QUALITY & SERVICE GUARANTEED

Ozair

7.5KW-132KW

Oil-injected Rotary Screw Air Compressor

Belt Driven | Direct Driven | One Shaft

2021.5

Ozair

7.5KW-132KW

Oil-injected Rotary Screw Air Compressor

L Series Fixed Speed

C Series VSD Permanent Magnet

L Series C Series

ASME ISO 9001:2015 CE

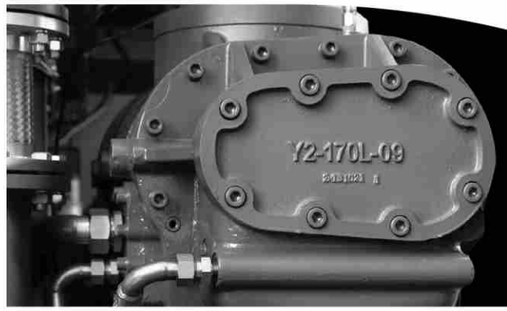
OZair Company Profile

OZair Compressors is an Australian owned and operated company. OZair Compressors manufacturing partner's factory is located in Guangzhou. The factory has advanced assembly, production line and testing equipment to support us to develop, design and manufacture screw air compressors that comply with the regulation of ISO9001 quality system & compressor industry standard. OZair Compressors management, sales and after sales team offers professional compressor solutions and quality service to customers.

Ozair screw air compressors are widely used in all industries such as oil, chemical, garment, plastic, glass, cement, water treatment, agriculture, food, construction, joinery etc. Models available includes L series fixed speed screw air compressor, CPM permanent magnet variable speed screw air compressor. Product power range is from 7.5kw to 250kw.

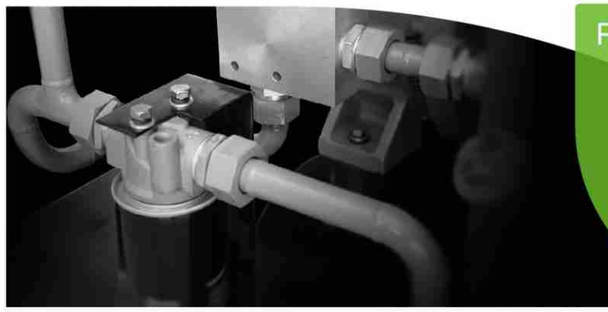
We pride ourselves in providing outstanding customer service and the fact that when you contact us you will always be able to talk to someone who can answer your questions and offer a solution to any problems you may have.

Ozair



Air-end

- High efficiency
- Low rotor speed
- Low vibration, stable and reliable performance
- Adopt the triple design of cylindrical roller & taper roller bearing, for longer service life



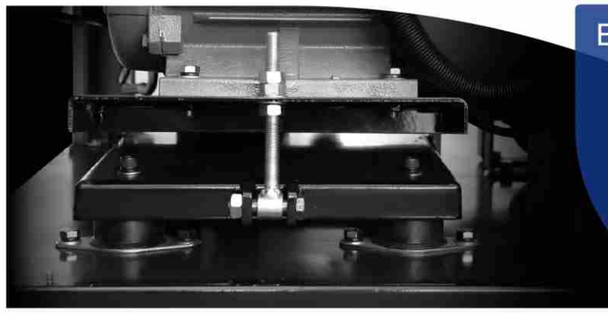
Pipe system

- Stainless steel hard pipe
- Good heat dissipation
- Using O ring seal
- No leakage problems, long service life

L Series

Oil filter

- High precision filter
- Keeps the oil system clean
- Superfine glass fibre, dust-holding capacity is 4 times bigger than filter paper
- Prevents air-end damaged



Easy maintenance

- Belt tension easy to adjust
- Good structure design, big internal volume, convenient maintenance
- There are rubber mounts under motor and air-end, reduces noise

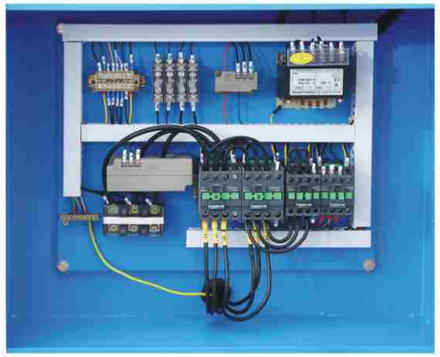
Belt Driven

L Series-Fixed Speed

OL11CB-8

Belt Driven

Big Air-end Low Speed



Intelligent Micro-Computer Control System

- International standard design
- Intelligent PLC controller, automatically adjusts air compressor load & unload according to the air demand
- Structure of electric box, easy to maintain
- Schneider electric parts, ensuring reliable operating
- Good fault diagnosis and protect function, stable and saving energy

