



Innovative fluid solutions.

The choice of trust in the chemical industry

## HD SERIES DRUM PUMP PRODUCT CATALOG



Anhui Changyu pump and valve manufacturing Co., LTD

Anhui Changyu pump and valve manufacturing Co., LTD

Contact address: Jingxian Economic Development Zone,  
Xuancheng City, Anhui Province  
Contact number: +8613651913727  
Website: www.changyupump.com  
Email: Jade.changyupump.com



whatsapp

## CORPORATE INTRO

Anhui Changyu Pump & Valve Manufacturing Co., Ltd. was established in 2006 and has more than 20 years of industry experience. It integrates R&D, production, sales and service, Concentrating on the corrosion resistance and safe transportation of valuable fluids, with an annual output of 20,000 units.

Changyu is an industrial enterprise supported by the Xuancheng Municipal Government, covering an area of 20,000 square meters, and ranks among the top four industrial manufacturing enterprises in the region.

The company has passed ISO 9001, CE, CQC, KC and other certifications. It is a national high-tech enterprise with more than 50 patents and has won the titles of Xuancheng City's "Specialized, Refined and New" Enterprise (SRII), "Famous Trademark of Anhui Province" and "Contract-abiding and Credit-worthy".

We already have dealer teams in three or four regions.

At present, the new factory has been successfully completed. The total investment of this factory amounts to 35 million yuan, with a total area of 20,000 square meters. It has over 70 employees and is a digital factory integrating 5G technology and intelligence.



**20000+** square meter

floor area

**3500** Ten thousand yuan

Total investment

**20000** Table

Annual production capacity

**100+** individual

Enterprise certificate

# CORPORATE CULTURE



## CORE VALUES

Integrity is the foundation and innovation is the soul



## CORPORATE VISION

Intelligently manufacture chemical pumps to set a benchmark and build a happy enterprise model



## CORPORATE MISSION

Make high-risk media a safe productive force

Anhui Changyu Pump and Valve Manufacturing Co., Ltd.

# DEVELOPMENT HISTORY

● Empower industry with technology and win trust with quality. Provide efficient and reliable pump and valve solutions.

● Adhere to green development, promote energy conservation and emission reduction, and contribute to sustainable development.

### 2006

- Anhui Changyu Chemical Pump Valve Co., Ltd. was established.

### 2009

- Pass ISO 9001
- Quality Management System Certification

### 2008

- Independently developed
- UHB-ZK type anti-corrosion and wear-resistant mortar pump

### 2011

- Self-developed
- FYH type corrosion-resistant and wear-resistant submersible pump

### 2015

- The company was renamed "Anhui Changyu Pump Valve Manufacturing Co., Ltd."
- Awarded the title of National High-tech Enterprise

### 2019

- Develop the 100UHB-400 high-efficiency pump
- Received the New Product Certificate of Anhui Province

### 2022

- First received the "Two-Congruence Integration Management System Evaluation Certificate - Grade A"
- The UHB series corrosion-resistant pumps have been awarded the certificate of new product by Anhui Province.

### 2024

- Through ISO 14001, ISO 45001
- CE, OHSAS18001 certificate

Anhui Changyu pump and valve manufacturing Co., LTD

# HD系列

# 抽液泵

HD SERIES DRUM PUMP

使用说明书

Instruction Manual



## 电机型号字母意义 MOTOR MODEL NUMBER KEY

HD	-	E	2-V
品名 Name		型号 Type	电压 Voltage
高效桶泵 High-performance Drum pump		E 无极调速电机(Variable speed control motor) EX(SB-3) 固定高速防爆电机(EX motor) ENC 封闭式无极调速电机(TEFC) SB-370W 固定高速电机(Electronic motor) SB-550W 固定高速电机(Electronic motor) SB-880W 固定高速电机(Electronic motor) SB-1100W 固定高速电机(Electronic motor) 370W 固定低转速电机(Encapsulated motor) 550W 固定低转速电机(Encapsulated motor) 750W 固定低转速电机(Encapsulated motor) 1100W 固定低转速电机(Encapsulated motor) 1500W 固定低转速电机(Encapsulated motor) A1 气动马达(Air motor) A2 气动马达(Air motor) A3 气动马达(Air motor) A4 气动马达(Air motor) A6 气动马达(Air motor) A8 气动马达(Air motor)	1-V 110V 2-V 220V 3-V 380V VFD - 变频 YB - 防爆 DC - 直流 RCHG - 充电式

## 泵型号字母意义 PUMP MODEL NUMBER KEY

实例 Example: HD-SS304-1000(high volume/material:SS304)  
 HD-PPHT-1000-HP(high pressure/material:PPHT)

MD	-	SS	-	1000		HP		BN
品名 Name		材质 Material		长度 Length		型号 Type		定子材质 Stator Material
HD: 高效桶泵 High-performance Drum pump MD: 迷你小型插桶泵 Mini Drum Pump 如遇HD整机型号 此HD可省略 In case of HD machine model This HD can be omitted		304不锈钢 SS304 316L不锈钢 SS316L 铝合金 AL 塑料 PPHT 氯化聚氯乙烯 CPVC 二氟 PVDF 特氟龙 PTFE		700:700mm(27") 1000:1000mm(39") 1200:1200mm(47") 1500:1500mm(60") 1800:1800mm(72")		HP:高扬程 High Pressure HV:大流量(不标) High Volume (Do not bid) HC:哈氏合金轴 3A:3A卫生级 3A Sanitary Standard HV:高粘度 High Viscosity HV250 25000CP HV500 50000CP HV1000 100000CP		VT:氟橡胶 NBR:丁腈橡胶 CR:氯丁橡胶 NR:天然橡胶 TF:PTFE特氟龙

如有疑问请联系本公司或最近经销商  
 Please contact us or the nearest distributor if you have any questions.



## Product Introduction

HD series drum liquid pump is a new product developed by Anhui Changyu Pump Co.Ltd.through introducing technologies from Europe and America.it has many advantages,like advanced technology,stable performance,easy operation,reliable quality and a high performance/price ratio.To ensure quality,we import all key components of the products.like deep groove ball bearing form Switzland,outer framework oil sealsof fluorine rubber from Japan and bushings formTaiwan;All major parts produced by CHANGYU are marked with logos of our registered trademark to ensure authenticity and quality reliabilty of our products and efectively protect high reliability and durabilityof our products.We have a complete whole-set testing platform for conducting performance tests for all products,and only those pumps and motors passed performance tests can be released.Our products are 100%tested to meet your requirements for high-quality products. So far, its the only ideal alternative in China for imported barrel pumps.It adopts a stepless speed control motorwith leading technology in China,with such advantages of low noise and small impact,Besides,it's provided with an overheated protector to protect the motor from being burnt because of overload,thus ensuring high reliability and durability of the pump unit.The pump body and the motor adopt thread flange mounting discs,which needn't any tools in disassembling,thus very easy for maintenance.

CHANGYU HD-EX2-V(SB-3)explosion-proof product is applicable for inflammable and explosive working environments with a flameproof capabilty up to.IIB and an ignition temperature not lower than T4 group,featured with safe and reliable,reasonable structure, advanced process,high efficiency,easy maintenance,etc.The product conforms to provisions in GB3836.1-83:Electrical Apparatusfor Explosive Atmospheres-General Requirements,GB3836.2-83:Electrical Apparatus for Explosive Atmospheres Flameproof Electrical Apparatus "d",and GB3883.1-83:Safety of Hand-held Motoroperated Electric Tools.It passed strict tests of China National Quality Supervision and Test Center for Explosion Protected Electrical Products,granted with a certificate of passing explosion-proof tests.The certificate number is:CNEx21.2725.Please visit the website of the authoritative organization.www.china-ex.com to check and verify it.

The above products are strictly tested by the explosion-proof test station as per the standard 3836.2:Electrical Apparatus for Explosive Atmospheres Flameproof Electrical Apparatus "d",and the test result conforms to provisions for flameproof types for plants(dII-BT4).

### Safety

Zero leakage:the pump pipe adopts a zero leakage design,thus more suitable for transporting corrosive,inflammable and explosive liquids.

Overload protection:the speed control motor is provided with an overload protector

### Economical and Practical

Portable:the total weight of the pump pipe and the motor is between 1 KG and 25KG,being portable and removable.

Efficientit can empty a 200L standard barrel within 2 to 3 minutes.

No shaft seal with a zero leakage structure,there is no need to use the mechanical seal.thus reducing costs for maintenance and repair.

### Universality

Muti-materials:PP,PVDF,PTFE,stainless steel and aluminum alloy materials are applicable for transporting a great majority of liquids between low and high viscosity,thus meeting needs for more than 80%of applications.Currently we're available for such types as CHANGYU HD-AL,HD-SS304,HD-SS316L,HD-PPHTHD-PVDF,HD-PTFEand HD-HV.

Muti-actuators:electric or pneumatic,meeting different power sources.

### User-friendly

User-friendly design:the ergonomic shape design makes it easier for operators to use.

Strongly applicabile:it can transport common media,all kinds of strong acid and alkali and inflammable and explosive liquids.

Easy for connection.it adopts a standard G1'thread outlet,suitable for connecting all kinds of joints.

Modiied coupling:there is no need for alignment ininstallation,and it onlytakes seconds for connection.

Quick jointits motor and pump pipes adopt a quick joint,very easy for disassembly and assembly

Overall quick disassembling structure:there is no need for any assistive tools for disassembly and assembly.Extensive

accessories:complete accessories meet different needs.

### Reliability

Passing tests 100%:every CHANGYU pump is strictly tested before delivery.

Available for dry operation.its self-lubricating bearing is available for short-time dry operation without damages to the pump pipe.

Modular structure:WANGQUAN parts are highly integrated,easy for disassembly and maintenance.

### High Efficiency

High-performance impellerits high-performance double-suction impeller offers both large flow and high lift head.Easy

structure:its easy to umpick and wash.disassembly and assembly can be finished within 10 minutes.

### Environment-friendly

Zeroleakageit causes to no environmental pollution.



# HD系列抽液泵 | HD Series Drum Pump

## 优点及特性说明 FEATURES



### 标准的设计 Compact Design

可快速、容易连接交换所有马达和抽液泵  
Fast strip down for quick change of motor and pump

### 安全性联轴器 Safety Coupling

有效防止主轴卡死，造成马达损坏  
Effectively prevent shaft got stuck to cause motor damage

### 三通泵头轴承座 T Type pump head bearing

PPHT\PVDF\SUS316L\304\PTFE\AL

### 安全性插管式出液口 Safety bayonet-tube outlet

锯齿状束节设计不易滑落  
可安全及有效的移动(拔出)外接管  
Spiral design for safe and quick change of fittings

### 主轴 High quality shaft

AL、SS 系列: SUS316L  
PPHT、PVDF、PTFE系列: Hastelloy

### 套管TEF® Drivepipe TEF

被固定于内管内，可确保稳定性及可适当调整  
Being fixed in tube to ensure stability and adjustability

### 叶轮KYANR®PVDF High perfcenace impeler

有效提升泵浦输送量  
坚固结构增加耐磨性  
Efficiently improve the delivery capacity, firm in structure foe better abrasion resistance

### 高性能轴承组 High performance Bearing Sets

可降低马达输送动力对耗损提升泵浦性能  
不锈钢材质防酸氯腐蚀耐高温  
Stainless steel for acid chloride corrosion resistance and high temperature application.

生产商注册商标凸铸LOGO设计确保产品纯正。  
The logo of the manufacturer's registered trademark ensures authenticity of products.

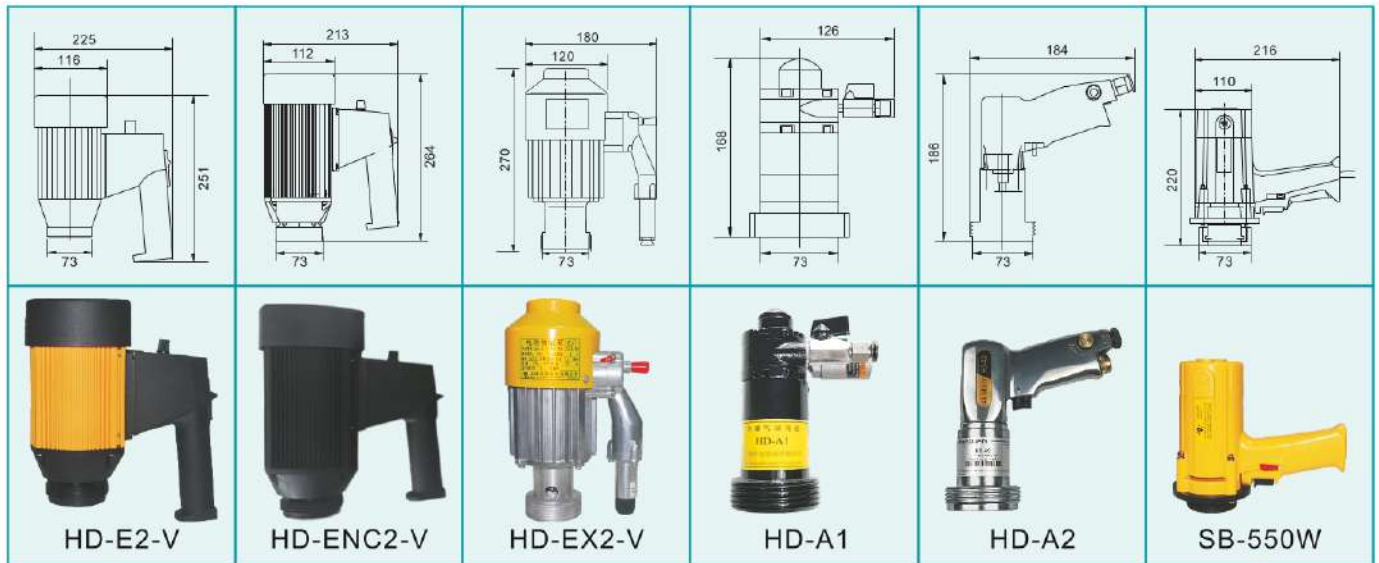
快拆式螺牙设计(管轴套座)  
Threaded Design (Carbon brush housing)  
不需任何工具即可轻松维修保养可快速更换叶轮泵浦外壳、精确调整更换之零件。  
Easy maintenance without any additional tools required. Quick change of impeller and housing.

轴套  
Shaft Bushing  
耐酸碱如龙材质  
Rulon® not only for better acid and alk resistance, but also high wear resista and low friction.



各种叶片式抽液泵皆采用无轴封设计，可耐空转30分钟以上。  
All vane drum pumps are of none-shaft seal design, which allows blank run up to 30 minutes.

# HD Series Drum Pump | HD系列抽液泵



可快速、容易连接  
交换所有马达和抽液泵  
Quick change of motor and pump

**互换 SWAP**

例: HD-PPHT-1000

	HD泵管	MD泵管
SS	D=42	D=32
PPHT	D=41	D=32
PVDF	D=41	D=32
PTFE	D=41	D=32
AL	D=42	D=32

单位Unit: mm

 SS 不锈钢材质	 PPHT塑料材质	 PVDF二氟材质	 PTFE特氟龙材质	 AL铝合金材质
--------------	--------------	--------------	---------------	-------------

# HD系列抽液泵 | HD Series Drum Pump

## 抽液泵材质应用范围 MATERIAL APPLICATION SCOPE OF DRUM PUMP

泵浦材质 Pump material	最高耐温 Max.Temp.	应用范围 Application scope	
PPHT (玻纤增强 聚丙烯) (Fiberglass reinforced PP)	80°C/175°F	酸性和碱性物质如：醋酸、铵、氯化铁、氟硅酸、 氢氧化物、消毒剂、磷酸(45%)、氮酸(20%)、 钠氢氧化物、硫酸(75%)、漂白水及其它液体。 Acid and alkaline substances, like acetic acid, ammonium, iron chloride, fluosilicic acid, hydroxide, disinfectors, phosphoric acid (45%), nitric acid (20%), sodium hydroxide, sulfuric acid (75%), bleaching water and other liquids.	<ul style="list-style-type: none"> <li>Acetic Acid</li> <li>Sulfuric Acid</li> <li>Hydrochloric-20%</li> <li>Nitric Acid-20%</li> <li>Alkalies</li> <li>Ferric Chloride</li> </ul>
PVDF (聚偏氟乙烯) (Poly vinylidene fluoride)	100°C/212°F	高腐蚀性毒性物质如：氢氟酸(浓度COLD)、 氮酸(浓缩)、丙酸、硬脂酸、硫酸及其它溶液。 Highly corrosive and toxic substances, like hydrofluoric acid (concentration COLD), propylhomoserin (concentrated), propanoic acid, stearic acid, sulfuric acid and other solutions.	<ul style="list-style-type: none"> <li>Concentrated Nitric Acid</li> <li>Sulfuric Acid-66 Baume</li> <li>Sodium Hypochlorite</li> <li>Propionic Acid</li> <li>Stearic Acid</li> <li>Hydrofluoric Acid</li> </ul>
PTFE (特氟龙) (Poly tetra fluoroethylene)	110°C/230°F	任意浓度的硫酸、盐酸、磷酸、氢氟酸、氢氧化钠、 氢氧化钾、铬酸、王水、甲酸、醋酸、丙酸、丁酸、 硝酸、甲烷、乙烷及各种苯、醇、醚、丙酮、环己酮、 酯类、氟乙烯。 Any concentration of sulphuric acid, hydrochloric acid, phosphoric acid, hydrofluoric acid, sodium hydroxide, potassium hydroxide, chromic acid, aqua regia, methanoic acid, acetic acid, propanoic acid, butyric acid, nitric acid, methane, ethane and different kinds of benzene, alcohol, ether, acetone, cyclohexanone, esters and vinyl fluoride.	<ul style="list-style-type: none"> <li>Sulfuric acid</li> <li>Hydrochloric acid</li> <li>Phosphoric acid</li> <li>Hydrofluoric acid</li> <li>Sodium hydroxide</li> <li>Chromic acid</li> <li>Aqua regia</li> <li>Formic acid</li> <li>Methane</li> <li>Benzene</li> <li>Alcohol</li> <li>Acetone</li> <li>Ester</li> </ul>
SS304 (304不锈钢) (stainless steel 304)	100°C/212°F	可燃性物质或易燃性物质柴油、汽油、各种油类、 和缓剂(界面活性剂)、酒精。 Flammable or inflammable substances, diesel oil, gasoline, all kinds of oil, inhibiting agents (interfacial active agents) and alcohol.	<ul style="list-style-type: none"> <li>Alcohol • Gasoline</li> <li>Aqueous Ammonia</li> <li>Isopropyl Ether</li> <li>Solvents</li> <li>Petroleum Products</li> </ul>
SS316L (316L不锈钢) (stainless steel 316L)	100°C/212°F	可燃性物质或易燃性物质柴油、汽油、各种油类、 和缓剂(界面活性剂)、酒精。 各种食品类、饮料类、医用类、高纯净度轻质流体 Flammable or inflammable substances, diesel oil, gasoline, all kinds of oil, inhibiting agents (interfacial active agents) and alcohol. All kinds of food, beverage, medicine and high-purity light-duty fluids.	<ul style="list-style-type: none"> <li>Alcohol • Gasoline</li> <li>Aqueous Ammonia</li> <li>Isopropyl Ether</li> <li>Solvents</li> <li>Petroleum Products</li> </ul>
AL (铝合金) (aluminium alloy)	100°C/212°F	低腐蚀性的污水、柴油、低粘度油、润滑油 Weakly corrosive sewage, diesel oil, low-viscosity oil and lubricating oil	<ul style="list-style-type: none"> <li>Sewage</li> <li>Diesel oil</li> <li>Low viscosity oil</li> <li>Lubricating oil</li> </ul>



输送液体如为易燃易爆溶剂时，必须采用防爆电机或气动马达，同时接上接地线，以确保使用之安全。

If the service is solvent, it's necessary to adopt an explosion-proof or pneumatic motor and meanwhile connect the ground wire to ensure safe use.

## 订货前注意事项/到货检查 NOTES BEFORE ORDER/ARRIVAL CHECK



在操作抽液泵之前，操作人员应了解对于使用之液体相关化学特性与材质适用条件范围，并详读所有操作注意事项和安全警告标示。

Before operating a liquid pump, the operator shall know chemical properties related to the working liquid and applicable conditions and scopes of materials, and also read all operation notes and safety warning signs in details.

### 订购抽液泵应注意事项

- 一、抽液泵依不同材质有不同的条件及应用范围，订购抽液泵前应考虑以下因素：
  - 1.液体化学特性(PUMP泵体及主轴材质耐抗性)，2.流量(l/min)，3.扬程(m)
  - 4.温度(°C)，5.粘度(cps)，6.通过粒径(mm)，7.比重(kg/m<sup>3</sup>)
- 二、确认使用电源、接管方式及相关作业环境。
- 三、泵体三通常规铸件出液口为M42\*2螺纹出口出厂标准配备1寸(25.4mm)快速套管接口(宝塔接口)也可另外选配特殊规格的3/4"(20mm)或1 1/4"(32mm)，1 1/2"(40mm)接口，也可选增配接口方式：螺纹、卡盘、快装公母头等等。

### NOTES FOR ORDERING LIQUID PUMP

- I. The liquid pumps have different conditions and application scopes in accordance with different materials, and the following factors shall be taken into consideration before ordering liquid pumps.
  1. The liquid's chemical properties (resistance of materials of the pump's body and main shaft); 2. flow (l/min); 3. lift head (m); 4. temperature (°C); 5. viscosity (cps); 6. diameter of passing grain (mm); 7. specific gravity (kg/m<sup>3</sup>)
- II. Confirm working power supply, pipe connection mode and relevant working environment.
- III. The liquid outlet of the conventional casting of the pump body tee is M42 \*2 threaded outlet. The factory standard is equipped with a 1-inch(25.4mm)fast binding casing The interface (pagoda interface)can also be equipped with 3/4 "(20mm)or 1 1/4"(32mm)of special specifications, 1 1/2"(40mm)interface, and optional additional interface modes: thread, chuck, quick mounting male and female, etc.

