重庆水泵厂有限责任公司简介

重庆水泵厂有限责任公司（原重庆水泵厂）是国内专业从事计量泵、往复泵、自平衡离心泵、低压离心泵以及以泵为主机的除氧系统和成套加药装置开发、制造、生产的主导企业；产品广泛用于石油、化工、煤化工、核工业、电力、国防等领域，并远销国外；

公司始建于1951年，现有员工900余人，高中级职称的工程技术和管理人员218人，国家级专家5人，生产加工设备570余台套，是国家机械工业和全国泵行业重点骨干企业，重庆质量效益型企业，中石油、中石化、中海油、中冶一级入网成员；50多年来，积淀了雄厚的技术装备和人力资源，为国民经济各行业提供了大批的优质产品；公司管理实现网络化；

公司产品技术开发中心获得国家认可，设有流体力学、流体机械、化工机械、给排水、电气及自动化控制等专业；公司拥有14项隔膜泵专利技术，5项离心泵专利技术，1项化工齿轮泵专利，1项环保产品专利，具有一、二、三类压力容器设计和制造资格；产品多次获得国家、部、市技术进步奖，优质产品奖等多项奖励；

公司质量保证体系：取得ISO9001国际质量体系认证和军工体系认证；产品开发、制造、设计、生产、检验、组装、测试以及售后服务等都有严密的组织机构和管理体系；

公司是西南地区泵类产品检测中心，产品检测手段完备：有高速动平衡机、万能试验机、探伤设备、金相显微镜、拉力试验机、冲击试验机、硬度试验机、碳硫分析仪、光谱分析仪等检验设备，设有力学实验室和理化分析室以及计量泵微机试验台、往复泵试验台、离心泵检测试验台、成套装置检测中心；

质量、品牌、信誉是我们永恒的追求，顾客满意是我们的宗旨！公司一贯坚持以顾客为中心，满足市场不断发展、变化的需求，我们愿与顾客精诚合作，互利双赢，共谋发展；公司全体员工衷心欢迎国内外的新老客户前来咨询、合作！

A brief introduction to Chongqing Pump Industry Co., Ltd.

Chongqing Pump Industry Co. Ltd. (former Chongqing Pump Works) is a leading enterprise in China of developing and manufacturing metering pump, reciprocating pump, self-balance centrifugal pump, and complete chemical feed system with metering pump as main machine, which are widely used in such fields as petroleum, chemical, coal chemical, unclear industry, power, national defense, etc. and exported oversea.

Initially established in 1951, the company has now more than 900 people and 218 of them are engineering staff and managerial personnel with titles of intermediate or senior professional post, including 5 experts at national level, and possesses over 570 production equipments, is one of flagship companies in the Chinese machinery inclustry and pump industry, a quality and benefit type enterprise and a member of the first class network of CNOC, SINOPEC, CNOOC and CNMC. For over 50 years, the company has accumulated rich human resources and technical equipment, supplied large quantities of high quality products for the national economy, and realized the networked management in all aspects.

The company's technical development center which has been approved by the state offers such specialties as fluid mechanics, fluid machinery, chemical machinery, water supply and drainage, electrical control, and automatic control. The company is qualified for design and fabrication of classes 1, 2 and 3 pressure vessels, and possesses many patented technologies: 14 diaphragm pump technologies, 5 centrifugal pump technologies, 1 chemical gear pump technology, and 1 environmental protection product. Its products won Technical Progress Prize and High Quality Product Prize many times by the state, the ministry and the municipality.

The company won ISO 9001 Certificate and Certificate Conformity of Quality System Certification of Machinery Military Product Supplier, and has a compact organization and management system for product development, design, fabrication, assembly, inspection and test, and afterservice.

The company is also an inspection center in southwest China of pump products, set up a mechanics laboratory and a physicochemical analysis room, and has complete inspection and test equipment such as high-speed dynamic balancing machine, universal testing machine, flaw detector, metallurgical microscope, tension testing machine, impact testing machine, hardness tester, carbon-sulfur analyzer, spectral analyzer, computer-based test beds for metering pump, reciprocating pump and centrifugal pump, and test center for complete sets of equipment, etc.

Quality, brand and prestige are what our company pursues perpetually. Satisfying customers is our purpose. The company consistently perseveres in the principle of focusing the customer and meeting the ever-growing and ever-changing market. We are willing to sincerity cooperate with customers for mutually beneficial win-win, and common development, and warmly welcome the regular and new customers at home and abroad to consult and cooperate.

液 压 隔 膜 泵
Hydraulic Diaphragm Pumps

1、概　述

本公司于 l955 年制造成功国产第一台三缸高压往复泵，至今往复泵已形成 l5 个机座系列 ,500 多种规格，最大流量 800m^3/h, 最高排出压力 63Mpa，最大柱塞力 l000kN，最大功率 2240kW 。公司自上世纪 60 年代中期研究、生产液压隔膜计量泵 ,60 年代末开始批量出口罗马尼亚、阿尔巴尼亚等国液压隔膜式泥浆泵，至今已具有几十年的设计、制造技术和服务经验，并获得多项专利。

公司于 80 年代末在三缸往复泵和隔膜计量泵的基础上研制、开发、生产往复式液压隔膜泵，现已形成系列产品。该系列产品为卧式单作用或双作用往复式液压隔膜泵，借助隔膜元件将输送浆料全部隔离在介质流道侧，使活塞部件处在液压油下工作而大大地延长了密封件的寿命。该泵具有隔膜限位补油、双隔膜破裂监测报警及均流无沉积等优点，采用料浆型专用组合阀组，适于输送颗粒浓度大、易沉淀、磨砺性强、腐蚀性强的介质；泵组运行稳定可靠，阀组、隔膜寿命长，维护快捷方便。本系列有专门为有色金属行业“湿法冶金”工艺流程输送各种高温、高磨蚀带腐蚀性矿浆料，煤化工行业输送水煤浆料以及泥浆、炉渣浆等料浆介质开发的低速隔膜泵；还有用于油田开采、石油化工、电力、化工等行业输送污水以及腐蚀和非腐蚀性溶液介质的中速隔膜泵。

本系列泵根据需要可提供三缸型隔膜泵、单缸及串联型隔膜泵，其流量范围 2-800m^3/h，最高工作压力≤ 25Mpa，输送料浆类介质时选用低速泵，最大颗粒 < 8mm、浓度≤ 75%、温度≤ 200℃；输送溶液类介质时选用中速泵。

泵的型号意义如下：

1.General

The company has accumulated decades of rich experience in design, fabrication and service of reciprocating pump which, since its successful manufacture of the first hi-pressure triplex reciprocating pump in 1955, has now developed the reciprocating pump into of 15 frame series and of more than 500 specifications, offering maximum discharge capacity up to 63 MPa, maximum plunger force to 1000 kN, maximum power to 1400 kW, and possessed many patented technologies.

