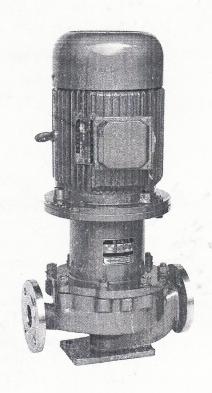
# CQG系列不锈钢立式管道磁力泵

• CQG Series Stainless Steel Vertical Pipeline Magnetic Pump •

# 便原即第

使用前请仔细阅读说明书



浙江扬子江泵业有限公司 ZHEJIANG YANGZIJIANG PUMP CO.,LTD.

#### 磁力泵概述

在石油、化工、军工、制药等领域中,经常存在着一些输送腐蚀性液体的场所,因此研制和开发全密封、无泄漏、 抗腐蚀性能强的离心泵是我们关心和研究的方向。磁力传动静密封技术在泵领域的应用显示出其零泄漏的密封特性。

磁力传动离心泵(简称磁力泵)是应用现代磁力学原理,利用永磁体的磁力传动实现扭矩的无接触传递的一种新型泵,也就是电机带动外转子(即外磁钢)总成旋转时,通过磁场的作用磁力线穿过隔离套带动内转子(即内磁钢)总成和叶轮同步旋转,由于介质封闭在静止的隔离套内,从而达到无泄漏抽送介质的目的,彻底解决了机械传动泵的轴封泄漏而设计的全密封、无泄漏、无污染的新型工业用泵。

磁力泵足化工流程中杜绝跑、冒、滴、漏现象,消除环境污染,创造"无泄漏车间"、"无泄漏工厂",实现安全、文明生产的理想用泵。广泛应用于石油、化工、制药、印染、电镀、食品、环保等企业的生产流程中输送不含铁屑杂质的腐蚀性液体,尤其适用于易燃、易爆、易挥发、有毒和贵重液体的输送。

磁力泵产品有CQ、CQF、ZCQ、CQB、CQB-F、CQB-G、ZBF、MP、CQG等系列,产品符合国际标准ISO2858、国家标准GB5662和JB/T 7742-1995的有关要求;以上各种系列磁力泵都采用最优秀的水力模型,达到了高效、节能、性能稳定等优点。而且结构简单,安装简便,占地面积小,拆卸维修方便,噪音低,是石油、化工、制药、电镀、电子、环保等行业的首选产品。

## **BRIEFING OF MAGNETIC PUMP**

In the fields of petroleum, chemicals, war industry and pharmaceuticals etc., there are often needs to handle some corrosive liquids. For this reason we dedicate ourselves to the development and research of fully sealed, leak-tight and corrosion-resisting centrifugal pumps. Magnetism-driven silent seal technology performs leak-tight seal in pump industry.

Magnetism-driven centrifugal pump (magnetic pump for short) is a late model uses the theory of modern magnetics. The noncontact transfer of torque is actualized by the magnetic force of permanent magnet. Namely, when motor drives outer rotor (outer magnet steel) assembly rotating, inner rotor (inner magnet steel) assembly will rotate synchronously with impeller driven by magnetic line of force through spacer sleeve under the function of magnetic field. As medium is closed in the actionless spacer sleeve, leak-tight delivery of medium can be effected, making it a new-style industrial pump of full seal and no leakage and pollution, and away from the trouble of leakage at shaft seal borne by mechanical drive pumps.

Magnetic pump is an environmental-friendly solution to the phenomena of bleeding, emitting, dropping and leaking, thus to effect "leak-tight workshop" and "eak-tight factory" for safe and civilized production. They are widely used in the industries of petroleum, chemicals, pharmaceuticals, printing and dyeing, electroplating, foodstuff, environment protection and etc. to handle corrosive liquid not containing scrap irons, especially inflammable, explosive, volatile, toxic and precious liquids.

Magnetic pumps are provided with CQ, CQF, ZCQ, CQB, CQB-F, CQB-G, ZBF, MP, CQG series conforming to ISO2858, GB5662 and JB/T7742-1995, Using the most superior hydraulic model, all magnetic pumps above are featured by high efficiency, energy saving, steady performance, simple structure, easy installation, small occupation of floor, convenient disassembly and maintenance and low noise, making the m optimal for the industries of petroleum, chemicals, pharmaceuticals, electroplating, electronics, environment protection and etc.



