

上海宜菱泵业有限公司

上海宜菱泵业有限公司

上海宜菱泵业有限公司

地 址：上海市闸北区永和路459弄

电 话：021-51697765

免费电话：400-668-7774

传 真：021-51697765转802

网 址：<http://www.ylpv.net>



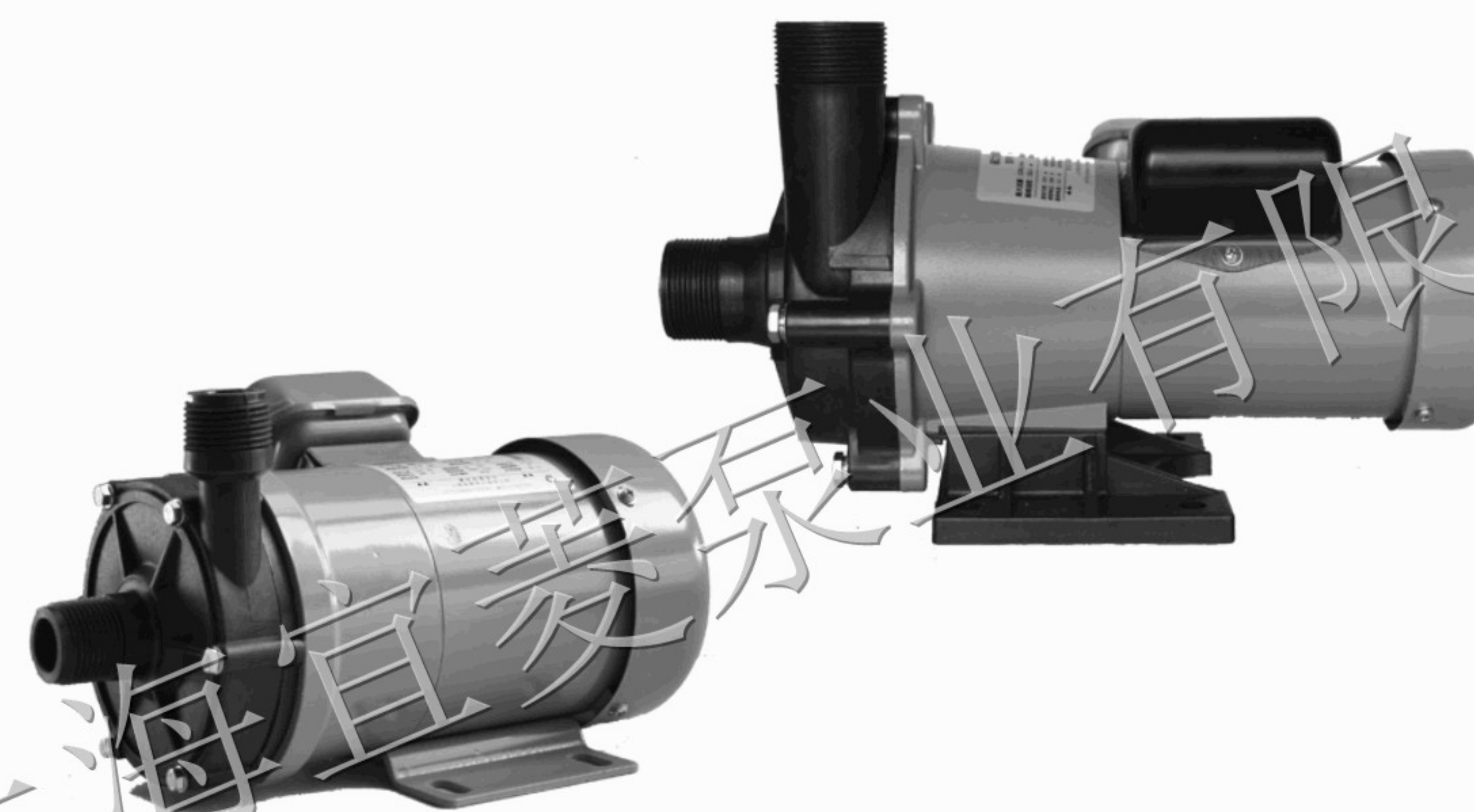
MP型
Type

磁 力 泵

Magnetic pump

使用说明书

Service Manual



上海宜菱泵业有限公司

SHANGHAI YILING PUMP CO., LTD.

目 录

CONTENTS

1.前言 INTRODUCTION	2
2.开箱检验 OPEN BOX AND CHECK	3
3.规格 SPECIFICATIONS	3
4.性能曲线 PERFORMANCE CURVE	4
5.外形尺寸 SIZE	5
6.使用注意事项 CAUTION	6
7.安装、配管、配线 INSTALLATION PIPEFITTING LINEFITTINGS	8
8.输送 CONVEYING	10
9.维修检测 MAINTENANCE AND CHECK	10
10.故障原因及对策 BREAKDOWN REASON AND COUNTERMEASURE	11
11.拆卸、组装 DISASSEMBLE ASSEMBLE	12
12.保修期与维修服务 GUARANTEE AND MAINTENANCE	12
附表泵主要材料的耐腐蚀性能	13

1.前言

INTRODUCTION

感谢惠购MP型系列磁力泵，该泵是磁力驱动离心水泵，严禁空载运转(传统型)。本产品经技术改制后，允许空载运行，产品分传统型与技术型任凭客户选用。使用前请详细阅读本说明书，以便妥善使用与保养，能安全而有效发挥该泵的性能。

Thank you for your purchasing Model MP series magntic pump. This pump is a centrifugal pump of magnetic driving, strictly forbid racing(traditional type). Through technical improved it is allowed to race, This product is divided into two types: traditional type and technical improvement type. Consumers can choose them freely.

Read the instruction carefully before use it. so as to use and maintain properly and develop the performance safely and effectively.

结构与各部件名称 STRUCTURE AND NAME OF PARTS

★MP-15RN、20R、30R、40R、55R、70R、100R、100RX、120R、MPH-400、401

(3)O环 (氟橡胶制)
3."O" ring (manufactured by fluorine rubber).

(图为MP-30R型)
(Fig as MP-30R)

(1)固定螺丝及垫圈 (不锈钢)
1.fixed screw and washer(stainless steel)

(8)电机
8.electric motor

(10)六角型固定螺丝
10.turret fixed screw.

(9)驱动磁铁: 6极或8极铁氧体磁铁从外罩外部以磁力转动叶轮。
9 driving magnet:iron and oxygen magnet on the poles, 6 or 8 drives the vane wheel from the outer of the hood.

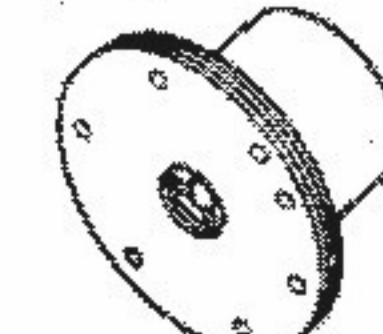
(7)隔离套: 聚丙烯一次成型，底部安有支撑心轴的轴承。
7.spacing sheath polypropylene once forming The bottiom is fixed bearing of supporting mandrel.

(4)(5)(6)叶轮 (组): 聚丙烯制内封铁氧体磁铁与特种陶瓷中空型心轴成一体。
其形状有R型 (中间性能) 及RX型 (大流量) 为开式叶轮, RZ型 (高扬程) 为封闭式叶轮
4.5.6. vane wheels(group): iron and oxygen magnetic lining manufactured by polypropylene and special porcelain mandrel becomes a whole. the shapes:R (medium performance) and RX(Large flow)are open vane wheel. RZ(high lift) is close vane wheel.

(2)泵壳 (加有填充材料的聚丙烯一次成型，壳内中央有轴承)
2.case(filling material polypropylene once forming. the centre inside the case fixed bearing).

· 开式叶轮
Open vane wheel

· 封闭式叶轮
Close vane wheel



2.开箱检验

OPEN BOX AND CHECK

磁泵到货先开箱检验, 注意以下几点:

- 1、磁泵型号是否与您选择的一致, 以及标牌上的电流是否相匹配。
- 2、检验运输过程中是否破损、变形(电机底座外包装)及安装螺丝等松弛。如有不妥之处, 请速与我公司联系。

Open box and check before delivery. Pay close attention to the followings:

1. Whether the Model of magnetic pump is accord with the one you purchase.
Whether the current on the label is qualified.
2. Check whether the machine damaged, out of shape(outside package of the bottom seat of electrical machine)and the installation screw is loosen during transportation.

Something wrong happened, please contact with our Ltd. immediately.

3.规格

SPECIFICATIONS

50/60Hz

型号 Model	软管接口 Tube interface		螺纹接口式 Spiral interface		最大流量 Max. capacity (L/min)	最高扬程 Max. head (m)	标准输出量 Standard outlet		比重 Specific weight	马达 Motor		重最 Weight (kg)
	入口 Inlet (mm)	出口 Outlet (mm)	出口 Outlet-Inlet (mm)	活管 Tube (mm)			流量 Capacity (L/min)	扬程 head (m)		输出 Output (w)	相 Phase	
MP-6R	14	14	-	-	8/9	1/1.4	2.8/5	0.8	<1.2	3	1	0.8
MP-6RZ	14	14	-	-	5.5/6	2.1/2.7	3.2/4.5	0.8	<1.1	3	1	0.8
MP-10R-N	14	14	-	-	11/12	1.5/2.1	5/8	1	<1.1	6	1	0.8
MP-15R-N(M)	14	16	3/4	13	16/19	2.4/3.4	8/12	1.5	<1.3	10	1	1.6
MP-20R(M)	18	18	3/4	16	27/32	3.1/4.3	7/22	2	<1.2	20	1	2.4
MP-20RX(M)	26	26	1	20	46/52	1.3/2.5	30/40	1	<1.3	20	1	2.4
MP-20RZ(M)	18	18	3/4	13	10/11	4.6/4.9	7/10	4	<1.1	20	1	2.4
MP-30R(M)	20	20	3/4	16	33/38	3.8/5.4	16/25	2.5	<1.3	45	1	4.5
MP-30RX(M)	26	26	1	20	62/72	2.9/4.1	32/46	2	<1.1	45	1	4.5
MP-30RZ(M)	18	18	3/4	13	15/17	8/11	10/14	6	<1.1	45	1	4.5
MP-40R(M)	20	20	3/4	16	45/52	4.6/6.5	22/34	4	<1.1	65	1	4.9
MP-40RX(M)	26	26	1	20	75/85	3.3/4.7	47/65	2	<1.1	65	1	4.9
MP-55R(M)	26	26	1	20	60/70	5.6/8.2	30/45	4	<1.2	90	1	5.4
MP-55RZ(M)	26	26	1	20	25/28	10/14	15/22	8	<1.1	90	1	5.4
MP-70R(M)	26	26	1	20	86/97	6.7/7.9	50/72	4	<1.1	150/180	1	6.0
MP-100R(M)	26	26	1	20	120/130	8.6/11.6	60/70	7/9	<1.3	265	1or3	8.5
MP-100RX	-	-	1 1/4	32	170	9.0	100	5.0	<1.3	250	1or3	9
MP-120R	-	-	1 1/4	36	220	10.5	140	6.0	<1.3	370	1or3	20.5
MP-120RT	-	-	2 1/4	48	220	10.5	140	6.0	<1.3	370	1or3	20.5
MPH-400CV5-D	-	-	1 1/2	36	260	12.5	150	8.5	<1.3	370	3	14
MPH-400CV4-D	-	-	1 1/2	36	210	12	110	7	<1.3	370	3	14
MPH-400CV3-D	-	-	1 1/2	36	180	11	90	6	<1.3	370	3	14
MPH-401 Cv5-D	-	-	1 1/2	36	330	18	200	12	<1.3	750	3	22.8