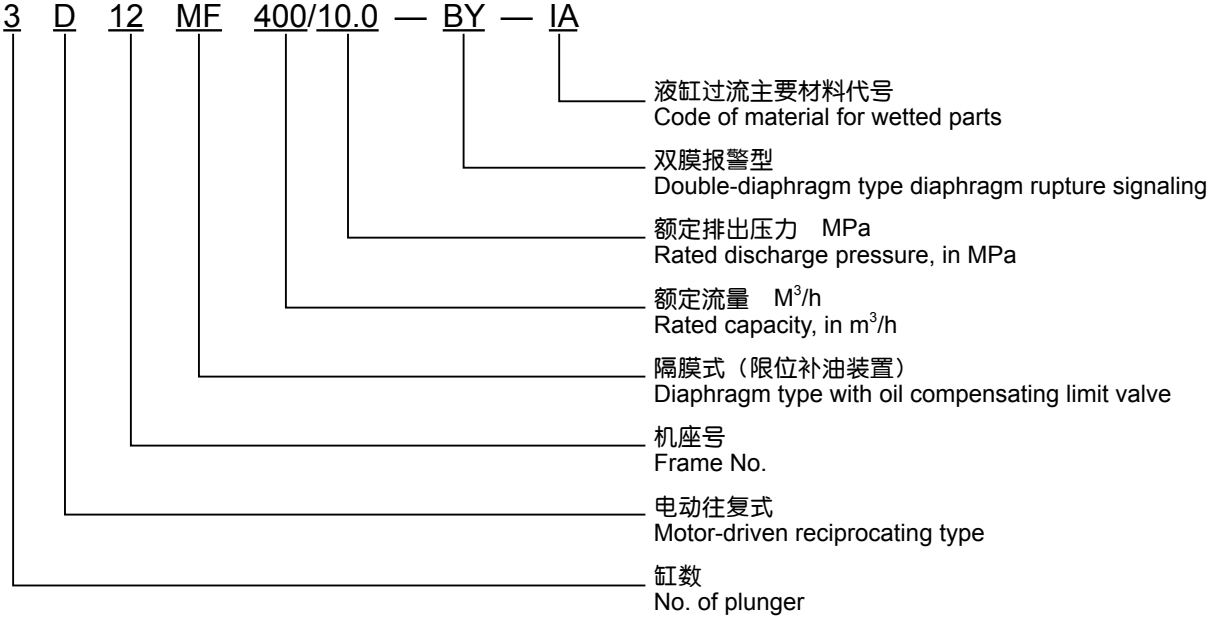
The hydraulic diaphragm metering pump was begun to be developed and produced in the middle of the 1960s, and exported to Romania, Albania and other countries in the end of the 1960s.

The hydraulic diaphragm pump was developed out of the triplex reciprocating pump and diaphragm metering pump in the end of the 1990s and has been now evolved to series of products. This series of products are horizontally single-acting piston reciprocating diaphragm pumps. With the diaphragm which totally separates the pumped fluid from the piston cylinder parts, the lifetime of wear-and tears parts such as piston, sealing ring and cylinder bush is greatly prolonged for delivering high abrasive pulps. The pump is designed with oil compensating limit device, double-diaphragm type rupture signaling, even flowing without depositing and special combined valve set for abrasive product containing solids liable to deposit and corrosive fluids. The pump set features reliable and smooth operation, durable vale set and diaphragm, ease of maintenance. In this series of products, the lower speed diaphragm pumps are used for hi-temperature, highly abrasive and/or corrosive ore pulps liable to settle and containing big solids (size ≤ 8 mm, content up to 75%) at the temperature ≤ 200 ℃, coal pulp, iron slag in nonferrous metal industry wet-process metallurgy and coal chemical industry; and the intermediate speed pump for sewage, corrosive and non-corrosive solutions in recovery of petroleum, electric power and chemical industries, etc.

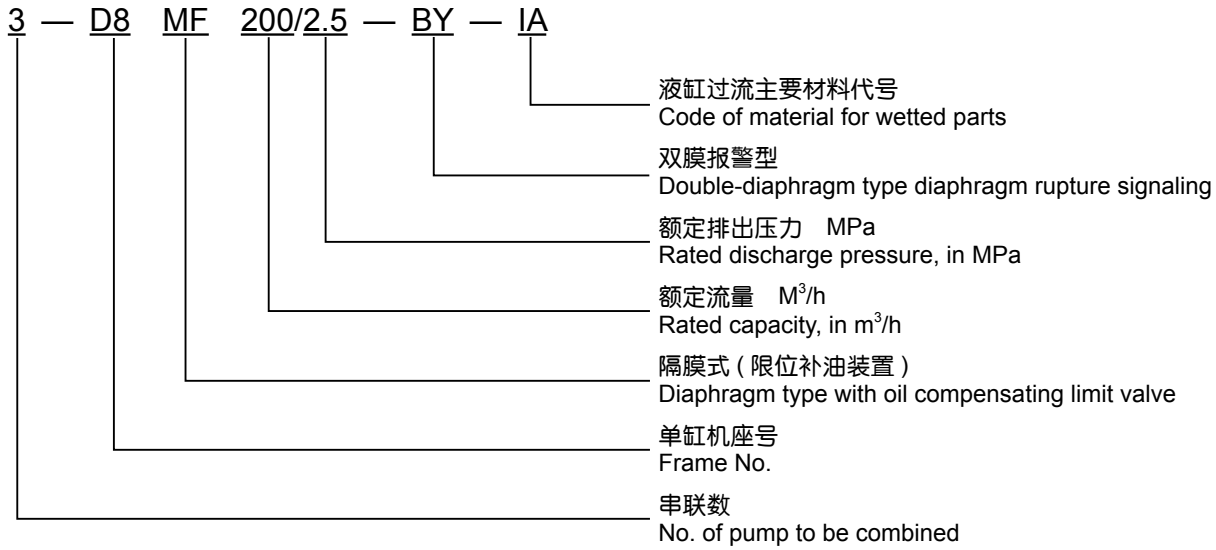
The triplex diaphragm pump, single-cylinder diaphragm pump and multiplex pump in line are available for different applications, offering capacities from 2 to 800m3/h and the maximum working pressure up to 20 MPa.

