

After-treatment Equipment for Compressed Air System







Refrigerated Air Dryer
Adsorption Air Dryer
Combine Air Dryer
Line Air Filter
After Cooler





#### EFRIGERATED AIR DRYER

## Refrigerated

Moist Air

12m<sup>3</sup>/min air contains 280L water/day





280L of

Air Tank



90L of water/day



Dryer

dried air

Air system

190L of water/day

78L of water/day

### Need To Use The Refrigerated Air Dryer

- ◆ Usually compressed air contains 100% vapor, these vapors are condensed together when the air would be cooled. The condensed water not only damages the compressor system, reduces tool efficiency, but also destroys your terminal products, corrodes piping and increases your maintenance costs.
- More than 90L water will enter into the compressor system everyday if without the air dryer. JIANYE refrigerated air dryer removes approximately 90% of water and ensures your application in good performance.



Transport and install conveniently, all pipes and wires of JIANYE refrigerated air dryer are connected before leaving manufactory.

No need to make any special installation foundation, just connect the power and turn the start button, the air dryer can be operated at once.

We adopt thickness 0.5mm heat-exchanger and evaporator, thickness 1.0mm connected cooper pipe and thickness 4.5mm seamless barrel to minimize the leakage rate.

Stabilized and clear pressure dew-point.

Stong fan and advanced welding process, improve the cooling effect.



#### The Components of Refrigerated Air Dryer



#### Pre-cooler (Heat Exchange)

Inlet air and outlet air exchanges temperature in here which result in hot inlet air gets cool and cool outlet air gets warm.

Reducing the stress of air dryer, prolong the service life of dryer. Solving the pipe frosting problem.



#### **Evaporator**

The core component of the air dryer. Most vapor are condensed into liquid water due to compressed air is cooled by refrigerant, then water is discharged.

Evaporator is made from aluminum plate and thickness 0.5mm cooper pipe. It oversize and long cooling distance which result in good cooling effect.

Good welding technology that greatly reduce the refrigerant leakage rate.



#### **Air-cooled Condenser**

Refrigerant flows with S-shaped, cooling area increased greatly.

Continual cooling process, good cooling performance.



#### **Refrigerant Compressor**

The "HEART" of the air dryer, and refrigerant like "BLOOD".

We adopt Japan Panasonic refrigerant compressor, stable and high efficiency





#### **High Pressure Switch High/Low Pressure Switch**

An Important protective device.

Prevent fan and compressor from burning caused by high outlet pressure or low inlet pressure.

> Ps: all model with a high pressure switch. Model BL0080-BL0500 with a high/low pressure switch.



#### **Dry Filter**

Filtering the impurities in the refrigerant, it ensures the cooling system not effected by moisture and impurity. Also it protects the refrigerant compressor, prolongs the service life of refrigerant.



#### **Expansion Valve**

It is one of the basic component of refrigerant system. It reduces the pressure and controls the flow rate of refrigerant to improve the cooling

Ps: model BL0080-BL0500 with an expansion valve.



#### **Hot Gas Bypass Valve**

While air capacity of air dryer decrease, inner temperature of an evaporator will be down to 0 ° C. meanwhile the pipe will be blocked caused by the condensate water freeze-up.

Hot gas bypass valve can solve this freeze-up problem, ensure air dryer operate smoothly.

Ps: model BL0080-BL0500 with a hot gas bypass valve.



#### **Electric Auto-Drain**

Discharge the condenser water from air dryer automatically.

Discharge time and interval time can be adjusted by users.