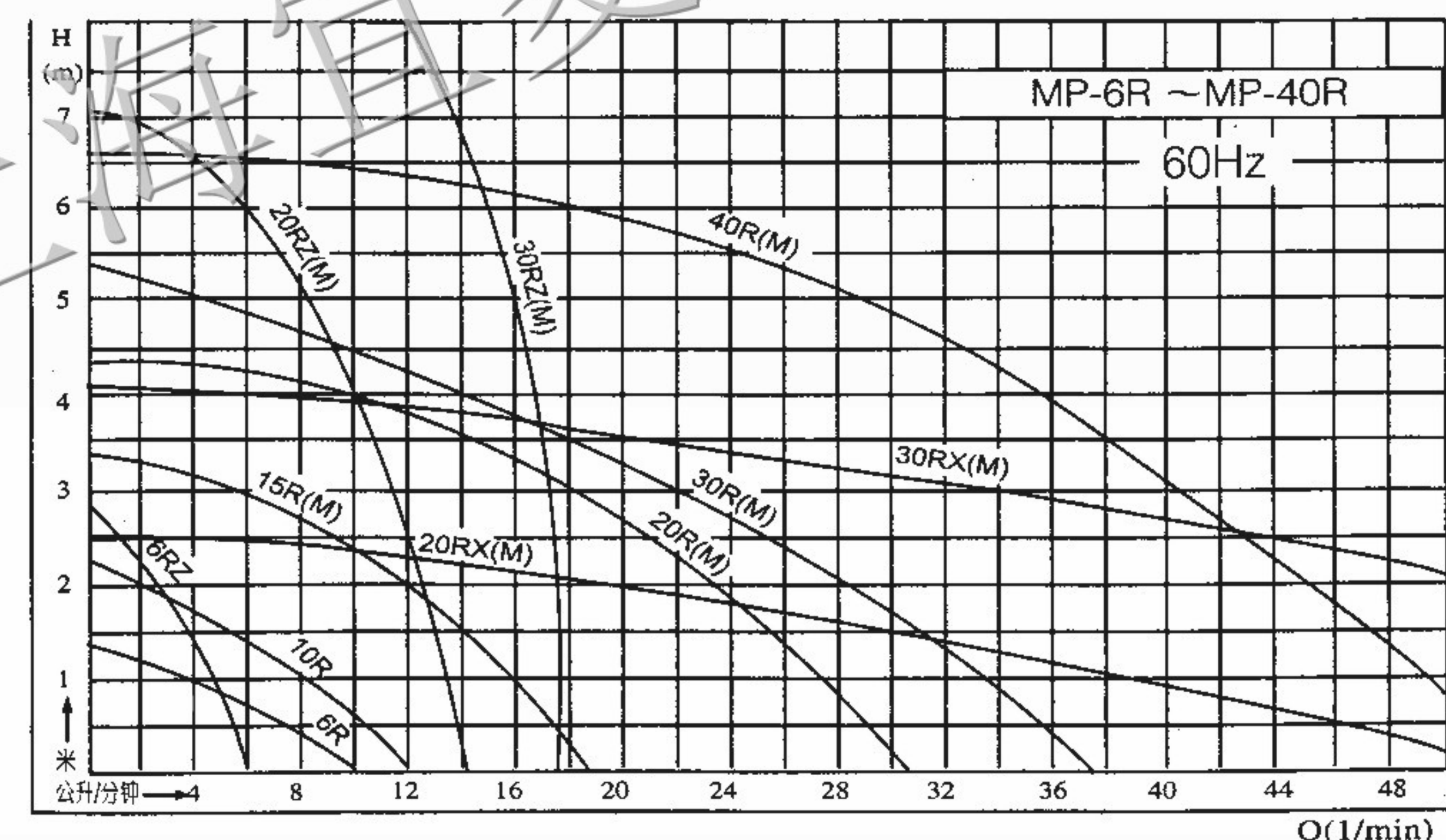
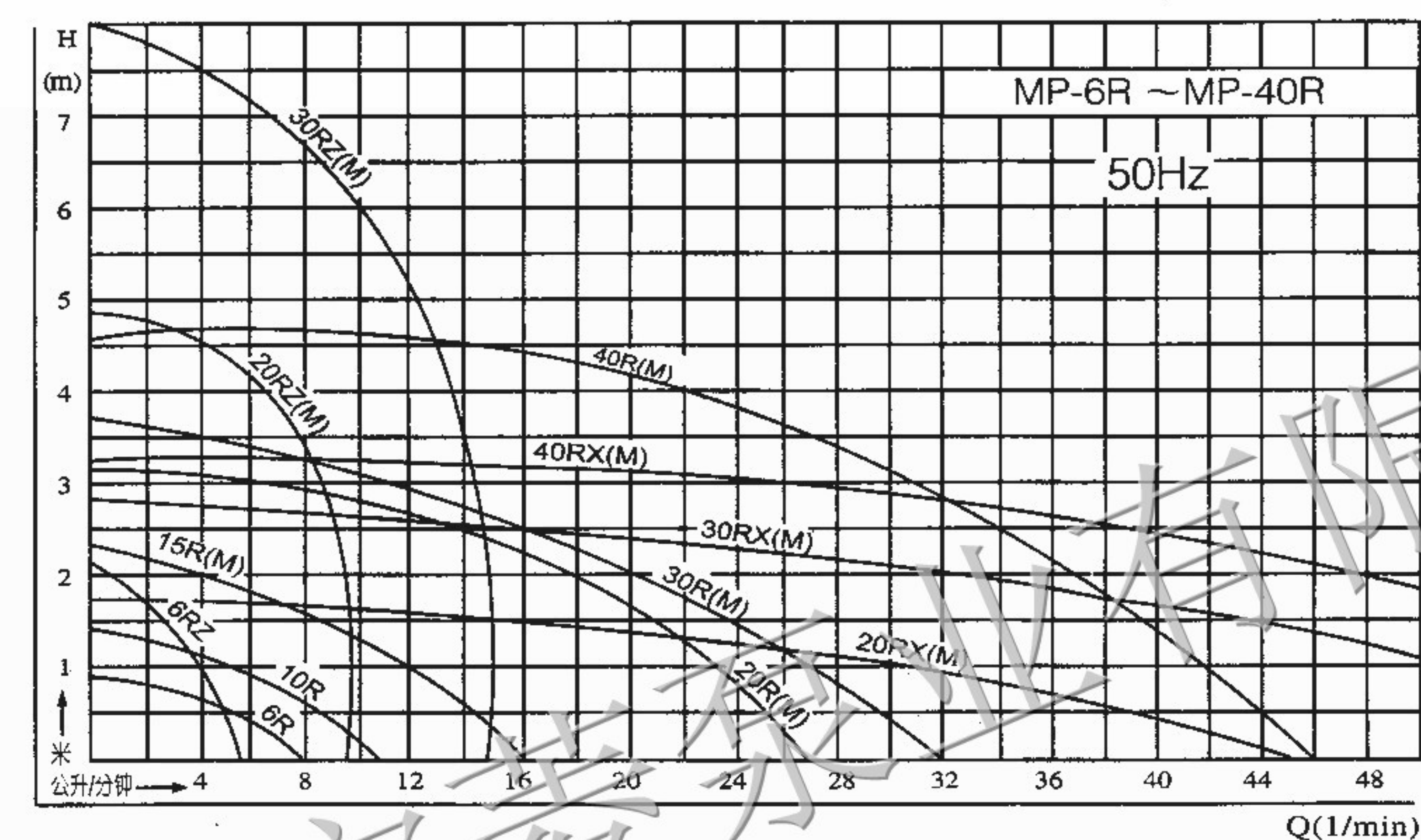
- 注:
- 常温清水条件下, 最大流量时扬程为0; 最高扬程时流量为0。
 - 单相马达工作电压分为100V、110V、220V、240V, 三相马达工作电压为380V。
 - 正常的工作温度0-80℃, 如有要求更高工作环境可协商解决, 以满足您的条件。
 - (M)螺纹接口式。

4.性能曲线(常温下清水试验性能)

Performance curve(cleaning water test performance in normal temperature)

● MP-6R型-MP-40R型

(曲线图) (Additional table)

