



Air
Treatment
Solutions

压缩空气过滤器及分离器 COMPRESSED AIR FILTER & SEPARATOR



2018
 ITALIAN
TECHNOLOGY

Why use compressed air filter

为什么要用压缩空气过滤器

大气中含有水蒸气、碳氢化合物及固体颗粒（每立方米的空气中大约含有1亿4千万个固体颗粒），这些杂质随着空气被吸入空压机中，然后和残留的润滑油一起进入压缩空气管网。这些污染物如果不能及时得到处理将会导致管道腐蚀，危害到生产设备及工具的灵敏度和寿命，并对制造产品的质量造成影响。

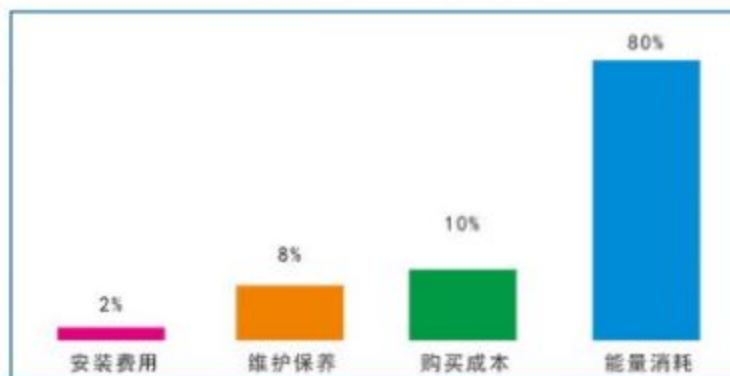
The atmosphere contains water vapour, hydrocarbon and solid particles (about 140 million solid particles per metre of air found in the atmosphere). These impurities inhaled into the air compressor and then enter the compressed air network together with residual lubricant. Failure to treat these contaminants in a timely manner lead to corrosion of pipelines, endangering production equipment, harming tool sensitivity and lifespan, which eventually affect the product quality.

Energy consumption

关于能量消耗

对于压缩空气系统管网而言，过滤器的阻力往往是系统管网压降的重要构成部分。一支过滤器在常规使用条件下，能耗产生的成本占总运行成本的80%。通常1bar的压降约等于7%-10%的压缩机功率损失。

For compressed air system, filter resistance is often a factor of air pressure drop. Under normal operating conditions, the energy consumption of a filter contributes 80% of total operating cost, and the air pressure drop of 1 bar usually equal to 7%-10% of air compressor's energy