## 产品特点 PRODUCT FEATURES

CQG型是在ISG型立式管道泵的基础上设计而成的新型立式结构磁力泵,它乘承ISG泵的优点,又与磁力传动的完美结合,达到了无泄漏输送液体的要求。

CQG型立式磁力泵可直接安装在管道的任何部位,对 管道中的介质进行加压,可直接替换原来的ISG泵,安装 尺寸与ISG泵完全相同,方便用户更换。

CQG is a late-model vertical magnetic pump designed on the base of ISG vertical pipeline mounted pump. Embodying the advantages of ISG pump, this type is provided with magnetic drive for leak-tight delivery of liquid.

CQG vertical magnetic pump can be directly mounted to any position on the pipeline, and carries out pressurization to the medium inside pipeline. It can directly replace ISG pump, with installation dimensions completely same as ISG pumps for the convenience of making replacement.

# 型号意义 SIGNIFICATION OF MODEL

CQG 32 - 125

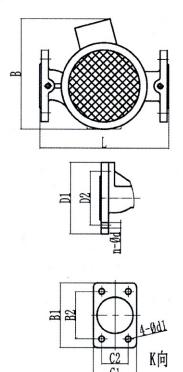
- 叶轮名义直径(mm) Impeller diameter (mm) - 进出口直径(mm) Inlet & Outlet diameter (mm) - 立式管道磁力泵 Vertical pipeline magnetic pump

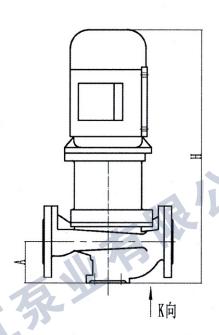
# 性能参数 PERFORMANCE PARAMETERS

코 목	流量	扬程	数事	电机功率	汽蚀余量		
	$(m^2/h)^2$	$\langle m \rangle$	(%)	(kW) Motor	(NPSH)r(m) Net positive		
Model	Fow	Head	Efficiency	power	suction head		
CQG25-110	4.0	15	27	0.75	2.3		
CQG 25-125	4.0	20	21	1.1	2.3		
CQG 25-160	4.0	32	17	2.2	2.3		
CQG32-100	4.5	12.5	29	0.75	2.0 2.3 2.3		
CQG32-125	4.5	20	29	1.1			
CQG32-160	4.5	32	29	2.2			
CQG32-200	4.5	50	17	4	2.0		
CQG40-125	6.3	20	31	1.5	2.3 2.3		
CQG40-160	6.3	32	25	3			
CQG40-200	6.3	50	18	5.5	2.3		
CQG40-250	6.3	80	13	11	2.3		
CQG 50-100	12.5	12.5	47	1.5	2.3		
CQG 50-125	12.5	20	43	2.2	2.3		
CQG50-160	12.5	32	37	4	2.3		
CQG 50-200	12.5	50	31	7.5	2.3		
CQG50-250	12.5	80	23	15	2.3		
CQG65-100	25	12.5	54	2.2	2.5		
CQG65-125	25	20	53	3	2.5		

型용	流癥	扬程	效率	电机功率	汽蚀余量 (NPSH)r(m) Net positive suction head 2.5		
Model	(m³/h) Flow	(m) Head		Motor power			
CQG65-160	25	32	48	5.5			
CQG65-200	25	50	43	11	2.5		
CQG65-250	25	80	35	18.5	2.5		
CQG80-100	50	12.5	58	4	3.0		
CQG80-125	50	20	57.5	7.5	3.0		
CQG80-160	50	32	56	11	3.0		
CQG80-200	50	50	52	18.5	3.0		
CQG80-250	50	80	44	30	3.0		
CQG100-100	100	12.5	61	7.5	4.5		
CQG100-125	100	20	61	15	4.5		
CQG100-160	100	32	61	18.5	4.5		
CQG100-200	100	50	59	30	4.0		
CQG100-250	100	80	54	45	4.0		
CQG125-125	160	20	65	18.5	4.0		
CQG125-160	160	32	63	30	4.0		
CQG125-200	160	50	62	45	5.5		
CQG125-250	160	80	60	75	5.0		

