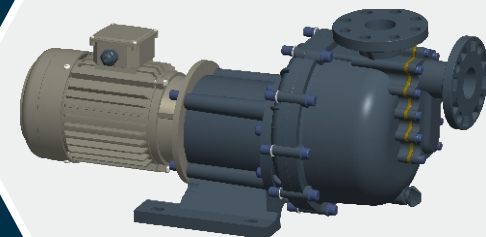
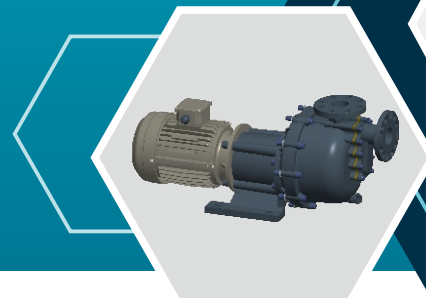




勇于创新 稳定可靠 节能环保



EGL系列气液磁力泵

耐用磁力泵的新标杆
DURABLE MAGNETIC PUMP NEW BENCHMARKS



公司简介

Company Profile

我司专业从事工业泵浦的定向研发、设计、制造、销售与服务。公司依托深厚的技术储备，综合国际知名品牌优势，精选高品质的原材料，持续为客户提供高效、节能、稳定、可靠、齐全的产品。

我司各类泵浦、系统广泛应用于：光伏太阳能、半导体、化工、表面处理、连续电镀、电容镀膜、化学储能、水处理等行业。

优势特点

Advantages and Characteristics

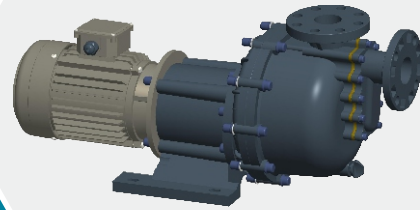
1. 核心部件采用进口供应商，例如：磁头、轴套等；
2. 铸件采用高端原材料，以进口和自主研发为主，杜绝材料问题；
3. 磁力泵做到零泄露，保证运行安全、可靠；
4. 泵浦流道自主设计，高效运行，节能环保；
5. 泵浦采用独特设计，高温、低温亦可稳定运转；
6. 强大研发团队，可按客户需求，量身定制。



