

更专业螺杆机制造生产商  
MORE PROFESSIONAL MANUFACTURER



## 螺杆空气压缩机

SCREW AIR COMPRESSOR

山东杜卡斯机械制造有限公司

SHANDONG DUKAS MACHINERY MANUFACTURING CO.,LTD.

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## 公司介绍 ABOUT US

山东杜卡斯机械制造有限公司位于山东临沂。旗下杜卡斯品牌集研发、设计、生产和销售为一体的综合型螺杆空气压缩机生产厂家。它拥有20000平方米厂房，其包括大型生产车间、全方位一流的展示厅和检测实验室等。

杜卡斯拥有优秀的机械工程设计师、经验丰富的员工团队和专业的管理团队。生产理念以节能为主，致力于完善和改进工艺流程，让杜卡斯的产品具有级变频节能核心技术，同时具有静音、耐用、省电、安全的特点。

公司现有9大系列多个规格的产品。包括：工频空气压缩机、永磁变频空气压缩机、永磁变频双级空气压缩机、四合一空气压缩机、无油水润滑压缩机、柴油螺杆式移动空气压缩机、电动螺杆式移动空气压缩机、冷干机、吸附机以及相关配件等。杜卡斯秉承合作共赢的经营理念为每位顾客提供一站式服务！

杜卡斯空气压缩机不仅覆盖国内市场，还远销国外至南非、澳大利亚、泰国、俄罗斯、阿根廷、加拿大等20多个国家和地区。杜卡斯产品以质量和款式的优异性得到用户的良好口碑。公司始终秉持质量第一、服务第一的理念竭诚为每一位客户提供卓越的产品和无微不至的售后服务！

杜卡斯热忱期盼国内外客户莅临本厂参观指导！



Shandong Dukas Machinery Manufacturing Co., Ltd. is located in Linyi, Shandong. Dukas is a comprehensive screw air compressor manufacturer that engaged in R & D, design, production and sales. It has a plant of 20,000 square meters, including a large production workshop, a comprehensive first-class exhibition hall and a testing laboratory.

Dukas has excellent mechanical engineering designers, an experienced staff team and a professional management team. The production concept focuses on energy-saving and is committed to perfecting and improving the technological process in order to get the core technology of super frequency energy-saving, achieving the characteristics of mute, durability, power saving and safety.

The company has 9 series of products with multiple models. Including Fixed speed air compressor, PM VSD air compressor, PM VSD two-stage air compressor, 4-in-1 air compressor, Oil free water lubricating air compressor, Diesel portable screw air compressor, Electric portable screw air compressor, Air dryer, Adsorption machine and the matching spare parts. Dukas adheres to the business philosophy of cooperation and mutual benefit to provide a one-stop service for every customer!

Dukas air compressors not only cover the domestic market but also are exported to more than 20 countries and regions such as South Africa, Australia, Thailand, Russia, Argentina, Canada and so on. Dukas products have won a good reputation from users for their excellent quality and style. The company has always adhered to the concept of quality first, service first and dedication to providing every customer with excellent products and meticulous after-sales service!

Dukas warmly welcome customers to visit our factory and establish a wide range of cooperation!

## 产品应用行业 PRODUCT APPLICATION

螺杆空气压缩机技术日趋成熟，并且具有高性能、高效率、高可靠性、低维护费用和智能控制的特点，能够满足不同用户实际的用气需求。

Screw air compressor technology is becoming more and more mature, and has the characteristics of high performance, high efficiency, high reliability, low maintenance cost and intelligent control, can meet the actual gas demand of different users.

螺杆式空气压缩机应用范围很广泛：重、轻工业、矿山、水电、海港、工程建设、油田、铁路、交通、船舶制造、能源、军工、航天等行业。

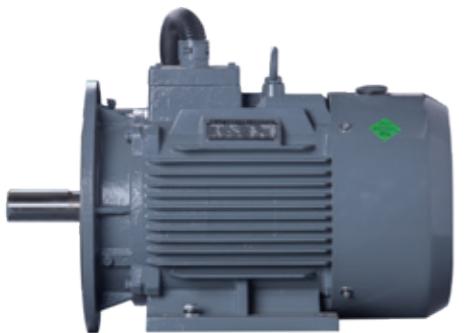
The application range of screw air compressor is very wide: heavy&light industry, mining, hydropower, seaport, engineering construction, oil and gas fields, railways, transportation, shipbuilding, energy, military industry, spaceflight and other industries.





### 主机 AIR-END

- 采用国际顶级第三代非对称双螺杆主机，秉承精致的制造工艺，采用巅峰高效率低压高效率齿形，轴向进气口设计。
- 优化流道设计，转子大，转速低，效率高。比第二代增加能效5%-15%。
- 采用瑞典SKF重型轴承，双唇唇轴密封，耐用、可靠。轴承设计寿命为8-10万小时。螺杆主机的设计寿命约为20万小时。
- Adopts the international top-level third-generation asymmetric wire twin-screw air end, adheres to the exquisite manufacturing process, adopts the peak high efficiency low-pressure, high-efficiency tooth shape and the axial air inlet design.
- Optimized flow channel design, with a large rotor, low speed and high efficiency. Increased energy efficiency by 5% -15% compared to the second generation.
- Uses Swedish SKF heavy-duty bearings, double-lip lip shaft seal, durable and reliable. The bearing design life is 80,000-100,000 hours and the air end design life is about 200,000 hours.



### 电机 MOTOR

- 电机采用知名品牌高性能电机。永磁同步电机采用高性能汝铁硼永磁体，200°C不失磁，使用寿命长达15年。
- 定子线圈采用专用漆包线，绝缘性卓越，使用寿命长。
- 电机具有温度保护功能，且调速范围宽，精度高，气量调节范围更广；体积小，噪音小，允许过载电流大，可靠性显著提高。防护等级IP55，绝缘等级F，有效保护电机，增长电机使用寿命，效率较同类产品高5%-7%。
- The motor uses high-performance motors of well-known brands. Permanent magnet synchronous motors (PM motors) use high-performance NdFeB permanent magnets which will not lose magnetism under 200 ° and its service life reaches as long as 15 years.
- The stator coil uses the frequency converter special halo proof enameled wire, the insulation is outstanding and the service life is longer.
- The motor has the function of temperature protection. It also has a wide range of motor speed regulation, high precision and wide range of volume regulation. The reliability is significantly improved with small size, low noise and large excess current.
- Protection grade IP55, insulation grade F, effectively protects the motor and increases the service life of the motor, the efficiency is 5%-7% higher than similar products.



### 风机 FAN

- 风机采用大扇面设计，有效增强风机的散热效果。
- 风机电机采用特殊绕组和高防护等级设计，适应恶劣工况。
- 风机通过控制器控制，实现自动启停功能，有效维持空压机润滑油正常工作温度。
- The fan uses a large fan design to effectively enhance the fan's heat dissipation effect. The motor adopts a special internal design to adapt to harsh working conditions.
- The fan motor adopts special winding and high protection grade design to adapt to harsh working conditions.
- The fan is controlled by the controller to realize the automatic start and stop function, which effectively maintains the normal working temperature of the air compressor lubricant.



### 换热器 COOLER

- 换热器使用高质量的原材料，独特的内部通道设计，增大换热面积，可以有效的为空压机散热。
- 换热器内壁做防腐处理，增加换热器的使用寿命，增大换热效果。
- 散热器经过严格的出厂测试，质量可靠，有效防止空压机高温，增加机器使用寿命。
- The heat exchanger uses high-quality raw materials and a unique internal channel design, which increases the heat exchange area and can effectively dissipate heat for the air compressor.
- The inner wall of the heat exchanger is treated with corrosion protection to increase the service life of the heat exchanger and increase the heat transfer effect.
- The radiator has passed the strict factory test, and the quality is reliable, which effectively prevents the high temperature of the air compressor and increases the service life of the machine.



### 进气阀 INTAKE VALVE

- 进气阀是控制空气压缩机进气的核心组件。
- 我们采用世界知名品牌进气阀，可根据系统用气量的要求，0-100%自动调节气量，压力损失小，动作稳定，寿命长，降低了运行费用。
- Intake valve is the core component to control the air intake of the air compressor.
- Adopting the world famous brand air intake valve, it can automatically adjust the air volume by 0-100% according to the requirement of the system air quantity. It promises small pressure loss, stable action and long life consequently reduced operating costs.



### 控制器 CONTROLLER

- 采用PLC多语言控制系统，界面美观直观，操作方便，操作人员可以快速、轻松地调整压缩机。
- 具有过载保护、短路保护、反向保护、低温保护、高压保护等14种保护功能，全方位保护机组。
- 先进的微电脑控制驱动系统，实现智能控制，风量变速控制，负荷启动和软启动自动调节。智能动态控制，动态显示压缩机各部件的工作状态、可视压力、温度、电流工作曲线等。
- 内存大，配备打印机接口；可采用计算机远程监控或空气压缩机之间的多联控。
- Adopts PLC multilanguage control system, beautiful and intuitive interface, easy to operate function, operators can quickly and easily adjust the compressor.
- 14 protection functions such as overload protection, short circuit protection, reverse protection, low temperature protection, high voltage protection, etc. to fully protect the unit.
- The advanced microcomputer control drive system realizes intelligent control, air volume variable speed control, automatic adjustment of load start and soft start. Intelligent dynamic control, dynamic display of the working status of each component of the compressor, visual pressure, temperature, current working curve, etc.
- Large memory and equipped with printer interface; It can use computer remote monitoring or multiple linkage control between air compressors.