It's automatic, intelligent and low failure rate

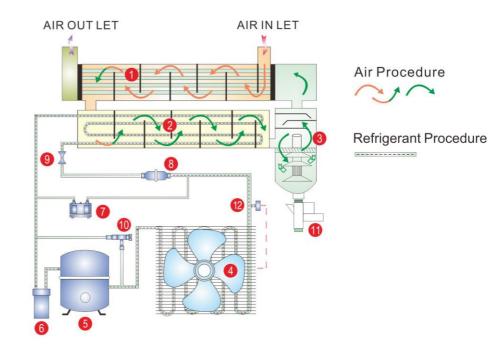


### JIANYE

#### **Refrigerated Air Dryer**

#### **▶** Operation Process

- 1. Pre-cooler / Heat Exchanger
- 2. Evaporator
- 3. Air/Water Separator
- 4. Air-cooled Condenser
- 5. Refrigerant Compressor
- 6. Refrigerant Reservoir
- 7. High-low Pressure switch
- 8. Dry Filter
- 9. Expansion Valve (Capillary)
- 10. Hot Gas Bypass Valve
- 11. Electric Auto-Drain
- 12. High Pressure Switch



#### Air Procedure:

The compressed air from "AIR INLET" enters into air dryer and goes through (1) Pre-cooler, the compressed air will be pre-cooled first, after that it flows through (2) Evaporator to get further cooler, the vapor of the compressed air is condensed because the air gets cool, when the cooled compressed air passes (3) Air/water separator, water will be discharged by (11) Electric auto-drain automatically. At last the dry and cool compressed air enters into the copper pipe of (1) Pre-cooler again, the outlet air and inlet air exchange the temperature in pre-cooler. Dry compressed air out from "AIR OUTLET".

#### Refrigerant Procedure:

The refrigerant will be compressed by (5) Refrigerant compressor, after that it is a high temperature and high pressure vapor, the refrigerant vapor enters into (4) Air-cooled condenser to gets lower temperature, this moment refrigerant from a vapor to a liquid state, and then liquid refrigerant go through (8) Dryer filter to get purer, and then it pass by the (9) Expansion valve, the pressure of refrigerant becomes lower. Gas and liquid mixed refrigerant flow into copper pipe of (1) Evaporator to low down the compressed air temperature, finally refrigerant gets back to (5) Refrigerant reservoir, this is a circular process.



## Technical Parameters





(Normal Pressure)

(High Pressure)

Model	Air capa	acity	Compressor Power	Power Supply	Air Connection	N.W.	Dimension(L×W×H)
	m³/min	CFM	hp	v/hz/ph		kg	mm
BL0005	0.8	28	0.25	220v/50hz/1ph	DN20(G3/4")	50	400x800x640
BL0010	1.8	64	0.35	220v/50hz/1ph	DN20(G3/4")	55	400x800x640
BL0020	2.8	99	0.5	220v/50hz/1ph	DN25(G1")	65	400x800x780
BL0030	3.8	134	0.75	220v/50hz/1ph	DN25(G1")	68	400x800x780
BL0040	5.5	194	1.25	220v/50hz/1ph	DN40(G1-1/2")	90	500x860x880
BL0060	6.8	240	1.5	230v/50hz/1ph	DN40(G1-1/2")	95	500x860x880
BL0080	8.8	311	2	220v/50hz/1ph	DN50(G2")	130	700x900x1000
BL0100	11.5	406	2.5	220v/50hz/1ph	DN50(G2")	135	700x900x1000
BL0120	14	494	3	380v/50hz/3ph	DN65(G2-1/2")	160	700x1000x1000
BL0150	16	565	4	380v/50hz/3ph	DN65(G2-1/2")	165	800x1000x1000
BL0200	22.8	805	5	380v/50hz/3ph	DN80(F3)	250	700x1450x1160
BL0250	28.5	1007	6	380v/50hz/3ph	DN80(F3)	300	700x1450x1160
BL0300	35	1236	8	380v/50hz/3ph	DN80(F3)	400	1800x1000x1360
BL0400	45	1589	10	380v/50hz/3ph	DN100(F4)	500	2000x1000x1360
BL0500	55	1943	12.5	380v/50hz/3ph	DN100(F4)	600	2200x1100x1480

#### **Operating Range:**

♦ Working Pressure:0.6-1.3Mpa(normal pressure type) ♦ Ambient Temperature:  $5-45^{\circ}$ C 3.0-4.0Mpa(high pressure type)

◆ Max.Inlet Temperature:<80°C

#### **Standard Conditions:**

- ♦ Air Inlet Temperature:38 °C ♦ Ambient Temperature:35 °C ♦ Working Pressure:0.7Mpa ♦ Pressure Dew Point:2-10 °C
- ◆ Please contact us for any specification that is not within the above mentioned standards.