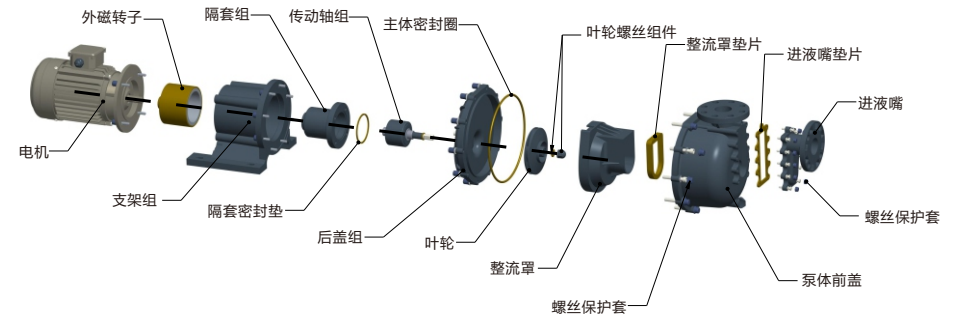


气液磁力泵

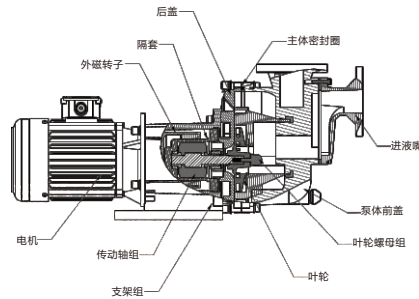
EGL-12 >>>



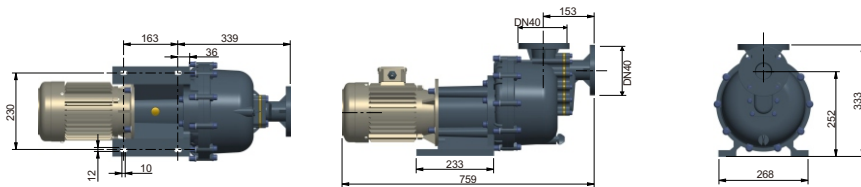
>> 分解图 series decomposition figure



>> 剖面图 Cross section view



>> 外型尺寸图 Envelop dimensions figure



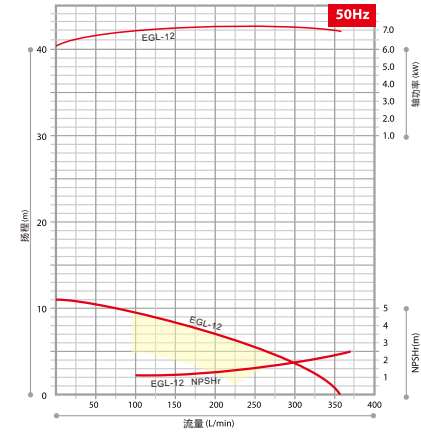
特点：此系列磁力泵可以输送气液混合液体，只要泵腔注入液体，就可持续抽送混合液体，允许抽送直径2mm以下2%质量含量的固体颗粒。具体情况请咨询工程师。

>> 过流部件可选材料及温度范围

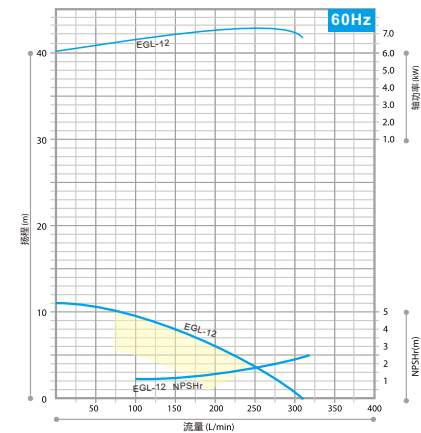
泵体	密封件		耐磨件		
GF+PP	0°C~90°C	EPDM	0°C~60°C	碳石墨	-10°C~80°C
PVDF	-20°C~100°C	VITON	-25°C~80°C	高纯度氧化铝	-60°C~150°C
PPS	-60°C~120°C	FKM	-70°C~120°C	工程复合碳化硅	-80°C~280°C
ETFE	-85°C~120°C	PTFE	-180°C~250°C		°C~°C