### 变频器 INVERTER

- 配备高频电抗器，有效降低了变频器和外磁场的干电抗。
- 可靠地降低启动时的峰值电流，实现软启动。
- 采用高性能的电流矢量技术，可以轻松驱动感应电机。
- 高性能、高质量和高功率密度的设计，以及在可用性、可维护性、环保、安装空间和设计标准方面的显著改进，可以进一步优化用户体验。
- 独立风扇设计，增加大变频器使用寿命。
- 快速跟踪压力变化，控制压力波动在±0.01Mpa范围内，利用最优功率准确提供所需空气。
- The standard is equipped with high frequency reactor, effectively reducing the frequency converter and the external magnetic field dry reactance.
- Reliably reduces peak current when it is started, realizes stable starting.
- With high-performance current vector technology, it can easily drive induction motors.
- High performance, high quality and high power density design, as well as significant improvements in usability, maintainability, environmental protection, installation space, and design standards, can further optimize the user experience.
- Independent air duct design, resistances to all kinds of severe environmental pollution.
- Rapidly track the change of pressure and control pressure fluctuation within ±0.01Mpa, optimal power is used to accurately provide necessary air.



### 油滤 OIL FILTER

- 采用高密度滤料，表面经过纳米电镀处理。
- 滤芯孔径均匀，滤芯阻力小，通量大，拦截能力强，使用寿命长。
- 过滤精度高，有效过滤润滑油中的杂质，延长了设备的使用寿命。
- Adopts high-density filter material, the surface is treated with nano-electroplating.
- The filter element has uniform pore size, small filter resistance, large flux, strong interception ability and long service life.
- High filtration accuracy effectively filters impurities in lubricating oil, prolongs the service life of the equipment.



### 空滤 AIR FILTER

- 空滤采用具有较高的容尘能力和较低的流动阻力设计，可滤除空气中的微小固定颗粒，除尘效果达99.5%，确保系统的各个零部件的功能正常运行，延长使用寿命。  
Adopting a design with high dust holding capacity and low flow resistance, which can filter out tiny fixed particles in the air. The dust removal effect can reach 99.5%, ensuring the normal operation of the components of the system and extending the service life.



### 油分芯 AIR-OIL SEPARATOR CORE

- 品质优越的油气分离元件和气液过滤元件，配以设计先进的三次油气分离，使得含油量控制在3ppm以下，保证输出高质量的压缩空气。  
The high-quality air-oil separation element and gas-liquid filter element are equipped with advanced three-stage air-oil separation to keep the oil content below 3ppm to ensure the output of high-quality compressed air.



## 工频螺杆空气压缩机

### FIXED SPEED SCREW AIR COMPRESSOR

#### 1. 行业领先高效主机 Advanced High Efficiency Air End

采用行业领先的螺杆主机，高效率、低转速，转子采用第三代齿形，领先的优秀型线设计，具有稳定、可靠、节能及使用寿命长的优势。Adopts industry-leading screw air end, high efficiency and low rotating speed. With the third generation tooth type of rotor, cutting-edge geometric design-stable, reliable, energy saving and long service life.

#### 2. 弹性联轴器直联传动 Flexible Coupling Direct Driven

直联结构无任何损失，传动效率百分百，维护成本低，拆解方便，大大节省停机时间。维修保养方便，主机维修保养时只拆主机，电机维修保养时只拆电机，互不影响。

Adopts direct connection structure without any loss, transmission efficiency is 100%, maintenance cost is low, disassembly is convenient, greatly save the downtime. Easy maintenance—air end maintenance only need to disassemble the air end, motor maintenance only need to disassemble motor, do not affect each other.

#### 3. 智能微电脑控制系统 Intelligent Microcomputer Control System

采用智能控制系统，保障全自动化智能运行，对排气压力、温度等现场数据进行检测，通过进气阀将排气压力控制在所预置的压力范围，从而输出稳定的压力。

Adopts intelligent control system to ensure fully automated intelligent operation, detect exhaust pressure, temperature and other field data, and control the exhaust pressure within the preset pressure range through the intake valve, so as to output stable pressure.

#### 4. 安全可靠高效电机 Safe, Reliable and Efficient Motor

采用特制低转速空压机专用电机，防护等级IP55，绝缘等级F级，适应恶劣工况。高平衡精度，高速运行时保证平稳。

Adopts unique low-speed motor, protection grade IP55, insulation grade F, suitable for bad working conditions. High balance precision, high speed running smoothly.

#### 5. 独特的散热和冷却系统 Unique Heat Removal & Cooling System

采用先进的设计，口琴式散热器，使散热面积有效增加，运行更快捷顺畅，及时带走机器的热量。相同面积的换热效果比传统冷却器高出30%。即使在高温高湿的亚太地区，也能保证机组的正常运行。

Adopts advanced design, harmonica radiator, effectively increase the heat dissipation area, run faster and smoother, and take away the heat of the machine in time. The heat exchange effect of the same area is 30% higher than that of the traditional cooler. Even in the Asia-Pacific region with high temperature and high humidity, the normal operation of the unit can be guaranteed.

## 工频螺杆空气压缩机

### FIXED SPEED SCREW AIR COMPRESSOR

- 行业领先高效主机 Advanced High Efficiency Air End
- 弹性联轴器直联传动 Flexible Coupling Direct Drive
- 智能微电脑控制系统 Intelligent Microcomputer Control System
- 安全可靠高效电机 Safe, Reliable and Efficient Motor
- 独特的散热和冷却系统 Unique Heat Removal & Cooling System



**工频螺杆空气压缩机参数表** Fixed Speed Screw Air Compressor Specification 7.5kw-45kw

型号 Model		DKS-7.5F	DKS-11F	DKS-15F	DKS-18.5F	DKS-22F	DKS-30F	DKS-37F	DKS-45F
电动机 Motor	功率Power(kw) 马力Horsepower(ps)	7.5 10	11 15	15 20	18.5 25	22 30	30 40	37 50	45 60
排气量/排气压力 Air displacement/ Working pressure (M³/Min./MPa)	1.2/0.7	1.9/0.7	2.5/0.7	3.2/0.7	3.8/0.7	5.3/0.7	6.8/0.7	7.4/0.7	
	1.1/0.8	1.7/0.8	2.3/0.8	3.0/0.8	3.6/0.8	5.0/0.8	6.2/0.8	7.0/0.8	
	0.9/1.0	1.6/1.0	2.1/1.0	2.7/1.0	3.2/1.0	4.5/1.0	5.6/1.0	6.2/1.0	
	0.8/1.2	1.4/1.2	1.9/1.2	2.4/1.2	2.7/1.2	4.0/1.2	5.0/1.2	5.6/1.2	
出气口尺寸 Air outlet diameter		DN20	DN25	DN25	DN25	DN25	DN40	DN40	DN40
系统润滑油量 Lubricating oil volume (L)		10	16	16	18	18	30	30	30
噪音 Noise level dB(A)		60±2	62±2	62±2	64±2	64±2	66±2	66±2	66±2
驱动方式 Driven method		直联 Direct driven							
启动方式 Start method		△	Y-△						
机组重量 Weight (kg)		220	350	360	510	510	650	700	780
外形尺寸 External dimensions	长度 Length (mm)	900	1100	1100	1200	1200	1460	1460	1460
	宽度 Width (mm)	600	730	730	880	880	980	980	980
	高度 Height (mm)	800	980	980	1080	1080	1230	1230	1230

**工频螺杆空气压缩机参数表** Fixed Speed Screw Air Compressor Specification 55kw-132kw

型号 Model		DKS-55F	DKS-75F	DKS-90F	DKS-110F	DKS-132F
电动机 Motor	功率Power(kw) 马力Horsepower(ps)	55 75	75 100	90 125	110 150	132 175
排气量/排气压力 Air displacement/ Working pressure (M³/Min./MPa)	10.0/0.7	13.4/0.7	16.2/0.7	21.0/0.7	24.5/0.7	
	9.2/0.8	12.6/0.8	15.0/0.8	19.8/0.8	23.2/0.8	
	8.5/1.0	11.2/1.0	13.8/1.0	17.4/1.0	20.5/1.0	
	7.6/1.2	10.0/1.2	12.3/1.2	14.8/1.2	17.4/1.2	
出气口尺寸 Air outlet diameter		DN50	DN50	DN50	DN65	DN65
系统润滑油量 Lubricating oil volume (L)		65	65	72	90	90
噪音 Noise level dB(A)		68±2	68±2	70±2	70±2	70±2
驱动方式 Driven method		直联 Direct driven				
启动方式 Start method		Y-△	Y-△	Y-△	Y-△	Y-△
机组重量 Weight (kg)		1250	1350	1950	2200	2500
外形尺寸 External dimensions	长度 Length (mm)	1750	1750	2450	2450	2450
	宽度 Width (mm)	1280	1280	1660	1660	1660
	高度 Height (mm)	1590	1590	1700	1700	1700



## 变频螺杆空气压缩机

### PM VSD SCREW AIR COMPRESSOR

#### 1. 智能控制系统 Intelligent Control System

直观显示排气温度和压力，运行频率、电流、功率、运行状态，实时监控排气温度和压力、电流、频率波动。  
Direct display of discharge temperature and pressure, operating frequency, current, power, operating state. Real time monitoring of discharge temperature and pressure, current, frequency fluctuations.