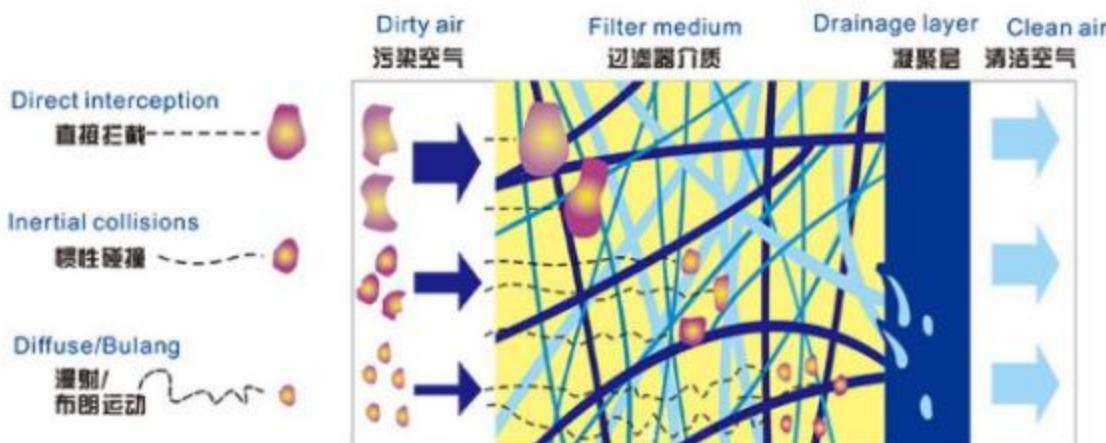


The principle

压缩空气过滤器的工作原理

当待处理的压缩空气进入过滤器时，流速放缓，大颗粒的液滴在重力作用下掉落下来，还有一些液滴和固体颗粒在通过玻纤滤料层时被直接拦截下来。较小直径的液滴和固体颗粒随气流通过滤芯时，因惯性碰撞被滤料捕捉并逐渐凝聚成更大的液滴流下来，更小的固体和液体颗粒不随气流改变方向，只是在做布朗运动，一旦接近滤料时，受玻纤的静电引力影响而被吸附在滤料上。过滤出来的油水聚集在过滤器的底部，经排水器排出。为了保护环境，排出的油水必须要有专门的容器收集，切勿直接排放到公共污水管。

When compressed air enters the filter, flow speed reduces. Large droplets will fall due to gravity. Some liquid droplets and solid particles will be directly intercepted by the glass fiber filter. As smaller diameter droplets and solid particles pass through the filter core, they are captured by inertia collisions and gradually condensed into larger droplets. Once they close to the filter media, they are adsorbed by the electrostatic force of the glass fiber. The oil and water will then be collected at the bottom of the filter and is discharged through the auto drain. In order to protect the environment, the oil and water discharged must be collected in a special container.



filter structure diagram

过滤器结构分解图



Differential Pressure Gauge (DPG): Precise indicator shows the level of element saturation and prompt or element replacement

压差表:准确指示滤芯压差状况, 提醒及时更换滤芯

O-ring: Better sealing and strength

O型密封圈:有更好的密封性和强度

Stainless steel mesh: High filtration surface area with low differential pressure loss

不锈钢内网:菱形设计气流通过面积更大, 阻力更小

Pleated Filter Media: Small pressure drop plus able to trapped large amount of particles.

过滤层采取折叠式工艺, 压差小, 容尘量大

Stainless steel mesh

不锈钢外网

Aluminum Alloy Cylinder: High strength hardness material with anodized treatment

铝合金筒体, 高强度高硬度材质, 阳极抗氧化处理

High temperature resistance and strong corrosion resistance of condensed layer

凝聚层耐高温, 耐腐蚀性强

Drain: European best automatic drain valve with manual drain function, high stability and long life span

排水器: 欧洲最好的带手动检测功能的自动排水器, 高稳定性, 寿命长



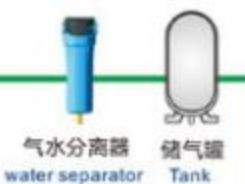
Technical Data

技术参数表

	产品图 Product Chart	过滤级别 Filter level	除尘 Dust removal	除油 Oil removal	初始压差 Initial pressure difference
P级		除尘过滤 Dust filter	3 μm	—	0.05bar
M级		除油过滤 Coalescing Filter	1 μm	0.1ppm	0.08bar
H级		高精过滤 High precision filter	0.01μm	0.01ppm	0.10bar
C级		活性炭过滤 Activated carbon filter	—	0.003ppm	0.07bar
X级		超高精过滤 Superfine filter	0.01μm	0.005ppm	0.15bar
CP级		深度除油过滤 Depth Oil removal filters	—	0.003ppm	0.05bar



Applications 不同配置应用说明图



1. 适用一般机械、焊接、矿山等；
符合ISO8573.1:3.-.4

Suitable for regular machine,
welding/soldering mining and etc;
Air Quality ISO8573.1:3.-.4



2. 适用一般车间、气动工具、喷砂处理等；
符合ISO8573.1:2.-.2

Suitable for regular workshop, air
tools, spray-painting and etc;
Air Quality ISO8573.1:2.-.2



3. 适用食品、饮料、静电涂装、精密控制阀等；
符合ISO8573.1:1.-.1

Suitable for food, drink, electrostatic
spray-painting, precision control valve and etc;
Air Quality ISO8573.1:1.-.1



4. 适用食品、饮料、医疗、洁净无菌实验室、自动化科技设备、精密电子工业等；符合ISO8573.1:1.-.1

Suitable for food, drink, medical, sterile lab,
Automatic technology equipment, precision
electronics industry and etc;
Air Quality ISO8573.1:1.-.1