以上标识为材料耐受温度，产品运行温度视介质及环境而定，请咨询我方工程师。

>> 50Hz性能曲线



>> 60Hz性能曲线

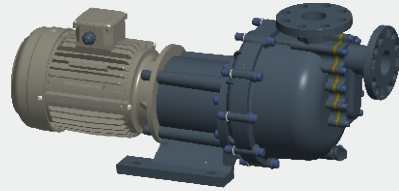


备注：以上为标配电机曲线

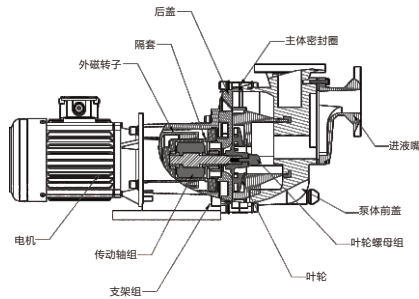


气液磁力泵

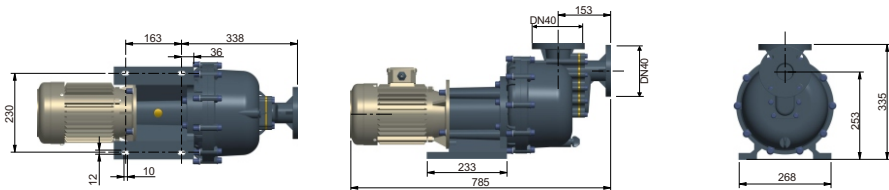
EGL-18 >>>



>> 剖面图 Cross section view



>> 外型尺寸图 Envelop dimensions figure



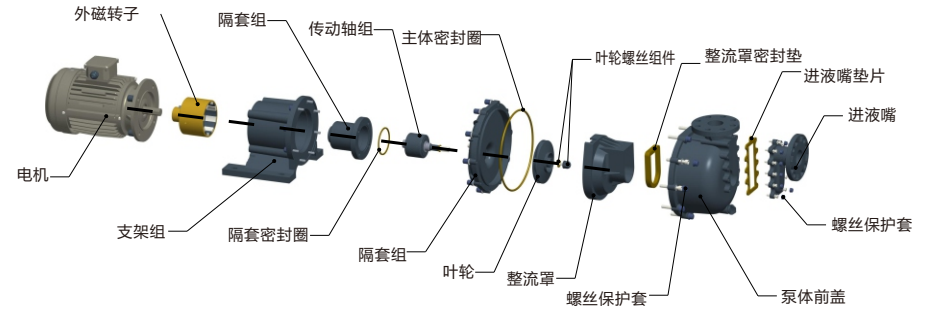
特点：此系列磁力泵可以输送气液混合液体，只要泵腔注入液体，就可持续抽送混合液体，允许抽送直径2mm以下2%质量含量的固体颗粒。具体情况请咨询工程师。

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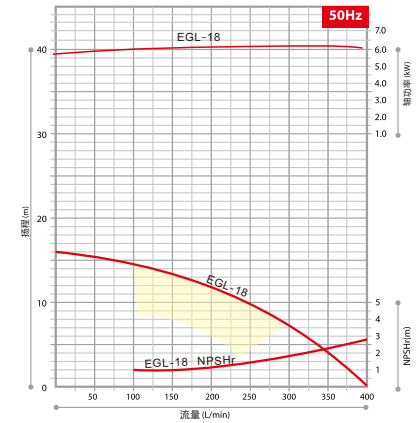
泵体	密封件		耐磨件		
GF+PP	0°C~90°C	EPDM	0°C~60°C	碳石墨	-10°C~80°C
PVDF	-20°C~100°C	VITON	-25°C~80°C	高纯度氧化铝	-60°C~150°C
PPS	-60°C~120°C	FKM	-70°C~120°C	工程复合碳化硅	-80°C~280°C
ETFE	-85°C~120°C	PTFE	-180°C~250°C		°C~°C

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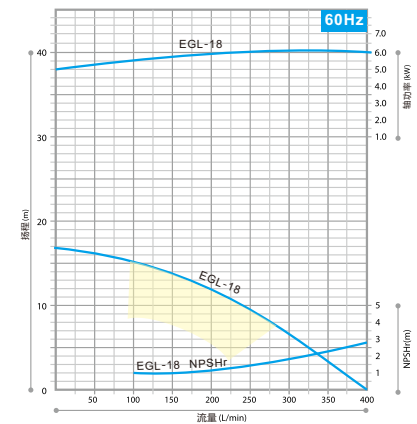
>> 分解图 series decomposition figure