## 抽液泵尺寸应用范围 DIMENSION APPLICATION SCOPE OF DRUM PUMP

适用容器 Applicable containers	泵浦型号 Pump type	泵浦管长度 Pump pipe length
5加仑瓶 5GAL Bottles	HD-材质 material 700	700mm(27')
55加仑标准鼓圆桶 (200L) 55 Gal. standard drum barrels (200L)	HD-材质 material 1000	1000mm(39')
桶罐、罐子槽体 Drums, jars and tanks	HD-材质 material 1200	1200mm(47')
国际标准吨桶 Intermediate bulk containers(IBCs)	HD-材质 material 1500	1500mm(60')
大型容器 Big containers	HD-材质 material 1800	1800mm(72')

### 货到检查

- 一、请检查铭牌，确认是否为您所订购之抽液泵。
- 二、请检查电机(或气动马达)、泵管有无任何损坏及异常情况。
- 三、请确定电机及抽液泵所有螺丝、零件是否皆已锁紧、固定。

### ARRIVAL CHECK

- I. Please check the nameplate to confirm whether it's the pump that you've ordered.
- II. Please check whether the motor (or pneumatic motor) and the pump pipe have any damages or abnormalities.
- III. Please confirm whether all screws and parts of the motor and the liquid pump have been locked and fixed.

### 操作说明及注意事项 OPERATING INSTRUCTIONS AND NOTES

- 一、请先检查扶手轮及出口管路是否锁紧。
- 二、叶轮容许通过颗粒3mm以下之软性物质，若超过此粒径请另行加装过滤网。
- 三、泵机勿存放在潮湿或酸气、热气及各种腐蚀性气体过重处。
- 四、电机、气动马达及抽液泵严禁碰撞损坏。
- 五、HD-A系列气动马达机型，运行中必须加装带自动添油型气动三联件（除水过滤、润滑、压力调整）。  
注：润滑油采用ISO VG32涡轮机油（俗称1#透平油）
- 六、请将抽液泵管及出口管路放至指定安全区域后再开启电(气)源，防爆型电机为拉杆式开关。
- 七、使用电(气)源时，请由小到大启动，以延长泵机运转时间及寿命，亦防止人员发生危险。
- 八、注意电压是否与电机铭牌一致或供气压力和供气管径及产气量是否满足。
- 九、调速电机均有过载保护装置。（其它泵型建议在电源进线端加设过载保护器）
- 十、使用时，必须有专业人员现场操作，运行过程中人员切勿离开现场。
- 十一、一般桶装手提式抽液泵可抽取之粘度约为500-800cps：高扬程叶轮粘度可达1000-1200cps，如需输送更高粘度液体，请选用适合高粘度的HV螺杆式插桶泵或是其它适用抽液泵(例：FY气动浆料泵、RW气动隔膜泵、ZB转子泵、CG螺杆泵)。
- 十二、如发现泵机有异响时，关停泵机并检查是否吸入异物与叶轮碰撞。
- 十三、输送液体如为易燃易爆溶液时，需采用防爆型电机或气动马达，同时接上接地线，以确保使用上的安全。
- 十四、电机或气动马达与泵管安装时请确实，如安装不当，会造成电机马达联轴器与泵管联轴器损毁。
- 十五、电机或气动马达与泵管安装前，请先确认开关为关闭OFF状态。
- 十六、电机或气动马达请勿浸入液体中或泼到液体。
- 十七、HD系列抽液泵应在海拔1000米以下使用。

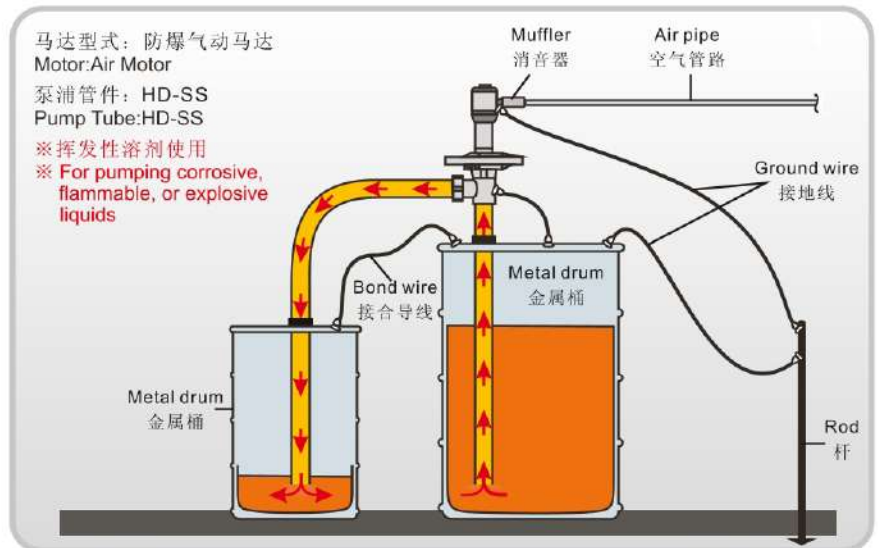
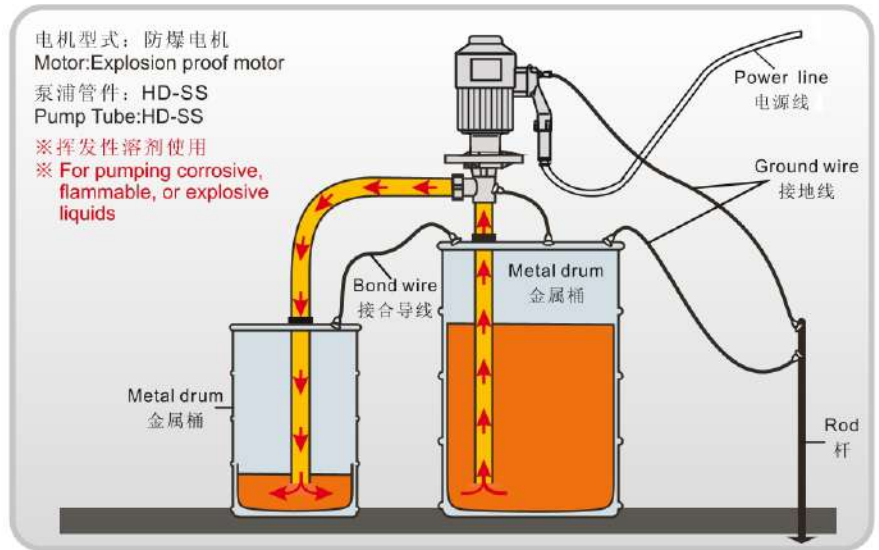
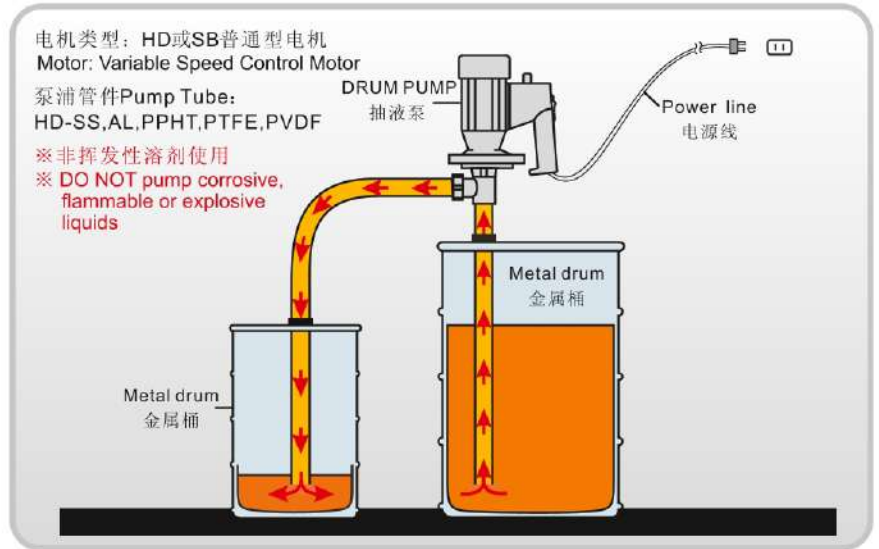
- I. Please check first whether the handwheel and the outlet pipeline are locked.
- II. The impeller allows passing of soft substances with a grain diameter below 3mm, and if beyond that diameter, please mount a filter screen additionally.
- III. Don't store the pump in any place with excessive moisture or acid, hot or corrosive gases.
- IV. It's strictly prohibited to knock and damage the motor, the pneumatic motor and the drum pump.
- V. HD-A series pneumatic motor type in HD-A series must be mounted additionally with an automatic pneumatic oiling triplex (water removal and filtration, lubrication and pressure regulation). Note: the lubricating oil adopts ISO VG32 turbine oil (informally called 1# turbine oil).
- VI. Please place the liquid pump pipe and the outlet pipeline in a designated safe area before starting the power (gas) supply. The explosion-proof motor is a pull rod switch.
- VII. When using the power (gas) supply, please start it gradually to extend the pump's service time and life and also protect personnel from dangers.
- VIII. Note whether the voltage is accurate or whether the supply gas pressure and the gas production are met.
- IX. All speed control motors are provided with an overload protector (for other pump types, it's recommended to mount an overload protector additionally at the power lead end).
- X. Professionals must be available for its field operation and during its running they shall by no means leave the field.
- XI. A common drum portable liquid pump can pump liquids with viscosity about 500-800cps; and up to 1,000-1200 cps for a high-lift impeller; if required to transport liquids with higher viscosity, please choose a high-viscosity spiral liquid pump or other applicable liquid pumps (such as: FY pneumatic slurry pump, RW pneumatic diaphragm pump, ZB rotor pump and CG screw pump).
- XII. If any abnormal noise of the pump is found, please check whether foreign matters are pumped inside to knock against the impeller.
- XIII. If the working liquid is a solvent, it's necessary to adopt an explosion-proof or pneumatic motor and meanwhile connect the ground wire to ensure safe use.
- XIV. Please make sure the electric or pneumatic motor is installed on the pump pipe well because improper installation may result in damages to the couplings of the motor and the pump pipe.
- XV. Before installing the electric or pneumatic motor on the pump pipe, please confirm first that the switch is off.
- XVI. Please don't immerse the electric or pneumatic motor into liquids or splash liquids on it.
- XVII. HD series liquid pump shall be used at an elevation below 1,000m.

抽液泵安装示意图 DRUM PUMP SUGGESTED INSTALLATION



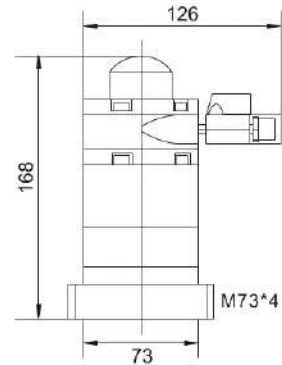
输送液体如为溶剂等挥发性易燃易爆介质，需配置防爆电机或防爆气动马达，同时必须接上接地线、等位线，以确保使用上的安全；如疏忽接地线时，可能会导致静电而造成火灾、伤害甚至死亡。如果仍有疑义，使用前请先洽生产商或经销商。

For safety, please properly bond and ground when handling solvent or flammable fluids as a static electric discharge could result in fire, equivalent line, explosion, injury or death. Do not start the pump in case of any doubt, and contact with local distributor.



## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-A1防爆气动马达(Explosion Proof Pneumatic Motor)



型号 Type	HD-A1
流量 Flow	最大(Max.)70L(7bar) HP型最大(Max.)50L/min 最大(Max.)55L(4bar) HP型最大(Max.)35L/min
扬程 Head	最高(Highest)5M(7bar) HP型最高(Highest)8M 最高(Highest)4M(4bar) HP型最高(Highest)6.5M
转速 Speed	0~10000(r/min)
功率 Power	375W
粘度 Viscosity	最大(Max)700CPS
重量 Weight	1.23kg

最大入口压力 Max. Inlet air pressure: 102 psi(7bar)

空气耗气量 Air consumption: 22CFM@92psi(10.38liter/sec@6.3bar)

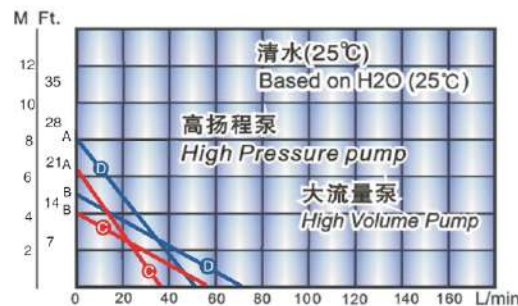
空气接头 Air joint: 10mm

附件Accessory: 消音器、气量调节阀 muffler and air flow control valve

必须配备: 空气过滤器、压力调节器、自动注油壶(气动3联件)

Required parts: air filter, pressure regulator and automatic oiler (pneumatic triplex)

主体 Body: 铸铁、铝合金 Cast iron and aluminum alloy



A(D)线为HP高扬程封闭式叶轮D(7 Bar);

A(C)线为HP高扬程封闭式叶轮C(4 Bar);

B(D)线为大流量开放式叶轮(7 Bar);

B(C)线为大流量开放式叶轮(4 Bar);

测试条件: 200L圆桶;

HD-SS316L-1000泵管;

介质为25°C清水, 出液口为1 1/4"(32mm), 测试允许误差 ± 10%。

Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ± 10%.

典型泵型HD-A1+PPHT-1000

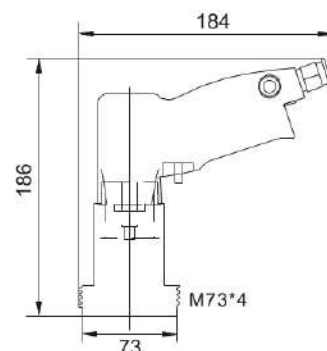
Typical pump model HD-A1+PPHT-1000

净重 Weight: 2.53kg

该马达还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT(engineering plastics), PVDF(polyvinylidene fluoride), PTFE(polytetrafluoroethylene) Pump assembly of other materials.

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-A2防爆气动马达(Explosion Proof Pneumatic Motor)



型号 Type	HD-A2
流量 Flow	最大(Max.)110L(7bar) HP型最大(Max.)85L/min 最大(Max.)60L(4bar) HP型最大(Max.)45L/min
扬程 Head	最高(Highest)9M(7bar) HP型最高(Highest)25M 最高(Highest)5M(4bar) HP型最高(Highest)15M
转速 Speed	0~18000(r/min)
功率 Power	560W
粘度 Viscosity	最大(Max)500CPS
重量 Weight	1.02kg

最大入口压力 Max. Inlet air pressure: 102 psi(7bar)

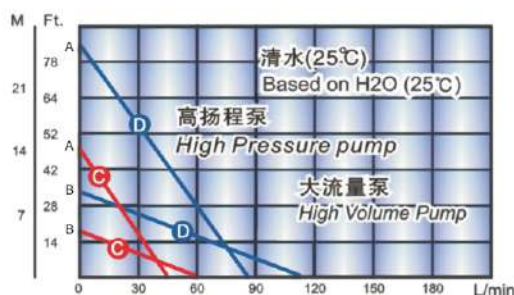
空气耗气量 Air consumption: 28CFM@90psi(13.2liter/sec@6.2bar)

空气接头 Air joint: 12mm

必须配备: 空气过滤器、压力调节器、自动注油壶(气动3联件)

Required parts: air filter, pressure regulator and automatic oiler (pneumatic triplex)

主体 Body: 铸铁、铝合金 Cast iron and aluminum alloy



A(D)线为HP高扬程封闭式叶轮D(7 Bar);

A(C)线为HP高扬程封闭式叶轮D(4 Bar);

B(D)线为大流量开式叶轮(7 Bar);

B(C)线为大流量开式叶轮(4 Bar);

测试条件: 200L圆桶;

HD-SS316L-1000泵管;

介质为25°C清水, 出液口为1 1/4"(32mm), 测试允许误差 ± 10%。

Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ± 10%.

典型泵型HD-A2+SS304-1000

Typical pump model HD-A2+SS304-1000

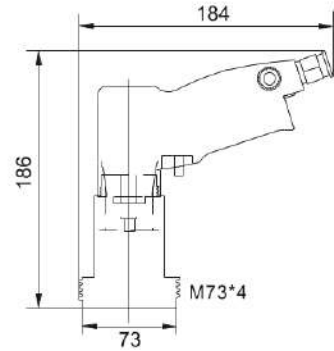
净重 Weight: 5.28kg

该马达还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

# HD系列抽液泵 | HD Series Drum Pump

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-A2防爆气动马达(Explosion Proof Pneumatic Motor)



型号 Type	HD-A2
流量 Flow	最大(Max.)65L(7bar) HP型最大(Max.)50L/min 最大(Max.)40L(4bar) HP型最大(Max.)30L/min
扬程 Head	最高(Highest)6M(7bar) HP型最高(Highest)15M 最高(Highest)4M(4bar) HP型最高(Highest)10M
转速 Speed	0~18000(r/min)
功率 Power	560W
粘度 Viscosity	最大(Max)500CPS
重量 Weight	1.02kg

最大入口压力 Max. Inlet air pressure: 102 psi(7bar)

空气耗气量 Air consumption: 28CFM@90psi(13.2liter/sec@6.2bar)

空气接头 Air joint: 12mm

必须配备: 空气过滤器、压力调节器、自动注油壶(气动3联件)

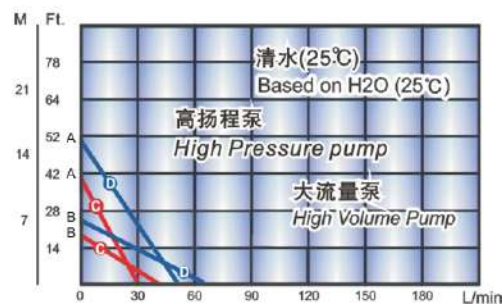
Required parts: air filter, pressure regulator and automatic oiler (pneumatic triplex)

主体 Body: 铸铁、铝合金 Cast iron and aluminum alloy

典型泵型HD-A2+MD-PPHT-600

Typical pump model HD-A2+MD-PPHT-600

净重 Weight: 1.84kg



A(D)线为HP高扬程封闭式叶轮D(7 Bar);

A(C)线为HP高扬程封闭式叶轮C(4 Bar);

B(D)线为大流量开放式叶轮D(7 Bar);

B(C)线为大流量开放式叶轮C(4 Bar);

测试条件: 25L圆桶;

MD-PPHT-600泵管;

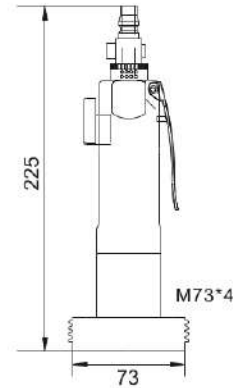
介质为25°C清水, 出液口为1"(25mm), 测试允许误差±10%。

Line A refers to HP high-lift enclosed impeller. Line B refers to large-flow open impeller. Testing conditions: 25L round barrel, MD-PPHT-600 pump pipe, medium 25°C clear water, liquid outlet 1"(25mm), and allowable error of test ± 10%.

该马达还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

气动马达、电机系列 AIR MOTOR、MOTOR SERIES

HD-A3防爆气动马达(Explosion Proof Pneumatic Motor)



型号 Type	HD-A3
流量 Flow	最大(Max.)75L(7bar)    HP型最大(Max.)65L/min
扬程 Head	最高(Highest)6M(7bar)    HP型最高(Highest)17M
转速 Speed	0~12000(r/min)
功率 Power	385W
粘度 Viscosity	最大(Max)500CPS
重量 Weight	0.75kg

最大入口压力 Max. Inlet air pressure: 102 psi(7bar)

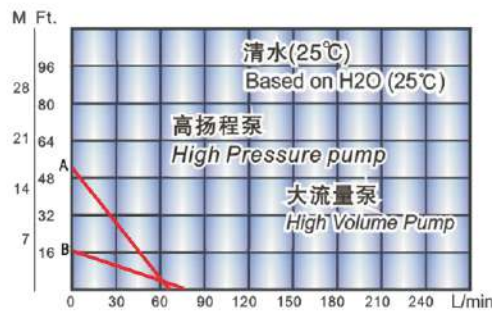
空气耗气量 Air consumption: 18CFM@90psi(8.7liter/sec@6.2bar)

空气接头 Air joint: 10mm

必须配备: 空气过滤器、压力调节器、自动注油壶(气动3联件)

Required parts: air filter, pressure regulator and automatic oiler (pneumatic triplex)

主体 Body: 铝合金 aluminum alloy



A线为HP高扬程封闭式叶轮D(7 Bar);

B线为大流量开放式叶轮(7 Bar);

测试条件: 200L圆桶;

HD-PTFE-1000泵管;

介质为25°C清水, 出液口为1 1/4"(32mm), 测试允许误差 ± 10%。

Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-PTFE-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ± 10%.

