

## CQB-F 系列衬氟磁力泵

CQB-F Series Fluorine Lining Magnetic Pump

### 产品特点 Product Features

CQB-F型衬氟磁力泵的过流部件均采用聚偏二氟乙烯(PVF<sub>2</sub>)制造。在常温下, PVF<sub>2</sub>对卤素、卤代烃、强氧化剂、沸酸、碱等多种有机溶剂都有良好耐蚀性。泵的外壳为金属材料, 有足够的强度承受管道以及外界机械冲击。进口口径32mm以下的采用全氟结构。因此可广泛用于化工、制药、电镀、石油、环保、稀土分离、冶炼、汽车制造中的酸洗等领域。

All flow-through parts of CQB-F fluorine lining magnetic pump are made of PVF<sub>2</sub>. Under normal temp., PVF<sub>2</sub> has a fine corrosion resistance to many organic solvents like halogen, halogenated hydrocarbon, strong oxidant, boiling acid and alkali. The pump has a metal shell with enough tenacity to afford the mechanical impact from the pipeline and outside. The inlet diameter below 32mm adopt full fluorine structure. It's widely applied in such fields as chemicals, pharmacy, electroplating, petroleum, environment protection, rare earth separation, smelting and acid washing in automobile manufacturing and etc.



### 型号意义 Signification of Model



### 性能参数 Performance Parameters

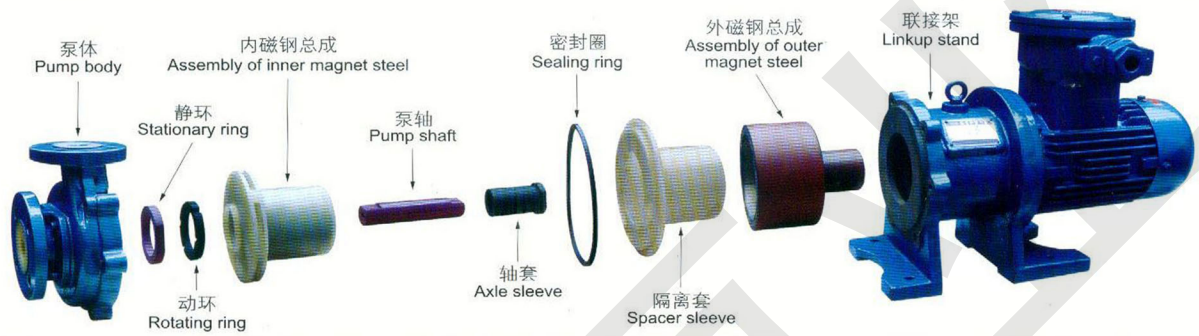
型号 Model	口径 Caliber (mm)		流量 Flow (m <sup>3</sup> /h)	扬程 Head (m)	汽蚀余量 Net positive suction head (NPSH)r(m)	电机功率 Motor power (kW)	转速 Rotary speed (r/min)	电压 Voltage (V)
	进口 Inlet	出口 Outlet						
CQB16-10-80F	16	10	1.8	8	6.0	0.12	2900	220/380
CQB20-12-100F	20	12	3	12	6.0	0.37	2900	220/380
CQB32-25-125F	32	25	3.2	20	5.0	0.75	2900	380
CQB40-32-115F	40	25	6.3	15	6.0	0.75	2900	380
CQB40-32-145F				25	5.0	1.5	2900	380
CQB50-40-125F	50	40	12.5	20	3.5	2.2	2900	380
CQB50-40-160F				32	3.5	3	2900	380
CQB65-50-125F	65	50	25	20	4.0	4	2900	380
CQB65-50-160F				32	4.0	5.5	2900	380
CQB80-65-125F	80	65	50	20	3.5	7.5	2900	380
CQB80-65-160F				32	3.5	11	2900	380
CQB100-80-125F	100	80	100	20	3.2	15	2900	380
CQB100-80-160F				32	3.2	18.5	2900	380

## CQB-F 系列衬氟磁力泵

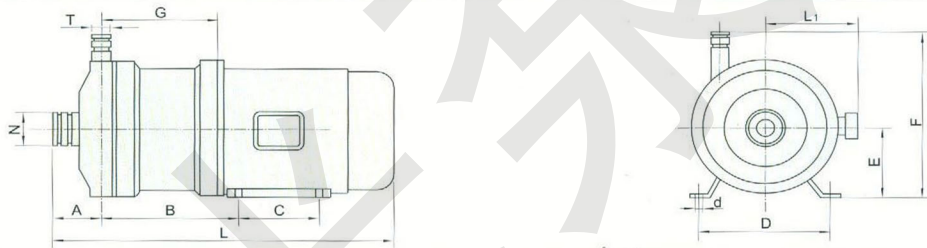
CQB-F Series Fluorine Lining Magnetic Pump