>> 50Hz性能曲线



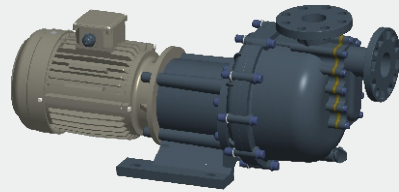
>> 60Hz性能曲线



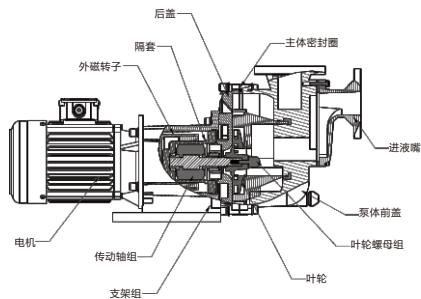
备注：以上为标配电机曲线



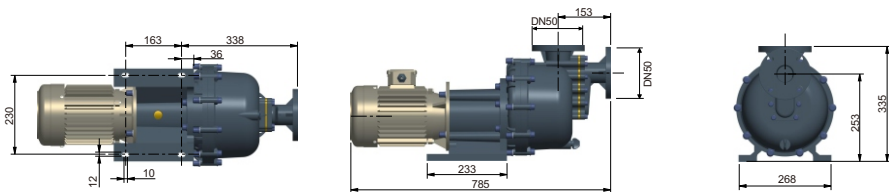
气液磁力泵 EGL-25 >>>



>> 剖面图 Cross section view



>> 外型尺寸图 Envelop dimensions figure



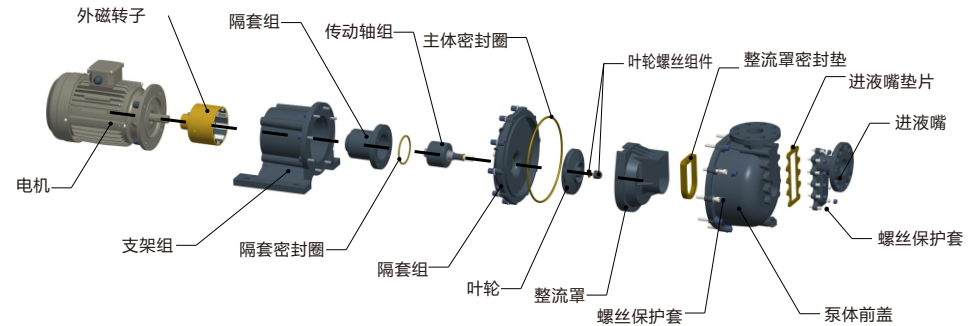
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>> 过流部件可选材料及温度范围

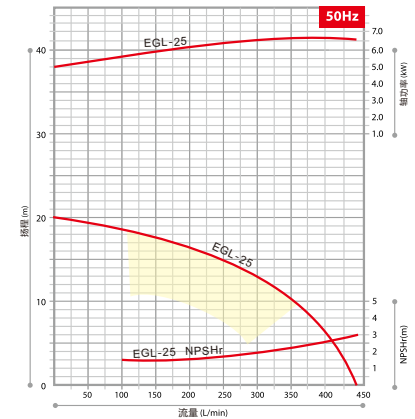
泵体	密封件		耐磨件		
GF+PP	0°C~90°C	EPDM	0°C~60°C	碳石墨	-10°C~80°C
PVDF	-20°C~100°C	VITON	-25°C~80°C	高纯度氧化铝	-60°C~150°C
PPS	-60°C~120°C	FKM	-70°C~120°C	工程复合碳化硅	-80°C~280°C
ETFE	-85°C~120°C	PTFE	-180°C~250°C		°C~°C

以上标识为材料耐受温度，产品运行温度视介质及环境而定，请咨询我方工程师。

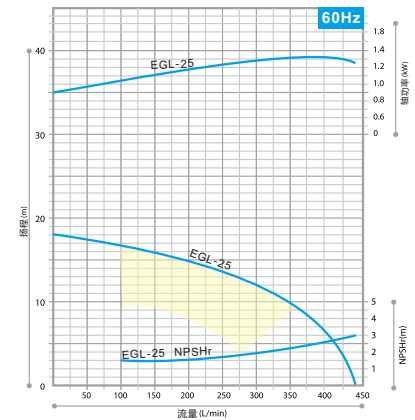
>> 分解图 series decomposition figure



>> 50Hz性能曲线



>> 60Hz性能曲线



备注：以上为标配电机曲线

Model Identification Code Instruction

EGL 12 / P0 / 111 / FF
 (1) (2) (3) (4)

1、Series Model

12 , 18,

2、Material Code

General:P0,K0,S0,E0

Option:PF,KF,SF,EF

(P : PP+GF玻纤增强聚丙烯 , K : PVDF , S : PPS , E : ETFE、 0 : 常规、 F : 选配)

3、Motor Code

Code	Voltage
1	Single phase 220V
2	Three phase 220V
3	Three phase 380V
4	Three phase 415V
5	Three phase 380V
X	Customers' Request

Code	Frequency
1	50Hz
2	60Hz
X	Customers' Request

Code	Number of Poles
1	4 -Pole
2	2-Pole
X	Customers' Request

4、Interface Types

F: Flange H: Union L: Thread Q: Others

Notes: Letter H is added to the end of the model with high cleanliness level requirements.

CHOOSE MODEL DATA TABLES

In order to help you choose the proper pump , please help provide the following data as much detail as possible.