OZCOOL Lubricating oil

- **High antioxidant ability**.
  Resists oil viscosity changes avoids varnish build up and air/oil separator blockages. Increases the maintenance interval time. Although being used in adverse conditions, OZCOOL efficiency is higher than the normal compressor oil.
- **Wide range usage temperature.**
  OZCOOL runs smoothly and efficiently under the higher oil temperatures and higher discharge temperatures .
- **Lower volatility.**
  OZCOOL has lower volatility than normal compressor oil which reduces the oil consumption and improves the quality of compressed air.
- **High quality.**
  OZCOOL is suitable for using in adverse conditions.

PLC Control System

- The compressor controller will show the maintenance reminders, fault alarm and safety shutdown function.
- PLC control system can diagnose and protects by it self.
- PLC control system had block control and remove control function(option).

Technical Parameters(Belt Driven)

Model	Max Working Pressure		F.A.D		Motor Power		Connection	Net Weight	Dimension (L*W*H)
	bar	psig	m³/min	CFM	hp	kW		kgs	mm
OL7.5CB-7	7	102	1.2	42	10	7.5	G1/2"	220	850x600x850
OL7.5CB-8	8	116	1.1	38					
OL7.5CB-10	10	145	1.0	35					
OL7.5CB-13	12.5	182	0.8	28					
OL11CB-7	7	102	1.8	63	15	11	G3/4"	280	850x600x950
OL11CB-8	8	116	1.7	60					
OL11CB-10	10	145	1.5	52					
OL11CB-13	12.5	182	1.3	45					
OL15-7	7	102	2.5	88	20	15	G1"	380	950x870x1230
OL15-8	8	116	2.4	84					
OL15-10	10	145	2.2	77					
OL15-13	12.5	182	1.7	60					
OL18.5-7	7	102	3.2	113	25	18.5	G1"	500	950x870x1230
OL18.5-8	8	116	3.0	105					
OL18.5-10	10	145	2.7	95					
OL18.5-13	12.5	182	2.3	81					
OL22-7	7	102	3.8	134	30	22	G1"	540	950x870x1230
OL22-8	8	116	3.7	130					
OL22-10	10	145	3.2	113					
OL22-13	12.5	182	2.7	95					
OL30-7	7	102	5.2	183	40	30	G1-1/2"	680	1150x990x1395
OL30-8	8	116	5.0	176					
OL30-10	10	145	4.5	158					
OL30-13	12.5	182	3.6	127					
OL37-7	7	102	6.5	229	50	37	G1-1/2"	730	1150x990x1395
OL37-8	8	116	6.2	218					
OL37-10	10	145	5.6	197					
OL37-13	12.5	182	4.6	162					
OL45-7	7	102	7.5	264	60	45	G1-1/2"	790	1150x990x1395
OL45-8	8	116	7.2	254					
OL45-10	10	145	6.5	229					
OL45-13	12.5	182	5.6	197					

- According to the standard of GB19153-2009
- Compressor Stage: One Stage Compression
- Standard Power Supply: 415V/50Hz/3Ph
- Exhaust Temperature: Ambient Temperature + 15 ℃
- Please contact us for any specification that is not within the above mentioned standards.

L Series-Fixed Speed

Direct Driven

- Motor connects to the air-end directly by a coupling, no gear box needed, this design greatly improves the transmission efficiency. OZair compressor produces 1:1 energy transfer.
- Ozair screw air compressor is stable and reliable, has low vibration, offers continues smooth compressed air to users.
- The compressor design temperature is rated at (46℃) and high humidity conditions, this design avoids the shutdown possibility caused by high temperatures.
- Silent enclosure, low noise & low vibration.
- PLC controller ensures reliable and efficient operation.