# 尺寸表 SIZE TABLE





	1						<del></del>	·	·	,	,	,
型号	H	A	В	L	B1	B2	C1	C2	D1	D2	4-0d1	n-Ød
CQG50-100	585	95. 5	255	300	150	110	100	60	165	125	Ø14	4-018
CQG50-125	637	98	287	320	170	130	120	80	165	125	Ø14	4-018
CQG50-160	665	100	288	320	170	130	120	80	165	125	Ø18	4-018
CQG50-200	770	100	360	360	170	130	120	80	165	125	Ø18	4-018
CQG65-100	600	108	263	340	200	160	140 .	100	185	145	Ø18	4-018
CQG65-125	650	105	295	360	200	160	140	100	185	145	Ø18	4-018
CQG65-160	790	105	335	360	200	160	140	100	185	145	Ø18	4-018
CQG65-200	940	105	430	380	200	160	140	100	185	145	Ø18	4-018
CQG80-100	674	120	315	400	200	160	140	100	200	160	Ø18	8-018
CQG80-125	820	125	360	400	200	160	140	100	200	160	Ø18	8-018
CQG80-160	936.5	125	430	400	200	160	140	100	200	160	Ø18	8-018
CQG100-100	845	140	360	440	220	180	160	120	220	180	Ø18	8-018
CQG100-160	1030	160	430	500	220	180	160	120	220	180	Ø18	8-018

#### 磁力泵安装和使用 INSTALLATION AND OPERATION OF MAGNETIC PUMP

- 一、磁力泵应水平安装不宜整立、塑料泵不得承受管路重量、特殊垂直安装的场合、电机务必朝上。
- 二、抽吸液面高于泵轴心线时,起动前先开吸入管道阀门;抽吸液面低于泵轴心线,管道需配备底阀。
- 三、泵使用前应进行检查, 电机转动要灵活, 无卡滞及异常声响, 各紧固件无松动现象。
- 四、检查电机旋转方向与转向标记是否一致。
- 五、电机启动后, 缓慢打开排出阀, 待泵进入正常工作状态后, 再将排出阀调到所需开度。
- 六、泉停止工作前, 应先关闭排出阀门, 然后关闭吸入管阀门。
- 1. Magnetic pump should be horizontally installed, but not upright. Plastic pump is not able to endure the weight of pipeline. In case of special occasions requiring upright installation, motor should be kept upward.
- 2. When liquid level is higher than the centerline of pump, turn on the valve of intake pipe before start; when liquid level is lower than the centerline, a bottom valve should be fitted to the pipeline.
  - 3. Check before operation to make sure that motor rotates flexibly without jamming and abnormal sound, and that all fasteners are not loosened.
  - 4. Check whether motor rotates in accordance with the direction sign.
  - 5. After motor is started, slowly turn on discharge valve. When pump enters normal working state, adjust the discharge valve to the required opening.
  - 6. Before pump stops working, turn off discharge valve first, and then the valve of intake pipe.

