

AIR ENERGY CATALOGUE



The Air of Trust



ANEST IWATA



| | |
|----------------------------|---|
| Headquarters | ANEST IWATA Corporation |
| Founded | May 1 st , 1926 |
| Established | June 2 nd , 1948 |
| Capital | 3354 mil Yen / 25 mil EUR |
| Listed Stock | First section of the Tokyo Stock Exchange, listed in 1973 |
| Main Business | <ul style="list-style-type: none">• Air compressors and associated products• Spray painting equipment, liquid application equipment, associated products and installation• Vacuum pumps and associated products |
| Accounting Term | March 31 st |
| Number of Employees | 1,415 / Japanese: 602 (43%) and Other: 813 (57%) including group companies |
| Domestic Bases | Headquarters, 2 plants and 20 branches |
| Group | 41 companies (Outside Japan : 35) |
| Accounting Period | March, 31 |

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Oilfree Scroll Compressor

Simplex Scroll Compressors
Multiplex Scroll Compressors



Oilfree Piston Compressor

Oilfree Reciprocating Compressors



Screw Compressor

Oil Lubricate Screw Compressors



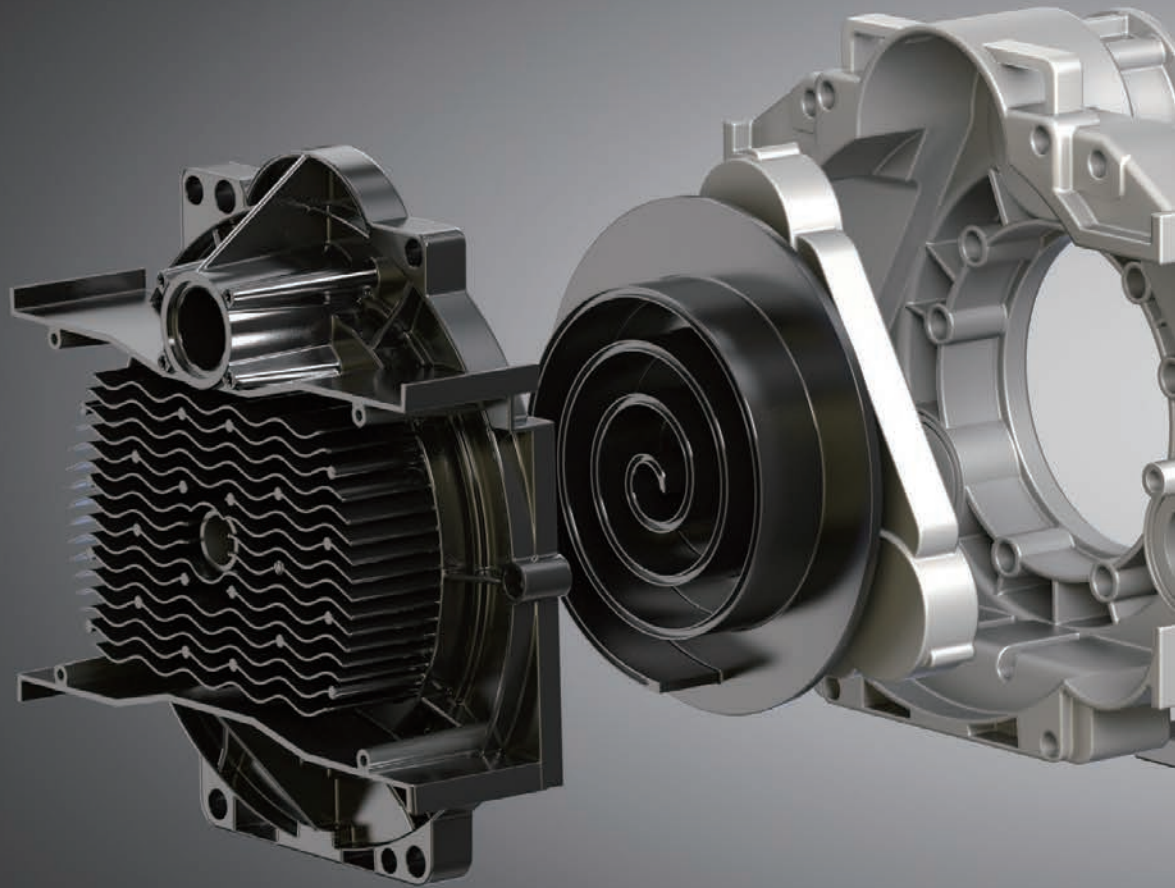
Oilfree Scroll Vacuum Pump

Dry Scroll Vacuum Pump



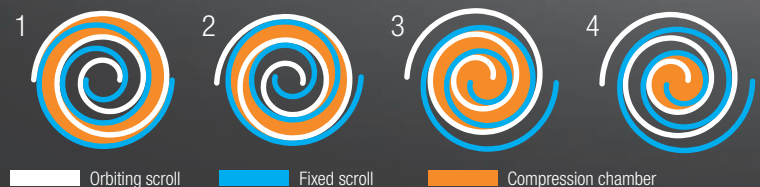
The Most Advanced Technologies for High-Quality air

High-precision processing technology is required to produce the components that make up a Scroll Compressor. We have developed new Scroll Air-Ends thanks to the experience and know-how we have accumulated over the past 20 years.



Scroll Compression Principle

As the orbiting scroll goes from No.1 to No.4 position, the size of the symmetrical crescent-shaped compression chambers is gradually reduced, compressing the air contained within. This is then discharged through the central exhaust port.



Oilfree Drain

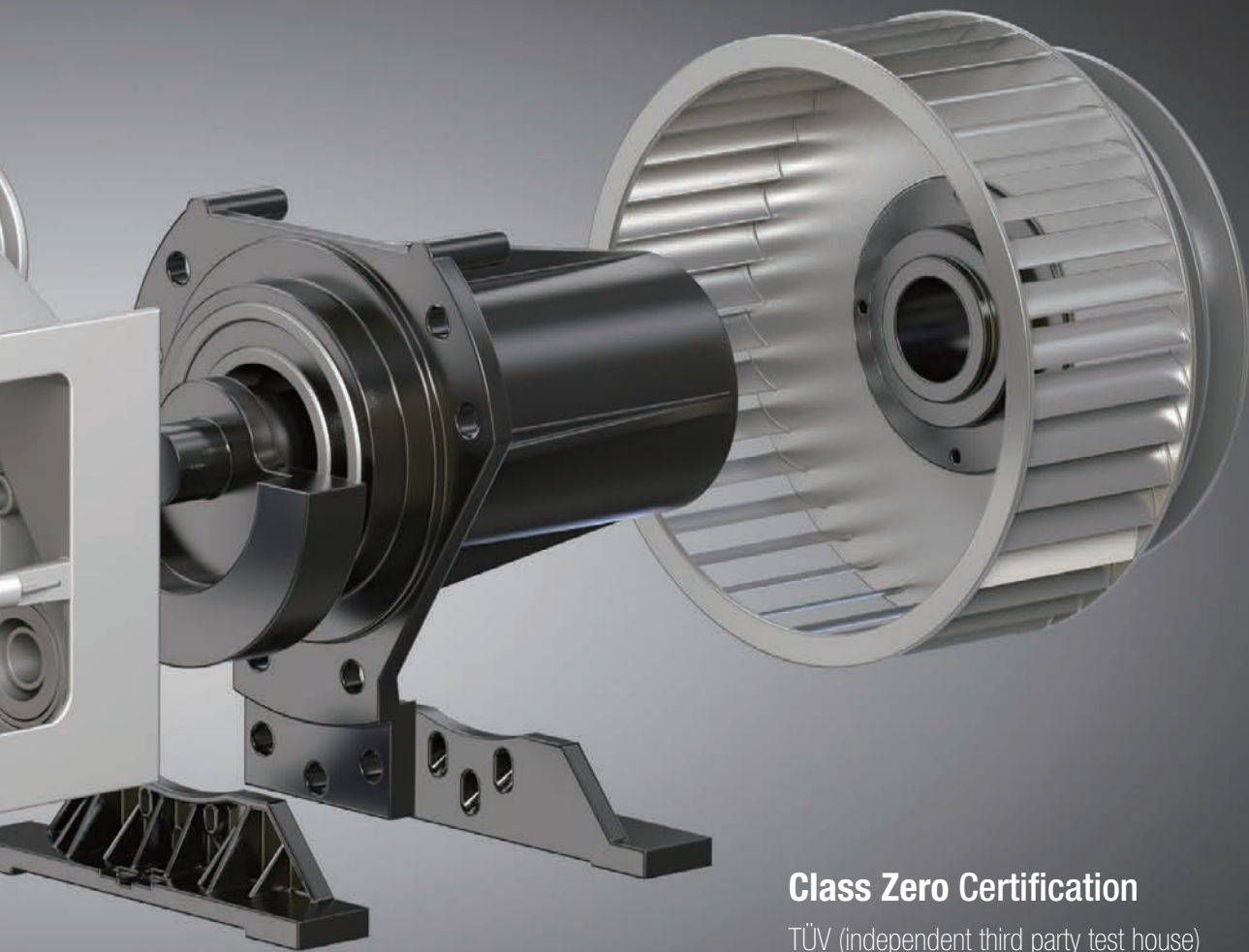
Drainage from oil-lubricated compressors requires proper treatment as it contains oil. Oilfree scroll compressors, on the other hand, are eco-friendly, their drain is clean and does not contain oil, therefore avoiding the cost of drain disposal.



Drainage from an oilfree compressor



Drainage from an oil-lubricated compressor



Class Zero Certification

TÜV (independent third party test house) has just certified that the air quality from our oilfree scroll compressors is in conformity with "Class 0 (ISO8573-1:2010[-;-:0])".



Clean

Air from oil-lubricated compressors contains oil and can contaminate the piping. This does not happen with an Oilfree Scroll Compressor which produces high-quality oilfree air.

INSIDE THE PIPING OF AN OIL-LUBRICATED COMPRESSOR



INSIDE THE PIPING OF AN OILFREE COMPRESSOR



What is Class Zero?