典型泵型HD-A3+PTFE-1000

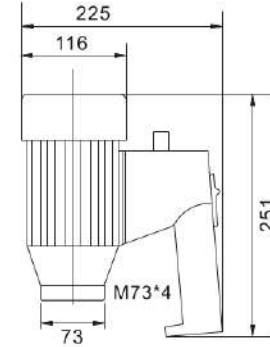
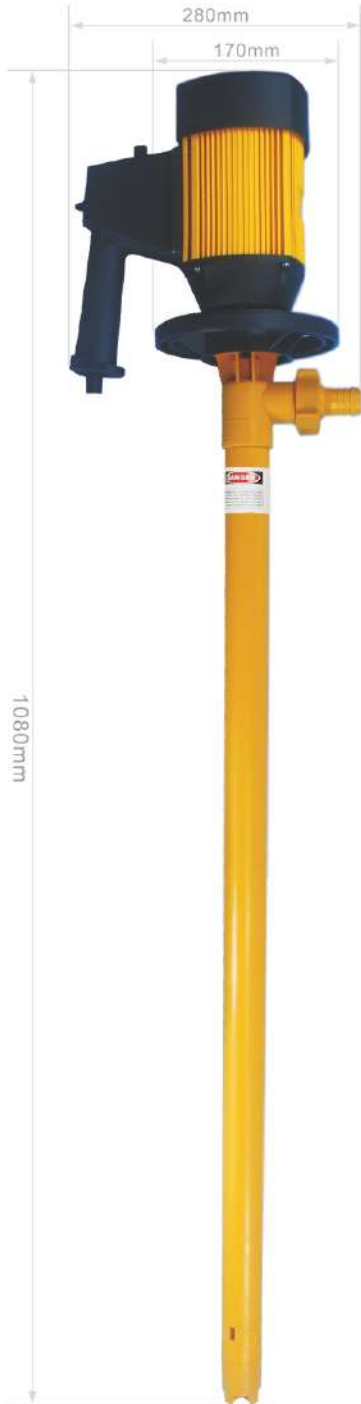
Typical pump model HD-A3+PTFE-1000

净重 Weight: 2.02kg

该马达还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

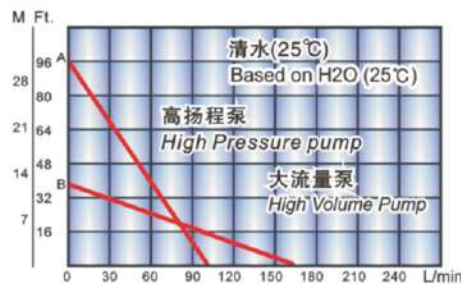
## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-E2-V可调速电动马达(Variable Speed Control Motor)



型号 Type	HD-E2-V	
流量 Flow	最大(Max.)165L	HP型最大(Max.)100L/min
扬程 Head	最高(Highest)10M	HP型最高(Highest)30M
转速 Speed	0~10000(r/min)	
功率 Power	800W	
粘度 Viscosity	最大(Max)800CPS	HP型最大(Max)1000CPS
重量 Weight	3.55kg	

空转保护装置 Idle protector  
 安全手动重换装置 Safe manual change device  
 注塑德国黄聚碳外壳马达可抗化学腐蚀  
 Jet molding German yellow polycarbonate casing motor.resistant to chemical corrosion  
 220V 调速电机-附16尺(5米)SJT电线插头  
 220V Speed control motor-included with 16 chi (5m) SJT wire plug  
 防护等级 Protection calss: IP44



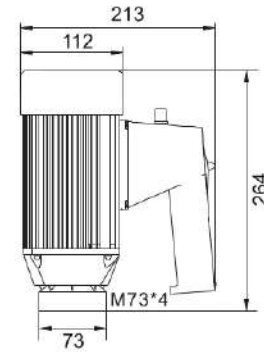
A线为HP高扬程封闭式叶轮;  
 B线为大流量开放式叶轮;  
 测试条件: 200L圆桶;  
 HD-SS316L-1000泵管;  
 介质为25℃清水, 出液口为1 1/4"(32mm),  
 测试允许误差±10%。  
 Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25℃ clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ±10%.

典型泵型HD-E2-V+PVDF-1000  
 Typical pump model HD-E2-V+PVDF-1000  
 净重 Weight: 5.25kg

该电机还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
 The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

气动马达、电机系列 AIR MOTOR、MOTOR SERIES

HD-ENC2-V可调速电动马达(Variable Speed Control Motor)



型号 Type	HD-ENC2-V	
流量 Flow	最大(Max.)133L	HP型最大(Max.)60L/min
扬程 Head	最高(Highest)11M	HP型最高(Highest)22M
转速 Speed	0~10000(r/min)	
功率 Power	825W	
粘度 Viscosity	最大(Max)800CPS	HP型最大(Max)1000CPS
重量 Weight	5.9kg	

低压过载保护器 Low Voltage Release (选配)

热保护器 Thermal Overload

外壳材质: 阳极氧化铝

Housing Material: Anodized Aluminum

220V 调速电机-附16尺(5米)SJT电线插头

220V Speed control motor-included with 16 chi (5m) SJT wire plug

电机型式及防护等级 Motor type and protection grade: TEFC(IP54)防滴溅

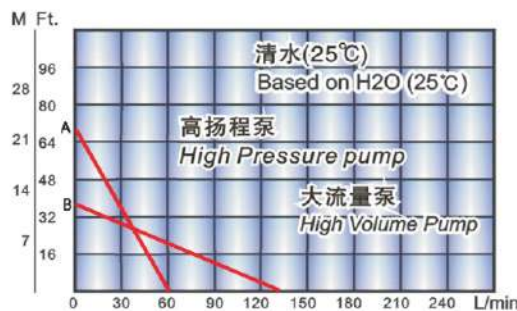
噪音 Noise Level: 88dBa分贝

绝缘等级 Insulation Class: F2

典型泵型HD-ENC2-V+SS304-1000

Typical pump model HD-ENC2-V+SS304-1000

净重 Weight: 9.29kg



A线为HP高扬程封闭式叶轮;

B线为大流量开放式叶轮;

测试条件: 200L圆桶;

HD-SS316L-1000泵管;

介质为25°C清水, 出液口为1 1/4"(32mm),

测试允许误差 ± 10%。

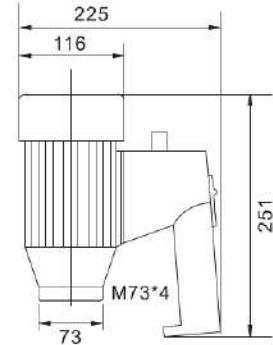
Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ± 10%.

该电机还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

# HD系列抽液泵 | HD Series Drum Pump

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-E1-V可调速电动马达(Variable Speed Control Motor)



型号 Type	HD-E1-V	
流量 Flow	最大(Max.)110L	HP型最大(Max.)90L/min
扬程 Head	最高(Highest)12M	HP型最高(Highest)21M
转速 Speed	0~10000(r/min)	
功率 Power	485W	
粘度 Viscosity	最大(Max)800CPS	HP型最大(Max)1000CPS
重量 Weight	3.55kg	

空转保护装置 Idle protector

安全手动重换装置 Safe manual change device

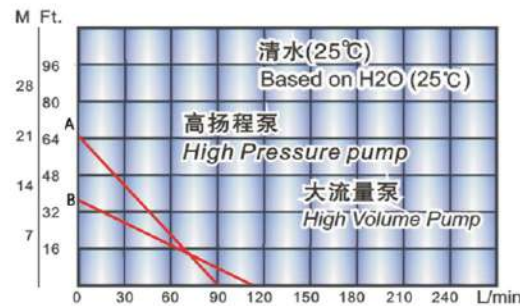
蓝色防触漆外壳马达可抗化学腐蚀

Blue anti touch paint motor housing, resistant to chemical corrosion

110V 调速电机-附16尺(5米)SJT电线插头(可选配220V Optional 220V)

110V Speed control motor-included with 16 chi (5m) SJT wire plug

防护等级 Protection calss: IP44



A线为HP高扬程封闭式叶轮;

B线为大流量开放式叶轮;

测试条件: 200L圆桶;

HD-SS316L-1000泵管;

介质为25°C清水, 出液口为1 1/4"(32mm),

测试允许误差±10%。

Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ±10%.

典型泵型HD-E1-V+PVDF-1000

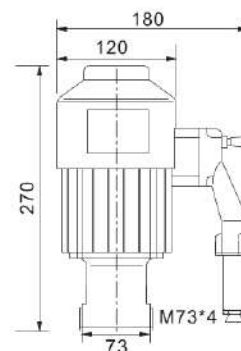
Typical pump model HD-E1-V+PVDF-1000

净重 Weight: 5.25kg

该电机还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

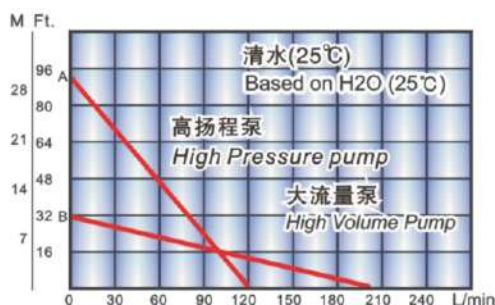
## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-EX2-V(SB-3)防爆电机(Explosion Proof Motor)



型号 Type	HD-EX2-V(SB-3)	
流量 Flow	最大(Max.)198L	HP型最大(Max.)120L/min
扬程 Head	最高(Highest)12M	HP型最高(Highest)30M
转速 Speed	12000(r/min)	
功率 Power	880W	
粘度 Viscosity	最大(Max)500CPS	HP型最大(Max)800CPS
重量 Weight	4.4kg	

全封闭式铝合金外壳 Totally enclosed aluminum alloy casing  
 220V 防爆电机-附3米出线，不含防爆插头  
 220V explosion-proof motor - included with a 3m outgoing line, without an explosion-proof plug  
 防护等级 Protection class: IP55  
 防爆合格证号 Explosion-proof certificate number: CN Ex21.2725  
 防爆等级 Explosive-proof class : d II BT4



A线为HP高扬程封闭式叶轮;  
 B线为大流量开放式叶轮;  
 测试条件: 200L圆桶;  
 HD-SS316L-1000泵管;  
 介质为25℃清水, 出液口为1 1/4"(32mm),  
 测试允许误差±10%。

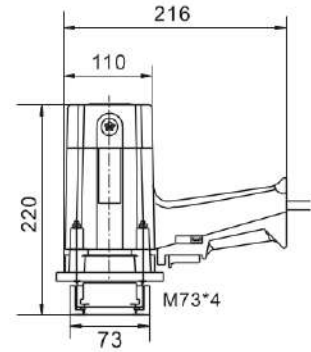
Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ±10%.

典型泵型HD-EX2-V+SS316L-1000  
 Typical pump model HD-EX2-V+SS316L-1000  
 净重 Weight: 8.57kg

该电机还可以配置铝合金、不锈钢304、不锈钢316L等金属材质的泵浦总成。  
 The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L Pump assembly of other materials.

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### SB-370W固定高速电机(Fixed High-Speed Motor)



型号 Type	SB-370W
流量 Flow	最大(Max.)90L HP型最大(Max.)55L/min
扬程 Head	最高(Highest)6M HP型最高(Highest)17M
转速 Speed	8000(r/min)
功率 Power	370W
粘度 Viscosity	最大(Max.)500CPS HP型最大(Max.)800CPS
重量 Weight	2 kg

注塑德国黄聚碳外壳马达可抗化学腐蚀

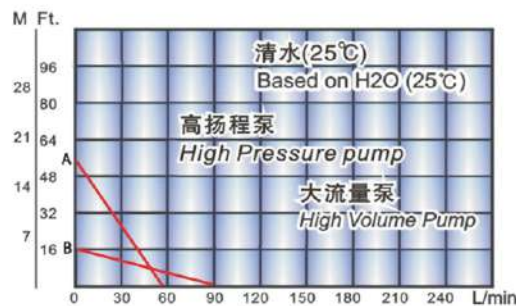
Jet molding German yellow polycarbonate casing motor, resistant to chemical corrosion

220V 高速电机-附3米电线插头

220V high-speed motor - included with a 3m wire plug

防护等级 Protection class : IP20

绝缘等级 Insulation class : E级



A线为HP高扬程封闭式叶轮;

B线为大流量开放式叶轮;

测试条件: 200L圆桶;

HD-SS316L-1000泵管;

介质为25°C清水, 出液口为1 1/4"(32mm),

测试允许误差 ± 10%。

Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ± 10%.

典型泵型SB-370W+HD-PVC-1000

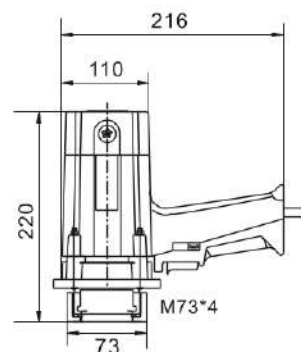
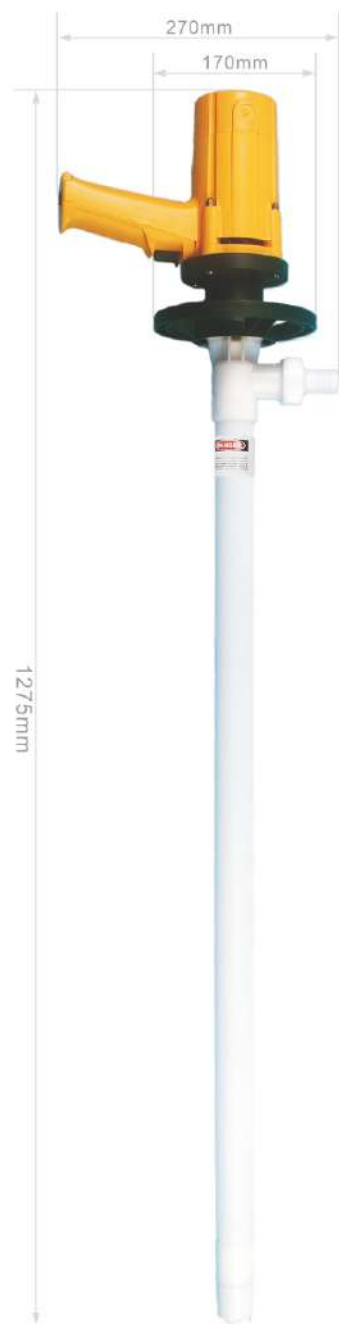
Typical pump model SB-370W+HD-PVC-1000

净重 Weight: 3.31kg

该电机还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### SB-550W固定高速电机(Fixed High-Speed Motor)



型号 Type	SB-550W
流量 Flow	最大(Max.)120L HP型最大(Max.)70L/min
扬程 Head	最高(Highest)8M HP型最高(Highest)22M
转速 Speed	8000(r/min)
功率 Power	550W
粘度 Viscosity	最大(Max.)500CPS HP型最大(Max.)800CPS
重量 Weight	2.3kg

注塑德国黄聚碳外壳马达可抗化学腐蚀

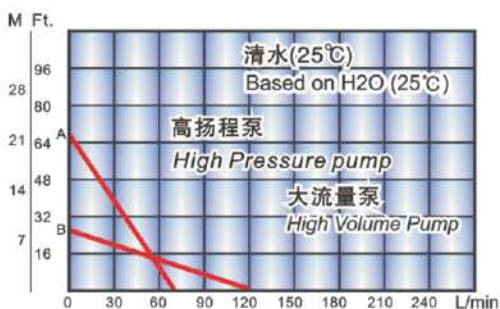
Jet molding German yellow polycarbonate casing motor, resistant to chemical corrosion

220V 高速电机-附3米电线插头

220V high-speed motor - included with a 3m wire plug

防护等级 Protection class: IP20

绝缘等级 Insulation class: E级



A线为HP高扬程封闭式叶轮;  
B线为大流量开放式叶轮;  
测试条件: 200L圆桶;  
HD-SS316L-1000泵管;  
介质为25°C清水, 出口口为1 1/4"(32mm),  
测试允许误差 ± 10%。

Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ± 10%.

典型泵型SB-550W+HD-PPHT-1000

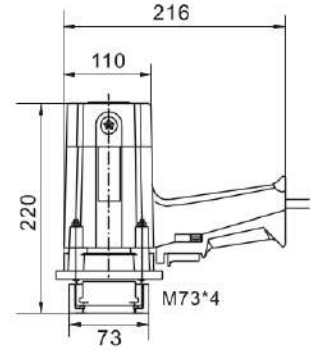
Typical pump model SB-550W+HD-PPHT-1000

净重 Weight: 3.61kg

该电机还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### SB-880W固定高速电机(Fixed High-Speed Motor)



型号 Type	SB-880W	
流量 Flow	最大(Max.)170L	HP型最大(Max.)105L/min
扬程 Head	最高(Highest)10M	HP型最高(Highest)29M
转速 Speed	10000(r/min)	
功率 Power	880W	
粘度 Viscosity	最大(Max.)500CPS	HP型最大(Max.)800CPS
重量 Weight	3.3kg	

注塑德国黄聚碳外壳马达可抗化学腐蚀

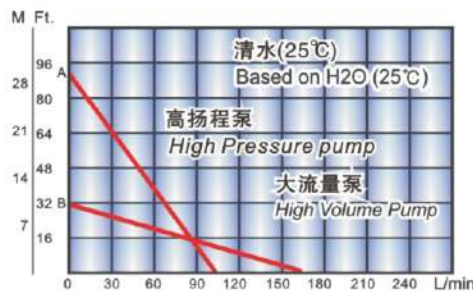
Jet molding German yellow polycarbonate casing motor, resistant to chemical corrosion

220V 高速电机-附3米电线插头

220V high-speed motor - included with a 3m wire plug

防护等级 Protection class: IP20

绝缘等级 Insulation class: E级



A线为HP高扬程封闭式叶轮;

B线为大流量开放式叶轮;

测试条件: 200L圆桶;

HD-SS316L-1000泵管;

介质为25°C清水, 出液口为1 1/4"(32mm),

测试允许误差 ± 10%。

Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ± 10%.

#### 典型泵型SB-880W+HD-SS304-1000

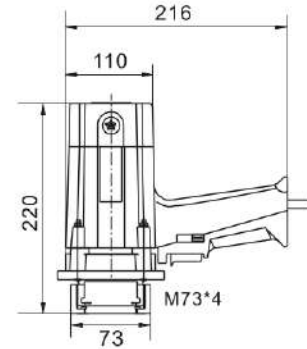
Typical pump model SB-880W+HD-SS304-1000

净重 Weight: 7.56kg

该电机还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

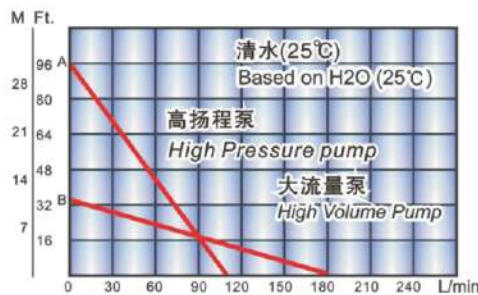
气动马达、电机系列 AIR MOTOR、MOTOR SERIES

SB-1100W固定高速电机(Fixed High-Speed Motor)



型号 Type	SB-1100W	
流量 Flow	最大(Max.)180L	HP型最大(Max.)110L/min
扬程 Head	最高(Highest)11M	HP型最高(Highest)30M
转速 Speed	10000(r/min)	
功率 Power	1100W	
粘度 Viscosity	最大(Max.)500CPS	HP型最大(Max.)800CPS
重量 Weight	3.38kg	

注塑德国黄聚碳外壳马达可抗化学腐蚀  
 Jet molding German yellow polycarbonate casing motor, resistant to chemical corrosion  
 220V 高速电机-附3米电线插头  
 220V high-speed motor - included with a 3m wire plug  
 防护等级 Protection class : IP20  
 绝缘等级 Insulation class : E级



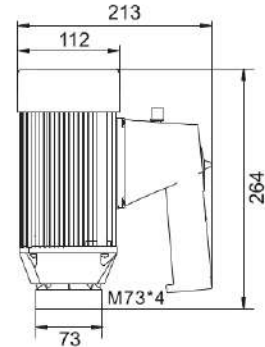
A线为HP高扬程封闭式叶轮;  
 B线为大流量开放式叶轮;  
 测试条件: 200L圆桶;  
 HD-SS316L-1000泵管;  
 介质为25°C清水, 出液口为1 1/4"(32mm),  
 测试允许误差±10%。  
 Line A refers to HP high-lift enclosed impeller, Line B refers to large-flow open impeller. Testing conditions: 200L round barrel, HD-SS316L-1000 pump pipe, medium 25°C clear water, liquid outlet 1 1/4"(32mm), and allowable error of test ±10%.

典型泵型SB-1100W+HD-AL-1000  
 Typical pump model SB-1100W+HD-AL-1000  
 净重 Weight: 5.23kg

该电机还可以配置铝合金、不锈钢304、不锈钢316L、PPHT(工程塑料)、PVDF(聚偏氟乙烯)、PTFE(聚四氟乙烯)等材质的泵浦总成。  
 The motor can also be configured with aluminum alloy, stainless steel 304, stainless steel 316L, PPHT (engineering plastics), PVDF (polyvinylidene fluoride), PTFE (polytetrafluoroethylene) Pump assembly of other materials.

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

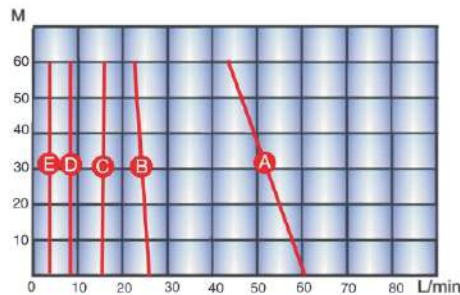
### HD-ENC2-V可调速电动马达(Variable Speed Control Motor)



型号 Type	HD-ENC2-V
流量 Flow	最大(Max.) 60L/min
扬程 Head	最高(Highest)60M
转速 Speed	0~10000(r/min)
功率 Power	825W
粘度 Viscosity	最大(Max.) 100000CPS
重量 Weight	5.9kg

低压过载保护器 Low Voltage Release(选配)  
 热保护器 Thermal Overload  
 外壳材质: 阳极氧化铝  
 220V 高速电机-附16尺(5米)SJT电线插头  
 220V high-speed motor - included with 16chi(5m)SJT wire plug  
 电机型式及防护等级 Motor type and protection grade:TEFC(IP54)防滴溅  
 噪音 Noise Level: 88dBa分贝  
 绝缘等级 Insulation class : F2

典型泵型HD-ENC2-V+SS316L-1000HV 100VT  
 Typical pump model HD-ENC2-V+SS316L-1000HV 100VT  
 净重 Weight: 16.45kg



A线: 粘度1CPS  
 B线: 粘度10000CPS  
 C线: 粘度30000CPS  
 D线: 粘度60000CPS  
 E线: 粘度100000CPS

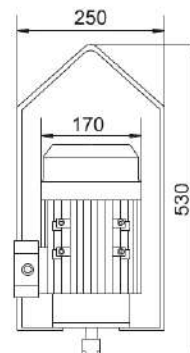
测试条件: 200L圆桶;  
 HD-SS316L-1000HV 100VT泵管;  
 介质为2000CPS水性树脂,  
 出液口为1"(25mm),  
 测试允许误差 ± 10%。

Testing conditions: 200L round barrel,  
 HD-SS316L-1000HV 100VT pump  
 pipe, medium 2000CPS waterborne  
 resin, liquid outlet 1(25mm),  
 and allowable error of test ± 10%.