#### 2. 最新一代高效永磁电机 The Latest Generation High Efficiency Permanent Motor

绝缘等级F级，防护等级IP55，适应比较恶劣的工作环境。采用无齿轮箱设计，电机与主机阳转子通过联轴器直接连接，传动效率高。调速范围宽，精度高，气量调节范围广。永磁电机效率高出普通电机3%-5%，且效率恒定，当转速下降的时候，依然保持高效率。  
Insulation grade F, protective grade IP55, suitable for the bad working conditions. No gearbox design, motor and main rotor through the coupling directly connected, high transmission efficiency. Wide range of speed regulation, high precision, wide range of air flow regulation. The efficiency of the permanent magnet motor is higher 3%-5% than regular motor, efficiency is constant, when the speed drops, still remain the high efficiency.

#### 3. 最新一代超稳变频器 The Latest Generation Super Stable Inverter

恒压供气，供气压力精确控制在0.01MPa以内。恒温供气，一般恒温设定在85℃左右，使润滑油效果最佳，同时避免高温跳机。消除空载，减少45%的空载能耗，消除过余压力，空压机压力每升高0.1MPa，耗能增加7%。矢量供气，精确计算，保证空压机的产气量与用户系统的需求数量时刻保持一致。  
Constant pressure air supply, air supply pressure is accurately controlled within 0.01Mpa. Constant temperature air supply, general constant temperature set at 85℃, make the best oil lubrication effect and avoid high temperature to stop. No empty load, reduce energy consumption by 45%, eliminate excess pressure. For each 0.1mpa increase of air compressor pressure, energy consumption increases by 7%. Vector air supply, accurate calculation, to ensure that the air compressor production and customer system air demand at all times to maintain the same.

#### 4. 宽变频范围节能显著 Wide Working Frequency Range To Save Energy

频率转换范围从5%到100%。当用户气体波动较大时，节能效果越明显，低频运行噪音越低，适用于任何场所。  
Frequency conversion ranges from 5% to 100%. When the user's gas fluctuation is large, the more obvious energy saving effect and the lower the low-frequency running noise, applicable to any place.

#### 5. 启动冲击小 Small Start-up Impact

采用变频永磁电机，启动平稳、柔和。电机启动时电流不超过额定电流，不影响电网并降低主机的机械磨损，大大减少了电源故障，延长了主螺杆机的使用寿命。  
Use frequency conversion permanent magnet motor, start smooth and soft. When the motor starts, the current does not exceed the rated current, which does not affect the power grid and the mechanical wear of the main engine, greatly reduces the power failure and prolongs the service life of the main screw machine.

#### 6. 低噪音 Low Noise

变频器是一种软启动装置，启动冲击很小，启动时噪音会很低。同时，变频空气压缩机运行频率小于工频空气压缩机稳定运行时，机械噪音大大降低。  
The inverter is a soft start device, the start-up impact very small, noise will be very low when start-up. At the same time, PM VSD compressor running frequency is less than the fixed speed compressor during stable operation, mechanical noise decreases very much.

## 变频螺杆空气压缩机

### PM VSD SCREW AIR COMPRESSOR

- 智能控制系统 Intelligent Control System
- 最新一代高效永磁电机 The Latest Generation High Efficiency Permanent Motor
- 最新一代超稳变频器 The Latest Generation Super Stable Inverter
- 宽变频范围节能显著 Wide Working Frequency Range To Save Energy
- 启动冲击小 Small Start-up Impact
- 低噪音 Low Noise



变频螺杆空气压缩机参数表 PM VSD Screw Air Compressor specification 7.5kw-45kw

型号 Model		DKS-7.5V	DKS-11V	DKS-15V	DKS-18.5V	DKS-22V	DKS-30V	DKS-37V	DKS-45V
电动机 Motor	功率Power(kw) 马力Horsepower(ps)	7.5 10	11 15	15 20	18.5 25	22 30	30 40	37 50	45 60
排气量/排气压力 Air displacement/ Working pressure (M³/Min./MPa)	1.2/0.7	1.9/0.7	2.5/0.7	3.2/0.7	3.8/0.7	5.3/0.7	6.8/0.7	7.4/0.7	
	1.1/0.8	1.7/0.8	2.3/0.8	3.0/0.8	3.6/0.8	5.0/0.8	6.2/0.8	7.0/0.8	
	0.9/1.0	1.6/1.0	2.1/1.0	2.7/1.0	3.2/1.0	4.5/1.0	5.6/1.0	6.2/1.0	
	0.8/1.2	1.4/1.2	1.9/1.2	2.4/1.2	2.7/1.2	4.0/1.2	5.0/1.2	5.6/1.2	
出气口尺寸Air outlet diameter		DN20	DN25	DN25	DN25	DN25	DN40	DN40	DN40
系统润滑油量Lubricating oil volume (L)		10	16	16	18	18	30	30	30
噪音Noise level dB(A)		60±2	62±2	62±2	64±2	64±2	66±2	66±2	66±2
驱动方式Driven method		直联Direct driven							
启动方式Start method		PM VSD							
机组重量Weight (kg)		220	350	360	510	510	650	700	780
外形尺寸 External dimensions	长度 Length (mm)	900	1100	1100	1200	1200	1460	1460	1460
	宽度 Width (mm)	680	730	730	880	880	980	980	980
高度Height (mm)		800	980	980	1080	1080	1230	1230	1230

变频螺杆空气压缩机参数表 PM VSD Screw Air Compressor Specification 55kw-132kw

型号 Model		DKS-55V	DKS-75V	DKS-90V	DKS-110V	DKS-132V
电动机 Motor	功率Power(kw) 马力Horsepower(ps)	55 75	75 100	90 125	110 150	132 175
排气量/排气压力 Air displacement/ Working pressure (M³/Min./MPa)	10.0/0.7	13.4/0.7	16.2/0.7	21.0/0.7	24.5/0.7	
	9.2/0.8	12.6/0.8	15.0/0.8	19.8/0.8	23.2/0.8	
	8.5/1.0	11.2/1.0	13.8/1.0	17.4/1.0	20.5/1.0	
	7.6/1.2	10.0/1.2	12.3/1.2	14.8/1.2	17.4/1.2	
出气口尺寸Air outlet diameter		DN50	DN50	DN50	DN65	DN65
系统润滑油量Lubricating oil volume (L)		65	65	72	90	90
噪音Noise level dB(A)		68±2	68±2	70±2	70±2	70±2
驱动方式Driven method		直联Direct driven				
启动方式Start method		PM VSD				
机组重量Weight (kg)		1250	1350	1950	2200	2500
外形尺寸 External dimensions	长度 Length (mm)	1750	1750	2450	2450	2450
	宽度 Width (mm)	1280	1280	1660	1660	1660
	高度Height (mm)	1590	1590	1700	1700	1700



## 双级永磁变频螺杆空气压缩机

### TWO-STAGE PM VSD AIR COMPRESSOR SERIES

#### 特点 FEATURES

1. 双级压缩降低了每级压缩比，减少内泄漏，提高容积效率，降低了轴承负载，提高了主机寿命。

Two-stage compression reduces the compression ratio of each stage, reduces internal leakage, improves volumetric efficiency, reduces bearing load, and increases the life of the host.

2. 双级压缩替代单级压缩，排气量增加近15%，可以实现多达成15%的节能效果。

Two-stage PM VSD replaces single-stage compression, and the displacement is increased by nearly 15%, which can achieve an additional 15% energy saving effect.

3. 转子采用最新设计的转子UV专利型线，经过二十余道工序的精加工，保证了转子型线的精确度，可靠性和有效性。

The rotor adopts the latest patented rotor UV profile, which has been refined by more than 20 procedures to ensure the accuracy, reliability, and effectiveness of the rotor profile.

4. 双级压缩主机更高效、更节能，较普通工频机节能高达40%，以8000h/台/年计算，每年可节约电费3万美金。

Two-stage PM VSD air compressor mainframe is more efficient and more energy-saving. It can save up to 40% energy compared with ordinary industrial frequency machines. Calculated at 8000h/unit/year, it can save electricity costs 30,000 USD per year.

#### 优点 ADVANTAGES

##### 1. 更节能 More Energy Efficient

双级压缩转子通过齿轮直接传动，每级转子都能获得最佳速度，主机始终处于最佳节能转速运行，变频软启动，降低了空压机启动能源消耗，采用两个独立的永磁电机驱动，通过控制级间压力，在不同的工况下压缩机始终工作在最佳效率点，相比单级压缩，理论上双级压缩比单级压缩工频机型可节能40%。

Two-stage PM VSD rotor is directly driven through the gears, and each stage of the rotor can obtain the best speed. The Air end is always running at the best energy-saving speed. The frequency conversion soft-start reduces the energy consumption of the air compressor during startup. By controlling the pressure between stages, the compressor always works at the best efficiency point under different working conditions. Compared with single-stage fixed speed air compressor, in principle, two-stage PM VSD air compressor can save 40% energy.

##### 2. 更高效 More Efficient

高效永磁电机+无传动效率损失。

高效永磁电机拥有节能和性能卓越的优点。

一体式结构能够减少联轴器和齿轮的效率损失。

PM VSD motor+ no transmission efficiency loss.

PM VSD motor has the advantages of energy-saving and excellent performance.

The one-piece structure can reduce the efficiency loss of coupling and gear.