Explanation to the model number of pump：

三缸型 For triplex pump



单缸及串联型 For single-cylinder pump and multiplex pump in line



液缸过流部份主要材料 Materials for Main Wetted Parts

材料代号 Code	I	IA	II	III	IV
材料牌号 Grade	ZG270 - 500	ZG20Crl3	1Crl8Ni9Ti	(ZG) 1Crl8Nil2Mo2Ti	(ZG) 316 L

2、专利技术

本系列隔膜泵，采用拥有自主知识产权的专利技术有：

- 隔膜监测报警装置 (专利号 89213068.7)
- 隔膜限位补油装置 (专利号 90214975.X)
- 液力管式隔膜泵 (专利号 90214976.8)
- 分离型往复式液压隔膜泵 (专利号 200320104721.4)
- 输送易沉淀颗粒的均流式无沉积隔膜泵液缸部件 (专利号 200420060539.8)
- 活塞错位型往复泵 (专利号 200410022587.2)
- 往复式容积泵用柱形防腐空气室 (申请号 200620110122.7)
- 矿浆泵用组合阀 (申请号 200620110121.2)
- 往复式容积泵用气液接触式安全充气空气室 (申请号 200620110639.6)
- 一种囊式报警隔膜及带有本隔膜的往复式泵 (申请号 200620110040.9)

2. Patented techniques

- Diaphragm rupture signaling（Patent No.: 89213068.7）
- Oil compensating limit valve（Patent No.: 90214975.X）
- Hydraulic tubular diaphragm pump（Patent No.: 90214976.8）
- Hydraulic diaphragm pump with separated type cylinders（Patent No. 200320104721.4）
- Diaphragm pump cylinder for fluid containing solids and liable to settle with even following and without sedimentation（Patent No.: 200420060539.8）
- Staggered-piston pump（Patent No.: 200410022587.2）
- Cylindrical anticorrosion damper for positive displacement pump — reciprocating（Patented application No.: 200620110122.7）
- Valve set for ore pulp pump（Patented application No.: 200620110121.2）
- Gas—liquid contact type safe-charging damper for positive displacement pump — reciprocating（Patented application No.: 200620110639.6）
- Bag-type diaphragm with rupture signaling（Patented application No.: 200620110040.9）

3 泵组技术特点

本系列隔膜泵组主要由传动箱、隔膜泵头、减速机、变频电机、安全阀、缓冲器、润滑油泵及监测控制系统等部分组成。本泵通过调节变频器来改变泵速达到无级调节泵的流量。以满足管路工艺流程要求。隔膜泵、减速机、电动机通过联轴器连接，分别组装在钢制底座上便于起吊和安装。

3.1 动力端

● 小功率泵传动箱与减速箱共体，大功率泵则与减速箱分体，布局合理。

● 传动箱体采用高牌号铸铁浇铸，具有良好的吸震性。

● 采用有限元分析软件对曲轴、连杆、十字头、阀等进行结构分析。

● 曲轴采用高强度合金锻材和多点支承形式，其抗弯抗疲劳性好、承载能力强。

● 小功率泵连杆大头轴瓦采用巴氏轴承合金，小头衬套采用高强度耐用铜基合金；大功率泵连杆大、小头均采用滚动轴承，具有免维修、运行寿命长的特点。

● 连杆摩擦副及十字头采用油压式强制润滑。

3.2 液力端

● 液压油腔设有隔膜限位补油装置 (专利技术) 实现适时补油，避免过量补油现象，有效延长隔膜的运行寿命。

● 采用双隔膜并设有隔膜破裂报警装置 (专利技术)，当任一隔膜破裂时通过监控装置及时报警停车，避免液压油腔和管道被污染和腐蚀。

● 隔膜备有聚四氟乙烯、聚四氟乙烯 + 耐油橡胶复合体、耐酸碱耐油橡胶等多种材料满足各种使用工况。

● 泵头介质腔采用均流式结构 (专利技术) 使矿浆料处在紊流状不易沉积。

● 泵头配不同材质满足强腐蚀、高磨蚀特殊使用要求。

● 矿浆阀组针对高磨蚀带颗粒工况，采用耐磨橡胶 + 高硬 (≥ 60HRc) 金属组合的翼形锥阀，具有缓冲、降噪、密封可靠、泵效高的特点。

● 标准阀组配有多种耐蚀合金材料，满足不同溶液类强腐蚀介质的输送需求 -

● 吸、排阀组呈阶梯布局，不用拆卸管路便可快速拆装阀组和清淤结。

● 泵头缸盖为前置式，借助专用起吊工具勿需拆卸管路便轻松拆装缸盖、隔膜等缸内零件。

● 活塞缸套经精细衍磨和碳氮共渗硬化处理，密封元件寿命长。

● 活塞接杆增设中间接段，勿需卸下缸套轻松拆装活塞环，接杆采用卡板式连接。

● 前缸盖、阀盖和阀座采用液压快速拆卸工具拆装，省力又省时。

3. Technical characteristics of the pump set

The pump set consists mainly of power frame, diaphragm pump head, speed reducer, frequency controlled AC motor, safety valve, damper, oil pump, monitor and control system. Capacity can be adjusted infinitely by means of a converter to control the pump speed to meet the requirements of process flow.

The diaphragm pump, speed reducer and motor are connected together by couplings, and mounted on their steel base respectively for ease of lifting and installation.