## A B

## The Components of Adsorption Air Dryer







#### **Adsorption Tower**

01

Reasonable design and good drying efficiency. There is a large air diffuser inside the tower that can ensure compressed air contacts with absorbent more than 5seconds, also make sure compressed air 100% through the absorbent.

Tower can be used more than 10 years because of the rust prevention treatment.



#### **Check Valve**

02

It prevent compressed air backflow, low compressed air consumption and save energy. It is sensitive and stable.



#### Pneumatic Valve Pneumatic Butterfly Valve

Control compressed air enter in to A/B tower intelligently. It is long service life time and reliable.

Ps: B0005-BX0150 with pneumatic valves, BX0200-BX0500 with pneumatic butterfly valve.



#### Controller

04

The controller is consisted of several of microprocessor chips. Very simple and easy to handle the controller. The operation cycle and swith state are showed by LED display clearly.



#### **Absorbent**

(activated alumina and molecular sieves)

Prefect match of activated alumina and molecular sieves that result in high performance.

Durable and high quality absorbent.



#### Solenoid Valve Pneumatic Control Valve

06

Best cooperation of solenoid valve and pneumatic control valve, they ensure inlet pressure above 0.4Mpa to guarantee the absorption air dryer operate smoothly.



#### Muffler

It maximize to low down the exhaust noise.



#### Throttle valve

It adjusts the regeneration air flow rate to reduce the compressed air consumption.



#### Heater

09

Only need 7% compressed air as regeneration air to revive the absorbent if air dryer with a heater. Due to that compressed air is saved greatly.

The low hot adsorption air dryer suit for the user who need a large number of compressed air.

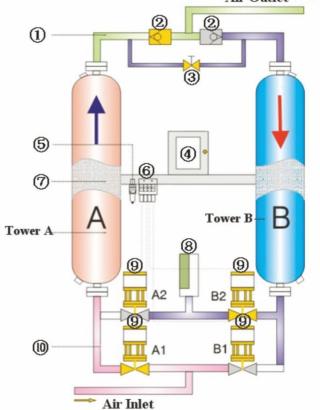
(Ps: low hot adsorption air dryer with a heater)

## A B

#### **ADSORPTION AIR DRYER**

Heatless Adsorption Air Outlet Air Outlet

- Upper Tube System
- 2 Check Valve
- 3 Throttle Valve
- 4 Controller
- 6 Pneumatic Control Valve
- 6 Solenoid Valve
- Absorbent (activated alumina and molecular sieves)
- 8 Muffler
- 9 Pneumatic(Valve A1, A2, B1, B2)
- 10 Underside Tube System



#### **Operation process**

Adsorption—the compressed air enters into tower A from (9) Pneumatic valve A1, and then flows past the (7) Adsorbent from bottom to top, after that the compressed air comes out from the (1) Upper tube.

Regeneration—a part of dry compressed air (about 14%) as regeneration air enters into the tower B from (3) Throttle valve, it flows past the (7) absorbent from top to bottom, absorbent in tower B recovers the adsorption function. After that regeneration air will be discharged from (9) Pneumatic valve B2 and (8) Muffler.

**Pressure equalizing**—finish the regeneration program, (9) Pneumatic valve B2 turn off, the pressure of tower B rises to working pressure, and it ready to adsorb.

**Task switch**— (9)Pneumatic valve B1 turns on, A1 turns off, A2 turns on and B2 turns off. Task of tower A & B is changed, tower B adsorbs vapor and tower A regenerates absorbent. The operation task and time are controlled by controller automatically.