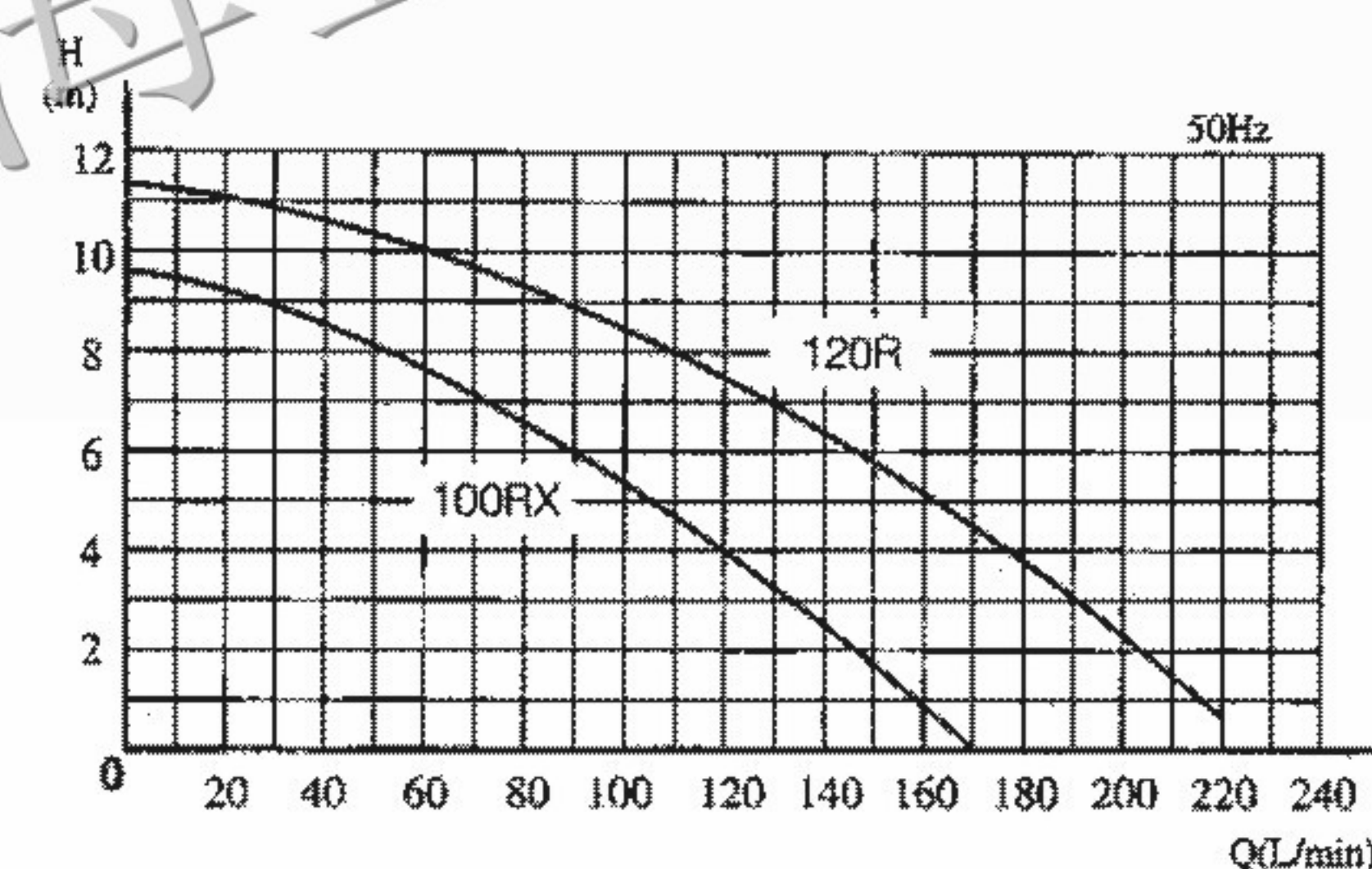
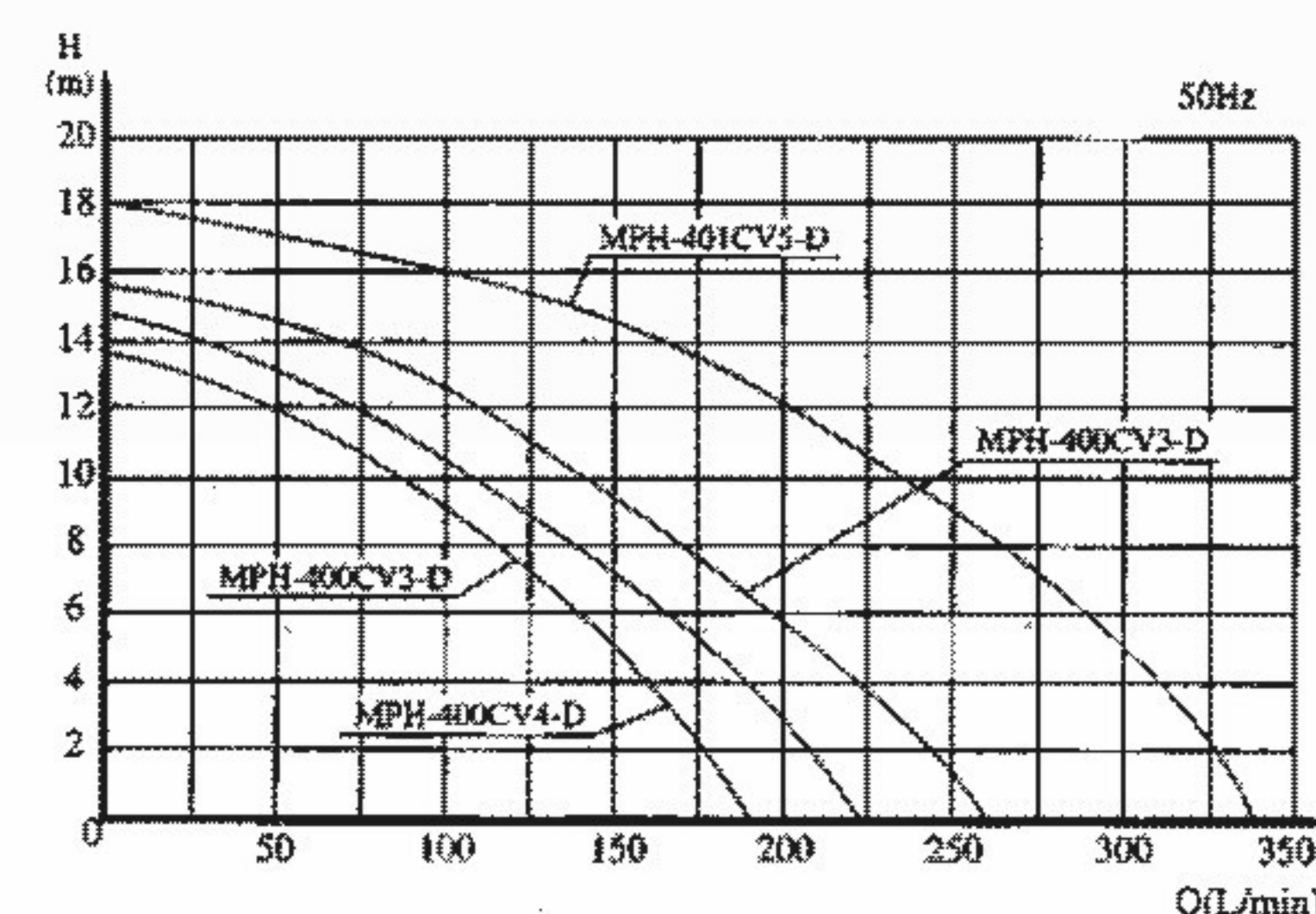


MP-30R ~ MP-100R
50Hz

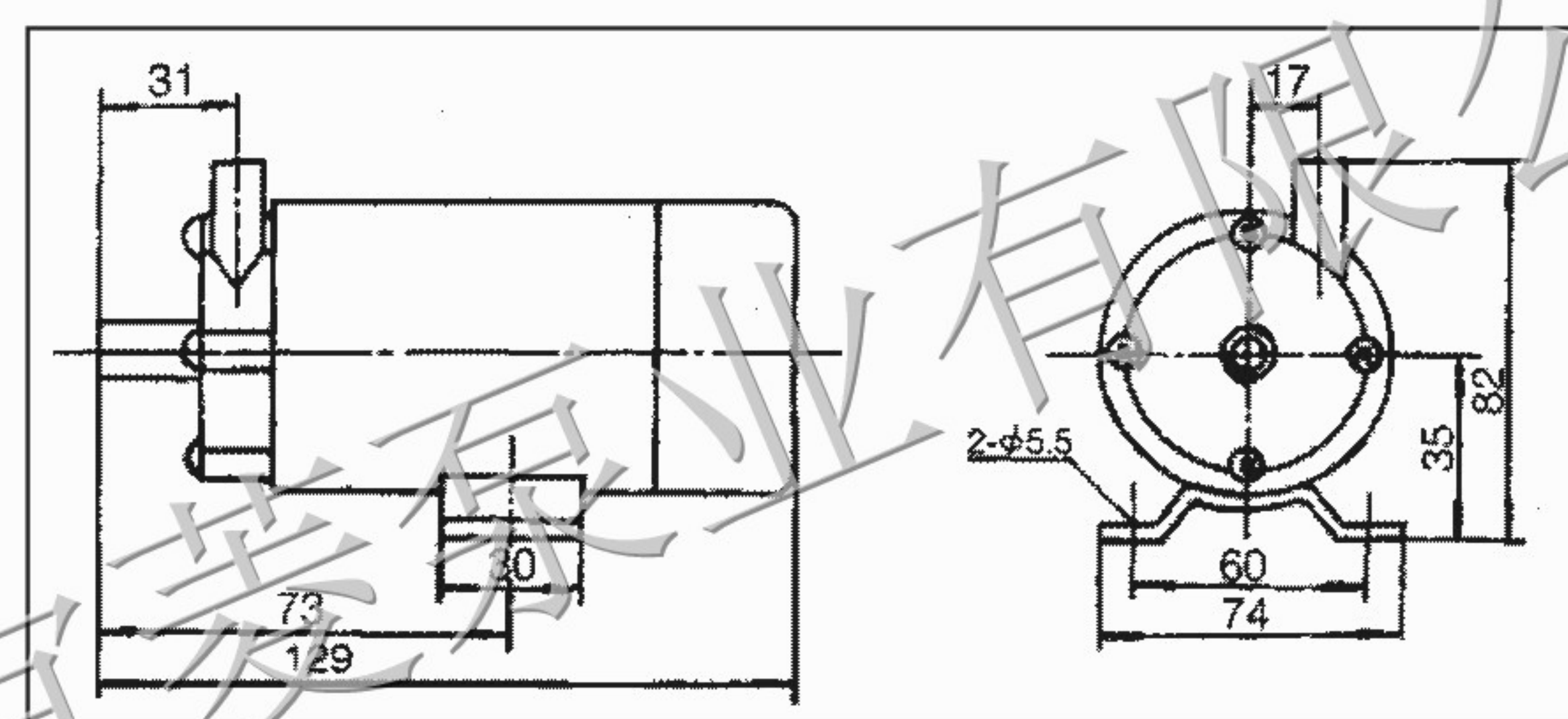
Rev/min

Cik/min

3000RPM
2000RPM
1500RPM
1000RPM
750RPM

[illegible]

MP-6R, 6RZ, 1 ORN



型 号	W	H	L	a	b	c	h	e	f	G	d
MP-15R	95	108	180	-	50	68	55	40	21.5	117	5.5
MP-20R	116	108	210	27	46	92	48	39	28.5	100	6
MP-30R	120	130	252	40	64	100	60	49	30	169	9
MP-40R	122	130	277	40	64	102	60	50	30	172	8

型 号	W	H	L	a	b	c	h	e	f	G	d
MP-20RZ	86	126	211	30	50	67	56	41	40	132	6.5
MP-30RZ	120	130	236	40	64	100	60	42	40	151	9
MP-55RZ	120	153.5	277	44	64	100	65.5	56.5	43	198.5	9

Technical drawing of a motor showing two views: a side view and a front view. The side view shows the motor's profile with dimensions: e (height of the mounting bracket), G (total length), and L (length of the motor body). The front view shows the motor's circular face with dimensions: $4-\phi d$ (four mounting holes of diameter d), w (width of the mounting bracket), and H (height of the motor body). A large, stylized watermark 'SINOTRANS' is overlaid on the drawing.

型 号	W	H	a	b	c	f	e	G	d	
MP-20RX	86	130	220	30	50	67	57	45	143	5.5
MP-30RX	120	136	284	40	64	100	61	48	172	8
MP-55RX	122	136	278	46	64	102	61	48	174	8

型 号	W	H	L	a	b	c	h	e	f	G	d
MP-55R	120	159.5	277	40	64	100	65.5	56.5	43	198.5	9
MP-70R	142	162	265	70	96	108	66	55	44	176.5	9.5
MP-100R	150	175	322	70	100	110	75	66	44	194.5	9
MP-100RX	156	174	323	70	100	110	74	63	40	196	9

Technical drawing of the 2500 series pump assembly, showing front and side views with dimensions.

