

**ZENSEN 振圣®**

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**ZENSEN 振圣®**

值得信赖的全球合作伙伴

一流产品, 服务全球

Providing World Class Products and Services

2023-2024



成为世界一流的机电产品供应商和开发商。  
To be the world class developers and suppliers for  
mechanical and electrical products.

为客户创造价值，为员工创造机会，为社会创造财富。  
To create value for customers,creat opportunities for  
employees,and create wealth for the society.

一流产品 服务全球  
Providing World Class Products and Services

## 关于振圣

浙江振圣机电科技有限公司专业从事于真空泵、冷媒回收机、水泵以及各种相关部件、工具的研发、制造和销售。

目前，振圣的年产能可为 20万台真空泵、5万台制冷回收机和 30万台水泵。公司于 2004 年开始研发生产真空泵和冷媒回收机，并与北美、南美、欧洲和亚洲市场建立了密切的技术战略合作关系。公司产品的设计以创新技术为核心，汇集了卓越的品质和高性能标准。

振圣拥有完整的全球工程开发团队、质量管理团队和客户服务团队，为全球市场上的客户带来高度创新的产品。此外，振圣还与多家世界一流的公司和合作伙伴共同合作，不断为您带来最新的技术。

振圣产品：真空泵、冷媒回收机、制冷暖通空调和管道行业的维修工具，深井潜水泵、自动自吸式水泵、太阳能深井水泵、泳池泵和智能无级变速电机，以及相关组件。此外，振圣还供应无油压缩机、无刷直流电机控制系统和其他在这些行业中常用的各种组件。

振圣服务：提供100%的研发、制造和生产全套服务，涵盖供热通风与空调工程和管道行业的各种服务工具和组件。同时提供品牌服务。

## ABOUT ZENSEN

### ABOUT ZENSEN

Zhejiang Zhensheng Mechanical & Electrical Technology Co., Ltd is specialized in the developing, manufacturing and selling of the Vacuum Pumps, Refrigerant Recovery Units, Water Pumps and various related components and tools. ZENSEN's current annual production capacity is 200K Vacuum Pumps, 50K Refrigerant Recovery Units and 300K Water pump. We began to research, development to produce vacuum pumps and refrigerant recovery units in 2004 with close technical strategic cooperation with North & South American, European and Asian marketplaces. The company's products are designed around innovative technologies that brings together excellent quality and high-performance standards.

ZENSEN has a complete global engineering development team, quality management team and customer service team that brings our clients highly innovative products to the global marketplace. ZENSEN also works with various world-class companies and partners to continue to bring you the latest technology.

ZENSEN Products: Vacuum Pumps, Refrigerant Recovery Units, and Service tools for the HVAC & R and Plumbing trades, Deep Well water pump, Automatic self-priming pumps, Solar Deep Well water pump, Swimming pump and Intelligent step less variable speed motor, and associated components. ZENSEN also supplies components such as oil-less compressors, BLDC motor control systems, and other various components commonly used in these trades.

ZENSEN Services: 100% Turnkey development, tooling and production of various service tools and components serving the HVAC&R and Plumbing trades. Branding services.

## 关于生产 ABOUT production



### ● 先进生产设备

公司秉承“以高、精、尖的生产设备，制造高品质的产品”的生产理念，引进国际先进的五轴车铣复合中心、钻铣加工中心、精密高速车床等多条机械加工、表面处理生产线等，确保了零部件加工的精细化要求和装配出高品质的产品。

### TOP PRODUCTION EQUIPMENT

The company insists on technological innovation, invests much in the introduction of automatic equipments for technological improvements. The equipments include special machine for metal machining, automatic Mazak CNC machine and a series high-performance machine.



### ● 先进的生产加工工艺

公司关注产品实现每一个细节的生产效率和保证能力不断进行技术创新和数据分析，通过高素质的员工和先进的制造设备的有机结合，使零件成型、机械加工、材料处理、装配与包装、质量检测与控制等多个工艺环节都能采用最佳的生产方式。

### TECHNOLOGY

Based on specialized production to allocate human resource and equipments, utilize advanced information management system, and rely on the best production mode to realize best efficiency and lowest cost. Make sure every process is accurate to provide customers with products of high quality.



### ● 管理

公司注重员工教育培训和先进管理方法的学习。集技术、人才、管理等优质资源优势进行有效合理的整合，导入5S管理、ISO9001质量体系管理、数据化生产管理等现代化企业管理模式，以保证企业的诚信和信心。

### CORPORATE MANAGEMENT

The company implemented ERP management system and 5S management based on the ISO9001 requirements;

### ● 服务

公司以“站在客户的立场上”为服务理念。加强产品的售前、售中、售后服务，及时帮助解决客户在了解和使用产品中的各种问题，持续为客户提供满足期望的产品，做客户永远的伙伴。

### CUSTOMER SERVICE

Continuous improvement, focus on achieving customer's value and provide the best service.



## 关于特性

### 1. 产品价值:

更轻、更小、更可靠;

### 2. 防卡机技术:

采用美国航天工业道康宁耐磨技术和关键零件的特殊处理, 正常连续长时间使用不卡机;

### 3. 防漏油技术:

采用进口的密封元件和防泄漏专利技术的应用, 能够长时间连续使用不漏油;

### 4. 满足不同的需求:

通过对市场的充分调查研究, 特别选用不同的配置以满足不同的需求: SV配置真空泵采用高可靠性电磁阀, 有效防止返油; R32配置真空泵采用特别设计的无火花结构, 适用于R32和1234yf等冷媒; ZSBZ系列小巧方便, 特别适合于制冷维修户外作业;

## ABOUT Characteristics

### 1. PRODUCTS VALUE:

Lighter, Smaller, Faster and more Reliable;

### 2. ANTI-SEIZE TECHNOLOGY:

We adopted the US technology Dow Corning of Anti-Abrasion and special treatment of material, the products will not seize under long-term operation;

### 3. OIL ANTI-LEAKAGE TECHNOLOGY:

Specially designed and patented high grade Imported Seals used to prevent the oil leakage;

### 4. MEET DIFFERENT NEEDS:

Through the full investigation to the market, especially select different configures meet different needs: SV configured vacuum pump adopts high reliable solenoid valve to prevent oil flow back, R32 configured vacuum pump adopts specially designed non-sparkling structure, suitable for A2, A2L and A3 systems; ZSBZ series 18VDC vacuum pump is very small and convenient, which is suitable for outdoor refrigeration maintenance;



## 全球销售网络 GLOBAL sales network

振圣的销售和设计服务网络遍布全球市场。从在亚洲的国内销售到为世界各地定制产品，振圣在提供满足客户需求的创新设计方面是公认的领导者。

ZENSEN's sales and design services network covers all global markets. From domestic ZENSEN sales in Asia to customized products for the balance of the globe, ZENSEN is a proven leader in providing innovative designs for meeting the customers needs;



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# ZSR-2A 双缸回收机

## ZSR-2A 2-Cyl Ignition Proof Refrigerant Recovery Unit



### 特点Features:

1. 可以回收中低压制冷剂如R-134a 或 R1234yf (A2L) 以及高压制冷剂如R410a 或 R32 (A2L)  
Recover Med-Low Pressure Refrigerants such as R-134a or R1234yf (A2L) to High Pressure Refrigerants such as R410a or R32 (A2L)
2. 无油双缸压缩机设计, 不受污染的制冷剂和油影响 Oil-less 2 cylinder compressor design that is not affected by contaminated refrigerants and oils.
3. 压缩机由轻量化、高效的无刷直流电机驱动 Compressor is powered by lightweight, highly efficient BLDC motor.
4. 压缩机设计为即使在高压下也能抽真空 Compressor designed to pull a vacuum even at high discharge pressures.
5. 三阀门设计, 可实现各种回收功能, 包括清洗或自清洁功能 3 Valve design for various recovery functions, including purge or self-cleaning
6. 清洗或自清洁功能, 清除内置冷凝器盘管中残留的制冷剂 Purge or Self Cleaning function to remove residual trapped refrigerants from built in condenser coil.
7. 进气口过滤网, 防止大颗粒损坏无油活塞密封件 Inlet port filter screen to prevent large particles from damaging the oil-less piston seals.
8. 无刷直流电机控制器编程, 可防止电机过载, 并通过电机传感器实现最佳性能 BLDC motor controller programmed to prevent motor overloading and motor sensing for optimal performance
9. 采用易于携带的高抗冲击吹塑箱, 经久耐用 Durable design utilizing a high impact resistant blow molded case that is easy to carry
10. 通用电压, 可在输入功率80VAC 至 265VAC、50/60Hz时运行 Universal voltage, can run with input power down to 80VAC to 265VAC, 50 or 60Hz
11. 直接驱动风扇, 空气流量大, 即使在炎热的天气也能保持设备凉爽 Direct drive fan to high air flows to keep the unit cool even in hot days
12. LED 界面, 配有低压表和高压表, 为用户提供设备状态 LED interface and Low and High Pressure gauges to give the user units status.
13. 可选配油罐满溢传感器线 Optional tank overfill sensor cord available
14. 快速直接回收蒸汽和液体制冷剂 Fast direct vapor and liquid refrigerant recovery
15. 防点火设计, 可安全回收 A2、A2L 和 A3 制冷剂 Ignition Proof Design for safe A2, A2L and A3 refrigerant recover.
16. 专利产品 Patented Product

# ZSR-2A 双缸回收机

## ZSR-2A 2-Cyl Ignition Proof Refrigerant Recovery Unit



### 适用范围Application:

1. 含制冷剂的供热通风与空调工程设备, 包括: 热泵、分体式系统、窗式空调、冰箱、冷藏架、屋顶设备、自带空调和热泵设备、冰柜等。
  2. 汽车和移动空调系统, 用于轿车、公共汽车、卡车和越野车。
  3. 适用于中低压至高压制冷剂。
1. HVAC&R refrigerant containing equipment including: Heat Pumps, Split Systems, Window AC, Refrigerators, Cold Storage Racks, Roof Top units, self contained AC and Heat Pump units, freezers, and many more.
2. Automotive and Mobile AC systems for cars, buses, trucks, and off road vehicles.
3. Suitable for Medium Low to High Pressure refrigerants.

### 技术参数 Specification

| 型号 Model                                                                                 |             | ZSR-2A                                                       |              |              |
|------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------|--------------|--------------|
| 制冷剂 Refrigerants                                                                         |             | Ⅲ: R12, R134a, R401C, R406A, R500, R1234yf, and many others. |              |              |
|                                                                                          |             | Ⅳ: R-22, R401A, R-407C, R407D, R-502, and many others.       |              |              |
|                                                                                          |             | Ⅴ: R410a, R404A, R507, R32 and many others                   |              |              |
| 电压Power Supply                                                                           |             | 100-240VAC, 50/60HZ                                          |              |              |
| 功率Motor Power                                                                            |             | 1.3HP                                                        |              |              |
| 转速Motor Speed                                                                            |             | 3000 RPM Variable Speed                                      |              |              |
| 最大电流Max.Current Draw                                                                     |             | 6.5A/12A                                                     |              |              |
| 压缩机Compressor Type                                                                       |             | Reciprocating 2 Cylinder Oil-less, Air Cooled                |              |              |
| 高压切断电源High Pressure Shut-Off                                                             |             | 550 PSIG(38.5bar/3850kPa) Maximum                            |              |              |
| 经认证的回收效率<br>美国AHRI 740-2016测试标准<br>Certified<br>Recovery Rates<br>per AHRI 740-2016 Std. | 水汽Vapor     | Ⅲ 0.31kg/min                                                 | Ⅳ 0.35kg/min | Ⅴ 0.34kg/min |
|                                                                                          | 液体Liquid    | 4.52kg/min                                                   | 5.63kg/min   | 6.29kg/min   |
|                                                                                          | 推拉Push/Pull | 4.99kg/min                                                   | 5.73kg/min   | 6.81kg/min   |
| 运行温度Operating Temp                                                                       |             | 0℃-40℃                                                       |              |              |
| 尺寸Dimensions                                                                             |             | 370mm (L) x245mm (W) x310mm (H)                              |              |              |
| 净重N.W.                                                                                   |             | 11.3kg                                                       |              |              |

## ZSR-2B 双缸回收机

# ZSR-2B Deluxe 2-Cyl Ignition Proof Recovery Unit



### 特点Features:

1. 可以回收中低压制冷剂如R-134a 或 R1234yf (A2L) 以及高压制冷剂如R410a 或 R32 (A2L)  
Recover Med-Low Pressure Refrigerants such as R-134a or R1234yf (A2L) to High Pressure Refrigerants such as R410a or R32 (A2L)
2. 无油双缸压缩机设计, 不受污染的制冷剂和油影响 Oil-less 2 cylinder compressor design that is not affected by contaminated refrigerants and oils.
3. 压缩机由轻质、高效的无刷直流电机驱动 Compressor is powered by lightweight, highly efficient BLDC motor.
4. 压缩机设计为即使在高压下也能抽真空 Compressor designed to pull a vacuum even at high discharge pressures.
5. 单或三阀门设计, 可实现各种回收功能, 包括清洗或自清洗功能 1 or 3 Valve design for various recovery functions, including purge or self-cleaning
6. 清洗或自清洗功能, 清除内置冷凝器盘管中残留的制冷剂 Purge or Self Cleaning function to remove residual trapped refrigerants from built in condenser coil.
7. 进气口过滤网, 防止大颗粒损坏无油活塞密封件 Inlet port filter screen to prevent large particles from damaging the oil-less piston seals.
8. 无刷直流电机控制器编程, 可防止电机过载, 并通过电机传感实现最佳性能 BLDC motor controller programmed to prevent motor overloading and motor sensing for optimal performance
9. 采用易于携带的高抗冲击注塑箱, 经久耐用 Durable design utilizing a high impact resistant injection molded case that is easy to carry
10. 通用电压, 可在输入功率80VAC 至 265VAC、50 或 60Hz时运行 Universal voltage, can run with input power down to 80VAC to 265VAC, 50 or 60Hz.
11. 直接驱动风扇, 空气流量大, 即使在炎热的天气也能保持设备凉爽 Direct drive fan to high air flows to keep the unit cool even in hot days
12. LCD 界面, 配有电子低压表和高压表, 为用户提供设备状态 LCD interface with electronics Low and High Pressure gauges to give the user units status.
13. 可选配油罐满溢传感器线 Optional tank overfill sensor cord available
14. 快速直接回收蒸汽和液体制冷剂 Fast direct vapor and liquid refrigerant recovery
15. 防点火设计, 可安全回收 A2、A2L 和 A3 制冷剂 Ignition Proof Design for safe A2, A2L and A3 refrigerant recover.
16. 专利产品 Patented Product

## ZSR-2B 双缸回收机

# ZSR-2B Deluxe 2-Cyl Ignition Proof Recovery Unit



### 适用范围Application:

1. 含制冷剂的供热通风与空调工程设备, 包括: 热泵、分体式系统、窗式空调、冰箱、冷藏架、屋顶设备、自带空调和热泵设备、冰柜等。
2. 汽车和移动空调系统, 用于轿车、公共汽车、卡车和越野车。
3. 适用于中低压至高压制冷剂。
1. HVAC&R refrigerant containing equipment including: Heat Pumps, Split Systems, Window AC, Refrigerators, Cold Storage Racks, Roof Top units, self contained AC and Heat Pump units, freezers, and many more.
2. Automotive and Mobile AC systems for cars, buses, trucks, and off road vehicles.
3. Suitable for Medium Low to High Pressure refrigerants.