## **Technical Parameters**





			, ,		_
Model	Air Flow	Rates	Air connection	Net Weigh	Dimension (L×W×H)
	Nm³/min	CFM	mm	kg	mm
BX0005	0.8	28	DN15	70	600x350x1500
BX0010	1.8	64	DN20	80	650x450x1500
BX0020	2.8	99	DN20	100	700x450x1500
BX0030	3.8	134	DN25	130	900x480x1600
BX0040	5.5	194	DN40	250	1000x650x1750
BX0060	6.8	240	DN40	280	1000x700x1900
BX0080	8.8	311	DN50	450	1100x700x1800
BX0100	11.5	406	DN50	500	1100x650x2050
BX0120	14	494	DN65	550	1200x850x2200
BX0150	16	565	DN65	580	1200x850x2200
BX0200	22.8	805	DN80	860	1400x1000x2350
BX0250	28.5	1007	DN80	1200	1400x1000x2500
BX0300	35	1236	DN80	1600	1750x1100x2500
BX0400	45	1589	DN100	1900	1700x1100x2600
BX0500	55	1943	DN100	2300	1900x1200x2800
BX0600	65	2296	DN125	2800	2000x1300x2800
BX0800	85	3002	DN150	3400	2200x1600x2900
BX1000	105	3709	DN150	4100	2600x1600x2960
BX1200	120	4238	DN200	4500	3200x1600x3000
BX1600	160	5651	DN200	6000	3800x1800x3000
BX2000	200	7064	DN250	7500	4200x2000x3000



**HEATLESS ADSORPTION AIR DRYER** 

#### **Standard Condition**

- ◆ Working pressure: 0.6-1.0Mpa
- ◆ Pressure dew point: 20°C ~ -40°C
- ♦ Air inlet temperature: 0°C ~ 45°C
- ◆ Compressed air consumption:≤14%
- ◆ Pressure drop:≤0.025Mpa
- ◆ Absorbent:activated alumina & molecular sieves
- ◆ Power supply: BX0005-BX0120: 220v/50hz/1ph

BX0150-BX2000: 380v/50hz/3ph

If need the heatless adsorption air dryer is not in standard, please contact the supplier.

### A B

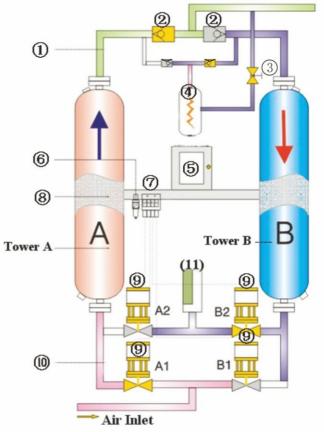
#### **ADSORPTION AIR DRYER**

Low Hot Adsorption

Air Outlet

**Air Dryer** 

- 1 Upper Tube System
- 2 Check Valve
- 3 Throttle Valve
- 4 Heater
- 6 Controller
- 6 Pneumatic Control Valve
- Solenoid Valve
- 8 Absorbent (activated alumina and molecular sieves)
- 9 Pneumatic Valve (A1, A2, B1, B2)
- 10 Underside Tube System
- 11 Muffler



#### **Operation process**

Adsorption—the compressed air enters into tower A from (9) Pneumatic valve A1, and then flows past the (7) Adsorbent from bottom to top, after that the compressed air comes out from the (1) Upper tube.

**Regeneration**—a bit of dry compressed air (about 7%) as regeneration air will be warmed up by (4) Heater and then enters into the tower B from (3) Throttle valve, it flows past the (7) absorbent from top to bottom, absorbent in tower B recovers the adsorption function. After that regeneration air will be discharged from (9) Pneumatic valve B2 and (11) Muffler.

**Pressure equalizing**—finish the regeneration program, (9) Pneumatic valve B2 turn off, the pressure of tower B rises to working pressure, and it ready to adsorb.

**Task switch**— (9)Pneumatic valve B1 turns on, A1 turns off, A2 turns on and B2 turns off. Task of tower A & B is changed, tower B adsorbs vapor and tower A regenerates absorbent. The operation task and time are controlled by controller automatically.