Reasons to Selecting

■ ZAKF过滤器配备压差表，能够准确指示滤芯压差的状况，提醒及时更换滤芯，一般不安装压差表的过滤器则无法准确提示腔体内压差情况，在压差达到一定值后会增加能耗，额外耗能在短时间内的累积就会超出更换滤芯的价值。

■ ZAKF Filters installed with a differential pressure gauge (DPG) can exactly indicate the pressure differences of element for timely replacement. When the pressure difference reach to a certain value, that will increase energy consumption and hence energy expense will exceed the value of element.



■ 产品采用欧洲最好的带手动检测功能的自动排水器，高稳定性，寿命长，未安装自动排水器的过滤器需要耗费人工定时排放冷凝液。一旦没有及时排放冷凝液，在累计到一定程度时，过滤出来的油和水又会被气流带到下游管道，造成再次污染。(AD-01操作须知：排水阀底端铜质旋钮垂直状态下左向拧到底为手动排水状态，右向拧到底为自动排水状态。)

■ Reliable and durable automatic drain from Europe is used with manual drain built-in function to ensure higher stability and long life span .Without auto drain, customer will need to incur additional manpower to drain condensate water manually. Otherwise, filtered oil and water will be enter to the downstream pipe and cause compressed air polluted again. (AD-01 Operation Guide: vertical anti-clockwise for manual . vertical clockwise for automatic .)



AD-01内置自动排污阀
AD-01 inner automatic drain



AD-05外置电子排污阀
AD-05 electrical timed drain



AD-14外置机械式排污阀
AD-14 external mechanical automatic drain

■ 高效滤芯与其他一般滤芯相比如下：

1. 滤纸：我们采用折叠式滤芯，相比一般缠绕式多出约3倍的过滤面积和更高的容尘量，同时也意味着拥有更小的压差和更长的使用寿命。

■ High efficiency elements features :

1. Filter paper: deep-pleated filter element has 3 times of filtration area than rapped type and higher space to hold the dust,it also has lower pressure drop and longer life span.



2. 采用不锈钢菱形网，相比于圆孔网有更大的有效过滤面积，和更小的阻力；



2. Rhombic shaped stainless steel mesh has larger effective filtration area and smaller pressure drop compare to round-hole type

3. 滤芯外部的凝聚层采用喷胶棉，与一般传统的海绵相比，有耐高温和耐腐蚀的优点，海绵在使用一段时间后容易腐烂，腐烂的海绵被气流吹到下游管道后如未被拦截会对生产设备造成一定损坏；



3. uses polyester wadding for the external coalescing layer, compared to traditional foams, it has high resistance to high temperature and corrosion. Traditional foams is easily damaged after a period of time, ragged forms can be blown into down stream pipeline and possibly damage the production equipment.

4. 采用无拉杆的设计方式，滤芯顶部的卡口设计，与一般拉杆的设计相比节省更多的安装空间，且非常便于拆卸；



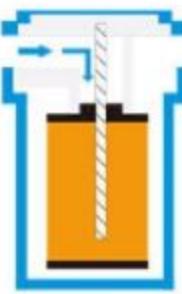
4. No pull rod design to save installation space and easy to disassemble

- 过滤器的空气入口到滤芯之间采用弯管设计，相比于直角设计的过滤器有更小的压降，筒体采用防锈抗氧化和喷涂双重处理，耐腐蚀性强。



弯角进气口和滤芯顶部卡口设计

Design of angle inlet and top clamp of filter



Design of rectangular inlet and Lvxindai

- Elbow design between air inlet and element, less pressure drop compared to vertical type. The housing is double treated with antioxidation and painting to resist corrosion.

- 检漏设备：过滤器漏气是能源的损失，许多轻微的漏气现象是不容易被发现的。过滤器100%经过严格的检漏测试，充分保障用户的利益。



- leak test equipment : filter leakage is a big energy loss, many micro leakage is not easy to detect. filters are 100% strictly leak tested to ensure customer benefit.