Ozair Ozair

Technical Parameters(Direct Driven)

Model	Max Working Pressure		F.A.D		Motor Power		Connection	Net Weight	Dimension (L*W*H)
	bar	psig	m³/min	CFM	hp	kW		kgs	mm
OL15D-8	8	116	2.4	84	20	15	G1"	520	1410x850x1135
OL18.5D-8	8	116	3	106	25	18.5	G1"	540	1410x850x1135
OL22D-8	8	116	3.6	127	30	22	G1"	560	1410x850x1135
OL37D-8	8	116	6.2	218	50	37	G1-1/2"	740	1530x930x1255
OL45D-8	8	116	7.6	268	60	45	G1-1/2"	800	1530x930x1255
OL55D-8	8	116	10.0	353	75	55	G1-1/2"	1180	1800x1125x1430
OL75D-8	8	116	13.0	459	100	75	G2"	1470	2000x1300x1600
OL90D-8	8	116	16.0	565	120	90	G2"	1950	2130x1400x1750
OL110D-8	8	116	20.0	706	150	110	DN65	2450	2550x1550x1900
OL132D-8	8	116	24.0	847	180	132	DN65	2500	2550x1550x1900

- According to the standard of GB19153-2009
- Compressor Stage: One Stage Compression
- Standard Power Supply: 415V/50Hz/3Ph
- Exhaust Temperature: Ambient Temperature + 15 ℃
- Please contact us for any specification that is not within the above mentioned standards.

Permanent Magnet
Variable Speed Screw Air Compressor

C Series

Permanent Magnet Synchronous Motor(PM)
Adopts the high efficiency NdFeb permanent magnet,
It won't lose magnetism up to a temperature of 140℃.
The service life is more than 15 years.

Stator Coil
Using the wire which is specialized for inverter use. Excellent insulation, longer service life.

When the use of air is intermittent, average energy saving achieved is 35-50%.

Reduces the working pressure of the system.
The constant pressure is more efficient.

No power consumption when it is not loading .
No unloading,
No electricity wastage.

Permanent magnet synchronous motor for higher efficiency.

Wider range of the AC voltage(300V-440V).
The compressor can run normally and it won't stop in this range.

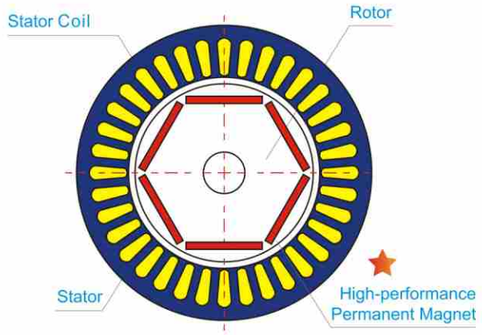
Can adjust the discharge air volume according to the pressure.

Colour touch screen
Operation is easy to use.

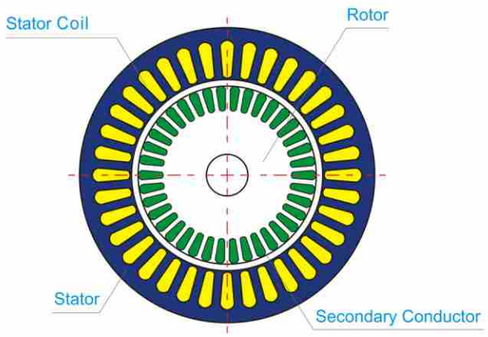
Comparison(Permanent Magnet Synchronous Motor & Normal Asynchronous Motor)

Magnetic field is the foundation for the motor to achieve the electrical energy conversion.

Compared to the asynchronous motor, the permanent magnet motor has following the advantages.



Permanent Magnet Synchronous Motor



Asynchronous Induction Motor

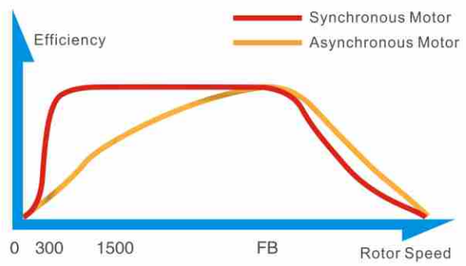
High Efficiency It cancels the loss of the excitation system which improves efficiency 5%-12% .
The power factor is high , the force ratio of inertia is high.
The motor is in directed drive, without the speed slip loss, No need for motor bearing and coupling to drive, that can improve additional 3% efficiency.
When in light loading, the PM motor can improve efficiency between 15-35% as the same specifications induction motor. It is always highly efficient at light or heavy load.
At present, OZair is using the PM motor technology for first class energy savings.

