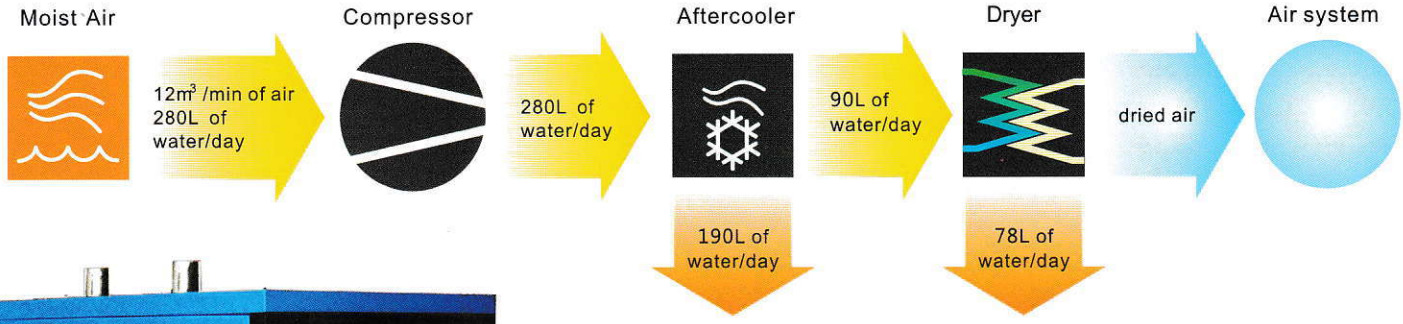
Newair **REFRIGERATED AIR DRYER**

Why Need To Use The Refrigerated Air Dryer ?



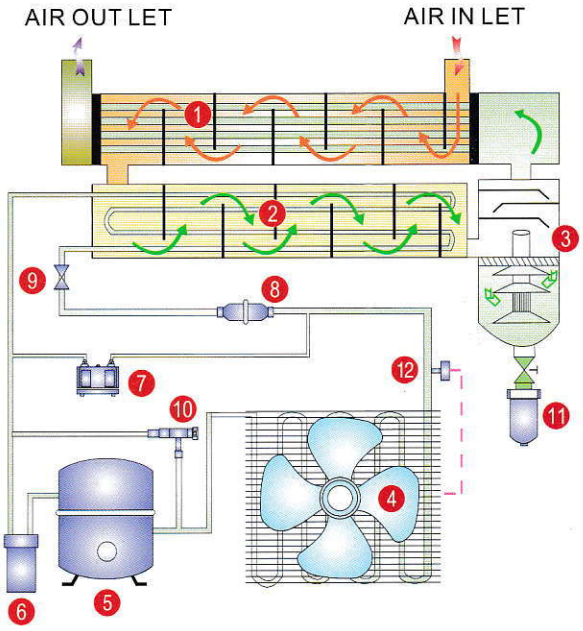
- Usually, the compressed air contains 100% vapor.When the air cooled, the vapor will be condensed. Air compressor and after system will be damaged.
- 90Lwater will enter into the compressor system if without an air dryer.
- NEWAIR Refrigerated Air Dryer can get rid of the water completely.

Advantage

1. The refrigerated dryer are connected with pipes and wire before out of factory. They are easy to be installed and operated without making any special foundation.
2. The refrigerated dryer operate stably, low-noise,save power and long life.
3. It is easy to control the refrigerated dryer. Turning the button is OK.

Operation Principle

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. Automatic Drain
12. High pressure switch



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Air Procedure:

The compressed air form "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) 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.

Refrigerant Procedure:

The refrigerant will be compressed by (5) Refrigerant compressor,after that it is in a high temperature and high pressure vapor state, the refrigerant vapor enters into (4) Air-cooled condenser to get 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 than it pass by the (9) Expansion valve, the pressure of refrigerant becomes lower. Gas and liquid mixed refrigerant flow into copper pipe of (2) Evaporator to lower down the compressed air temperature, finally refrigerant gets back to (6) Refrigerant reservoir, this is a circular process.