## Technical Parameters





Model	Air Flow	Rates	Air connection	Heater Power	Net Weigh	Dimension (L×W×H)
	Nm³/min	CFM	mm	kw	kg	mm
BX0010LH	1.8	64	DN20	0.35	95	650x450x1500
BX0020LH	2.8	99	DN20	0.5	120	700x450x1500
BX0030LH	3.8	134	DN25	0.75	140	900x480x1600
BX0040LH	5.5	194	DN40	1.25	270	1000x650x1750
BX0060LH	6.8	240	DN40	1.5	300	1000x700x1900
BX0080LH	8.8	311	DN50	2	480	1100x700x1800
BX0100LH	11.5	406	DN50	2.5	530	1100x650x2050
BX0120LH	14	494	DN65	3	580	1200x850x2200
BX0150LH	16	565	DN65	3.75	620	1200x850x2200
BX0200LH	22.8	805	DN80	5	900	1400x1000x2350
BX0250LH	28.5	1007	DN80	6.25	1250	1400x1000x2500
BX0300LH	35	1236	DN80	7.5	1700	1750x1100x2500
BX0400LH	45	1589	DN100	10	2000	1700x1100x2600
BX0500LH	55	1943	DN100	12.5	2500	1900x1200x2800
BX0600LH	65	2296	DN125	15	3000	2000x1300x2800
BX0800LH	85	3002	DN150	20	3800	2200x1600x2900
BX1000LH	105	3709	DN150	25	4500	2600x1600x2960
BX1200LH	120	4238	DN200	30	5000	3200x1600x3000
BX1600LH	160	5651	DN200	40	6500	3800x1800x3000
BX2000LH	200	7064	DN250	50	8000	4200x2000x3000



LOW HOT ADSORPTION AIR DRYER

#### **Standard Condition**

- ♦ Working pressure: 0.6-1.0Mpa
- ♦ Pressure dew point: 20°C ~ -40°C
- ◆ Air inlet temperature: 0°C ~ 45°C
- ♦ Compressed air consumption: ≤7%
- ◆ Pressure drop:≤0.025Mpa
- ◆ Absorbent: activated alumina & molecular sieves

◆ Power supply: BX0020LH-BX0120LH: 220v/50hz/1ph
BX0150LH-BX2000LH: 380v/50hz/3ph

If need the low hot adsorption air dryer is not in standard, please contact the supplier.





# Combine Air Dryer

Refrigerated Air Dryer & Adsorption Air Dryer





- Hot and humidity Inlet compressed air exchanges temperature with cool & dry compressed air in the heat exchanger of refrigerated air dryer. After preliminary cooling, inlet compressed air will be cool again by refrigerant, most of water will be condensed together and will be discharge. At this time dew point of compressed air about 2-10℃.
- In order to get lower dew point compressed air, compressed air enter into adsorption air dryer to have further drying. After four processes: adsorption, regeneration, pressure equalizing and task exchange, the dew point of compressed air about -20 ∼ -40°C. At last cool & dry compressed air flow through heat exchanger to low down the inter air compressor, thus we get dry and low dew point compressed air.

#### Advantages -

- Low pressure dew point: Compressed air is treated by refrigerated air dryer and adsorption air dryer, due to that the dew point can be -20 ~ -40 ℃. Combine air dryers are widely used in high precision product line.
- Best Adaptable: No ambient temperature limited.
- Low consumption: Only need 3-5% compressed air to revive the absorbent, low compressed air consumption.
- Integrative structure design: Refrigerated air dryer and adsorption air dryer are connected before leaving manufactory, save space.

  All pipes are connected, no need to install the foundation, just put it on the flat ground and connect the power, the combine dryer can be operated.

