

GDL 多级管道离心泵系列

GDL multi-stage pipeline centrifugal pump Series

使
用
说
明
书



上海美言壹泵阀有限公司
ShangHai MeiYan Yi Pump & Valve Co., LTD.

GDL 多级管道离心泵

GDL multi-stage pipeline centrifugal pump

概述 overview

GDL 型立式单吸多级分段式管道离心泵是我单位近些年在国内外优秀泵型之基础上结合用户的使用要求及消防有关标准，并根据 JB/TQ6435-92 标准设计制造的新一代水泵产品。

GDL 型多级管道离心泵采用立式节段式外加不锈钢壳体结构，使得泵的进出口位于同一水平线上且口径相同，能像阀门一样安装于管路之中，它同时集中了多级泵之高压，立式泵之占地面积小及管道泵之安装方便的优点，同时由于采用了优秀的水力模型，所以还具有高效节能，运行平稳等优点，且轴封采用耐磨机械密封，无泄漏使用寿命长。

为了更好地满足用户的要求，本单位还开发了出水口位于上部的 GDLS 型，其进出口可以不同的相对位置（ 0° 、 90° 、 180° ）安装，使用极为方便。

为了使用用户能更加安全、可靠的使用该型泵，上海美言壹泵阀特别研制了便拆式结构型，它除拥有 GDL、GDLS 的一切优点外，更为您更换机械密封等易损件提供了更加方便、快捷、省力的途径，使本型泵更无忧运行与维护。

The GDL type vertical single suction multi-stage segmented pipeline centrifugal pump is a new generation of water pump product designed and manufactured by our unit in recent years based on excellent pump types at home and abroad, combined with user requirements and relevant fire safety standards, and in accordance with JB/TQ6435-92 standards.

The GDL type multi-stage pipeline centrifugal pump adopts a vertical segmented external stainless steel shell structure, which enables the inlet and outlet of the pump to be located on the same horizontal line and have the same diameter, and can be installed in the pipeline like a valve. It also concentrates the high pressure of the multi-stage pump, has the advantages of small footprint of the vertical pump and convenient installation of the pipeline pump. At the same time, due to the excellent hydraulic model used, it also has the advantages of high efficiency, energy saving, and smooth operation. The shaft seal adopts wear-resistant mechanical seal, with no leakage and long service life.

In order to better meet the requirements of users, our unit has also developed the GDLS type with the outlet located at the upper part. Its inlet and outlet can be installed at different relative positions (0° , 90° , 180°), making it extremely convenient to use.

In order to provide users with safer and more reliable use of this type of pump, Shanghai Meiyanyi Pump Valve has specially developed a detachable structural type. In addition to all the advantages of GDL and GDLS, it also provides a more convenient, fast, and labor-saving way for you to replace vulnerable parts such as mechanical seals, making this type of pump more worry free to operate and maintain.

应用范围 Application scope

GDL 型多级管道离心泵主要适用于高压运行系统中冷热清水的循环和增压、高层建筑多台泵并联供水、消防、锅炉给水和冷却水系统及各种冲洗液的输送等。

The GDL type multi-stage pipeline centrifugal pump is mainly suitable for the circulation and pressurization of cold and hot water in high-pressure operating systems, parallel water supply

of multiple pumps in high-rise buildings, fire protection, boiler feedwater and cooling water systems, and the transportation of various flushing liquids.