ISO8573-1 (JIS B8392-1) defines quality classes for compressed air. Class Zero indicates wall flow oil, oil mist and oil vapor are completely absent. As oil vapor in particular cannot be absorbed by conventional air filters, it is important factories that require clean air use Class Zero compressors.

| CLASS | Oil Concentration mg/m ³ |
|-------|---|
| 0 | As specified by the equipment user or supplier and more stringent the Class 1 |
| 1 | ≦ 0.01 |
| 2 | ≦ 0.1 |
| 3 | ≦ 1 |
| 4 | ≦ 5 |



- ① Wall Flow Oil
- ② Oil Mist
- ③ Oil Vapor

Simplex Oilfree Scroll Compressors

0.75 kW (1HP)

MADE IN GERMANY
with Japanese Engineering

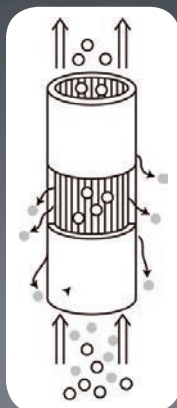
Features

- 8,000 hrs. maintenance free^{*3}
- Class Zero oilfree air
- Low noise level
- Low vibration
- Compact size
- Wheels for easy relocation
- Membrane dryer model available

49dB(A)



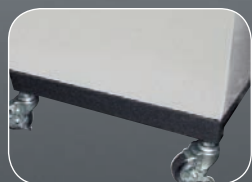
• SLPE-07E



Principle of membrane

Features of Membrane Dryer

- Environmentally friendly; no Freon gas
- Purge-cut function



Casters for better mobility



Scroll air-end (1HP) (Direct-Driven)



Aluminium air receiver (anti-rust coated)



Membrane dryer

| Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*1) | | Noise Level (*2) | Outlet size | Dryer pressure dew point °C | Tank capacity L | Net Dimensions (WxDxH) mm | Net Weight kg | Voltage Volt/Hz/Pha |
|-----------|-------|----|-------------------|-----------------------|-----|-------------|------|------------------|---------------------|-----------------------------|-----------------|---------------------------|---------------|---------------------|
| | kW | HP | | bar | MPa | L/min | m³/h | | | | | | | |
| SLPE-07E | 0.75 | 1 | Pressure switch | 8 | 0.8 | 70 | 4.2 | 49 | Rc 3/8 [ball valve] | - | 5 (internal) | 335x590x690 | 50 | 230/50/1 |
| SLPE-07ED | | | | | | 60 | 3.6 | | | 15 | | 335x660x690 | | |

*1 F.A.D. is measured at max working pressure.

*2 Noise level measured at a distance of 1M according to ISO11201; tolerance±3dB

*3 Except intake filter

• It is recommended to install air filters and an external receiver tank after the compressor.

• Even with Class Zero compressors, oil may be found in the piping.

This may be caused by the presence of oil in the piping before installation of the compressor or by accident during the production process



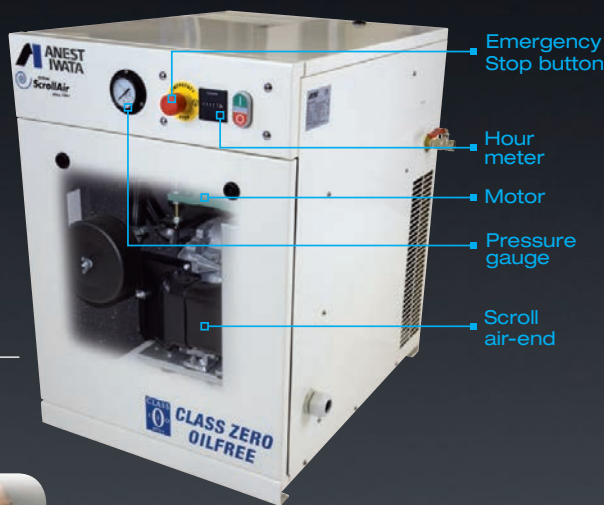
Simplex Oilfree Scroll Compressors

1.5 kW (2HP) - 7.5 kW (10HP)

Features

- 10.000 hrs. maintenance free^{*3}
- Class Zero oilfree air
- IE3 premium efficiency motor
- Control panel for easy operation in 5.5/7.5kW model
- Low noise level
- Low vibration

SLPE-15(1)E-37(1)E



SLPE-55(1)F-75(1)F



8 bar models

| | Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*1) | | Noise Level (*2) | Outlet size | Net Dimensions (WxDxH) mm | Net Weight kg | Tank capacity L | Voltage |
|----------------|----------------|-------|-----|-------------------|-----------------------|-----|-------------|------|------------------|-------------|---------------------------|---------------|-----------------|----------|
| | | kW | HP | | bar | MPa | L/min | m³/h | | | | | | |
| Standard | SLPE-15E | 1.5 | 2 | Pressure switch | 8 | 0.8 | 155 | 9.3 | 54 | Rc 3/8 | 535x685x745 | 80 | - | 230/50/1 |
| | SLPE-22E-T | 2.2 | 3 | | | | 243 | 14.6 | 56 | | | 85 | | |
| | SLPE-37E | 3.7 | 5 | | | | 404 | 24.2 | 59 | | | 105 | | |
| | SLPE-55F | 5.5 | 7.5 | Pressure sensor | | | 596 | 35.8 | 55 | Rc 3/4 | | 205 | | |
| | SLPE-75F | 7.5 | 10 | | | | 808 | 48.5 | 57 | | | 210 | | |
| w/Tank | SLPE-15E-90 | 1,5 | 2 | Pressure switch | 8 | 0.8 | 155 | 9.3 | 56 | Rc 3/8 | 1120x600x1325 | 145 | 90 | 230/50/1 |
| | SLPE-22E-T-90 | 2,2 | 3 | | | | 243 | 14.6 | 61 | | | 150 | | |
| | SLPE-37E-90 | 3,7 | 5 | | | | 404 | 24.2 | 59 | | | 165 | | |
| w/Tank w/Dryer | SLPE-15ED-90 | 1,5 | 2 | Pressure switch | 8 | 0.8 | 155 | 9.3 | 57 | Rc 3/8 | 1310x600x1325 | 185 | 90 | 230/50/1 |
| | SLPE-22ED-T-90 | 2,2 | 3 | | | | 243 | 14.6 | 63 | | | 190 | | |
| | SLPE-37ED-90 | 3,7 | 5 | | | | 404 | 24.2 | 60 | | | 205 | | |

10 bar models

| | Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*1) | | Noise Level (*2) | Outlet size | Net Dimensions (WxDxH) mm | Net Weight kg | Tank capacity L | Voltage |
|----------------|-----------------|-------|----|-------------------|-----------------------|-----|-------------|------|------------------|-------------|---------------------------|---------------|-----------------|----------|
| | | kW | HP | | bar | MPa | L/min | m³/h | | | | | | |
| Standard | SLPE-151E | 1.5 | 2 | Pressure switch | 10 | 1.0 | 119 | 7,1 | 55 | Rc 3/8 | 535x685x745 | 80 | - | 230/50/1 |
| | SLPE-221E-T | 2.2 | 3 | | | | 207 | 12,4 | 57 | | | 85 | | |
| | SLPE-371E | 3.7 | 5 | | | | 337 | 20,2 | 59 | | | 105 | | |
| w/Tank | SLPE-151E-90 | 1,5 | 2 | Pressure switch | 10 | 1.0 | 119 | 7,1 | 58 | Rc 3/8 | 1120x600x1325 | 145 | 90 | 230/50/1 |
| | SLPE-221E-T-90 | 2,2 | 3 | | | | 207 | 12,4 | 57 | | | 150 | | |
| | SLPE-371E-90 | 3,7 | 5 | | | | 337 | 20,2 | 62 | | | 165 | | |
| w/Tank w/Dryer | SLPE-151ED-90 | 1,5 | 2 | Pressure switch | 10 | 1.0 | 119 | 7,1 | 59 | Rc 3/8 | 1310x600x1325 | 185 | 90 | 230/50/1 |
| | SLPE-221ED-T-90 | 2,2 | 3 | | | | 207 | 12,4 | 58 | | | 190 | | |
| | SLPE-371ED-90 | 3,7 | 5 | | | | 337 | 20,2 | 66 | | | 205 | | |

*1 F.A.D. is measured at max working pressure.

*2 Noise level measured at a distance of 1M according to ISO11201; tolerance±3dB

*3-1 Except intake filter

*3-2 5000 hrs. for 10 bar models and 8000 hrs. for 5.5kW and 7.5kW models

• It is recommended to install air filters and an external receiver tank after the compressor.

• Even with Class zero compressors, oil may be found in the piping.

This may be caused by the presence of oil in the piping before installation of the compressor or by accident during the production process.

SLPE-551F and SLPE-751F coming soon.



Multiplex Oilfree Scroll Compressors

11 kW (15HP) - 30 kW (40HP)



Features

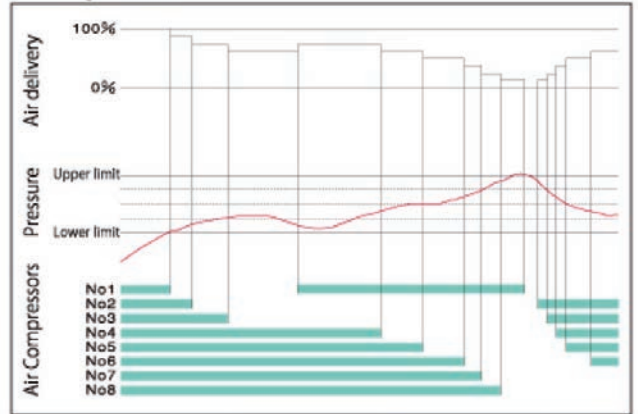
- Multi Stage Control for energy conservation
- Class Zero oilfree air
- 10.000 hrs. maintenance free for 8 bar model³
- IE3 premium efficiency motor
- Touch panel for monitoring running conditions
- Low noise level
- Low vibration



Multi-stage Scroll Compressor

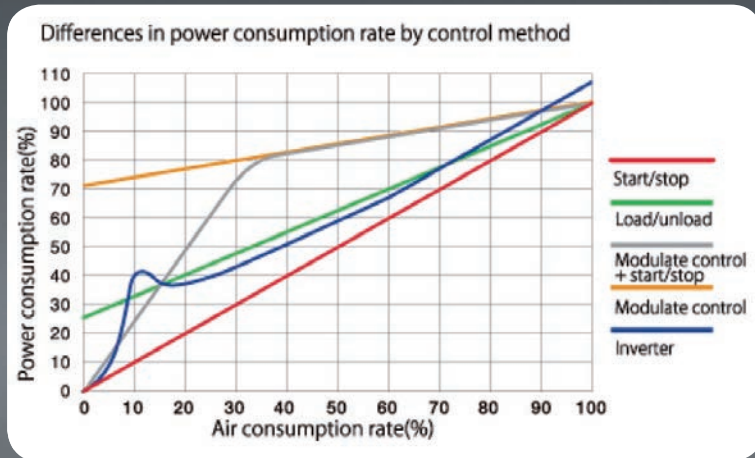


Operation of multi-stage control to achieve high energy-saving performance (multi-stage control)



Energy-saving operation with 4 compressors when consumption is low

Full operation with 6 compressors when consumption is high



8 bar models

| Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*1) | | Noise Level (*2) | Outlet size | Net Dimensions (WxDxH) mm | Net Weight kg | Voltage Volt/Hz/Pha |
|-----------|-----------|----|-------------------|-----------------------|-----|-------------|-------------------|------------------|-------------|---------------------------|---------------|---------------------|
| | kW | HP | | bar | MPa | L/min | m ³ /h | | | | | |
| SLPE-110E | 11(3x3.7) | 15 | Pressure sensor | 8 | 0.8 | 1211 | 73.0 | 59 | Rc 1 | 655x960x1555 | 365 | 400/50/3 |
| SLPE-150E | 15(4x3.7) | 20 | | | | 1615 | 96.9 | 61 | | | | |
| SLPE-220E | 22(6x3.7) | 30 | | | | 2422 | 145 | 64 | Rc 1 1/4 | | 745 | |
| SLPE-300E | 30(8x3.7) | 40 | | | | 3230 | 194 | 67 | | | 885 | |

10 bar models

| Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*1) | | Noise Level (*2) | Outlet size | Net Dimensions (WxDxH) mm | Net Weight kg | Voltage Volt/Hz/Pha |
|------------|-----------|----|-------------------|-----------------------|-----|-------------|-------------------|------------------|-------------|---------------------------|---------------|---------------------|
| | kW | HP | | bar | MPa | L/min | m ³ /h | | | | | |
| SLPE-1101E | 11(3x3.7) | 15 | Pressure sensor | 10 | 1.0 | 1009 | 61.0 | 60 | Rc 1 | 655x960x1555 | 365 | 400/50/3 |
| SLPE-1501E | 15(4x3.7) | 20 | | | | 1346 | 80.8 | 62 | | | | |
| SLPE-2201E | 22(6x3.7) | 30 | | | | 2018 | 121 | 66 | Rc 1 1/4 | | 745 | |
| SLPE-3001E | 30(8x3.7) | 40 | | | | 2692 | 162 | 65 | | | 885 | |

*1 F.A.D. is measured at max working pressure.