Separator

分离器

Water separator

气水分离器

在压缩空气过滤器和干燥设备之前安装气水分离器可以去除99%的液态水，使下游净化设备发挥更好的效能。气水分离器独特的双段旋风分离设计，使之比传统的气水分离器除水效果更高。气水分离器可选择的安装位置在空气压缩机后，在后部冷却器后，在储气罐后。

Installing water separator before compressed air filter and drying equipment can remove 99 % of liquid water, making downstream purification more efficient. The unique two-stage cyclone separation design makes it more effective than traditional type of water separator. The air and water separator can be installed in various position such as after the air compressor, after the rear cooler or after the air receiver tank.

Specification/ Flange water separation filter scale

气水分离器(W)/法兰气水分离过滤器规格尺寸表

型号 model	接口尺寸 Conn. size	流量 Flow rate			外形尺寸(mm) Interface Size				气水分离器(W) 图1
		inch	m ³ /min	c f m	A	B	C	D	
F0045W	1/2"	1.3	45	95	220	197	—	—	
F0046W	3/4"	1.3	45	95	220	197	—	—	
F0100W	3/4"	2.8	100	95	280	257	—	—	
F0180W	1"	5.1	180	125	315	290	—	—	
F0181W	1-1/2"	5.1	180	125	315	290	—	—	
F0370W	1-1/2"	10.5	370	125	400	370	—	—	
F0515W	2"	14.6	515	170	520	478	—	—	
F0745W	2"	21.1	745	170	700	658	—	—	
F1060W	2-1/2"	30	1060	200	995	938	—	—	
F1061W	3"	30	1060	200	995	938	—	—	
F1650W	3"	46.7	1650	200	995	938	—	—	
FL2100W	DN125	63	2224	535	1274	995	273	—	
FL2800W	DN150	84	2965	577	1484	1175	325	—	
FL3500W	DN150	105	3707	577	1584	1275	325	—	
FL4448W	DN200	126	3448	650	1785	1410	380	—	
FL5189W	DN200	147	5189	650	1885	1510	380	—	
FL5930W	DN200	168	5930	650	1985	1610	380	—	
FL6672W	DN200	189	6672	650	2085	1710	380	—	
FL7350W	DN250	210	6672	785	2245	1795	480	—	
FL8542W	DN250	242	8543	785	2345	1896	480	—	
FL10096W	DN300	286	10096	875	2535	2048	530	—	
FL11649W	DN300	330	11649	900	2635	2148	530	—	

法兰气水分离过滤器
图2

Filter separator

分离过滤器

ZAKF独特的分离过滤器是旋风分离与过滤两个功能的组合产品，具有节省安装空间，减轻滤芯负荷的优点。旋风分离组件可以去除大部分的液态油水及大的固体颗粒，滤芯再进一步除油除尘，分离器滤芯一般选用P级或M级。产品可以安装在紧凑空间的机器内部，冷冻式干燥机前，吸附式干燥机后，空分设备后以及其他应用场合。

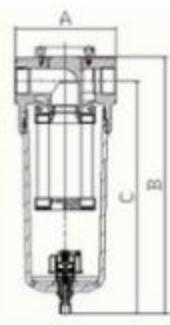
ZAKF unique separation filter is a combination of cyclone separation and filtration, with the advantages of saving installation space and reduce filter load. Cyclonic separation component can remove most of the liquid oil and water as well as large solid particles, as for filter element, it will further remove dust. Separator filter element has two grades to choose from, mainly P(3.00 micron) or M (1.00 micron). Separator can be installed in a compact space inside a machine, before refrigerated dryer, after adsorption dryer and other applications.