## 双级永磁变频螺杆空气压缩机

### TWO-STAGE PM VSD AIR COMPRESSOR SERIES

- 提高了主机寿命 Improved host lifetime
- 双级压缩替代单级压缩 Two-stage compression replaces single-stage compression
- 双级压缩更可靠性和更有效 Two-stage compression is more reliable and efficient
- 双级压缩主机更高效、更节能 Two-stage compression mainframe more efficient, more energy-saving



**双级永磁变频螺杆空压机参数表** Two-stage PM VSD Air Compressor Series Specification 22kw-75kw

型号 Model		DKS-22VT	DKS-37VT	DKS-45VT	DKS-55VT	DKS-75V
电动机 Motor	功率Power(kw)	22	37	45	55	75
	马力Horsepower(ps)	30	50	60	75	100
排气量/排气压力 Air displacement/ Working pressure (M <sup>3</sup> /Min./MPa)	4.2/0.7	7.6/0.7	9.8/0.7	12.8/0.7	16.9/0.7	
	4.1/0.8	7.1/0.8	9.7/0.8	12.5/0.8	16.5/0.8	
	3.5/1.0	5.9/1.0	7.8/1.0	10.7/1.0	13.0/1.0	
	3.2/1.3	5.4/1.3	6.5/1.3	8.6/1.3	11.0/1.3	
出气口尺寸Air outlet diameter	DN40	DN40	DN65	DN65	DN65	
系统润滑油量Lubricating oil volume (L)	18	30	30	65	65	
噪音Noise level dB(A)	70±2	72±2	72±2	74±2	74±2	
驱动方式Driven method	直联Direct driven	直联Direct driven	直联Direct driven	直联Direct driven	直联Direct driven	
启动方式Start method	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	
机组重量Weight (kg)	730	1080	1680	1780	1880	
外形尺寸 External dimensions	长度Length (mm)	1500	1900	1900	2450	2450
	宽度Width (mm)	1020	1260	1260	1660	1660
	高度Height (mm)	1310	1600	1600	1700	1700

**双级永磁变频螺杆空压机参数表** Two-stage PM VSD Air Compressor Series Specification 90kw-185kw

型号 Model		DKS-90VT	DKS-110VT	DKS-132VT	DKS-160VT	DKS-185VT
电动机 Motor	功率Power(kw)	90	110	132	160	185
	马力Horsepower(ps)	125	150	175	220	250
排气量/排气压力 Air displacement/ Working pressure (M <sup>3</sup> /Min./MPa)	20.8/0.7	25.5/0.7	29.6/0.7	33.6/0.7	39.6/0.7	
	19.8/0.8	24.6/0.8	28.0/0.8	32.6/0.8	38.0/0.8	
	17.5/1.0	20.51.0	23.5/1.0	28.5/1.0	32.5/1.0	
	14.3/1.3	17.6/1.3	19.8/1.3	23.8/1.3	27.6/1.3	
出气口尺寸Air outlet diameter	DN65	DN65	DN80	DN80	DN80	
系统润滑油量Lubricating oil volume (L)	120	120	120	140	140	
噪音Noise level dB(A)	76±2	76±2	76±2	78±2	78±2	
驱动方式Driven method	直联Direct driven	直联Direct driven	直联Direct driven	直联Direct driven	直联Direct driven	
启动方式Start method	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	
机组重量Weight (kg)	2800	3160	3280	3390	3590	
外形尺寸 External dimensions	长度Length (mm)	2450	3150	3150	3800	3800
	宽度Width (mm)	1660	1980	1980	1980	1980
	高度Height (mm)	1700	2150	2150	2150	2150

# 激光切割专用空压机

SPECIAL DESIGN AIR COMPRESSOR  
FOR LASER CUTTING SYSTEM



**节能高效**  
Energy-saving And Efficiency

**插电即用**  
Power On & Use

**维护方便**  
Easy Maintenance

**可调压力**  
Adjustable Pressure

**品质可靠**  
Reliable Quality



## 激光切割专用空压机

SPECIAL DESIGN AIR COMPRESSOR FOR LASER CUTTING SYSTEM

1. 第三代一体式螺杆空压机，将空压机、储气罐、冷干机和精密过滤器，通过金属管连接为一个整体用户无需对设备进行二次连接，降低泄露风险，安装方便使用便捷。  
The third generation of integrated screw air compressor, air tank, refrigeration dryer, and precision filter are connected through metal pipes into a whole machine, user does not need to install, The equipment is reconnected to reduce the risk of leakage, and it is easy to install and use.

2. 高效精密过滤器采用进口滤芯五级过滤，为激光切割提供清洁气源，有效保护切割机镜片，减小压差降低能耗。  
High-efficiency precision filter using imported filter element with five-stage filtration, provides clean air source for laser cutting, effectively protects the lens of the laser cutting machine, reduces the pressure difference and reduces energy consumption

3. 采用性能卓越的板换式冷干机，结构紧凑回转式制冷压缩机，高冷量配置方案，确保高温条件下的可靠运行。  
Adopting a plate type freeze dryer with excellent performance, a compact rotary refrigeration compressor, and a high cooling capacity configuration scheme to ensure reliable operation under high-temperature conditions.

4. 可提供16kg连续恒压供气，消除加卸载压差，提高作业效率。  
Can provide 16kg continuous constant pressure gas supply, eliminate loading and unloading pressure difference, improve work efficiency.

5. 自动排水，降低干燥机、过滤器负荷，保证空气品质。  
Water auto drain, Reduce air dryer & air filter load, ensure air quality.

6. 采用国际知名品牌变频器，品牌实力保证、全球压缩机行业高端首选，让启动更平顺，运行更节能。  
High Grade Inverter, Top brand strength guarantee, the global compressor industry, industry high-end first choice. Smoother start-up and more energy-efficient operation.

7. 高效全铜电机，采用IE4电机，防护等级IP55、绝缘等级F、连续高强度运行设计。  
High Efficiency Copper Motor, IE4 motor is adopted, protection class IP55, insulation class F, continuous high strength operation design.

8. 主机采用国际顶级第三代非对称丝双螺杆主机，秉承精致的制造工艺，采用采用巅峰高效率齿形，轴向进气口设计。  
Air-end adopts the international top-level third-generation asymmetric wire twin-screw air end, adheres to the exquisite manufacturing process, adopts the peak high efficiency low-pressure, high efficiency tooth shape and the axial air inlet design.

**激光切割专用空压机参数表 Special Design Air Compressor For Laser Cutting System Specification**

型号 Model	DKS-11F	DKS-11V	DKS-15F	DKS-15V	DKS-22F	DKS-22V	DKS-37F	DKS-37V
排气量(M <sup>3</sup> /Min) Air Flow Capacity	1.1	1.1	1.5	1.5	2.5	2.5	3.5	3.5
功率(KW) Power	11	11	15	15	22	22	37	37
工作压力(MPa) Working Pressure	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
启动方式 Starting Way	Y-Δ	VSD	Y-Δ	VSD	Y-Δ	VSD	Y-Δ	VSD
出气口尺寸 Air Outlet Size	DN20	DN20	DN20	DN20	DN25	DN25	DN25	DN25
噪音db(A) Noise	62±2	60±2	62±2	60±2	62±2	60±2	64±2	62±2
外形尺寸(mm) Dimension	1800*755*15 85	1800*755*15 85	1800*755*15 85	1800*755*15 85	2100*910*18 20	2100*910*18 20	2100*1245*1 875	2100*1245*1 875
重量 ( kg ) Weight	540	540	550	550	890	890	1180	1180
适用激光 (W) Applicable Laser	1000- 1500	1000- 1500	2000- 3000	2000- 3000	6000-10000	6000-10000	15000-20000	15000-20000



## 四合一螺杆空压机

### 4-IN-1 TYPE SCREW AIR COMPRESSOR

1.一体化设计，更少的零部件和连接件，减少机组故障和泄露的可能性；直接排出干燥的压缩空气，充分保证用户终端用气质量；大大节省客户安装成本和使用空间，外形美观。

Integrated design with beautiful appearance, fewer parts, and connectors reduce the possibility of unit failure and leakage; direct discharge of dry compressed air, fully guarantee the quality of user terminal gas; greatly save customer installation costs and use space.

2.全新的模块化设计结构，布局紧凑，即装即用，移动便利。

With new modular design structure, compact layout, ready to install and work.

3.机组经过严格测试，机组振动值远低于国际标准。

After strict testing of the unit, the vibration value of the unit is far lower than the international standard.

4.集成优化的管路设计，减少了管路的长度和数量，由此降低了管路泄露的发生率以及降低管路系统造成的内部损耗。

The integrated and optimized pipeline design reduces the length and number of pipelines, thereby reducing the incidence of pipeline leakage and internal losses caused by the pipeline system.

5.采用性能卓越的冷冻干燥机，结构紧凑回转式制冷压缩机，高冷量配置方案，确保高温条件下的可靠运行。

Adopting a freeze dryer with excellent performance, a compact rotary refrigeration compressor, and a high cooling capacity configuration scheme to ensure reliable operation under high-temperature conditions.