*2 Noise level measured at a distance of 1M according to ISO11201; tolerance±3dB

*3-1 Except intake filter

*3-2 5000 hrs. for 10 bar models

• It is recommended to install air filters and an external receiver tank after the compressor.

• Even with Class zero compressors, oil may be found in the piping.

This may be caused by the presence of oil in the piping before installation of the compressor or by accident during the production process



LIST OF TECHNICAL SPECIFICATIONS

8 bar models

| | Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*1) | | Noise Level (*2) | Outlet size | Net Dimensions (WxDxH) | Net Weight | Tank capacity | Voltage | | |
|----------------|----------------|-------|------|-------------------|-----------------------|-----|-------------|-------------|------------------|-------------|------------------------|------------|---------------|----------|---------------|----------|
| | | kW | HP | | bar | MPa | L/min | m³/h | | | | | | | kg | L |
| Standard | SLPE-07E | 0,75 | 1 | Pressure switch | 8 | 0,8 | 70 | 4,2 | 49 | Rc 3/8 | 335x590x690 | 50 | 5 (internal) | 230/50/1 | | |
| | SLPE-07ED | | | | | | 60 | 3,6 | | | 335x660x690 | 52 | | | | |
| | SLPE-15E | 155 | 9,3 | | | | 54 | 535x685x745 | 80 | | | | | | | |
| | SLPE-22E-T | 243 | 14,6 | | | | 56 | 85 | | | | | | | | |
| | SLPE-37E | 404 | 24,2 | | | | 59 | 105 | | | | | | | | |
| | SLPE-55F | 5,5 | 7,5 | Pressure sensor | | | 596 | 35,8 | 55 | Rc 3/4 | 605x970x1195 | 205 | - | 400/50/3 | | |
| | SLPE-75F | 7,5 | 10 | | | | 808 | 48,5 | 57 | Rc 1 | 655x960x1555 | 365 | | | | |
| | SLPE-110E | 11 | 15 | | | | 1211 | 73,0 | 59 | | | Rc 1 1/4 | | | 1370x955x1555 | 435 |
| | SLPE-150E | 15 | 20 | | | | 1615 | 96,9 | 61 | 745 | | | | | | |
| | SLPE-220E | 22 | 30 | | | | 2422 | 145 | 64 | 885 | | | | | | |
| SLPE-300E | 30 | 40 | 3230 | 194 | 67 | | | | | | | | | | | |
| w/Tank | SLPE-15E-90 | 1,5 | 2 | Pressure switch | 8 | 0,8 | 155 | 9,3 | 56 | Rc 3/8 | 1120x600x1325 | 145 | | | 90 | 230/50/1 |
| | SLPE-22E-T-90 | 2,2 | 3 | | | | 243 | 14,6 | 61 | | | 150 | | | | 400/50/3 |
| | SLPE-37E-90 | 3,7 | 5 | | | | 404 | 24,2 | 59 | | | 165 | | | | |
| w/Tank w/Dryer | SLPE-15ED-90 | 1,5 | 2 | Pressure switch | 8 | 0,8 | 155 | 9,3 | 57 | Rc 3/8 | 1310x600x1325 | 185 | | | 90 | 230/50/1 |
| | SLPE-22ED-T-90 | 2,2 | 3 | | | | 243 | 14,6 | 63 | | | 190 | 400/50/3 | | | |
| | SLPE-37ED-90 | 3,7 | 5 | | | | 404 | 24,2 | 60 | | | 205 | | | | |

10 bar models

| | Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*1) | | Noise Level (*2) | Outlet size | Net Dimensions (WxDxH) | Net Weight | Tank capacity | Voltage |
|----------------|-----------------|-------|----|-------------------|-----------------------|-----|-------------|------|------------------|-------------|------------------------|------------|---------------|----------|
| | | kW | HP | | bar | MPa | L/min | m³/h | | | | | | |
| Standard | SLPE-151E | 1,5 | 2 | Pressure switch | 10 | 1,0 | 119 | 7,1 | 55 | Rc 3/8 | 535x685x745 | 80 | - | 230/50/1 |
| | SLPE-221E-T | 2,2 | 3 | | | | 207 | 12,4 | 57 | | | 85 | | |
| | SLPE-371E | 3,7 | 5 | | | | 337 | 20,2 | 59 | | | 105 | | |
| | SLPE-1101E | 11 | 15 | Pressure sensor | | | 1009 | 61,0 | 60 | Rc 1 | 655x960x1555 | 365 | | 400/50/3 |
| | SLPE-1501E | 15 | 20 | | | | 1346 | 80,8 | 62 | | | 435 | | |
| | SLPE-2201E | 22 | 30 | | | | 2018 | 121 | 66 | Rc 1 1/4 | 1370x955x1555 | 745 | | |
| | SLPE-3001E | 30 | 40 | | | | 2692 | 162 | 65 | | | 885 | | |
| w/Tank | SLPE-151E-90 | 1,5 | 2 | Pressure switch | 10 | 1,0 | 119 | 7,1 | 58 | Rc 3/8 | 1120x600x1325 | 145 | 90 | 230/50/1 |
| | SLPE-221E-T-90 | 2,2 | 3 | | | | 207 | 12,4 | 57 | | | 150 | | 400/50/3 |
| | SLPE-371E-90 | 3,7 | 5 | | | | 337 | 20,2 | 62 | | | 165 | | |
| w/Tank w/Dryer | SLPE-151ED-90 | 1,5 | 2 | Pressure switch | 10 | 1,0 | 119 | 7,1 | 59 | Rc 3/8 | 1310x600x1325 | 185 | 90 | 230/50/1 |
| | SLPE-221ED-T-90 | 2,2 | 3 | | | | 207 | 12,4 | 58 | | | 190 | | 400/50/3 |
| | SLPE-371ED-90 | 3,7 | 5 | | | | 337 | 20,2 | 66 | | | 205 | | |



1 | 2 | 3 | 4 | 5 | 6¹ | 7
SLPE - 22 | 1 | E | D - M - 270

| | | | |
|----------------|--------------------|-------|---------------------------|
| 1 | Model | SLPE | Oilfree Scroll Compressor |
| 2 | Power | 07 | 0,75kW / 1HP |
| | | 15 | 1,5kW / 2HP |
| | | 22 | 2,2kW / 3HP |
| | | 37 | 3,7kW / 5HP |
| | | 55 | 5,5kW / 7,5HP |
| | | 75 | 7,5kW / 10HP |
| | | 110 | 11kW / 15HP |
| | | 150 | 15kW / 20HP |
| | | 220 | 22kW / 30HP |
| | | 300 | 30kW / 40HP |
| 3 | Max. Press. | Blank | 8 bar |
| | | 1 | 10 bar |
| 4 | Series | E | E Series |
| | | F | F Series |
| 5 | Dryer | Blank | Without Dryer |
| | | D | With Dryer |
| 6 ¹ | Power | M | Single phase, 230V/50Hz |
| | | T | Three phase, 400V/50Hz |
| 7 | Tank (coming soon) | Blank | Without tank |
| | | 90 | With 90L tank |
| | | 270 | With 270L tank |
| | | 500 | With 500L tank |

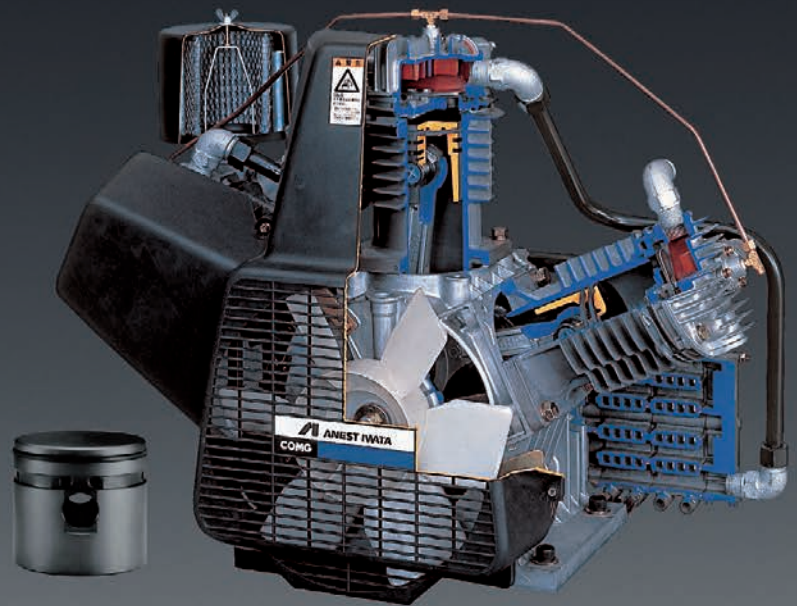
*1 : Only 2,2kW model

OILFREE RECIPROCATING TECHNOLOGY

We developed wide range of **OILFREE RECIPROCATING COMPRESSORS** in 1979 and keep improving the technologies since then along with our unique technical characteristics which are Composite Resin Piston and high pressure as well as high durability.

FEATURES:

- Oilfree Air
- Composite resin piston
- Long maintenance interval (10,000 hrs.)
- Durability for continues workload
- Wide range (0,75kW to 11kW)
- 2 way cooling system (above 2,2kW)
- 2-stage for 14 bar (above 5,5kW)



The composite resin piston

The composite resin piston is made from a heat resistant and thermosetting resin.