Specification scale

分离过滤器(PW)规格尺寸表

型号 Model	流量 Flow		接口尺寸 Interface Size	外形尺寸(mm) Shape size		
	m ³ /min	cfm		A	B	C
F0045PW	1.3	45	1/2"	95	220	197
F0046PW	1.3	45	3/4"	95	220	197
F0100PW	2.8	100	3/4"	95	280	257
F0180PW	5.1	180	1"	125	315	290
F0181PW	5.1	180	1-1/2"	125	315	290
F0370PW	10.5	370	1-1/2"	125	400	370
F0515PW	14.6	515	2"	170	520	478
F0745PW	21.1	745	2"	170	700	658
F1060PW	30	1060	2-1/2"	200	995	938
F1061PW	30	1060	3"	200	995	938
F1650PW	46.7	1650	3"	200	995	938

分离过滤器(W)
图3



(图1、图3)

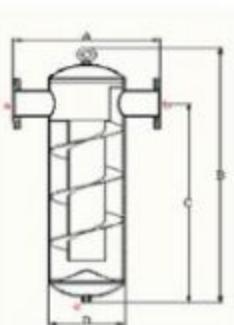


图2



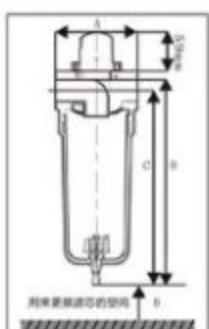
(图1、图3)

Tube thread filter

管螺紋過濾器規格尺寸表



过滤器型号 Filter model	接口尺寸 Conn. size	流量 Flow rate		尺寸(mm) Dimensions				滤芯型号 element model
		inch	m³/min	cfs	A	B	C	
F0020	1/2"	0.57	20	95	220	197	95	0020E*
F0021	3/4"	0.57	21	95	220	197	95	0020E*
F0045	1/2"	1.3	45	95	220	197	110	0045E*
F0046	3/4"	1.3	46	95	220	197	110	0045E*
F0070	3/4"	2.0	70	95	280	257	145	0070E*
F0100	3/4"	2.8	100	95	280	257	175	0100E*
F0125	1"	3.5	125	125	320	290	185	0125E*
F0126	1-1/2"	3.5	126	125	320	290	185	0125E*
F0180	1"	5.1	180	125	320	290	185	0180E*
F0181	1-1/2"	5.1	181	125	320	290	185	0180E*
F0265	1-1/2"	7.5	265	125	400	370	230	0265E*
F0370	1-1/2"	10.5	370	125	400	370	270	0370E*
F0515	2"	14.6	515	170	520	478	390	0515E*
F0745	2"	21.1	745	170	700	658	570	0745E*
F0780	2"	22.2	745	170	700	658	570	0780E*
F0900	2-1/2"	25.5	900	200	995	938	570	0900E*
F0901	3"	25.5	901	200	995	938	570	0900E*
F1060	2-1/2"	30	1060	200	995	938	630	1060E*
F1061	3"	30	1061	200	995	938	630	1060E*
F1280	3"	36.3	1280	200	995	938	700	1280E*
F1650	3"	46.7	1650	200	995	938	700	1650E*



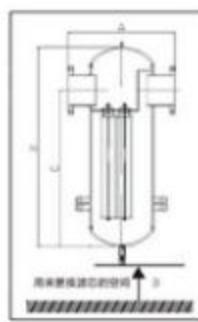
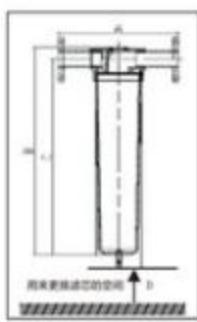
Flange filter

法兰过滤器规格尺寸表



外接法兰 External flange									
过滤器型号 Filter model	接口尺寸 Conn. size	流量 Flow rate		尺寸(mm) Dimensions				滤芯支数 element number	滤芯型号 element model
		DN (mm)	m³/min cfm	A	B	C	D		
FL0745	DN65	21.1	745	330	677	635	500	1	0745E*
FL0900	DN80	25.5	900	364	974	913	500	1	0900E*
FL1060	DN80	30	1060	364	974	913	500	1	1060E*
FL1280	DN80	36.3	1280	364	974	913	500	1	1280E*
FL1650	DN100	46.8	1650	364	974	913	500	1	1650E*