该泵管还可以搭配HD-E2-V、SB-1100W, 可定制出口压力12kg高压泵型。  
 The pump tube can also be matched with HD-E2-V, SB-1100W, can be customized outlet pressure 12kg high pressure pump type

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-550W电动马达(Electric Motor)



注：不同功率电机的外形及重量各有不同

Mark: Different power motors have different shapes and weights

型号 Type	HD-550W 可选配750W、1100W
流量 Flow	最大(Max.) 60L/min
扬程 Head	最高(Highest)60M
转速 Speed	750~960(r/min)
功率 Power	550W
粘度 Viscosity	最大(Max.) 100000CPS
重量 Weight	15.5kg

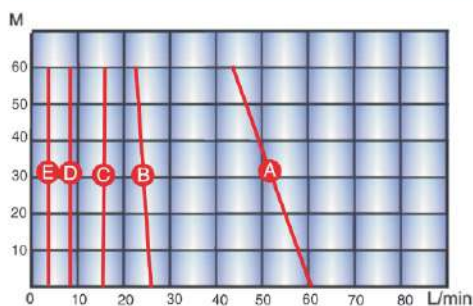
外壳材质：铸铁

Housing Material: Cast Iron

220V/380V/普通电机/防爆电机(可选择)

220V/380V/Explosion-proof motor

防护等级 Protection class:IP55



A线：粘度1CPS  
B线：粘度10000CPS  
C线：粘度30000CPS  
D线：粘度60000CPS  
E线：粘度100000CPS

测试条件：200L圆桶；  
HD-SS316L-1000HV 100VT泵管；  
介质为2000CPS水性树脂，  
出液口为1"(25mm)，  
测试允许误差±10%。

Testing conditions:200L round barrel,  
HD-SS316L-1000HV 100VT pump  
pipe, medium 2000CPS waterborne  
resin,liquid outlet 1"(25mm),  
and allowable error of test ± 10%.

典型泵型HD-550W+SS316L-1000HV 100VT

Typical pump model HD-550W+SS316L-1000HV 100VT

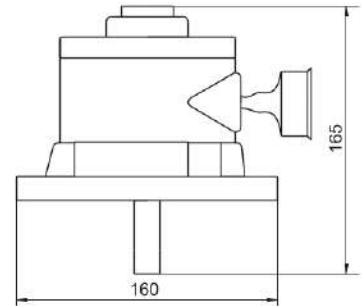
净重 Weight: 26kg

该泵管还可以搭配 HD-550W、HD-750W、HD-1100W、HD-1500W等普通电机、变频电机及防爆电机。

The pump pipe can also be used with HD-550W,HD-750W,HD-1100W,HD-1500W and other ordinary motors,variable frequency motors and explosion-proof motors.

## 气动马达、电机系列 AIR MOTOR、MOTOR SERIES

### HD-A4防爆气动马达(Explosion Proof Pneumatic Motor)



注：不同功率电机的外形及重量各有不同

Mark: Different power motors have different shapes and weights

型号 Type	HD-A4
流量 Flow	最大(Max.) 60L/min
扬程 Head	最高(Highest)60M
转速 Speed	300~900(r/min)
功率 Power	1500W
粘度 Viscosity	最大(Max.) 100000CPS
重量 Weight	5.0kg

最大入口压力 Max. Inlet air pressure:102psi(7bar)

空气耗气量 Air consumption: 80CFM@ 100psi(37liter/sec@ 7bar)

空气接头 Air joint:10mm

附件 Accessory:消音器、气量调节阀 muffler and air flow control valve

必须配备: 空气过滤器、压力调节器、自动注油壶(气动3联件)

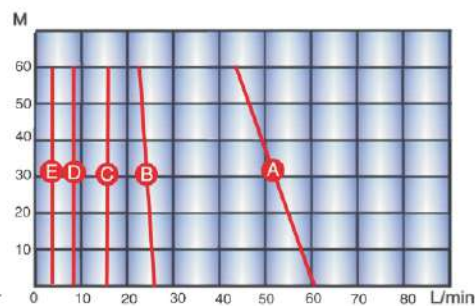
Required parts: air filter,pressure regulator and automatic oiler(pneumatic triplex)

主体 Body: 铸铁 Cast iron

A线: 粘度1CPS  
B线: 粘度10000CPS  
C线: 粘度30000CPS  
D线: 粘度60000CPS  
E线: 粘度100000CPS

测试条件: 200L圆桶;  
HD-SS316L-1000HV 100VT泵管;  
介质为2000CPS水性树脂,  
出液口为1"(25mm),  
测试允许误差±10%。

Testing conditions:200L round barrel,  
HD-SS316L-1000HV 100VT pump  
pipe, medium 2000CPS waterborne  
resin, liquid outlet 1(25mm),  
and allowable error of test±10%.



典型泵型HD-A4+SS316L-1000HV 100VT  
Typical pump model HD-A4+SS316L-1000HV 100VT

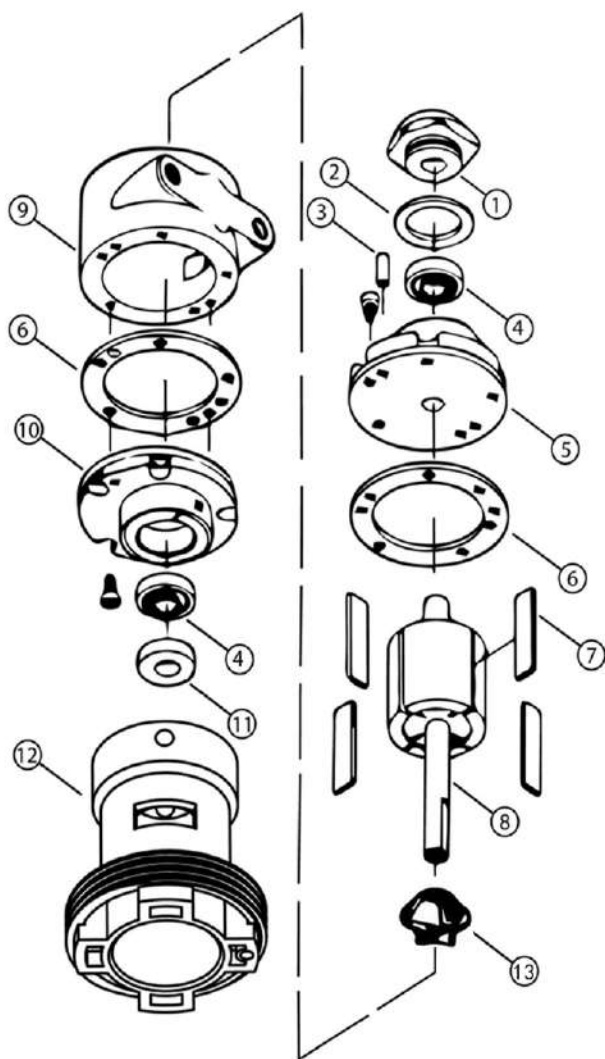
净重 Weight: 16.4kg

该泵管还可以搭配 HD-A4、HD-A6、HD-A8等气动马达。

The pump pipe can also be used with HD-A4,HD-A6,HD-A8 and other pneumatic motors.

配件列表 PARTS LISTS

HD-A1配件清单(HD-A1 Spare Parts Lists)



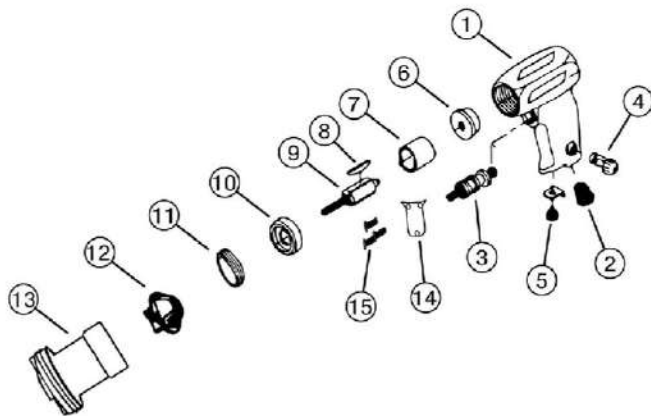
序号 No.	名称 Name	编号 P/N	数量 Qty
	易损件*(包括第2、4、6、7、11及13项) Repair Kit*(Includes items 2,4,6,7,11&13)	SK285	
1	锁紧端盖 Dead End Cap	SAC228A	1
2	垫圈 Gasket	SAC229	1
3	定位销 Dowel Pin	SD324A	1
4	轴承 Bearing	SAG549	2
5	锁紧端板 Dead End Plate	SAC617	1
6	垫圈 Gasket	SAC527	2
7	叶片 Vane	SAE893	4
8	转子总成 Rotor Assembly	SAE896	1
9	缸体 Body	SAE899	1
10	传动端板 Drive End Plate	SAC616	1
11	轴封 Shaft Seal	SAC190A	1
12	泵连接架 Pump Tube Adapter	9007	1
13	马达联轴器 Motor coupling	883.833	1
	消声器(未显示) Muffler(not shown)	SAF350	1
	进气球阀(未显示) Inlet Ball Valve(not shown)	SAF351	1

注意：唯一可供购买的备件是SK285和9007

Note: The only spare parts available for purchase are SK285 and 9007

## 配件列表 PARTS LISTS

### HD-A2系列配件列表(HD-A2 Spare Parts Lists)



说明:

HD-A2气动马达配有一个开关, 可将扳机永久锁定在“开启”位置。可通过在“OFF”位置和“MAX”位置之间转动马达手柄一侧的调速器来调整马达的速度。

Description:

The HD-A2 air motor is equipped with a plate which permanently locks the trigger in the "ON" position. The speed of the motor can be adjusted by tuning the speed regulator on the side of the motor handle between the "OFF" position and the "MAX" position.

操作:

在将气源连接到HD-A2的进气口之前, 确保调速器刻度盘处于“OFF”位置(见图1)。在连接了气源, 并且泵管的排放软管处于其所需位置, 调速器的刻度盘可以朝“MAX”方向转动。完成输送过程后, 调速器刻度盘应返回到“OFF”的位置!

⚠ 不按规范操作可能会导致严重后果。

Operation:

Prior to connecting an air source to the air inlet of the HD-A2, ensure that the speed regulator dial is in the "OFF" position (See Figure 1). Once the air source has been connected and the discharge hose of the pump tube is in its desired location, the speed regulator dial can be turned toward "MAX". Upon completion of the pumping process, the speed regulator dial should be returned to the "OFF" position.

⚠ Failure to do so can result in severe injury.

序号 No.	名称 Name	部件编码 Part Number
1	外壳组件 Housing Assembly	317-A-A40
2	进气口 Inlet Bushing	317A-3B
3	扳机组件 Trigger Assembly	317A-A93
4	调节器组件 Regulator Assembly	317-A249
5	消声器套件 Muffler Kit	317A-AMK1
6	后端板总成 Rear End Plate Assembly	317A-A12
7	气缸 Cylinder	317-A3
8	叶片 Vanes (4 required)	317A-42-4
9	转子 Rotor	317A-53
10	前端板总成 Front End Plate Assembly	317A-A11
11	马达锁紧螺母 Motor Lock Nut	317A-27
12	马达联轴器 Motor Coupling	883.833
13	泵连接架 Pump Tube Adapter	3170
14	扳机板 Trigger Plate	3176
15	扳机板螺丝 Trigger Plate Screws	3177

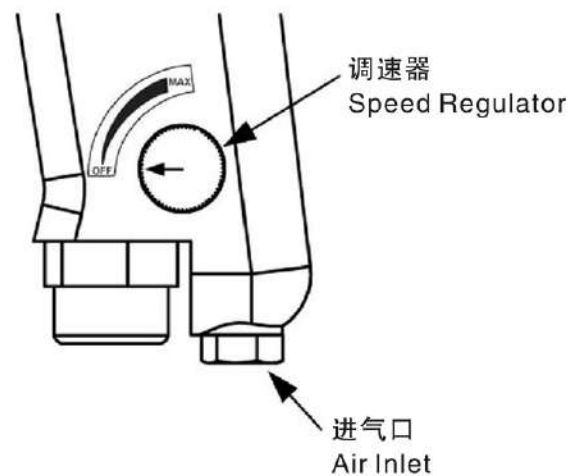
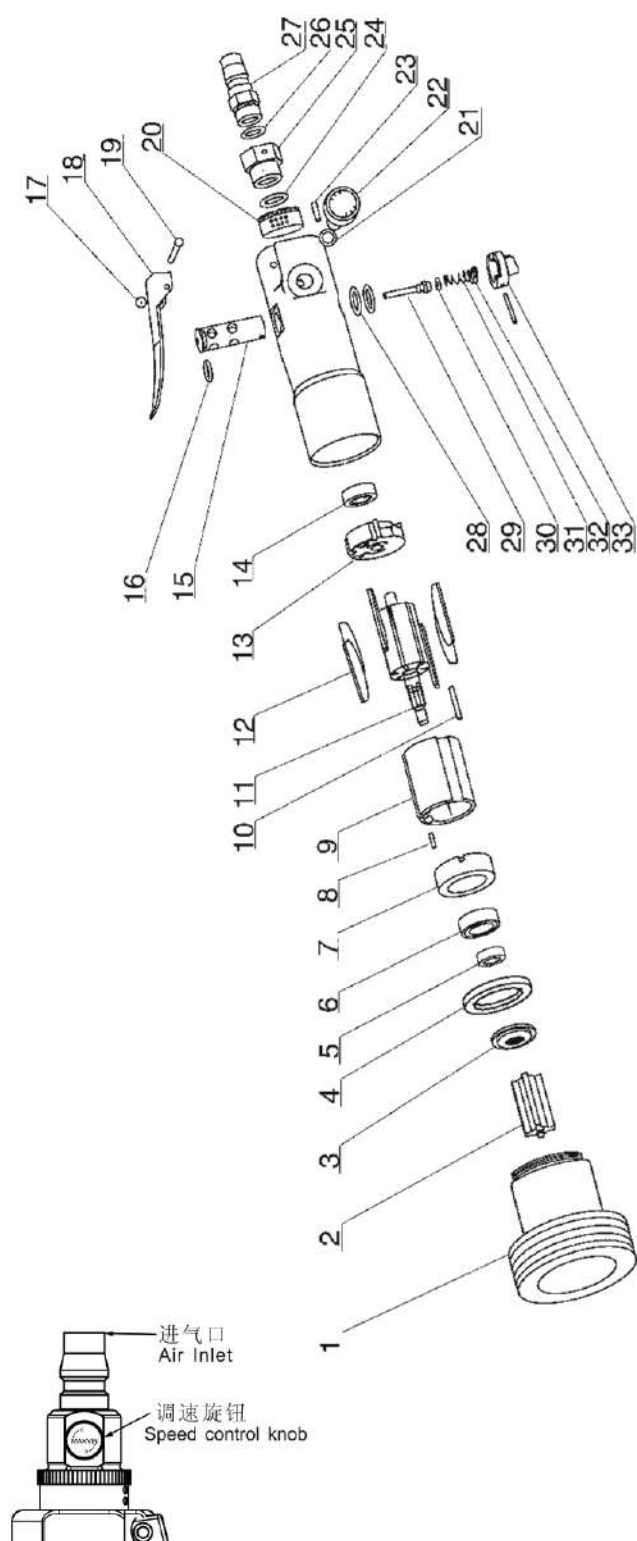


图1  
Figure 1

## 配件列表 PARTS LISTS

### HD-A3系列配件列表(HD-A3 Spare Parts Lists)



序号 No.	名称 Name	部件编码 Part Number
1	泵连接架 Pump Tube Adapter	823.901
2	马达联轴器 Motor coupling	823.902
3	垫片 Shim	823.903
4	挡板 Baffle	823.904
5	调节套 Regulating sleeve	823.905
6	轴承 Front head bearing	823.906
7	气缸前盖 Front cylinder head	823.907
8	圆柱销 Cylindrical pin	823.908
9	气缸 Cylinder	823.909
10	圆柱销 Cylindrical pin	823.910
11	转子 Rotor	823.911
12	叶片 Blade	823.912
13	气缸后盖 Rear cylinder head	823.913
14	轴承 Rear head bearing	823.914
15	阀座 Valve seat	823.915
16	O型圈 O-ring	823.916
17	O型圈 O-ring	823.917
18	板柄 Trigger piece	823.918
19	销轴 Pin	823.919
20	消声器 Muffler	823.920
21	壳体 Housing	823.921
22	节流阀 Throttle valve	823.922
23	锁紧螺丝 Lock screw	823.923
24	O型圈 O-ring	823.924
25	接头 Joint	823.925
26	O型圈 O-ring	823.926
27	管接头 Pipe joint	823.927
28	O型圈 O-ring	823.928
29	阀杆 Valve stem	823.929
30	O型圈 O-ring	823.930
31	阀杆压簧 Compression spring	823.931
32	O型圈 O-ring	823.932
33	换向开关 Change-over switch	823.933

# HD系列抽液泵 | HD Series Drum Pump

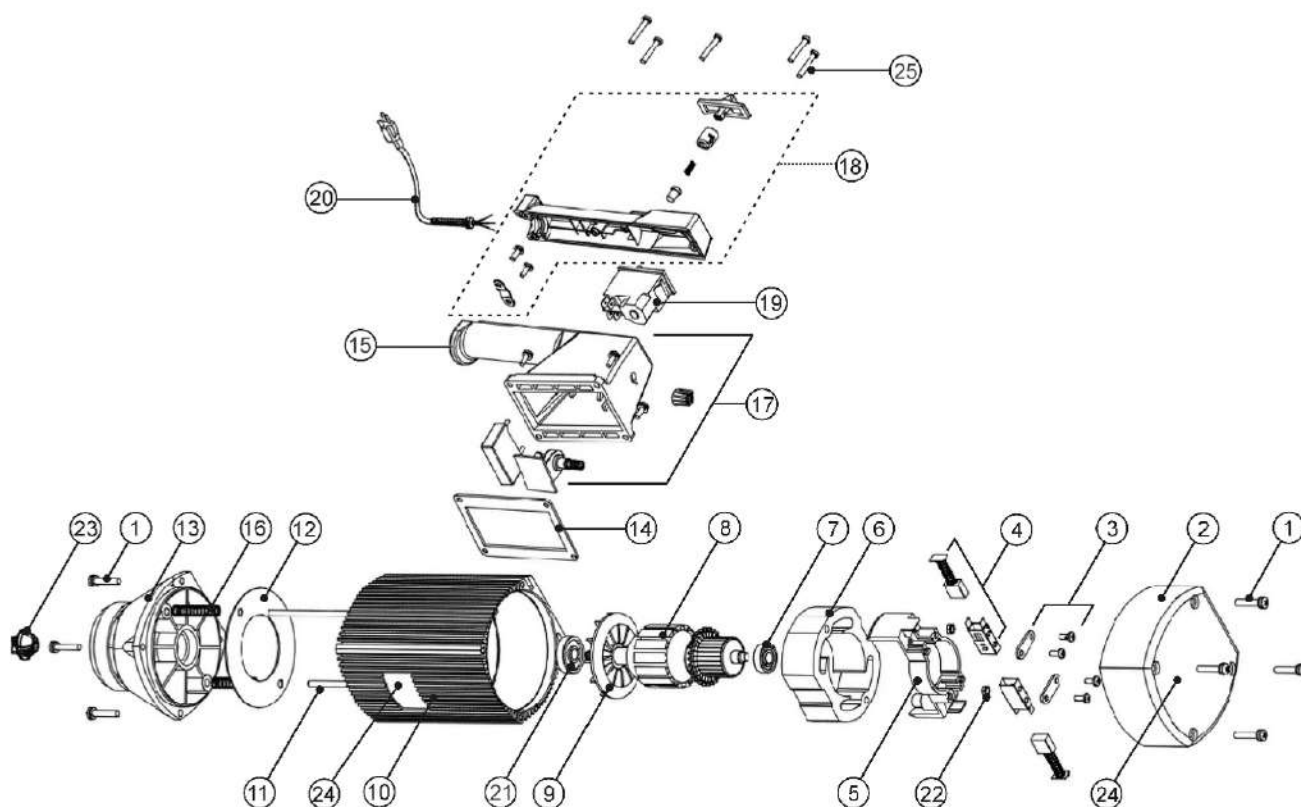
## 配件列表 PARTS LISTS

### HD-E2-V可调速电机系列 HD-E2-V Variable Speed Control Motor Series

型号 Model	电源 Power
HD-E2-V	220V/1 φ/50-60Hz/800W

电机重量(Weight):3.55kg

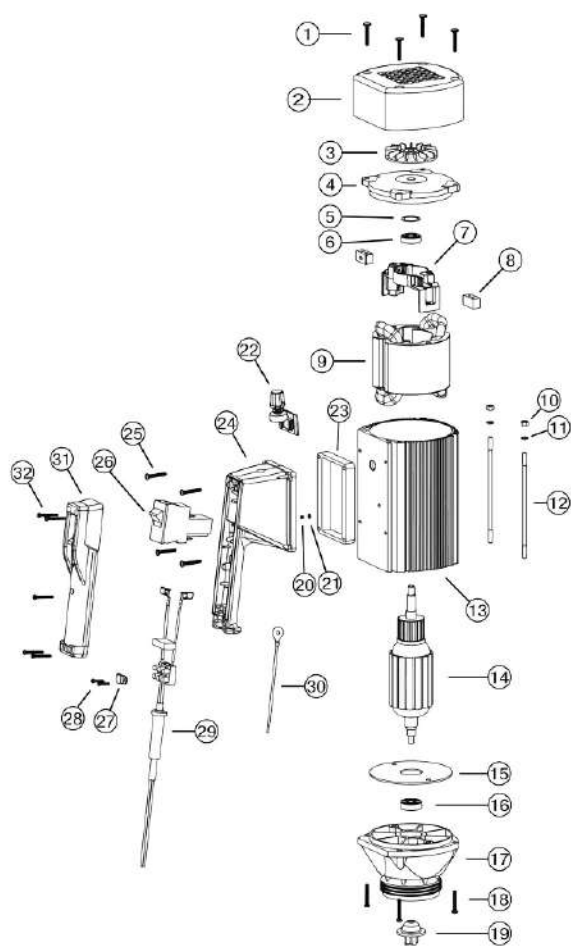
不适用于输送易燃易爆介质及场合。Do Not Pump Flammable or Explosive Fluids.