### 技术参数 Specification

| 型号 Model                                                                                         | ZSR-2B                                                         |            |            |            |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------|------------|------------|
| 制冷剂<br>Refrigerants                                                                              | III: R12, R134a, R401C, R406A, R500, R1234yf, and many others. |            |            |            |
|                                                                                                  | IV: R-22, R401A, R-407C, R407D, R-502, and many others.        |            |            |            |
|                                                                                                  | V: R410a, R404A, R507, R32 and many others                     |            |            |            |
| 电压Power Supply                                                                                   | 100-240VAC, 50/60HZ                                            |            |            |            |
| 功率Motor Power                                                                                    | 1.3HP                                                          |            |            |            |
| 转速Motor Speed                                                                                    | 3000 RPM Variable Speed                                        |            |            |            |
| 最大电流Max.Current Draw                                                                             | 6.5A/12A                                                       |            |            |            |
| 压缩机Compressor Type                                                                               | Reciprocating 2 Cylinder Oil-less, Air Cooled                  |            |            |            |
| 高压切断电源High Pressure Shut-Off                                                                     | 550 PSIG(38.5bar/3850kPa) Maximum                              |            |            |            |
| 经认证的回收效率<br>美国AHRI 740-<br>2016测试标准<br>Certified<br>Recovery Rates<br>per AHRI 740-<br>2016 Std. | 水汽Vapor                                                        | 0.31kg/min | 0.35kg/min | 0.34kg/min |
|                                                                                                  | 液体Liquid                                                       | 4.52kg/min | 5.63kg/min | 6.29kg/min |
|                                                                                                  | 推/拉Push/Pull                                                   | 4.99kg/min | 5.73kg/min | 6.81kg/min |
| 运行温度Operating Temp                                                                               | 0°C-40°C                                                       |            |            |            |
| 尺寸Dimensions                                                                                     | 370mm (L) x260mm (W) x307mm (H)                                |            |            |            |
| 净重N.W.                                                                                           | 11.5kg                                                         |            |            |            |

# ZSR-1A 单缸回收机

## ZSR-1A Single-cylinder Refrigerant Recovery Unit



### 特点Features:

- 1.可以回收中低压制冷剂如R-134a 或 R1234yf (A2L) 以及高压制冷剂如R410a 或 R32 (A2L)  
Recover Med-Low Pressure Refrigerants such as R-134a or R1234yf (A2L) to High Pressure Refrigerants such as R410a or R32 (A2L)
- 2.无油单缸压缩机设计, 不受污染的制冷剂和油影响 Oil-less 1 cylinder compressor design that is not affected by contaminated refrigerants and oils.
- 3.压缩机由轻质、高效的直流无刷电机驱动 Compressor is powered by lightweight, highly efficient BLDC motor.
- 4.压缩机设计为即使在高排气压力下也能抽真空 Compressor designed to pull a vacuum even at high discharge pressures.
- 5.三阀门设计, 可实现各种回收功能, 包括清洗或自清洗功能 3 Valve design for various recovery functions, including purge or self-cleaning
- 6.清洗或自清洗功能, 清除内置冷凝器盘管中残留的制冷剂 Purge or Self Cleaning function to remove residual trapped refrigerants from built in condenser coil.
- 7.进气口过滤网, 防止大颗粒损坏无油活塞密封件 Inlet port filter screen to prevent large particles from damaging the oil-less piston seals.
- 8.采用高抗冲击注塑箱, 易于携带, 经久耐用 Durable design utilizing a high impact resistant injection molded case that is easy to carry
- 9.双电压可用 Dual voltage available.
- 10.直接驱动风扇, 空气流量大, 即使在炎热的天气也能保持设备凉爽 Direct drive fan to high air flows to keep the unit cool even in hot days
- 11.配有低压表和高压表, 为用户提供设备状态 Low and High Pressure gauges to give the user units status.
- 12.防点火设计, 可安全回收 A2、A2L 和 A3 制冷剂 Ignition Proof Design available for safe A2, A2L and A3 refrigerant recover.
- 13.专利产品 Patented Product.

# ZSR-1A 单缸回收机

## ZSR-1A Single-cylinder Refrigerant Recovery Unit



适用范围Application:  
1.制冷行业分体式空调、窗机、柜机的空调系统、冷冻货柜维修;  
Refrigeration industry split air-conditioning, window machine, cabinet air-conditioning system of cabinet machine, freezer container maintenance;  
2.汽车行业轿车、大巴空调及冷冻冷藏车的维修及汽车空调生产厂的质检及返修;  
Maintenance of car, bus air-conditioning and refrigerated truck in automobile industry as well as quality inspection and return repair of automobile air-conditioning production factory;  
3.适用于大多数中高压制冷剂。

### 技术参数 Specification

| 型号 Model                                                                        |              | ZSR-1A                                                              |   |   |
|---------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------|---|---|
| 制冷剂<br>Refrigerants                                                             |              | Ⅲ: R12, R134a, R401C, R406A, R500, R1234yf, and many others.        |   |   |
|                                                                                 |              | Ⅳ: R-22, R401A, R-407C, R407D, R-502, and many others.              |   |   |
|                                                                                 |              | V: R410a, R404A, R507, R32 and many others                          |   |   |
| 电压Power Supply                                                                  |              | 115VAC 50/60Hz or 230VAC 50/60Hz or Dual Voltage 115~230VAC 50,60Hz |   |   |
| 功率Motor Power                                                                   |              | 1/2HP                                                               |   |   |
| 转速Motor Speed                                                                   |              | 2300 RPM Maximum Variable Sped Motor                                |   |   |
| 最大电流Max.Current Draw                                                            |              | 5A @ 230VAC, 8A @ 115VAC                                            |   |   |
| 压缩机Compressor Type                                                              |              | 无油, 空气冷却 Oil-less,Air cooled                                        |   |   |
| 高压切断电源High Pressure Shut-Off                                                    |              | 550 PSIG (38.5bar/3850kPa) Maximum                                  |   |   |
| 经认证的回收效率 美国AHRF 740-2016测试标准<br>Certified Recovery Rates per AHRF 740-2016 Std. | 水汽Vapor      | Ⅲ                                                                   | Ⅳ | Ⅴ |
|                                                                                 | 液体Liquid     |                                                                     |   |   |
|                                                                                 | 推/拉Push/Pull |                                                                     |   |   |
| 运行温度Operating Temp                                                              |              | 0℃~40℃                                                              |   |   |
| 尺寸Dimensions                                                                    |              | 350mm (L) x220mm (W) x300mm (H)                                     |   |   |
| 净重N.W.                                                                          |              | 8 kg                                                                |   |   |

# ZSA 真空泵

## ZSA Hi-Rel Vacuum Pump

### 特点:

1. 泵体采用经特殊热处理的零部件, 经久耐用, 使用寿命长
2. 使用全铜电机线, 提供更好的电机性能, 能在高温、低温环境下运转
3. 在寒冷天气下, 启动温度低至 0°C
4. 强制供油系统, 可在所有泵送条件下提供 100% 润滑
5. 专利放油系统, 换油更方便
6. 高极限真空 (双级, 2Pa)
7. 可选无火花配置, 适用于易燃制冷剂系统
8. 可选配双电压

### Feature:

1. The pump mechanism built with specially heat treated parts that provide durability for long service life.
2. Use all copper motor wires for better motor performance and low and high operating temperatures.
3. Cold weather start up down to 0°C.
4. Forced oil system to provide 100% lubrication under all pumping conditions.
5. Patented oil drain system for more convenient oil changes.
6. High Ultimate vacuum (2 stage, 2Pa)
7. Optional Ignition proof construction available for flammable refrigerant system use.
8. Optional dual voltage available



# ZSA 真空泵

## ZSA Hi-Rel Vacuum Pump



SV款  
增加电磁阀结构, 绝对防止返流  
Equip The Solenoid Valve,  
Anti-Backflow Function



R32款  
无火花配置, 适用于A2, A2L和A3等级冷媒  
Suitable for A2, A2L and A3 refrigerant systems with spark-less construction



### 技术参数 Specification

| 型号 Model                    | ZSA-1S           |                  | ZSA-1.5S         |                  | ZSA-2S            |                   | ZSA-3S            |                   | ZSA-4S            |                   |
|-----------------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 系列Series                    | N、SV、R32         |                  |                  |                  |                   |                   |                   |                   |                   |                   |
| 频率Frequency                 | 50Hz             | 60Hz             | 50Hz             | 60Hz             | 50Hz              | 60Hz              | 50Hz              | 60Hz              | 50Hz              | 60Hz              |
| 流量<br>Free Air Displacement | 1.8CFM<br>50 l/m | 2.1CFM<br>60 l/m | 2.7CFM<br>76 l/m | 3.2CFM<br>90 l/m | 3.6CFM<br>100 l/m | 4.3CFM<br>120 l/m | 5.3CFM<br>151 l/m | 6.4CFM<br>180 l/m | 7.1CFM<br>201 l/m | 8.5CFM<br>240 l/m |
| 功率Power                     | 160W             | 180W             | 180W             | 210W             | 180W              | 210W              | 210W              | 230W              | 460W              | 500W              |
| 转速RPM                       | 1440             | 1720             | 1440             | 1720             | 1440              | 1720              | 1440              | 1720              | 1440              | 1720              |
| 极限真空Ultimate Vacuum         | 75microns        |                  | 75microns        |                  | 75microns         |                   | 75microns         |                   | 75microns         |                   |
| 加油量Oil Capacity             | 14.1oz./400ml    |                  | 13.8oz./390ml    |                  | 19.8oz./650ml     |                   | 19.8oz./560ml     |                   | 30 oz./850ml      |                   |
| 尺寸Dimensions(mm)            | 315 × 122 × 258  |                  | 315 × 122 × 258  |                  | 348 × 140 × 272   |                   | 348 × 140 × 272   |                   | 380 × 160 × 285   |                   |
| 重量Weight                    | 15lb/6.8kg       |                  | 16.5lb/7.5kg     |                  | 18.3lb/8.3kg      |                   | 22lb/10kg         |                   | 29.8lb/13.5kg     |                   |

| 型号 Model                    | ZSA-1D           |                  | ZSA-1.5D         |                  | ZSA-2D            |                   | ZSA-3D            |                   | ZSA-4D            |                   |
|-----------------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 系列Series                    | N、SV、R32         |                  |                  |                  |                   |                   |                   |                   |                   |                   |
| 频率Frequency                 | 50Hz             | 60Hz             | 50Hz             | 60Hz             | 50Hz              | 60Hz              | 50Hz              | 60Hz              | 50Hz              | 60Hz              |
| 流量<br>Free Air Displacement | 1.8CFM<br>50 l/m | 2.1CFM<br>60 l/m | 2.7CFM<br>76 l/m | 3.2CFM<br>90 l/m | 3.6CFM<br>100 l/m | 4.3CFM<br>120 l/m | 5.3CFM<br>151 l/m | 6.4CFM<br>180 l/m | 7.1CFM<br>201 l/m | 8.5CFM<br>240 l/m |
| 功率Power                     | 190W             | 210W             | 210W             | 230W             | 360w              | 390w              | 560W              | 610W              | 700W              | 750W              |
| 转速RPM                       | 1440             | 1720             | 1440             | 1720             | 1440              | 1720              | 1440              | 1720              | 1440              | 1720              |
| 极限真空Ultimate Vacuum         | 15microns        |                  | 15microns        |                  | 15microns         |                   | 15microns         |                   | 15microns         |                   |
| 加油量Oil Capacity             | 10oz./300ml      |                  | 18oz./540ml      |                  | 17.7oz./500ml     |                   | 21.2oz./600ml     |                   | 20.5oz./580ml     |                   |
| 尺寸Dimensions(mm)            | 315 × 122 × 258  |                  | 348 × 140 × 272  |                  | 348 × 140 × 272   |                   | 380 × 160 × 285   |                   | 380 × 160 × 285   |                   |
| 重量Weight                    | 19.4lb/8.8kg     |                  | 22.5lb/10.2kg    |                  | 23.1lb/10.5kg     |                   | 34.8lb/15.8kg     |                   | 35.7lb/16.2kg     |                   |

# ZSC 真空泵

## ZSC Portable Vacuum Pump

### 特点:

1. 泵体采用经特殊处理的零部件, 经久耐用, 使用寿命长
2. 低成本版泵采用铝电机绕组
3. 在寒冷天气下, 启动温度低至 0°C
4. 强制供油系统, 可在所有泵送条件下提供 100% 润滑
5. 专利放油系统, 换油更方便。
6. 高极限真空 (双级, 2Pa)
7. 可选无火花配置, 适用于易燃制冷剂系统。
8. 可选配双电压
9. 可选配全铜电机线, 提供更好的电机性能, 能在高温、低温环境下运转

### Feature:

1. The pump mechanism built with specially heat treated parts that provide durability for long service life.
2. Lower cost version pump using Aluminum motor windings.
3. Cold weather start up down to 0°C.
4. Forced oil system to provide 100% lubrication under all pumping conditions.
5. Patented oil drain system for more convenient oil changes.
6. High Ultimate vacuum (2 stage, 2Pa)
7. Optional Ignition proof construction available for flammable refrigerant system use.
8. Optional dual voltage available
9. Optional all copper motor wires for better motor performance and low and high operating temperatures.



