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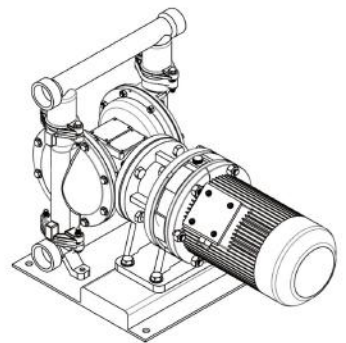
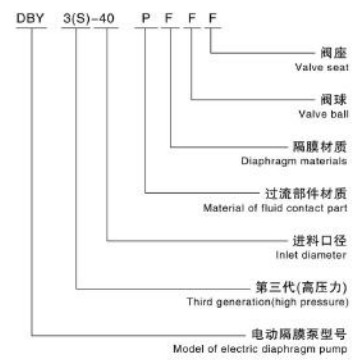


DBY3 电动隔膜泵
electric diaphragm pump



DBY3

一、型号意义 DESIGNATION



DBY3

DBY3

二、性能简介 Function

电动隔膜泵即能抽送流动的液体，又能输送一些不易流动的介质，具有自吸泵、杂质泵等输送机械的许多优点，并可调节流量。该泵的优点如下：

- 1、使用方便，不需引水、工作可靠，只需通电即可工作。
- 2、电动隔膜泵品种多，泵体介质过流部分，可根据用户要求不同，分为铸钢、不锈钢、铝合金、氟塑料等，隔膜泵电机可分为普通电机、防爆电机、变频电机和电磁调速电机；
- 3、可输送较稠液体（粘度在10000厘泊以下）；
- 4、电动泵本身无轴封，大大延长使用寿命；
- 5、流道宽敞，通过性能好，允许通过最大颗粒9mm，抽送泥浆、杂质时，对泵磨损甚微；
- 6、工作环境范围：5-65℃，输送介质范围：-20℃~150℃；
- 7、结构简单，易损件少，安装维修方便。泵输送的介质不会接触到泵的连杆、轴承等运动部件，不像其他类型的泵因转子、活塞、齿轮、叶片等部件的磨损而使性能逐步下降；
- 8、由于隔膜将被输送介质和传动机械件分开，所以介质绝对不会向外泄漏；且电动隔膜泵本身无轴封，使用寿命大大延长；根据不同介质，隔膜可分为氯丁橡胶、氟橡胶、丁腈橡胶、聚四氟乙烯、聚氨酯等，可以满足不同客户的要求。

Electric diaphragm pump can pump both flowing liquid and the liquid with flowing less easily, have the advantages as the self-priming pump and trash pump..

- (1)Easy to use, it can work with electricity.
- (2)The material of pump body can meet customer's requirement, such as casting steel, stainless steel, aluminium alloy, fluoroplastics etc. There are four kinds motor of the pump: common motor, explosion proof motor, variable frequency motor and electromagnetic speed-adjustable motor.
- (3)Can pump much thicker liquid (thickness below 10000 centipoise)
- (4)The motor do not have shaft seal, which can extend the service life.
- (5)Good passage capacity, the maximum particle is 9mm, do less damage to the pump when pump the slurry.
- (6)Working Temperature: 5-65℃ Medium Temperature: -20℃~150℃
- (7)Simple structure, less wearing parts, easy installation and maintenance.
- (8)Since the diaphragm is separated by the medium and the transmission machinery, so the medium will not leak. According to different medium, the material of the diaphragm can be neoprene, FKM, NBR, Teflon, PUF etc.