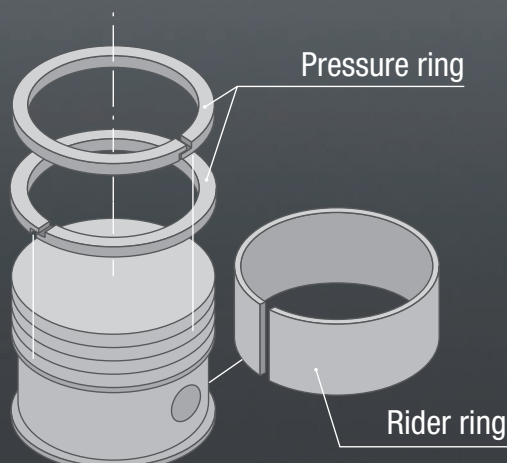
It has excellent anti-wear characteristics and can endure continuous use under high temperatures.

It eliminated the need for a rider ring, which is essential to conventional OILFREE air compressors.

This means you are free from seizure or galling, often found in the rider ring mechanism.

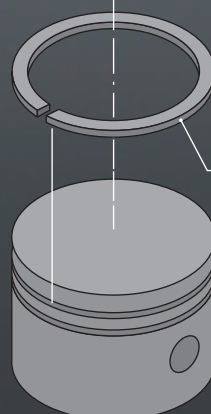
The compression ring is made from Teflon resin which has high heat and anti-wear resistance properties.

■ Conventional OILFREE piston

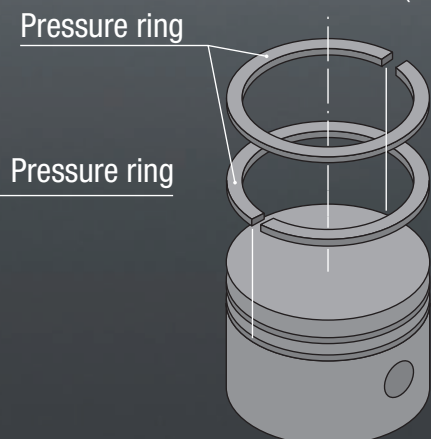


■ Composit resin piston

● LP (first stage)



● HP (two stage)



TFPE Series

MADE IN GERMANY
with Japanese Engineering

The oilfree models provide high-quality clean air.

APPLICATIONS

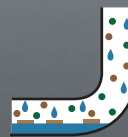
- Food & Beverage
- Dental & Medical
- Pharmaceutical
- Laboratory
- Painting
- Agriculture
- Fiber industry
- Others



Clean

Air from oil-lubricated compressors contains oil and can contaminate the piping. This does not happen with an Oilfree Scroll Compressor which produces high-quality oilfree air.

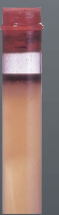
INSIDE THE PIPING OF AN OIL-LUBRICATED COMPRESSOR



INSIDE THE PIPING OF AN OILFREE COMPRESSOR



Drainage from an oilfree compressor



Drainage from an oil-lubricated compressor

| Model | Power | | Operation Control | Max. Working Pressure | | F.A.D. (*) | | Noise Level (2) | Outlet size | Net Dimensions (WxDxH) mm | Net Weight kg | Tank Capacity L | Voltage Volt/Hz/Pha |
|-----------|-------|-----|-------------------|-----------------------|-----|------------|------|-----------------|-------------|---------------------------|---------------|-----------------|---------------------|
| | kW | HP | | bar | MPa | L/min | m³/h | | | | | | |
| TFPE-55E | 5,5 | 7.5 | Pressure switch | 14 | 1.4 | 520 | 31.2 | 78 | 1" | 1500x700x1300 | 300 | 270 | 400/50/3 |
| TFPE-75E | 7,5 | 10 | | | | 700 | 42.0 | 79 | | | 330 | | |
| TFPE-110E | 11 | 15 | | | | 1020 | 61.2 | 82 | | | 400 | | |

OIL LUBRICATE COMPRESSOR

PREMIUM LINE

- Air Energy Control
- High efficiency Motor IE3
- High efficiency compression Unit
- Noise reduction
- Optimized separation system
- Efficient cooling system and ventilation

STANDARD LINE

- Easy Control
- High efficiency Motor IE3
- Encapsulated Air End
- Noise reduction



PREMIUM LINE

Screw compressors 7,5 to 90kW | 8 - 13 bar

| | Model | Power | | Flow rate m ³ /min | | | Noise level dB (A) | Compressed air out put inch | Dimensions mm (WxDxH) | Weight kg | Tank capacity L | Voltage V/Hz/Ph |
|---------------------|-----------------|-------|--------------|-------------------------------|--------------|-------------|-----------------------|-----------------------------------|--------------------------|--------------|-----------------------|--------------------|
| | | kW | HP | 8 bar | 10 bar | 13 bar | | | | | | |
| PREMIUM LINE | CAIRP-F-75 | 7,5 | 10 | 1,20 | 1,02 | 0,81 | 65 | 3/4" | 930x690x1120 | 278 | - | 400/50/3 |
| | CAIRP-F-110 | 11 | 15 | 1,65 | 1,50 | 1,17 | 67 | 3/4" | 930x690x1120 | 283 | | |
| | CAIRP-F-150 | 15 | 20 | 2,40 | 2,20 | 1,98 | 68 | 3/4" | 1215x870x1300 | 288 | | |
| | CAIRP-F-185 | 18,5 | 25 | 2,86 | 2,52 | 2,02 | 66 | 1" | 1215x870x1300 | 415 | | |
| | CAIRP-F-220 | 22 | 30 | 3,36 | 3,05 | 2,43 | 67 | 1" | 1215x870x1300 | 435 | | |
| | CAIRP-F-300 | 30 | 40 | 4,78 | 4,11 | 3,72 | 65 | 1 1/4" | 1500x1000x1450 | 707 | | |
| | CAIRP-F-370 | 37 | 50 | 5,67 | 5,12 | 4,46 | 65 | 1 1/4" | 1500x1000x1450 | 715 | | |
| | CAIRP-F-450 | 45 | 60 | 6,85 | 6,19 | 5,53 | 65 | 1 1/4" | 1500x1000x1450 | 778 | | |
| | CAIRP-F-550 | 55 | 75 | 9,10 | 8,15 | 7,40 | 73 | 1 1/2" | 2200x1450x1990 | 1720 | | |
| | CAIRP-F-750 | 75 | 100 | 12,70 | 10,30 | 9,10 | 75 | 1 1/2" | 2200x1450x1990 | 1820 | | |
| CAIRP-F-900 | 90 | 125 | 13,70 | 13,00 | 11,80 | 75 | 1 1/2" | 2200x1450x1990 | 1920 | | | |
| W/ DRYER W/ TANK | CAIRP-F-75-270 | 7,5 | 10 | 1,20 | 1,02 | 0,81 | 66 | 1/2" | 2150x720x2070 | 480 | 270 | 400/50/3 |
| | CAIRP-F-110-270 | 11 | 15 | 1,65 | 1,50 | 1,17 | 67 | 1/2" | 2150x720x2070 | 485 | 270 | |
| | CAIRP-F-75-500 | 7,5 | 10 | 1,20 | 1,02 | 0,81 | 67 | 1/2" | 2150x720x2300 | 520 | 500 | |
| | CAIRP-F-110-500 | 11 | 15 | 1,65 | 1,50 | 1,17 | 68 | 1/2" | 2150x720x2300 | 525 | 500 | |
| W/ INVERTER | CAIRP-F-150 F | 15 | 20 | 0,75 - 2,40 | 0,68 - 2,04 | 0,65 - 1,77 | 66 | 1" | 1215x870x1300 | 500 | - | 400/50/3 |
| | CAIRP-F-185 F | 18,5 | 25 | 0,82 - 2,90 | 0,78 - 2,54 | 0,75 - 2,12 | 66 | 1" | 1215x900x1300 | 523 | | |
| | CAIRP-F-220 F | 22 | 30 | 0,86 - 3,40 | 0,81 - 3,12 | 0,78 - 2,67 | 67 | 1" | 1215x900x1300 | 543 | | |
| | CAIRP-F-300 F | 30 | 40 | 1,72 - 4,90 | 1,62 - 4,37 | 1,43 - 3,77 | 65 | 1 1/4" | 1500x1000x1450 | 963 | | |
| | CAIRP-F-370 F | 37 | 50 | 2,14 - 6,09 | 1,94 - 5,53 | 1,83 - 4,80 | 65 | 1 1/4" | 1500x1000x1450 | 971 | | |
| | CAIRP-F-450 F | 45 | 60 | 2,60 - 7,40 | 2,40 - 6,50 | 2,10 - 5,50 | 65 | 1 1/4" | 1500x1000x1450 | 1033 | | |
| | CAIRP-F-550 F | 55 | 75 | 2,56 - 9,10 | 2,95 - 8,15 | 3,47 - 7,40 | 66 | 1 1/2" | 2200x1450x1990 | 1700 | | |
| | CAIRP-F-750 F | 75 | 100 | 3,60 - 12,70 | 3,70 - 10,30 | 4,20 - 9,10 | 66 | 1 1/2" | 2200x1450x1990 | 1850 | | |
| CAIRP-F-900 F | 90 | 125 | 3,60 - 13,70 | 3,70 - 13,00 | 4,20 - 11,80 | 67 | 1 1/2" | 2200x1450x1990 | 1950 | | | |