Front View Dimensions:

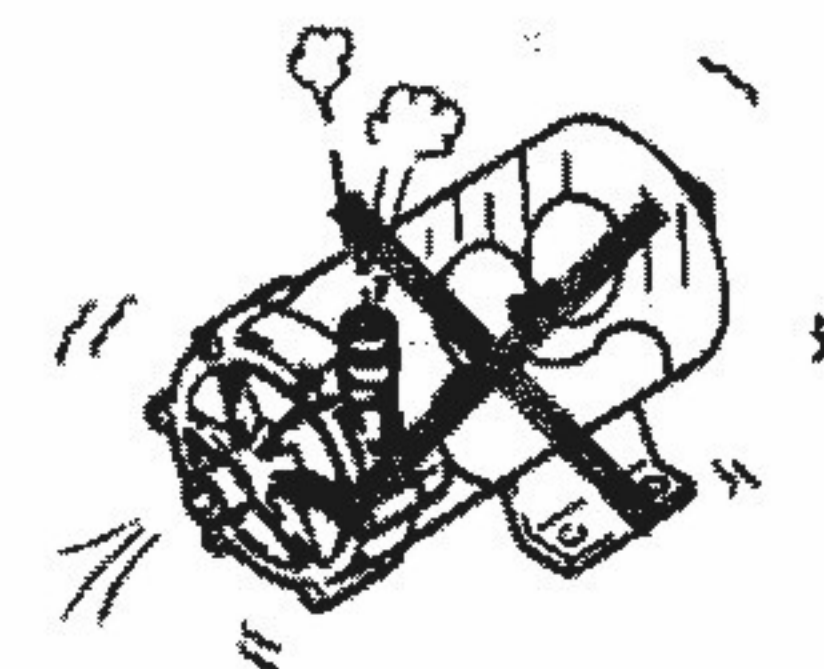
- Total width: 216
- Top flange width: 123.5
- Total height: 206
- Base height: 93
- Base width: 110
- Base mounting hole spacing: 140
- Shaft diameter: $\phi 28.5$

Side View Dimensions:

- Top flange connection: G2 1/2" and G1 1/2"
- Top flange width: 68
- Motor mounting bracket width: 68
- Motor mounting hole spacing: 4- $\phi 12$
- Motor mounting hole diameter: $\phi 11$
- Motor mounting bracket height: 68
- Motor mounting bracket width: 350
- Motor mounting bracket depth: 126.5
- Motor mounting bracket connection: G1 1/2" and G2 1/2"

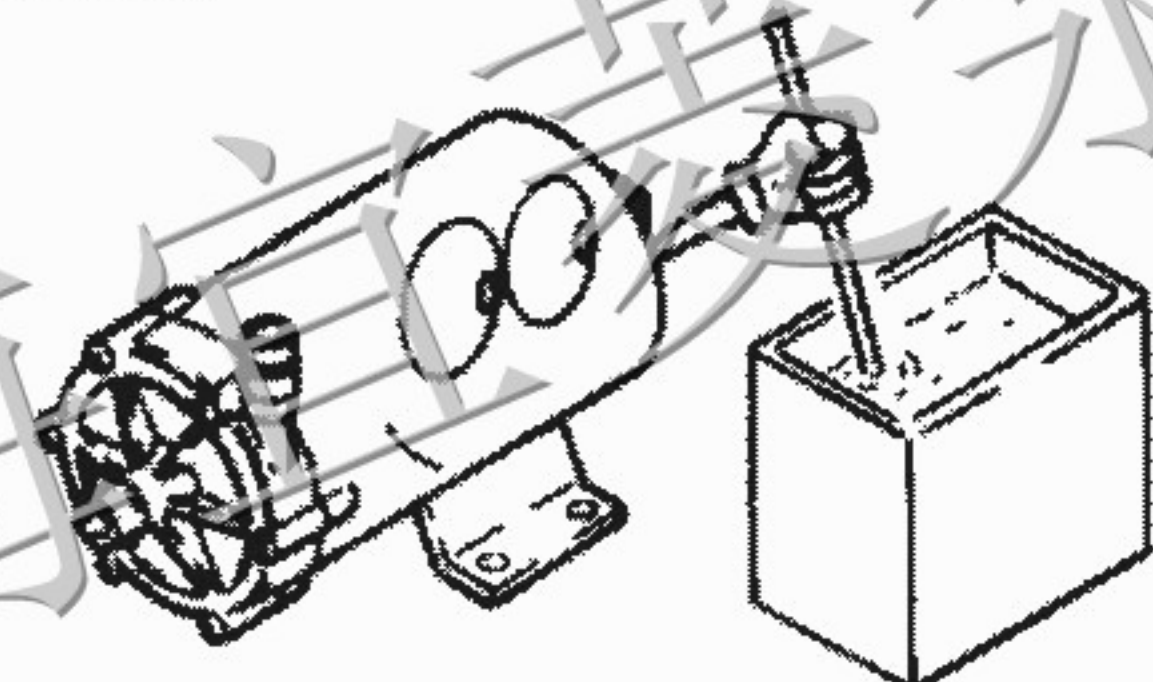
6.使用注意事项

1、Traditional type magnetic pump is not allowed to Race otherwise it will happen burning.increasing damage technical improvement type(patent product)is allowed to race.because bearing is made from special materials



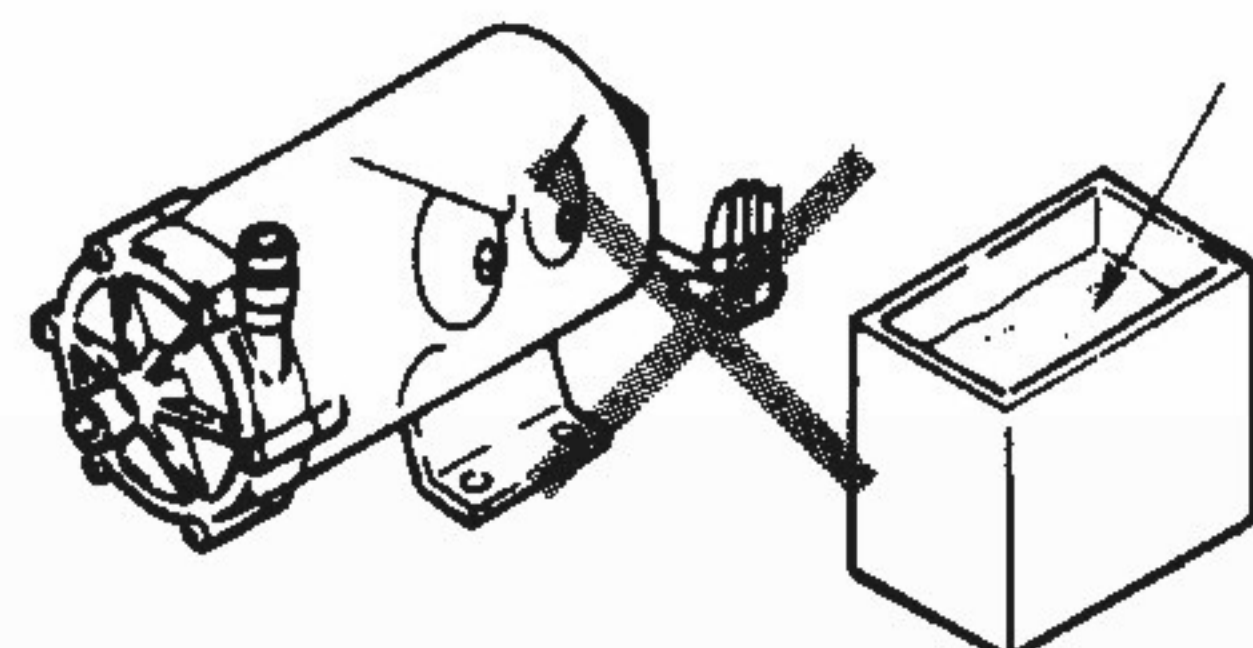
(3)能够输送的液体温度,最高80℃。然而根据不同的液体也有差异。

3、The temperature of conveying liquid is 80℃ max.however.different liquid has different temperature.



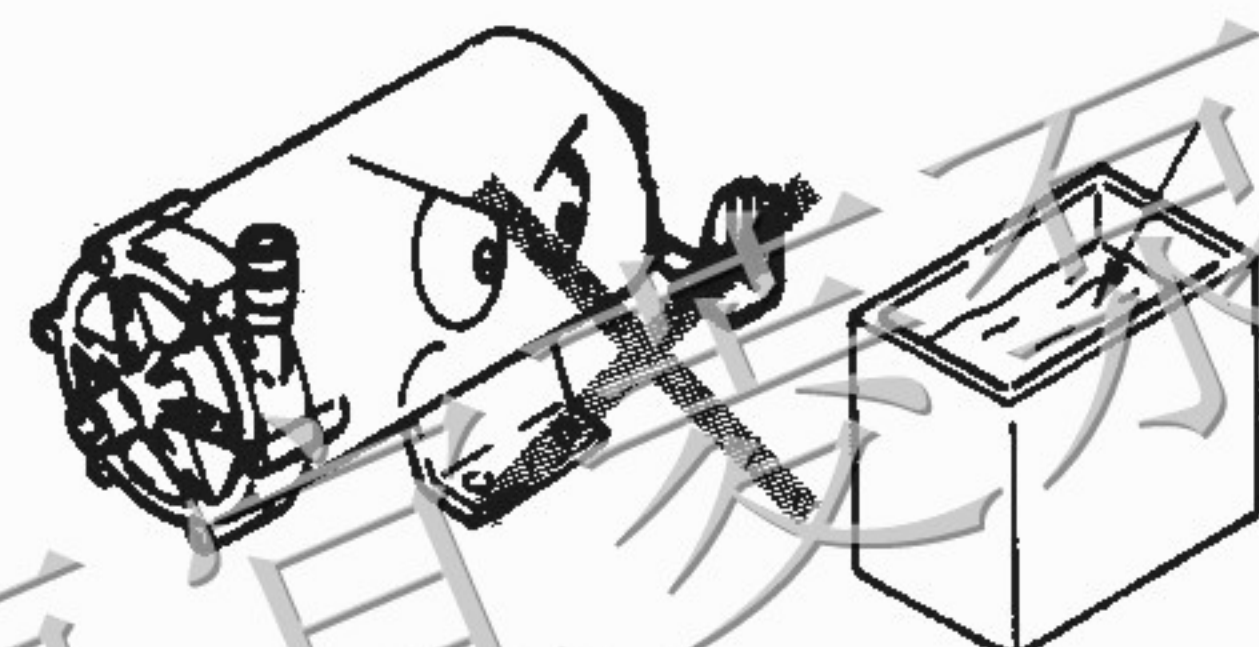
(5)由于泵内部具有强磁性,因此不能输送含有铁镍等粉末的液体。

5、Because the Pump inside has strong magnetic Do not convey liquid with powder of iron and nickel etc.



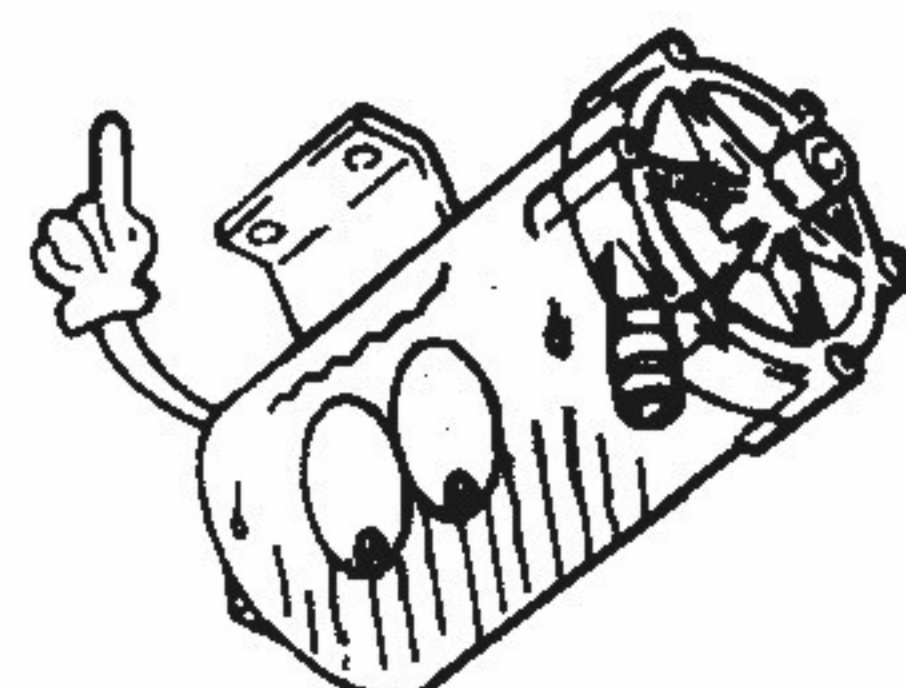
(7)请不要在泥浆中使用,以免加快轴承的磨损。

7、Do not use in the mud avoid increasing bearing damage.