序号 No.	部件名称 Name	配件编号 Part No.	序号 No.	部件名称 Name	配件编号 Part No.		
01	上盖/下端盖螺丝	Screw for plastic housing	881.830P	14	把手垫片	Gasket	881.867
02	电机上盖	Motor cover	880.800	15	把手外壳	Handle housing	880.801
03	十字自攻螺丝组件	Cross screw with gasket	810.840	16	弹簧	Spring	885.807
04	碳刷组件	Carbon brush	887.803	17	调速开关	Speed-control switch	880.805
05	碳刷架座	Brush holder	885.808	18	把手上盖(推杆)	Switch cover	880.802
06	外线圈组	Stator	887.802	19	电源开关	Power switch	887.804
07	轴承	Ball bearing	881.826	20	电源线	Power cord w/strain relief&plug (含插头)	887.805
08	内线圈组	Armature	887.801	21	轴承	Bearing	883.831
09	散热风叶	Fan	885.812	22	六角螺母	Hexagon nut	884.848
10	电机外壳	Motor housing, plastic	885.810P	23	电机端联轴器	Motor coupling	883.833
11	连接杆	Rod connector	885.806	24	品牌标识	Nameplate	
12	下端盖垫片	Guide disc	885.804	25	把手螺丝	Screw	881.831
13	电机下端盖	Lower housing	881.800	N/A	维修套件(包括项目4和23)	N/A Repair Kit*(Includes Items 4&23)	

## 配件列表 PARTS LISTS

### HD-ENC系列配件列表 HD-ENC Series Spare Parts List



序号 No.	名称 Name	部件编码 No.	数量 Qty.
1	上盖螺丝	Screw, Motor Cover	3130 4
2	电机上盖	Motor Cover	3000 1
3	散热风叶	Fan	3512 1
4	上端盖	Bearing Cover	3511 1
5	波形垫片	Wave Washer	8125 1
6	轴承	Bearing, Upper	8331 1
7	碳刷架座	Brush Holder	8508 1
8	碳刷组件	Carbon Brushes	8509* 2
9	外线圈组	Stator	1
	110V	110V	3503
	220V	220V	3702
10	六角螺母	Hexagon Nut	8448 2
11	螺母垫片	Lock Washer	8071 2
12	连接杆	Rod Connector	3703 2
13	电机外壳	Motor Housing	3510 1
14	内线圈组	Armature	1
	110V	110V	3502
	220V	220V	3701
15	下端盖垫片	Guide Disc	3504 1
16	轴承	Bearing, Lower	8126 1
17	下端盖	Lower Housing	8100 1
18	下端盖螺丝	Screw, Lower Housing	8130 4
19	电机端联轴器	Motor Coupling	883.833 1
20	地线螺丝	Ground Screw	8162 1
21	螺丝垫片	Star Washer	8511 1
22	调速开关	Speed-control switch	1
	110V	110V	9803
	220V	220V	9804
23	把手垫片	Gasket	1
	110V	110V	8167
	220V	220V	8167LVR
24	把手外壳	Switch Housing	1
	固定速度	Fixed Speed	8001
	可调速	Variable Speed	8010
25	把手螺丝	Screw, Switch Housing	4
	110V	110V	8131
	220V	220V	8131LVR
26	电源开关	Power switch	1
	110V	110V	8611
	220V(带低电压释放)	220V (w/Low Voltage release)	8704LVR
	220V(不带低电压释放)	220V (w/o Low Voltage release)	8704
27	电源线夹	Cable Clamp	8001-1 1
28	电源线螺丝	Screw, Cable Clamp	8001-2 2
29	电源线	Power cord w/strain relief&plug	1
	110V	110V	8360-KIT
	220V	220V	8705-KIT
30	接地线	Earthing Lead	8183 1
31	把手上盖	Switch Cover	8002 1
32	把手上盖螺丝	Screw, Switch Cover	8221 5
N/A	维修套件(包括项目8和19)	N/A Repair Kit*(Includes Items 8&19)	1
	110V-220V	110V-220V	9055

# HD系列抽液泵 | HD Series Drum Pump

## HD-PPHT抽液泵系列 HD-PPHT DRUM PUMP SERIES

型号 Model	长度 Length	材质 Material	中心轴 Shaft	叶轮 Impeller
HD-PPHT-700	700mm(27")	Polypropylene	SS316L/Hastelloy	PVDF 大流量(不标) PVDF High Volume
HD-PPHT-1000	1000mm(39")			
HD-PPHT-1200	1200mm(47")			
HD-PPHT-1500	1500mm(60")			
HD-PPHT-1800	1800mm(72")			
HD-PPHT-700-HP	700mm(27")	Polypropylene	SS316L/Hastelloy	PVDF 高扬程 PVDF High Pressure
HD-PPHT-1000-HP	1000mm(39")			
HD-PPHT-1200-HP	1200mm(47")			
HD-PPHT-1500-HP	1500mm(60")			
HD-PPHT-1800-HP	1800mm(72")			

最大耐温(Max Temp):75°C/167°C

粘度(Viscosity):1000Cps/mPas(HD-E)

700Cps/mPas(HD-A1/A2/A3)

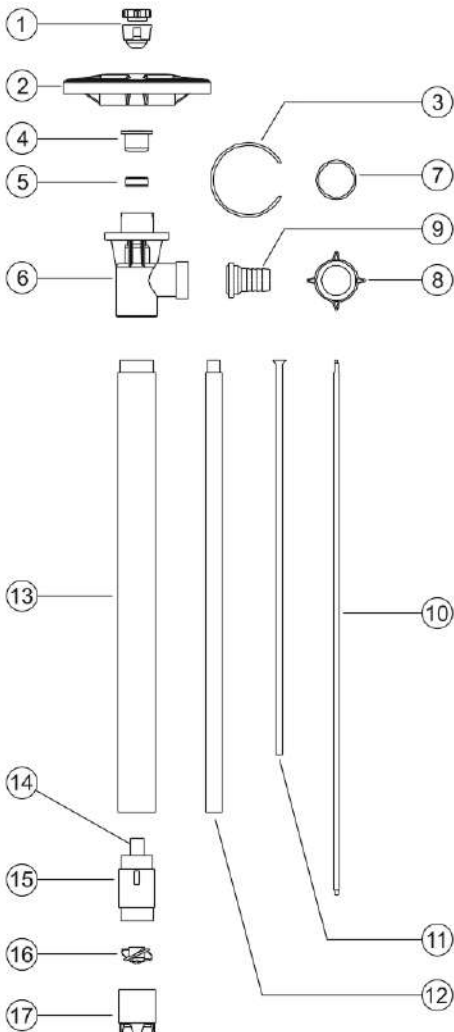
500Cps/mPas(HD-EX(SB-3))

最大比重(Max Specific Gravity):1.8

出口选择(Discharge Options):1"(25mm)barb

3/4"(20mm)barb

重量: (weight):1-2kg



序号 No.	部件名称 Name	配件编号 No.
01	泵联轴器 Pump coupling	810.804
02	扶手轮 Hand wheel	818.842
03	卡环 Snap ring	815.808
04	轴承组 Bearing unit assembled-2	810.838
05	V型油封 V-Seal-VT	840.800
06	三通泵头座 Connection flange	860.828
07	出液口垫片 TEL seal	821.895
08	出液口锁母 Wing nut	861.806
09	出液口管芯 Hose barb, 1"	860.882
10	中心轴 Drive shaft	700mm(27") 815.843+L (Hastelloy/SS316L) 1000mm(39") 815.844+L 1200mm(47") 815.845+L 1500mm(60") 815.846+L 1800mm(72") 815.847
11	轴套管 Guide sleeve	700mm (27") 815.814 (FEP) 1000mm(39") 815.815 1200mm(47") 815.816 1500mm(60") 815.817 1800mm(72") 815.818
12	内管 Inner tube	700mm (27") 866.800 (PP) 1000mm(39") 866.801 1200mm(47") 866.802 1500mm(60") 866.815 1800mm(72") 866.816
13	外管 Outer tube	700mm (27") 866.803 (PP) 1000mm(39") 866.804 1200mm(47") 866.805 1500mm(60") 866.817 1800mm(72") 866.818
14	轴套 Pure carbon brush	816.806
15	管轴套座 Carbon brush housing	865.824
16	叶轮 (开式) PVDF impeller	846.808
	高扬程叶轮 High pressure impeller	846.808HP
17	底座 Pump foot	816.809
	高扬程泵底座 High pressure pump foot	816.809HP

## HD-PVDF抽液泵系列 HD-PVDF DRUM PUMP SERIES

型号 Model	长度 Length	材质 Material	中心轴 Shaft	叶轮 Impeller
HD-PVDF-700	700mm(27")	PVDF	Hastelloy	PVDF大流量(不标) PVDF High Volume
HD-PVDF-1000	1000mm(39")			
HD-PVDF-1200	1200mm(47")			
HD-PVDF-1500	1500mm(60")			
HD-PVDF-1800	1800mm(72")			
HD-PVDF-700-HP	700mm(27")	PVDF	Hastelloy	PVDF高扬程 PVDF High Pressure
HD-PVDF-1000-HP	1000mm(39")			
HD-PVDF-1200-HP	1200mm(47")			
HD-PVDF-1500-HP	1500mm(60")			
HD-PVDF-1800-HP	1800mm(72")			

最大耐温(Max Temp):100°C/212°F

粘度(Viscosity):1000Cps/mPas(HD-E)

700Cps/mPas(HD-A1/A2/A3)

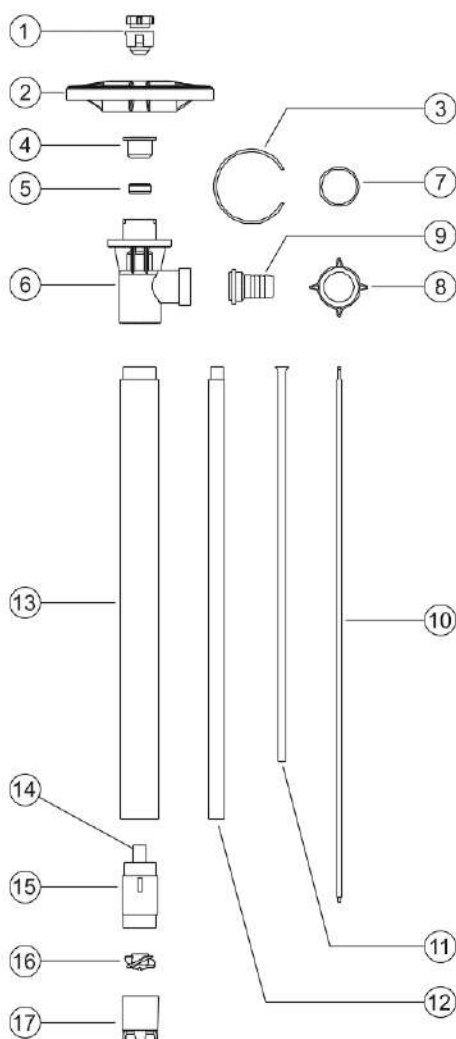
500Cps/mPas(HD-EX(SB-3))

最大比重(Max Specific Gravity):1.8

出口选择(Discharge Options):1"(25mm)barb

3/4"(20mm)barb

重量: (weight):1.2-2.4kg



序号 No.	部件名称 Name		配件编号 No.
01	泵联轴器	Pump coupling	810.804
02	扶手轮	Hand wheel	818.842
03	卡环	Snap ring	815.808
04	轴承组	Bearing unit assembled-2	810.838
05	V型油封	V-Seal-VT \ TFEP	840.800
06	三通泵头座	Connection flange	840.728
07	出液口垫片	TEL seal	821.895
08	出液口锁母	Wing nut	841.706
09	出液口管芯	Hose barb,1"	840.882
10	中心轴	Drive shaft	815.843
		700mm(27") (Hastelloy)	815.844
		1000mm(39")	815.845
		1200mm(47")	815.846
		1500mm(60")	815.847
		1800mm(72")	815.814
11	轴套管	Guide sleeve	815.815
		(FEP)	815.816
		700mm(27")	815.817
		1000mm(39")	815.818
		1200mm(47")	846.800
		1500mm(60")	846.801
		1800mm(72")	846.802
12	内管	Inner tube	846.811
		(PVDF)	846.812
		700mm(27")	846.803
		1000mm(39")	846.804
		1200mm(47")	846.805
		1500mm(60")	846.813
		1800mm(72")	846.814
13	外管	Outer tube	816.806
		(PVDF)	846.807
		700mm(27")	846.808
		1000mm(39")	846.808HP
		1200mm(47")	846.809
		1500mm(60")	846.809HP
		1800mm(72")	
14	轴套	Pure carbon brush	
15	管轴套座	Carbon brush housing	
16	叶轮(开式)	PVDF impeller	
	高扬程叶轮	High pressure impeller	
17	底座	Pump foot	
	高扬程泵底座	High pressure pump foot	

# HD系列抽液泵 | HD Series Drum Pump

## HD-SS抽液泵系列 HD-SS DRUM PUMP SERIES

型号 Model	长度 Length	材质 Material	中心轴 Shaft	叶轮 Impeller
HD-SS304-700(或SS 316L)	700mm(27")	SUS304/ SUS 316L	Stainless 316L	PVDF大流量(不标) PVDFHigh Volume
HD-SS304-1000(或SS 316L)	1000mm(39")			
HD-SS304-1200(或SS 316L)	1200mm(47")			
HD-SS304-1500(或SS 316L)	1500mm(60")			
HD-SS304-1800(或SS 316L)	1800mm(72")			
HD-SS304-700-HP(或SS 316L)	700mm(27")	SUS304/ SUS 316L	Stainless 316L	PVDF 高扬程 PVDF High Pressure
HD-SS304-1000-HP(或SS 316L)	1000mm(39")			
HD-SS304-1200-HP(或SS 316L)	1200mm(47")			
HD-SS304-1500-HP(或SS 316L)	1500mm(60")			
HD-SS304-1800-HP(或SS 316L)	1800mm(72")			

最大耐温(Max Temp):100℃/212°F

粘度(Viscosity):1000Cps/mPas(HD-E)

700Cps/mPas(HD-A1/A2/A3)

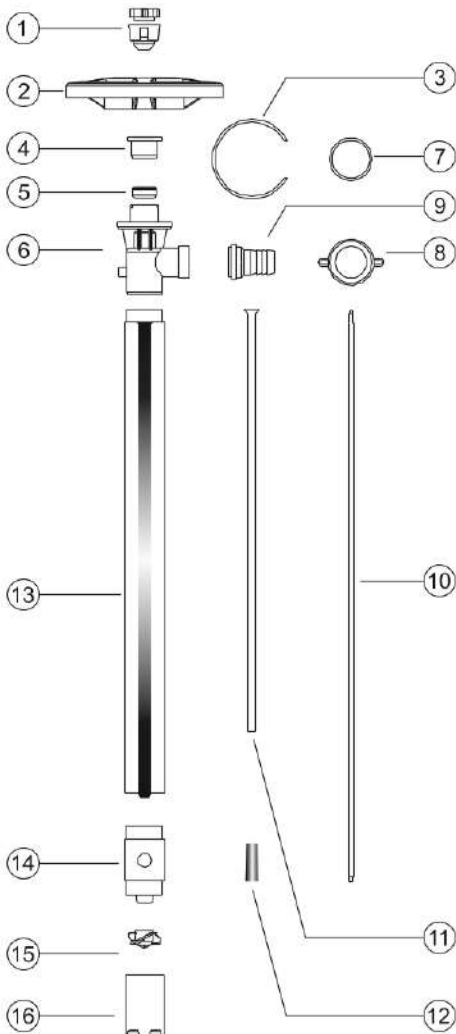
500Cps/mPas(HD-EX(SB-3))

最大比重(Max Specific Gravity):1.8

出口选择(Discharge Options):1"(25mm)barb

3/4"(20mm)barb

重量: (weight):3.8-5.8kg



序号 No.	部件名称 Name	配件编号 No.
01	泵联轴器 Pump coupling	810.804
02	扶手轮 Hand wheel	818.842
03	卡环 Snap ring	815.808
04	轴承组 Bearing unit assembled-2	810.838
05	V型油封 V-Seal-VT	840.800
06	三通泵头座 Connection flange (304, 316L)	820.800+L
07	出液口垫片 TEL seal	821.895
08	出液口锁母 Wing nut (304, 316L)	821.868+L
09	出液口管芯 Hose barb,1" (304, 316L)	821.896+L
10	中心轴 Drive shaft	700mm (27") 820.827 1000mm(39") 820.828 1200mm(47") 820.829 1500mm(60") 827.809 1800mm(72") 827.810
11	轴套管 Guide sleeve	700mm (27") 820.831 (FEP) 1000mm(39") 827.815 1200mm(47") 820.832 1500mm(60") 827.811 1800mm(72") 827.812
12	轴套 Pure carbon brush	纯碳聚合物 816.806
13	内外管 Inner/outer tube assembly	700mm (27") 827.800+L (304, 316L) 1000mm(39") 827.801+L 1200mm(47") 827.802+L 1500mm(60") 827.813+L 1800mm(72") 827.814+L
14	管轴套座 Carbon brush housing (304, 316L)	827.804+L
15	叶轮 (开式) PVDF impeller	827.806
	高扬程叶轮 High pressure impeller	827.806HP
16	底座 Pump foot	827.808+L
	高扬程泵底座 High pressure pump foot	827.808HP+L

注: 根据被输送介质的特性: 可增配定制SS316L及黄铜材质的叶轮。  
Note: According to the characteristics of the conveying medium, customized SS316L and brass impeller can be added.

## HD-PTFE抽液泵系列 HD-PTFE DRUM PUMP SERIES

型号 Model	长度 Length	材质 Material	中心轴 Shaft	叶轮 Impeller
HD-PTFE-700	700mm(27")	PTFE	Hastelloy	PTFE大流量(不标) PTFE High Volume
HD-PTFE-1000	1000mm(39")			
HD-PTFE-1200	1200mm(47")			
HD-PTFE-1500	1500mm(60")			
HD-PTFE-1800	1800mm(72")			
HD-PTFE-700-HP	700mm(27")	PTFE	Hastelloy	PTFE高扬程 PTFE High Pressure
HD-PTFE-1000-HP	1000mm(39")			
HD-PTFE-1200-HP	1200mm(47")			
HD-PTFE-1500-HP	1500mm(60")			
HD-PTFE-1800-HP	1800mm(72")			

最大耐温(Max Temp):110°C/230°F

粘度(Viscosity):1000Cps/mPas(HD-E)

700Cps/mPas(HD-A1/A2/A3)

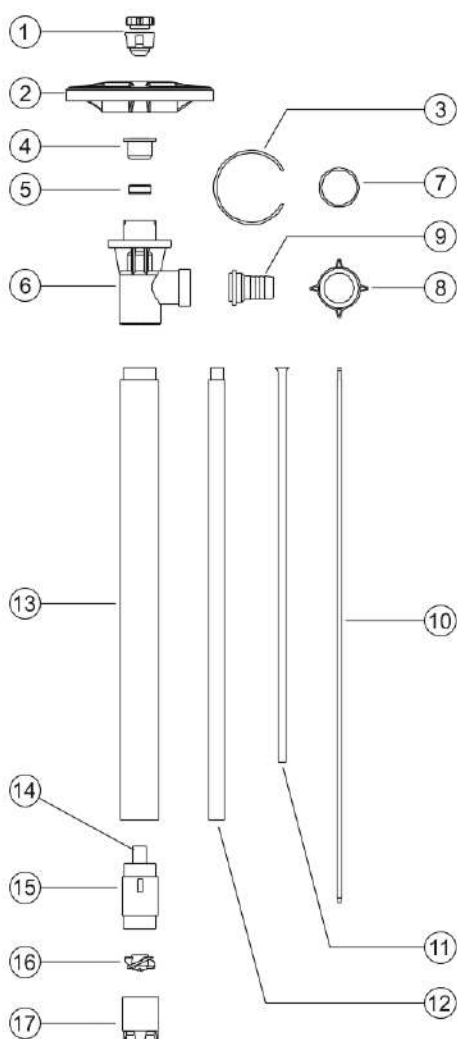
500Cps/mPas(HD-EX(SB-3))