Low noise

Compact structure ,Small Size,Light weight
The structure is simple ,reliable to operate and easy to maintain.

High precision, Fast Response

Bigger Starting Torque



Synchronous Motor and Asynchronous Motor Efficiency Curve

Application of Permanent Magnet Motor

- OZ air uses the high efficiency permanent magnet synchronous motor. Compared with the normal asynchronous VSD motor , energy saving performance is higher. The full load efficiency of one 37kW compressor is 97%,however,the efficiency of same level asynchronous motor is only 92% ,**it may save 5% more energy.**
- When at low speed, the permanent magnet synchronous motor efficiency won't change, but normal asynchronous motor efficiency will be lower. **So the PM can save energy more than 7%- 11%.**
- 37kW means the shaft power of the main motor. The actual input power is (37 • 1.15 service factor) =42.55kW .If the compressor works for 6000 hours per year ,It can save the electric charge : 6000H • 60% • 42.55kW • 7%=10722.6 kW • h/year.

Application of VSD Technology

- For example, 1unit 37kW compressor, if the load rate is 60% ,it means the unloading rate is 40%, it will waste 21.3kW (Full load is 42.55kW÷2)when in unloading. If the compressor will run 6000 hours per year, **so it may waste electricity 51,120 kW • h (21.3kW • 2400 hours).**
- OZ air C37PM can help you save electric up to 51120 kW • h/year!
- 37kW means the shaft power. The actual input power is 42.55kW .If the compressor will run 6000 hours per year ,loading rate is 60%. It will use electric 153,180kW • h, But in actual operation, the unloading rate is 40%, It costs electrical energy of 21.3kW when unloading, which means waste electric charge 51220kW • h(6000h • 40% • 22kW).
Generally the compressor won't work at full load, industry statistics show the average loading rate is 60%.
When running unloaded, the motor is still running, that means that electricity is wasted.

*** Above data is the Industry data, the actual saving value is depends on actual use.**

Without Pressure Loss

- The normal compressor is in 0.8Mpa, in fact the unloading pressure is 0.8Mpa .and the loading pressure is 0.65Mpa .That means 0.6Mpa is enough for running.
- You can adjust the pressure in 0.65 MPa when using the OZ air C37PM, which can help you save electricity 10722.6 kW • h/year. For every 0.14barg pressure drop, it can save 1% energy. We can take 7% as example.
- 37kW means the shaft power, the actual input power is 43kW.If the compressor runs for 6,000 hours per year .

Save Electricity
6,000h • 60% • 42.55kW • 7%=10,722.6 kW • h/year.

C Series

C SERIES
PM Synchronizing

Ozair

Double Energy Saving

Permanent Magnet Variable Speed Screw Air Compressors

1. Vector control technology ,fast response.
2. Soft Starts: starting impact is reduced.
3. Control in variable flow, stable air supply.

2. Customized smart touch screen and control module, which can record the operation parameters and the working conditions.
3. Maintenance information, which can set the run time and stop time.
4. Adjust the discharge air volume according to the air pressure.

3. The overhaul of the newest air-end is 8 years.
4. The service life of the PM motor is over 15 years.
5. The efficiency of the PM motor is 97.37%,which exceeds IE3.
6. Compact structure and smaller size
7. Wide frequency conversion range : 25-100%

4. Using stainless steel pipe, durable and anti-aging
5. Using thread and O-ring seal, remove conveniently and reduce leaks.