#### Technical Parameters

Model	Air Flow	Rates	Air connection	Net Weigh	Dimension (L×W×H)
	Nm³/min	CFM	mm	kg	mm
BC0030	3.8	134	DN25	220	1150x700x1800
BC0040	5.5	194	DN40	370	900x1300x1800
BC0060	6.8	240	DN40	400	1000x1300x1800
BC0080	8.8	311	DN50	600	1060x1400x2000
BC0100	11.5	406	DN50	650	1160x1400x1900
BC0120	14	494	DN65	800	1160x1600x1900
BC0150	16	565	DN65	900	1260x1600x2000
BC0200	22.8	805	DN80	1500	1500x2000x2050
BC0250	28.5	1007	DN80	1700	1700x2000x2180
BC0300	35	1236	DN80	2100	1700x2000x2220
BC0400	45	1589	DN100	2500	2000x2100x2400
BC0500	55	1943	DN100	3100	2200x2100x2500
BC0600	65	2296	DN125	3500	2400x2200x2650
BC0800	85	3002	DN150	4200	2600x2600x2900
BC1000	105	3709	DN150	5200	3000x2800x3000
BC1200	120	4238	DN200	5800	3200x3000x3000
BC1600	160	5651	DN200	7600	3800x3300x3000
BC2000	200	7064	DN250	9500	4200x3500x3000

### COMBINE AIR DRYER

#### **Standard Condition**

- ♦ Working pressure: 0.6-1.0Mpa
- ♦ Pressure dew point: 20°C ~ -40°C
- ◆ Air inlet temperature: 0°C ~ 45°C
- lacktriangle Compressed air consumption: $\leqslant$ 5%
- ◆ Pressure drop:≤0.025Mpa
- ◆ Absorbent: activated alumina & molecular sieves
- ◆ Power supply: BC0030-BC0120: 220v/50hz/1ph BC0150-BC2000: 380v/50hz/3ph



#### AFTER-COOLER

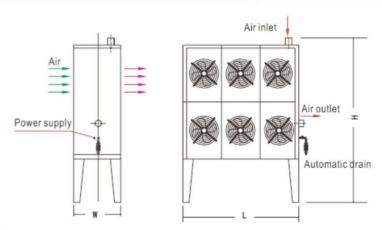




- JIANYE Air cooled After-cooler get rid of the water in the compressed air.
- The temperature of compressed air can be low down to 42'C.
- JIANYE After-cooler suit for the high temperature environment.
- It's no need to make the install foundation.
- Recommend you install the after-cooler behind the screw air compressor or piston air compressor.







Model	Air Flow Rates		Power	Fan Power	Fan	Air Connection	Dimensions (L*W*H)
	(Nm3/min)	CFM	(W)	input/output(W)	model * quanlity	(mm)	(mm)
BAC0010	1.8	64	120	85/39	Ф 300*1	DN20(G3/4")	550X300X640
BAC0030	3.8	134	150	140/80	Ф 350*1	DN25(G1")	620X300X730
BAC0060	6.8	240	250	140/80	Ф 350*1	DN40(G1-1/2")	620X300X760
BAC0080	8.8	311	300	180/112	Ф 400*1	DN50(G2")	830X350X940
BAC0120	14	494	380	140/80*2	Ф 350*2	DN65(G2-1/2")	1380X550X1100
BAC0150	16	565	500	180/110*2	Ф 400*2	DN65(G2-1/2")	1500X600X1150
BAC0250	28.5	1007	100	450/270*2	Ф 500*2	DN80(F3)	1600X600X1250



#### Working Condition:

Inlet Pressure: 0.4~1.0MPa Inlet Temperature: ≤150 °C Air Ambient Temperature: ≤40 °C Pressure Drop: ≤0.021 Mpa

Power supply: BAC0010-BAC0120:220v/50hz/1ph

BAC0150-BAC0250:380v/50hz/3ph

#### Air outlet Temperature:

- (1)When the air pressure is higher than 0.7MPa, the outlet temperature will be the ambient temperature +6~8 °C
- (2) When the air pressure is lower than 0.7 MPa, the outlet temperature will be the ambient temperature +8~12 ℃

If need the air cooled after-cooler is not in standard, please contact the supplier.