最大比重(Max Specific Gravity):1.8

出口选择(Discharge Options):1"(25mm)barb

3/4"(20mm)barb

重量: (weight):1.5-3kg



序号 No.	部件名称 Name	配件编号 No.
01	泵联轴器 Pump coupling	810.804
02	扶手轮 Hand wheel	818.842
03	卡环 Snap ring	815.808
04	轴承组 Bearing unit assembled-2	810.838
05	V型油封 V-Seal-VT	840.800
06	三通泵头座 Connection flange	940.728
07	出液口垫片 TEL seal	821.895
08	出液口锁母 Wing nut	941.706
09	出液口管芯 Hose barb,1"	940.882
10	中心轴 Drive shaft	700mm(27") 815.843 (Hastelloy) 1000mm(39") 815.844 1200mm(47") 815.845 1500mm(60") 815.846 1800mm(72") 815.847
11	轴套管 Guide sleeve	700mm (27") 815.814 (FEP) 1000mm(39") 815.815 1200mm(47") 815.816 1500mm(60") 815.817 1800mm(72") 815.818
12	内管 Inner tube	700mm (27") 946.800 (PTFE) 1000mm(39") 946.801 1200mm(47") 946.802 1500mm(60") 946.811 1800mm(72") 946.812
13	外管 Outer tube	700mm (27") 946.803 (PTFE) 1000mm(39") 946.804 1200mm(47") 946.805 1500mm(60") 946.813 1800mm(72") 946.814
14	轴套 Pure carbon brush	816.806
15	管轴套座 Carbon brush housing	946.807
16	叶轮(开式) PTFE impeller	946.808
17	高扬程叶轮 High pressure impeller	946.808HP
	底座 Pump foot	916.809
	高扬程泵底座 High pressure pump foot	916.809HP

## 操作说明书和零部件手册(HD-HV) OPERATING INSTRUCTION AND PARTS MANUAL

卫生级螺杆式插桶泵型号: HD-HV250&HD-HV1000

### 备件清单

#### HD-HV250 见图11

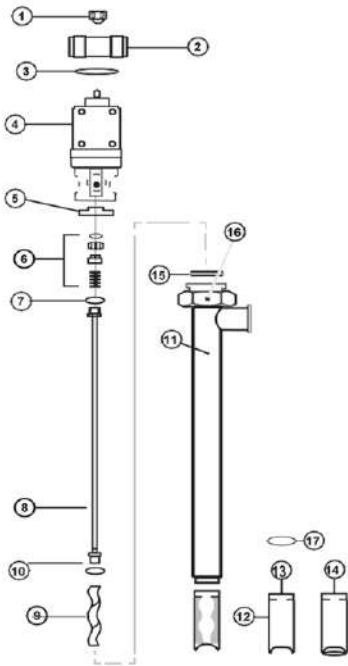


图11 HD-HV250

#### HD-HV1000 见图12

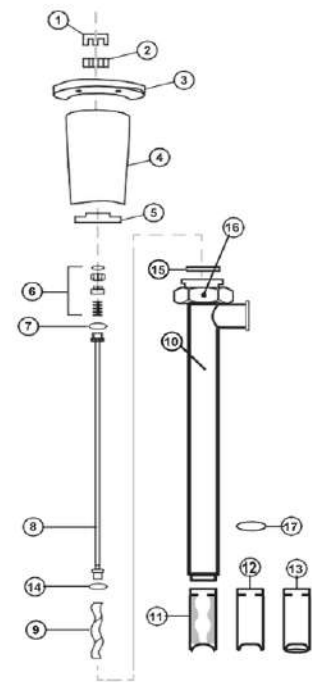


图12 HD-HV1000

序号	描述	配件编码
1	泵联轴器	1004
2	连接螺母 SS316L	8842
3	止动环 SS316L	8208
4	齿轮减速装置: SS316L	779
5	机械密封衬套 SS316L	702
6	机械密封 SIC	703
7	垫片聚四氟乙烯 PTFE	735
8	驱动主轴 SS316L	
	HD-SS316L-700	704
	HD-SS316L-1000	705
	HD-SS316L-700\1000\1200	706
	HD-SS316L-1200	707
9	螺杆轴转子 SS316L	
	HD-SS316L-700	708
	HD-SS316L-1000	709
	HD-SS316L-1200	710
10	垫片聚四氟乙烯 PTFE	731
11	外管总成 SS316L	
	HD-SS316L-700	800
	HD-SS316L-1000	801
	HD-SS316L-700\1000\1200	802
	HD-SS316L-1200	803
12	定子外壳 SS316L	
	丁腈或氟橡胶*(SS316L管)	
	HD-SS316L-700	816
	HD-SS316L-1000	817
	HD-SS316L-1200	818
	聚四氟乙烯(仅限定子插件)	
	HD-SS316L-700	822
	HD-SS316L-1000	823
	HD-SS316L-1200	824
13	定子管 SS316L	
	HD-SS316L-700	874
	HD-SS316L-1000	875
	HD-SS316L-1200	876
14	Stator for Bagliners	
	丁腈或氟橡胶*(SS316L管)	
	HD-SS316L-700	816BL
	HD-SS316L-1000	817BL
	HD-SS316L-1200	818BL
	定子管 SS316L	
	HD-SS316L-700	874BL
	HD-SS316L-1000	875BL
	HD-SS316L-1200	876BL
15	垫片 丁腈或氟橡胶	737
	垫片聚四氟乙烯	738
16	带锁定螺钉六角螺母	757
17	内卡圆环SS316L(仅用于特氟龙定子)	0016

序号	描述	配件编码
1	电机联轴器(不包括泵管)	
	型号:	
	HD-550W,HD-750W,HD-1100W&HD-A8	
	24mm	740
	型号:HD-A4	
	14mm	744
	型号:HD-A6	
	19mm	747
	型号:	
	HD-550W,HD-750W,HD-1100W	
	28mm	746
2	插入式联轴器	745
3	电机安装法兰铝制	760
4	轴承外壳铝制	759
5	机械密封衬套 SS316L	702
6	机械密封 SIC	703
7	垫片聚四氟乙烯	735
8	驱动轴 SS316L	
	HD-SS316L-700	704
	HD-SS316L-1000	705
	HD-SS316L-700\1000\1200	706
	HD-SS316L-1200	707
9	转子SS316L	
	HD-SS316L-700	708
	HD-SS316L-1000	709
	HD-SS316L-1200	710
10	外管组件 SS316L	
	HD-SS316L-700	800
	HD-SS316L-1000	801
	HD-SS316L-700\1000\1200	802
	HD-SS316L-1200	803
11	定子	
	丁腈或氟橡胶*(SS316L管)	
	HD-SS316L-700	816
	HD-SS316L-1000	817
	HD-SS316L-1200	818
	聚四氟乙烯(仅限定子插件)	
	HD-SS316L-700	822
	HD-SS316L-1000	823
	HD-SS316L-1200	824
12	定子管 SS316L	
	HD-SS316L-700	874
	HD-SS316L-1000	875
	HD-SS316L-1200	876
13	Stator for Bagliners	
	丁腈或氟橡胶*(SS316L管)	
	HD-SS316L-700	816BL
	HD-SS316L-1000	817BL
	HD-SS316L-1200	818BL
	定子管 SS316L	
	HD-SS316L-700	874BL
	HD-SS316L-1000	875BL
	HD-SS316L-1200	876BL
14	垫圈聚四氟乙烯	731
15	垫片丁腈或氟橡胶	737
	垫片聚四氟乙烯	738
16	定位螺丝 SS316L	757
17	内卡圆环SS316L(仅用于特氟龙定子)	0016

**操作说明书和零部件手册(HD-HV) OPERATING INSTRUCTION AND PARTS MANUAL**

**Sanitary Pump Models: HD-HV250&HD-HV1000**

**Spare Parts Lists**

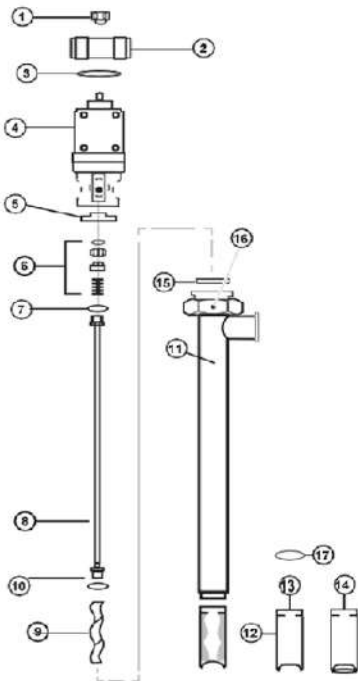


Figure 11 HD-HV250

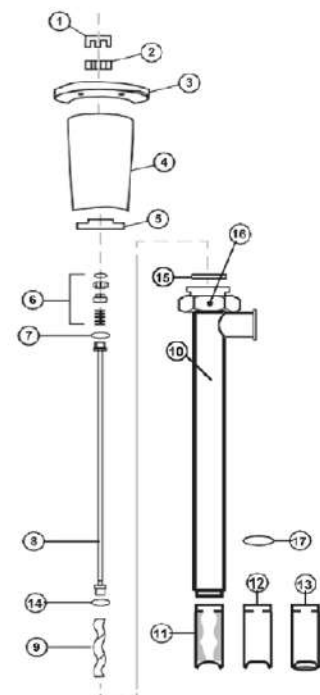


Figure 12 HD-HV1000

**HD-HV250 See Figure 11**

No.	Description	P/Nfor SP-800SR
1	Pump Coupling	1004
2	Connection Nut,SS316	8842
3	Snap Ring,SS316	8208
4	Gear Reduction Unit,SS316	779
5	Mechanical Seal Bushing,SS316	702
6	Mechanical Seal,SIC	703
7	Gasket,PTFE	735
8	Drive Shaft,SS316	
	HD-SS316L-700	704
	HD-SS316L-1000	705
	HD-SS316L-700\1000\1200	706
	HD-SS316L-1200	707
9	Rotor,SS316	
	HD-SS316L-700	708
	HD-SS316L-1000	709
	HD-SS316L-1200	710
10	Gasket,PTFE	731
11	Outer Tube Assembly,SS316	
	HD-SS316L-700	800
	HD-SS316L-1000	801
	HD-SS316L-700\1000\1200	802
	HD-SS316L-1200	803
12	Stator SS316L	
	Buna&viton*(SS316 Tube)	
	HD-SS316L-700	816
	HD-SS316L-1000	817
	HD-SS316L-1200	818
	PTFE(Stator Insert Only)	
	HD-SS316L-700	822
	HD-SS316L-1000	823
	HD-SS316L-1200	824
13	Stator Tube,**SS316	
	HD-SS316L-700	874
	HD-SS316L-1000	875
	HD-SS316L-1200	876
14	Stator for Bagliners	
	Buna&viton*(SS316 Tube)	
	HD-SS316L-700	816BL
	HD-SS316L-1000	817BL
	HD-SS316L-1200	818BL
	Stator Tube,**SS316	
	HD-SS316L-700	874BL
	HD-SS316L-1000	875BL
	HD-SS316L-1200	876BL
15	Gasket,Buna&viton	737
	Gasket,PTFE	738
16	Set Screw,SS316	757
17	Ring,SS316(For Use with Teflon Stator Only)	0016

**HD-HV1000 See Figure 12**

No.	Description	P/Nfor SP-800DD
1	Motor Coupling (Not Included with Pump Tube)	
	Models:	
	HD-550W,HD-750W,HD-1100W&HD-A8	
	24mm	740
	Model:HD A4	
	14mm	744
	Model:HD A6	
	19mm	747
	Models:	
	HD-550W,HD-750W,HD-1100W	
	28mm	746
2	Coupling Insert	745
3	Motor Mount Flange,Aluminum	760
4	Bearing Housing Assembly,Aluminum	759
5	Mechanical Seal Bushing,SS316	702
6	Mechanical Seal,SIC	703
7	Gasket,PTFE	735
8	Drive Shaft, SS316	
	HD-SS316L-700	704
	HD-SS316L-1000	705
	HD-SS316L-700\1000\1200	706
	HD-SS316L-1200	707
9	Rotor,SS316	
	HD-SS316L-700	708
	HD-SS316L-1000	709
	HD-SS316L-1200	710
10	Outer Tube Assembly,SS316	
	HD-SS316L-700	800
	HD-SS316L-1000	801
	HD-SS316L-700\1000\1200	802
	HD-SS316L-1200	803
11	Stator	
	Buna&viton*(SS316 Tube)	
	HD-SS316L-700	816
	HD-SS316L-1000	817
	HD-SS316L-1200	818
	PTFE(Stator Insert Only)	
	HD-SS316L-700	822
	HD-SS316L-1000	823
	HD-SS316L-1200	824
12	Stator Tube,**SS316	
	HD-SS316L-700	874
	HD-SS316L-1000	875
	HD-SS316L-1200	876
13	Stator for Bagliners	
	Buna&viton*(SS316 Tube)	
	HD-SS316L-700	816BL
	HD-SS316L-1000	817BL
	HD-SS316L-1200	818BL
	Stator Tube,**SS316	
	HD-SS316L-700	874BL
	HD-SS316L-1000	875BL
	HD-SS316L-1200	876BL
14	Gasket,PTFE	731
15	Gasket,Buna&viton	737
	Gasket,PTFE	738
16	Set Screw,SS316	757
17	Ring,SS316(For Use with Teflon Stator Only)	0016

**操作说明书和零部件手册 OPERATING INSTRUCTION AND PARTS MANUAL**

**Assembly**

1. Remove the pump and motor from packaging.
2. Inspect all contents for damage.
3. Couple the motor to the pump tube by using the HandWheel. (See figure 1).

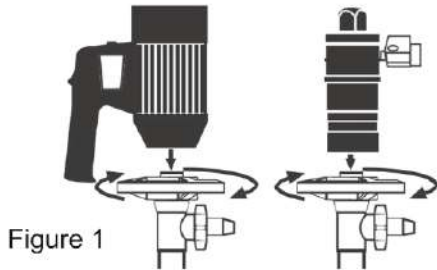


Figure 1

**⚠ WARNING** When using an HD-A1, HD-A2 or HD-A3 Series motor, Standard Pump recommends the use of a Filter Lubricator Regulator (FLR) in order to ensure a moisture free supply of air to the motor.

**⚠ WARNING** HD-A1, HD-A2 or HD-A3 Series motors must be lubricated daily to ensure proper functionality.

**Operation**

1. Once the pump is fully assembled and all connections are securely fastened, insert the pump into the drum or tank.
2. Turn the motor switch to the "ON" position or open air inlet valve.
3. If your package contains a flow meter (Package numbers 9500-9503 or 9510-9513) please reference the factory operating instructions which are located in your carton.
4. After use, clean the pump and store vertically.

**Maintenance DISASSEMBLY/CLEANING PROCEDURES**

1. In order to clean a majority of the residue from the pump tube, immerse the pump into a 55 Gallon Drum of water. Allow the pump to circulate the water for 3 minutes.
2. For a more thorough cleaning remove the motor from the pump tube by loosening the hand wheel (see Figure 2).

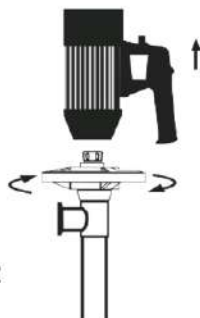


Figure 2

3. Remove the pump foot. (see figure 3)

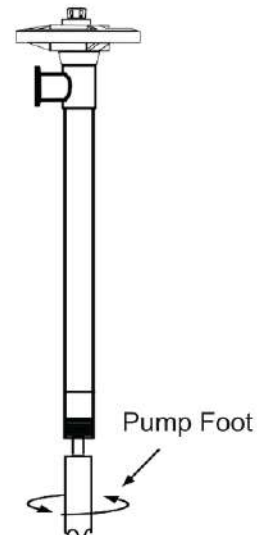


Figure 3

NOTE: Remove pump foot by turning clockwise.

4. While holding the drive shaft with pliers (factory suggests using grip-locks to avoid scarring shaft) remove the impeller by turning counter clockwise (see Figure 4).

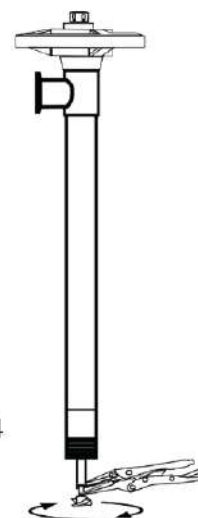


Figure 4

NOTE: Use grip lock pliers to hold shaft while removing impeller.

## 操作说明书和零部件手册 OPERATING INSTRUCTION AND PARTS MANUAL

### HD-HV Series Spare Parts List

5、拆卸泵管(见图5)。

5.Remove the Pump Housing (see Figure 5).

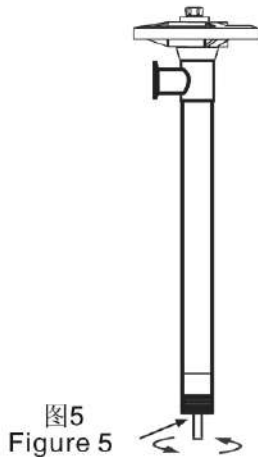


图5  
Figure 5

注意：顺时针方向旋转，拆卸泵管。

NOTE:Remove pump housing by turning clockwise.

6、对于塑料和铝制泵管，顺时针方向旋转拆卸外管和内管(见图6)。

6.For plastic and aluminum models,remove outer tube and inner tube from discharge housing by turning clockwise (see Figure 6).

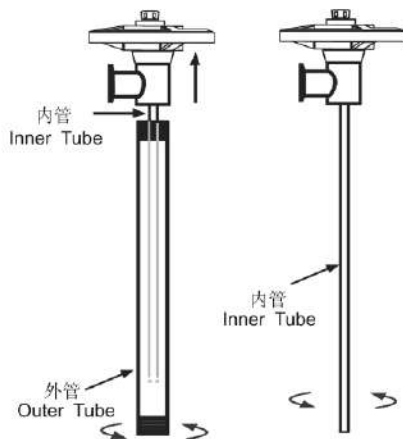


图6  
Figure 6

7、对于不锈钢型号(即HD-SS304及HD-SS316L), 应顺时针旋转拆卸内/外管总成的连接法兰(见图7)。

7.For stainless steel models (i.e.7600-7700,9714-9717& 9904-9913), remove connection flange from inner/outer tube assembly by turning clockwise (see Figure 7).

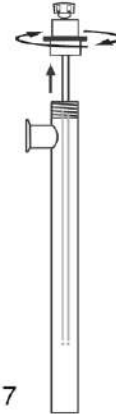


图7  
Figure 7

8、通过转动逆时针方向从驱动轴拆卸泵联轴器 (P/N: 810.804)(见图8)。

8.Remove pump coupling (P/N:810.804)from drive shaft by turning counterclockwise(see Figure 8).

注意：拆卸联轴器时用钳子夹住轴。

NOTE:Use grip-lock pliers to hold shaft while removing coupling.

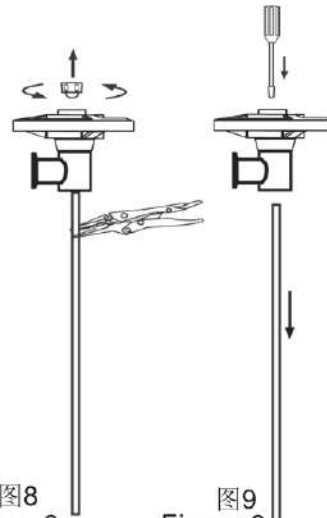


图8  
Figure 8

图9  
Figure 9

9、将驱动中心轴直接向下拉，将其从三通泵头座上拆下，同时将螺丝刀插入轴承组(P/N:810.838)(见图9)。

9.Pull drive shaft straight down removing it from the discharge housing or connection flange while inserting a screwdriver through bearing unit(P/N:810.838)(see Figure 9).

注意：确保螺丝刀保持在轴承组内，且垫片和密封是固定的，并适当对齐，以便重新组装。

NOTE:Ensure screwdriver is maintained inside bearing unit so spacer and seal are stationary and aligned properly for reassembly.

**⚠ WARNING** 在轴承组(P/N: 810.838)重新装配期间更换传动轴时，确保传动轴通过轴承组内部轴承之间的间隔物插入。否则可能会导致轴承组过早失效。

**⚠ WARNING** When replacing the drive shaft in the bearing unit (PIN810.838) durin reassembly, make sure the drive shaft is inserted through the spacer in between the bearings inside the bearing unit.Failure to do so could cause the bearing unit to prematurely fail.

## 操作说明书和零部件手册(HD–HV) OPERATING INSTRUCTION AND PARTS MANUAL

### Sanitary Pump Models:HD–HV250 HD–HV1000

#### Description

Standard's Drum Pumps are designed to transfer a variety of materials from 55 gallon drums and tanks. Standard Pump offers several different pumps, each designed for specific applications. Before operating, please confirm that the pump's materials of construction are suitable for the application.

#### Unpacking

Cartons should be handled with care to avoid damage from dropping, etc. After unpacking, inspect carefully for any damage that may have occurred during transit. Check for loose, damaged or missing parts.

#### General Safety Information

The responsibility for safe assembly, installation, and operation ultimately rests with the operator. Read and understand ALL safety precautions and operating instructions before operation. Careless pump operation can result in serious injury.

1. Before operating the pump, read and understand these operating instructions.
2. The operator should wear suitable protective clothing including the following: face mask, safety shield or goggles, gloves, apron, and safety shoes.
3. Before operating, verify the materials being pumped are compatible with the pump's "wetted components."
4. All Federal, State, and local safety codes should be followed.
5. Verify that the motor voltage corresponds to proper electrical supply.
6. Before plugging motor into power supply, make sure the motor switch is in the OFF position. For Air Motors ensure inlet valve is closed before attaching air line.
7. Before operation, confirm all pump connections are properly tightened.
8. First pump clean water in order to familiarize yourself with the pump's operation, flow rate, discharge pressure and motor speed.
9. Before starting the pump, confirm the discharge hose is securely fastened to the receiving vessel in order to prevent splashing.
10. Never leave pump unattended during operation.
11. Do not submerge the motor in any liquid.
12. When finished using the pump, flush the pump by pumping water or an appropriate cleaning solution. Do not use flammable or combustible cleaning solutions.
13. Never carry the motor by the power cord.
14. Never store pump in container. Always rinse pump thoroughly and hang on wall bracket or ensure pump tube is stored in an upright and vertical position.