Model	Air Flow Rates	Compressor Power	Power	Air Connection	N.W.	Dimension(L×W×H)
--	m3/min	HP	V/50Hz	--	kg	mm
BL0005	0.8	0.25	240V/50HZ/1PH	DN20(G3/4")	50	400x700x640
BL0010	1.8	0.35	240V/50HZ/1PH	DN20(G3/4")	55	400x700x640
BL0020	2.8	0.5	240V/50HZ/1PH	DN25(G1")	65	400x700x780
BL0030	3.8	0.75	240V/50HZ/1PH	DN25(G1")	68	400x700x780
BL0040	5.5	1.25	240V/50HZ/1PH	DN40(G1-1/2")	90	500x860x880
BL0060	6.8	1.5	240V/50HZ/1PH	DN40(G1-1/2")	95	500x860x880
BL0080	8.8	2	240V/50HZ/1PH	DN50(G2")	130	700x860x1000
BL0100	11.5	2.5	240V/50HZ/1PH	DN50(G2")	135	700x860x1000
BL0120	14	3	240V/50HZ/1PH	DN65(G2-1/2")	160	700x1000x1000
BL0150	16	4	415V/50HZ/3PH	DN65(G2-1/2")	165	700x1000x1000
BL0200	22.8	5	415V/50HZ/3PH	DN80(F3)	250	700x1300x1160
BL0250	28.5	6	415V/50HZ/3PH	DN80(F3)	300	700x1300x1160
BL0300	35	8	415V/50HZ/3PH	DN80(F3)	400	1700x1000x1260
BL0400	45	10	415V/50HZ/3PH	DN100(F4)	500	2000x1000x1260
BL0500	55	12.5	415V/50HZ/3PH	DN100(F4)	600	2200x1000x1480

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

Working conditions:

1、working pressure:0.6-1.3Mpa 2、Ambient temperature:5-45℃ 3、Max.inlet temperature: < 80℃ 4、Cooling method:Air-cooled

Standard conditions:

- Air inlet temperature:38℃
- Ambient temperature:35℃
- Working pressure:0.7Mpa
- Pressure dew point:2-10℃
- Refrigerant:R-22

Newair

LINE AIR FILTER

Different grades of Line Filters

AO Filter: Pre-filter

Get rid of the particles which bigger than 1μm, also collect fluid oil and water, oil content in the air: ≤ 0.5 mg/m3(PPM) at 21℃.

AA Filter: After-filter

Get rid of the vapor, oil mist and particles which bigger than 0.01μm, oil content in the air: ≤ 0.01 mg/m3(PPM) at 21℃ (should prepose a AO filter)

AX Filter: High Efficiency filter

Get rid of the vapor, oil mist and particles which bigger than 0.001μm, oil content in the air: ≤ 0.001 mg/m3(PPM) at 21℃ (should prepose a AO filter)

ACS Filter: Activated carbon filter

Absorb oil vapour and hydrocarbon smell, oil content in the air: ≤ 0.003 mg/m3(PPM) at 21℃ (should prepose a 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 0.01μm. (should be installed after the adsorption air dryer)

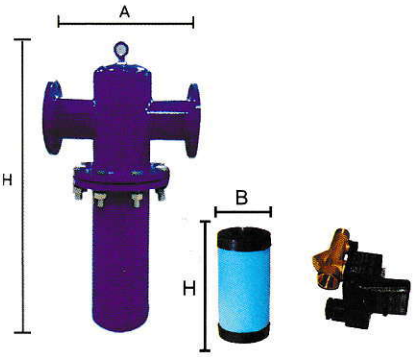
Technical Parameters (Conventional Air Filters)