# ZSC 系列真空泵

## ZSC Portable Vacuum Pump



### SV款

增加电磁阀结构, 绝对防止返流  
Equip The Solenoid Valve,  
Anti-Backflow Function



### R32款

无火花配置, 适用于  
A2, A2L 和 A3 等级冷媒  
Suitable for A2, A2L  
and A3 refrigerant  
systems with spark-  
less construction



### 技术参数 Specification

| 型号 Model                    | ZSC-1S       |              | ZSC-1.5S     |              | ZSC-2S       |              | ZSC-3S        |               | ZSC-4S        |               | ZSC-5S        |               | ZSC-6S        |               |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 频率 Frequency                | 50Hz         | 60Hz         | 50Hz         | 60Hz         | 50Hz         | 60Hz         | 50Hz          | 60Hz          | 50Hz          | 60Hz          | 50Hz          | 60Hz          | 50Hz          | 60Hz          |
| 流量<br>Free Air Displacement | 1.4CFM       | 1.7CFM       | 2.5CFM       | 3.0CFM       | 3.0CFM       | 3.5CFM       | 5.3CFM        | 6.4CFM        | 7.1CFM        | 8.5CFM        | 8.9CFM        | 10.6CFM       | 10.7CFM       | 12.8CFM       |
|                             | 40 l/m       | 48 l/m       | 71 l/m       | 85 l/m       | 83 l/m       | 100 l/m      | 151 l/m       | 180 l/m       | 201 l/m       | 240 l/m       | 251 l/m       | 300 l/m       | 301 l/m       | 360 l/m       |
| 功率 Power                    | 160W         | 180W         | 180W         | 200W         | 180W         | 200W         | 210W          | 230W          | 240W          | 270W          | 360W          | 400W          | 460W          | 500W          |
| 转速 RPM                      | 2880         | 3440         | 2880         | 3440         | 2880         | 3440         | 2880          | 3440          | 2880          | 3440          | 2880          | 3440          | 2880          | 3440          |
| 极限全压强<br>Total Pressure     | 150microns   | 150microns   | 150microns   | 150microns   | 150microns   | 150microns   | 75microns     | 75microns     | 75microns     | 75microns     | 75microns     | 75microns     | 75microns     | 75microns     |
| 加油量<br>Oil Capacity         | 6.4oz./190ml | 5.7oz./170ml | 5.7oz./170ml | 5.7oz./170ml | 6.1oz./180ml | 6.1oz./180ml | 13.9oz./410ml | 13.9oz./410ml | 21.3oz./630ml | 21.3oz./630ml | 28.7oz./850ml | 28.7oz./850ml | 27.7oz./820ml | 27.7oz./820ml |
| 尺寸<br>Dimensions            | 265x105x220  | 265x105x220  | 265x105x220  | 265x105x220  | 265x105x220  | 265x105x220  | 315x122x258   | 315x122x258   | 348x140x272   | 348x140x272   | 380x160x285   | 380x160x285   | 380x160x285   | 380x160x285   |
| 净重<br>N.W.                  | 8.8lb/4kg    | 8.8lb/4kg    | 9.3lb/4.2kg  | 9.3lb/4.2kg  | 11.0lb/5.0kg | 11.0lb/5.0kg | 17.6lb/8.0kg  | 17.6lb/8.0kg  | 22lb/10.0kg   | 22lb/10.0kg   | 29.1lb/13.2kg | 29.1lb/13.2kg | 29.8lb/13.5kg | 29.8lb/13.5kg |

| 型号 Model                    | ZSC-1D       |              | ZSC-1.5D      |               | ZSC-2D       |              | ZSC-3D        |               | ZSC-4D      |             | ZSC-5D        |               | ZSC-6D        |               |
|-----------------------------|--------------|--------------|---------------|---------------|--------------|--------------|---------------|---------------|-------------|-------------|---------------|---------------|---------------|---------------|
| 频率 Frequency                | 50Hz         | 60Hz         | 50Hz          | 60Hz          | 50Hz         | 60Hz         | 50Hz          | 60Hz          | 50Hz        | 60Hz        | 50Hz          | 60Hz          | 50Hz          | 60Hz          |
| 流量<br>Free Air Displacement | 1.4CFM       | 1.7CFM       | 2.9CFM        | 3.4CFM        | 3.6CFM       | 4.3CFM       | 5.3CFM        | 6.4CFM        | 7.1CFM      | 8.5CFM      | 8.9CFM        | 10.6CFM       | 10.7CFM       | 12.8CFM       |
|                             | 40 l/m       | 48 l/m       | 80 l/m        | 96 l/m        | 100 l/m      | 120 l/m      | 151 l/m       | 180 l/m       | 201 l/m     | 240 l/m     | 251 l/m       | 300 l/m       | 301 l/m       | 360 l/m       |
| 功率 Power                    | 190W         | 200W         | 210W          | 230W          | 210W         | 230W         | 360W          | 390W          | 460W        | 500W        | 500W          | 550W          | 560W          | 600W          |
| 转速 RPM                      | 2880         | 3440         | 2880          | 3440          | 2880         | 3440         | 2880          | 3440          | 2880        | 3440        | 2880          | 3440          | 2880          | 3440          |
| 极限全压强<br>Total Pressure     | 15microns    | 15microns    | 15microns     | 15microns     | 15microns    | 15microns    | 15microns     | 15microns     | 15microns   | 15microns   | 15microns     | 15microns     | 15microns     | 15microns     |
| 加油量<br>Oil Capacity         | 4.7oz./140ml | 4.7oz./140ml | 10.5oz./310ml | 10.5oz./310ml | 10oz./300ml  | 10oz./300ml  | 18oz./540ml   | 18oz./540ml   | 22oz./650ml | 22oz./650ml | 21oz./620ml   | 21oz./620ml   | 20.6oz./610ml | 20.6oz./610ml |
| 尺寸<br>Dimensions            | 265x105x220  | 265x105x220  | 315x122x258   | 315x122x258   | 315x122x258  | 315x122x258  | 348x140x272   | 348x140x272   | 380x160x285 | 380x160x285 | 380x160x285   | 380x160x285   | 380x160x285   | 380x160x285   |
| 净重<br>N.W.                  | 9.9lb/4.5kg  | 9.9lb/4.5kg  | 19.2lb/8.7kg  | 19.2lb/8.7kg  | 19.4lb/8.8kg | 19.4lb/8.8kg | 23.1lb/10.8kg | 23.1lb/10.8kg | 32lb/14.5kg | 32lb/14.5kg | 32.7lb/14.8kg | 32.7lb/14.8kg | 33.6lb/15.2kg | 33.6lb/15.2kg |

## ZSD 直流无刷系列真空泵

# ZSD DC Brushless Series Vacuum Pump

智能控制  
技术领先



## ZSD 直流无刷系列真空泵

# ZSD DC Brushless Series Vacuum Pump



### 特点:

- 1.强大的直流无刷电机技术, 提供轻量级真空泵
- 2.无火花配置, 适用于 A2、A2L 和 A3 制冷剂系统
- 3.泵体采用经特殊处理的零部件, 经久耐用, 使用寿命长
- 4.专利放油系统, 换油更方便。
- 5.强制供油润滑系统, 可在所有条件下提供 100% 润滑油
- 6.内置电磁阀, 具有防回流功能
- 7.真空表, 可以看到真空操作的进展情况
- 8.采用通用操作电压 100-240VAC 50/60Hz
- 9.为旋片式真空泵提供最高的CFM与重量比
- 10.启动时的电流冲击极低

### Features:

- 1.Powerful BLDC motor technology that provides a light weight vacuum pump
- 2.Ignition proof construction for use with A2, A2L and A3 refrigerant systems
- 3.Special heat treated pump mechanism for durable long service life.
- 4.Patented oil draining valve to provide easy oil changes.
- 5.Force Oil Lubrication system to provide 100% oil lubrication at all conditions
- 6.Built in solenoid valve for Anti-backflow function
- 7.Vacuum gauge so you can see the progress of the vacuum operation.
- 8.Universal voltage 100-240VAC 50/60Hz operation.
- 9.Provides the highest ration of CFM vs. Weight for rotary vane type vacuum pumps.
- 10.Very low inrush current on start up.

### 技术参数 Specification

| 型号 Model                    | ZSD-2D          |      | ZSD-3D          |      | ZSD-4D          |      | ZSD-5D          |      | ZSD-6D          |      |
|-----------------------------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|
| 频率Frequency                 | 50Hz            | 60Hz | 50Hz            | 60Hz | 50Hz            | 60Hz | 50Hz            | 60Hz | 50Hz            | 60Hz |
| 流量<br>Free Air Displacement | 4CFM            |      | 6CFM            |      | 8CFM            |      | 10CFM           |      | 12.8CFM         |      |
|                             | 113 l/m         |      | 169 l/m         |      | 225 l/m         |      | 281 l/m         |      | 360 l/m         |      |
| 功率Power                     | 300W            |      | 300W            |      | 560W            |      | 560W            |      | 560W            |      |
| 转速RPM                       | 3200            |      | 3200            |      | 2600            |      | 2600            |      | 2600            |      |
| 极限真空Ultimate Vacuum         | 15microns       |      | 15microns       |      | 15microns       |      | 15microns       |      | 15microns       |      |
| 加油量Oil Capacity             | 21.9oz./610ml   |      | 18oz./540ml     |      | 22.6oz./640ml   |      | 21.9oz./610ml   |      | 20.5oz./580ml   |      |
| 尺寸Dimensions(mm)            | 342 × 132 × 278 |      | 358 × 146 × 306 |      | 358 × 146 × 306 |      | 358 × 146 × 306 |      | 358 × 146 × 306 |      |
| 重量Weight                    | 15.2lb/6.9kg    |      | 16.1lb/7.3kg    |      | 19.4lb/8.8kg    |      | 20.5lb/9.3kg    |      | 21.6lb/9.8kg    |      |

# ZSBD 迷你真空泵

## ZSBD Mini Vacuum Pump

### 特点:

1. 体积最小、重量最轻的真空泵，采用直流有刷电机
2. 泵体采用经特殊热处理的零部件，经久耐用，使用寿命长
3. 高极限真空（双级，2Pa）
4. 强制供油润滑，提高可靠性和使用寿命
5. 可提供单级到双级

### Features:

1. The smallest and lightest vacuum pumps. Utilizes bridge rectified DC motors.
2. Special heat treated pump mechanism parts for long life operation.
3. High Ultimate vacuums
4. Force oil lubrication to improve reliability and long service life durability.
5. Available in single to two stage offerings



# ZSBD 迷你真空泵

## ZSBD Mini Vacuum Pump



SV款  
可选电磁阀配置适用于防反流功能  
Optional Solenoid Valve inlet available  
for Anti-backflow function



### 技术参数 Specification

| 型号 Model                    | ZSBD-1S          |      | ZSBD-2S          |      |
|-----------------------------|------------------|------|------------------|------|
| 系列Series                    | N、SV             |      |                  |      |
| 频率Frequency                 | 50Hz             | 60Hz | 50Hz             | 60Hz |
| 流量<br>Free Air Displacement | 1.5CFM<br>42 l/m |      | 3.1CFM<br>87 l/m |      |
| 功率Power                     | 160W             |      | 180W             |      |
| 转速RPM                       | 3000             |      | 3000             |      |
| 极限真空Ultimate Vacuum         | 75microns        |      | 75microns        |      |
| 加油量Oil Capacity             | 6.4oz./180ml     |      | 5oz./140ml       |      |
| 尺寸Dimensions (mm)           | 255 × 105 × 160  |      | 255 × 105 × 160  |      |
| 重量Weight                    | 6.8lb/3.1kg      |      | 7.9lb/3.6kg      |      |

| 型号 Model                    | ZSBD-1D          |      |
|-----------------------------|------------------|------|
| 系列Series                    | N、SV             |      |
| 频率Frequency                 | 50Hz             | 60Hz |
| 流量<br>Free Air Displacement | 1.5CFM<br>42 l/m |      |
| 功率Power                     | 190W             |      |
| 转速RPM                       | 3000             |      |
| 极限真空Ultimate Vacuum         | 15microns        |      |
| 加油量Oil Capacity             | 4.6oz./130ml     |      |
| 尺寸Dimensions (mm)           | 255 × 105 × 160  |      |
| 重量Weight                    | 8.4lb/3.8kg      |      |

## ZSBZ 直流无刷电池泵

# ZSBZ DC Brushless Battery Vacuum Pump

### 特点:

- 1.强大的无刷直流电机技术,使得泵启动时动力强劲;重量轻,便于携带;能效高,电池使用寿命长
- 2.智能电池,优化电池在运行和充电过程中的使用寿命
- 3.强制供油系统,可在任何条件下提供100%润滑,确保可靠性
- 4.泵机构采用经特殊热处理的零部件,使用寿命长
- 5.高极限真空,双级 3.3Pa
- 6.无火花配置,适用于A2,A2L和A3制冷剂系统
- 7.特殊的电池管理系统,可使5.0 AH电池运行75分钟
- 8.可选进气电磁阀,用于防止回流

### Features:

1. BLDC Motor technology makes this pump powerful on start up, light weight for carrying and energy efficient for longer battery life.
2. Intelligent battery optimizes battery life in operation and re-charging.
3. Force oil system provides 100% lubrication at all conditions for reliability.
4. Special heat treated pump mechanism provide long service life.
5. High ultimate vacuums, two stage 3.3Pa
6. Ignition proof construction for use with A2, A2L and A3 refrigerant systems
7. Special battery management system to get 75 minutes of operation from 5.0 AH battery
8. Optional Inlet Solenoid Valve for anti-backflow protection



## ZSBZ 直流无刷电池泵

# ZSBZ DC Brushless Battery Vacuum Pump



搭配振圣5.0 aH电池及充电器提供最优的产品使用新能  
同时可配置如Makita, BOSCH, Milwaukee, Rili, DeWalt等电池转接座  
Zensen 5.0aH battery and charger available for optimum performance.  
Battery Adaptors for various 18VDC battery systems for Makita, Bosch, Milwaukee, Rili and DeWalt.

### 技术参数 Specification

| 型号 Model                           | ZSBZ-1S-B18V    | ZSBZ-2S-B18V    |
|------------------------------------|-----------------|-----------------|
| 流量<br>Free Air Displacement        | 2.0 CFM         | 4.0 CFM         |
|                                    | 55 l/m          | 114 l/m         |
| 电压Voltage                          | 18V DC          | 18V DC          |
| 功率Power                            | 80W             | 90W             |
| 极限真空Ultimate Vacuum                | 75micron        | 75micron        |
| 加油量Oil Capacity                    | 6.4oz./190ml    | 6.1oz./180ml    |
| 尺寸(不含电池)Dimensions without battery | 190 × 105 × 192 | 190 × 105 × 192 |
| 净重N.W.                             | 5.3lb/2.4kg     | 6.4lb/2.9kg     |

| 型号 Model                           | ZSBZ-1D-B18V    |
|------------------------------------|-----------------|
| 流量<br>Free Air Displacement        | 2.0 CFM         |
|                                    | 55 l/m          |
| 电压Voltage                          | 18V DC          |
| 功率Power                            | 90W             |
| 极限真空Ultimate Vacuum                | 15micron        |
| 加油量Oil Capacity                    | 4.7oz./140ml    |
| 尺寸(不含电池)Dimensions without battery | 190 × 105 × 192 |
| 净重N.W.                             | 6.81b/3.1kg     |

# ZSBZ 直流电池泵

## ZSBZ DC Battery Vacuum Pump

### 特点:

- 1.标准直流电机使该泵在启动时功能强大, 携带重量轻
- 2.力油系统提供100%的润滑, 在任何条件下的可靠性。
- 3.特殊热处理泵机构, 使用寿命长。
- 4.高极限真空, 双级3.3Pa
- 5.5.0 AH电池可运行60分钟

### Features:

- 1.Standard DC motor makes this pump powerful on start up and light weight for carrying
- 2.Force oil system provides 100% lubrication at all conditions for reliability.
- 3.Special heat treated pump mechanism provide long service life.
- 4.High ultimate vacuums, two stage 3.3Pa
- 5.60 minutes of operation from 5.0 AH battery



# ZSBZ 直流电池泵

## ZSBZ DC Battery Vacuum Pump



搭配振圣5.0 ah电池及充电器提供最优的产品使用新能  
同时可配置如Makita, BOSCH, Milwaukee, Rili, DeWalt等电池转接座

Zensen 5.0ah battery and charger available for optimum performance.  
Battery Adapots for various 18VDC battery systems for Makiat, Bosch, Milwaukee, Rili and DeWalt.