**4合1螺杆空压机参数表** 4-IN-1 Screw Air Compressor Specification

型号 Model		DKS-7.5F	DKS-7.5V	DKS-11F	DKS-11V	DKS-15F	DKS-15V	DKS-15F	DKS-15V
电动机 Motor	功率Power(kw)	7.5	7.5	11	11	15	15	15	15
	马力Horsepower(ps)	10	10	10	15	20	20	20	20
排气量/排气压力 Air displacement/ Working pressure (M³/Min./MPa)	1.2/0.7	1.2/0.7	1.6/0.7	1.6/0.7	2.5/0.7	2.5/0.7	1.5/1.6	1.5/1.6	
	1.1/0.8	1.1/0.8	1.5/0.8	1.5/0.8	2.3/0.8	2.3/0.8			
	0.9/1.0	0.9/1.0	1.3/1.0	1.3/1.0	2.1/1.0	2.1/1.0			
	0.8/1.2	0.8/1.2	1.1/1.2	1.1/1.2	1.9/1.2	1.9/1.2			
出气口尺寸Air outlet diameter	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25
系统润滑油量 Lubricating oil volume (L)	10	10	16	16	16	16	18	18	18
噪音Noise level dB(A)	60±2	60±2	62±2	62±2	62±2	62±2	62±2	62±2	62±2
驱动方式Driven method	直连Direct driven	直连Direct driven	直连Direct driven	直连Direct driven	直连Direct driven	直连Direct driven	直连Direct driven	直连Direct driven	直连Direct driven
启动方式Start method	Y-Δ	PM VSD	Y-Δ	PM VSD	Y-Δ	PM VSD	Y-Δ	PM VSD	
机组重量Weight (kg)	370	370	550	550	550	550	550	550	550
外形尺寸 External dimensions	长度 Length (mm)	1600	1600	1800	1800	1800	1800	1800	1800
	宽度 Width (mm)	700	700	800	800	800	800	800	800
高度Height (mm)	1500	1500	1700	1700	1700	1700	1700	1700	1700

## 柴油固定式螺杆空压机

### FEATURES OF DIESEL STATIONARY SCREW AIR COMPRESSOR

1.主机：采用第三代5:6的大直径转子设计，主机与柴油机通过高弹性联轴器直联，中间没有增速齿轮，主机转速与柴油机一致，传动效率更高，可靠性更好，寿命更长。

Main engine: the main engine and the diesel engine are directly connected through a high elastic coupling with the large diameter rotor design of the third generation 5:6, and there is no increasing gear in the middle. The speed of the main engine is the same as that of the diesel engine and the transmission effect is achieved Higher rate, better reliability, longer life.

2.柴油机：选用康明斯、玉柴等国内外名牌柴油机，符合国II排放要求，动力强劲，燃油耗低，有覆盖全国的售后服务体系，用户可得到迅速完善的服务。

Diesel engine: the choice of domestic and foreign famous brand diesel engines such as cummins and yuchai meets the national II emission standards with strong power and low fuel consumption.

3.气量控制系统简洁可靠，根据用气量的大小，对进气量进行0~100%的自动调节，同时自动调节柴油机油门，最大限度节约柴油。

The air volume control system is simple and reliable, according to the size of the air consumption, the air intake of 0~100% automatic adjustment, at the same time, automatic adjustment of the diesel engine throttle, maximum diesel saving.

4.微电脑智能监控空压机排气压力、排气温度、柴油机转速、油压、水温、油箱液位等运行参数，具有自动报警和停机保护功能。

Microcomputer intelligent monitoring air compressor exhaust pressure, exhaust temperature, diesel engine speed, oil pressure, water temperature, oil tank level and other operating parameters, with automatic alarm and shutdown protection function.

5.多级空气过滤器，适合多粉尘工作环境；多级燃油过滤器，适合国内油品质量现状；超大油水冷却器，适合高温、尤其是高原高海拔等恶劣环境。

Multi-stage air filter, suitable for dust environment; Multistage fuel filter, suitable for domestic oil quality status; Super large oil-water cooler, suitable for high temperature, especially high altitude and other harsh environment.

6.人性化的设计，需维护的零部件都在可及范围之内，保养空气过滤器、油过滤器、燃料箱、电池及油冷却器等方便容易，减少了停机时间。Humanized design, need to maintain the parts within the range of maintenance, maintenance of air filter, oil filter, fuel tank, battery and oil cooler, easy and convenient, reduce the downtime.

### 柴油空压机参数表 Features Of Diesel Stationary Screw Air Compressor Specification

型号 Model		DKS1025K	DKS1100K	DKS1025K	DKS1025K	SDF1025K	
排气量 Air displacement/(M³/Min./MPa)		29	33	33	35	37	
排气压力 Working pressure ( MPa)		2.4	2.5	3.5	3	2.4	
出气口尺寸 Air outlet diameter	1*DN20 1*DN50	1*DN20 1*DN50	1*DN20 1*DN50	1*DN20 1*DN50	1*DN20 1*DN50	1*DN20 1*DN50	
排气温度 Dis.temperature(°C)	≤130	≤130	≤130	≤130	≤130	≤130	
供气含油量 Air oil content(PPM)	≤5	≤5	≤5	≤5	≤5	≤5	
驱动方式 Driven method	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	
柴油机参数 Diesel engineer parameter	型号model	YC6MK400-H300	WP12G480E310	QSX12-C600T/VOLVO1651VE			
	功率power(KW)	295	353	447			
	转速speed ( RPM)	1900	1750	1900			
	排量displacement(L)	10	12	15/16			
外形尺寸 External dimensions	长度含拖杆Length (mm)	3400	3400	4000			
	宽度Width (mm)	1950	1950	1950			
	高度Height (mm)	1830	1830	2100			
	机组重量Weight (kg)	4700	5000	7000			





## 智慧型水润滑无油螺杆机

Smart Energy-Saving Water Lubricating Oil-Free Screw Compressor

### DW系列水润滑无油螺杆机

自学习功能，智能起停

检测环境温度，预防环境温度过高导致的高温故障；

检测后处理设备末端压力，有效杜绝压缩空气压差过高，浪费电能；

检测电机温度，保护电机。

### DW Series Smart Energy-Saving Water Lubricating Oil-Free Screw Compressor

Self-learning function, intelligent start/stop

Detect the ambient temperature to prevent the ambient temperature from being too high to cause high-temperature failure;

Detect the terminal pressure of the post-treatment equipment to effectively prevent the compressed air's pressure different from being too high to waste electric energy;

Detect the motor's temperature to protect it.

### 水润滑无油螺杆机参数表

Smart Energy-Saving Water Lubricating Oil-Free Screw Compressor Specification

型号 Model	最大 工作压力 work pressure MPa	流量 AAD m³/min	电机 功率 Motor power kw	噪音 Noise dB(A)	冷却水 进出口径 Diameters of cooling water inlet and outlet	冷却水量 Quantity of cooling water 进水32°C Water entering32°C T/H	润滑 水量 Lubricating water L	外形尺寸 dimension LxWxH mm	重量 weight kg	空气 出口 Air outlet
DW06AW	0.8 1.0	0.78 0.65	5.5	58	3/4"	1.5	10	800x800x1100	430	3/4"
DW08A/W	0.8 1.0 1.25	1.17 1.05 0.81	7.5	58	3/4"	2	10	800x800x1100	470	3/4"
DW11AW	0.8 1.0 1.25	1.65 1.42 1.10	11	60	1"	2.5	26	1200x760x1300	580	3/4"
DW15A/W	0.8 1.0 1.25	2.43 2.17 1.80	15	63	1"	3.5	26	1200x760x1300	620	3/4"
DW18A/W	0.8 1.0 1.25	3.13 2.82 2.05	18.5	65	1"	4	30	1400x900x1450	680	1"
DW22A/W	0.8 1.0 1.25	3.52 3.21 2.78	22	65	1"	5	30	1400x900x1450	730	1"
DW30AW	0.8 1.0 1.25	5.12 4.43 3.63	30	67	1 1/2"	7	40	1550x1150x1500(A) 1500x1150x1300(W)	1100	1 1/4"
DW37A/W	0.8 1.0 1.25	6.30 5.33 4.77	37	67	1 1/2"	9	40	1550x1150x1500(A) 1500x1150x1300(W)	1150	1 1/4"
DW45A/W	0.8 1.0 1.25	7.4 6.30 5.56	45	68	1 1/2"	10	90	1800x1300x1750(A) 1800x1300x1680(W)	1390	2"
DW55A/W	0.8 1.0 1.25	9.6 8.55 7.67	55	70	1 1/2"	12	120	1980x1400x1850(A) 1800x1300x1680(W)	1470	2"
DW75AA/V	0.8 1.0 1.25	13.00 11.50 9.70	75	73	1 1/2"	18	120	2100x1600x1900(A) 1800x1300x1750(W)	2250 1630	2"
DW90A/W	0.8 1.0 1.25	14.8 13.90 12.60	90	73	1 1/2"	20	180	2400x1600x2000(A) 2200x1550x1800(W)	2650 2350	2 1/2"
DW110A/W	0.8 1.0 1.25	19.85 16.66 15.56	110	78	2"	24	180	2700x1600x2100(A) 2200x1550x1800(W)	2950 2460	2 1/2"
DW132A/W	0.8 1.0 1.25	23.10 19.97 16.90	132	78	2"	30	240	3000x1700x2250(A) 2200x1550x1800(W)	3500 2500	2 1/2"
DW160W	0.8 1.0 1.25	28.11 25.45 22.52	160	80	3"	35	240	3000x1800x2100	3700	3"
DW185W	0.8 1.0 1.25	33.97 29.00 25.21	185	80	3"	38	300	3000x1800x2100	3750	3"
DW200W	0.8 1.0 1.25	36.75 32.78 29.24	200	80	4"	42	300	3100x1850x2100	3900	4"
DW220W	0.8 1.0 1.25	39.67 36.75 29.63	220	80	4"	47	360	3100x1850x2100	4200	4"
DW250W	0.8 1.0 1.25	43.5 39.30 34	250	80	4"	53	360	3100x1850x2100	4600	4"

注：1、以“DW75W”为例，D代表Dukas，W代表WATER,75代表本台机器的主电机功率为75KW,如果后缀为“A”代表为风冷，W代表水冷；

NOTES: 1. Take \*GW75W for example: D stands for Dukas, W for WATER, 75 for 75KW, namely the machine's main motor power, and the suffix, if any, A for

air cooling, and W for water cooling;

2. The above parameters are from tests in standard working conditions and for reference only.

## 无油节能真空泵

Oil-Free Energy-Saving  
Vacuum Pump

### 产品特点

负压压力平稳,提升产品合格率!  
提高生产效率,避免重复的工作!  
节能稳定高效,节能25%-75%之间!  
压缩腔体无油润滑,降低运行开支!  
结构简单维护方便,减少维护时间!  
最佳工业投资产品,回报周期快速!