三、概述 Description

DBY3系列电动隔膜泵，采用摆线针轮减速机传动，通过曲轴滑块机构带动双隔膜作往返运动，使工作腔容积发生交替变化，从而达到将液体不断地吸入和排出。由于本公司生产隔膜材质取得了突破性的进展，大大地延长隔膜的使用寿命，因此被越来越广泛地替代部分离心泵、螺杆泵来应用于石化、陶瓷、污水、涂料、食品、冶金等行业。

DBY3 series electric diaphragm pump adopting new cycloidal reducer, making the double diaphragm do reciprocation with the help of the crankshaft drive mechanism, breath can and remove the liquid constantly by changing the working volume. According to the breakthrough progress on the pump material made by our company that increase the service life, the DBY3 is widely used in Petrochemical, ceramics, water, paint, food and metallurgical industries replace the centrifugal pump and screw pump.

四、工作原理 Working Principle

DBY3系列电动隔膜泵工作原理：在隔膜泵的两个对称工作腔中，各装有一块有弹性的隔膜，连杆将两块隔膜结成一体，连杆中间的方形槽装有凸轮带动连杆往复运动。

电机轴与一根偏心轴通过键连接，偏心轴的前端有凸轮和轴承构成，轴承与连杆上的方形槽配合。电机转动时，连杆就能实现往复运动。

当连杆轴向左边运动，左边腔体处于压缩状态，液体被从腔体中挤压出去，同时右边腔体处于扩张状态，将外部的液体吸入到腔内；之后连杆往右边运动，右边腔体处于压缩状态，液体被压缩出去，同时左边腔体处于扩张状态，将外部液体吸入到腔体内，这样就实现了电机带动膜片来回工作，将介质不断向外输送。

2 Working Principle

There are two flexible diaphragms in the symmetrical working chamber of the pump, the connection rod combines two diaphragms, the cam equipped in the middle of the square groove of the connecting rod drives the connection rod do Reciprocation.

The motor shaft is connect with an eccentric shaft which front is composed with camshaft and bearing.. The connection rod will do Reciprocation while the motor works.

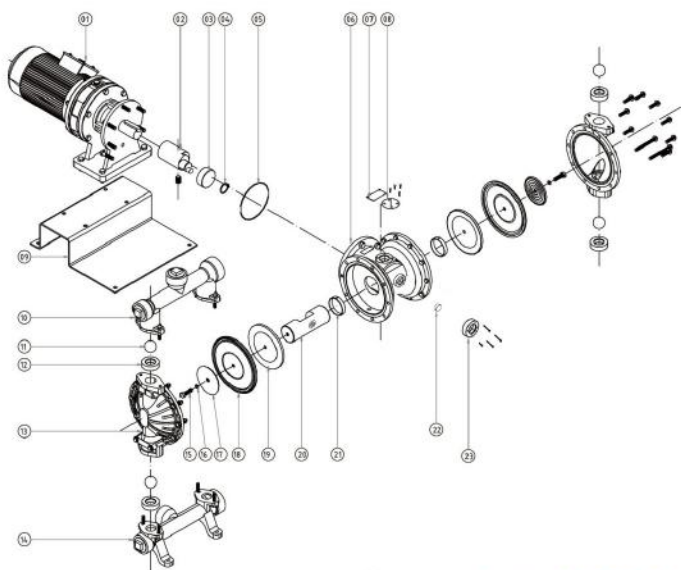
When the connection rod shaft moves forward left direction, the left chamber in a compressed state, the liquid is squeezed out of the chamber, meanwhile the right chamber in an expanded state, the external liquid is sucked into the chamber; the connection rod moves forward right direction, the right cavity in a compressed state, the liquid is compressed out, and left the chamber in an expanded state, the external liquid is sucked into the cavity, thus achieving a motor driven diaphragm back and forth to work, we will continue outward transport medium.