Model	Air Connection	Air Flow Rates		Dimension (A×H)	N.W	Packing Dimension	Filter Element Model	Element Dimension (BxH)
--	mm	Nm^3/min	l/s	mm	kg	mm	--	mm
BF0005(G)	DN20(G 3/4")	0.8	13	Φ90x275	1.6	105x120x320	BF0005	43x95
BF0010(G)	DN20(G 3/4")	1.8	30	Φ90x275	1.6	105x120x320	BF0010	43x95
BF0020(G)	DN25(G1")	2.8	47	Φ90x275	1.8	105x120x320	BF0020	43x150
BF0030(G)	DN25(G1")	3.8	63	Φ120x370	2.8	140x140x390	BF0030	60x185
BF0040(G)	DN40(G1-½")	5.5	92	Φ120x500	3	140x140x520	BF0040	65x280
BF0060(G)	DN40(G1-½")	6.8	114	Φ120x500	3.2	140x140x520	BF0060	65x340
BF0080(G)	DN50(G2")	8.8	147	Φ150x620	6	150x150x650	BF0080	70x400
BF0100(G)	DN50(G2")	11.5	192	Φ150x620	6	150x150x650	BF0100	70x450
BF0120(G)	DN65(G2-½")	14	234	Φ150x920	10.5	170x170x940	BF0120	85x625
BF0150(G)	DN65(G2-½")	16	267	Φ150x920	11	170x170x940	BF0150	85x750

Technical Parameters (Flange Air Filters)

Model	Air Connection	Air Flow Rates		Dimension (A×H)	N.W	Packing Dimension	Filter Element Model	Element Dimension (BxH)
--	mm	Nm^3/min	l/s	mm	kg	mm	--	mm
BF0200(F)	DN80(F3)	22.8	381	400x736	40	800X460X330	BE0200	115X370
BF0250(F)	DN80(F3)	28.5	476	400x820	45	900X460X330	BE0250	115X425
BF0300(F)	DN80(F3)	35	585	400x1076	48	1100X460X330	BE0300	115X525
BF0400(F)	DN100(F4)	45	752	459x1076	51	1150X460X330	BE0400	115X645
BF0500(F)	DN100(F4)	55	919	565x860	68	650X460X330	BE0250x2	115X425

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



Working conditions:

Max. operating temperature:<66℃

Min. operating temperature:<1.5℃

Min. operating pressure:<1.6Mpa

Standard configuration:

Air filter shell + Filter element + Automatic drainer (Conventional type)

Air filter shell + Filter Element + Electronic Drain (Flange type)

Newair **LINE AIR FILTER**

Why Need To Use The LINE AIR FILTER ?

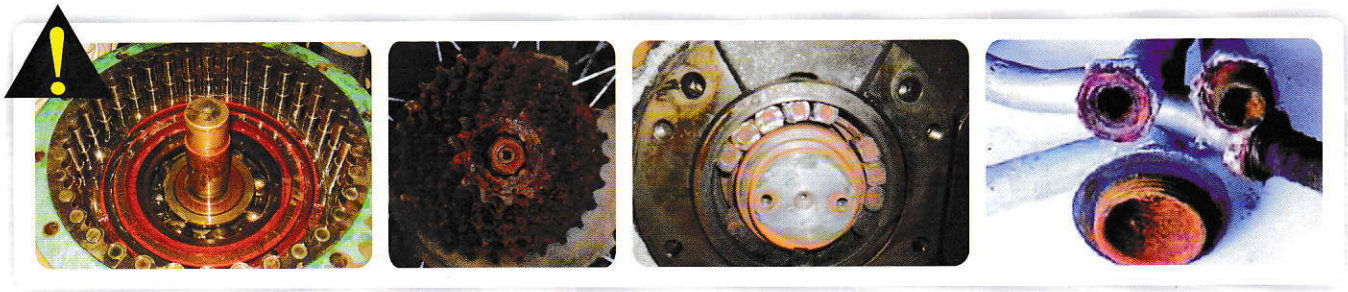
The hidden danger of untreated air

There are about 140 million of dust particles in every cubic meter air.
This polluted air is a huge threat for any compressed air system and pneumatic machine in the industrial area.

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 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 NEWAIR Line Air Filter

- Advantage module design: The filter element is separated from the shell and cover. It is easy to change the filter element.
- The shell is with special treatment: The shell is with a high strength fluorine carbon treatment. It can prolong the lifetime up to 10 years.
- Optimal sealing: The line air filter is sealed by O-ring and epoxy resin ring. It can avoid the air leakage.
- High efficiency filter element: The element is made by Φ0.5μm borosilicate fiber. The fiber thickness is 3000μm. The density is 4% (the void is 96%). That can make the filter element in high volume and with a longer lifetime. Good quality filter element will help you to reduce much operation and maintenance charge.
- Stable auto-drain: It can work intelligently. Simple structure with low consumption.