### 技术参数 Specification

| 型号 Model                           | ZSBZ-1S-18V    | ZSBZ-2S-18V    |
|------------------------------------|----------------|----------------|
| 流量<br>Free Air Displacement        | 1.0 CFM        | 2.0 CFM        |
|                                    | 28.8 l/m       | 55.2 l/m       |
| 电压Voltage                          | 18V DC         | 18V DC         |
| 功率Power                            | 80W            | 90W            |
| 极限真空Ultimate Vacuum                | 75micron       | 75micron       |
| 加油量Oil Capacity                    | 3.2oz./90ml    | 3.9oz./110ml   |
| 尺寸(不含电池)Dimensions without battery | 220 × 95 × 155 | 252 × 95 × 155 |
| 净重N.W.                             | 6.4lb/2.9kg    | 7.5lb/3.4kg    |

| 型号 Model                           | ZSBZ-1D-18V    |
|------------------------------------|----------------|
| 流量<br>Free Air Displacement        | 1.0 CFM        |
|                                    | 27.6 l/m       |
| 电压Voltage                          | 18V DC         |
| 功率Power                            | 90W            |
| 极限真空Ultimate Vacuum                | 15micron       |
| 加油量Oil Capacity                    | 3.5oz./100ml   |
| 尺寸(不含电池)Dimensions without battery | 252 × 95 × 155 |
| 净重N.W.                             | 7.9lb/3.6kg    |

# VPA 经典系列真空泵

## VPA Classic Vacuum Pump

### 特点:

1. 泵体采用经特殊热处理的零部件, 经久耐用, 使用寿命长
2. 使用全铜电机线, 提供更好的电机性能, 能在高温、低温环境下运转
3. 在寒冷天气和低电压下, 启动温度低至 0°C
4. 强制供油系统, 可在所有泵送条件下提供 100% 润滑
5. 标准放油螺栓
6. 高极限真空, 双级 2Pa
7. 可选防点火结构, 适用于易燃制冷剂系统。
8. 可选配双电压

### Features:

1. The pump mechanism built with specially heat treated parts that provide durability for long service life.
2. Use all copper motor wires for better motor performance and low and high operating temperatures.
3. Cold weather and low voltage start up down to 0°C
4. Forced oil system to provide 100% lubrication under all pumping conditions.
5. Standard Oil Drain Plug
6. High Ultimate vacuum (2 stage, 2Pa)
7. Optional Ignition proof construction available for flammable refrigerant system use.
8. Optional dual voltage



# VPA 经典系列真空泵

## VPA Classic Vacuum Pump



可选配SV 电磁阀款, 增加防反流功能  
Optional SV Version for Anti-Backflow Function  
可选配R32 无火花款, 适用于A2,A2L和A3等级冷媒  
Optional R32 Version suitable for A2, A2L and A3 refrigerant systems

### 技术参数 Specification

| 型号 Model                    | VPA-1S          |        | VPA-2S          |        | VPA-3S          |         | VPA-4S          |         | VPA-5S          |         | VPA-6S          |         |
|-----------------------------|-----------------|--------|-----------------|--------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|
| 频率Frequency                 | 50Hz            | 60Hz   | 50Hz            | 60Hz   | 50Hz            | 60Hz    | 50Hz            | 60Hz    | 50Hz            | 60Hz    | 50Hz            | 60Hz    |
| 流量<br>Free Air Displacement | 1.6CFM          | 1.9CFM | 2.6CFM          | 3.2CFM | 5CFM            | 6.9CFM  | 6.6CFM          | 7.9CFM  | 8.3CFM          | 10CFM   | 9.9CFM          | 11.8CFM |
|                             | 45 l/m          | 53 l/m | 75 l/m          | 86 l/m | 138 l/m         | 163 l/m | 186 l/m         | 224 l/m | 236 l/m         | 283 l/m | 278 l/m         | 332 l/m |
| 功率Power                     | 130W            | 160W   | 180W            | 210W   | 190W            | 220W    | 390W            | 400W    | 390W            | 400W    | 390W            | 400W    |
| 转速RPM                       | 1440            | 1720   | 1440            | 1720   | 1440            | 1720    | 2880            | 3440    | 2880            | 3440    | 2880            | 3440    |
| 极限真空Ultimate Vacuum         | 75microns       |        | 75microns       |        | 75microns       |         | 75microns       |         | 75microns       |         | 75microns       |         |
| 加油量Oil Capacity             | 15oz./450ml     |        | 14.9oz./440ml   |        | 14.9oz./450ml   |         | 29oz./860ml     |         | 28oz./840ml     |         | 27.3oz./820ml   |         |
| 尺寸Dimensions(mm)            | 330 × 135 × 255 |        | 330 × 135 × 255 |        | 350 × 143 × 265 |         | 380 × 160 × 285 |         | 380 × 160 × 285 |         | 380 × 160 × 285 |         |
| 重量Weight                    | 15.9lb/7.2kg    |        | 17.7lb/8.0kg    |        | 22.6lb/10.2kg   |         | 30lb/13kg       |         | 29.6lb/13.4kg   |         | 30.5lb/13.8kg   |         |

| 型号 Model                    | VPA-1D          |        | VPA-2D          |        | VPA-3D          |         | VPA-4D          |         | VPA-5D          |         | VPA-6D          |         |
|-----------------------------|-----------------|--------|-----------------|--------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|
| 频率Frequency                 | 50Hz            | 60Hz   | 50Hz            | 60Hz   | 50Hz            | 60Hz    | 50Hz            | 60Hz    | 50Hz            | 60Hz    | 50Hz            | 60Hz    |
| 流量<br>Free Air Displacement | 1.6CFM          | 1.9CFM | 2.6CFM          | 3.2CFM | 5CFM            | 6.9CFM  | 6.6CFM          | 7.9CFM  | 8.3CFM          | 10CFM   | 9.9CFM          | 11.8CFM |
|                             | 45 l/m          | 53 l/m | 75 l/m          | 86 l/m | 138 l/m         | 163 l/m | 186 l/m         | 224 l/m | 236 l/m         | 283 l/m | 278 l/m         | 332 l/m |
| 功率Power                     | 130W            | 160W   | 180W            | 210W   | 190W            | 220W    | 390W            | 400W    | 390W            | 400W    | 390W            | 400W    |
| 转速RPM                       | 1440            | 1720   | 1440            | 1720   | 1440            | 1720    | 2880            | 3440    | 2880            | 3440    | 2880            | 3440    |
| 极限真空Ultimate Vacuum         | 15microns       |        | 15microns       |        | 15microns       |         | 15microns       |         | 15microns       |         | 15microns       |         |
| 加油量Oil Capacity             | 12oz./350ml     |        | 14oz./440ml     |        | 14oz./420ml     |         | 22oz./650ml     |         | 20.6oz./610ml   |         | 20oz./590ml     |         |
| 尺寸Dimensions(mm)            | 330 × 135 × 255 |        | 350 × 143 × 265 |        | 350 × 143 × 265 |         | 380 × 160 × 285 |         | 380 × 160 × 285 |         | 380 × 160 × 285 |         |
| 重量Weight                    | 19.5lb/8.8kg    |        | 23.6lb/10.2kg   |        | 24.8lb/11.2kg   |         | 32lb/14.5kg     |         | 32.7lb/14.8kg   |         | 33.6lb/15.2kg   |         |

## ZSF 无油烟真空泵

# ZSF Oil Smork Free Vacuum Pump

### 特点:

- 1.双级过滤无油烟低噪音专利技术设计, 适合食品包装、实验室、医院等室内使用或作为配套设备使用。
- 2.整体泵头高加工精度高真空度(1Pa)专利设计
- 3.强制供油系统, 可在所有条件下提供 100% 润滑
- 4.油箱上配置泄压安全阀集成
- 2.可选无火花配置, 适用于 A2、A2L 和 A3 制冷剂系统
- 8.可选进气电磁阀, 用于防止回流
- 7.可选双电压配置
- 8.泵机构采用经特殊热处理的零部件, 经久耐用, 使用寿命长

### Features:

- 1.Double-stage filter, oil smoke free and low noise patented technology design, suitable for food packaging, laboratories, hospitals and other indoor use or as a supporting equipment.
- 2.The whole pump head high machining precision with high vacuum degree (1Pa) patented design
- 3.Force oil system to provide 100% lubrication during all conditions.
- 4.Integrated pressure relief safety valve on oil reservoir
- 5.Optional ignition proof construction for A2, A2L and A3 refrigerant systems
- 6.Optional Inlet solenoid valve for Anti-backflow protection
- 7.Optional Dual Voltage construction.
- 8.The pump mechanism built with specially heat treated parts that provide durability for long service life.



## ZSF 无油烟真空泵

# ZSF Oil Smork Free Vacuum Pump

### 技术参数 Specification



| 型号 Model                    | ZSF-1D          |        | ZSF-2D          |         | ZSF-3D          |         |
|-----------------------------|-----------------|--------|-----------------|---------|-----------------|---------|
| 频率Frequency                 | 50Hz            | 60Hz   | 50Hz            | 60Hz    | 50Hz            | 60Hz    |
| 流量<br>Free Air Displacement | 1.8CFM          | 2.1CFM | 3.6CFM          | 4.3CFM  | 5.5CFM          | 6.6CFM  |
|                             | 52 l/m          | 60 l/m | 102 l/m         | 120 l/m | 156 l/m         | 186 l/m |
| 功率Power                     | 240W            | 250W   | 290W            | 300W    | 460W            | 500W    |
| 转速RPM                       | 1440            | 1720   | 1440            | 1720    | 2880            | 3440    |
| 极限真空Ultimate Vacuum         | 7.5microns      |        | 7.5microns      |         | 7.5microns      |         |
| 加油量Oil Capacity             | 13.5oz./400ml   |        | 15.2oz./450ml   |         | 15.2oz./450ml   |         |
| 尺寸Dimensions(mm)            | 325 × 192 × 223 |        | 338 × 212 × 238 |         | 338 × 212 × 238 |         |
| 重量Weight                    | 20.3lb/9.2kg    |        | 26.9lb/12.2kg   |         | 26.5lb/12kg     |         |



专利技术双过滤器设计  
TWO FILTERS DESIGN



专利技术整体泵头设计  
INTEGRATED PUMP HEAD DESIGN

## ZSJ 经济型真空泵

# ZSJ Economic Vacuum Pump

### 特点:

- 1.泵体经过特殊热处理提供长时间运行稳定性
- 2.手柄和电容盒一体式设计, 成本低, 经济适用

### Features:

- 1.The pump mechanism built with specially heat treated parts that provide durability for long service life.
- 2.Integrated handle and capacitor box design, low cost, economical



## ZSJ 经济型真空泵

# ZSJ Economic Vacuum Pump



### 技术参数 Specification

| 型号 Model                    | ZSJ-1S          |        | ZSJ-1.5S        |        | ZSJ-2S          |         | ZSJ-3S          |         | ZSJ-4S          |         |
|-----------------------------|-----------------|--------|-----------------|--------|-----------------|---------|-----------------|---------|-----------------|---------|
| 频率Frequency                 | 50Hz            | 60Hz   | 50Hz            | 60Hz   | 50Hz            | 60Hz    | 50Hz            | 60Hz    | 50Hz            | 60Hz    |
| 流量<br>Free Air Displacement | 1.8CFM          | 2.1CFM | 2.5CFM          | 3.0CFM | 3.8CFM          | 4.5CFM  | 4.6CFM          | 5.5CFM  | 8.0CFM          | 9.5CFM  |
|                             | 50 l/m          | 60 l/m | 70 l/m          | 84 l/m | 107 l/m         | 128 l/m | 129 l/m         | 154 l/m | 225 l/m         | 268 l/m |
| 功率Power                     | 150W            | 170W   | 160W            | 180W   | 300W            | 330W    | 450W            | 500W    | 550W            | 600W    |
| 转速RPM                       | 2880            | 3440   | 2880            | 3440   | 2880            | 3440    | 2880            | 3440    | 2880            | 3440    |
| 极限真空Ultimate Vacuum         | 150microns      |        | 150microns      |        | 150microns      |         | 150microns      |         | 150microns      |         |
| 加油量Oil Capacity             | 5.1oz./150ml    |        | 8.8oz./260ml    |        | 8.8oz./260ml    |         | 18.3oz./540ml   |         | 14.2oz./420ml   |         |
| 尺寸Dimensions(mm)            | 258 × 122 × 225 |        | 306 × 122 × 225 |        | 306 × 122 × 225 |         | 347 × 138 × 245 |         | 347 × 138 × 245 |         |
| 重量Weight                    | 11.2lb/5.1kg    |        | 13.2lb/6.0kg    |        | 14.3lb/6.5kg    |         | 22lb/10kg       |         | 22.5lb/10.3kg   |         |

| 型号 Model                    | ZSJ-1D          |        | ZSJ-1.5D        |        | ZSJ-2D          |         | ZSJ-3D          |         | ZSJ-4D          |         |
|-----------------------------|-----------------|--------|-----------------|--------|-----------------|---------|-----------------|---------|-----------------|---------|
| 频率Frequency                 | 50Hz            | 60Hz   | 50Hz            | 60Hz   | 50Hz            | 60Hz    | 50Hz            | 60Hz    | 50Hz            | 60Hz    |
| 流量<br>Free Air Displacement | 1.8CFM          | 2.1CFM | 2.8CFM          | 3.3CFM | 3.8CFM          | 4.5CFM  | 4.6CFM          | 5.5CFM  | 8.0CFM          | 9.5CFM  |
|                             | 50 l/m          | 60 l/m | 79 l/m          | 94 l/m | 107 l/m         | 128 l/m | 129 l/m         | 154 l/m | 225 l/m         | 268 l/m |
| 功率Power                     | 160W            | 190W   | 180W            | 220W   | 330W            | 380W    | 500W            | 550W    | 570W            | 620W    |
| 转速RPM                       | 2880            | 3440   | 2880            | 3440   | 2880            | 3440    | 2880            | 3440    | 2880            | 3440    |
| 极限真空Ultimate Vacuum         | 15microns       |        | 15microns       |        | 15microns       |         | 15microns       |         | 15microns       |         |
| 加油量Oil Capacity             | 6.8oz./200ml    |        | 20.3oz./600ml   |        | 19.6oz./580ml   |         | 12.9oz./380ml   |         | 12.9oz./380ml   |         |
| 尺寸Dimensions(mm)            | 306 × 122 × 225 |        | 347 × 138 × 245 |        | 347 × 138 × 245 |         | 347 × 138 × 245 |         | 347 × 138 × 245 |         |
| 重量Weight                    | 16.8lb/7.6kg    |        | 22.5lb/10.2kg   |        | 22.7lb/10.3kg   |         | 23.1lb/10.5kg   |         | 23.8lb/10.8kg   |         |