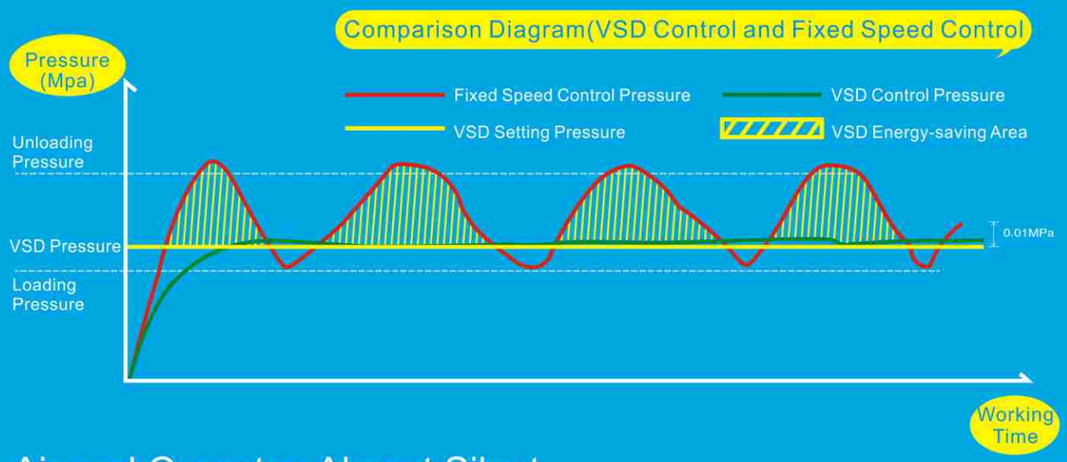
5. The fan is in low speed, with longer service life.
6. Cooler and fan can be removed independently, there is 20% cooling margin.
7. The best collocation can satisfy in 50℃ environmental.

6. Reliable inlet valve system. No need to worry about the oil spray when the emergency stop is activated and power failure.

Why Choose OZ air PM Compressor?

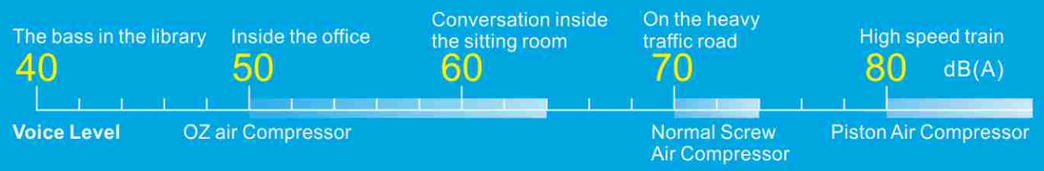
Compared with the normal fixed speed and normal VSD screw air compressor, if low air consumption is required, the PM screw compressor has lower energy consumption and more energy saving.

Most of factories will choose a compressor with 20% higher air volume as they need. If there is a big fluctuation in the air consumption in any time(difference time, every day, every year). It may result most of the loading rate is about 50% to 70%. The User spends unnecessary electricity costs, which means they can not reduce the product cost. Now the material cost is no longer the key of product cost, the electricity has become the key of product cost. So save electricity means save products cost, which make your products more competitive.



Air-end Operates Almost Silent

- **Using advanced structural design, optimization of fluid and sound-absorbing materials and other kinds of methods achieves the ultra low operating sound.**
- **The fan can be controlled by the inverter, that can further reduce the noise(optional).**
- **Consider the sound pressure, sound quality, the volume of noise and other countermeasures, make the noise drop to a minimum ensuring it suitable for any factory**



40%

Energy-saving

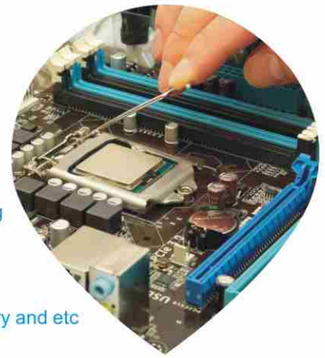
C series -The Permanent Magnet motor VSD Screw Air Compressor

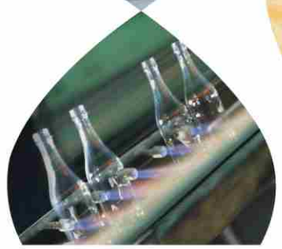
Ozair

Real Energy-Saving Products

OZ air Permanent Magnet motor Variable Speed Screw Air Compressors

Application Area





- Textile
- Glass
- Cement
- Printing and dyeing
- Water treatment
- Chemical industry and etc
- More areas
- Construction
- Joinery