### Features

negative pressure stable, improve product pass rate! Improve production efficiency, avoid duplication of work!  
Energy-saving stable and efficient, energy-saving between 25%-75% ! Compression Cavity oil-free Lubrication, reduce operating costs!  
Simple structure, easy maintenance, reduce maintenance time!  
The best industrial investment products, Rapid Return Cycle!



### 智能 Intelligence

杜卡斯配备了智能控制器进行控制有  
卓越的内置智能功能,能和更佳的真空度,  
并配备变速驱动。  
Dukas is equipped with an intelligent controller for  
control with superior built in intelligence, ability a  
nd better vacuum, and equipped with a variable  
speed drive

### 紧凑 Compact

紧凑的降噪机壳,提供无振动的运行  
和噪音水平,紧凑的占地面积配合真  
正的即插即用,确保快速安装。  
Compact noise reduction chassis provides vibration-free  
operation and noise levels, compact footprint with true  
plug-and-play to ensure quick installation.



### 洁净 Environmental Protection

压缩腔无任何燃油排放,保零污染,  
这得益于非常清洁且性能卓越的排气  
系统,具有出色的真空能力。  
The compression chamber is fuel-free and pollution-free,  
thanks to a very clean and efficient exhaust system with  
excellent vacuum capability.

### 低压无油节能真空泵参数表

Parameter table of low-pressure oil-free energy-saving vacuum pump

型号 Model	压力 Pressure MPa	容积流量 Volumetric flow m³/min	功率 Power KW	电源 Power supply	驱动方式 Driving Mode	耗水量 Water consumption T/h	允许环境 温度范围°C Permissible Environment temperature range	进气温度°C Intake temperature	噪音等级 Noise level dB	重量 weight Kg	外形尺寸 dimension LxWxH mm	进气口尺寸 Inlet size	出气口尺寸 Outlet size
SA50-5PM	380V 50HZ 永磁同步 Permanent Magnet synchronization	0.76-5.33	5.5	380V 50HZ 永磁同步 Permanent Magnet synchronization	<46 <65	0.05	10KPA- -50KPA	75±2	480	1250X700X760	DN80	DN80	
SA50-8PM		1.05-7.40	7.5			0.08			75±2	500	1250X700X760	DN100	DN100
SA50-11PM		135-10.72	11			0.12			79±2	550	1320X700X760	DN125	DN125
SA50-15PM		2.39-17.65	15			0.15			79±2	650	1450X1150X1500	DN150	DN150
SA50-22PM		3.38-23.76	22			0.20			81±2	680	1450X1150X1500	DN150	DN150
SA50-30PM		4.59-32.21	30			0.20			81±2	720	1450X1150X1500	DN150	DN150
SA50-37PM		6.22-43.59	37			0.20			82±2	1400	2020X1460X1392	DN200	DN200
SA50-45PM		7.15-50.03	45			0.20			82±2	1550	2020X1460X1392	DN200	DN200
SA50-55PM		8.72-61.02	55			0.30			85±2	1650	2020X1460X1392	DN200	DN200
SA50-75PM		13.13-91.88	75			0.35			88±2	2600	2020X1460X1392	DN250	DN250
SA50-90PM		15.37-107.64	90			0.45			94±2	2950	2300X2100X1800	DN300	DN300
SA50-110PM		17.33-132.13	110			0.50			96±2	3200	2300X2100X1800	DN300	DN300
SA50-132PM		18.52-168.60	132			0.50			96±2	3300	2300X2100X1800	DN300	DN300
SA50-160PM		23.25-213.13	160			0.70			98±2	3800	2600X2100X1800	DN350	DN350
SA50-185PM		28.65-23632	185			0.70			98±2	3800	2600X2100X1800	DN350	DN350
SA50-220PM		33.25-264.26	220			0.70			98±2	7500	3800X2300X2680	DN350	DN350
SA50-250PM		41.12-313.15	250			0.70			98±2	7900	3800X2300X2680	DN400	DN400

### 高压无油节能真空泵参数表

Parameter table of high-pressure oil-free energy-saving vacuum pump

型号 Model	压力 Pressure MPa	容积流量 Volumetric flow m³/min	功率 Power KW	驱动方式 Driving Mode	耗水量 Water consumption T/h	允许环境 温度范围°C Permissible Environment temperature range	进气温度°C Intake temperature	噪音等级 Noise level dB	重量 weight Kg	外形尺寸 dimension LxWxH mm	进气口尺寸 Inlet size	出气口尺寸 Outlet size
SA2S-8PM PULS	-50Kpa~ -85Kpa 永磁同步 Permanent Magnet synchronization	1.08-5.99	7.5	<46 <65	0.15	10KPA- -50KPA	77±2	460	1200X750X1272	DN100	DN80	
SA2S-11PM PULS		1.23-9.23	11		0.15			77±2	500	1200X750X1272	DN100	DN80
SA2S-15PM PULS		1.95-14.39	15		0.15			79±2	1000	1300X850X1400	DN125	DN125
SA2S-22PM PULS		3.21-22.52	22		0.20			81±2	1300	1400X950X1488	DN150	DN125
SA2S-30PM PULS		4.72-31.08	30		0.20			81±2	1600	1400X950X1488	DN150	DN125
SA2S-37PM PULS		5.72-40.09	37		0.25			82±2	1600	1600X1350X1550	DN200	DN150
SA2S-45PM PULS		7.31-51.22	45		0.25	永磁同步 Permanent Magnet synchronization	<46 <65	83±2	1750	1600X1350X1550	DN200	DN150
SA2S-55PM PULS		8.61-60.29	55		0.30			85±2	2200	1750X1480X1742	DN200	DN200
SA2S-75PM PULS		11.69-81.87	75		0.35			85±2	2500	1750X1480X1742	DN200	DN200
SA2S-90PM PULS		24.15-102.75	90		0.40			90±2	3200	2600X1300X2100	DN200	DN200
SA2S-110PM PULS		30.45-121.80	no		0.40			90±2	3400	2600X1300X2100	DN200	DN200
SA2S-132PM PULS		36.75-147.87	132		0.50			92±2	4000	2950X1800X2100	DN250	
SA2S-160PM PULS		48.30-185.61	160		0.55			94±2	5000	2950X1800X2100	DN250	DN250
SA2S-185PM PULS		65.10-212.05	185		0.80			94±2	5900	3300X2000X2200	DN300	DN300
SA2S-220PM PULS		78.75-253.61	220		0.85			95±2	7500	4200X2200X2400	DN400	DN300
SA2S-250PM PULS		86.10-289.95	250		0.90			95±2	11000	4200X2200X2400	DN500	DN400



## 电动移动式螺杆空压机

### FEATURES OF ELECTRIC PORTABLE SCREW AIR COMPRESSOR

1. 可靠性高: 压缩机零部件少, 没有易损件, 因而它运转可靠, 寿命长, 大修间隔期可达8~10万小时。

High reliability: the compressor has few spare parts and no vulnerable parts, so it runs reliably and has a long service life. The interval of overhaul can reach 80,000-100,000 hours.

2. 操作维护方便: 自动化程度高, 操作人员不必经过长时间的专业培训, 可实现无人值守运转。

Easy operation and maintenance: high degree of automation, operators do not have to go through a long period of professional training, can achieve unattended operation.

3. 动力平衡性好: 没有不平衡惯性力, 可平稳地高速运转, 可实现无基础运转, 体积小, 重量轻、占地面积少。

Good dynamic balance: no unbalanced inertial force, stable high-speed operation, can achieve no foundation operation, small size, light weight, less floor space.

4. 适应性强: 具有强制输气的特点, 容积流量几乎不受排气压力的影响, 在宽广的转速范围内能保持高效率。

Strong adaptability: with the characteristics of forced gas transmission, volume flow is almost not affected by exhaust pressure, in a wide range of speed can maintain high efficiency.