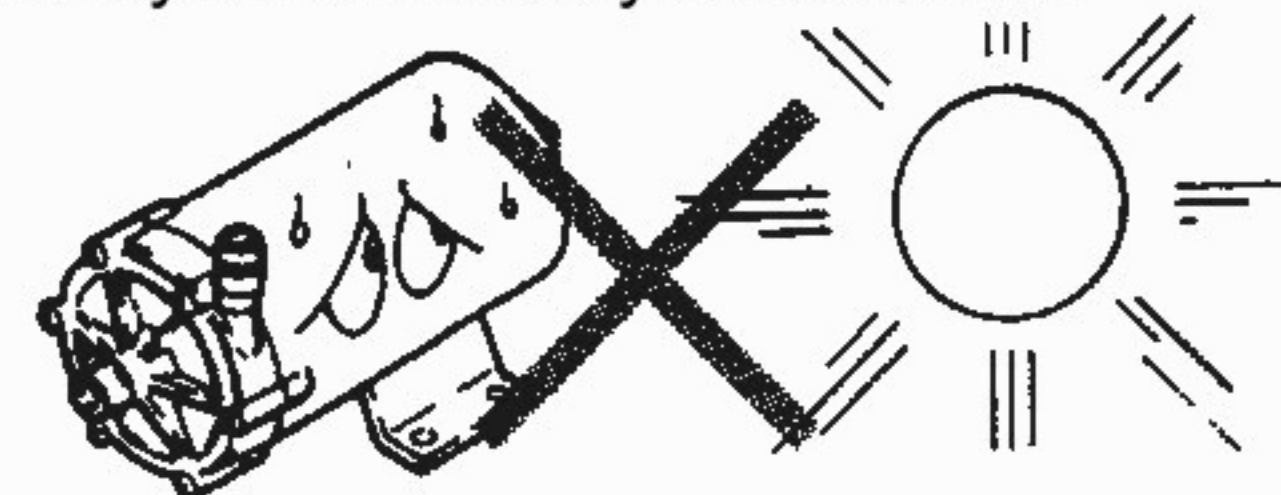
(9)使用冷水时,必须将底座朝下使用(为了防止后罩周围的凝结水进入电机内部)

9、Use cooling water, put the bottom seat downward(prevent frozen water around back hood from entering the motor inside)



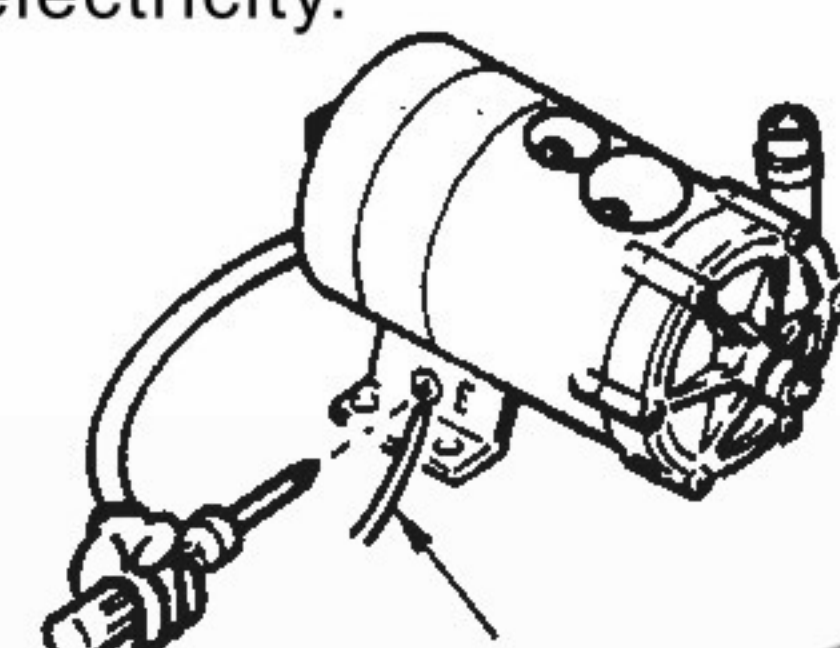
(4)由于电机是密封的,请不要在周围温度在高于40℃时使用,相对湿度要在90%以下使用。不要使灰尘,水等进入电机的内部,电机带有水就会引起漏电烧损等原因,因此要绝对避免。

4、Because the motor is sealed,please do not use it at the temperature of over 40℃.at the humidity of below 90%.Do not let dust water into the inside of machine.otherwise.the machine will cause leakage of electricity.so absolutely avoid them.



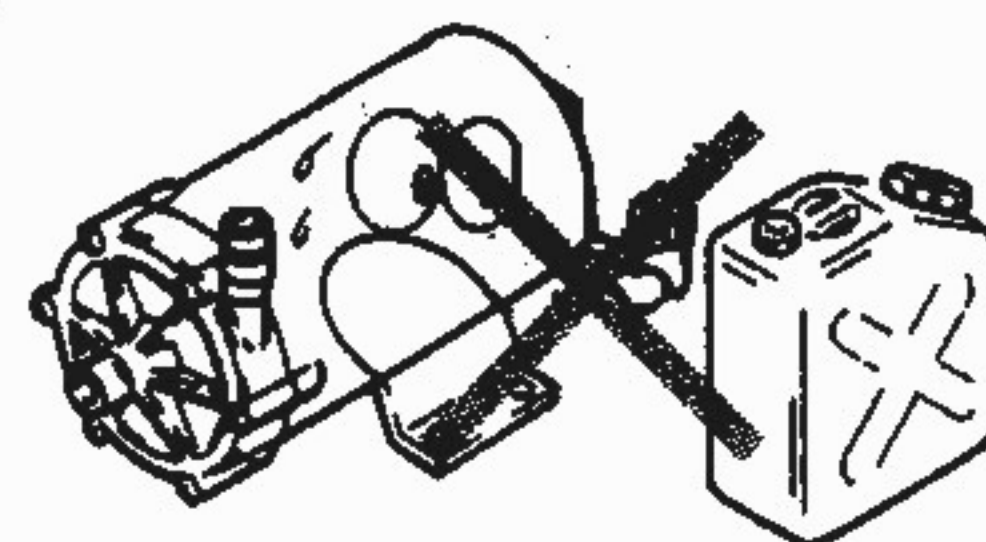
(6)务必用接地的螺丝将电机接地,为了防止万一发生的触电事故,要使用漏电保护器。

6、Make the motor ground connection with the screw of ground connection in order to avoid causing electric accident use protector for leakage of electricity.



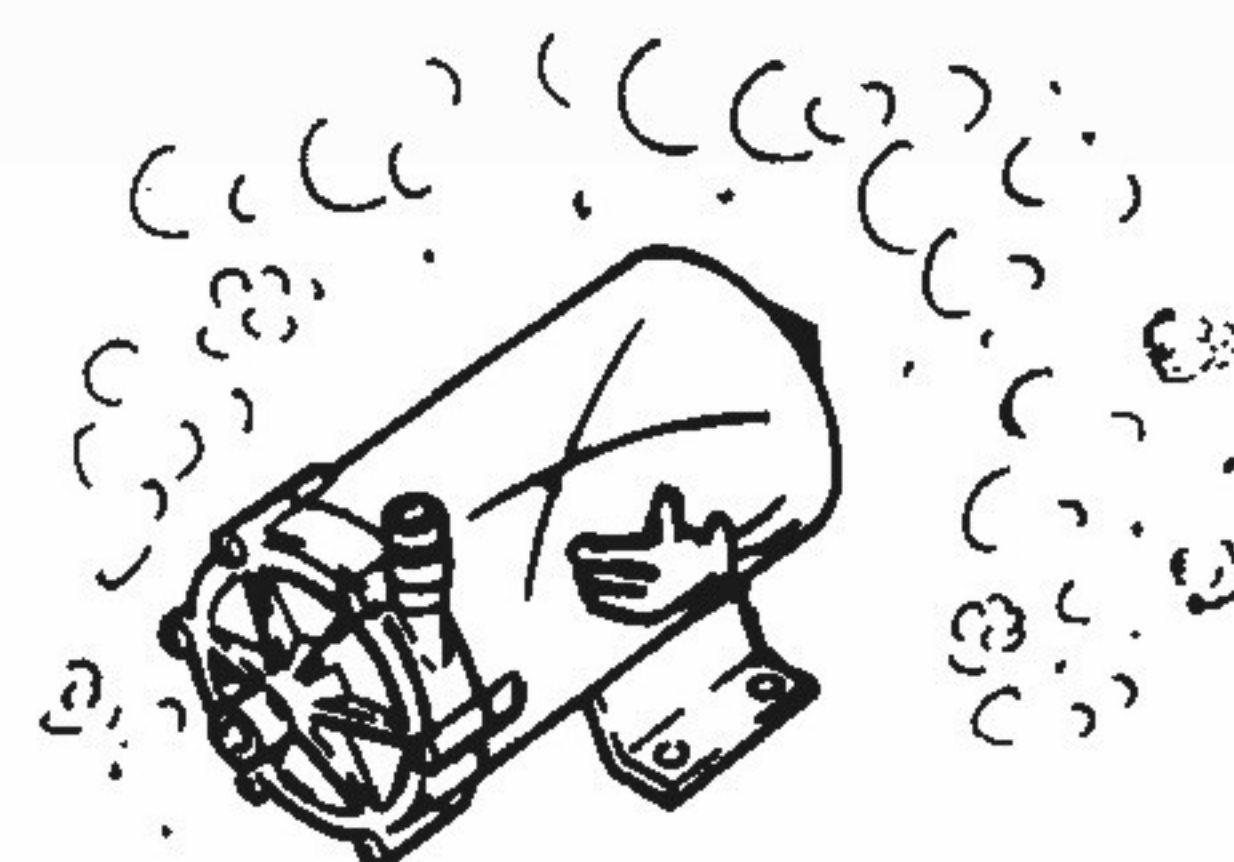
(8)为了安全起见请不要在磁泵的附近堆放易燃易爆品。

8、Do not put the combustile near the magnetic pump.