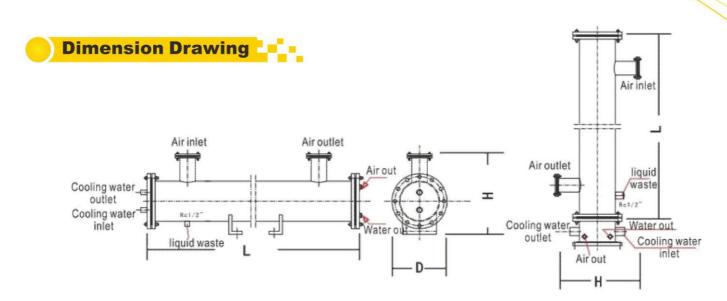


### WATER COOLED AFTER-COOLER



- JIANYE water cooled after-cooler low down the temperature of compressed air.
- It is easy to install.
- It can suit for the environment which in high temperature, high humidity and heavy dust.





Model	Air Flow Rates		Air Connection	Water Flow Rates	Water Tube Connection	Dimensions (L*W*H)
7	(Nm3/min)	(CFM)	(mm)	m3/h	(mm)	(mm)
BAC0250W	28.5	1007	DN80(F3)	6	G1-1/2"	1650X330X400
BAC0300W	35	1236	DN80(F3)	8	G2"	1650X400X500
BAC0400W	45	1589	DN100(F4)	12	G2"	2150X400X500
BAC0500W	55	1943	DN100(F4)	14	G2-1/2"	2150X450X560
BAC0600W	65	2296	DN125(F5)	17	G2-1/2"	2200X450X560
BAC0800W	85	3002	DN150(F6)	21	G3"	2200X500X600
BAC1000W	105	3709	DN150(F6)	27	G3"	2200X500X600



#### **Working Condition:**

Inlet Pressure: 0.4~1.0MPa Inlet Temperature: ≤180 ℃

Cooling Water Inlet Pressure: 0.25~0.4MPa Cooling Water Inlet Temperature: ≤35°C

#### Air outlet Temperature:

It will be changed along with the cooling water flow. 0.25 m3/h cooling water are consumed for 1Nm3/min compressed air.

If need the water cooled after-cooler is not in standard, please contact the supplier.



#### LINE AIR FILTER

## Why Need To Use The LINE AIR FILTER

#### The hidden danger of untreated air

There are about 140 million of dust particles in every cubic meter air.

The polluted air can not be ignored because that is a huge threat for compressed air system and any machines.





#### The bad quality of compressed air will cost you more money

The compressed air which contains water, dirt, rust particles and bacteria which will lead to the below problems,

- ◆ The tools and equipments will be broken down frequently. It will make them in a shorter lifetime, that will increase your maintenance fee and waste your production time.
- ◆ There are contaminated and other harmful materials in the end products.
- It will destroy the pipe of the compressed air system. And it will lead to the compressed air leakage.



#### Features of JIANYE Line Air Filter

- Advantage module design: The filter element is separated from the shell and cover. It is easy to change the filter element.
- Special treatment shell: after a high strength fluorine carbon treatment, the lifetime of the shell up to 10 years.
- Optimal sealing: The line air filter is sealed by O-ring and epoxy resin ring that can avoid the air leakage problem.
- ♦ High efficiency filter element: The filter element is made by ⊕0.5um borosilicate filter which thickness is 3000um and the density is 4% (the void is 96%). Therefore Jianye filter element in high capacity and with a longer lifetime.
- ♦ Stable auto-drain: It work intelligently. Simple structure with low consumption.











#### Different Grades of Line Filters

#### AO Filter: Pre-filter

Get rid of the particles which bigger than  $1\mu m,$  also collect fluid oil and water, oil content in the air:  $\leqslant 0.5$  mg/m3(PPM) at  $21\,^{\circ}\!\!\mathrm{C}$  .

#### AA Filter: After-filter

Get rid of the vapor, oil mist and particles which bigger than  $0.01\mu m$ , oil content in the air:  $\leq 0.01~mg/m3(PPM)$  at  $21^{\circ}C$  (should prepose a AO filter)

#### AX Filter: High Efficiency filter

Get rid of the vapor, oil mist and particles which bigger than  $0.01\mu m$ , oil content in the air:  $\leq 0.001$  mg/m3(PPM) at  $21^{\circ}C$  (should prepose a AO filter & AA filter)