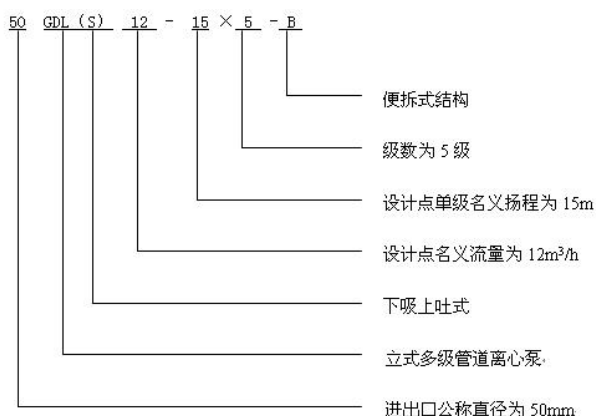


GDL 多级管道离心泵产品图 Product diagram of GDL multi-stage pipeline centrifugal pump

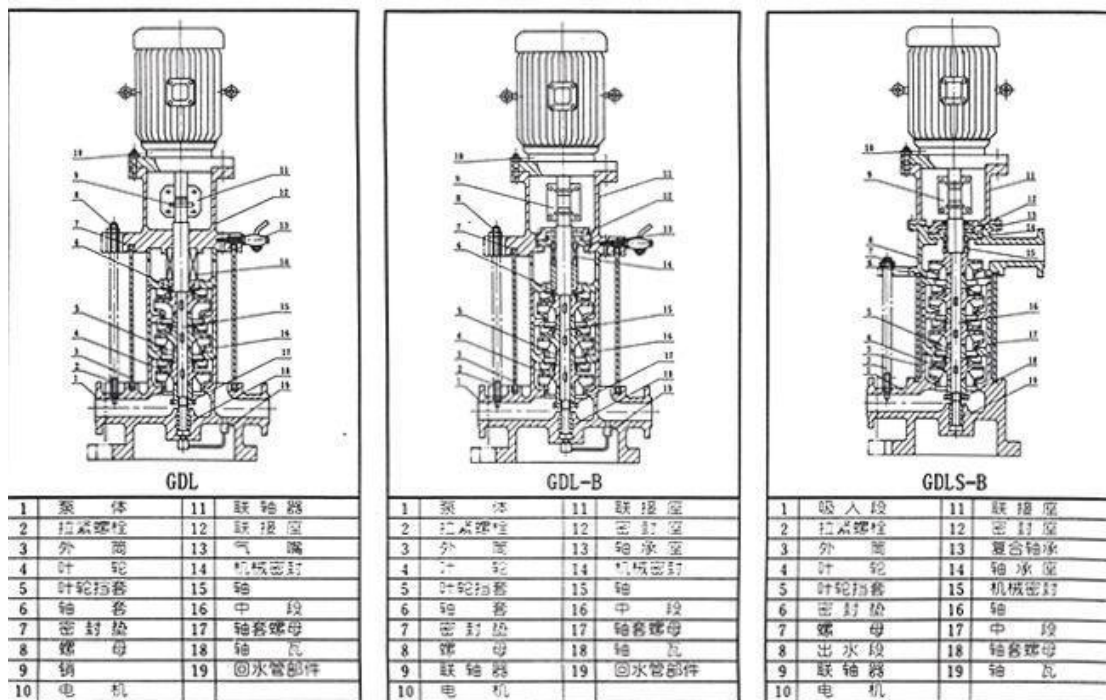
工作条件 working conditions

- 1、本型泵可输送清水或物理化学性质类似于清水的液体;
 - 2、液体温度: $-15^{\circ}\text{C}\sim+120^{\circ}\text{C}$;
 - 3、工作压力: 最大工作压力 $<2.5\text{Mpa}$, 即系统压力=入口压力+闭阀工作时的压力 $<2.5\text{Mpa}$;
 - 4、周围环境的温度应低于 40°C , 相对湿度不超过 95%;
 - 5、输送含腐蚀性介质及热液体时, 请于订货时提出, 以便采用特殊材质满足使用要求。
1. This type of pump can transport clean water or liquids with physical and chemical properties similar to clean water;
 2. Liquid temperature: $-15^{\circ}\text{C}\sim+120^{\circ}\text{C}$;
 3. Working pressure: The maximum working pressure is less than 2.5Mpa , which means that the system pressure is equal to the inlet pressure plus the pressure when the valve is closed, which is less than 2.5Mpa ;
 4. The temperature of the surrounding environment should be below 40°C , and the relative humidity should not exceed 95%;
 5. When transporting corrosive media and hot liquids, please specify at the time of ordering so that special materials can be used to meet the usage requirements.