(10)不要在强腐蚀性气体地方使用。

10、Do not use place stronger corrosion air



7.安装、配管、配线

Installation,Pipe fittings,Line fittings

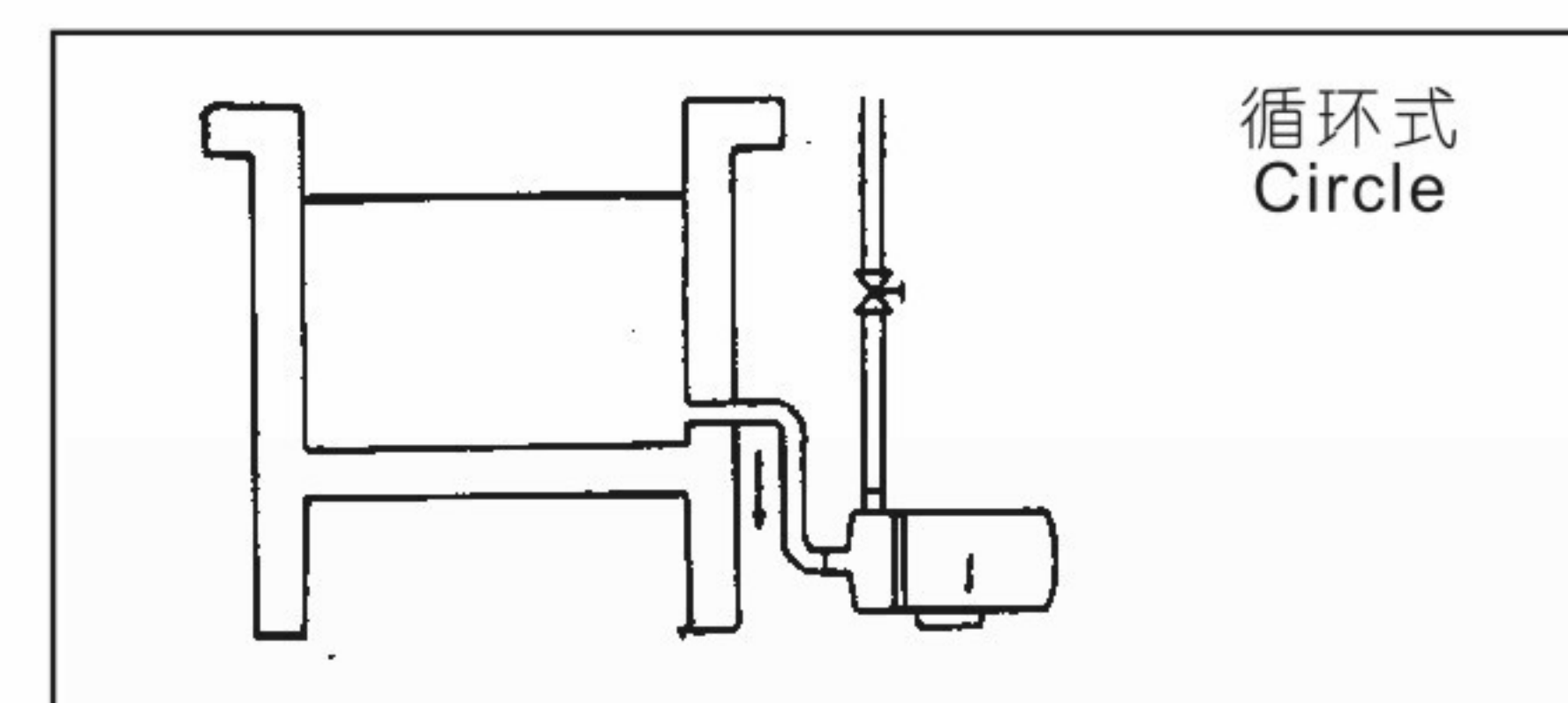
安装: Installation

1、本机要安装在温度0-40℃之间,相对湿度90%以下,便于以后维修,检查的地方。

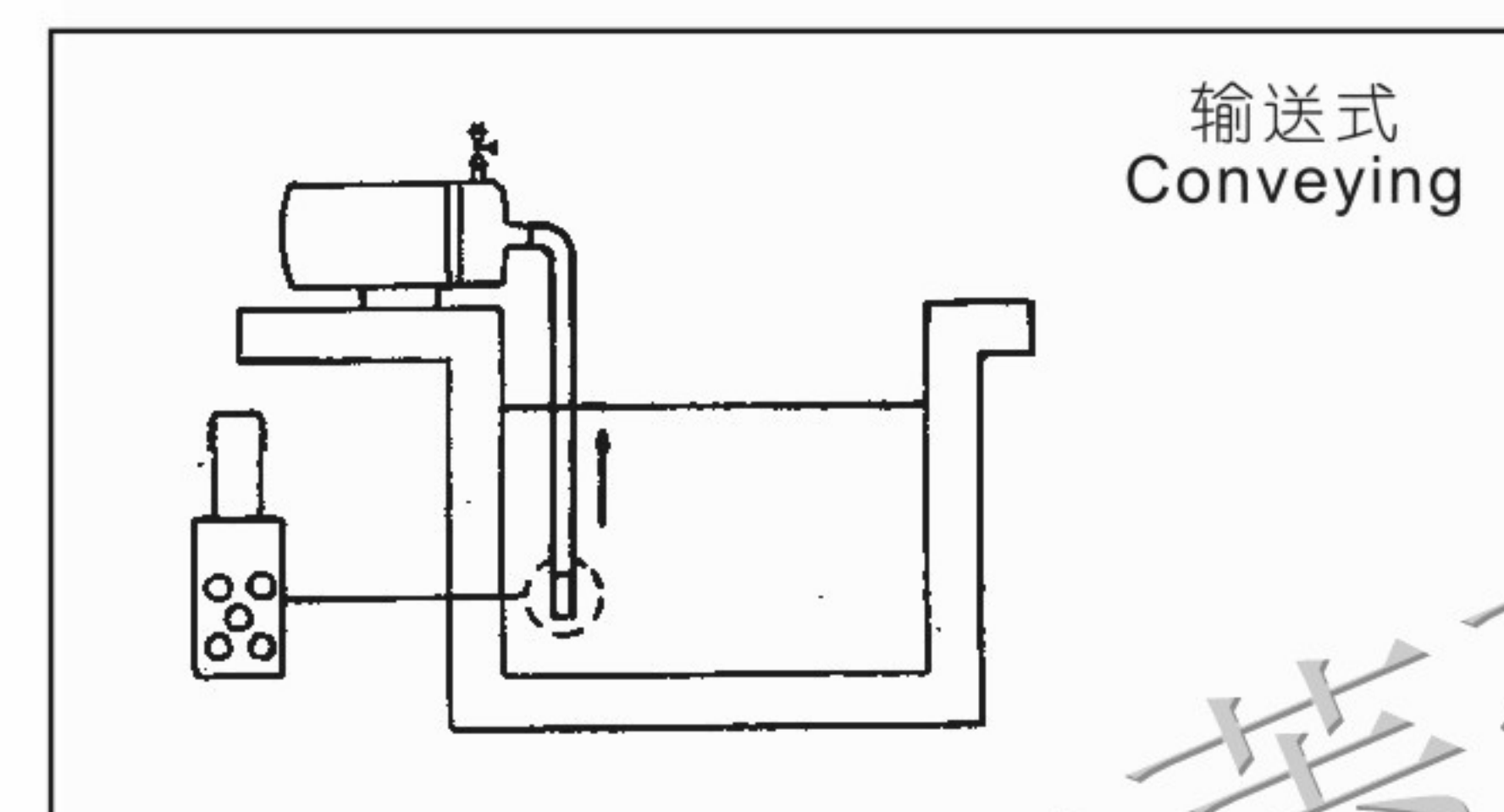
1 The machine should be installed at the temperature of 0-40℃, at the humidity of below 90%, so as to maintain and check later.

2、因本泵不是自吸式故要安装在低于所吸液面水平以下的地方,安装在高于液面位置使用时,吸嘴处要加装一个管脚型阀门。而且在运转之前要吸水。

2、This pump should be installed in the place which is lower than the surface level of suction,because it is not selfsuction.Conversly,should be added a pipe foot valve at the suction nozzle.which should be sucked water before running.