法兰连接 Flange connection									
FL1400	DN100	42	1400	525	980	782	500	2	0745FE*
FL2100	DN125	63	2100	525	1003	794	500	3	0745FE*
FL2800	DN150	84	2800	577	1064	857	500	4	0745FE*
FL3500	DN150	105	3500	651	1123	862	500	5	0745FE*
FL4448	DN200	126	4448	651	1180	891	500	6	0745FE*
FL5189	DN200	147	5189	718	1246	944	500	7	0745FE*
FL5930	DN200	168	5930	718	1246	944	500	8	0745FE*
FL6672	DN200	189	6672	784	1262	936	500	9	0745FE*
FL7350	DN250	210	7350	784	1317	964	500	10	0745FE*
FL8542	DN250	242	8542	834	1483	1122	500	11	0755FE*
FL10096	DN300	286	10096	876	1540	1132	500	13	0755FE*
FL11649	DN300	330	11649	998	1586	1146	500	15	0755FE*

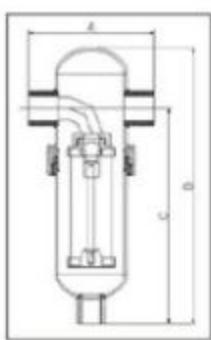


Stainless steel filter

不锈钢过滤器规格尺寸表



过滤器型号 Filter model	接口尺寸 Conn. size	流量 Flow rate		尺寸(mm) Dimensions		
		BSP-F	m ³ /min cfm	A	B	C
ST0021	3/4"	0.6	21	159	258	186
ST0053	3/4"	1.5	53	159	258	186
ST0078	1"	2.2	78	159	323	251
ST0102	1"	2.9	102	159	323	251
ST0130	1-1/2"	4.9	130	194	380	293
ST0200	1-1/2"	5.7	200	194	380	293
ST0270	2"	7.7	270	194	460	373
ST0380	2"	10.8	380	194	460	373
ST0520	2-1/2"	14.8	520	250	622	522
ST0770	2-1/2"	22	770	250	802	700
ST1400	DN100	42	1483	525	980	782
ST2100	DN125	63	2224	525	1003	794
ST2800	DN150	84	2965	577	1064	857
ST3500	DN150	105	3707	651	1123	862
ST4448	DN220	126	4448	651	1180	891
ST5189	DN220	147	5189	718	1246	944
ST5930	DN220	168	5930	718	1246	944
ST7350	DN250	210	7413	784	1317	964



Stainless steel fungicidal filter(can pass through gas)

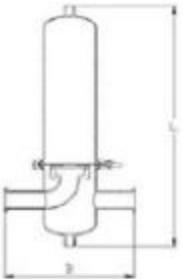
不锈钢除菌类过滤器(可以通蒸汽)



壳体采用304或316L不锈钢制造，内外表层镜面抛光处理，防腐蚀，阻力小，广泛应用于各种工艺气体的过滤应用及气体的除菌处理，如：半导体制造、冶金、石化、医疗、制药及食品工业等。

The shell is made of 304 or 316L stainless steel. The surface surface surface is polished, corrosion resistant and low pressure drop. It is widely used in the filtration of various process gases and decontamination of gases, such as semiconductor manufacturing, metallurgy, petrochemicals, medical, pharmaceutical and food industry.

过滤器型号 Filter model	接口尺寸 Conn. size	流量 Flow rate		尺寸(mm) Dimensions			滤芯支数 element number
		BSP-F	m ³ /min	cfn	筒体直径	B	
ST0021MV	3/4"	0.6	21	101	250	363	1
ST0053MV	3/4"	1.5	53	101	250	363	1
ST0078MV	1"	2.2	78	101	250	488	1
ST0102MV	1"	2.9	102	101	250	738	1
ST0130MV	1-1/2"	4.9	130	101	250	738	1
ST0200MV	1-1/2"	5.7	200	219	380	488	3
ST0270MV	2"	7.7	270	219	380	738	3



Installation in series

串联式组合

This compact assembly design will meet most customers demand. It is suitable for end of point usage and without installation of threaded connector.