#### HD–HV250 Specifications

Model	Immersion Length	Wetted Components			Motor Drives	Discharge Size	Max Viscosity cps (mPAS)*	Max Discharge Pressure	Max Flow Rate	Max Temp	Inlet Size	Max Solid Size	Duty Cycle
		Tube & Rotor	Stator	Mechanical Seal									
HD-HV250-NBR		SS316L	Food Grade BUNA	SicNiton/SiC			25000	87psi (6bar)	12GPM (45LPM)	185°F (85°C)			Intermittent
HD-HV250-TF	27" (700mm)	SS316L	PTFE	SicNiton/SiC	SB		25000	87psi (6bar)	12GPM (45LPM)	300°F (148°C)			Intermittent
HD-HV250-VT	39" (1000mm)	SS316L	VITON	SicNiton/SiC	HD-ENC	1.5"Tri-Clamp	25000	87psi (6bar)	12GPM (45LPM)	212°F (100°C)	2"	25"	Intermittent
HD-HV100-NBR		SS316L	Food Grade BUNA	SicNiton/SiC	HD-EX2		10000	87psi (6bar)	12GPM (45LPM)	185°F (85°C)			Intermittent
HD-HV100-TF	47" (1200mm)	SS316L	PTFE	SicNiton/SiC	HD-E2		10000	87psi (6bar)	12GPM (45LPM)	300°F (148°C)			Intermittent
HD-HV100-VT		SS316L	VITON	SicNiton/SiC			10000	87psi (6bar)	12GPM (45LPM)	212°F (100°C)			Intermittent

Pump is intended for intermittent use when operating at maximum viscosity. The above pump types can be customized for the maximum output pressure of 174psi (12bar) and the maximum flow rate of 7GPM (26L/min).

#### Notes

1. Pump stator elastomer (PTFE, VITON, BUNA) may vary performance.
2. Performance is based on using a 900 RPM motor. Reducing motor speed will decrease pump performance.
3. The SP-800SR Series pump is equipped with a gear reduction unit which reduces the speed of the pump to between 750 and 900 RPM. Therefore, the motor speed must not exceed 16,000 RPM's in order to achieve the proper operating RPM's of the pump.
4. Performance will vary depending on whether the product being pumped is newtonian (viscosity remains constant regardless of shear) or non-newtonian (viscosity does not remain constant with shearing).
5. Flow rates based on water. As viscosity increases, the flow rate will decrease.

## 操作说明书和零部件手册(HD-HV) OPERATING INSTRUCTION AND PARTS MANUAL

### 卫生级螺杆式插桶泵型号：HD-HV250&HD-HV1000

#### HD-HV250电动机技术条件

型号	电压	安培	瓦特	马力	相	赫兹	外壳	变速	防爆等级	重量 磅/公斤
HD-ENC-1	110V	8.5A	825W	1HP	1	50-60Hz	TEFC(IP54)	N	N	12.7(5.7)
HD-ENC-1V	110V	8.5A	825W	1HP	1	50-60Hz	TEFC(IP54)	Y	N	12.7(5.7)
HD-ENC-2	220V	5A	825W	1HP	1	50-60Hz	TEFC(IP54)	N	N	12.7(5.7)
HD-ENC-2V	220V	5A	825W	1HP	1	50-60Hz	TEFC(IP54)	Y	N	12.7(5.7)
HD-E2-V	220V	4A	800W	1HP	1	50-60Hz	IP44	Y	N	7.8(3.55)
HD-EX2-V	220V	4A	880W	1HP	1	50-60Hz	IP55	N	EX	9.7(4.4)

#### HD-HV250

**⚠ WARNING** HD-HV250系列泵只适用于间歇工作状态。(例如, 每30分钟休息一次, 10分钟冷却时间), 对于连续工作应用, 标准泵推荐使用HD-HV1000系列泵。

**⚠ WARNING** HD-HV系列泵是正排量泵。绝对不能靠关闭部件(如加注枪、阀门等)运行, 否则可能导致压力过大, 造成严重伤害和泵的损坏。

**⚠ WARNING** HD-HV250系列泵不能脱水断液。泵的干运转会对泵的机械密封和定子造成严重的损坏。

#### 安装(HD-HV250)

- 1、从包装上拆下泵和马达。
- 2、检查所有部件是否有损坏。
- 3、用六角螺母将电动机连接在泵上(见图1)。

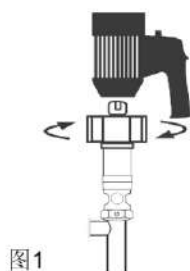


图1

- 4、第一次运转使用清水, 以便熟悉泵的运行, 流量, 排出压力和电机的转速。

- 5、建议在使用HD-HV250系列泵之前彻底清洗和消毒(见第43页)。
- 6、使用顶部封闭的油桶或盖子, 以防止可能的污染。

#### 操作(HD-HV250)

- 1、当泵完全装配完毕, 且所有连接都紧固时, 将泵插入桶或罐中(见图2)。



图2

- 2、建议在泵出液口连接安装合适的软管或管道。

**⚠ WARNING** 确保软管符合泵排出压力要求(HD-HV100或HD-HV250=87psi(6 bar))/(HD-HV1000=174psi(12.1bar))。建议使用额定为泵排放压力4倍的软管。87X4=348psi(24.3bar)。

- 3、如果你选择使用软管, 用一个合适的软管管箍将软管与软管倒钩固定在泵排放压力的管路上。
- 4、确保电机上的速度控制旋转到最小位置(完全逆时针方向)。

- 5、把电动机开关调整到开启位置。
- 6、顺时针方向转动速度控制旋钮, 缓慢加速马达。

**⚠ WARNING** **Ex** 不要使用此泵输送易燃或易爆产品, 或在存在易燃或易爆气体的环境中使用, 除非与防爆或气动马达以及适当的接地线一起使用。如有相关问题, 请咨询工厂或授权分销商。

#### 维修 & 拆卸(见第43页)

## 操作说明书和零部件手册(HD-HV) OPERATING INSTRUCTION AND PARTS MANUAL

### Sanitary Pump Models:HD-HV250 HD-HV1000

#### HD-HV-250 Motor Specifications

Model	Voltage	Amps	Watts	HP	Phaes	Hz	Enclosure	Variable Speed	Hazardous Duty	Shipping Weight lb/kg
HD-ENC-1	110V	8.5	825	1	1	50-60	TEFC(IP54)	N	N	12.7(5,7)
HD-ENC-1V	110V	8.5	825	1	1	50-60	TEFC(IP54)	Y	N	12.7(5,7)
HD-ENC-2	220V	5	825	1	1	50-60	TEFC(IP54)	N	N	12.7(5,7)
HD-ENC-2V	220V	5	825	1	1	50-60	TEFC(IP54)	Y	N	12.7(5,7)
HD-E2-V	220V	4	800	1	1	50-60	IP44	Y	N	7.8(3.55)
HD-EX2-V	220V	4	880	1	1	50-60	IP55	N	EX	9.7(4.4)

#### HD-HV250

**⚠ WARNING** The HD-HV250 Series PUMP is recommended for intermittent DUTY USE only.(ie.,30 MINUTE intervals with a 10 MINUTE cooling off period).For CONTINUOUS DUTY applications, Standard PUMP recommends USING the HD-HV1000 Series PUMP.

**⚠ WARNING** The HD-HV250 Series PUMP is positive displacement PUMPS and SHOULD never be operated against SHUT-OFF elements SUCH as nozzles,valves,etc.FAILURE to comply may RESULT in excessive PRESSURE BUILD RESULTING In SERIOUS INJURY and PUMP damage.

**⚠ WARNING** The HD-HV250 Series PUMP SHOULD not be RUN dry. RUNNING the PUMP dry will RESULT in SERIOUS damage to the mechanical seal and stator of the PUMP.

#### Assembly (HD-HV250)

- 1.Remove the pump and motor from packaging.
- 2.Inspect all contents for damages.
- 3.Couple the electric motor to the pump using the hex nut (see Figure 1).

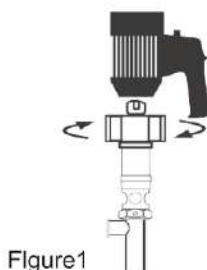


Figure1

- 4.First pump clean water in order to familiarize yourself with the pump's operation,flow rate, discharge pressure and motor speed.

5.It is recommended to thoroughly clean and sanitize HD-HV250 series pumps before operation (see page 44 ).

- 6.Use closed top drum or cover to prevent possible contamination.

#### Operation (HD-HV250)

- 1.Once the pump is fully assembled and all connections are fastened,insert the pump into the drum or tank(see Figure 2).

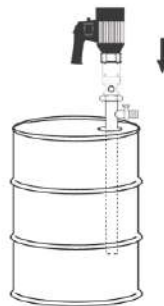



Figure2

- 2.It is recommended to attach a suitable hose or pipe to the pump discharge.

**⚠ WARNING** Make SURE the hose meets the PUMP discharge PRESSURE REQUIREMENTS (HD-HV100or HD-HV250=87 psi (6bar)/(HD-HV1000=174 psi (12,1 bar)).It is recommended to USE a hose that is rated 4 x the PUMP discharge PRESSURE.Ex:87 x 4= 348 psi (24,3 bar).

- 3.If you opt to use a hose,fasten the hose to the hose barb with a suitable hose clamp that exceeds the pump discharge pressure.
- 4.Make sure the speed control knob on the motor is turned to the MIN position (completely counterclockwise).

- 5.Turn the motor switch to the ON position.
- 6.Slowly throttle the motor up by turning the speed control knob clockwise.

**⚠ WARNING**  Do not USE these PUMPS for the transfer of flammable or COMBUSTIBLE PRODUCTS or in an environment where flammable or COMBUSTIBLE FUMES are present UNLESS USED in CONJUNCTION with Explosion Proof or Air motor as well as proper GROUNDING and bonding wires. Please CONSULT the factory or AUTHORIZED DISTRIBUTOR with any QUESTIONS regarding installation.

#### Maintenance Disassembly (See page 44)

## 操作说明书和零部件手册(HD-HV) OPERATING INSTRUCTION AND PARTS MANUAL

### 卫生级螺杆式插桶泵型号：HD-HV250&HD-HV1000

#### HD-HV1000规格

泵型号	泵管长度	组成部分			马达驱动	拆卸工具规格	最大粘度 cps(mPAS)	最大排出 压力	最大流量	最高 温度	入口 口径	最大 颗粒 直径	操作 形式		
		主轴	定子	机械密封											
HD-HV1000-NBR	27" (700mm)	SS316L	食品级 丁腈橡胶	硬质合金/氮化硅	固定低速电机 封闭式电机 防爆电机 气动马达	1.5"三夹钳	100000	87psi (6bar)	12GPM (45LPM)	185°F (85°C)	2" (51mm)	25" (6mm)	间歇		
HD-HV1000-TF		SS316L	聚四 氟乙烯	硬质合金/氮化硅				100000	87psi (6bar)	12GPM (45LPM)			300°F (148°C)	间歇	
HD-HV1000-VT		SS316L	氟橡胶	硬质合金/氮化硅				100000	87psi (6bar)	12GPM (45LPM)			212°F (100°C)	间歇	
HD-HV500-NBR		39" (1000mm)	SS316L	食品级 丁腈橡胶				硬质合金/氮化硅	50000	87psi (6bar)			12GPM (45LPM)	185°F (85°C)	间歇
HD-HV500-TF		47" (1200mm)	SS316L	聚四 氟乙烯				硬质合金/氮化硅	50000	87psi (6bar)			12GPM (45LPM)	300°F (148°C)	间歇
HD-HV500-VT		SS316L	氟橡胶	硬质合金/氮化硅				50000	87psi (6bar)	12GPM (45LPM)			212°F (100°C)	间歇	

\*泵用于在最大黏度运转时应该间歇使用。以上泵型均可以定制为最高输出压力174psi(12bar)最大流量7GPW(26L/min)的型号。

#### 注意：

- 1、泵定子弹性体(聚四氟乙烯、氟橡胶和丁腈橡胶)可能会有不同的性能。
- 2、性能是基于使用一个每分钟900转的电机。降低电机转速会降低泵的性能。
- 3、HD-ENC2-V系列泵配有齿轮减速装置，使泵的转速低至750-900pm，因此，电机转速不得超过16000pm，以达到泵的正常  
工作转速。
- 4、泵的性能将取决于被泵输送介质的动力粘度(不管剪切力大小，粘度保持恒定)还是非动力粘度(剪切力大小，粘度不保持恒定)。
- 5、测试性能是以水为基础的流量，随着粘度的增加，液体流量减小。

#### HD-HV1000电动机技术条件

马达型号	马力 HP	功率 kW	转速 r/min	外壳 防护	框架	法兰盘	空气消耗量	进气管 尺寸	重量 磅/公斤
HD-550W	0.75	0.55	750-900	TEFC (IP55)	90LC	B14/C140	N/A	N/A	56 (25.5)
HD-750W	1	0.75	750-900	TEFC (IP55)	100LC	B14/C140	N/A	N/A	56 (25.5)
HD-1100W	1.5	1.1	750-900	TEFC (IP55)	100LC	B14/C140	N/A	N/A	78 (35.5)
HD-A4	2	1.5	300-900	N/A	IEC#72/D71	B14/C140	80 CFM@100psi 37 L/Sec@7 Bar	3/8"	12.0 (5.0)
HD-A6	4	3.0	300-900	N/A	IEC#72/D71	B14/C140	130 CFM@100psi 65 L/Sec@7 Bar	1/2"	24.0 (11.0)
HD-A8	5	3.7	300-900	N/A	IEC#72/D71	B14/C140	170 CFM@100psi 80 L/Sec@7 Bar	1/2"	26.0 (12.0)

注意：当使用气动马达时，为了获得最佳性能，请确保安装了适当尺寸的空气管道。

#### HD-HV1000

**⚠ WARNING** HD-HV1000系列泵是正排量泵。绝对不能靠关闭部件(如加注枪、阀门等)运行，否则可能导致压力过大，造成严重伤害和泵损坏。

**⚠ WARNING** HD-HV1000系列泵不能脱水断液。泵的干运转会对泵的机械密封和定子造成严重的损坏。

#### 装配(HD-HV1000)

1、从包装上拆下泵和马达。

- 2、检查所有部件是否有损坏。
- 3、把电机连接到泵上，电动或气动马达的泵应使用制造商提供的标准件(见图3)。

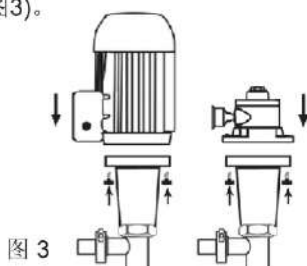


图 3

- 4、建议在使用HD-HV1000系列泵之前进行彻底的清洗和消毒。
- 5、建议使用顶部可密闭或带盖子的桶器皿，以防止可能的污染。
- 6、马达
  - a) 电动-确保电动机和插头连接到适当的电压和方向。在铭牌上找到使用接线图。
  - b) 气动-为了最佳的性能，确保适当尺寸的空气管线和连接。(配置气动三联件)

# HD系列抽液泵 | HD Series Drum Pump

## 操作说明书和零部件手册(HD–HV) OPERATING INSTRUCTION AND PARTS MANUAL

### Sanitary Pump Models:HD–HV250 & HD–HV1000

#### HD–HV1000Specifications

Model	Immersion Length	Wetted Components			Motor Drives	Discharge Size	Max Viscosity cps (mPAS)*	Max Discharge Pressure	Max Flow Rate	Max Temp	Inlet Size	Max Solid Size	Duty Cycle
		Tube & Rotor	Stator	Mechanical Seal									
HD-HV1000-NBR	27" (700mm)	SS316L	Food Grade BUNA	SicNiton/SiC	Fixed high-speed motor Explosion proof motor	1.5"Tri-Clamp	100000	87psi (6bar)	12GPM (45LPM)	185°F (85°C)	2"	25"	Intermittent
HD-HV1000-TF		SS316L	PTFE	SicNiton/SiC				87psi (6bar)	12GPM (45LPM)	300°F (148°C)			
HD-HV1000-VT		SS316L	VITON	SicNiton/SiC				87psi (6bar)	12GPM (45LPM)	212°F (100°C)			
HD-HV500-NBR	39" (1000mm)	SS316L	Food Grade BUNA	SicNiton/SiC	Pneumatic motor Enclosed type motor	1.5"Tri-Clamp	50000	87psi (6bar)	12GPM (45LPM)	185°F (85°C)	2"	25"	Intermittent
HD-HV500-TF		SS316L	PTFE	SicNiton/SiC				87psi (6bar)	12GPM (45LPM)	300°F (148°C)			
HD-HV500-VT		SS316L	VITON	SicNiton/SiC				87psi (6bar)	12GPM (45LPM)	212°F (100°C)			

\*Pump is intended for intermittent use when operating at maximum viscosity.The above pump types can be customized for the maximum output pressure of174psi(12bar )and the maximum flow rate of 7GPM(26L min).

#### Notes

1. Pump stator elastomer(PTFE .VITON&BUNA)may vary performance.
- 2.Performance is based on using a 900 RPM motor.Reducing motor speed will decrease pump performance.
- 3.Performance will vary depending on whether the product being pumped is newtonian(viscosity remains constant regardless of shear)or non-newtonian(viscosity does not remain constant with shearing).
- 4.Flow rates based on water.As viscosity increases,the flow rate will decrease.

#### HD–HV1000 Motor Specifications

Model	HP	kW	RPM	Enclosure	Frame	Flange	Air Consumption	Airline SizeInches	Shipping Weight lb/kg
HD–550W	0.75	0.55	750–900	TEFC (IP55)	90LC	B14/C140	N/A	N/A	56 (25.5)
HD–750W	1	0.75	750–900	TEFC (IP55)	100LC	B14/C140	N/A	N/A	56 (25.5)
HD–1100W	1.5	1.1	750–900	TEFC (IP55)	100LC	B14/C140	N/A	N/A	78 (35.5)
HD–A4	2	1.5	300–900	N/A	IEC#72/D71	B14/C140	80 CFM@100psi 37 L/Sec@7 Bar	3/8"	12.0 (5.0)
HD–A6	4	3.0	300–900	N/A	IEC#72/D71	B14/C140	130 CFM@100psi 65 L/Sec@7 Bar	1/2"	24.0 (11.0)
HD–A8	5	3.7	300–900	N/A	IEC#72/D71	B14/C140	170 CFM@100psi 80 L/Sec@7 Bar	1/2"	26.0 (12.0)

Note:For optimum performance when using an air motor make sure proper size air lines are installed.

#### HD–HV1000

**⚠ WARNING** The HD-HV1000 Series PUMP is positive displacement PUMPS and SHOULD never be operated against SHUT-OFF elements SUCH as nozzles, valves, etc. FAILURE to comply may RESULT in excessive PRESSURE BUILD RESULTING in SERIOUS INJURY and PUMP damage.

**⚠ WARNING** The HD-HV1000 Series PUMP SHOULD not be RUN dry. RUNNING the PUMP dry will RESULT in sERIOUS damage to the mechanical seal and stator of the PUMP.

#### Assembly (HD–HV1000)

- 1.Remove the pump and motor from packaging.

2. Inspect all contents for damages.
3. Couple the motor to the pump. Bolt electric or pneumatic motor to the pump using the hardware provided by the manufacturer(see figure 3).

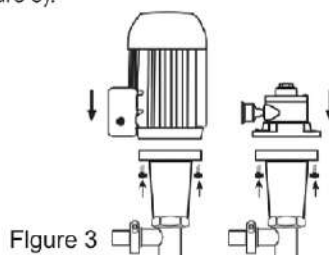


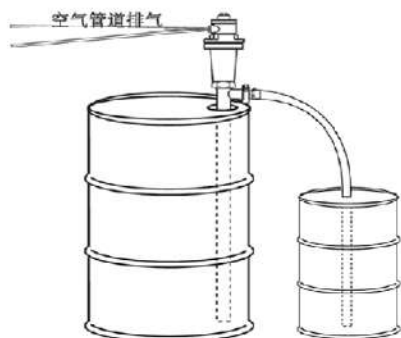
Figure 3

4. It is recommended to thoroughly clean and sanitize HD-HV1000 series pumps before operation.
5. Closed top drum or cover is recommended to prevent possible contamination.
6. Motor
  - a) Electric-make sure motor and plug are wired to proper voltage and direction. Use wiring diagram on nameplate.
  - b) Air-for optimum performance make sure proper size air line and connection.