CAIRP-F-75



CAIRP-F-300

STANDARD LINE

Screw compressors 4 to 75kW | 8 - 13 bar

| | Model | Power | | Flow rate m ³ /min | | | Noise level | Compressed air out put | Dimensions | Weight | Tank capacity | Voltage |
|---------------------|------------------|-------|-------|-------------------------------|-------------|-------------|-------------|------------------------|----------------|--------|---------------|----------|
| | | kW | HP | 8 bar | 10 bar | 13 bar | dB (A) | inch | mm (WxDxH) | kg | L | V/Hz/Ph |
| STANDARD | CAIR-F-40 | 4 | 5 | 0,56 | 0,45 | 0,40 | 65 | 1/2" | 820x540x750 | 138 | - | 400/50/3 |
| | CAIR-F-55 | 5,5 | 7,5 | 0,82 | 0,72 | 0,64 | 66 | 1/2" | 820x540x750 | 143 | | |
| | CAIR-F-75 | 7,5 | 10 | 0,95 | 0,86 | 0,69 | 67 | 1/2" | 820x540x750 | 148 | | |
| | CAIR-F-110 | 11 | 15 | 1,56 | 1,43 | 1,21 | 65 | 3/4" | 940x630x850 | 254 | | |
| | CAIR-F-150 | 15 | 20 | 2,01 | 1,90 | 1,67 | 67 | 3/4" | 940x630x850 | 280 | | |
| | CAIR-F-185 | 18,5 | 25 | 2,70 | 2,50 | 2,20 | 73 | 1" | 950x850x1180 | 468 | | |
| | CAIR-F-220 | 22 | 30 | 3,28 | 2,97 | 2,39 | 74 | 1" | 950x850x1180 | 498 | | |
| | CAIR-F-300 | 30 | 40 | 4,50 | 3,90 | 3,50 | 74 | 1" | 1200x890x1350 | 679 | | |
| | CAIR-F-370 | 37 | 50 | 5,35 | 5,00 | 4,20 | 75 | 1" | 1200x890x1350 | 700 | | |
| | CAIR-F-550 | 55 | 75 | 8,00 | 7,90 | 7,00 | 74 | 1 1/4" | 1680x1285x1640 | 1230 | | |
| CAIR-F-750 | 75 | 100 | 11,50 | 10,00 | 9,00 | 76 | 1 1/4" | 1680x1285x1640 | 1350 | | | |
| W/ TANK | CAIR-F-40-270 | 4 | 5 | 0,56 | 0,45 | 0,40 | 65 | 1/2" | 1525x540x1225 | 245 | 270 | 400/50/3 |
| | CAIR-F-55-270 | 5,5 | 7,5 | 0,82 | 0,72 | 0,64 | 66 | 1/2" | 1625x540x1250 | 252 | 270 | |
| | CAIR-F-55-500 | 5,5 | 7,5 | 0,82 | 0,72 | 0,64 | 66 | 3/4" | 1625x540x1250 | 295 | 500 | |
| | CAIR-F-75-270 | 7,5 | 10 | 0,95 | 0,86 | 0,69 | 67 | 1/2" | 1625x540x1250 | 257 | 270 | |
| | CAIR-F-75-500 | 7,5 | 10 | 0,95 | 0,86 | 0,69 | 67 | 1/2" | 2040x540x1460 | 300 | 500 | |
| | CAIR-F-110-270 | 11 | 15 | 1,56 | 1,43 | 1,21 | 65 | 3/4" | 1625x630x1300 | 365 | 270 | |
| | CAIR-F-110-500 | 11 | 15 | 1,56 | 1,43 | 1,21 | 65 | 3/4" | 2040x630x1430 | 390 | 500 | |
| | CAIR-F-150-270 | 15 | 20 | 2,01 | 1,90 | 1,67 | 67 | 3/4" | 1625x630x1300 | 392 | 270 | |
| | CAIR-F-150-500 | 15 | 20 | 2,01 | 1,90 | 1,67 | 67 | 3/4" | 2040x630x1430 | 438 | 500 | |
| | CAIR-F-185-500 | 18,5 | 25 | 2,70 | 2,50 | 2,20 | 73 | 1" | 2040x850x1770 | 670 | 500 | |
| CAIR-F-220-500 | 22 | 30 | 3,28 | 2,97 | 2,39 | 74 | 1" | 2040x850x1770 | 700 | 500 | | |
| W/ INVERTER | CAIR-F-110 F | 11 | 15 | 0,32 - 1,56 | 0,30 - 1,43 | 0,26 - 1,21 | 65 | 3/4" | 1100x730x935 | 280 | - | 400/50/3 |
| | CAIR-F-150 F | 15 | 20 | 0,34 - 2,01 | 0,32 - 1,90 | 0,28 - 1,67 | 67 | 3/4" | 1100x730x935 | 310 | - | 400/50/3 |
| W/ INVERTER W/ TANK | CAIR-F-110-500 F | 11 | 15 | 0,32 - 1,56 | 0,30 - 1,43 | 0,26 - 1,21 | 65 | 3/4" | 2040x730x1540 | 430 | 500 | 400/50/3 |
| | CAIR-F-150-500 F | 15 | 20 | 0,34 - 2,01 | 0,32 - 1,90 | 0,28 - 1,67 | 67 | 3/4" | 2040x730x1540 | 575 | 500 | 400/50/3 |



CAIR-F-40



CAIR-F-40 - 270

Piston compressors

| | Model | Power | | Max. Working Pressure | Flow rate | Noise level | Dimensions | Weight | Tank capacity | Voltage |
|------------------|------------------------|-----------|-----------|-----------------------|-----------|-------------|-------------------|--------|---------------|----------|
| | | kW | HP | | | | | | | |
| MOBILE | AI-MLK 250-24-230 | 1,7 | 2,2 | 10 | 121 | 72 | 740 x 320 x 660 | 37 | 24 | 230/50/1 |
| | AI-MLK 350-50-230 | 2,2 | 3 | 10 | 155 | 74 | 740 x 320 x 660 | 39 | 50 | 230/50/1 |
| | AI-MLK 350-50-400 | 2,2 | 3 | 10 | 155 | 74 | 1010 x 338 x 690 | 55 | 50 | 400/50/3 |
| | AI-MLK 520-90-400 | 3 | 4 | 10 | 400 | 71 | 1220 x 510 x 107 | 130 | 90 | 400/50/3 |
| | AI-MLK 600-90-400 | 4 | 5,5 | 10 | 448 | 75 | 1220 x 510 x 107 | 130 | 90 | 400/50/3 |
| | AI-MBK 360-2x9,5-230 | 2,2 | 3 | 10 | 135 | 77 | 770 x 610 x 510 | 50 | 19 | 230/50/1 |
| | AI-MBK 360-20-230 | 2,2 | 3 | 10 | 135 | 77 | 520 x 430 x 790 | 45 | 20 | 230/50/1 |
| | AI-MBK 830-2x17-400 | 5,5 | 7,5 | 10 | 592 | 77 | 750 x 585 x 790 | 135 | 34 | 400/50/3 |
| | AI-MSK 350-90-230 | 2,2 | 3 | 10 | 155 | 74 | 510 x 510 x 1150 | 55 | 90 | 230/50/1 |
| | AI-MLK 422-270-400 14b | 3 | 4 | 14 | 293 | 71 | 1600 x 560 x 1040 | 145 | 270 | 400/50/3 |
| LYING | AI-LK 600-270 | 4 | 5,5 | 10 | 448 | 75 | 1600 x 560 x 1040 | 143 | 270 | 400/50/3 |
| | AI-LK 600-500 | 4 | 5,5 | 10 | 448 | 75 | 1970 x 590 x 1300 | 205 | 500 | |
| | AI-LK 830-270 | 5,5 | 7,5 | 10 | 592 | 76 | 1600 x 560 x 1040 | 150 | 270 | |
| | AI-LK 830-500 | 5,5 | 7,5 | 10 | 592 | 76 | 1970 x 590 x 1300 | 255 | 500 | |
| | AI-LK 1080-270 YD | 7,5 | 10 | 10 | 860 | 77 | 1600 x 560 x 1040 | 165 | 270 | |
| | AI-LK 1080-500 YD | 7,5 | 10 | 10 | 860 | 77 | 1970 x 590 x 1300 | 270 | 500 | |
| | AI-LK 1200-500 | 4 + 4 | 5,5 + 5,5 | 10 | 896 | 77 | 2050 x 590 x 1170 | 425 | 500 | |
| | AI-LK 1660-500 | 5,5 + 5,5 | 7,5 + 7,5 | 10 | 1184 | 78 | 2050 x 590 x 1170 | 517 | 500 | |
| STANDING | AI-SK 540-270 | 3 | 4 | 10 | 386 | 76 | 670 x 670 x 1850 | 155 | 270 | 400/50/3 |
| | AI-SK 650-270 | 4 | 5,5 | 10 | 491 | 74 | 670 x 670 x 1850 | 180 | 270 | |
| | AI-SK 830-270 | 5,5 | 7,5 | 10 | 592 | 76 | 670 x 670 x 1850 | 200 | 270 | |
| HIGH PRESSURE | AI-LK 465-270 14b | 4 | 5,5 | 14 | 326 | 73 | 1600 x 560 x 1040 | 150 | 270 | 400/50/3 |
| | AI-LK 730-270 14b | 5,5 | 7,5 | 14 | 455 | 75 | 1600 x 560 x 1040 | 152 | 270 | |
| | AI-LK 730-500 14b | 5,5 | 7,5 | 14 | 455 | 76 | 1970 x 590 x 1300 | 260 | 500 | |
| | AI-LK 820-500 YD 14b | 7,5 | 10 | 14 | 567 | 76 | 1970 x 590 x 1300 | 270 | 500 | |
| SILENT | AI-LKS 600-270 | 4 | 5,5 | 10 | 448 | 69 | 1612 x 599 x 1264 | 215 | 270 | 400/50/3 |
| | AI-LKS 830-270 | 5,5 | 7,5 | 10 | 592 | 66 | 1612 x 599 x 1264 | 230 | 270 | |
| | AI-LKS 830-500 | 5,5 | 7,5 | 10 | 592 | 66 | 2038 x 600 x 1357 | 305 | 500 | |
| | AI-LKS 1070-270 YD | 7,5 | 10 | 10 | 785 | 66 | 1612 x 599 x 1264 | 250 | 270 | |
| | AI-LKS 1070-500 YD | 7,5 | 10 | 10 | 785 | 66 | 2038 x 600 x 1357 | 325 | 500 | |
| | AI-KS 400 | 2,2 | 3 | 10 | 248 | 68 | 864 x 591 x 745 | 115 | - | |
| | AI-KS 540 | 3 | 4 | 10 | 386 | 68 | 864 x 591 x 745 | 125 | - | |
| | AI-KS 600 | 4 | 5,5 | 10 | 448 | 69 | 864 x 591 x 745 | 160 | - | |
| | AI-KS 830 | 5,5 | 7,5 | 10 | 592 | 66 | 864 x 591 x 745 | 170 | - | |
| | AI-KS 1070 YD | 7,5 | 10 | 10 | 785 | 65 | 864 x 591 x 745 | 170 | - | |
| BASE COMPRESSORS | AI-K 650 | 4 | 5,5 | 10 | 491 | 74 | 750 x 400 x 590 | 70 | - | 400/50/3 |
| | AI-K 830 | 5,5 | 7,5 | 10 | 582 | 75 | 890 x 456 x 730 | 75 | - | |
| | AI-K 1050 YD | 7,5 | 10 | 10 | 860 | 77 | 1050 x 560 x 660 | 95 | - | |
| | AI-K 1400 YD | 11 | 15 | 10 | 1110 | 78 | 1050 x 460 x 660 | 95 | - | |