#### ACS Filter: Activated carbon filter

Absorb oil vapour and hydrocarbon smell, oil content in the air:  $\leqslant 0.003~mg/m3 (PPM)$  at 21  $^{\circ}\mathrm{C}$ 

(should prepose a AO filter & AA filter)

#### AR Filter: Common dedusting filter

Get rid of the particles which bigger than 1µm. (should be installed after the adsorption air dryer)

#### AAR Filter: High Efficiency dedusting filter

Get rid of the particles which bigger than  $0.01\mu m$ . (should be installed after the adsorption air dryer)

#### Technical Parameters (Conventional Air Filters)

Model	Air Connection	Air Flo	w Rates	Dimension (A×H)	N.W	Model (Filter Element)	Element Dimension (BxH)
-	mm	Nm³/min	CFM	mm	kg	-	mm
BF0005(G)	DN20(G-3/4")	0.8	28	Ф100x270	1.1	BE0005	43x95
BF0010(G)	DN20(G-3/4")	1.8	64	Ф100x270	1.4	BE0010	43x95
BF0020(G)	DN25(G1")	2.8	99	Ф100х270	1.5	BE0020	43x150
BF0030(G)	DN25(G1")	3.8	134	Ф115х340	2.6	BE0030	60x185
BF0040(G)	DN40(G1-1/2")	5.5	194	Ф115х380	3.3	BE0040	65x280
BF0060(G)	DN40(G1-1/2")	6.8	240	Ф115х380	3.5	BE0060	65x340
BF0080(G)	DN50(G2")	8.8	311	Ф135х690	4.5	BE0080	70x400
BF0100(G)	DN50(G2")	11.5	406	Ф135х690	4.8	BE0100	70x450
BF0120(G)	DN65(G2-1/2")	14	494	Ф160x870	10	BE0120	85x625
BF0150(G)	DN65(G2-1/2")	19	565	Ф160x870	12	BE0150	85x750



#### Technical Parameters (Flange Air Filters)

Model	Air Connection	Air Flow Rates		Dimension (A×H)	N.W	Model (Filter Element)	Element Dimension (BxH)
	mm	Nm³/min	CFM	mm	kg	-	mm
BF0250(F)	DN80(F3)	28.5	1007	220x790	17	BE0250	115X425
BF0300(F)	DN80(F3)	35	1236	400x1036	48	BE0300	115X525
BF0400(F)	DN100(F4)	45	1589	459x1076	51	BE0400	115X645
BF0500(F)	DN100(F4)	55	1943	565x860	68	BE0250x2	115X425



#### Working conditions:

Max. operating temperature:  $<66^{\circ}C$ Min. operating temperature:  $<1.5^{\circ}C$ 

Max. operating pressure: < 1.6Mpa

#### Standard configuration:

Shell + Filter Element + Auto Drain (conventional type).

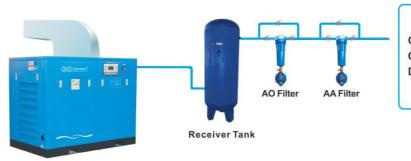
Shell + Filter Element + Electronic Drain (Flange type)

If need the air filter is not in standard, please contact with the supplier

#### **Flow Chart**

#### Program

#### **Application Range**



Get rid of 99% moisture contens Oil content: 0.01ppm Dust content: <1µm

**Efficiency** 

For swept,general cool and pack

Screw Air Compressor



Pressure dew point: 2~10°C Oil content: 0.01ppm Dust content: <0.01µm For spray paint, pneumatic instrument, pneumatic tool, sand blasting, air moveand mix, particles products convey



Pressure dew point: 2~10°C Oil content: 0.003ppm Dust content: <0.01µm For diving operation, breathable air,food compound, dentistry, cosmetics,hyperbaric oxygen chamber



Pressure dew point: -20~-70°C Oil content: 0.001ppm

Dust content: <0.01µm

For print, film industry, nuclear industry, aerospace industry, precision control instrument



Pressure dew point: -20~-70°C

Oil content: 0.003ppm Dust content: <0.01µm For bioengineering, fermentating food





After-treatment Equipment for Compressed Air System (2020.03 Edition)