Technical Parameter

C Series Permanent Magnet VSD Screw Air Compressor

Model	Max Working Pressure		F.A.D		Motor Power		Connection	Net Weight	Dimension (L*W*H)
	bar	psig	m³/min	CFM	hp	kW		kgs	mm
C7.5PM	6	87	1. 20	42	10	7.5	G1/2"	220	930x750x1210
	7	102	1.18	41					
	8	116	1.15	40					
	10	145	0.90	31					
C11PM	6	87	2.1	74	15	11	G1"	450	1150x800x1200
	7	102	1.9	67					
	8	116	1.8	63					
	10	145	1.5	52					
C15PM	5	72	2.8	98	20	15	G1"	480	1150x800x1200
	6	87	2.6	91					
	7	102	2.3	81					
	8	116	2.2	77					
	10	145	1.8	63					
C22PM	5	72	4.7	165	30	22	G1"	500	1150x800x1200
	6	87	4.4	155					
	8	116	3.6	127					
	10	145	3.0	105					
C30PM	5	72	6.1	215	40	30	G1-1/2"	650	1350x930x1255
	6	87	6.0	212					
	7	102	5.2	183					
	8	116	5.0	176					
	9	130	4.5	159					
	10	145	4.4	155					
C37PM	5	72	7.9	278	50	37	G1-1/2"	680	1350x930x1320
	6	87	7.3	257					
	7	102	6.6	233					
	8	116	6.4	226					
	9	130	5.7	201					
	10	145	5.4	190					
C45PM	5	72	10.0	353	45	45	G1-1/2"	930	1500x1125x1480
	6	87	9.4	332					
	7	102	8.6	303					
	8	116	8.0	282					
	9	130	7.1	250					
	10	145	6.8	240					
C55PM	5	72	11.8	416	75	55	G1-1/2"	950	1500x1125x1480
	6	87	11.0	388					
	7	102	10.3	363					
	8	116	9.7	342					
	9	130	9.0	317					
	10	145	8.6	303					
C75PM	5	72	15.9	561	100	75	G2"	1150	1700x1200x1600
	6	87	15.4	543					
	8	116	13.2	466					
	10	145	11.6	409					
C90PM	5	72	20.1	709	120	90	G2"	1560	1900x1300x1900
	6	87	17.8	628					
	7	102	16.6	586					
	8	116	15.2	536					
	9	130	13.9	490					
	10	145	13.3	469					
C110PM	6	87	21.9	773	145	110	DN65	1700	2250x1500x1900
	7	102	20.4	720					
	8	116	19.9	702					
	9	130	18.3	646					
	10	145	16.7	589					
C132PM	5	72	26.9	949	180	132	DN65	1760	2250x1500x1900
	6	87	25.5	900					
	7	102	24.1	851					
	8	116	22.5	794					
	10	145	20.1	709					

- According to the standard of GB19153-2009
- Compressor Stage: One Stage Compression
- Standard Power Supply: 415V/50Hz/3Ph
- Exhaust Temperature: Ambient Temperature + 15 ℃
- Please contact us for any specification that is not within the above mentioned standards.

OZ air

Refrigerated Air Dryer

▸HDF Series Technical Parameters

Model	Air Capacity	Refrigerant	Compressor Power	Power Supply	Dimension(L*W*H)	N.W.	Air Connection
	m^3/min		W	V/Ph/Hz	mm	kg	inch
HDF13	1.3	R134a	360	230V/1HP/50Hz	550x370x704	30	G3/4"
HDF21	2.1	R134a	364	230V/1HP/50Hz	550x370x704	34	G3/4"
HDF40	4	R410a	700	230V/1HP/50Hz	520x500x809	55	G1"
HDF66	6.6	R410a	951	230V/1HP/50Hz	520x500x809	60	G1.5"
HDF85	8.5	R410a	988	230V/1HP/50Hz	550x600x958	68	G1.5"
HDF105	10.5	R410a	1000	230V/1HP/50Hz	550x600x958	75	G2"
HDF140	14	R410a	1674	230V/1HP/50Hz	900x750x1009	110	G2"
HDF175	17.5	R410a	1750	230V/1HP/50Hz	900x750x1009	126	G2"
HDF220	22.0	R410a	2850	230V/1HP/50Hz	900x1150x1200	133	G2.5"
HDF260	26.0	R410a	3000	230V/1HP/50Hz	900x1150x1200	140	G2.5"