# ZRD 系列工业泵

## ZRD Industrial Vacuum Pump

### 特点:

- 1.工业级设计, 适用于超高真空度(小于1pa)和可靠的服务
- 2.自动防回流, 防止油污
- 3.配备齿轮泵, 强制润滑油泵机构的所有运动部件
- 4.双级气镇设计, 保证后级泵体干燥
- 5.特殊表面处理泵体部件, 提供长期服务
- 6.定位销泵体设计, 防止泵体错位

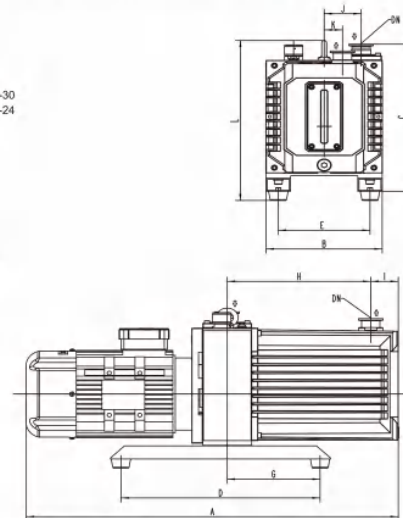
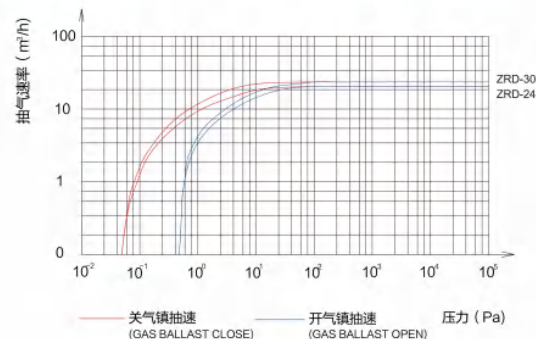
### Features:

- 1.Industrial grade design for ultra high vacuum levels (less than 1 Pa) and reliable service.
2. Automatic Anti-Backflow to prevent oil contamination.
3. Equipped with gear pump to force oil lubrication to all moving components of the pump mechanism.
4. Two stage gas ballast design to provide means of drying out 2nd stage mechanism.
5. Special surface treated pump components to provide long term service.
6. Dowel pin pump mechanism design to prevent pump mechanism misalignment.



# ZRD 系列工业泵

## ZRD Industrial Vacuum Pump



| ZRD系列旋片真空泵外形尺寸 Dimensions(mm) |     |     |     |     |     |     |     |    |    |    |     |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|
| 型号 Model                      | A   | B   | C   | D   | E   | G   | H   | I  | J  | K  | L   |
| ZRD-24                        | 610 | 190 | 281 | 326 | 150 | 152 | 235 | 45 | 61 | 30 | 306 |
| ZRD-30                        | 610 | 190 | 281 | 326 | 150 | 152 | 235 | 45 | 61 | 30 | 306 |

### 技术参数 Specification

| 型号 Model                                      | ZRD-24                |  | ZRD-30                |  |
|-----------------------------------------------|-----------------------|--|-----------------------|--|
| 抽速m³/h(L/s)                                   | 50Hz                  |  | 30(8.3)               |  |
| Free Air Displacement                         | 28.8(7.9)             |  | 36(9.9)               |  |
| 极限分压强—关闭气镇Partial Pressure—close gas ballast  | 4x10 <sup>-2</sup> Pa |  | 4x10 <sup>-2</sup> Pa |  |
| 极限总压强—关闭气镇Total Pressure—close gas ballast    | 4x10 <sup>-1</sup> Pa |  | 4x10 <sup>-1</sup> Pa |  |
| 极限总压强—开启气镇(Pa)Total Pressure—open gas ballast | 8x10 <sup>-1</sup> Pa |  | 8x10 <sup>-1</sup> Pa |  |
| 电源Power Supply                                | 单/三相single/tri-phase  |  | 单/三相single/tri-phase  |  |
| 电机功率Motor Power                               | 1.1/0.75 Kw           |  | 1.1 Kw                |  |
| 进排气口连接口 DN (mm)Intake/Exhaust Port Connector  | KF25/40               |  | KF25/40               |  |
| 用油量Oil Capacity                               | 1.3~2.0L              |  | 1.2~1.9L              |  |
| 电机转速(rpm)Motor Rotating Speed                 | 50Hz                  |  | 1440                  |  |
|                                               | 60Hz                  |  | 1720                  |  |
| 工作环境温度Environment Temperature                 | 5~40℃                 |  | 5~40℃                 |  |
| 噪音Noise                                       | ≤58dB                 |  | ≤58dB                 |  |
| 重量Weight                                      | 39kg                  |  | 42kg                  |  |

# CX 三合一油雾过滤器 CX 3 In 1 Exhaust Filter



## 特点:

1. 高效油雾过滤器在真空泵运行时捕捉油雾
2. 当真空泵在真空状态下运行时，油被返回到真空泵的油池中
3. 专利防溢设计。如果真空泵侧转或倒转，排气过滤器将防止泄漏
4. 可应用于多品牌真空泵

## Features:

1. High Efficient Coalescent filter catches oil mist when the vacuum pump is running.
2. Oil is returned back to the vacuum pump's oil reservoir when the vacuum pump is running under a vacuum.
3. Patented anti-spill desing. The exhaust filter will prevent spillage if the vacuum pump is turned on its side or upside down.
4. Interchangeable with many brands of vacuum pumps.



| 型号 Model                    | 三合一油雾过滤器 Three In One Vacuum Pump Catcher |
|-----------------------------|-------------------------------------------|
| 安装接口 Installation Interface | M27*1.5                                   |
| 尺寸 Size                     | Φ65*62.5                                  |

## 产品附件 Accessories

多家世界500强定点供应商  
The designated suppliers of the World Top 500 Enterprises

## 油雾过滤器 EXHAUST FILTER



| 型号 Model | 说明 Description |
|----------|----------------|
| C1       | 塑料 PLASTIC     |
| C3       | 塑料 PLASTIC     |
| C4       | 塑料 PLASTIC     |
| C7       | 塑料 PLASTIC     |

## 真空泵油 VACUUM PUMP OIL

400ml(13.5OZ)



600ml(20.5OZ)



4L(136OZ)



不同的真空泵油对真空泵的冷超声波动和极限真空有明显的影响。

Vacuum pumps can be operated with the oil listed below; using different oils affect all specified ultimate vacuum and cold starting.

| 型号 Model                              | M100            | M200            | ZS68                          |
|---------------------------------------|-----------------|-----------------|-------------------------------|
| 运动粘度 KINEMATIC VISCOSITY(40°C), MM2/S | 41.4-50.6       | 61.2-74.8       | 61.2-74.8                     |
| 粘度指数 VISCOSITY INDEX                  | 100             | 100             | 130                           |
| 闪电 FLASH POINT°C                      | 225             | 240             | 250                           |
| 倾点 POUR POINT°C                       | -10             | -10             | -35                           |
| 类型 TYPE                               | 矿物油 MINERAL OIL | 矿物油 MINERAL OIL | 合成油<br>SYNTHETIC DI-ESTER OIL |

## 进气嘴 INTAKE PORT ADAPTERS



| 型号 Model | 说明 Description    | 型号 Model | 说明 Description              | 型号 Model | 说明 Description       |
|----------|-------------------|----------|-----------------------------|----------|----------------------|
| A1       | 1/4" SAE          | A5       | 1/4" SAE VACUUM GAUGE       | T3       | LOCKED WITH M12x1NUT |
| A2       |                   | A6       | 1/4" SAE 1/2" ACME 3/8" SAE | T4       | SOLENOID VALVE       |
| A3       | 1/4" SAE 3/8" SAE | A7       | 1/4" SAE 3/8" SAE 3/4" SAE  | T5       | VACUUM GAUGE         |
| A4       | 1/4" SAE 1/2" SAE | T1       | BALL VALVE                  | T6       | SOLENOID VALVE       |

## 电源插头 POWER SUPPLY PLUGS



| 型号 Model | 说明 Description                    | 型号 Model | 说明 Description                  |
|----------|-----------------------------------|----------|---------------------------------|
| B1       | 美式电源线 AMERICAN PLUG               | B1       | 中式电源线 CHINAPLUG                 |
| B2       | 以色列式电源线 ISRAEL PLUG               | B2       | 日式电源线 JAPAN PLUG                |
| B3       | 欧式电源线 EUROPE PLUG                 | B3       | 澳式电源线 AUSTRALIA PLUG            |
| B4       | 英式电源线 UK PLUG                     | B4       | 南非式电源线 SOUTH AFRICA PLUG(SMALL) |
| B5       | 南非式电源线 (大) SOUTH AFRICA PLUG(BIG) | B5       | 意大利式电源线 ITALY PLUG              |

# ZSOP 系列手动油泵

## ZSOP Series Manual Oil Pump



(ZSOP-1)

(ZSOP-2)

- 1.带压加油, 适用全油品  
With pressure refueling, suitable for all oil products
- 2.采用不锈钢内管设计, 可靠耐用  
Use of stainless steel inner tube design, reliable and durable.
- 3.采用铝合金外管设计, 有效保护内管  
Use of aluminum alloy outer tube design, effectively protect the inner tube.
- 4.防返流结构, 确保加注安全  
Anti-return flow structure to ensure filling safety.

## 技术参数 Specification

| 型号 Model                                       | ZSOP-1                                | ZSOP-2                               |
|------------------------------------------------|---------------------------------------|--------------------------------------|
| 名称 Name                                        | 手动油泵 (手持式) Manual oil pump (handheld) | 手动油泵 (脚踏式) Manual oil pump (treadle) |
| 最大可克服背压 Maximum Overcoming Back Pressure       | 200psi                                | 250psi                               |
| 每冲程最大充注流量 Maximum Filling Flow Rate Per Stroke | 78 ml                                 | 100 ml                               |
| 管接头 Pipe Joint                                 | 1/4" SAE                              | 3/8" SAE 1/2" SAE                    |
| 软接头 Flexible Joint                             | —                                     | 5/8" -18UNF 转 7/16" -20              |
| 软管长度 Hose length                               | 900mm                                 | 630mm                                |
| 材质 Material                                    | 6061-T6 铝 Aluminium                   | 不锈钢 Stainless Steel                  |
| 外形尺寸 Overall Dimension                         | 500mm*82mm*65mm                       |                                      |
| 重量 Weight                                      | 1.06KG                                | 1.99KG                               |
| 包装方式 Packaging method                          | 吸塑盒Bister Box Packaging               | 纸箱包装Carton Packaging                 |

# ZSWP-200L-A 空调排水泵

## ZSWP-200L-A

### Air-Conditioning Condensate Pump



#### 特点

1. 高质量流量，高扬程/升程性能
2. 使用强力电机，以实现持续运行，使用寿命长
3. 排放口易于连接
4. 液位控制，可启动和停止泵流量
5. 多个冷凝水入口

#### Features:

1. High Mass Flow, high head/lift performance
2. Use of strong electrical motor allows for continuous operation and long service life.
3. Easy connection to discharge port
4. Level control to start and stop pump flow
5. Multi entry points for condensate to enter

#### 技术参数 Specification

| 型号 Model                        | ZSWP-200L-A          |
|---------------------------------|----------------------|
| 额定电压/频率 Volt/Frequency          | 220V 50HZ; 110V 60HZ |
| 功率 Power                        | 75W                  |
| 最大流量 Max. Flow Rate             | 200L/h; 52gal/h      |
| 最高扬程 Max. Head                  | 5m; 16.5ft           |
| 储水箱容量 Capacity of Water Tank    | 1.8L; 0.5gal         |
| 适用空调 Applicable Air-Conditioner | 25kw                 |
| 噪音 Noise                        | 45dB(A)              |
| 环境温度 Ambient Temp.              | 0-50°C               |

# ZSWP-360L-A 空调排水泵

## ZSWP-360L-A

### Air-Conditioning Condensate Pump



#### 特点

1. 高质量流量，高扬程/升程性能
2. 使用强力电机，以实现持续运行，使用寿命长
3. 排放口易于连接
4. 液位控制，可启动和停止泵流量
5. 多个冷凝水入口

#### Features:

1. High Mass Flow, high head/lift performance
2. Use of strong electrical motor allows for continuous operation and long service life.
3. Easy connection to discharge port
4. Level control to start and stop pump flow.
5. Multi entry points for condensate to enter.