OPERATING CONDITIONS :

REQUIRED FLOW (NORMAL)	L/min		
REQUIRED FLOW (MAXIMUM)	L/min		
TOTAL HEAD	m		
SPIT OUT THE HEAD	m		
INHALED HEAD	m		
NPSHa	m		
INSTALLATION POSITION	<input type="checkbox"/> INDOOR	<input type="checkbox"/> OUTDOOR	
OPERATION STATE	<input type="checkbox"/> CONTINUOUS	<input type="checkbox"/> INTERMITTENT	
ENVIRONMENT TEMPERATURE	DESIGN	℃	WINTER
		℃	SUMMER

MEDIA PROPERTIES :

MEDIUM NAME		TEMPERATURE	℃
CONCENTRATION	%	VISCOSITY	CP
SATURATED STEAM PRESSURE	MPa	PROPORTION	
SOLID CONTENT (CONTAIN)	μ %	HARDNESS	HB

MOTOR :

POWER	
SPEED	
PROTECTION GRADE (IP)	
INSULATION CLASS	
EXPLOSIVE-PROOF GRADE	V 相(PHASE) Hz

Precautions

- The performance curve provided by DATTO is the performance of transporting clean water at room temperature.
- Select the appropriate impeller according to the specific transport proportion. When selecting, add 5~10% allowance to the motor output power, namely:
POWER (SP) × MEDIUM PROPORTION × ALLOWANCE RATE (1.05 ~ 1.1) ≤ MOTOR OUTPUT POWER
 Note: The power (SP) increases in proportion to the specific proportion of the medium. If the viscosity increases, not only the power increases, but also the lift and flow will change. Therefore, the power required for pump performance will change, and correction calculation must be carried out. For details, please contact us.
- For magnetic drive pump, continuous operation is not allowed when the discharge port is closed, and the minimum flow shall be maintained. For the required minimum flow of various pumps, please refer to the performance parameter table and performance curve.
- To avoid cavitation in the pump body, the following formula must be met:

$$NPSHa \geq NPSHr + 0.5$$

NPSHa calculation method

$$NPSHa = \frac{10^6(Pa - Pv)}{\rho g} \pm hs - hf$$

Pa : Pressure acting on the surface of transmission medium

P : Medium density (kg/m³)

g : Gravity acceleration (m/s²)

NPSHa : Available cavitation residue(m)

NPSHr : The necessary cavitation residue(m)

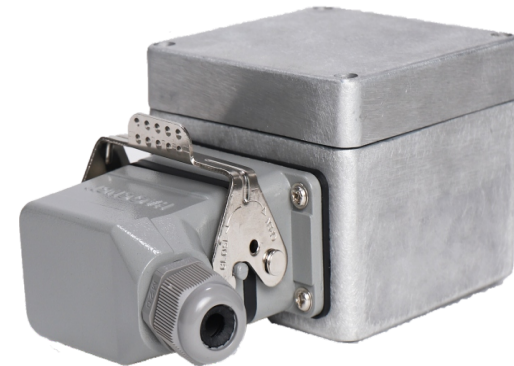
Note : according to performance curve choice NPSHr

Pv : (MPa) vapour pressure of the medium (Mpa)

hs : Suck up height(m)

hf : Suction pipe resistance(m)

OPTIONAL MOTOR JUNCTION BOX INTERFACE



INSTRUCTIONS AND PRECAUTIONS

Selection, installation, adjusting, operation and fault

1. General rules of specifications

Scientific technical specifications should be followed in the process of design, construction and maintenance in order to ensure the safe operation of the pump within its life cycle. During the design, the specific type selection shall be determined according to the flow, lift, specific proportion, pipeline length, medium composition, medium concentration, temperature, solid content, liquid viscosity and other parameters. The model, power, interface size and pipe diameter of the pump shall be determined according to the flow, lift, specific proportion and pipe length of the working point. Determine whether the materials of the flow passage parts of the pump are resistant to medium corrosion according to the medium composition, medium concentration and temperature. If there is solid content, the allowable range, particle diameter, hardness and other special requirements shall be determined with the supplier. If the liquid viscosity is too large, specific parameters shall be provided to the supplier for determination. During the construction, the pipeline works' technical and safety requirements shall be strictly followed. The pipe diameter should be consistent with the nominal diameter of the pump. The pipe diameter can be increased, but not reduced. The inlet and outlet pipes of the pump should be kept at a straight distance. Do not immediately install elbows at the inlet and outlet. As the pump is a rotating equipment, the base should be fixed firmly. Daily maintenance shall pay attention to regular cleaning, regular monitoring of vibration values, proficiency in the normally open and close settings of pipeline valves, and practice the startup and shutdown procedures.