五、主要用途 Main Usage

- | | |
|---------------------------|---|
| 1、各种剧毒、易燃、易挥发液体。 | 1、 Various toxin and flammable or volatility liquid |
| 2、各种强酸、强碱、强腐蚀液体。 | 2、 Strong acid, alkali, and corrosive liquid |
| 3、可输送较高温度介质150℃。 | 3、 Transport high temperature medium 150℃ |
| 4、作为各种压滤机级进压装置。 | 4、 As all kinds of filter press former send-pressure device |
| 5、热水回收及循环。 | 5、 Hot water recycle and circulation |
| 6、油罐车、油岸、油品装卸。 | 6、 Tankers, oil depots, oil loading and unloading |
| 7、泵吸泡菜、果酱、巧克力、土豆泥等。 | 7、 Suck pickles, jam, chocolate, mash. |
| 8、泵吸油漆、塑胶、颜料粘合剂。 | 8、 Suck paint, plastic, pigment adhesive etc. |
| 9、各种瓷瓶釉浆、水泥灌浆、泥浆。 | 9、 Chinaware, cement grouting, slurry. |
| 10、各种橡胶浆、有机溶剂、填料。 | 10、 Latex, organic solvents, packing |
| 11、用泵为游轮驳船请仓吸取仓底污水及剩油。 | 11、 Suck the sewage and residual oil for cruise |
| 12、啤酒花及发酵粉稀浆；糖浆、蜜糖。 | 12、 Hops and yeast slurry; syrup, honey |
| 13、泵吸矿井、坑道、隧道、下水道中污水、沉淀物。 | 13、 Suck the sewage and sediment for the mine, gallery, tunnel, sewer |
| 14、各种介质的吸送。 | 14、 Suck and raise all kind of medium. |

DBY3

六、零件明细表Parts List



Parts List 零部件明细表

序号No.	名称Name	序号No.	名称Name	序号No.	名称Name	序号No.	名称Name
01	电机 motor	02	偏心轴 Eccentric shaft	03	轴承 bearing shaft	04	卡簧 clamp spring
05	O型圈 O-ring	06	中筒体 midbody	07	铭牌 nameplate	08	检查窗 checking cage
09	底座 seat	10	出料口 discharge manifold	11	球 ball	12	球座 ball seat
13	立柱 stand column	14	进口口 suction manifold	15	夹板螺丝 screw	16	夹板O型圈 O-ring
17	外夹板 outside plate	18	膜片 diaphragm	19	内夹板 inside plate	20	连杆轴 connection rod shaft
21	连杆轴套 connection rod jacket	22	端盖轴承 End cap bearing	23	偏心轴端盖 Eccentric shaft end cover		

DBY3

七、DBY3电动隔膜泵型号及参数 DBY3 electric diaphragm pump model and parameter



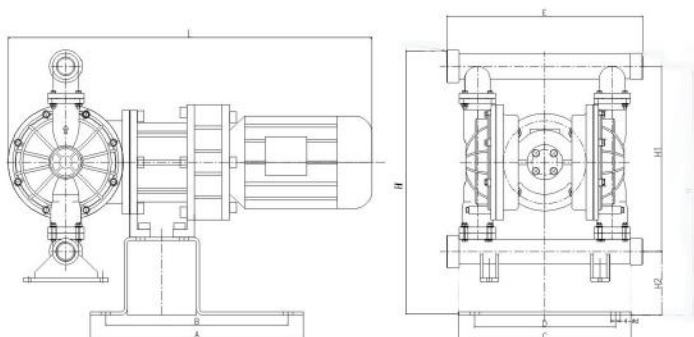
型号 Type	流量 Flow (L/min)	最大吸程 Lift (M)	扬程 PUMP LIFT (M)	电机功率 Power (KW)	最大可通过颗粒直径 the max particle diameter (mm)
DBY3-10/15	12.8	3	40	0.55	0.5
DBY3S-10/15	12.8	3	70	0.75	
DBY3-20/25	26	4	40	0.55	2.5
DBY3S-20/25	26	4	70	0.75	
DBY3-32/40/25A	55	4	40	1.5	3.5
DBY3S-32/40/25A	55	4	70	2.2	
DBY3-50/65	162	5	40	2.2	6
DBY3S-50/65	162	5	70	3	
DBY3-80/100	240	5	40	3	8
DBY3S-80/100	240	5	70	4	
DBY3-125	450	5	40	4	8
DBY3S-125	450	5	70	5.5	