3.1 Power end

- Small-power pump has a common frame containing the drive elements and reducing gears; large-power one has a separate speed reducer.
- Power frame of high-grade cast iron.
- Structural analysis of crankshaft, connecting rod, cross-head and valve employing finite element analysis software
- Made of high strength alloy, the forged crankshaft is multi-point supported, having high load-bearing strength and bending and fatigue resistances.
- For the small-power pump, the connecting rod big end bearing shell is made of babbit metal and the small end bushing of high strength copper-base alloy for extended service life; for the large-power pump, both the connecting rod big end and small end use rolling bearings with long service life, requiring little maintenance.
- Frictional pairs, such as connecting rod and cross head, use force-feed lubrication system.

3.2 Hydraulic end

- Hydraulic oil chamber is designed with the patented oil compensating limit valve which can feed oil at the right moment without excessive feed, extending the service life of the diaphragm effectively.
- Double diaphragm is designed with patented diaphragm rupture signaling for preventing the pumped and hydraulic fluids intermixing. During operating the rupture of one of the two diaphragms is reliably signaled. With the appropriate wiring, the pump driver may be shut down.
- Diaphragms of PTFE and compound of PTFE and oil-resistant rubber and other various diaphragms of acid proof, alkaline proof and oil resistant rubber materials are available for all applications.
- Process fluid chamber in the pump head is even flowing design that makes the pumped ore pulp in a turbulent-flow condition at which solids is not easy to sedimentate.
- Pump head of different materials for highly corrosive and/or abrasive fluids.
- Wing type conical valves of high-abrasion rubber plus highly hardened metal （ ≥ 60 HRc）, features buffer effect, low noise, reliable leak-tight design, and high efficiency.
- Various corrosion resistant alloy steels for standard valve set for different corrosive fluids.
- Stepped layout of suction and discharge valve sets for extreme ease of quick disassembling, reassembling and cleaning without disconnection of pipelines.
- Front-mounted cylinder head design for easy disassembly and reassembly of cylinder head, diaphragm and other internals in the pump head without dismounting the pipeline.
- Ground and nitrogen-carbon casehardened piston and cylinder bushing with longer service life.
- With an intermediate section between piston extension and crosshead, the piston ring and sealing elements may be disassembled easily without removing the cylinder bushing.
- Quick hydraulic assembling/disassembling tool for front cylinder head, valve cover, and valve seat with a saving of time and labor.

3.3 润滑系统

● 传动箱设置独立润滑系统，齿轮泵提供充足润滑油保证运动件的润滑效果。

● 油管路配有压力表、安全阀、粗精过滤器确保润滑洁净高效。

● 油路设有油温油压监测装置和就地显示表，当油温油压超出设定值时会报警和停车，确保设备安全运行。

3.4 底座部件

● 底座采用型钢焊接，设有吊耳、调节螺钉便于起吊和安装，减速机、电机、油泵、冷却器、联轴器及护罩组装在钢制底座上。

● 根据用户需要，可配柴油机、离合器、变速箱进行撬装组合，满足野外移动作业。

3.5 减速机

选用传动效率高、运行噪声低的硬齿面减速机，小功率一般采用自然风冷，大功率减速机一般采用软化水进行冷却。

3.6 缓冲器

● 柱形缓冲器采用优质无缝钢管制作，可选配自动补气装置 (专利技术) 进行适时补气或人工补气。

● 球形缓冲器采用囊式充气型，囊内充灌氮气，气囊设有保护器以防意外破裂。

4 泵组监控系统

泵组监控系统由干式变压器、交流变频柜、就地控制柜及现场一次仪表等组成，可实现数字通信控制方式。

4.1 交流变频柜

交流变频柜由进电源熔断器柜、整流柜、逆变柜组成，主要功能用于调节变频电机的转速以达到无吸调节泵的流量，带上通讯模块可接收和输出 DC4 ～ 20mA 信号达到自动控制的目的。

4.2 就地控制柜

就地控制柜由电源模块、cpu 模块.、通讯模块、I ／ o 模块、模拟量模块开关、一体化电源及电气元件、柜子等组成，对隔膜泵、润滑油泵等进行就地手动 ／ 远程自动操作控制，远程状态下接收通讯系统传送的控制数字信号，同时能将泵的运行状态和综合故障信号等传回至 DCS 系统，以便中控室对运行设备在线监测及控制。

4.3 主要连锁控制项目

● 主电机启动 ／ 停止 ／ 频率调节

● 隔膜破裂报警检测

3.3 Lubrication system

- Separate lubrication system for power frame in which the oil pump feeds the moving parts with full lubricating oil.
- Pressure gage, safety valve, rough / fine filters for the oil line.
- Monitor system and local indicator for oil line system, which sends a signal in case the oil temperature and/or pressure exceed a setting value, ensuring safe operation of the machine.

3.4 Base

- Welded base made of section steel with lifting eye, setting screw for ease of lifting and installation of pump, speed reducer, motor oil pump, cooler, .and coupling guard
- Skid-mounted combination of diesel engine, clutch and variable-speed drive available for field operation according to individual customer’s demand.

3.5 Speed reducer

Hardened tooth surface gear reducer offers high driving efficiency and low noise. Small-power reducer is cooled naturally and large-power one by softened cooling water.

3.6 Damper

- Cylindrical damper made of high-quality seamless steel tube with optional automatic air charger (patented) or manual charging.
- Spherical damper of bladder type is charged with nitrogen. The bladder is provided with protection device.

4. Monitor system of pump set

consisting of dry-type transformer, AC frequency conversion cabinet, local control panel and on-site primary instruments realizes digital communication control.

4.1 AC Frequency conversion cabinet

includes power fuse cabinet, rectifier cabinet, and dc-to-ac converter cabinet, used to control the motor speed to obtain the infinitely variable capacity. Automatic control of capacity may be obtained through the communication module which receives and sends a signal of DC 4 ～ 20 mA.