**电移空压机参数表** Portable electric Portable screw air compressor specification

型号 Model	SEP-210E	SEP-350E	SEP-460E	SEP-355G	SEP-460G	SEP-565E	SEP-565G	SEP-565F
排气量/排气压力 Air displacement/ Working pressure (M³/Min.)	6.2	10.2	13.0	10.2	13.0	16	16	16
排气压力 Working pressure(MPa)	0.8	0.8	0.8	1.3	1.3	0.8	1.2	1.0
出气口尺寸 Air outlet diameter	1*DN32	1*DN20 1*DN40	1*DN20 1*DN40 1*DN50					
供气含油量 Air oil content(PPM)	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
驱动方式 Driven method	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven
柴油机参数 Diesel engineer parameter	功率 Power(kw)	37	55	75	75	90	90	110
	转速 speed(RPM)	2950	2950	2950	2950	2950	2950	2950
	工作电压 Voltage (V/Hz)	380/50	380/50	380/50	380/50	380/50	380/50	380/50
	启动方式 Start method	Y-Δ						
外形尺寸 External dimensions	长度 Length (mm)	3016	4050	4050	4050	4050	4050	4438
	宽度 Width (mm)	1616	1700	1700	1700	1700	1750	1750
	高度 Height (mm)	1449	2200	2200	2200	2200	1900	1850
机组重量 Weight (kg)	1200	1850	2000	2000	2150	2250	2450	3050

**电移空压机参数表** Portable electric Portable screw air compressor specification

型号 Model	SEP-700E	SEP-700F	SEP-750G	SEP-850G	SEP-710H	SEP-830U	SEP-915H	SEP-915K
排气量/排气压力 Air displacement/ Working pressure (M³/Min.)	20.0	20.0	22.0	24.0	20.0	24.0	28.0	28.0
排气压力 Working pressure(MPa)	0.8	1.0	1.3	1.3	1.7	2.1	1.7	2.1
出气口尺寸 Air outlet diameter	1*DN20/1*DN40 1*DN50	1*DN201*DN50						
供气含油量 Air oil content(PPM)	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
驱动方式 Driven method	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven	直联 Direct driven
柴油机参数 Diesel engineer parameter	功率 Power(kw)	110	132	160	185	160	220	220
	转速 speed(RPM)	2950	2950	2950	2950	2950	1480	1490
	工作电压 Voltage (V/Hz)	380/50	380/50	380/50	380/50	380/50	380/50	380/50
	启动方式 Start method	Y-Δ						
外形尺寸 External dimensions	长度 Length (mm)	4438	4438	3750	3750	3750	4100	4049
	宽度 Width (mm)	1920	1920	1850	1850	1850	1850	2180
	高度 Height (mm)	1850	1850	2210	2210	2210	2300	1869
机组重量 Weight (kg)	3150	3300	4100	4200	4100	5310	5900	6100



## 柴油移动式螺杆空压机

### FEATURES OF DIESEL PORTABLE SCREW AIR COMPRESSOR

1. 主机：采用第三代5:6的大直径转子设计，主机与柴油机通过高弹性联轴器直联，中间没有增速齿轮，主机转速与柴油机一致，传动效率更高，可靠性更好，寿命更长。

Main engine: the main engine and the diesel engine are directly connected through a high elastic coupling with the large diameter rotor design of the third generation 5:6, and there is no increasing gear in the middle. The speed of the main engine is the same as that of the diesel engine and the transmission effect is achieved Higher rate, better reliability, longerlife.

2. 柴油机：选用康明斯、玉柴等国内外名牌柴油机，符合国II排放要求，动力强劲，燃油耗低，有覆盖全国的售后服务体系，用户可得到迅速、完善的服务。

Diesel engine: the choice of domestic and foreign famous brand diesel engines such as cummins and yuchai meets the national II emission standards, with strong power and low fuel consumption.

3. 气量控制系统简洁可靠，根据用气量的大小，对进气量进行0~100%的自动调节，同时自动调节柴油机油门，最大限度节约柴油。The air volume control system is simple and reliable, according to the size of the air consumption, the air intake of 0~100% automatic adjustment, at the same time, automatic adjustment of the diesel engine throttle, maximum diesel saving.

4. 微电脑智能监控空压机排气压力、排气温度、柴油机转速、油压、水温、油箱液位等运行参数，具有自动报警和停机保护功能。Microcomputer intelligent monitoring air compressor exhaust pressure, exhaust temperature, diesel engine speed, oil pressure, water temperature, oil tank level and other operating parameters, with automatic alarm and shutdown protection function.



5. 多级空气过滤器，适合多粉尘工作环境；多级燃油过滤器，适合国内油品质量现状；超大油水冷却器，适合高温、尤其是高原高海拔等恶劣环境。  
Multi-stage air filter, suitable for dust environment; Multistage fuel filter, suitable for domestic oil quality status; Super large oil-water cooler, suitable for high temperature, especially high altitude and other harsh environment.

6. 人性化的设计，需维护的零部件都在可及范围之内，保养空气过滤器、油过滤器、燃料箱、电池及油冷却器等方便容易，减少了停机时间。  
Humanized design, need to maintain the parts within the range of maintenance, maintenance of air filter, oil filter, fuel tank, battery and oilcooler, easy and convenient, reduce the downtime.

7. 移动方便，在恶劣的地形条件下仍然可以灵活移动。每台压缩机配置吊环，用于安全方便地进行吊装、运输。  
Easy to move, in bad terrain conditions can still move flexibly. Each compressor is equipped with a lifting ring for safe and convenient lifting and transportation.

**柴油移动式螺杆空压机参数表 Diesel Portable Screw Air Compressor Specification**

型号 Model	SDP-185	SDP-250E	SDP-350E	SDP-350G	SDP-420E	SDP-460G
排气量/排气压力 Air displacement/ Working pressure (M³/Min)	5	7	10	10	12	13
排气压力 Working pressure(MPa)	0.7	0.8	0.8	1.3	0.8	1.3
出气口尺寸 Air outlet diameter	1*DN32	1*DN32	1*DN32	1*DN20/1*DN40	1*DN20/1*DN40	1*DN20/1*DN40
排气温度 Dis.temperature(°C)	≤100	≤100	≤100	≤100	≤100	≤100
供气含油量 Air oil content(PPM)	≤5	≤5	≤5	≤5	≤5	≤5
驱动方式 Driven method	直联 Direct driven					
柴油机参数 Diesel engineer parameter	型号Model	V2403-T	YC4DK95-H300	YC4DK95-H300	WP4.1G140E331	WP4.1G140E331
功率 Power(kw)	33	70	70	103	103	118
转速 speed(RPM)	2000	2300	2300	2000	2300	2300
排量 displacement(L)	2.6	3.621	3.621	4.088	4.088	4.5
外形尺寸 External dimensions	长度 Length (mm)	3840	3170	3170	3700	3700
	宽度 Width (mm)	1490	1600	1600	1960	1960
	高度 Height (mm)	1780	1650	1650	2000	2000
机组重量 Weight (kg)	1270	1650	2000	2200	2200	2800

**柴油移动式螺杆空压机参数表 Diesel Portable Screw Air Compressor Specification**

型号 Model	SDP-560G II	SDP-420H II	SDP-550G	SDP-530G	SDP-600H
排气量/排气压力 Air displacement/ Working pressure (M³/Min)	16	12	16	15	17
排气压力 Working pressure(MPa)	1.3	1.7	1.4	1.3	1.7
出气口尺寸 Air outlet diameter	1*DN50	1*DN50	1*DN50	1*DN50	1*DN50
排气温度 Dis.temperature(°C)	≤100	≤100	≤100	≤100	≤100
供气含油量 Air oil content(PPM)	≤5	≤5	≤5	≤5	≤5
驱动方式 Driven method	直联 Direct driven				
柴油机参数 Diesel engineer parameter	型号Model	WP4G160E331	WP4G160E331	TAD552VE	WP6G190E330
功率 Power(kw)	118	118	160	140	176
转速 speed(RPM)	2300	2300	1800	2000	2100
排量 displacement(L)	4.5	4.5	5.1	6.75	6.75
外形尺寸 External dimensions	长度 Length (mm)	3900	3900	4300	4400
	宽度 Width (mm)	1900	1900	1900	1900
	高度 Height (mm)	2100	2100	2200	2100
机组重量 Weight (kg)	2610	2610	2710	2950	3000

## 板换式冷干机参数表

### PLATE HEAT EXCHANGE TYPE AIR DRYER

采用一定波纹形状的金属片叠装而成的高效板式换热器，不同于常规的板换之处是集预冷器、蒸发器、气水分离器三合一，无需外部接管和分离器，结构紧凑，设备占地面积小。  
It is an efficient plate heat exchanger made of a certain corrugated stainless steel sheet. Unlike the conventional stainless steel plate, the pre-cooler evaporator and the gas-water separator are combined into one. No external nozzles and splitters are required. The structure is compacted and with small footprint.



#### 主要特点 MAIN FEATURE

采用先进的不锈钢板翅式结构，集预冷器、蒸发器、气水分离器为一体，体积较小，不会对压缩空气产生二次污染。  
It adopts the advanced stainless steel fin structure, which integrates pre-cooler, evaporator and gas-water separator as a whole, with small volume and no secondary pollution to compressed air.  
换热器结构紧凑，换热系数高；预冷器5-8℃的进出口温差，大大优于传统换热器，既确保了出口极低相对湿度，又有效的降低了蒸发器的负荷，从而降低了整机的能耗。  
The heat exchanger has a compact structure and a high heat transfer coefficient; The temperature difference between the inlet and outlet of the precooler at 5-8℃ is much better than that of the traditional heat exchanger, which not only ensures extremely low relative humidity at the outlet, but also effectively reduces the load of the evaporator, thus reducing the energy consumption of the whole machine.  
体积小，安装简易，模块化组合提高生产效率。  
Small size, easy installation, modular combination to improve production efficiency.  
采用国际知名品牌制冷压缩机，性能稳定可靠。  
Adopt international famous brand refrigeration compressor, the performance is stable and reliable.  
控制：露点显示，操作简单，可远程控制。Control: dew point display, simple operation and remote control.