#### 磁力泵注意事项 CAUTIONS FOR MAGNETIC PUMP

- 一、因磁力泵轴承的冷却和润滑是靠被输送的介质,所以绝对禁止空载运转。同时应避免在工作中途停电后再启动时所造成的空载运转。
- 二、被输送介质中,若含有固体颗粒,泵入口要加过滤网;如含有铁磁质微粒,需加磁性过滤器(本公司有生产,属于选购件)。
- 三、被输送的介质及其温度应在泵材允许范围内(请向相关部门技术咨询)。工程塑料泵的使用温度<60℃,进口压力不大于0.1MPa。最大工作压力为0.6MPa。金属泵的使用温度<100℃,输送进口压力不大于0.2MPa。最大工作压力1.6MPa。
  - 四、对于输送液为易沉淀结晶的介质,使用后应及时清洗、排净泵内积液。
- 五、磁力泵长时间运行或运行过程发现泵有异常情况(噪音人,震动加剧)后,应系检轴承和端面动环的磨损情况,若轴承和轴套的间隙大于0.5~1mm,叶轮轴向窜动2~3mm时,应更换轴承和轴向动环。
- 1. As the cooling and lubrication of magnetic pump's bearing depends on the medium to be handled, that's why unloaded operation is absolutely prohibited. Meanwhile, pay close attention to avoid the unloaded operation after re-start due to power cut in process.
- If the mediums to be handled contain solid particles, then there should be a filter net at the entrance of pump. If there are ferom agnetic particles contained in mediums, a magnetic filter should be fitted (available in factory for your options).
  The mediums to be handled, as well as their temperature, should be kept within the allowed scope of pump material (please consult with relative
- 3. The mediums to be handled, as well as their temperature, should be kept within the allowed scope of pump material (please consult with relative technical department). The service temperature of engineering plastic pump should be <60°C, inlet pressure not greater than 0.1Mpa, maximum working pressure at 0.6MPa; the service temperature of metal pump should be <100°C, inlet pressure not greater than 0.2MPa, maximum working pressure at 1.6Mpa.
  - 4. For mediums easily deposited or crystallized, please flush immediately after use to clear away the deposited liquid inside.
- 5. In case of any abnormal conditions (like large noise or violent vibration) occurred after long-time operation or during operation, disassemble the bearing and end-face rotating ring for examination of abrasion. If the clearance between bearing and axle sleeve is greater than 0.5-1mm, and axial drunkenness of impeller from 2-3mm, then the bearing and axial rotating ring should be replaced.

# 磁力泵使用环境 SERVICE CONDITIONS OF MAGNETIC PUMP

环境温度: -20~40℃; 环境湿度: 95%; 海拔高度; 不超过1000米(大于时应在订货时提出)。

- 警告: a)、泵用电机应由专业人员进行有效安全接地,永久性标志为 ᡨ 。
  - b)、为防止触电,维修或清理磁力泵前应切断电源。
- 1、磁力泵在维修拆装过程中,内、外磁钢部件辐射出来的磁场将对如:心脏起搏器、信用卡、计算机磁盘、手表、精密仪器、仪表等产生磁场干扰,甚至产生危害性的影响。
  - a) 上述物件应远离磁性器件,保持1米以上的距离。
  - b) 装配好的整机磁力泵,不存在上述问题,因结构上有磁回路屏蔽,可放心使用。
- 2、装配内磁转子对准外磁转子轴向到位时,由于磁吸力(尤其是钕铁硼或稀上钴强磁),用户应采取适当的缓冲措施,以免卡、夹手指,防止工伤事故。

Ambient Temperature: -20-40°C; Ambient humidity: 95%; Height above sea level: not exceeding 1,000m (If beyond, please clarify when placing an order). Warning: a) Pump motor should be safely earthed by a professional, permanent sign as

- b) To avoid electric shock, the maintenance and cleaning of magnetic pump should be done after power supply is cut off.
- 1. When disassembling magnetic pump, the magnetic field radiated by inner and outer magnet steel components may produce interference, and even harmful influence to heart pacemaker, credit card, computer disk, watch, precision instrument, meter and etc.,
  - a) The above articles should be kept over 1 meter away from magnetic parts.
- b) The above-mentioned problems don't happen to assembled overall magnetic pump, because there is provided with a magnetic loop shield for your reassurance.
- 2. When inner magnet rotor is leveled to outer magnet rotor axially, and due to magnetic force (especially the strong magnet of NdFeB or rare earth-cobalt), users must take appropriate buffering measures to avoid work accidents like fingers being clamped.

# 浙江扬子江泵业有限公司 ZHEJIANG YANGZIJIANG PUMP CO.,LTD.

公司地址: 浙江省永嘉县瓯北和二工业区 电话(营销部):0577-67980805 67980810 67980813 67980815

企业邮箱: yzj@wwwwww.cc 备用邮箱: jwvalve@163.com 企业网址: http://www.yzjbf.cn

http://www.wwwwww.cc

联系传真:86-0577-67986930 客服热线: 0577-67980815

编: 325105