4.2 Local control panel includes

power module, CPU module, communication module, I/O module, analog module, power pack with switch, and electrical elements, used for local / remote control of operation of diaphragm pump and oil pump. Under remote control mode, the panel receives digital control signal from the communication system, and feeding back the signals of operation condition and fault of pump to DCS system so that the central control room can perform on-line monitoring and control of equipment under operation.

4.3 Main interlocking control activities

- Main motor start / stop / frequency regulation
- Monitoring of diaphragm rupture signaling

● 润滑油泵（主泵、减速机）启动 / 停止
● 润滑油油温、油压检测
● 润滑油加油检测
● 主电机绕组和轴承温度检测
● 减速机油温、油压检测
● 就地 / 远程操作

- Oil pumps (for main pump and speed reducer) start / stop
- Detection of oil temperature and pressure
- Detection of oil heating
- Detection of temperatures of motor windings and bearings
- Detection of oil temperature and pressure for speed reducer
- Local / remote / operation

5 流量调节方式

● 配交流变频器，流量在 10%～ 100%范围内无级调节；
● 配液力偶合器，流量在 30%～ 95%范围内无级调节。

5. Capacity adjustment methods

- AC frequency converter for infinitely variable capacity over a range of 10%～ 100%；
- Hydraulic coupler for infinitely variable capacity over a range of 30%～ 95% .

6 供货范围

隔膜泵	一套
减速机（含内置式）	一套
（交流变频）电动机	一台
公共底座、联轴器及护罩	一台
进口缓冲器	一套
出口缓冲器	一套
就地控制柜	一套
交流变频柜	一套
液压拆卸工具和专用工具	一套
随机备件	一套
技术资料	一套

6. Scope of supply

Diaphragm pump	1 set
Speed reducer (including built -in type)	1 set
Frequency controlled AC motor	1 set
Common base, coupling and guard	1 set
Suction damper	1 set
Discharge damper	1 set
Local control panel	1 set
AC frequency conversion cabinet	1 set
Hydraulic assembling/disassembling tool and special tool	1 set
Accompanying spare parts	1 set
Technical documents	1 set

7 订货须知

● 订货时请注明输送介质的物理性能和化学性能（如介质名称、工作压力、介质比重、介质浓度、颗粒度、介质粘度、PH 值、操作温度、气化压力等）。

7. Points for attention when ordering

- When placing an order for goods, please specify the physical and chemical properties of fluid to be pumped, such as fluid name, density, concentration, viscosity, PH value, vapor pressure, pumping temperature and pressure, etc.

D8MF 型料浆类隔膜泵参数表
Table of Parameter of Model D8MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
2.4	20	90	39	30	68 × 10	60 × 12
2.7			44	37		
3			*49	45		
3.3			55	45		
3	16	*100	39	30		
3.3			44	37		
3.8			*49	45		
4			55	45		
3.5	13	110	39	30	76 × 10	68 × 12
4			44	37		
4.5			*49	45		
5			55	45		
4.8	10	*125	39	30		
5.5			44	37		
6			*49	45		
6.5			55	45		
6	8	140	39	30	89 × 10	76 × 11
6.8			44	37		
7.5			*49	45		
8.5			55	45		
8	6.3	*160	39	30		
9			44	37		
10			*49	45		
11			55	45		
10	5	180	39	30	108 × 10	89 × 11
11			44	37		
12.5			*49	45		
14			55	45		
12.5	4	*200	39	30		
14			44	37		
16			*49	45		
17.5			55	45		
16	3.2	225	39	30	127 × 10	108 × 10
18			44	37		
20			*49	45		
22			55	45		
20	2.5	*250	39	30		
22			44	37		
25			*49	45		
28			55	45		
25	2	280	39	30	140 × 10	114 × 10
28			44	37		
31.5			*49	45		
35			55	45		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

2-D8MF 型料浆类隔膜泵参数表
Table of Parameter of Model 2- D8MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
5	20	90	39	45	83 × 10	60 × 12
5.5			44	55		
6.3			*49	55		
7			55	75		
6.3	16	*100	39	45		
7			44	55		
8			*49	55		
9			55	75		
7.5	13	110	39	45	95 × 10	68 × 12
8.5			44	55		
9.5			*49	55		
11			55	75		
10	10	*125	39	45		
11			44	55		
12.5			*49	55		
14			55	75		
12.5	8	140	39	45	114 × 10	76 × 12
14			44	55		
16			*49	55		
18			55	75		
16.5	6.3	*160	39	45		
18.5			44	55		
21			*49	55		
23			55	75		
21	5	180	39	45	140 × 10	89 × 12
24			44	55		
26.5			*49	55		
30			55	75		
26	4	*200	39	45		
29			44	55		
32.5			*49	55		
36.5			55	75		
33	3.2	225	39	45	168 × 10	102 × 10
37			44	55		
41.5			*49	55		
46.5			55	75		
41	2.5	*250	39	45		
46.5			44	55		
52			*49	55		
58			55	75		
52	2	280	39	45	185 × 10	108 × 10
58			44	55		
65			*49	55		
73			55	75		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

3-D8MF 型料浆类隔膜泵参数表
Table of Parameter of Model 3- D8MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
7.5	20	90	39	75	95 × 10	68 × 14
8.5			44	75		
9.5			*49	75		
10.5			55	90		
9.5	16	*100	39	75		
10.5			44	75		
12			*49	75		
13.5			55	90		
11.5	13	110	39	75	114 × 10	76 × 12
13			44	75		
14.5			*49	75		
16			55	90		
15	10	*125	39	75		
17			44	75		
19			*49	75		
21.5			55	90		
19	8	140	39	75	114 × 10	89 × 12
21.5			44	75		
24			*49	75		
27			55	90		
25	6.3	*160	39	75		
28			44	75		
31.5			*49	75		
35			55	90		
32	5	180	39	75	168 × 10	108 × 12
36			44	75		
40			*49	75		
45			55	90		
39	4	*200	39	75		
44			44	75		
49			*49	75		
55			55	90		
50	3.2	225	39	75	205 × 10	133 × 10
56			44	75		
62.5			*49	75		
70			55	90		
62	2.5	*250	39	75		
70			44	75		
78			*49	75		
87			55	90		
78	2	280	39	75	219 × 10	140 × 10
87.5			44	75		
98			*49	75		
110			55	90		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