#### 技术参数 Specification

| 型号 Model                        | ZSWP-360L-A          |
|---------------------------------|----------------------|
| 额定电压/频率 Volt/Frequency          | 220V 50HZ; 110V 60HZ |
| 功率 Power                        | 75W                  |
| 最大流量 Max. Flow Rate             | 360L/h; 95gal/h      |
| 最高扬程 Max. Head                  | 6m; 19.7ft           |
| 储水箱容量 Capacity of Water Tank    | 1.8L; 0.5gal         |
| 适用空调 Applicable Air-Conditioner | 45kw                 |
| 噪音 Noise                        | 45dB(A)              |
| 环境温度 Ambient Temp.              | 0-50°C               |

# ZSWP-C 系列空调排水泵

## ZSWP-C Series Air-Conditioning Condensate Pump



### 特点

1. 整体设计，美观大方
2. 自动感应，可靠排水
3. 高扬程、低功耗，超静音

### Features:

1. Overall design, beautiful and generous
2. Automatic induction, reliable drainage
3. High head, low power consumption, ultra-quiet

### 技术参数 Specification

| 型号 Model                        | ZSWP-24L-C           | ZSWP-40L-C           |
|---------------------------------|----------------------|----------------------|
| 额定电压/频率 Volt/Frequency          | 220V 50HZ; 110V 60HZ | 220V 50HZ; 110V 60HZ |
| 功率 Power                        | 3W                   | 3W                   |
| 最大流量 Max. Flow Rate             | 24L/h; 6.3gal/h      | 40L/h; 10.5gal/h     |
| 最高扬程 Max. Head                  | 10m; 32ft            | 10m; 32ft            |
| 储水箱容量 Capacity of Water Tank    | 200ml; 6.5oz         | 200ml; 6.5oz         |
| 适用空调 Applicable Air-Conditioner | 5kw                  | 7.5kw                |
| 噪音 Noise                        | 40.5(dB.30cm)        | 42.5(dB.30cm)        |
| 环境温度 Ambient Temp.              | 0-50℃                | 0-50℃                |

# ZSWP-D 系列空调排水泵

## ZSWP-D Series Air-Conditioning Condensate Pump



### 特点

1. 分体设计，体型小巧，安装更灵活
2. 自动感应，可靠排水
3. 高扬程、低功耗，超静音

### Features:

1. Split design, compact size, more flexible installation
2. Automatic induction, reliable drainage
3. High head, low power consumption, ultra-quiet

### 技术参数 Specification

| 型号 Model                        | ZSWP-24L-D           | ZSWP-40L-D           |
|---------------------------------|----------------------|----------------------|
| 额定电压/频率 Volt/Frequency          | 220V 50HZ; 110V 60HZ | 220V 50HZ; 110V 60HZ |
| 功率 Power                        | 3W                   | 3W                   |
| 最大流量 Max. Flow Rate             | 24L/h; 6.3gal/h      | 40L/h; 10.5gal/h     |
| 最高扬程 Max. Head                  | 10m; 32ft            | 10m; 32ft            |
| 储水箱容量 Capacity of Water Tank    | 60ml; 2.0oz          | 60ml; 2.0oz          |
| 适用空调 Applicable Air-Conditioner | 5kw                  | 7.5kw                |
| 噪音 Noise                        | 40.5(dB.30cm)        | 42.5(dB.30cm)        |
| 环境温度 Ambient Temp.              | 0-50℃                | 0-50℃                |

# ZSWP-E 系列空调排水泵

## ZSWP-E Series Air-Conditioning Condensate Pump



### 特点

1. 整体设计，结构紧凑，体型小巧，安装简便
2. 自动感应，可靠排水
3. 高扬程、低功耗，超静音
4. 采用一体化设计，可直接安装于左侧或者右侧管槽转角处，拆装、维修方便

### Features:

1. The overall design, compact structure, small size, easy to install
2. Automatic induction, reliable drainage
3. High head, low power consumption, ultra-quiet
4. Use of integrated design, can be directly installed on the left or right side of the pipe groove corner, easy to dismantle and maintenance.

### 技术参数 Specification

| 型号 Model                        | ZSWP-24L-E           | ZSWP-40L-E           |
|---------------------------------|----------------------|----------------------|
| 额定电压/频率 Volt/Frequency          | 220V 50HZ; 110V 60HZ | 220V 50HZ; 110V 60HZ |
| 功率 Power                        | 3W                   | 3W                   |
| 最大流量 Max. Flow Rate             | 24L/h; 6.3gal/h      | 40L/h; 10.5gal/h     |
| 最高扬程 Max. Head                  | 10m; 32ft            | 10m; 32ft            |
| 储水箱容量 Capacity of Water Tank    | 70ml; 2.4oz          | 70ml; 2.4oz          |
| 适用空调 Applicable Air-Conditioner | 5kw                  | 7.5kw                |
| 噪音 Noise                        | 40.5(dB.30cm)        | 42.5(dB.30cm)        |
| 环境温度 Ambient Temp.              | 0-50℃                | 0-50℃                |

# ZSQL-25 三防阀

## ZSQL-25 Condensate Trap



### 特点

1. 通畅排水 净享清新
2. 防堵塞、防虫、防臭
3. 浮球式隔离控制，节能、环保

### Features:

1. Smooth drainage, enjoy freshness
2. Anti-blocking, anti-insect, anti-odor
3. Float isolation control, energy saving, environmental protection

### 技术参数 Specification

| 型号 Model             | ZSQL-25                    |
|----------------------|----------------------------|
| 最大流量 Max. Flow Rate  | 10L/min                    |
| 连接尺寸 Connection Size | 内径Inlet 25mm 外径Outlet 32mm |

# ZSMG 系列单表阀

## ZSMG Series 1 Valve Manifold

### 特点:

1. 360°防冲击载荷的保护罩
2. 可提供高精度 (1.0级、1.6级) 仪表
3. 配备视镜, 用于观察液体制冷剂的流量
4. 配有一个手动阀, 用于启动和停止流量
5. 可选球阀或活塞控制阀。

### Features:

1. Gauge boot for 360° protection against shock loads.
2. High precision (Class 1.0, 1.6) gauges available.
3. Sight Glass for viewing liquid refrigerant flow.
4. One manual valve to start and stop flow.
5. Available in Ball or Piston control valves



(球阀款)

(标准款)

# ZSMG 系列单表阀

## ZSMG Series 1 Valve Manifold



球形控制阀, 更易于开启和关闭高压制冷剂。

Ball or Piston type control valve for easy opening and closing against high pressure refrigerants.

### 技术参数 Specification

| 型号 Model                    | ZSMG-1-H            | ZSMG-1-L            | ZSMG-1S-H           | ZSMG-1S-L           |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|
| 压力表范围 Pressure Gauge Range  | -1~55bar            | -1~35bar            | -1~55bar            | -1~35bar            |
| 压力表等级 Pressure Gauge Rating | Class 1, 1.6        |                     |                     |                     |
| 表盘尺寸 Dial Size              | Ø68mm               | Ø68mm               | Ø68mm               | Ø68mm               |
| 阀门类型 Valve Type             | 活塞式 Piston Type     |                     | 球阀式 Ball Type       |                     |
| 适用冷媒 Suitable Refrigerant   | R410a R22 R134a R32 | R410a R22 R134a R32 | R410a R22 R134a R32 | R410a R22 R134a R32 |
| 接口尺寸 Connector Size         | 1/4"-1/4"           | 1/4"-1/4"           | 1/4"-1/4"           | 1/4"-1/4"           |

# ZSMG 系列双表阀

## ZSMG Series 2 Gauge, 2 Valve Manifold

### 特点:

1. 360°防冲击载荷的保护罩
2. 可提供高精度 (1.0级、1.6级) 仪表
3. 配备视镜, 用于观察液体制冷剂的流量
4. 配有手动阀, 用于启动和停止流量
5. 可选球阀或活塞控制阀。

### Features:

1. Gauge boot for 360° protection against shock loads.
2. High precision (Class 1.0, 1.6) gauges available.
3. Sight Glass for viewing liquid refrigerant flow.
4. Manual valve to start and stop flow.
5. Available in Ball or Piston control valves



(球阀款)

(标准款)

# ZSMG 系列双表阀

## ZSMG Series 2 Gauge, 2 Valve Manifold



黄铜接头, 自带排气阀  
Ball joint with exhaust valve  
球阀开关, 使用更方便, 密封效果更好。  
Ball valve switch, more convenient to use, better sealing effect.

### 技术参数 Specification

| 型号 Model                    | ZSMG-2                 | ZSMG-2S                |
|-----------------------------|------------------------|------------------------|
| 压力表范围 Pressure Gauge Range  | -1~55bar H, -1~35bar L | -1~55bar H, -1~35bar L |
| 压力表等级 Pressure Gauge Rating | Class 1, 1.6           |                        |
| 表盘尺寸 Dial Size              | Ø68mm                  | Ø68mm                  |
| 阀门类型 Valve Type             | 活塞式 Piston Type        | 球阀式 Ball Type          |
| 适用冷媒 Suitable Refrigerant   | R410a R22 R134a R32    | R410a R22 R134a R32    |
| 接口尺寸 Connector Size         | 1/4"-1/4"              | 1/4"-1/4"              |

# R 系列冷媒管

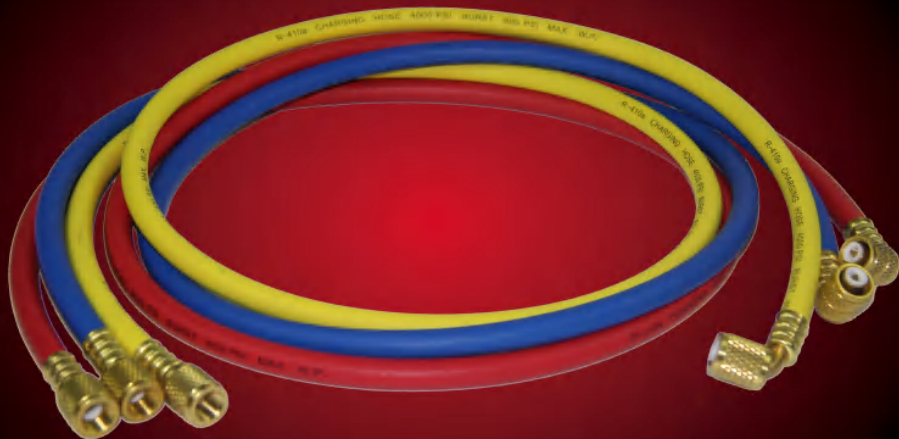
## R Series Refrigerant Hose

### 特点:

- 1.采用高强度冷媒管、可适用于R410A,R134A,R22等多种冷媒;
- 2.外层管壁激光打孔设计,有效防止冷媒挥发鼓包;

### Features:

- 1.Use of high strength refrigerant tube, which can be suitable for R410A, R134A, R22 and other refrigerants.
- 2.Laser drilling design of the outer tube wall, effectively prevent refrigerant volatilization bulge;



| 型号 MODEL                                                               | R22加氟管<br>R22 HOSE            | R410a加氟管<br>R410a Hose                 |
|------------------------------------------------------------------------|-------------------------------|----------------------------------------|
| 最大工作压力<br>Maximum Working Pressure                                     | 600PSI                        | 800PSI                                 |
| 最大爆破压力<br>Maximum Burst Pressure                                       | 3000PSI                       | 4000PSI                                |
| 三色加氟管<br>Three color hoses with swivel<br>refrigerant connection units | 红管red hose: 1/4"-1/4"*1.5m    | 红管red hose: 1/4"-1/4" or 5/16"*1.5m    |
|                                                                        | 蓝管blue hose: 1/4"-1/4"*1.5m   | 蓝管blue hose: 1/4"-1/4" or 5/16"*1.5m   |
|                                                                        | 黄管yellow hose: 1/4"-1/4"*1.5m | 黄管yellow hose: 1/4"-1/4" or 5/16"*1.5m |
| 加氟管密封类型 Hose seal type                                                 | 氟丁橡胶或特氟龙 Neoprene or Teflon   |                                        |

# ZSQC 系列可调式快速接头

## ZSQC Series Automotive Service Couplers



Quick coupling device that has self locking connection when the valve is open to prevent accident discharge of refrigerants.  
快速连接装置, 当阀门开启时具有自锁连接, 防止事故排放制冷剂。



R1234yf  
comes with 1/4"SAE Male x 12mm Male adaptor



R134a

### 技术参数 Specification

| 型号 MODEL                     | ZSQC-01L    | ZSQC-01H    | ZSQC-02L | ZSQC-02H |
|------------------------------|-------------|-------------|----------|----------|
| 适用冷媒<br>Suitable Refrigerant | R-1234yf    | R-1234yf    | R-134a   | R-134a   |
| 接口螺纹<br>Interface Thread     | 12mm Female | 12mm Female | 1/4"SAE  | 1/4"SAE  |

## ZSCV 系列截止阀

### ZSCV Series

### Service Hose Ball Valves



- 1.用于关闭或打开制冷剂软管Used to close or open a refrigerant service hose.
- 2.易于转动Easy to Turn
- 3.密封件由优质氯丁橡胶材料制成。阀体由黄铜制成，耐腐蚀，防泄漏。  
Seals are made of high grade neoprene material. The body is made of brass which is corrosion resistant and leak proof.



技术参数 Specification

| 型号 Model            | ZSCV-01SR   | ZSCV-01SB   | ZSCV-01ER | ZSCV-01EB | ZSCV-02SR   | ZSCV-02SB   | ZSCV-02ER | ZSCV-02EB |
|---------------------|-------------|-------------|-----------|-----------|-------------|-------------|-----------|-----------|
| 样式 Type             | 直头 Straight | 直头 Straight | 弯头 45°    | 弯头 45°    | 直头 Straight | 直头 Straight | 弯头 45°    | 弯头 45°    |
| 颜色 Color            | 红色 Red      | 蓝色 Blue     | 红色 Red    | 蓝色 Blue   | 红色 Red      | 蓝色 Blue     | 红色 Red    | 蓝色 Blue   |
| 内螺纹 Internal Thread | 1/4"SAE     | 1/4"SAE     | 1/4"SAE   | 1/4"SAE   | 5/16"SAE    | 5/16"SAE    | 5/16"SAE  | 5/16"SAE  |
| 外螺纹 External Thread | 1/4"SAE     | 1/4"SAE     | 1/4"SAE   | 1/4"SAE   | 1/4"SAE     | 1/4"SAE     | 1/4"SAE   | 1/4"SAE   |

## ZSCV-B 系列安全阀

### ZSCV-B Series

### Valve Core Depressor Tool



- 1.采用减压阀芯进行维修，具有后座密封功能。  
Used to depress valve core for servicing. Has back seating sealing feature.
- 2.黄铜阀体，具有耐腐蚀和防泄漏设计。  
Brass body for corrosion resistance and leak proof design.
- 3.密封件由高级氯丁橡胶制成。  
Seals made from high grade neoprene.



技术参数 Specification

| 型号 Model          | ZSCV-1-B | ZSCV-2-B | ZSCV-3-B |
|-------------------|----------|----------|----------|
| 内螺纹 Female Thread | 1/4"SAE  | 5/16"SAE | 5/16"SAE |
| 外螺纹 Male Thread   | 1/4"SAE  | 1/4"SAE  | 5/16"SAE |

## ZSTC 系列割刀

### ZSTC Series

### Copper And Aluminum Tube Cutter



1. 切削刀片采用热处理硬化工具钢制造，快速切削耐用。  
Cutting blade made of heat treated hardened tool steel for durability of fast cutting.
2. 滚子轴承平滑和快速切割。  
Roller bearings for smooth and fast cutting.
3. 铝合金刀架设计，重量轻，携带更轻松  
Aluminum alloy tool holder design, light weight, easier to carry
4. 用户可以顺利的切割旋钮设置切割张力。  
User friendly cutting knob to set cutting tension.



