing	Certification Housing
SEPURAN®	N2	C	- 1	- Sys	6L	- 1	2.5	- 1.5	N	A	6	S	16	RA
				System	6 inch long		Permeate Port 2½"	Feed and Retentate Port 1½"	NPT-Thread	Aluminium	SS 316 - 1.4404	≤ 16.0 bar   ≤ 232.0 psi	≤ 16.0 barg   ≤ 232.0 psig	ASME / RINA

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## Technical Information

# SEPURAN® N<sub>2</sub> System

### SEPURAN® – N2Sys 150x1860 P2.5N 6 16AE



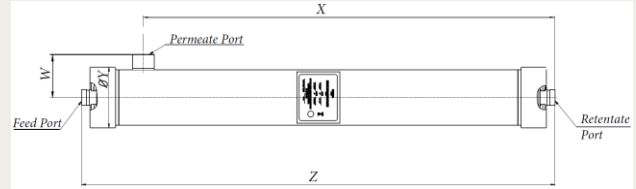
SEPURAN® N<sub>2</sub> system (sample picture)

#### Associated documents:

- User manual SEPURAN® N<sub>2</sub> system
- Technical drawing

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## DIMENSIONS



<b>Permeate port – W</b>	131 mm   5.16 inch
<b>Permeate port – X</b>	1 809 mm   71.22 inch
<b>Max diameter – Y</b>	184 mm   7.24 inch
<b>Total length – Z</b>	1 998 mm   78.66 inch
<b>Feed / Retentate connection</b>	NPT–Thread 1½" and Victaulic 2"
<b>Permeate connection</b>	NPT–Thread 2½"
<b>Weight</b>	48.2 kg   106.3 lbs
<b>Drawing number</b>	EVK–Hsg 6L–1 2.5–1.5N 6 25AE–C–V01–A

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

## SPECIFICATIONS

<b>Design, manufacturing and testing acc. to</b>	EN / ASME / CRN
<b>External material housing</b>	SS 316 – 1.4404
<b>External material cartridge tube</b>	Aluminium
<b>Operating pressure Feed- / Retentate side</b>	≤ 16.0 barg   ≤ 232.0 psig
<b>Operating pressure Permeate side</b>	≥ 0.0 barg   ≥ 0.0 psig
<b>Transmembrane pressure<sup>1</sup></b>	≤ 16.0 bar   ≤ 232.0 psi
<b>Max. actual permeate flow rate</b>	≤ 250 Am <sup>3</sup> /h   ≤ 147.3 acfm
<b>To be used with</b>	Pre-treated pressurized air
<b>Other Gases</b>	Contact the supplier
<b>Permitted temperature range</b>	1 – 70°C   34 – 158°F
<b>Inlet air requirements</b>	Particles, aerosols: ISO 8573-1:2010 class [1:-:1] Condensation of water must be avoided

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

## CHARACTERISTIC PERFORMANCE DATA

	<b>N2 produced</b> in Nm <sup>3</sup> /h at 7.0 barg; 25°C   in scfm at 102.0 psig; 77°F <sup>2</sup>	<b>Air / N2 ratio</b>
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### OPERATION

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

PRODUCT CODE	PRODUCT NAME
99133947	SEPURAN® – N2Sys 150x1860 P2.5N 6 16AE

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

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## Technical Information

# SEPURAN® N<sub>2</sub> System

### SEPURAN® – N2Sys 150x1860 P2.5G 6 16CN



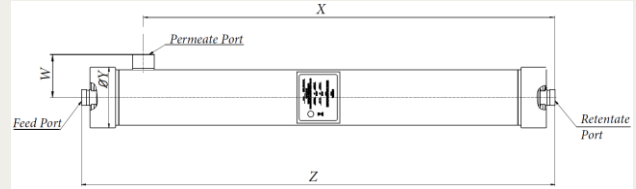
SEPURAN® N<sub>2</sub> system (sample picture)

#### Associated documents:

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- Technical drawing

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## DIMENSIONS



<b>Permeate port – W</b>	136 mm   5.35 inch
<b>Permeate port – X</b>	1 809 mm   71.22 inch
<b>Max diameter – Y</b>	184 mm   7.24 inch
<b>Total length – Z</b>	1 998 mm   78.66 inch
<b>Feed / Retentate connection</b>	BSPP–Thread 1" and Victaulic 1½"
<b>Permeate connection</b>	BSPP–Thread 2½" and Victaulic 3"
<b>Weight</b>	48.2 kg   106.3 lbs
<b>Drawing number</b>	EVK–Hsg 6L–1 2.5–1.0G 6 25CN–C–V01–A

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

## SPECIFICATIONS

<b>Design, manufacturing and testing acc. to</b>	SELO
<b>External material housing</b>	SS 316 – 1.4404
<b>External material cartridge tube</b>	Aluminium
<b>Operating pressure Feed- / Retentate side</b>	≤ 16.0 barg   ≤ 232.0 psig
<b>Operating pressure Permeate side</b>	≥ 0.0 barg   ≥ 0.0 psig
<b>Transmembrane pressure<sup>1</sup></b>	≤ 16.0 bar   ≤ 232.0 psi
<b>Max. actual permeate flow rate</b>	≤ 250 Am <sup>3</sup> /h   ≤ 147.3 acfm
<b>To be used with</b>	Pre-treated pressurized air
<b>Other Gases</b>	Contact the supplier
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## Technical Information

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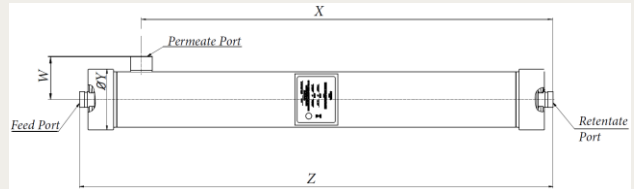
SEPURAN® N<sub>2</sub> system (sample picture)

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<b>Drawing number</b>	EVK–Hsg 6L–1 2.5–1.0G 6 25AE–C–V01–A

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## SPECIFICATIONS

<b>Design, manufacturing and testing acc. to</b>	EN / ASME / CRN
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<b>Operating pressure Permeate side</b>	≥ 0.0 barg   ≥ 0.0 psig
<b>Transmembrane pressure<sup>1</sup></b>	≤ 16.0 bar   ≤ 232.0 psi
<b>Max. actual permeate flow rate</b>	≤ 250 Am <sup>3</sup> /h   ≤ 147.3 acfm
<b>To be used with</b>	Pre-treated pressurized air
<b>Other Gases</b>	Contact the supplier
<b>Permitted temperature range</b>	1 – 70°C   34 – 158°F
<b>Inlet air requirements</b>	Particles, aerosols: ISO 8573-1:2010 class [1:-:1] Condensation of water must be avoided

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

## CHARACTERISTIC PERFORMANCE DATA

	<b>N2 produced</b> in Nm <sup>3</sup> /h at 7.0 barg; 25°C   in scfm at 102.0 psig; 77°F <sup>2</sup>	<b>Air / N2 ratio</b>
<b>99%</b>	27.5   17.2	3.7
<b>98%</b>	39.0   24.4	2.9
<b>97%</b>	49.7   31.1	2.5
<b>96%</b>	60.6   37.9	2.3
<b>95%</b>	72.3   45.2	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** systems is described in the associated user manual.

PRODUCT CODE	PRODUCT NAME
<b>99141883</b>	<b>SEPURAN® –</b> N2Sys 150x1860 P2.5G 6 16AE

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

## Disclaimer

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