为了满足更多的使用要求，我们设计了这样的快捷组合方式，适用各种实验或检测等用气终端。可以直接连在一起串联使用，无需加装螺纹连接。



Medical vacuum decontamination filter

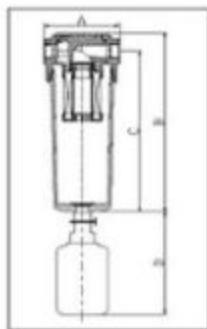
医用真空除菌过滤器



有效过滤医院病房、试验室、无尘车间的细菌以及杂质，从而保护室内环境。过滤器采用压铸铝壳体经阳极氧化处理，杜绝腐蚀性污染。

Specifically design filters for medical compressed air plant, laboratories and hospital, for filtration of liquid, bacteria contaminations and impurities. The filter adopts die-cast aluminum shell to be anodized to eliminate corrosive pollution.

过滤器型号 Filter model	接口尺寸 Conn. size	真空流量500mm Vacuum flow	空气流量 Air flow	尺寸(mm) Dimensions				滤芯型号 element model
				inch	Hg@m ³ /h	m ³ /h	A	
F0020MV	1/2"	12.9	4.3	95	220	197	160	0020MV
F0045MV	1/2"	29.4	9.8	95	220	197	160	0045MV
F0070MV	3/4"	45	15	95	280	257	160	0070MV
F0100MV	3/4"	63	21	95	280	257	160	0100MV
F0125MV	1"	78	26	125	315	285	160	0125MV
F0180MV	1"	114	38	125	315	285	160	0180MV
F0265MV	1-1/2"	168	56	125	397	365	160	0265MV
F0370MV	1-1/2"	237	79	125	397	365	160	0370MV
F0515MV	2"	330	110	170	520	478	160	0515MV
F0745MV	2"	474	158	170	700	658	160	0745MV
F1060MV	2-1/2"	675	225	200	995	938	160	1060MV
F1280MV	3"	816	272	200	995	938	160	1280MV
F1650MV	3"	1050	350	200	995	938	160	1650MV



Depth Oil removal filters

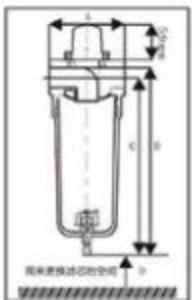
深度除油过滤器规格尺寸表



ZAKF CP系列深度除油过滤器滤芯由一个活性炭管及一段除尘滤芯组成。可吸附细微的油蒸汽，使最终的残油量低于0.003ppm。主要用于对含油量要求极高的应用场合，如：喷涂、激光切割、医药、精密电子等。

ZAKF CP Series depth oil removal filters consist of an activated carbon tube and a part of dust removal cartridge. That can absorb tiny oil vapor, cause the residual oil less 0.003 ppm at final. Application as: plating, laser cutting, medicine, precision electron etc.

过滤器型号 Filter model	接口尺寸 Conn. size	流量 Flow rate		尺寸(mm) Dimensions				滤芯型号 element model
		inch	m ³ /min	cfm	A	B	C	
F0045CP	1"	1.30	45	125	320	290	185	0045ECP
F0070CP	1"	2.00	70	125	320	290	185	0070ECP
F0100CP	1"	2.80	100	125	400	370	185	0100ECP
F0125CP	1"	3.50	125	125	400	370	185	0125ECP



Pressure correction factors

压力修正系数

工作压力 (bar) Working pressure	3	4	5	6	7	8	9	10	11	12	13	14	15	16
修正系数 Correction factors	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

以上数据均基于在7bar, 21°C时测得，过滤器最高工作压力16bar, P、M、H级最高工作温度100°C, C级最高工作温度60°C。

The above data are measured at 7 bar, 21°C, max. working pressure is 16 bar. Max. working temperature for Grade P, M, H is 100°C and Max. working temperature for Grade C is 60°C.

选型举例:处理量15m³/min, 工作压力5bar, 除油精度0.01mg/m³, V=15/0.75=20m³/min应该选型过滤器F0745H, 同时还应该配前置过滤器F0745P或者F0745M。

Example: You could choose the F0745H filter then install F0745P or F0745M Filters primarily when processing air rate is 15m³/min, working pressure 5 bar, residual oil 0.01mg/m³.