3D9MF 型料浆类隔膜泵参数表
Table of Parameter of Model 3D9MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
19	20	*125	39	132	133 × 10	127 × 14
21.5			44	160		
24			*49	185		
27			55	200		
24	16	140	39	132		
27			44	160		
30			*49	185		
34			55	200		
32	12.5	*160	39	132	168 × 10	133 × 14
36			44	160		
40			*49	185		
45			55	200		
40	10	180	39	132		
45			44	160		
50			*49	185		
56			55	200		
50	8	*200	39	132	203 × 10	159 × 12
56			44	160		
62			*49	185		
70			55	200		
63	6.3	225	39	132		
71			44	160		
79			*49	185		
89			55	200		
78	5	*250	39	132	219 × 10	168 × 12
88			44	160		
98			*49	185		
110			55	200		
98	4	280	39	132		
110			44	160		
123			*49	185		
138			55	200		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

3D10MF 型料浆类隔膜泵参数表
Table of Parameter of Model 3D10MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
40	20	*160	39	280	180 × 10	168 × 20
45			44	315		
50			*49	355		
57			55	400		
51	16	180	39	280		
57			44	315		
63			*49	355		
71			55	400		
63	12.5	*200	39	280	237 × 10	180 × 16
71			44	315		
81			*49	355		
91			55	400		
81	10	225	39	280		
91			44	315		
102			*49	355		
114			55	400		
100	8	*250	39	280	273 × 10	219 × 14
113			44	315		
125			*49	355		
141			55	400		
125	6.3	280	39	280		
141			44	315		
158			*49	355		
178			55	400		
160	5	*315	39	280	325 × 10	245 × 12
180			44	315		
200			*49	355		
225			55	400		
203	4	355	39	280		
230			44	315		
255			*49	355		
286			55	400		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

3D11MF 型料浆类隔膜泵参数表
Table of Parameter of Model 3D11MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
78	20	*200	39	560	245×12	219×24
88			44	630		
98			*49	710		
110			55	800		
100	16	225	39	560		
112			44	630		
125			*49	710		
140			55	800		
124	13	*250	39	560	325×12	245×20
140			44	630		
155			*49	710		
175			55	800		
156	10	280	39	560		
176			44	630		
196			*49	710		
220			55	800		
200	8	*315	39	560	406×12	299×18
225			44	630		
250			*49	710		
280			55	800		
255	6.3	355	39	560		
286			44	630		
320			*49	710		
360			55	800		
325	5	*400	39	560	456×12	325×16
365			44	630		
408			*49	710		
458			55	800		
415	4	450	39	560		
468			44	630		
520			*49	710		
585			55	800		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

3D12MF 型料浆类隔膜泵参数表
Table of Parameter of Model 3D12MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
98	20	*200	39	710	245×12	219×24
110			44	800		
123			*49	900		
138			55	1000		
125	16	225	39	710	273×12	245×24
140			44	800		
158			*49	900		
176			55	1000		
155	12.5	*250	39	710	325×12	273×24
175			44	800		
195			*49	900		
218			55	1000		
195	10	280	39	710	356×12	299×24
220			44	800		
245			*49	900		
275			55	1000		
210	9	*290	39	710		
238			44	800		
265			*49	900		
298			55	1000		
250	8	*315	39	710	406×12	299×24
280			44	800		
312			*49	900		
350			55	1000		
320	6.3	355	39	710	457×12	325×21
358			44	800		
400			*49	900		
450			55	1000		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

3D13MF 型料浆类隔膜泵参数表
Table of Parameter of Model 3D13MF Diaphragm Pump for Pulps

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
155	20	*250	39	1120	377 × 12	273 × 30
175			44	1250		
195			*49	1400		
218			55	1600		
195	16	280	39	1120	377 × 12	299 × 31
220			44	1250		
245			*49	1400		
275			55	1600		
250	13	*315	39	1120	406 × 14	325 × 30
280			44	1250		
312			*49	1400		
350			55	1600		
320	10	355	39	1120	457 × 14	356 × 30
358			44	1250		
400			*49	1400		
450			55	1600		
405	8	*400	39	1120	508 × 14	406 × 30
455			44	1250		
507			*49	1400		
570			55	1600		
460	6.3	450	35	1000	530 × 14	426 × 30
515			*39	1120		
580			44	1250		
645			49	1400		
569	5	*500	35	1000	580 × 14	457 × 30
635			*39	1120		
715			44	1250		
800			49	1400		

注 : 带 * 的为优先系列

Note:*denotes preferred series.

D8MF 型溶液类隔膜泵参数表
Table of Parameter of Model D8MF Diaphragm Pump for Solutions

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
6.5	20	90	98	75	76×5	60×10
9			138	110		
8	16	*100	98	75		
11.5			138	10		
10	13	110	98	75	89×5	68×10
14			138	110		
13	10	*125	98	75		
18			138	110		
14.5	8	140	88	75	108×6	76×10
20			123	90		
19	6.3	*160	88	75		
27			123	90		
24.5	5	180	88	75	127×6	89×10
34			123	90		
30.5	4	*200	88	75		
42.5			123	90		
34.5	3.2	225	79	75	159×6	95×8
47.5			109	90		
42.5	2.5	*250	79	75		
59			109	90		
53.5	2	280	79	75	168×6	108×8
74			109	90		

2-D8MF 型溶液类隔膜泵参数表
Table of Parameter of Model 2- D8MF Diaphragm Pump for Solutions

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
13	20	90	98	110	108×6	76×12
18.5			138	160		
16.5	16	*100	98	110		
23			138	160		
20	13	110	98	110	127×6	89×12
28			138	160		
26	10	*125	98	110		
36			138	160		
29	8	140	88	90	159×6	95×10
40			123	132		
38	6.3	*160	88	90		
53			123	132		
48	5	180	88	90	185×7	114×8
68			123	132		
60	4	*200	88	90		
84			123	132		
69	3.2	225	79	90	219×8	133×8
95			109	132		
85	2.5	*250	79	90		
118			109	132		
108	2	280	79	90	245×8	140×8
148			109	132		