AI-KS 400



AI-LKS 830-270



AI-SK 540-270

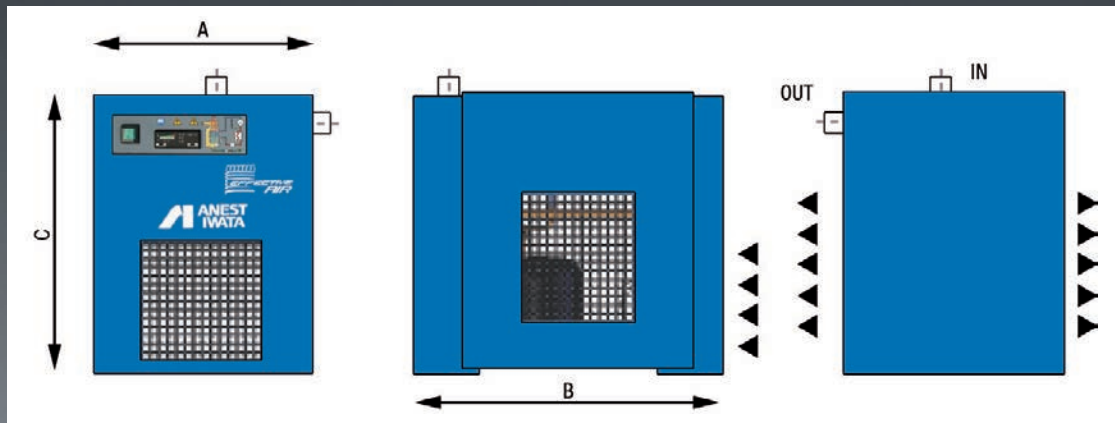


AI-MBK 360-2x9,5-230

Air Compressor Accessories

Refrigerated Air Dryer

Use of Refrigerated Air Dryers allows for the best performance of our oilfree scroll compressors. These units incorporate an electronic control to monitor all functions. A hot gas bypass valve avoids the formation of ice in the dryer. The vertical flow layout allows for easy access to the drain valve.



| Model name | Part no. | Compressor combination | | Max. air flow L/min | Outlet size | Dimension (WxDxH) mm | Weight kg | Voltage Volt/Hz/Phase |
|------------|---------------|------------------------|-----|------------------------|----------------|----------------------------|--------------|--------------------------------|
| | | kW | HP | | | | | |
| AID-3/AC | AID003GP1J000 | 3 | 4 | 350 | G3/8 | 310x345x435 | 21 | 230/50/single 230/60/single |
| AID-6/AC | AID006GP1J000 | 4 | 5.5 | 600 | G1/2 | 370x515x475 | 25 | |
| AID-9/AC | AID009GP1J000 | 5.5 | 7.5 | 950 | G1/2 | 370x515x475 | 26 | |
| AID-12/AC | AID012GP1J000 | 7.5 | 10 | 1.200 | G1/2 | 370x515x475 | 28 | |
| AID-18/AC | AID018GP1J000 | 11 | 15 | 1.800 | G1/2 | 370x515x475 | 32 | |
| AID-25/AC | AID025GP1J005 | 15 | 20 | 2.500 | G1 | 345x420x740 | 34 | 230/50/single |
| AID-32/AC | AID032AP1J005 | 18.5 | 25 | 3.200 | G1-1/4 | 345x445x740 | 39 | |
| AID-43/AC | AID043AP1J004 | 22 | 30 | 4.300 | G1-1/4 | 345x445x740 | 40 | |
| AID-52/AC | AID052AP1J004 | 22+ | 30+ | 5.200 | G1-1/4 | 485x455x825 | 41 | |
| AID-61/AC | AID061AP1J004 | 30 | 40 | 6.100 | G1-1/2 | 555x580x885 | 54 | |
| AID-75/AC | AID075AP1J003 | 37 | 50 | 7.500 | G1-1/2 | 555x580x885 | 56 | |
| AID-105/AC | AID105AP1J004 | 55 | 75 | 10.500 | G2 | 555x625x975 | 94 | |
| AID-130/AC | AID130AP1J004 | 55+ | 75+ | 13.000 | G2 | 555x625x975 | 96 | |
| AID-168/AC | AID168AP1J002 | 90 | 120 | 16.800 | G2-1/2 | 665x725x1105 | 144 | |

- Data refers to the following nominal conditions: ambient temperature of 25°C, with inlet air 7 bar and 35°C, and 5°C pressure dew point (-20.5°C atmospheric pressure dew point).
- Max. working conditions: ambient temperature 45°C, inlet air temperature 55°C and inlet air pressure 14 bar (16 bar for AID-3 to AID-18).
- It is recommended to install an air filter before the inlet.

Air Compressor Accessories

Air Receiver Tank (Vertical)



| Model name | Max. working pressure | | Capacity | Connection | Weight | Dimension |
|------------|-----------------------|-----|----------|------------|--------|--------------|
| | MPa | bar | Liter | in-out | kg | WxDxH (mm) |
| 87FY000 | 1.1 | 11 | 100 | G3/8-3/4 | 37 | 370x370x1156 |
| 87LY000 | | | 200 | | | |
| 87NY000 | | | 270 | G3/8-1 | 80 | 500x500x1648 |
| 87TY000 | | | 500 | | | |

*equipped with safety valve, pressure gauge, air release valve and drain valve

Air Filter with Auto Drain



| Model name | Max. working pressure | | Filtrating | Connection | Weight | Dimension |
|-----------------|-----------------------|-----|------------|------------|--------|------------|
| | MPa | bar | μm | in-out | kg | WxDxH (mm) |
| F4000-10G-WF1Z | 1.0 | 10 | 5μ | G3/8* | 0.45 | 80x79x171 |
| F4000-10G-WF1Y | | | 0.3μ | | | |
| M4000-10G-W-FIM | | | 0.01μ | | | |

*also available with other connection sizes from 1/8 to 1 inch

Auto Drain



| Model name | Max. working pressure | | Connection | | Electricity | Weight | Dimension |
|------------|-----------------------|-----|------------|--------------------|--------------|--------|------------|
| | MPa | bar | in-out | outlet (hose size) | | kg | WxDxH (mm) |
| BEKOMAT32 | 1.6 | 16 | G1/2 | G1/2(φ8-10) | 230V/50-60HZ | 1.0 | 179x74x115 |

*recommended electric cable is 3X 0.75mm²

Air Regulator



| Model name | max. working pressure | | Setting pressure range | | Connection | Weight | Dimension |
|-------------|-----------------------|-----|------------------------|---------|------------|--------|------------|
| | MPa | bar | MPa | bar | in-out | kg | WxDxH (mm) |
| R6000-20G-W | 1.0 | 10 | 0.05 to 0.85 | 0.5-8.5 | G3/4 | 1 | 90x90x151 |

*equipped with pressure gauge

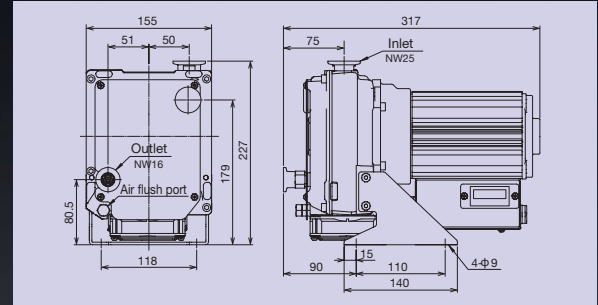
OIL FREE SCROLL VACUUM PUMP



ISP-50



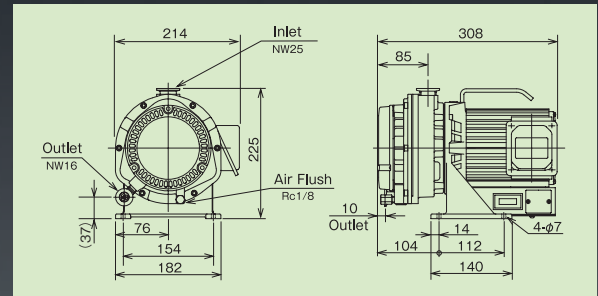
■ Dimensions



ISP-90



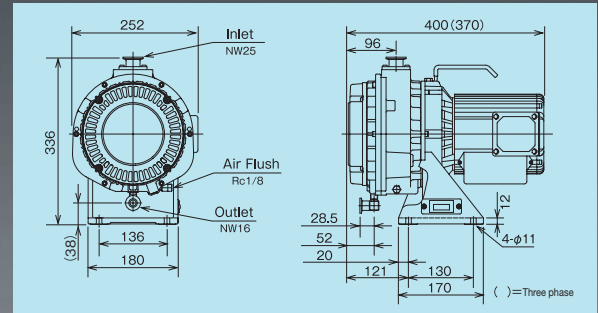
■ Dimensions



ISP-250C



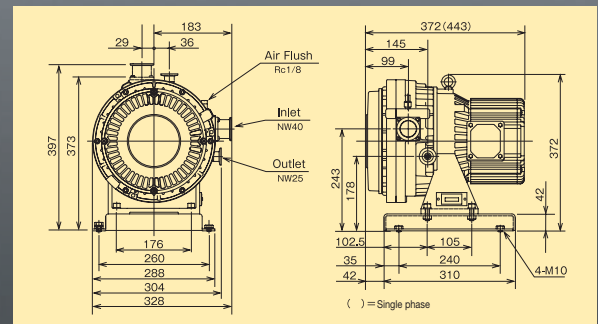
■ Dimensions



ISP-500C



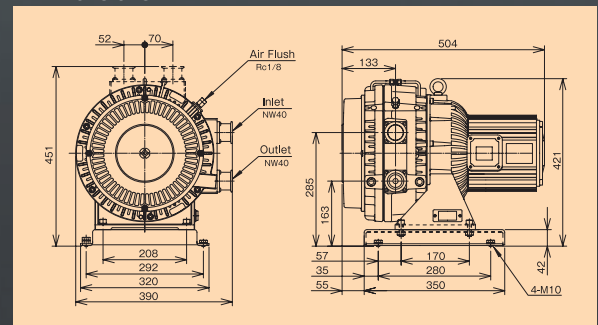
■ Dimensions

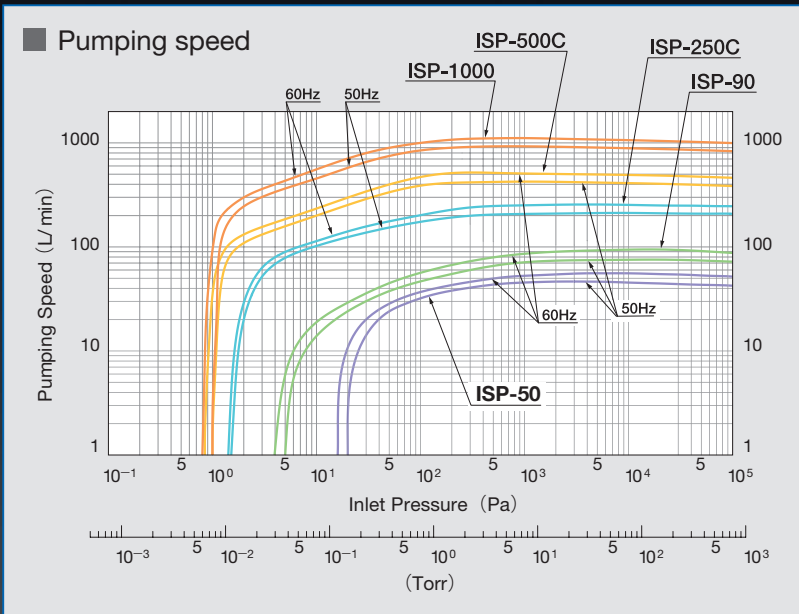


ISP-1000E



■ Dimensions





Air Flush

Purpose of Air Flush
 Pumping of humid gas by vacuum pump can cause condensed moisture to remain in pump. This remaining moisture can cause failure to ultimate pressure or pump. Air Flush operation is necessary to remove remaining moisture inside. Air Flush operation also recovers ultimate pressure.