#### 板换式冷干机参数表 Plate Heat Exchange Type Air Dryer Specification

型号 Model	处理气量 Capacity (Nm³/min)	制冷剂 Refrigerants	电 源 Power Voltage	装机功率 Installed power (kW)	净重 net weight (kg)	接口尺寸 Connection size	外形尺寸 (长宽高) L*W*H( mm)
LGA-1F	1	R134A	1 PH/220V/50HZ	0.38	35	G3/4"	500*360*680
LGA-1.6F	1.6	R134A	1 PH/220V/50HZ	0.45	35	G1"	500*360*725
LGA-2.6F	2.6	R134A	1 PH/220V/50HZ	0.78	48	G1"	550*440*820
LGA-3.8F	3.8	R22	1 PH/220V/50HZ	0.85	58	G 1 1/2"	650*540*765
LGA-6.5F	6.5	R22	1 PH/220V/50HZ	1.3	76	G 1 1/2"	770*590*870
LGA-8.5F	8.5	R22	1 PH/220V/50HZ	1.9	88	G 1 1/2"	800*700*880
LGA-11.5F	11.5	R22	1 PH/220V/50HZ	2.2	110	G2"	800*700*880
LGA-13.5F	13.5	R22	3PH/380V/50HZ	2.8	130	G2"	850*750*950
LGA-17F	17	R22	3PH/380V/50HZ	3.2	155	G 2 1/2"	850*950*990
LGA-20F/W	20	R22	3PH/380V/50HZ	4.2	220	G 2 1/2"	900*900*1290
LGA-25F/W	25	R22	3PH/380V/50HZ	4.8	280	PL80-16RF	1050*1030*1320
LGA-32F/W	32	R22	3PH/380V/50HZ	5.3	305	PL80-16RF	1050*1030*1320
LGA-38F/W	38	R22	3PH/380V/50HZ	5.8	355	PL100-16RF	1050*1050*1750
LGA-45F/W	45	R22	3PH/380V/50HZ	6.6	365	PL100-16RF	1050*1050*1750
LGA-55F/W	55	R22	3PH/380V/50HZ	7.8	470	PL125-16RF	1050*1050*1750
LGA-65F/W	65	R22	3PH/380V/50HZ	10	510	PL125-16RF	1050*1050*1750
LGA-76F/W	76	R22	3PH/380V/50HZ	12	750	PL150-16RF	2060*1050*2010
LGA-90F/W	90	R22	3PH/380V/50HZ	13.5	850	PL150-16RF	2060*1050*2010
LGA-110F/W	110	R22	3PH/380V/50HZ	16	920	PL150-16RF	2060*1050*2010
LGA-130F/W	130	R22	3PH/380V/50HZ	20	1020	PL150-16RF	2060*1050*2010



## 储气罐 AIR TANK

储气罐在空气压缩机的工作中占有重要地位。储气罐使供气更加稳定，减少了空压机的频繁启动，从而达到了节能的效果。同时，让压缩空气沉淀在气罐中，更有利于水和污染物的去除。

The Air tank occupies an important position in the work of the air compressor. The Air tank makes the gas supply more stable, reduces the frequent start of the air compressor, and thus achieves the effect of energy-saving. At the same time, let the compressed air precipitate in the Air tank is more conducive to water and pollution removal.

#### 储气罐参数表 Air Tank Specification

型号 Model	AT300-8	AT300-10	AT300-13	AT600-8	AT600-10	AT600-13	AT1000-8	AT1000-10	AT1000-13
容积 Volume (L)	300	300	300	600	600	600	1000	1000	1000
排气压力 Working pressure(MPa)	0.8	1.0	1.3	0.8	1.0	1.3	0.8	1.0	1.3
外形尺寸 External dimensions	高度 Height (mm)	1602	1602	1602	1905	1905	1905	2180	2180
	内径 Inner diameter (mm)	550	550	550	700	700	700	800	800
	厚度 Thickness (mm)	3.0	3.5	5.0	3.5	4.0	5.0	4.0	5.0
进气口 Inlet connection	尺寸 Size (mm)	DN25	DN25	DN25	DN40	DN40	DN40	DN40	DN40
	高度 Height (mm)	636	636	636	672	672	672	720	720
出气口 Outlet connection	尺寸 Size (mm)	DN25	DN25	DN25	DN40	DN40	DN40	DN40	DN40
	高度 Height (mm)	1166	1166	1166	1442	1442	1442	1720	1720
机组重量 Weight (kg)	75	81	110	120	140	160	165	212	230

型号 Model	AT2000-8	AT2000-10	AT2000-13	AT3000-8	AT3000-10	AT3000-13	AT5000-8	AT5000-10	AT5000-13
容积 Volume (L)	2000	2000	2000	3000	3000	3000	5000	5000	5000
排气压力 Working pressure(MPa)	0.8	1.0	1.3	0.8	1.0	1.3	0.8	1.0	1.3
外形尺寸 External dimensions	高度 Height (mm)	2860	2860	2860	3020	3020	3020	3000	3000
	内径 Inner diameter (mm)	1000	1000	1000	1300	1300	1300	1600	1600
	厚度 Thickness (mm)	5.0	6.0	7.0	5.0	6.0	8.0	6.0	7.0
进气口 Inlet connection	尺寸 Size (mm)	DN50	DN50	DN50	DN80	DN80	DN80	DN100	DN100
	高度 Height (mm)	849	849	849	760	760	760	936	936
出气口 Outlet connection	尺寸 Size (mm)	DN50	DN50	DN50	DN80	DN80	DN80	DN100	DN100
	高度 Height (mm)	1949	1949	1949	2080	2080	2080	2236	2236
机组重量 Weight (kg)	370	390	465	510	703	850	890	1005	1121

## 压缩空气净化系统流程图 COMPRESSED AIR PURIFICATION SYSTEM FLOW CHART



### 精密过滤器

#### HIGH-EFFICIENCY PRECISION FILTER

杜卡斯过滤器壳体采用航空级硅铝合金材料压铸成型，结构紧密，通过国家实验室耐压4.0Mpa承压试验保证过滤器在16bar的工况下密封合格。每个过滤器壳体均喷涂前经过清洗、脱脂及钝化处理，外表静电喷涂一层坚固、耐压环氧树脂涂层，起到良好的防腐作用。  
Dukas Precision filter housing is die-casted from aerospace grade silicon-aluminum alloy material. The structure is tight. The pressure is tested by the national laboratory with a pressure of 4.0Mpa to ensure that the filter is sealed under the condition of 16bar. Each filter housing is cleaned, degreased and passivated before spraying. The surface is electrostatically sprayed with a strong, pressure-resistant epoxy coating for good corrosion protection.

杜卡斯滤芯采用硼硅纤维滤材以及多孔玻纤过滤器材，外层采用聚酯纤维集尘层，耐高温、耐化学腐蚀，保证高效过滤和最小压力损失。配套在各类高精度用气设备，各类一线品牌空压机，后处理，激光切割设备，仪表用气，医疗设备，食品设备等等。  
Filter element uses borosilicate fiber filter material and porous glass fiber filter equipment. The outer layer is made of polyester fiber layer, which is resistant to high temperature and chemical corrosion, ensuring efficient filtration and minimum pressure loss. It is equipped with all kinds of high-precision gas equipment, all kinds of first-line brand air compressors, post-processing, laser cutting equipment, instrument gas, medical equipment, food equipment and so on.

过滤等级 Filter rating	过滤类型 Filter type	滤除颗粒( 水及油雾) Filter particles (water and oil mist)	含油量 Oil content
C级 Class C	碰撞分离 Collision separation	3微米/3 micron	5ppm
T级 Class T	凝聚式 Condensed	1微米/1 micron	1ppm
A级 Class A	凝聚式 Condensed	0.01微米 /0.01 micron	0.1ppm
F级 Class F	凝聚式 Condensed	0.01微米 /0.01 micron	0.001ppm
H级 (活性炭) H grade (activated carbon)	油蒸汽去除 Oil vapor removal	0.01微米 /0.01 micron	0.001ppm

过滤器型号 Filter mode	接管尺寸 Take over size	过滤器外型尺寸 Filter size		流量 flow
C,T,A,F,H	Rc	宽 mm	高 mm	Nm <sup>3</sup> /min
DKS-*001	3/4"	98	236	1.2
DKS-*002	3/4" 1"	98	236	2.4
DKS-*003	1" 1.5"	117	286	3.8
DKS-*005	1.5"	117	415	5.8
DKS-*008	1.5"	117	415	8.5
DKS-*010	2"	133	550	10.2
DKS-*013	2"	133	550	13
DKS-*015	2" 2.5"	150	780	15
DKS-*018	2" 2.5"	150	860	20
DKS-*022	2" 2.5"	150	1050	25

注：\*表示过滤器精度等级，标配手动排水阀，工作压力1.6Mpa, 工作温度1.5~80°C

Note: \* indicates the filter accuracy level, standard manual drain valve, working pressure 1.6Mpa, working temperature 1.5-80°C.

## 压缩空气净化系统流程图

### COMPRESSED AIR PURIFICATION SYSTEM FLOW CHART