3-D8MF 型溶液类隔膜泵参数表
Table of Parameter of Model 3-D8MF Diaphragm Pump for Solutions

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
19	20	90	98	160	127 × 6	89 × 12
28			138	200		
24	16	*100	98	160		
34			138	200		
29	13	110	98	160	159 × 7	102 × 12
41			138	200		
38	10	*125	98	160		
53			138	200		
44	8	140	88	132	195 × 7	114 × 12
60			123	180		
57	6.3	*160	88	132		
80			123	180		
73	5	180	88	132	237 × 7	140 × 10
102			123	180		
90	4	*200	88	132		
125			123	180		
103	3.2	225	79	132	273 × 8	159 × 8
142			109	160		
128	2.5	*250	79	132		
176			109	160		
160	2	280	79	110	299 × 8	180 × 8
220			109	160		

3D9MF 型溶液类隔膜泵参数表
Table of Parameter of Model 3D9MF Diaphragm Pump for Solutions

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
48	20	*125	98	355	194 × 8	140 × 18
68			138	500		
61	16	140	98	355		
86			138	500		
72	12.5	*160	88	315	245 × 8	159 × 16
100			123	450		
92	10	180	88	315		
128			123	450		
113	8	*200	88	315	299 × 8	180 × 14
158			123	450		
144	6.3	225	88	315		
200			123	450		
160	5	*250	79	280	325 × 8	203 × 12
220			109	400		
200	4	280	79	280		
278			109	400		

3D10MF 型溶液类隔膜泵参数表
Table of Parameter of Model 3D10MF Diaphragm Pump for Solutions

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
82	20	*160	79	630	245 × 10	168 × 20
114			109	800		
105	16	180	79	630		
145			109	800		
115	12.5	*200	70	500	299 × 10	194 × 16
161			98	710		
146	10	225	70	500		
205			98	710		
160	8	*250	62	450	356 × 10	219 × 14
227			88	630		
202	6.3	*280	62	450		
287			88	630		
227	5	*315	55	400	406 × 10	245 × 12
326			79	560		
288	4	355	55	400		
414			79	560		

3D11MF 型溶液类隔膜泵参数表
Table of Parameter of Model 3D11MF Diaphragm Pump for Solutions

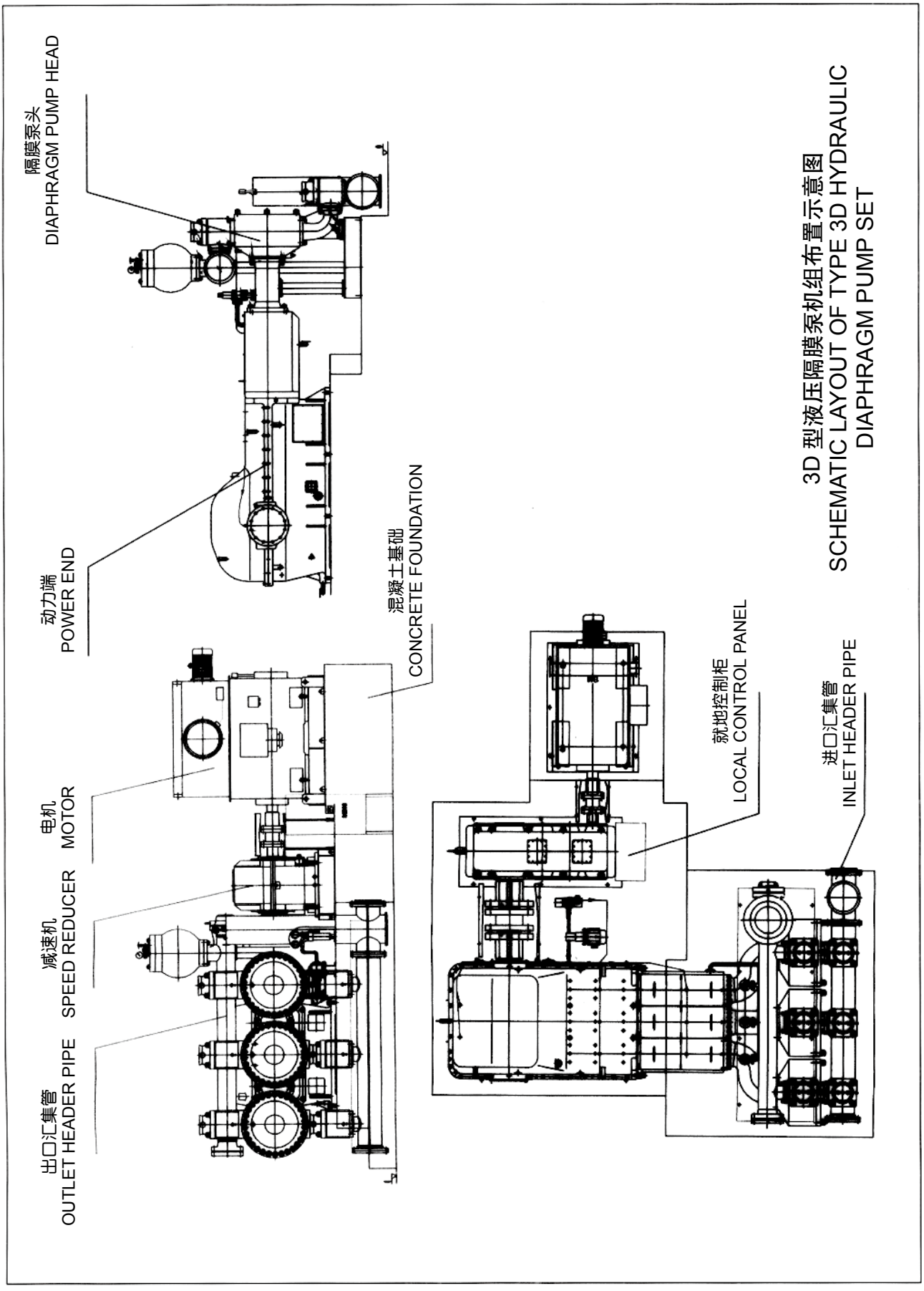
流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
143	20	200	70	1000	356 × 12	273 × 30
200			98	1400		
182	16	225	70	1000		
255			98	1400		
200	13	250	62	900	406 × 12	325 × 28
283			88	1250		
250	10	280	62	900		
355			88	1250		
282	8	315	55	800	457 × 12	377 × 24
405			79	1120		
360	6.3	355	55	800		
518			79	1120		
410	5	*400	49	710	508 × 12	377 × 20
585			70	1000		