## 操作说明书和零部件手册(HD-HV) OPERATING INSTRUCTION AND PARTS MANUAL

### 卫生级螺杆式插桶泵型号：HD-HV250&HD-HV1000

#### 汇编(HD-HV1000)(续)



注意：建议气管排放的空气远离桶或水箱，以防止可能的污染。

**⚠ WARNING** 当使用HD-A4,HD-A6或HD-A8马达时，标准泵必须使用一个自动注油系统的气动三联件(FLR)以确保马达无湿气进入。

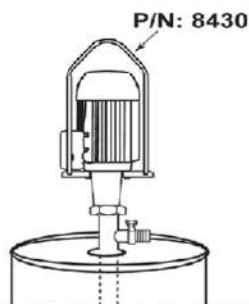
**⚠ WARNING** 请勿操作HD-HV250系列泵的黏度大于25000cps(mpas)，请勿操作HD-HV500或HD-HV1000系列泵的黏度大于100000cps(mpas)，违规操作将导致泵提前失效。

**⚠ WARNING** 当HD-HV1000泵与气动马达(HD-A4、HD-A6或HD-A8)一起用时，确保当面对马达时，空气管路与马达左侧进气孔相连。这样可以保证马达以顺时针方向转动。使用泵箭头确认的正确方向。逆时针方向运行，内部组件就会被拆卸。

**⚠ WARNING** **Ex** 请勿使用此泵输送易燃或易爆液体，或在存在易燃或易爆烟雾的环境中使用，除非与防爆或气动马达以及适当的接地线一起使用。如有相关安装问题，请咨询工厂或授权经销商。

#### (HD-HV1000)操作

1、当泵完全装配好，且所有连接都紧固时，将泵插入桶或罐中。桶泵可以使用一个可选的桶泵悬挂器从提升系统中悬挂下来(选配件：8430)



2、建议在泵排出口安装合适的软管或管道。  
3、如果你选择使用软管，用一个合适的软管夹子将软管倒钩固定在超过泵排放压力的软管上。

**⚠ WARNING** 确保软管符合泵排出压力要求(HD-HV100或HD-HV500=87psi(6bar)/(HD-HV1000=174psi(12.1bar)。建议使用额定为泵排放压力4倍的软管。  
87\*4=348psi(24.3bar)

#### 维护

##### 拆卸/清洗程序 (HD-HV250HD-HV1000)

4、从泵管上拆下电动机。对于HD-HV250型号：按顺时针旋转方向松开六角螺母(见图3)。HD-HV1000型号：松开(4)连接泵和电机的螺栓(见图4)。



图3  
注意：顺时针方向旋转六角螺母，拆卸电机

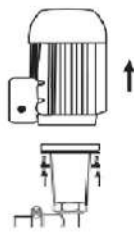


图4  
注意：从电机法兰上拆下4个螺栓。

5、松开六角螺母侧面的固定螺丝(见图5)  
6、将螺丝刀(或类似形状的物体)放入机械密封检查口(见图5)。  
7、用一个大扳手松开六角螺母，同时在机械密封检查口处握住螺丝刀(见图5)

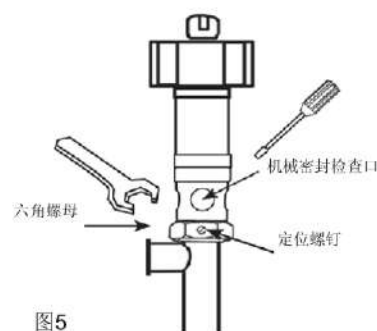


图5

8、一旦六角螺母松开，从驱动轴总成拆卸外管(见图6)。

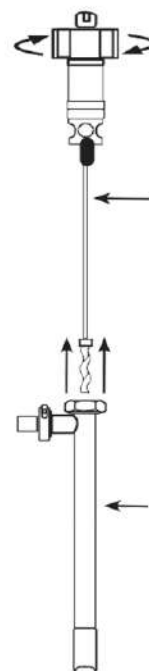
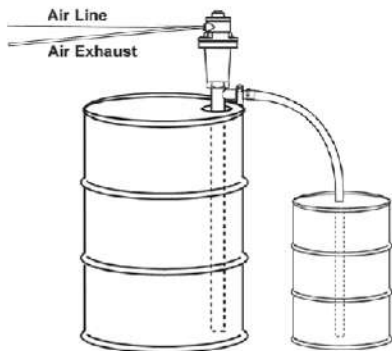


图6

## 操作说明书和零部件手册(HD–HV) OPERATING INSTRUCTION AND PARTS MANUAL

### Sanitary Pump Models:HD–HV250 & HD–HV1000

#### Assembly (HD–HV1000) (continued)



Note: Recommend plumbing discharge air away from drum or tank to prevent possible contamination.

**WARNING** When USING an HD-A4, HD-A6 or HD-A8 motor, Standard PUMP recommends the use of a Filter LUBRICATOR REGULATOR (FLR) in order to ENSURE a MOISTURE free SUPPLY of air to the motor.

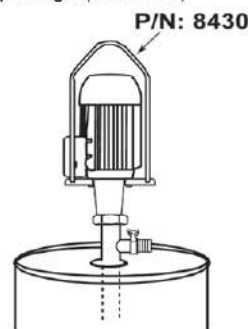
**WARNING** Do not operate the HD-HV250 series PUMP on viscosities greater than 25000cps (mPAS). Do not operate the HD- HV500 or HD-HV1000 series PUMPS on viscosities greater than 100,000 cps (mPAS). FAILURE to comply will RESULT in PREMATURE PUMP FAILURE.

**WARNING** When USING an HD-HV1000 PUMP in CONJUNCTION with an air motor (HD-A4, HD-A6 or HD-A8), make SURE the air line is connected to the air inlet hole on the left side of the motor as You face the motor. This will INSURE that the motor TURNS in a clockwise direction. Use the PUMP arrow to verify proper direction. If the PUMP rotates COUNTERCLOCKWISE, the internal components will disassemble.

**WARNING** **Ex** Do not USE these PUMPS for the transfer of flammable or COMBUSTIBLE PRODUCTS or in an environment where flammable or COMBUSTIBLE FUMES are present UNLESS USED in CONJUNCTION with Explosion Proof or Air motor as well as proper GROUNDING and bonding wires. Please CONSULT the factory or AUTHORIZED DISTRIBUTOR with any QUESTIONS regarding installation.

#### Operation (HD–HV1000)

1. Once the pump is fully assembled and all connections are fastened, insert the pump into the drum or tank. Pump can be suspended from hoisting system using an optional pump hanger (P/N:8430).



2. It is recommended to attach a suitable hose or pipe to the pump discharge.  
3. If you opt to use a hose, fasten the hose to the hose barb with a suitable hose clamp that exceeds the pump discharge pressure.

**WARNING** Make SURE the hose meets the PUMP discharge PRESSURE REQUIREMENTS (HD-HV1000 or HD-HV500=87 psi (6 bar)/ (HD-HV1000=174 psi (12,1 bar)). It is recommended to USE a hose that is rated 4 x the PUMP discharge PRESSURE. Ex: 87 x 4=348 psi (24,3 bar).

#### Maintenance

##### Disassembly Cleaning Procedures (HD-HV250/HD-HV1000)

4. Remove motor from pump tube. For models HD-HV250: loosen Hex Nut in clockwise rotation (see Figure 3). For models HD-HV1000: loosen (4) bolts that attach the pump to the motor (see Figure 4).

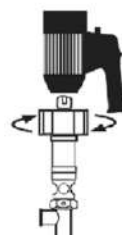


Figure 3

NOTE: Remove motor by turning hex nut clockwise

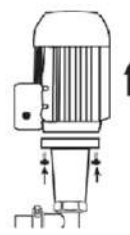


Figure 4

NOTE: Remove 4 bolts from motor flange.

5. Loosen set screw on side of Hex Nut (see Figure 5).  
6. Place a screwdriver (or similarly shaped object) in the mechanical seal inspection port (see Figure 5).  
7. Use a large wrench to loosen the Hex Nut while simultaneously holding the screwdriver in the seal inspection port (see Figure 5).

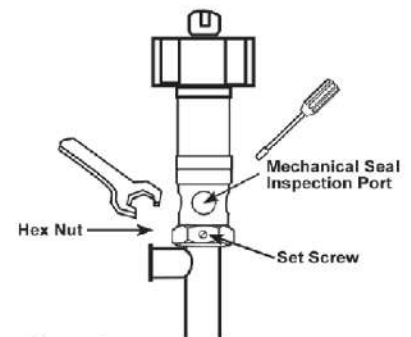


Figure 5

8. Once the Hex Nut is loosened, remove the outer tube from the drive shaft assembly (see Figure 6).

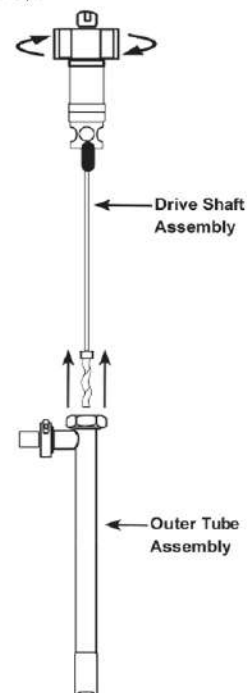


Figure 6

## 操作说明书和零部件手册(HD-HV) OPERATING INSTRUCTION AND PARTS MANUAL

### Sanitary Pump Models:HD-HV250 & HD-HV1000

#### Disassembly Cleaning Procedures (continued)

9.Remove the stator from the pump tube body by turning clockwise (see Figure 7).

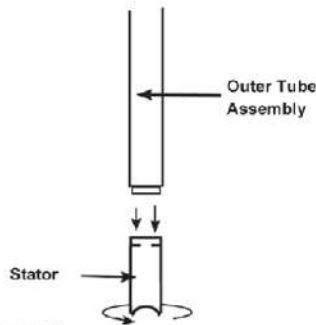


Figure 7

10.Hold the drive shaft in a fixed position and loosen the rotor(counterclockwise) located at the bottom of the drive shaft (see Figure8).

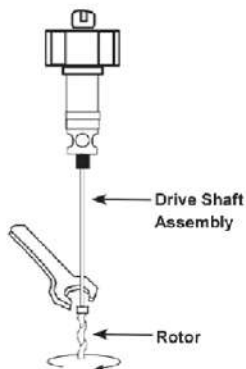


Figure 8

11.Insert a small screwdriver(or similar object) through the small hole on the shaft located inside the mechanical seal inspection port (see Figure 9).

12.While holding the small shaft still, loosen (counterclockwise)the pump drive shaft with large wrench.(see Figure 9).

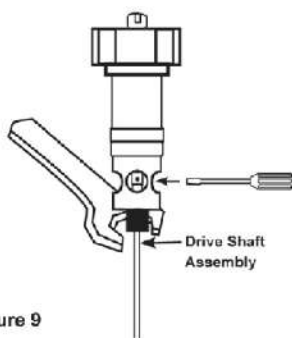


Figure 9

#### Mechanical Seal Replacement Pump Assembly (HD-HV250&HD-HV1000)

1.Follow steps 1-9 under the Disassembly Cleaning Procedures from above.  
2.The mechanical seal will be exposed in the lower portion of the mechanical seal bushing (see Figure 10).

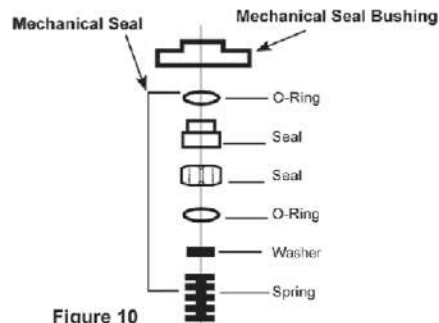


Figure 10

3.Remove damaged seal and replace with a new mechanical seal.Use a suitable lubricant on the seals O-rings.

**WARNING** Wear gloves when performing seal maintenance.ToUCHING the seal face COULD CAUSE PREMATURE FAILURE.

4.Reinstall mechanical seal bushing into bearing housing.

5.Thread drive shaft onto bearing housing shaft (see Figure 9).

6.Thread rotor onto drive shaft (see Figure 8)

7.Thread stator can onto pump body (see Figure 7).

8.Apply a suitable lubricant on rotor.

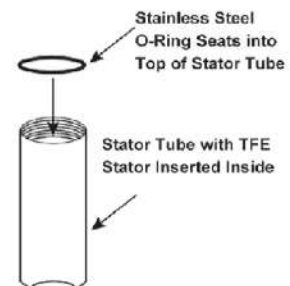
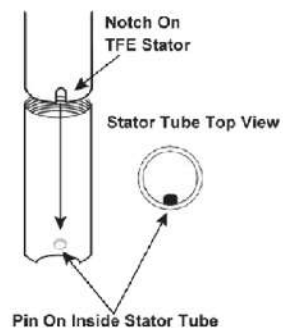
9. Once Bearing Housing, drive shaft, and rotor are securely threaded together, insert this assembly into the pump body (see Figure 6,page44).

10.Tighten the Hex Nut on the pump body to the Bearing housing. Use screwdriver (or similarly shaped object)in the mechanical seal inspection port(see Figure 5,page44).

11.Use a large wrench to tighten the Hex Nut while simultaneously holding the screwdriver in the seal inspection port (see Figure 5,page44).

12.Replace set screw into hex nut.

13.Reattach motor and resume operation. (HD-HV250: see Figure 3, page44); (HD-HV1000: seeFigure 4, page44 ).



Note:Slide the TFE stator into the stator tube. Make sure the pin on the stator tube lines up with the notch on the TFE stator insert.

## TROUBLESHOOTING

SYMPTOM	POSSIBLE REASONS	TROUBLESHOOTING
The electric/pneumatic motor stops running	<ul style="list-style-type: none"> <li>The motor current is overloaded (the motor cannot be actuated because its coil is burnt)</li> <li>Whether the power is disconnected or the plug falls</li> <li>Motor coupling wear, bite dead, stuck</li> <li>The stator's inside coil is eroded by acid gases, resulting in failure of action</li> <li>The power supply contact is poor</li> <li>The power supply's protection switch contact is poor</li> </ul>	<ul style="list-style-type: none"> <li>Mount an overload protector at the power lead end (change the coil)</li> <li>Check the power supply or fix the plug and the outlet again</li> <li>Replace the coupling</li> <li>Replace the inside coil</li> <li>Replace the plug or the outlet to ensure secure connection</li> <li>Overhaul the switch or replace it</li> </ul>
The electric/pneumatic motor is overheated	<ul style="list-style-type: none"> <li>Whether the current is so high that the motor is overloaded in running</li> <li>The motor's working voltage is not stable; please mount a voltage stabilizer or an overcurrent protection switch to prevent the motor from being overloaded and burnt</li> <li>The motor's running is slow and heavy because of the liquid's too high viscosity and excessive specific gravity plus too big grains and an excessive content of grains</li> </ul>	<ul style="list-style-type: none"> <li>Find out reasons for overload; please mount a power supply voltage stabilizer and an overcurrent protection switch</li> <li>Dilute the working medium's concentration, viscosity, specification or grain or replace it with another pump type</li> </ul>
The liquid pump stops running suddenly after normal starting	<ul style="list-style-type: none"> <li>Whether it is jammed or has filth deposits</li> <li>Please remove jams or filth and make sure of periodic checks</li> <li>Whether there are any foreign matters inside the pump body and whether the filtering device fails or any other matters fall into the drum tank</li> <li>Confirm whether the liquid temperature is too high and whether the material is applicable</li> </ul>	<ul style="list-style-type: none"> <li>Remove jams, filth or deposits</li> <li>Please replace the sieve and the filtering element and remove impurities inside the pipeline and the tank</li> <li>Reduce the working liquid's temperature or replace it with a pump type meeting and applying to the material of the working liquid</li> </ul>
There are cracks on the liquid pump's body	<ul style="list-style-type: none"> <li>Confirm whether the pump body's flow-through material and the working liquid are applicable</li> <li>The outlet and inlet pipelines are not fixed securely, resulting in vibrations during running; please fix such pipelines properly And replace the damaged parts with new ones.</li> <li>External force, accidental fall or collision extrusion, etc</li> </ul>	<ul style="list-style-type: none"> <li>Replace it with a pump type fully meeting or applying the material of the working liquid</li> <li>Fix the support for use of the liquid pump to reduce the amplitude and unnecessary vibrations as much as possible</li> </ul>
The liquid pump cannot pump out any liquid (when the motor can run normally)	<ul style="list-style-type: none"> <li>Check whether the outlet and inlet pipelines are jammed by foreign matters or have filth deposits</li> <li>Check whether the impeller foreign body blocking, wear, stuck, off, out of the insert</li> <li>The inlet liquid level shall be about more than 3cm higher than the pump pipe base</li> <li>Check whether the pump parts fall off, damage</li> <li>Whether the couplings of the motor or the pump pipe are worn out to result in idle running</li> <li>Make sure the motor is working properly, the carbon brush is shifted or can not be returned</li> </ul>	<ul style="list-style-type: none"> <li>Remove jams and filth at the liquid pump's inlet</li> <li>Remove foreign matters on the impeller, like entanglements, and replace the impeller if damaged Increase the liquid level</li> <li>Check and tighten impellers, couplings, bushings and the like, and replace couplings if the parts are damaged</li> <li>Check whether the connection is completely right and whether the carbon brush length is acceptable</li> </ul>
There are violent vibrations and loud noise during running of the liquid pump	<ul style="list-style-type: none"> <li>The liquid pump is not fixed securely or installed properly so as to result in vibrations in running</li> <li>Check whether the outlet and inlet pipelines are jammed by foreign matters or have filth deposits</li> <li>The bearings are worn out or rusty after long-term operation of the liquid pump</li> <li>Excessive wear of bushing, casing and tubule.</li> <li>The carbon brush is worn out after long-time service</li> </ul>	<ul style="list-style-type: none"> <li>Fix the support for use of the liquid pump, and check whether there is an excessive clearance between the main shaft and the bushing and whether the working liquid's viscosity or specific gravity exceeds the pump's application scope</li> <li>Replace bearings, bushings, bushings and tubes</li> <li>Replace the carbon brush and even the carbon brush yoke</li> </ul>
The liquid pump's pipe fittings leak	<ul style="list-style-type: none"> <li>The intermediate sleeve and the pipe shaft seat are worn out</li> <li>The central shaft is worn out because of long-time service</li> <li>Maybe the O-ring is worn out when the liquid discharge port leaks</li> <li>The high volatile medium gas rises at high speed and high temperature</li> <li>The couplings of the motor and the pump pipe are damaged</li> </ul>	<ul style="list-style-type: none"> <li>Replace the intermediate sleeve or the pipe shaft seat</li> <li>Replace the central shaft, the bushing and the related sealing element</li> <li>Replace the O-ring</li> <li>Tighten the pump pipe (enhance the strength sealant when necessary)</li> <li>Replace the couplings and check related parts</li> </ul>
The pneumatic motor fails	<ul style="list-style-type: none"> <li>The gas supply is not started yet</li> <li>The pneumatic motor's rotation speed is so low as to result in instability in full-load running</li> <li>Overload causes blade damage, long-term use leads to impeller wear, no lubrication heating dry grinding</li> </ul>	<ul style="list-style-type: none"> <li>Start the gas supply</li> <li>The air pressure is not enough, increase the air supply pressure and match the diameter of the trachea to increase the air supply</li> <li>To replace the blade or pneumatic motor, must be equipped with pneumatic three-piece</li> </ul>

## Common faults and troubleshooting methods of HV screw barrel inserting liquid pump

The pump cannot be started or the pump is stuck	<ul style="list-style-type: none"> <li>The pump has not been started for a long time</li> <li>The motor is not suitable or the parameter setting is not suitable</li> <li>The stator rubber is deformed or the medium viscosity is too high, and the fluidity is poor</li> <li>The material is seriously blocked, and the pump is running without liquid</li> <li>Control system defects and poor contact</li> </ul>	<ul style="list-style-type: none"> <li>Remove the drive motor, Add the right amount of lubricant and use a pipe wrench for turning</li> <li>Check the motor power and speed parameter settings</li> <li>Dilute to pump for viscosity or replace for higher viscosity pump type</li> <li>Check the pipeline clogging situation, the removal of solidified or coagulated material objects</li> <li>Check the control system and wiring</li> </ul>
The pump has no flow	<ul style="list-style-type: none"> <li>The stator and rotor are worn or the coupling is broken</li> <li>The flow passage is blocked and the feeding is insufficient</li> <li>The rotation direction of the pump is wrong, which is inconsistent with that of the arrow</li> <li>The pump pressure from the pump outlet to the closed container exceeds the rated pressure</li> <li>Solidification of medium at low temperature or under special working conditions</li> </ul>	<ul style="list-style-type: none"> <li>Replace the stator and rotor and the coupling</li> <li>Check the bottom of the pump tube and the pump cavity to eliminate blockage</li> <li>Adjust the rotation direction of the motor</li> <li>Replace with a new pump that meets the operating pressure</li> <li>Heating or dilution medium</li> </ul>
Flow and pressure fail to meet rated requirements	<ul style="list-style-type: none"> <li>The pipe at the bottom feed pipe orifice is blocked</li> <li>The speed is too low to reach the rated speed</li> <li>Insufficient liquid volume in the suction bucket</li> <li>Rotor and stator wear</li> <li>Medium viscosity is too high</li> </ul>	<ul style="list-style-type: none"> <li>Dredge the pipe</li> <li>Adjust the speed to the rated value</li> <li>Fill the suction bucket with liquid, raise the level</li> <li>Replace stator or rotor</li> <li>Heating medium, reducing viscosity</li> </ul>
Overvoltage and overcurrent	<ul style="list-style-type: none"> <li>Pressure holding and pump jamming</li> <li>Motor Jam, overload, load</li> </ul>	<ul style="list-style-type: none"> <li>Check the pipeline blockage, check the medium viscosity, particles, cooling condensation and so on</li> <li>Separate the pump from the motor and check the motor after power on</li> </ul>
Abnormal vibration and noise of pump	<ul style="list-style-type: none"> <li>Cavitation: the suction pipe is blocked, the pipe is too thin, and the flow rate is fast</li> <li>Abnormal under high pressure, mainly stator damage and mechanical parts damage</li> <li>The motor makes abnormal noise and the magnetic flux sound is obvious</li> <li>The static friction between stator and rotor is obvious, and the sound is very sharp</li> <li>The medium is easy to precipitate and adsorb on the surface of the tator cavity, and the flushing is not sufficient or the flushing method is incorrect</li> </ul>	<ul style="list-style-type: none"> <li>Cavitation problem can be eliminated</li> <li>Replace worn parts</li> <li>Adjust the inverter parameter settings</li> <li>Disassemble and check the stator cavity and medium precipitation</li> <li>The stator is worn to the limit and needs to be replaced</li> </ul>
Shaft seal leakage	<ul style="list-style-type: none"> <li>Mechanical seal damage/medium corrosion</li> </ul>	<ul style="list-style-type: none"> <li>Replace the mechanical seal</li> </ul>
Motor/stator overheating	<ul style="list-style-type: none"> <li>Non stepless speed regulating motor is used for variable speed</li> <li>Running torque is too large, dry running for a long time</li> <li>The pump shaft is not concentric with the reduction motor shaft</li> <li>Medium temperature is too high</li> <li>High-speed operation for a long time, medium viscosity or gravity is too large load operation</li> </ul>	<ul style="list-style-type: none"> <li>Increase the operating frequency to above 35Hz</li> <li>Ensure sufficient feeding and reduce running torque</li> <li>Readjust the coaxiality</li> <li>Replace high-temperature resistant stator and adjust rotor size</li> <li>Reduce the running speed, dilute or heat medium, or choose a more suitable pump type</li> </ul>



If the fault reasons are uncertain, please cut off the power(gas) supply immediately and notify your distributor for further check.