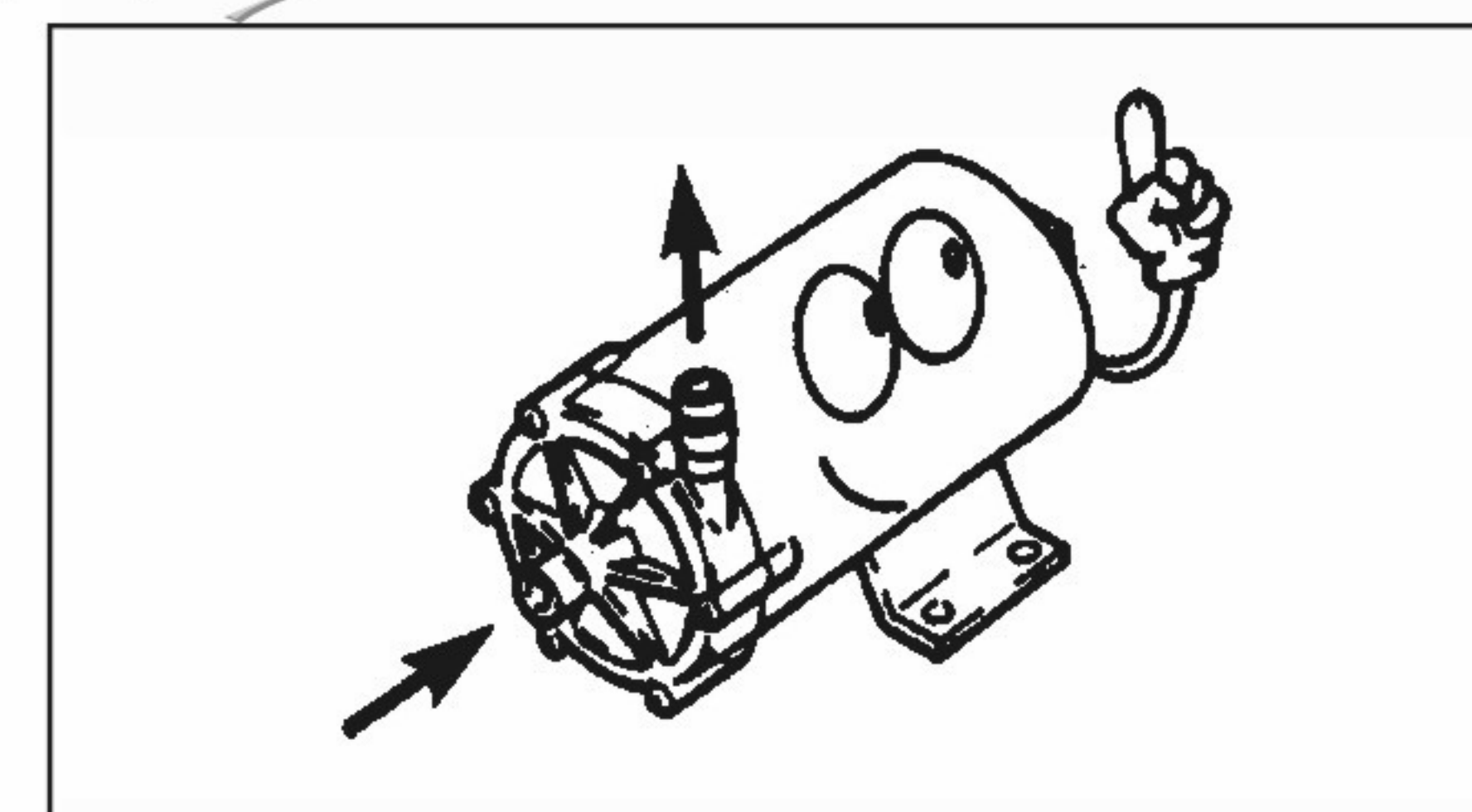
循环式
Circle



输送式
Conveying

3、安装方向可以自由选择,但为了磁泵室内的空气流通,最好将输出口朝上。

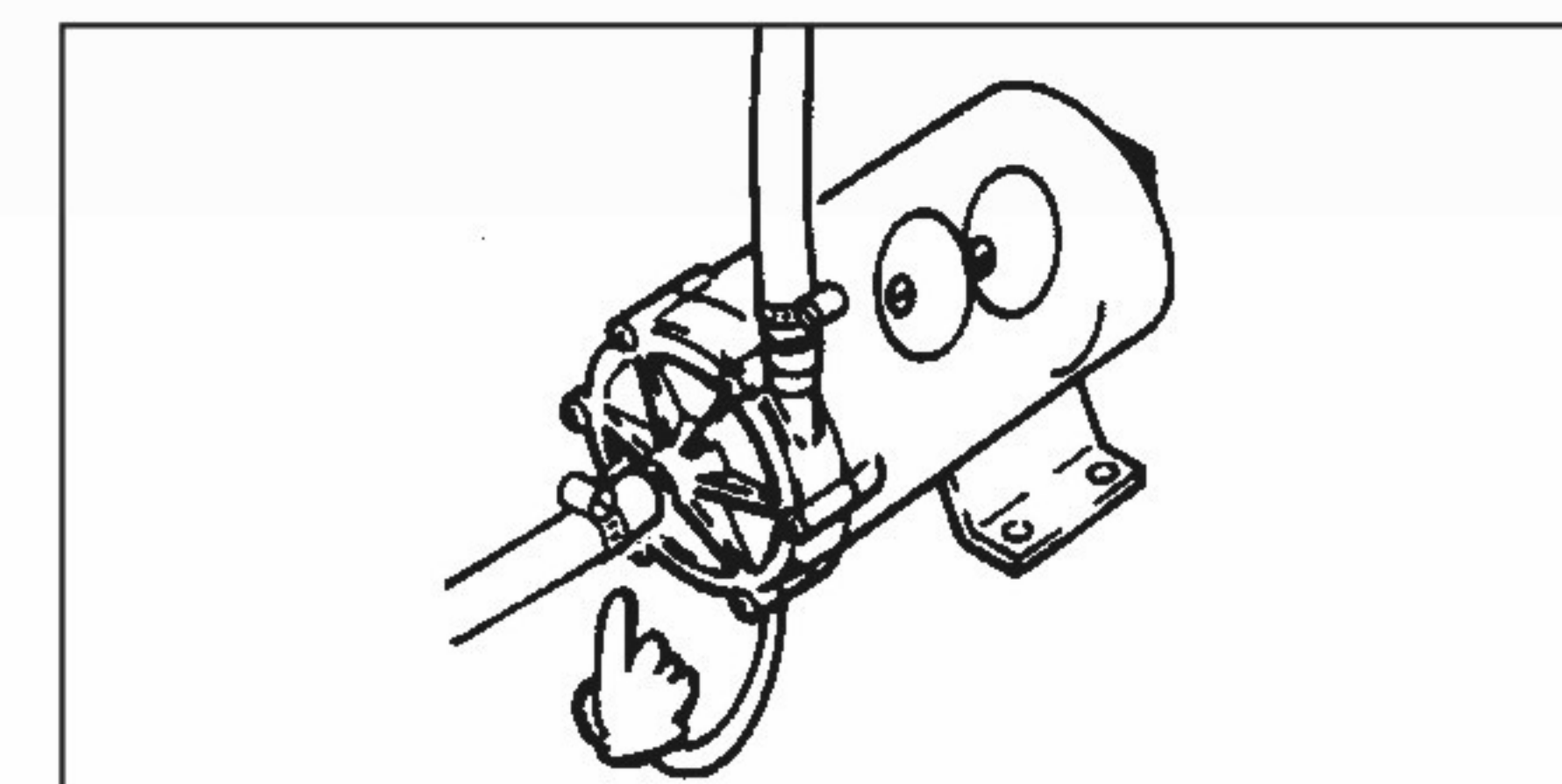
3、The direction of Installation can be chosen freely.But it is better put the output entrance upward in order to ventilate the indoor of the magnetic pump.



配管: Pipe fittings

1、配管请使用乙烯管等耐腐蚀性和耐压力的材料。特别是吸嘴处,吸力大容易破损,应配用适当吸管(使用温水特别要注意)。

1、Pipe fitting should be used corrosion proof and pressure proof materials of ethylene pipe.especially the suction nozzle The suction is strong.It's easily damaged,so it should be used suitable suction pipe.(Pay close attention when using warm water)

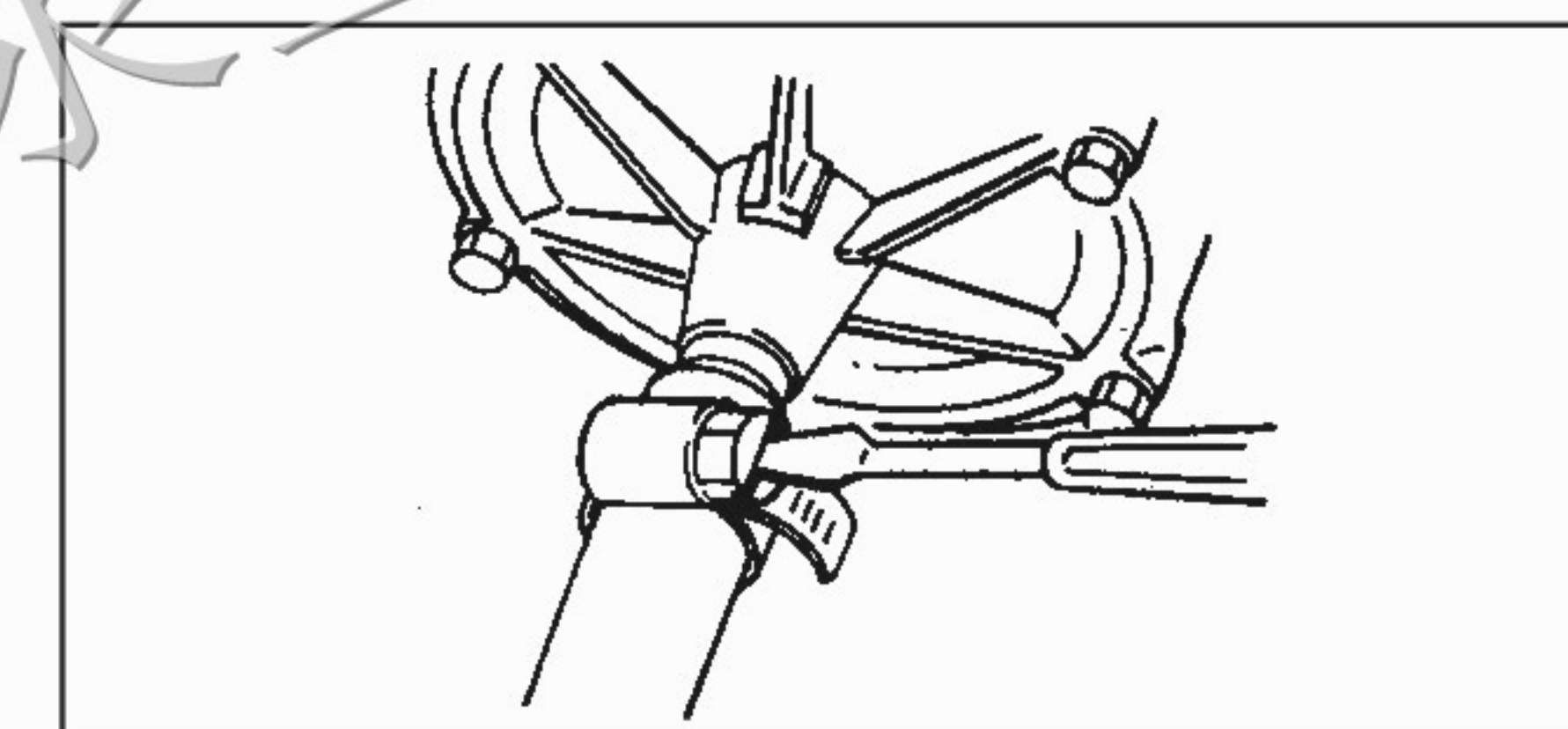


2、接管连接端,用扣紧环紧固,以防漏液,特别是吸嘴侧,若连接不好吸入空气,就会可能造成磁泵扬水性能降低出现空转。

2、Tighten the connection end with tight ring in case of leaking liquid,if the suction nozzle side is connected.especially do not suck air in,otherwise, it will be caused reducing performance of magnetic pump-up water and appearing racing.

3、为了减少液体通道的阻力,配管要短些,尽量减少弯曲处。

3、Pipe fitting Should be shorter and reduce,winding possibility,so as to reduce the resistance of liquid channel



配线: Line fittings

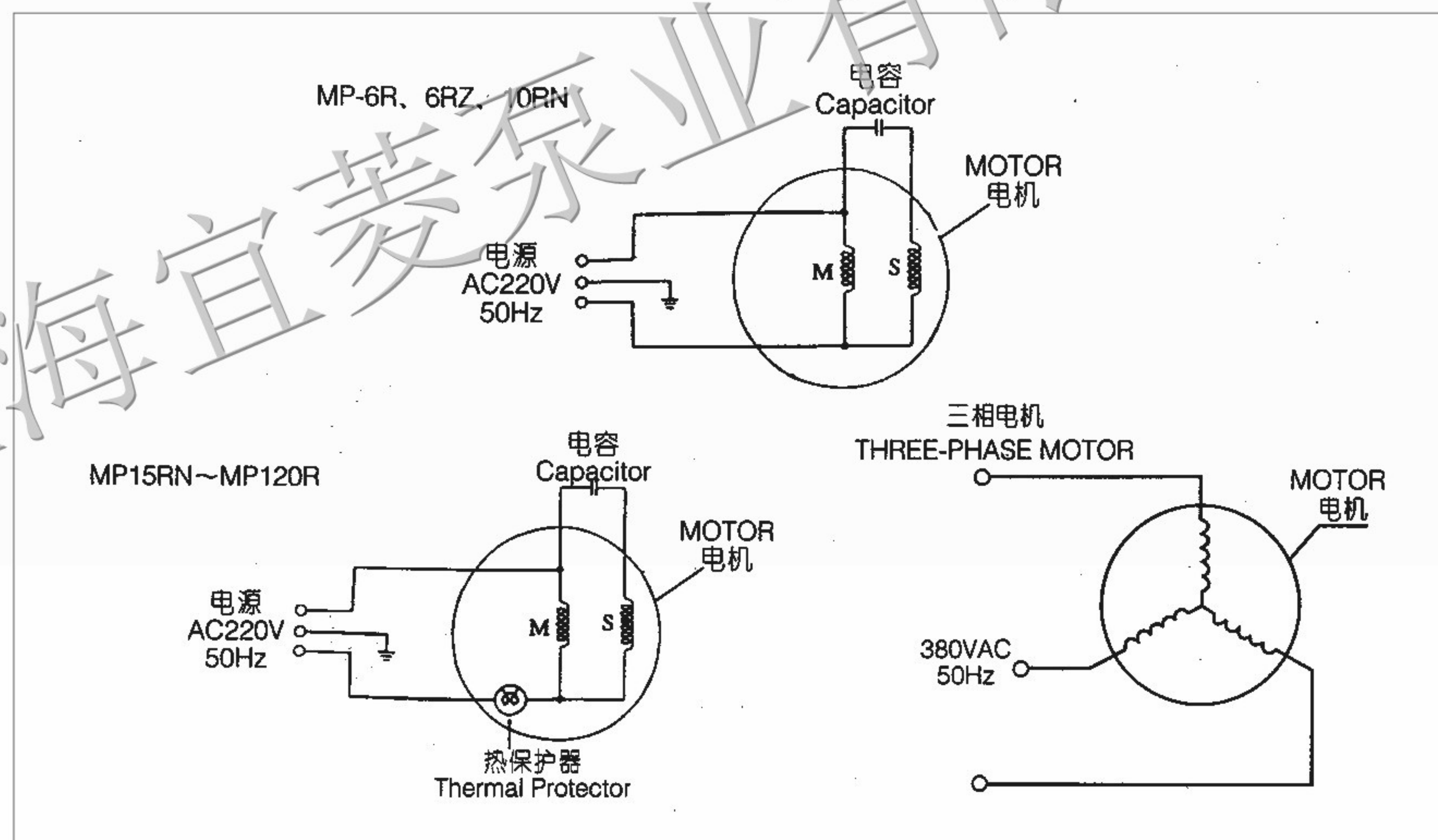
1、配线要使用良好的配线器具,按照电气设备标准及内线施工规定操作。

2、利用接地螺丝(E标志)进行接地。

1、Line fitting should be used excellent utensil and operated according to the standard of electric appliances equipment and regulation of inter construction.