How to select

ISP-500C-T-V

- 500= Pumping Speed of vacuum pump
- T= Three phase
- V= Vertical Inlet
- S= Single phase
- H= Horizontal Inlet

The model name of ISP-1000 is ISP-1000-TVA/THA, ISP-50 is change to ISP-50-SV1; single phase 100V, ISP-50-SV2; single phase 200V

| Trade name | | Oilfree Scroll Vacuum Pump | | | | | |
|--------------------------|------------------------|----------------------------|-------------------------|------------------------|--|------------------------|----|
| Model | | ISP-50 | ISP-90 | ISP-250C | ISP-500C | ISP-1000E | |
| Pumping speed (50 Hz) | L/min | 50 | 90 | 250 | 500 | 1000 | |
| | m ³ /h | 3,0 | 5,4 | 15,0 | 30,0 | 60,0 | |
| Ultimate pressure (50Hz) | ≅ Pa | 20 | 5 | 1,6 | 1 | 1 | |
| | ≅ mbar | 2,0 × 10 ⁻¹ | 5,0 × 10 ⁻² | 1,6 × 10 ⁻² | 1,0 × 10 ⁻² | 1,0 × 10 ⁻² | |
| Motor power | kW | 0,1 | 0,15 | 0,4 | 0,6 | 1,4 | |
| Voltage | V | Single phase | AC100V, AC200V, AC 230V | | | - | |
| | | Three phase | - | - | 100,115,200,230 (with thermal protector) | | |
| Noise level | dB(A) | 48 (at air flush 57) | 52 (at air flush 57) | 58 (at air flush 66) | 60 (at air flush 68) | 67 (at air flush 74) | |
| Weight | Kg | Single phase | 12 | 14 | 25 | 44 | - |
| | | Three phase | - | - | 23 | 38 | 56 |
| Leak tightness | Pa • m ³ /s | ≅ 1 × 10 ⁻⁷ | ≅ 1 × 10 ⁻⁵ | | | | |
| Water Vapor Capacity | g/day | 3 (at air flush) | 5 (at air flush) | 25 (at air flush) | | | |
| Air flush | L/min | 4 | 9 | 10 | | | |
| Inlet connection | NW | 25 | | 40 | | | |
| Outlet connection | NW | 16 | | 25 | 40 | | |
| Cooling system | | air-cooled | | | | | |
| Ambient temperature | °C | 5-40 | | | | 10-40 | |

● Ultimate pressure is measured as total pressure. Noise is measured in an anechoic room.

Applications

Synchrotron Facility

Evacuation units for beamlines in Synchrotron and Accelerator Facilities



High Vacuum Pumping System

Roughing pump for Turbo Molecular Pump and Mechanical Booster Pump



- Sputtering equipment, Vacuum deposition equipment, Ion plating equipment
- Gas recovery devices
- Vacuum equipment
- Leak detectors
- Device handling system

- Surface modification, Electron beam process
- Vacuum furnace, Heat treatment furnace
- Laboratory use
- Vacuum packaging machine
- Others

DRY SCROLL VACUUM PUMP



Single Phase Motor Three Phase Motor RoHS Conformity CSA Conformity CE Conformity

DVSL-100C



Single Phase Motor



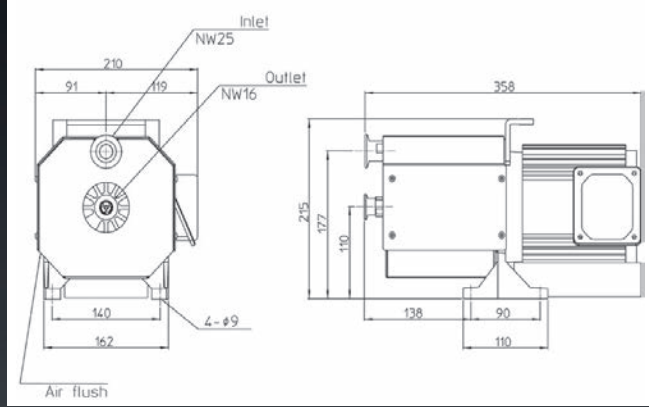
RoHS Conformity



CSA Conformity



CE Conformity



DVSL-500E/501E



Three Phase Motor



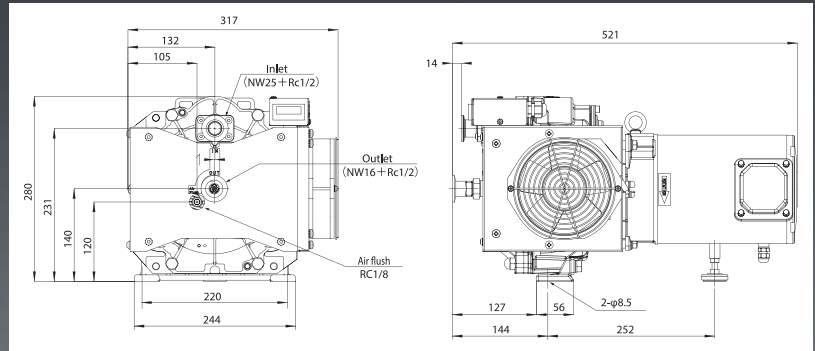
RoHS Conformity



CSA Conformity



CE Conformity



DVSL-501E-HC



Three Phase Motor



RoHS Conformity



CE Conformity

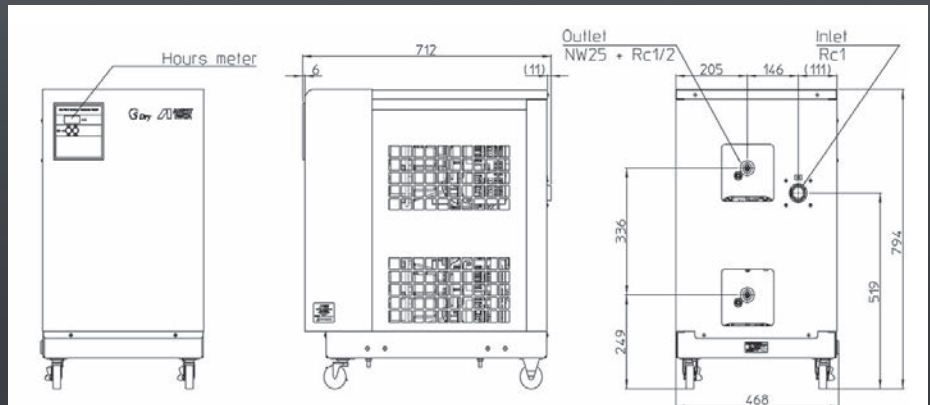


Introducing the HC model with increased durability in DVSL series! It lasts three-times longer than the standard model, thanks to the specialized finishing which is applied to the sliding surface. It is highly recommended to end-users who process water vapor frequently.

■ Product dimensions are the same as the DVSL-501C.

• Numbers and values are comparison to our current products and reference only. Results are varied depending upon application and condition of use.

DVSL-1002E



Three Phase Motor

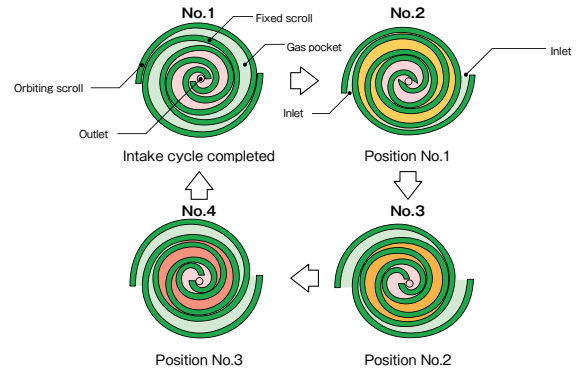
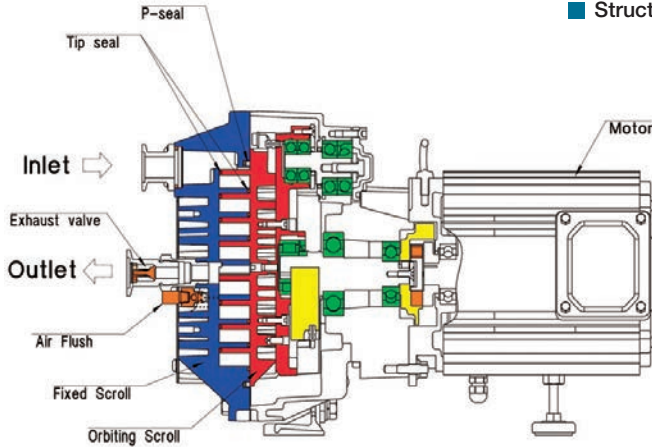
DRY SCROLL VACUUM PUMP

Excellence in continuous operation between atmosphere and vacuum and in displacing water vapor.

Application

- Vacuum Chuck
- Vacuum Transport
- Vacuum Forming
- Cryopump Regeneration
- Leak Test
- Roughing for TMP
- Deaerator
- Gas Substitution
- Vacuum Drying
- Vacuum Packing

Structure



Principle of compression

As the orbiting scroll orbits as shown in the illustration from No.1 position to No.4 position, crescent shaped gas pockets are gradually reduced. At the last stage, compressed gas is exhausted through the center port.

Air Flush

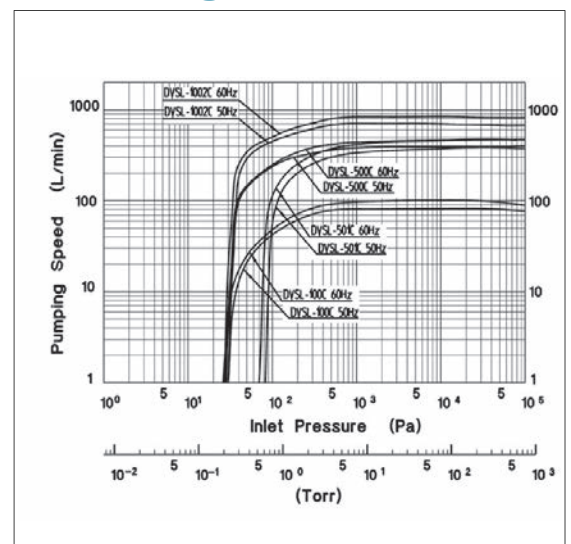
Purpose of Air Flush

Pumping of humid gas by vacuum pump can cause condensed moisture to remain in pump. This remaining moisture can cause failure to ultimate pressure or pump. Air Flush operation is necessary to pump remaining moisture inside the pump. Air Flush operation does not only pump remaining moisture but also recovers ultimate pressure.