3D12MF 型溶液类隔膜泵参数表
Table of Parameter of Model 3D12MF Diaphragm Pump for Solutions

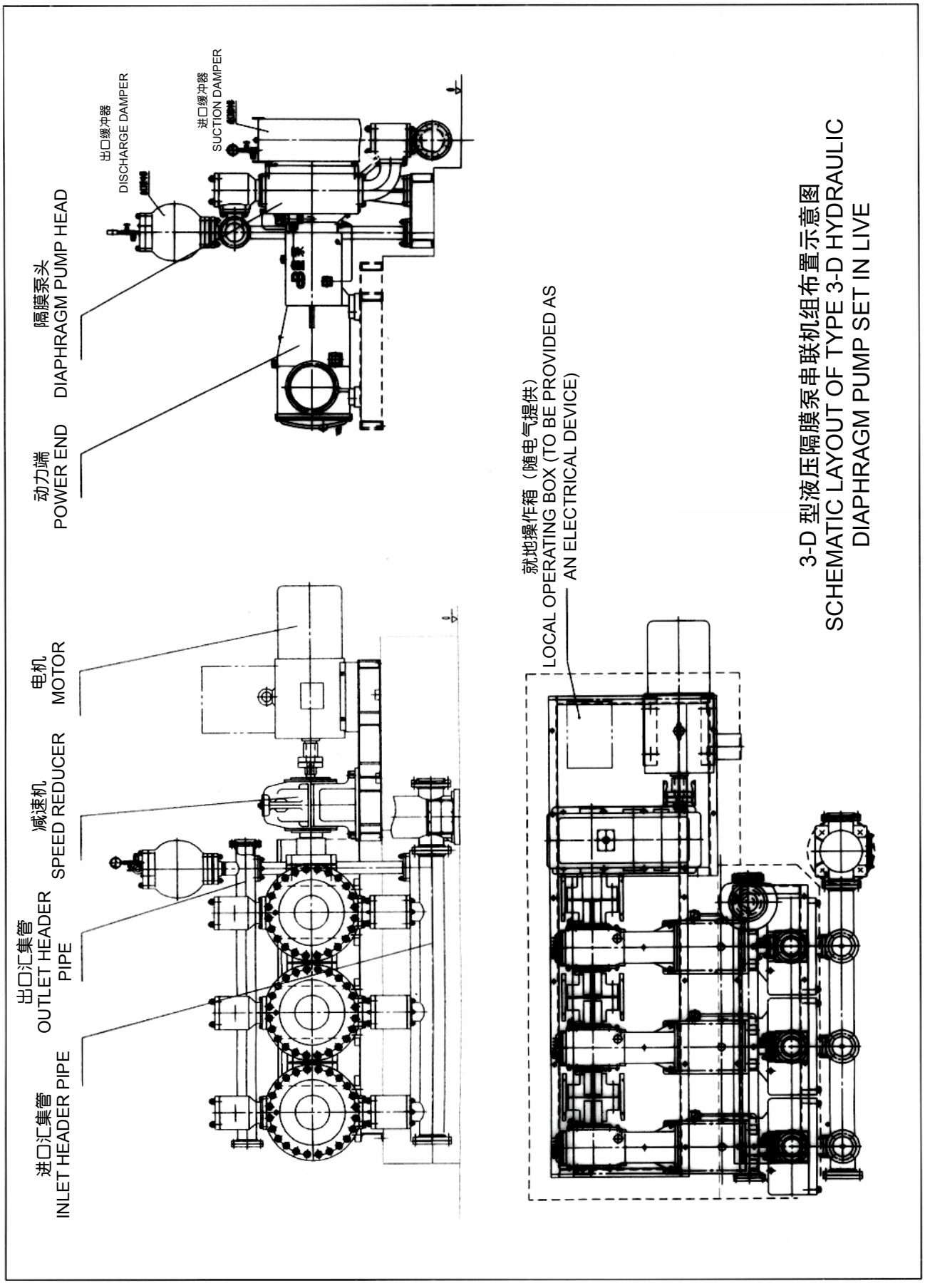
流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
158	20	*200	62	1250	325×12	219×25
225			88	2000		
200	16	225	62	1120	325×12	219×25
285			88	1600		
221	12.5	*250	55	1000	377×12	245×25
318			79	1400		
276	10	280	55	1000	426×14	356×25
400			79	1400		
300	9	*290	55	1000		
437			79	1400		
316	8	*315	49	900	457×14	406×25
452			70	1250		
360	6.3	355	44	800		
510			62	1100		

3D13MF 型溶液类隔膜泵参数表
Table of Parameter of Model 3D13MF Diaphragm Pump for Solutions

流量 Capacity m^3/h	压力 Pressure Mpa	活塞直径 Plunger dia. mm	泵速 Pump speed min^{-1}	电机功率 Motor power kw	进口外径壁厚 Outside dia Inlet mm	出口外径壁厚 wall thick.Outlet mm
221	20	*250	55	1600	377×12	245×26
318			79	2240		
276	16	280	55	1600	425×14	273×25
400			79	2240		
280	13	*315	44	1250	425×14	273×25
395			62	1800		
360	10	355	44	1250	457×14	299×20
505			62	1800		
405	8	*400	39	1120	508×14	299×20
570			55	1600		
515	6.3	450	39	1120	560×14	325×20
725			55	1600		
570	5	*500	35	1000	580×14	356×20
800			49	1400		



3D 型液压隔膜泵机组布置示意图
SCHEMATIC LAYOUT OF TYPE 3D HYDRAULIC DIAPHRAGM PUMP SET



3-D 型液压隔膜泵串联机组布置示意图
SCHEMATIC LAYOUT OF TYPE 3-D HYDRAULIC DIAPHRAGM PUMP SET IN LIVE