2、Use ground connection screw(mark E)to connect the line.

接线图
Circuit Figure



电机性能表
Motor Performance Table

型号 Model	电 压 Voltage(V)					输出功率 Output (w)	转速 speed(rpm)	绝缘等级 Insulation Class
	220/240		100/110		380			
	电流 Current (A)	电容 Capacitor (μ F)	电流 Current (A)	电容 Capacitor (μ F)	电流 Current (A)			
MP-6R	0.06/0.05	0.68	0.11/0.15	2		3	2800/3100	E
MP-6RZ								
MP-10RN								
MP-15RN	0.1/0.12	2	0.3/0.37	2		10	2600/3000	
MP-20R	0.15/0.14	2	0.34/0.43	3.5		20	2800/3100	
MP-20RX								
MP-20RZ								
MP-30R	0.25/0.24	2	0.55/0.64	3.5		45		
MP-30RX								
MP-30RZ								
MP-40R	0.41	3.5				65		
MP-40RX								
MP-55R	0.95	3				90		
MP-70R	1.1/1.0	6				150/180		
MP-100R	1.8/1.7	6				250/265		
MP-100X	1.55	6			0.78	250	2800	
MP-120R	2.5	7				370	2800	
MP-120RT								
MPH-400					1.15	370	2800	
MPH-401					1.7	750	2800	

8. 输送

CONVEYING

- 1、磁泵腔内注满水后，将出水端的阀门关闭，接通电源，慢慢打开阀门(使用管脚型阀门时接通电源之前，上吸的管路及泵腔内注满水后，方可接通电源)
- 2、检查磁泵扬水是否正常，如没有扬水，应即切断电源，排除原因(主要原因往往是里面有空气或异物掉进塞住)
- 3、避免进出水口猛开关，如出现连轴节脱落叶轮不转，此时应立即关闭电源，电机旋转停止连轴节复位后便恢复正常状态，磁泵里面不要掉进异物，如掉进异物，就会卡住叶轮，万一叶轮卡住，电机仍在运转，应立即切断电源，打开磁泵，取出异物。

CONVEYING

- 1、After pouring the water fully into the magnetic cavity, close the valve of the end of output water, switch on the current and open the valve slowly. (Before switch on the power using the pipe foot valve, after pour the water fully into the upper suction pipe channel and the cavity of the pump, then switch on the power)
- 2、Check whether the magnetic pump and lift are normal, without lift, should cut off the power at once and find the reason, (Main reason is: there is air or foreign matter to be clogged up in)
- 3、Avoid opening or closing the exit, entry water entrance suddenly. If appearing the shaft coupling come apart and vane wheel stop, should close the power immediately. After reset the stop shaft coupling, then recover the normal working condition. Do not drop foreign matter in the pump, otherwise, the vane wheel will be blocked. In case of blocking the vane wheel the motor can still run, so you must cut off the power and take out the foreign matter.

9. 维修检测

MAINTENANCE AND CHECK

日常检测时应注意磁泵运行状态、转向、振动声音异常，以及电流值，出水量是否异常，如出现异常，立即切断电源，对照故障原因及对策的各项排除原因。

MAINTENANCE AND CHECK

Pay attention to the pump state, when daily checking, such as abnormal vibrating sound, current value and the amount of output water, It is happens come abnormal phenomena, the power must be cut off fix the break down

10.故障原因及对策

BREAKDOWN REASON AND COUNTERMEASURE

原因 Reason	配线不好 Line fitting is not good	电机不好(线圈断线或电容不好) Motor is not good (Coil broken or capacitor is not good)	泵内留有空气 Pump inside remains air	进水口吸入空气 Intake sucks air	空运转 Racing	所吸液体的比重粘度太高 Proportion viscosity of sucked liquid is too high	叶轮磁铁碰到隔离套 Vane wheel magnet meets spacing sheath	叶轮损坏 Vane wheel is damaged	叶轮上附有异物 Vane wheel is damaged	"O"型圈损坏 "O" rubber washer is damaged	外壳紧固螺丝松动 Tighten screw is loosen	现象 Phenomena
泵不转 Pump does not run	○	○				○		○				
不扬水、扬水不足 Without lift or insufficient			○	○	○	○	○	○	○			○
电流值超过 Current value exceeded	○	○				○	○	○	○			
噪音及振动很大 Noise and vibration							○	○	○			
漏液 Leaking liquid										○	○	
对策 Countermeasure	检查配线 Checking fitting	调换电机 Exchange motor	将空气排出 Exhaust air	将管路紧固 Tighten pipe channel	停机再启动 Stop, then start	调换合适的泵 Exchange suitable pump	调换损坏部件 Exchange damaged parts	调换叶轮 Exchange vane wheel	清除掉异物 Remove foreign matter	将O型圈调换 Exchange washer	将螺丝紧固 Tighten screw	

11.拆卸、组合

DISASSEMBLE ASSEMBLE

拆卸、组合

拆卸泵体时，输送液可能残留在泵体内，故应注意操作，而且分解后，泵壳、叶轮、隔离套等部件应用水冲洗干净

DISASSEMBLE ASSEMBLE

When disassemble the pump body conveying liquid maybe remain in the pump body,so pay attention to operation After resolve. case, vane wheel and spacing sheath should be cleaned bywater.

泵体拆卸与检查：MP 15RN、20R、30R、40R、55R、70R、100R、100X、120R

1、拆下泵壳螺丝(1)，取出泵壳 2、从隔离套上(3)取出叶轮组件(4)(5)(6)及O型圆环，此时，检查泵壳与隔离套是否有与叶轮磨擦的痕迹，若有异常，应更换新件。3、从隔离套上取出电动机(8)

Disassembling and assembling of pump body

1、Disassemble the case screw(1)and take out the case 2、Take out the vane wheel parls(4)(5)(6) and "O" ring from the spacing sheath(3). meanwhile, check whether there remain fubbing track between case, spacing sheath and vane wheel If it happens some abnormal phenomena, should be changed new parts 3、Take out the motor(8)from spacing sheath

更换电机：

如果电机轴承声音及其他方面出现不正常现象时，应该更换电机，在拆卸泵体后，应按以下程序拆卸其他部件：

1、使用六角形扳手，通过电机下侧使用窗口，旋松用于固定驱动磁铁的六角形螺丝。2、直接将驱动磁铁套拔出，注意勿伤着电机轴承。

3、驱动磁铁安入新电动机时，驱动磁铁套应推至轴的突出部，再将六角防松螺丝固紧

Exchange motor:

If it happens some abnormal phenomena of bearing Sound and others etc should be changed new parts.After disassembling the pump body,disassemble other parts as following procedures.

1、Loosen the turret screw of fixing drive magnetic with turret spanner through the window under the motor.2、Draw out the drive magnet,sleeve directly pay close attention not to damage the motor bearing 3、Install the drive magnetic into the new motor. Pull the drive magnet wheel sleeve to the protrusive position of the shaft,then tighten the turret screw.

泵体安装：

1、隔离套(7)安入电动机(8)2、O型圈(3)装入隔离套，使用新O型圈安装时注意勿被异物扭曲。3、将叶轮组插入隔离套(7)4、将泵壳固定螺丝插入泵壳，位置与隔离套一致。5、将泵壳固定螺丝紧固电机固定泵壳，请勿单面紧固，应对角均匀紧固。

Pump body installation:

1、Install the spacing sheach(7)into the motor(8). 2、Install "O" ring(3)into the spacing sheath. Pay close attention not to be crooked by foreign matter. 3、Plug the vane wheel into the spacing sheath(7).4、Plug the fixed screw into the case the position is the same as the spacing sheath. 5、Fix the motor with the fixed screw. Do not tighten independently and should be even diagonally

12.保修期与维修服务

Guarantee and Maintenance

保修期与维修服务：

1、保修维修范围

(1)保修期从购入之日起计算为一年。(2)在保修期内，若是本公司设计与制作的原因所引起的故障破损，均由本公司免费修理。(3)以下原因所引起的破损，故障的修理费及更换消耗品费用为有偿服务：

a、保修期满后，故障与破损。b、非正常使用或因保管不当所引起的故障与破损。c、使用非本公司所指定的部件而引起的故障与破损。d、超出本公司所指定的修理与改造范围所引起的故障与损坏。e、火灾、天灾地震及不可挽救原因造成故障与损坏。

(4)使用由客户指定的规格或材料的制品，若发生故障与破损，本公司不负责任。(5)判断故障，破损原因应根据客户与本公司的维修工程师鉴定之结果。(6)在使用过程中发生故障所引起的种种费用及其他损害(失)本公司不予补偿。

(1) The guarantee period is one year from the date of purchasing. (2) During maintenance, if it happens breakdown and damage because of our designing and manufacturing, it is maintained free by our Ltd. (3) We need fees on the condition that breakdown and damage caused by following reasons are repaired or exchanged:

a、After the expiration of guarantee b、Abnormal using or keeping c、Without according to the designation of our Ltd. d、Beyond the range of repairing and improving designated by Ltd.

e、Fire、natural disaster earthquake and irresistible reasons.

(4) Our Ltd. are not responsible for the breakdown and damage if using it with the specifications and materials designated by consumers. (5) Breakdown and damage should be judged according to the result appraised by consumers and our maintenance engineer. (6) Our Ltd. can not compensate all the expenses and other lost because of breakdown.

2、维修：

在使用过程中出现异常情况下，应马上停机检查是否出现故障，（请参照故障原因及对策）

(1) 可委托定购商店或本公司维修。(2) 委托修理之前，应再次仔细阅读说明书，再检查一遍。

(3) 委托修理时，应告知如下几点： a、型号名称及制造号码 b、使用时间与状况 C、几处故障及其状况

送来修理时，因使用液在运输途中有流出的危险，故应将内部洗净送来。

2、Maintenance:

Appear some abnormal phenomena when using it, should stop the machine immediately and check whether it happens breakdown, (Please refer the breakdown reason and countermeasure.)

(1)、Commission order shop or out Ltd (2)、Before commission to repair, should read the instruction carefully again and check once more (3)、When commission to repair should tell as followings: a、Model and Number b、Using Time and State c、Breakdown and State

When deliver to repair, the liquid may flow in transportation, so must clean the machine inside and then delivery.

附表 泵主要材料的耐腐蚀性能(供参考)

介质名称	浓 度 %	聚丙烯		浓 度 %	陶瓷	
		25℃	50℃		25℃	80℃
硫 酸	60	✓	✓		✓	✓
硝 酸	25	✓	✓		✓	✓
盐 酸	<36	✓	✓		✓	✓
氢氟酸	35	✓	✓	1~100	×	
醋 酸	<80	✓	✓		✓	✓
氢氧化钠	100	✓	✓		○	×
重铬酸甲	25	✓	✓	10~20	✓	✓
溴 水		×	×		×	✓
乙 醇		✓	○		✓	✓
丙 酮		✓	○		✓	
四氯乙烷		○			✓	✓
氟利昂22		✓	✓		✓	✓
漂白液		✓	✓		✓	✓
电镀液	CL13%	✓	✓		✓	✓
照像液		✓	✓		✓	✓

✓—优良。○—可用，但腐蚀明显。×—腐蚀严重，不适用。