LINGHEIN Dryer Correction Factor

Inlet pressure correction factor									
bar	5	6	7	8	9	10	11	12	13
K1	0.9	0.97	1	1.03	1.06	1.08	1.1	1.12	1.13

correction caslvulatio

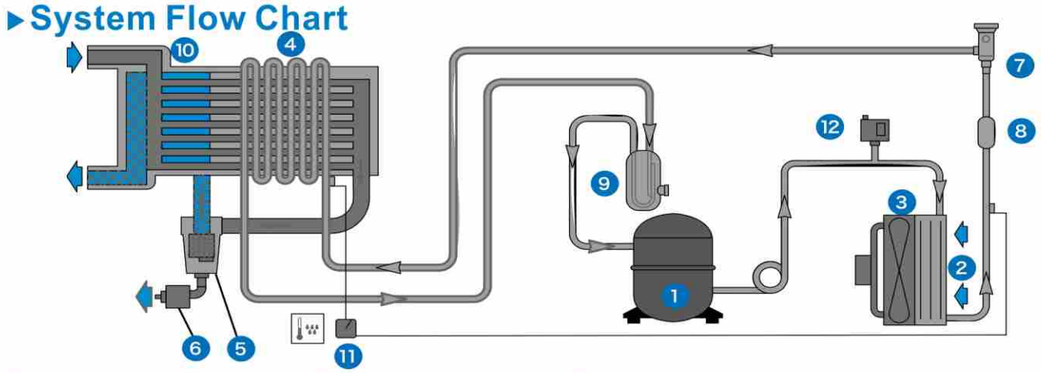
$$\frac{\text{capacity}}{m^3/\text{min}} = \frac{\text{actual capacity } m^3/\text{min}}{(K1)x(K2)x(K3)}$$

Inlet temperature correction factor							
℃	25	30	35	40	45	50	55
K2	1	1	1	0.82	0.69	0.58	0.45

ambient temperature correction factor					
℃	25	30	35	40	45
K3	1	1	1	0.82	0.69

HDF&HDP design conditions:
* Ambient Temperature: 25℃ *Inlet Temperature: 35℃ *Inlet pressure 7bar

▸System Flow Chart



1. Refrigerant Compressor
2. Air-cooled Condenser
3. Motor Fan
4. Evaporator
5. Air Water Separator
6. Electric auto drain
7. Expansion valve
8. Dry Filter
9. Air Liquid Separator(HDF40-HDF175)
10. Air Heat Exchanger
11. Dew Point Display
12. High Pressure Protection Switch(HDF40-HDF175)

Ozair

▸Different Grade of Line Air Filter Element

P Filter-Dust Removal Air Filter
Get rid of mass of water, the particles which bigger than 3 micron (oil content in the gas:≤1ppm).


P


M

M Filter-oil Removal Air Filter
Get rid of liquid water, oil mist ,the solid particles which bigger than 0.1 micron (oil content in the gas:≤0.1ppm).

H Filter-High Precision Air Filter
Get rid of liquid water, oil mist ,the solid particles which bigger than 0.01 micron (oil content in the gas:≤0.01ppm).

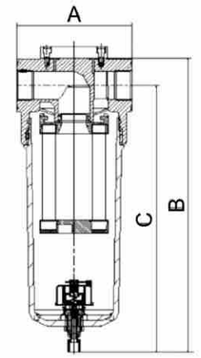

H


C

C Filter- Activated Carbon Air Filter
The activated carbon absorb the oil vapors and hydrocarbon (oil content in the gas:≤ 0.003ppm).

▸Line Air Filter Technical Parameter

Model	Connection	Air Capacity		Dimension(mm)		
		m^3/min	CFM	A	B	C
F0046	G3/4"	1.3	45	95	220	197
F0070	G3/4"	2.0	70	95	280	257
F0100	G3/4"	2.8	100	95	280	257
F0125	G1"	3.5	125	125	320	290
F0180	G1"	5.1	180	125	320	290
F0265	G1-1/2"	7.5	265	125	400	370
F0370	G1-1/2"	10.5	370	125	400	370
F0515	G2"	14.6	515	170	520	478
F0745	G2"	21.1	745	170	700	658
F0900	G2-1/2"	25.5	900	200	995	938
F1060	G2-1/2"	30.0	1060	200	995	938
F1280	G3"	36.3	1280	200	995	938
F1650	G3"	46.7	1650	200	995	938



Working conditions:
Max.operating temperature:<100℃(P,M,H),<60℃(C)
Min.operating temperature:<1.5℃
Min.operating pressure:<1.6Mpa

Standard configuration:
Air filter case +Filter element +Auto-drain

▸Pressure Correction Factor

Working pressure (bar)	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction Factor	0.5	0.63	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13