Specifications

| Trade name | | Oilfree Scroll Vacuum Pump | | | |
|--------------------------|-------------------|---------------------------------|-----------------------------|----------------------|------------------------|
| Model | | DVSL-100C | DVSL-500E | DVSL-501E | DVSL-1002E |
| Pumping speed (50 Hz) | L/min | 100 | 430 | 430 | 845 |
| | m ³ /h | 6,0 | 25,8 | 25,8 | 50,7 |
| Ultimate pressure (50Hz) | ≅ Pa | 50 | 30 | 100 | 30 |
| | ≅ mbar | $5,0 \times 10^{-1}$ | $3,0 \times 10^{-1}$ | $1,0 \times 10^{-0}$ | $3,0 \times 10^{-1}$ |
| Motor power | kW | 0,3 | 0,9 | 0,9 | 2,4 |
| Voltage | V | Single phase 100,115,200,230 | - | | - |
| | | Three-phase | 200,208,230,380,400,415,460 | | 200,220 |
| Noise level | dB(A) | ≅ 62 (at air flush 65) | ≅ 64 (at air flush 69) | | ≅ 69 (at air flush 74) |
| Weight | Kg | Single phase 15 | - | | - |
| | | Three-phase | 36 | | 118 |
| Water vapor | g/day | 100 (at air flush) | 250 (at air flush) | | 500 (at air flush) |
| Air flush | L/min | 5 (at air flush) | 10 (at air flush) | | 20 (at air flush) |
| Inlet connection | NW | NW25 (with Rc 3/8) | NW25 (with Rc 1/2) | | Rc 1 |
| Outlet connection | NW | NW16 (with Exhaust valve) | NW25 (with Exhaust valve) | | |
| Cooling system | | air-cooled | | | |
| Ambient temperature | °C | 5-40 | | | |
| Back-up material | | Fluorine rubber | Silicon rubber | Fluorine rubber | Silicon rubber |

Pumping speed



• Pumping speed of DVSL-501C-HC is the same as the DVSL-501C.

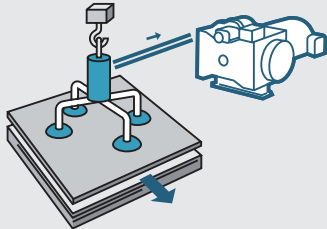
VACUUM EQUIPMENT APPLICATIONS

Vacuum equipment of Anest Iwata are utilized in various applications.

01

Pick and Place [DVSL]

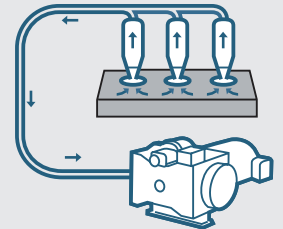
Conveying workpiece and utilizing a pressure difference with suction pad.



02

Vacuum Chuck [DVSL]

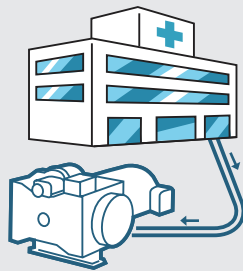
Chucking a workpiece by pressure difference. Suitable for distorted surface, soft, thin film and small objects.



03

Medical [ISP/DVSL]

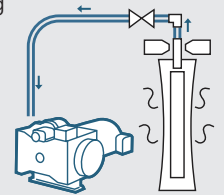
Used for various applications. Cancer therapy system, Sterilization and aspirator in the hospital etc.



04

Vacuum drying [DVSL]

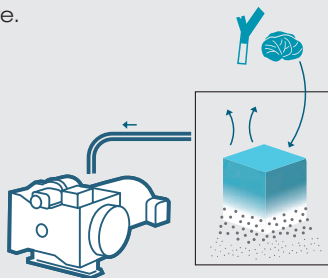
Removing unnecessary components from the work (workpiece) using vacuum pressure. It is used for delicate material against heating and complex shape. For example ... Removing washing water from mechanical parts, Removing absorbed water molecular from resin pellets, and centrifugal system for chemicals etc.



05

Vacuum-freeze drying [DVSL]

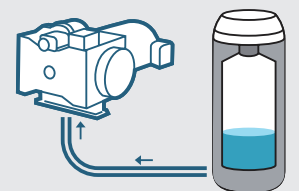
Sublimating frozen work under vacuum pressure. For example ... instant coffee, dry food, etc.



06

Vacuum heat insulation [DVSL]

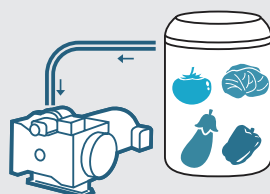
Vacuum is suitable for heat-insulation as it doesn't cause heat conduction. For example ... Vacuum heat insulation sheet, thermos etc.



07

Vacuum impregnation [DVSL]

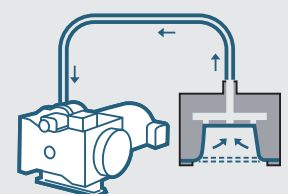
Penetrating the seasoning to groceries using a vacuum pressure. The mechanical components are utilized to infiltrate the adhesive.



08

Vacuum Forming [DVSL]

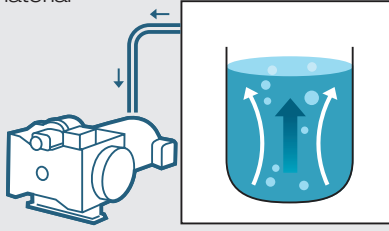
Using a vacuum pressure to the molding resin materials.



09

Degassing [DVSL]

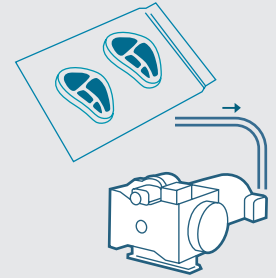
Contained gases are sucked from the material using a vacuum pressure.



10

Vacuum packaging [DVSL]

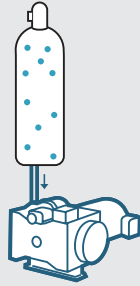
Sucking the air from the sealed bag to prevent deterioration of the food and workpiece.



11

Gas recovery devices [ISP/DVSL]

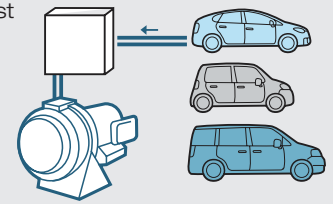
Make it easier to fill the gas to the container which is under vacuum pressure. It is also used to recover the gases, which are the rare gas and the effective gas to the environment (ISP series).



12

Exhaust gas inspection [ISP]

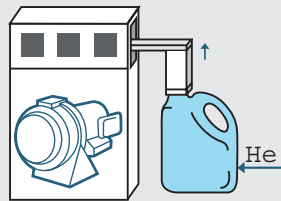
It is used for the inspection of particulate contained in the exhaust gas of automobiles.



13

Leak detectors [ISP/DVSL]

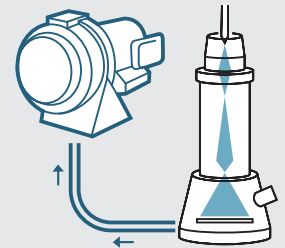
Checking the leakage of containers by pressure change during the certain time under the vacuum pressure. Leak tight pump is needed for Helium leak tester to prevent the influence of background (ISP series).



14

Electron microscope [ISP]

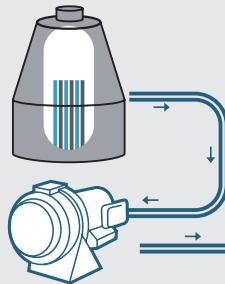
The vacuum pressure is needed in the chamber when the sample is scanned by shot electron beam.



15

Vacuum heat treatment [ISP]

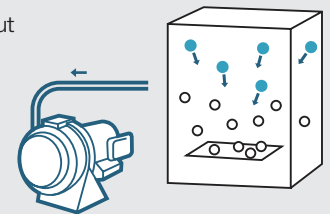
Preventing the oxidation and removing absorbed gas for heat treatment under the vacuum pressure.



16

Sputtering [ISP]

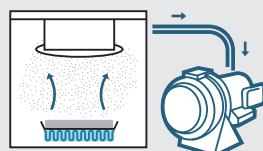
Deposit metal on a surface by using fast ions to eject particles out of it from a target.



17

Evaporation deposition [ISP]

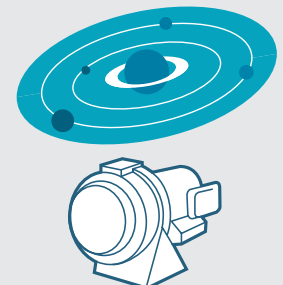
Deposit metal on a surface by heating a target in vacuum chamber.



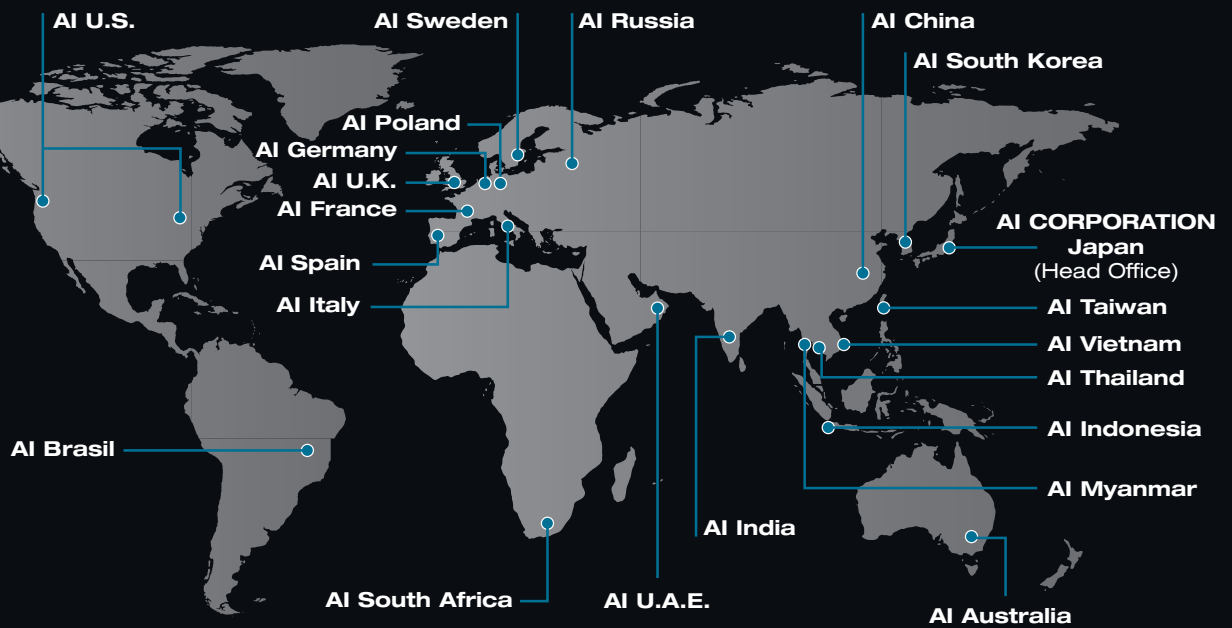
18

Accelerator • Synchrotron [ISP]

By creating clean vacuum condition, we are supporting world's cutting-edge technologies such as accelerator and particle physics.



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