DBY3

八、外型及安装尺寸

Outlinge and installing dimension

型号Type	A	B	C	D	E	L	H	H1	H2	Zxφb
DBY3-10/15	260	320	220	280	240	510	255	300	65	4xφ12
DBY3-20/25	322	280	260	225	227	520	325	245	65	4xφ12
DBY3-32/40/25A	375	335	350	310	326	730	465	335	105	4xφ16
DBY3-50/65	460	406	430	379	415	760	635	450	145	4xφ16
DBY3-80/100	500	400	431	385	605	950	710	555	110	4xφ16
DBY3-125	420	340	416	370	810	851	652	638	137	4xφ14



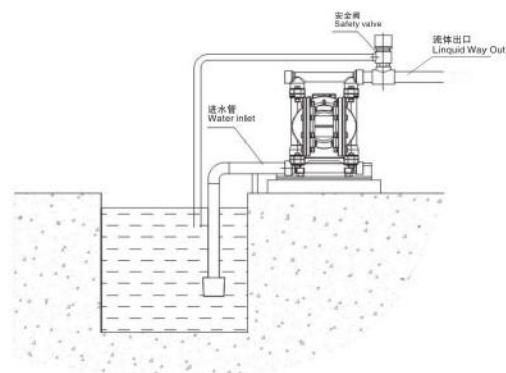
DBY3

九、安装指引 Installation

(一) 安装准备 installing preparation

1. 安装时请注意打开泵上方的检查窗，确认内部结构有润滑油。
 2. 检查电机法兰和泵体螺丝连接，以及其他安装部位螺丝连接是否有松动。
 3. 泵进出口允许安装阀门，但出料口装有阀门时，必须在阀门前装有安全阀。
1. Open the inspection window on the top of the pump when installation, to make sure the lubricating oil with internal structure.
2. Check the connection of the motor flange and screw, as well as other parts connected by the screw.
3. The valve can be allowed to installed at the inlet and outlet of the pump, but if you want to install valve at the outlet, install the safety valve before the valve.

(二) 安装示意图 Installation Instruction



十、注意事项 Note

- 1、本设备仅用于专用用途。
 - 2、在操作设备前，必须阅读所有的说明，了解各种标志和标签内容。
 - 3、设备仅可用于规定的目的，如果不能确信，可与本公司经销商联系。
 - 4、不得擅自改变或改造设备，应采用纯正的零件和附件。
 - 5、每日应检查设备，如果有任何磨损或损坏的零件，应立即更换或修理。
 - 6、必须使用符合液体防腐要求的设备部件。应参阅设备说明中的技术数据的内容，并了解制造商有关流体和溶剂的警告。
 - 7、在有铝制设备中，不能使用三氯乙烷、二氯乙烷，其他卤化溶剂或含有这类溶剂的液体，否则会导致爆炸可能性的化学反应。
 - 8、不得用软管来拖动设备。
 - 9、应遵守国家的一切有关火灾，电气和安全方面的规定。
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- 1.The device is used only for special purposes.
 - 2.You must read all the instructions, understand the various marking and labeling content, before operating the equipment.
 - 3.The device can only be used for the specified purpose, if not convinced, you can contact the dealer.
 - 4.Do not change or modify the equipment, you should use genuine parts and accessories.
 - 5.Exam the equipment everyday, change or repair the damaged parts.
 - 6.The equipment parts must comply with the preservative requirements of the liquid. You should refer to the contents of the technical data, and understand the manufacturer warnings about fluids and solvents.
 - 7.You can not use trichloroethane, dichloroethane, liquid such solvents or other solvents containing halogenated when use an aluminum device, otherwise it will lead to the possibility of an explosion of a chemical reaction.
 - 8.Forbidden to drag the device by hosepipe.
 - 9.Comply with the state regulations about fire, electricity and safe things