2. Precautions for Installation

1. The length of the inlet pipeline of the pump shall be less than 2 meters, and the number of 90 degree elbows shall be less than 3. The inlet and outlet pipelines shall keep a straight line, and the length shall be 5 times of the flange diameter of the pump. If the inlet pipeline really needs to be more than 2 meters, and there are too many elbows, please increase the pipeline diameter as appropriate.

2. The diameter of the inlet and outlet pipes should be consistent with the requirements of the pump, which can be increased, but not reduced. If the diameter of the inlet pipe is too small, cavitation will occur, and the impeller will generate a lot of air, causing vibration. The inlet should not be installed in an inverted U shape, which will store gas.

3. If filter protection is required for the inlet pipeline, the bottom valve with screen shall be installed consistent with the pipeline model, and regular cleaning shall be specified. If Y-type filter is selected, it shall be increased to 1.5-2 times of the pipeline diameter.

4. When the pump is at full flow, the liquid level at the liquid inlet shall be free of vortex. During installation and adjusting, the liquid level height shall be determined, and it is better to have a low liquid level limit switch for protection. It is recommended that the liquid level of 1-inch (DN25) interface pump should not be lower than 20CM, the liquid level of 1.5-inch (DN40) interface pump should not be lower than 25CM, the liquid level of 2-inch (DN50) interface pump should not be lower than 30CM, and the liquid level of 2.5-inch interface pump should not be lower than 35CM. The standard is that the maximum flow of liquid on site will not produce vortex, because the density, temperature and tension of each liquid will be different.

5. The base of the pump shall be firmly installed. Since the pump is a rotating equipment, the base must be firmly installed to prevent resonance and flexible vibration.

6. Check if the liquid tank is sealed. If it is too tight, there will be negative pressure at the inlet. If there is, an air vent should be added.

3. Adjusting

1. Clean all overflow pipes before adjusting.
2. Open all pipe valves.
3. Add the required amount of liquid.
4. Discharge the gas in the inlet pipeline and check whether the pipeline is smooth.
5. Check whether the power connection is suitable, turn on the motor power, jog for 3 times to determine the running direction.
6. Start up and operate, observe the change of liquid level and whether there is bubble at the outlet.

4. Operation Monitoring

1. It is strictly forbidden to run without liquid, and stop the machine for inspection immediately in case of abnormal noise and abnormal rise of motor surface temperature.
2. The vibration value directly above the bearing position of the front end cover of the motor shall be regularly monitored every week and shall be less than 4.5mm/S. If it exceeds the standard, the machine shall be stopped for inspection.
3. Check that the liquid at the inlet nozzle does not contain bubbles, and that the dissolved bubbles in the liquid do not enter the pump. It is necessary to separate the bubbles from the liquid surface.
4. Before starting the machine every day, check the height from the inlet of the inlet pipe (at the opening of the tank) to the liquid level, and no vortex will be generated during operation.

5. Shutdown protection

First adjust the outlet valve to the minimum flow of the pump, and then close the power to prevent the pump body from being damaged by the impact of returned liquid. Then close the inlet valve and outlet valve.

6. Maintenance

1. After disassembling the pump, first observe whether the external magnetic rotor (active magnetic rotor) is oxidized, and no liquid can touch the magnet part. Spray quick drying paint to protect the external magnetic rotor when disassembling for maintenance.
2. Handle with care to protect the ceramic parts. Make the assembly angle of the pump cover and the spacer sleeve correct, and ensure the parts clean.

7. Fault Diagnosis

1. Liquid shortage operation is a general term for phenomena, including dry operation with complete liquid shortage, wet operation with half liquid shortage, and operation with insufficient liquid intake. Completely dry running without liquid will immediately crack the ceramic parts; The liquid will not flow normally when it is half starved of liquid for wet operation, and the plastic around the ceramic parts will be hot melted when the temperature rises; If the liquid inlet is not fully operated, the pump will produce cavitation, increase the vibration and loosen the shaft sleeve.
2. Overflow parts will corrode, decompose and crack if exceeding the scope of use and tolerance of the materials.