Energy efficiency of filters

过滤器的能效

压缩空气过滤器的压力损失由固有的压力损失和逐渐增大的压力损失组成。固有压力损失由过滤器壳体结构和壳体与滤芯之间的接口产生。增量的压力损失由过滤器滤芯工作过程中逐渐被污染物堵塞而产生。提供优化的压缩空气通道是降低系统运行费用的关键。

过滤器接口:同一个过滤器具有多种接口尺寸可供选择，能同时满足系统不同和流量的要求，增加了客户选择机会和减少安装费用。

紧凑、轻巧:先进的滤芯设计理念可使用过滤器更小，更紧凑。同时允许过滤器安装在狭窄的空间里。

完全防腐: 过滤器壳体经过阳极氧化处理，优越的防腐性能提供10年的质量保证。

按时更换滤芯的好处

- 确保高质量的压缩空气 ● 保护吸附式干燥器吸附床
- 保护下游设备 ● 减少运行费用 ● 提高生产力和盈利能力

不更换滤芯的后果有哪些

- 破坏吸附式干燥器的吸附床，导致非计划更换吸附剂
- 腐蚀储气罐和输送管网 ● 堵塞和冻结阀门和空气马达
- 从阀门、气缸排放的污染物会形成一个不健康的工作环境，存在潜在的人员缩退、缺员和财务赔偿等问题
- 损坏机器 ● 生产流程效率低下 ● 合格率低
- 增加制造成本，增加停机时间

过滤器配置了压差表，而且表上的指针位于绿色区域，却为什么还需要更换滤芯？

由于滤芯中的过滤纤维在使用过程中逐渐变脆，即使一个很小的孔也会导致过滤介质断裂，这时污染物未经过滤就进入下游压缩空气系统中。如果这种现象真的发生，由于过滤器前后压差不大，压差表上的指针会始终处于绿色区域，滤芯不会被及时更换直至用户在下游发现污染物，这种情况发生以后，即使更换了滤芯，在相当长的一段时间内下游管线中还是会有污染物存在。



The pressure loss of compressed air filter consists of inherent pressure loss and increasing pressure loss. The inherent pressure loss is caused by the filter shell structure and the interface between the shell and the filter core. The incremental pressure loss is caused by the clogging of the filter core. Providing the optimized compressed air channel is the key to reduce the system operating cost.

Filter connection: The same filter has a variety of interface sizes to choose from, and can meet both system and flowrate requirements, increasing customer selection opportunities and reducing installation costs.

Compact and light: ATS advanced filter core design concept Makes filter smaller and more compact, which allow filters to be installed even in narrow spaces.

Complete anticorrosion: filter shell are all anodized, this excellent anticorrosion performance provides 10 years of quality assurance.

Benefits of timely replace of elements

Ensure high quality compressed air、Protection of adsorption dryer's adsorption bed、Protection of downstream equipment、Reduction in operating costs、Improving productivity and profitability

What are the consequences of not replacing the filter

Will cause damaging to the adsorption bed of adsorption dryer, resulting in unplanned replacement of the desiccant beads. Corrosion of gas storage tanks and pipes in transmission networks. Valves and air motors blocked and frozen. Discharges from valves and cylinders create an unhealthy working environment, Potential staffing attrition as well as financial compensation due to health issue. Machine will be damaged, Ineffective production processes, Low eligibility rate, Increase manufacturing cost and downtime.

The filter is equipped with a differential pressure gauge and the pointer is in the green area, but why do we still require to change the elements?

Reason being is that the filter fibers in the filter element become brittle over a period of time, even a small hole can cause the filter medium to break and thus the contaminants will enter the downstream of the compressed air system without filtering. If this happens, the pointer on the gauge will always be in the green area due to the small pressure difference between the front and back of the filter, the filter element will not be replaced in time until the user found contaminants downstream. Please note that even if the element is replaced, contamination will still be remained in the downstream pipeline for a considerable period of time.



specializing in manufacturing compatible and custom-made filters and elements

专业制造压缩空气过滤器滤芯及非标替代滤芯定制