CQB-F Series Fluorine Lining Magnetic Pump

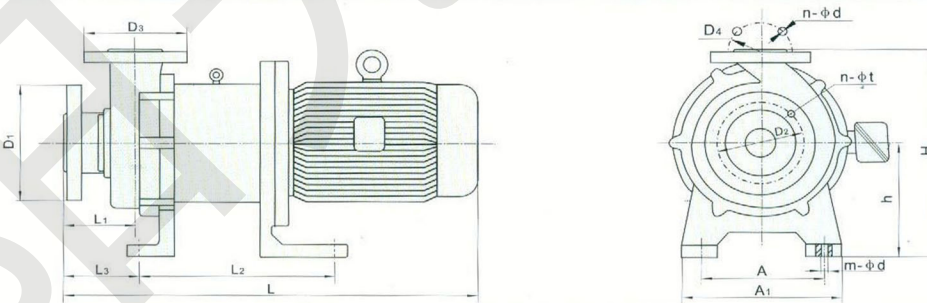
### 结构示意图 Structure Drawing



### 安装尺寸 Installation Dimensions



型号 Model	A	B	C	D	E	F	d	G	L <sub>1</sub>	L	N	T
CQB16-10-80F	46	119	70	90	56	135	7	100	75	298	24	16
CQB20-12-100F	54	145	90	100	71	165	7	108	85	374	26	18



型号 Model	D <sub>1</sub>	D <sub>2</sub>	n-φt	D <sub>3</sub>	D <sub>4</sub>	n-φd	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L	A	A <sub>1</sub>	h	H	m-φd
CQB32-25-125F	140	100	4-18	115	85	4-15	75	93	195	484	140	185	143	272	4-12
CQB40-32-115F	150	110	4-18	140	100	4-18	73	89	200	493	160	200	150	290	4-12
CQB40-32-145F	150	110	4-18	140	100	4-18	73	89	200	518	160	200	150	290	4-12
CQB50-40-125F	165	125	4-18	150	110	4-18	85	87	200	580	195	240	168	328	4-15
CQB50-40-160F	165	125	4-18	150	110	4-18	85	87	200	600	195	240	168	328	4-15
CQB65-50-125F	180	145	4-18	165	125	4-18	81	95	270	630	190	250	200	380	4-18
CQB65-50-160F	185	145	4-18	165	125	4-18	81	95	270	685	190	250	200	380	4-18
CQB80-65-125F	200	160	8-18	185	145	4-18	101	102	259	740	230	300	250	427	4-25
CQB80-65-160F	200	160	8-18	185	145	4-18	101	102	259	900	230	300	250	440	4-25
CQB100-80-125F	220	180	8-18	200	160	8-18	116	124	275	951	280	360	250	470	4-25
CQB100-80-160F	220	180	8-18	200	160	8-18	116	124	275	951	280	360	250	470	4-25
CQB100-80-125F	100	80	100	20	3.2	15	2900	380							
32				3.2					18.5	2900	380				

## 磁力泵安装使用与注意事项

Installation, Operation and Cautions of Magnetic Pump

### 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竖立，塑料泵不得承受管路重量，特殊垂直安装场合，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、泵停止工作前，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 $<60^{\circ}\text{C}$ ，进口压力不大于 $0.1\text{MPa}$ ，最大工作压力为 $0.6\text{MPa}$ ；金属泵的使用温度 $<100^{\circ}\text{C}$ ，输送进口压力不大于 $0.2\text{MPa}$ ，最大工作压力 $1.6\text{MPa}$ ；
- 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有异常情况(噪音大，震动加剧)后，应拆检轴承和端面动环的磨损情况，若轴承和轴套的间隙大于 $0.5\sim 1\text{mm}$ ，叶轮轴向窜动 $2\sim 3\text{mm}$ 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.
2. If the mediums to be handled contain solid particles, then there should be a filter net at the entrance of pump. If there are ferromagnetic particles contained in mediums, a magnetic filter should be fitted (available in factory for your options).
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  $<60^{\circ}\text{C}$ , inlet pressure not greater than  $0.1\text{Mpa}$ , maximum working pressure at  $0.6\text{MPa}$ ; the service temperature of metal pump should be  $<100^{\circ}\text{C}$ , inlet pressure not greater than  $0.2\text{MPa}$ , maximum working pressure at  $1.6\text{MPa}$ .
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  $0.5\sim 1\text{mm}$ , and axial drunkenness of impeller from  $2\sim 3\text{mm}$ , 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： $-20\sim 40^{\circ}\text{C}$ ；环境湿度：95%；海拔高度：不超过1000米(大于时应是在订货时提出)。

- 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 。  
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(尤其是钕铁硼或稀土钴强磁)，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:  $-20\sim 40^{\circ}\text{C}$ ; 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.