#### 技术参数 Specification

| 型号 Model                         | ZSFT-19                                           | ZSFT-32                                           | ZSFT-42                                           |
|----------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| 切割材质<br>Cutting Material         | 铜、铝、铁管等<br>Copper, aluminium, iron tubes, etc.    | 铜、铝、铁管等<br>Copper, aluminium, iron tubes, etc.    | 铜、铝、铁管等<br>Copper, aluminium, iron tubes, etc.    |
| 切管范围<br>Cutting Range            | 3-19mm                                            | 4-32mm                                            | 6-42mm                                            |
| 刀片材质<br>Blade Material           | GCr15                                             | GCr15                                             | GCr15                                             |
| 切管壁厚<br>Wall Thickness           | ≤3mm                                              | ≤3mm                                              | ≤3mm                                              |
| 重量 (g)<br>Weight (g)             | 150g                                              | 312g                                              | 420g                                              |
| 尺寸(长 宽 高)<br>Dimension (L, W, H) | 60x38x25mm                                        | 140x42x62mm                                       | 140x42x62mm                                       |
| 包装方式<br>Packing Method           | 透明吸塑盒+彩卡<br>Transparent blister box + colour card | 透明吸塑盒+彩卡<br>Transparent blister box + colour card | 透明吸塑盒+彩卡<br>Transparent blister box + colour card |

## ZSST 系列胀管器

### ZSST Series

### Tube Expander for Annealed Copper and Aluminum.



1. 设计紧凑合理，胀管轻松高效  
Compact and reasonable design, easy and efficient tube expansion
2. 手柄可折叠，携带更方便  
Foldable handle, more convenient to carry
3. 设计确保了膨胀的准确性，并防止过度膨胀。  
Design ensures the accuracy of expansion as well as prevents over expanding.
4. 防滑橡胶手柄设计，手感更舒适更轻松  
Non-slip rubber handle design, more comfortable and easier to handle



#### 技术参数 Specification

| 型号 Model                | ZSST-A                                            | ZSST-B                                                    |
|-------------------------|---------------------------------------------------|-----------------------------------------------------------|
| 胀管范围<br>Expansion Range | 3/8" 1/2" 5/8" 7/8"<br>10 12 16 18 22             | 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 7/8"<br>6 8 10 12 16 18 22 |
| 材质<br>Material          | 40Cr Steel                                        |                                                           |
| 重量 (g)<br>Weight (g)    | 320g                                              | 320g                                                      |
| 包装方式<br>Packing Method  | 透明吸塑盒+彩卡<br>Transparent blister box + colour card | 透明吸塑盒+彩卡<br>Transparent blister box + colour card         |

## ZSDT 扩管器 ZSDT Flaring Tool



- 1.设计内置离合器，当扩口操作完成时滑动。  
Designed with built-in clutch that slips when the flaring operation is complete.
- 2.偏心扩口设计，可轧制出精确、高质量的退火铜或铝扩口。  
Eccentric flaring design to roll form accurate and high quality flares into annealed copper or aluminum.



### 技术参数 Specification

| 型号 Model              | ZSDT                                  |
|-----------------------|---------------------------------------|
| 扩管范围 Flaring Size     | (公制Metric) 6 8 10 12 16 19            |
|                       | (英制Inch) 1/4 5/16 3/8 1/2 5/8 3/4     |
| 切管范围 Cutting Range    | 4-32mm                                |
| 切割材质 Cutting Material | 铜、铝、铁管等<br>Annealed Copper, Aluminium |
| 切管壁厚 Wall Thickness   | ≤3mm                                  |
| 包装方式 Packing Method   | 纸箱+纸内衬<br>Cardboard box + paper liner |

## ZSBT 系列弯管器 ZSBT Series Bending Tool for annealed copper and aluminum tubing



- 1.采用特有的手柄转向结构，再进行超过90°的弯管操作时更顺畅  
Use of unique handle steering structure, it is smoother when bending the pipe more than 90°.
- 2.双滚轮设计，降低管道摩擦，弯管更轻松  
Double roller design, reducing pipe friction, bending more easily
- 3.顶端角度盘设计，弯管角度清晰可控  
Design of top angle plate, bending angle is clearly marked for accurate bend angles.
- 4.塑胶防滑手柄设计，手感舒适更轻松  
Design of plastic non-slip handle design, feel comfortable and easier to handle



### 技术参数 Specification

| 型号 Model                         | ZSBT-5/16"                                           | ZSBT-3/8"   | ZSBT-1/2"   | ZSBT-5/8"   | ZSBT-3/4"   | ZSBT-7/8"   |
|----------------------------------|------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|
| 管子规格<br>Tube Specification       | 5/16" (8mm)                                          | 3/8" (10mm) | 1/2" (12mm) | 5/8" (16mm) | 3/4" (19mm) | 7/8" (22mm) |
| 适用管子材质<br>Suitable Tube Material | 2mm内铜、铝、不锈钢管<br>Annealed Copper and Aluminium Tubing |             |             |             |             |             |
| 弯管半径<br>Bend Radius              | 23.5mm                                               | 23.2mm      | 36.3mm      | 54.4mm      | 71.8mm      | 80.8mm      |
| 弯管范围<br>Bend Range               | 0-180°                                               |             |             |             |             |             |
| 总长<br>Overall Length             | 463mm                                                | 440mm       | 563mm       | 602mm       | 725mm       | 742mm       |
| 重量<br>Weight                     | 1.52Kg                                               | 1.5Kg       | 1.94Kg      | 2.86Kg      | 3.81Kg      | 4.21Kg      |
| 包装方式<br>Packing Method           | 透明吸塑盒+彩卡<br>Transparent blister box + colour card    |             |             |             |             |             |

## ZST 系列去毛刺刀

### ZST Series Deburring Tool



- 1.体积小、方便携带  
Small size, easy to carry
- 2.内部可放置备用刀片，使用更方便  
Spare blades can be placed inside, more convenient to use.
- 3.快速夹头设计，无需工具可轻松完成刀片更换  
Design of quick collet, easy blade replacement without tools



ZST-01



ZST-01-B



ZST-01-C



ZSTC-D16

#### 技术参数 Specification

| 型号 Model                                   | ZST-01                                         | ZST-01-B                        | ZST-01-C                   | ZSTC-D16 |
|--------------------------------------------|------------------------------------------------|---------------------------------|----------------------------|----------|
| 刀头材质/硬度<br>Cutterhead<br>Material/Hardness | M2 HSS/63HRC                                   |                                 |                            |          |
| 刀头直径<br>Cutterhead Diameter                | Ø3.2                                           | Ø3.2                            | Ø3.2                       | Ø25      |
| 手柄材质<br>Handle Material                    | 塑料<br>Plastics                                 | 塑料包橡胶<br>Plastic Covered Rubber | 铝合金<br>Aluminium           | —        |
| 标配刀片数量<br>Number of standard<br>blades     | 2把(内置1把)<br>2 (1 built-in)                     | 2把(内置1把)<br>2 (1 built-in)      | 2把(内置1把)<br>2 (1 built-in) | —        |
| 包装方式<br>Packing Method                     | 透明吸塑盒+彩卡 Transparent blister box + colour card |                                 |                            |          |

## ZST 系列倒角器

### ZST Series Tubing Deburring Tool



- 1.用于修整被切管子的内外边缘。  
Used to debur the inside and outside edge of a cut tube.
- 2.优质阳极氧化铝机身，使用寿命长。  
High Grade Anodized Aluminum body for long lasting life.
- 3.集成高碳工具钢去毛刺刀片  
Integrated High Carbon Tool Steel deburring blades

- 1.集成高碳工具钢去毛刺刀片  
Integrated High Carbon Tool Steel deburring blades
- 2.防滑塑料外壳，重量轻易携带  
Non-slip plastic shell, easy to carry

#### 技术参数 Specification

| 型号 Model                    | ZST-02                                         | ZST-02-W         |
|-----------------------------|------------------------------------------------|------------------|
| 刀头材质<br>Cutterhead Material | 65Mn                                           | 65Mn             |
| 外部材质<br>External Material   | 塑料ABS<br>Plastic ABS                           | 铝合金<br>Aluminium |
| 切割范围<br>Cutting Range       | 4~40mm(1/8"-1-5/8")                            | 12~50mm(1/2"-2") |
| 包装方式<br>Packing Method      | 透明吸塑盒+彩卡 Transparent blister box + colour card |                  |

## ZSRS 系列棘轮扳手

### ZSRS Series Spanner Wrench



适用于采用方型调节阀杆的制冷剂阀门，如分体式系统后阀座阀和膨胀阀  
For use on refrigerant valves using square profile adjustment stems such as split system back seating valves and expansion valves



#### 技术参数 Specification

| 型号 Model               | ZSRS-01                                        | ZSRS-02               |
|------------------------|------------------------------------------------|-----------------------|
| 规格<br>Specification    | 3/16" 1/4" 5/16" 3/8"                          | 3/16" 1/4" 1/2" 9/16" |
| 包装方式<br>Packing Method | 透明吸塑盒+彩卡 Transparent blister box + colour card |                       |

## ZSCT 系列毛细管钳

### ZSCT Series Capillary Tube Cutter



1. 刀具采用高碳工具钢制成，用于切割退火铜、铝毛细管。  
Cutting tool is made with high carbon tool steel to cut annealing copper and aluminum capillary tubing
2. 切割边缘是经过开锋和热处理的，能保持长期锋利。  
The cutting edge is sharpened and heat treated for long term sharpness.
3. 手柄上的橡胶握把，切割时感觉舒适。  
Rubber grips on the handle for comfort feel when cutting.



#### 技术参数 Specification

| 型号 MODEL                         | ZSCT-01                                        | ZSCT-02   |
|----------------------------------|------------------------------------------------|-----------|
| 适用规格<br>Capillary Tubing OD size | 0.1~3.0mm                                      | 0.1~3.0mm |
| 包装方式<br>Packing Method           | 透明吸塑盒+彩卡 Transparent blister box + colour card |           |

## VMZS-1 智能数显真空计

## VMZS-1 Intelligent Electronic Vacuum Gauge



- 1.超大屏幕 (60\*26) 背光数显, 清晰易读;  
Large screen (60\*26) backlight digital display, clear and easy to read;
- 2.触摸屏设计, 用于附加功能, 如泄漏测试, 单位选择。  
Touch screen design, used for additional features such as leak testing, units selection.
- 3.专业高精度真空传感器, 测量更精确;  
Professional high-precision vacuum sensor, more accurate measurement;
- 4.人体工学设计, 操作携带方便;  
Ergonomic design, easy to operate and carry;
- 5.各种通知的声音警报。  
Audible alarm for various notifications.

### 技术参数 Specification

| 型号 Model                            | VMZS-1                                                                   |
|-------------------------------------|--------------------------------------------------------------------------|
| 最大过载压力<br>Maximum Overload Pressure | 72PSI/0.5MPa                                                             |
| 量程 Range                            | 0~100000Pa, 0~756Torr, 0~1000mBar, 0~30inHg, 0~100000Microns             |
| 分辨率 Resolution                      | 0.01 (<10Pa) 、0.0001 (<10mBar) 、<br>0.0001 (<0.5inHg) 、1 (<30000Microns) |
| 测量精度<br>Measurement Accuracy        | 2~1333Pa:读数±5% (20°C)<br>2~1333Pa: reading ± 5% (20°C)                   |
| 环境温度<br>Ambient Temperature         | 2~50°C (32~122°F)                                                        |
| 显示单位<br>Display Unit                | Pa, Torr, mBar, inHg, Microns                                            |
| 传感器 Sensor                          | 皮拉尼传感器<br>Pirani Sensor                                                  |
| 蜂鸣器 Buzzer                          | ≥80dB(10cm处)<br>≥80dB(at 10cm)                                           |
| 重量 Weight                           | 132g(不含电池和转换接杆)<br>132g (without battery and conversion connecting rod)  |
| 电池规格/电池寿命<br>Battery/Battery Life   | 3 AAA/100 Hours                                                          |
| 尺寸 Dimension                        | 142*51*31                                                                |

## ZCM-1 数字钳形表

## ZCM-1 Digital Clamp Meter



- 1.大屏LCD读数显示, 快速ADC/模数转换器(3次/秒)  
Large LCD readout display, fast ADC / digital converter (3 times / sec)
- 2.全功能误测保护, 最大可承受600V (30kVA)的能量冲击, 并设置过压、过流报警提示  
Full-featured mismeasurement protection, can withstand a maximum of 600V (30kVA) energy impact, and set over-voltage, over-current alarm prompts
- 3.真有效值; 电压测量600V  
True effective value; Voltage measurement 600V
- 4.具有高压频率测量功能  
With high-voltage frequency measurement function
- 5.交流电流测量功能  
AC current measurement function
- 6.具有电流频率测量功能  
With current frequency measurement function
- 7.温度测量功能  
Temperature measurement function
- 8.电容测量功能  
Capacitance measurement function

### 技术参数 Specification

| 型号 Model                        | 量程<br>Range              | 分辨率<br>Resolution | 准确度<br>Accuracy        |
|---------------------------------|--------------------------|-------------------|------------------------|
| 交流电流<br>AC Current              | 400A                     | 0.1A              | ±(2.0%+10)             |
| 电流频率<br>Current Frequency       | 50Hz~100Hz               | 0.1Hz             | ±(1.0%+5)              |
| 直流电压<br>DC Voltage              | 600V                     | 1V                | ±(0.7%+3)              |
| 交流电压<br>AC Voltage              | 600V                     | 1V                | ±(0.8%+5)              |
| 高压频率<br>High voltage frequency  | 10Hz~10kHz               | 0.01Hz~0.01kHz    | ±(1.0%+5)              |
| 电阻<br>Resistance                | 40MΩ                     | 0.01MΩ            | ±(2.0%+5)              |
| 电容<br>Capacitance               | 4mF                      | 0.001mF           | ±(10%)                 |
| 温度测量<br>Temperature measurement | -40~1000°C<br>-40~1832°F | 1°C<br>1°F        | ±(2.0%+5)<br>±(2.5%+4) |

# ZMT-39C 数字万用表

## ZMT-39C

### Digital Multimeters



1. 大屏LCD 4000位模数显示, 快速ADC/数转换器 (3次/秒)  
Large LCD 4000 bit analogue/digital display, fast ADC/digital converter (3 times/second)
2. 全功能误测保护, 最大可承受1000V过电压冲击。并设置有过压、过流报警提示  
Full-featured mismeasurement protection, can withstand a maximum of 1000V energy impact, and set over-voltage, over-current alarm prompts
3. 大容量电容扩展量程, 测量响应速度快,  $\leq 10\text{mF}$ 响应时间约6秒内  
Large-capacity capacitance extension range, fast measurement response reading,  $\leq 10\text{mF}$  response time of about 6 seconds
4. 通断测量、NCV非接触测量, 同步配置"声光"提示功能  
On-off measurement, NCV non-contact measurement, synchronous configuration "sound and light" prompt function
5. 背光灯, 二极管/三极管测量  
Backlight, diode/transistor measurement
6. 低电压提示  
Low voltage warning

#### 技术参数 Specification

| 型号 Model        | ZMT-39C       |                |                 |
|-----------------|---------------|----------------|-----------------|
|                 | 量程 Range      | 分辨率 Resolution | 准确度 Accuracy    |
| 直流电压 DC Voltage | 1000V         | 1V             | $\pm(0.7\%+3)$  |
| 交流电压 AC Voltage | 750V          | 1V             | $\pm(0.8\%+3)$  |
| 直流电流 DC Current | 10A           | 0.01A          | $\pm(1.2\%+5)$  |
| 交流电流 AC Current | 10A           | 0.01A          | $\pm(1.5\%+3)$  |
| 电阻 Resistance   | 200M $\Omega$ | 0.1M $\Omega$  | $\pm(5.0\%+10)$ |
| 电容 Capacitance  | 10mF          | 0.01mF         | $\pm 10\%$      |

# ZIT-306C 红外测温仪

## ZIT-306C

### Infrared Thermometer



1. 圆环形激光瞄准: 采用高精激光调节技术, 使得测量指示区域更准确  
Circular laser aiming: the use of high-precision laser adjustment technology, making the measurement indicator area more accurate
2. EBTN彩屏: 可方便晚上或光线较暗时使用  
EBTN color screen: easy to use at night or when the light is low
3. 最大/最小值/平均值/差值保持  
Max/Min/Average/Difference keep
4. 可调节发射率, 0.1~1.0 (可调)  
Adjustable emissivity, 0.1~1.0 (adjustable)
5. 具有蜂鸣器声音报警提示功能, 可快速发现异常  
With buzzer sound alarm warning function, can quickly find abnormalities
6. 扳机锁定, 适用于需要对温度进行监控的工艺过程  
Trigger lock, suitable for processes that require monitoring of temperature
7. 测量范围  $-50.0^{\circ}\text{C} \sim 500^{\circ}\text{C}$  ( $-58.0^{\circ}\text{F} \sim 932^{\circ}\text{F}$ )  
Measuring range  $-50.0^{\circ}\text{C} \sim 500^{\circ}\text{C}$  ( $-58.0^{\circ}\text{F} \sim 932^{\circ}\text{F}$ )
8. 12:1 的距离系数比  
12:1 distance coefficient ratio
9. 一键测量, 关机模式下短按"按钮"可启动一键测量, 方便快捷  
One-touch measurement, short press "button" in shutdown mode can start one-touch measurement, convenient and quick.

#### 技术参数 Specification

| 型号 Model                                       | ZIT-306C                                                                                                                                                                                                                                                                  |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 测温范围 Temperature Range                         | $-50^{\circ}\text{C} \sim 500^{\circ}\text{C}$ ( $-58^{\circ}\text{F} \sim 932^{\circ}\text{F}$ )                                                                                                                                                                         |
| 测温精度 Measurement Accuracy                      | $-50^{\circ}\text{C} \sim 0^{\circ}\text{C}: \pm(2^{\circ}\text{C}+0.1^{\circ}\text{C}/^{\circ}\text{C})$<br>$0^{\circ}\text{C} \sim 500^{\circ}\text{C}: \pm(4.0^{\circ}\text{F}+0.1^{\circ}\text{F}/^{\circ}\text{F})$<br>$32^{\circ}\text{F} \sim 932^{\circ}\text{F}$ |
| 距离系数(D:S) Distance Coefficient (D:S)           | 12:1                                                                                                                                                                                                                                                                      |
| 响应时间 Response Time                             | $\leq 250\text{ms}$ (读数的95%)<br>$\leq 250\text{ms}$ (95% of reading)                                                                                                                                                                                                      |
| LCD显示 LCD Display                              | 高对比EBTN彩屏<br>High-contrast EBTN colour screen                                                                                                                                                                                                                             |
| 单位选择 Unit Selection                            | $^{\circ}\text{C}/^{\circ}\text{F}$                                                                                                                                                                                                                                       |
| 测量模式 Measurement Mode                          | 最大值/最小值/平均值/差值(MAX/MIN/AVG/DIF)                                                                                                                                                                                                                                           |
| 发射率 Emissivity                                 | 0.1~1.0可调节, 默认0.95<br>0.1~1.0 adjustable, default 0.95                                                                                                                                                                                                                    |
| 激光信号 Laser Signal                              | 圆环激光<br>circular laser                                                                                                                                                                                                                                                    |
| 激光参数 Laser Parameters                          | CLASS 2 波长630nm~670nm功率<1mW<br>CLASS 2 Wavelength 630nm~670nm Power <1mW                                                                                                                                                                                                  |
| 工作环境温度 Operating Ambient Temperature           | $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ ( $32^{\circ}\text{F} \sim 122^{\circ}\text{F}$ )                                                                                                                                                                             |
| 高/低温声音报警<br>High/low temperature audible alarm |                                                                                                                                                                                                                                                                           |
| 延时自动关机<br>Delayed automatic shutdown           |                                                                                                                                                                                                                                                                           |

# ZMA-1 迷你风速计

## ZMA-1

### Mini Anemometer



1. CD背光显示屏, 风速风温并列双显一目了然  
CD backlit display, wind speed and wind temperature parallel double display clearly
2. 风力等级动态指示条显示省去复杂的换算烦恼  
Wind level dynamic indicator bar display eliminates the complicated conversion trouble.
3. 当环境达到风寒指数提示值时产品自动提示寒冷警告(环境温度0以下, 风速>5m/s)  
When the environment reaches the wind cold index warning value, the product automatically prompts cold warning (ambient temperature below 0, wind speed > 5m/s)
4. 蒲福风力等级指示 (0~12级)  
Beaufort wind level indication (0 ~ 12 degree)
5. 最大值、平均值、数据保持  
Maximum value, average value, data maintenance
6. 自动关机、低压提示、过量程提示  
Automatic shutdown, low-pressure warning, over-range warning
7. 具有五种风速测量单位切换和/两种风温单位切换  
With 5 kinds of wind speed measurement unit switching and two kinds of wind temperature unit such as / switching
8. 采用了日本TOREX LDO电压稳定控制技术, 产品功耗更低  
Use of Japan TOREX LDO voltage stability control technology, lower power consumption.
9. 微型磁传感器技术及独特的风叶结构设计使启动风速降低至0.1m/s  
Micro magnetic sensor technology and the unique design of wind blade structure reducing the starting wind speed to 0.1m/s.
10. 采样速率/0.5秒  
Sampling rate /0.5 seconds

#### 技术参数 Specification

| 型号 Model                           | ZMA-1                       |                              |
|------------------------------------|-----------------------------|------------------------------|
|                                    | 量程<br>Range                 | 基本精度<br>Fundamental Accuracy |
| 风速测量<br>Wind Speed<br>Measurement  | 0~30m/s(标准standard)         | ± (5%rdg + 0.5)              |
|                                    | 1.4~108Km/h(参考referenced)   | ± (5%rdg + 15rdg)            |
|                                    | 0.7~58Knots(参考referenced)   | ± (5%rdg + 10rdg)            |
|                                    | 0.8~67mph(参考referenced)     | ± (5%rdg + 10rdg)            |
|                                    | 78~5905ft/min(参考referenced) | ± (5%rdg + 180rdg)           |
| 温度测量<br>Temperature<br>Measurement | 零下10℃~50℃<br>-10℃ to 50℃    | ±2℃                          |

# ZMS-1 迷你噪音计

## ZMS-1

### Mini Sound Meter



1. LCD背光显示屏: 4位数液晶显示, 最大显示至"9999"  
LCD backlit display: 4-digit LCD display, the maximum display to "9999"
2. 采样速率可"快速/慢速"自由转换  
(快速125毫秒, 慢速1秒)  
The sampling rate can be converted freely to "fast / slow" (fast 125 milliseconds, slow 1 second)
3. 最大值、最小值、数据保持  
Maximum value, minimum value, data maintenance
4. 自动关机、过载指示  
Automatic shutdown, overload indication
5. 采用了日本TOREX LDO电压稳定控制技术, 产品功耗更低  
Use of Japan TOREX LDO voltage stability control technology, lower power consumption products
6. 传感器种类: 1/2英寸电容式麦克风  
Sensor type: 1/2-inch condenser microphone
7. 二级污染等级  
Second level of pollution
8. 电池欠压显示  
Battery undervoltage display

#### 技术参数 Specification

| 型号 Model                                     | ZMS-1       |                   |                                                                          |                                                                                            |
|----------------------------------------------|-------------|-------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
|                                              | 量程<br>Range | 分辨率<br>Resolution | 准确度<br>Accuracy                                                          | 说明<br>Description                                                                          |
| 噪音测量 (A加权)<br>Noise Measurement (A-weighted) | 30~130dB    | 0.1dB             | ±1.5dB                                                                   | 频率响应<br>Frequency Response: 31.5Hz~8KHz                                                    |
| 采样速率<br>Sampling Rate                        | FAST        |                   | 采样时间: 125毫秒<br>Sampling Time: 125 ms                                     |                                                                                            |
|                                              | STOW        |                   | 采样时间: 1000毫秒<br>Sampling Time: 1000 ms                                   |                                                                                            |
| 过载指示<br>Overload Indication                  |             |                   | 显示"UN"及"OL"符号<br>Display of "UN" and "OL" symbols                        |                                                                                            |
| 最大值测量 Maximum Value Measurement              |             |                   | 显示"MAX/MIN"符号<br>Display of "MAX/MIN" symbols                            |                                                                                            |
| 数据保持/背光 Data Hold/Backlight                  |             |                   | 显示"HOLD"符号及开关背光<br>Display of "HOLD" symbol and switch backlighting.     |                                                                                            |
| 自动关机 Auto Shutdown                           |             |                   | 无操作约5分钟后自动关机<br>Automatic shutdown after about 5 minutes of no operation |                                                                                            |
| 低电提示 Low Battery Indication                  |             |                   | 3.0~3.5V                                                                 | 电源3.0~3.5V时显示低电符号<br>Display of "low battery" symbol when the power supply is 3.0 to 3.5V. |

## ZSMG-410a-B 系列冷媒工具箱1

### ZSMG-410a-B Series Refrigerant ToolBox 1



1.吹塑工具箱设计, 工具定制定位, 取用更方便, 携带更轻松。  
Blow molding toolbox design, tool customization positioning, more convenient access, easier to carry.  
2.内含冷媒表, 割刀, 扩管器等全套制冷工具, 避免漏带工具, 使用更轻松  
Containing a full set of refrigeration tools such as refrigerant meter, cutter, flaring tool, etc. to avoid leakage of tools and make it easier to use.

#### 技术参数 Specification

| 型号 Model                                                    | ZSMG-2-410a | ZSMG-2-410a-B | ZSMG-2S-410a | ZSMG-2S-410a-B |
|-------------------------------------------------------------|-------------|---------------|--------------|----------------|
| 旋钮式双表 (410)<br>Knob Type Double Meter (410)                 | 1           | 1             | ×            | ×              |
| 球阀式双表 (410)<br>Ball Valve Type Double Meter (410)           | ×           | ×             | 1            | 1              |
| 加氟管-红 Hose-red: 1/4"-5/16"*1.5m                             | 1           | 1             | 1            | 1              |
| 加氟管-蓝 Hose-blue: 1/4"-5/16"*1.5m                            | 1           | 1             | 1            | 1              |
| 加氟管-黄 Hose-yellow: 1/4"-1/4"*1.5m                           | 1           | 1             | 1            | 1              |
| 转接头 (内R410/R22)<br>Adaptor (Internal R410 to R22)           | 1           | ×             | 1            | ×              |
| 快速接头R1234yf-红 1/4SAE<br>Quick Connector R1234yf-Red 1/4SAE  | ×           | 1             | ×            | 1              |
| 快速接头R1234yf-蓝 1/4SAE<br>Quick Connector R1234yf-Blue 1/4SAE | ×           | 1             | ×            | 1              |
| 开瓶器<br>Bottle Opener                                        | ×           | 1             | ×            | 1              |
| 气门芯扳手<br>Valve Core Spanner                                 | 1           | 1             | 1            | 1              |
| 备用配件-气门芯<br>Spare Parts-Valve Cores                         | 1           | 1             | 1            | 1              |
| 备用配件-O型圈<br>Spare Parts-O-Ring                              | 2           | 2             | 2            | 2              |

## ZSMG-410a-C 系列冷媒工具箱2

### ZSMG-410a-C Series Refrigerant ToolBox 2



1.吹塑工具箱设计, 工具定制定位, 取用更方便, 携带更轻松。  
Blow molding toolbox design, tool customization positioning, more convenient access, easier to carry.  
2.内含冷媒表, 割刀, 扩管器等全套制冷工具, 避免漏带工具, 使用更轻松  
Containing a full set of refrigeration tools such as refrigerant meter, cutter, flaring tool, etc. to avoid leakage of tools and make it easier to use.



#### 技术参数 Specification

| 型号 MODEL                                           | ZSMG-2-410a-C | ZSMG-2S-410a-C |
|----------------------------------------------------|---------------|----------------|
| 旋钮式双表 (410)<br>Knob Type Double Meter (410)        | 1             | ×              |
| 球阀式双表 (410)<br>Ball Valve Type Double Meter (410)  | ×             | 1              |
| 加氟管-红 Hose-red: 1/4"-5/16"*1.5m                    | 1             | 1              |
| 加氟管-蓝 Hose-blue: 1/4"-5/16"*1.5m                   | 1             | 1              |
| 加氟管-黄 Hose-yellow: 1/4"-1/4"*1.5m                  | 1             | 1              |
| 扩管器Tube Expander: ZSDT-A                           | 1             | 1              |
| 扩管条(英制)<br>Expanded Tube Strip (Inch): ZSFT-6M/B   | 1             | 1              |
| 扩管条(公制)<br>Expanded Tube Strip (Metric): ZSFT-6M/T | 1             | 1              |
| 迷你型割刀 Mini Cutter(ZSTC-19)                         | 1             | 1              |
| 小号割刀 Small Cutter(ZSTC-32)                         | 1             | 1              |
| 毛刺刮刀 Burr Scraper(ZST-01)                          | 1             | 1              |
| 说明书Instruction Manual                              | 1             | 1              |