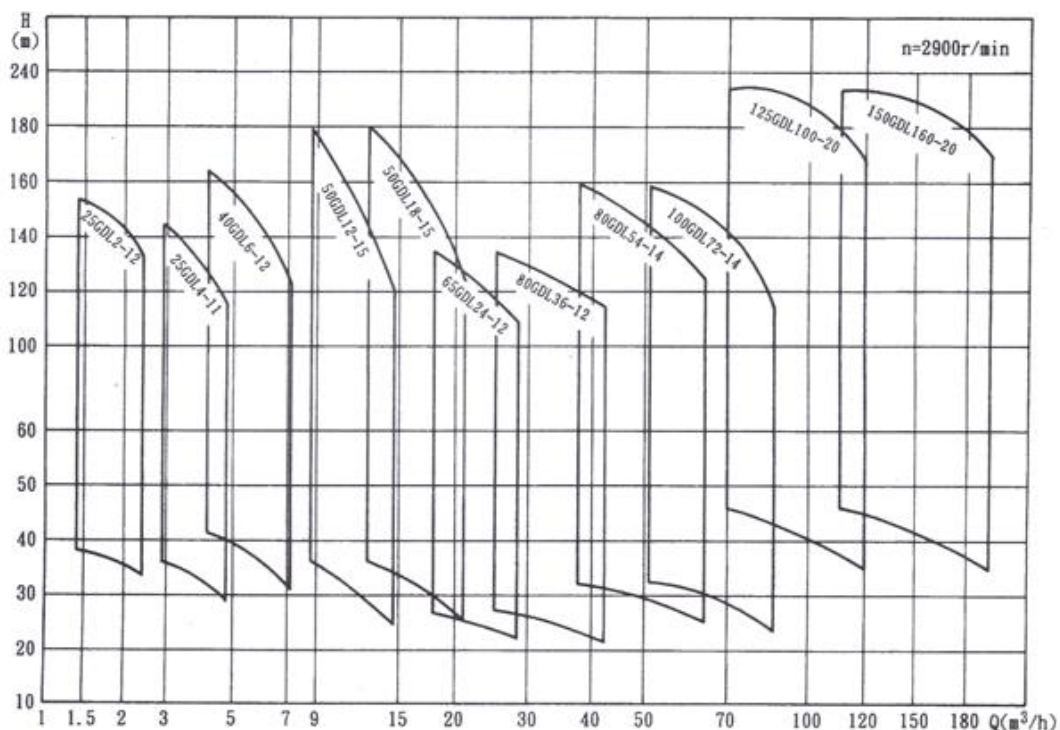
型号意义 Model Meaning



结构简图 STRUCTURE DIAGRAM



型谱图 Spectrogram

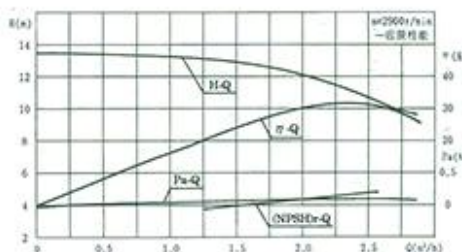


注: GDL-B、GDLS、GDLS-B 型型谱图同上图

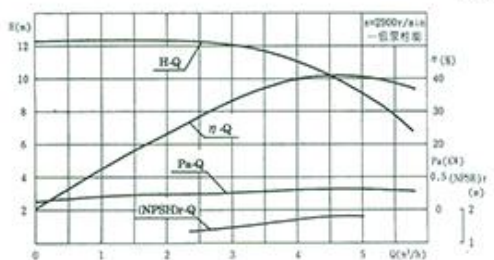
Note: The spectra of GDL-B, GDLS, and GDLS-B types are the same as the above figure



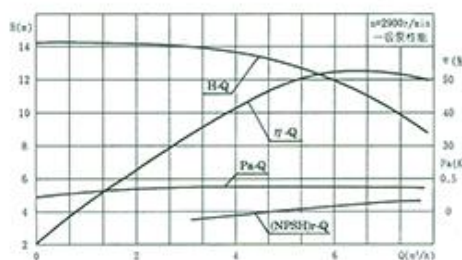
25GDL2



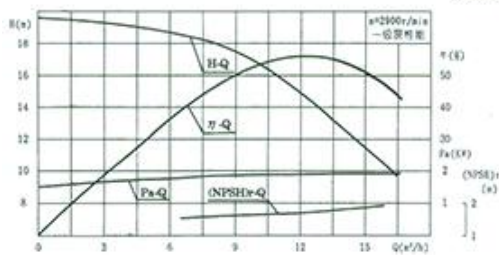
25GDL4



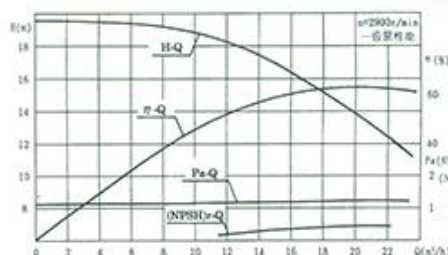
40GDL6



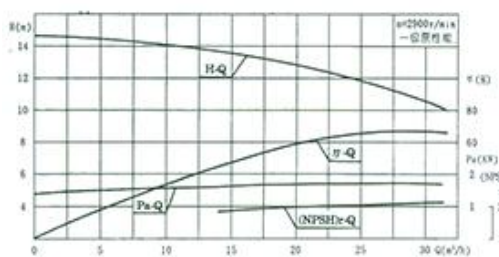
50GDL12



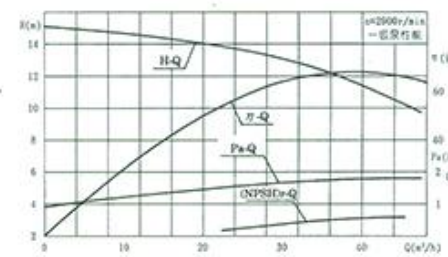
50GDL18



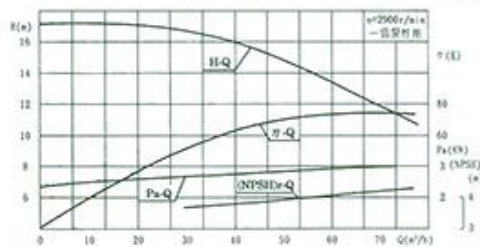
65GDL24



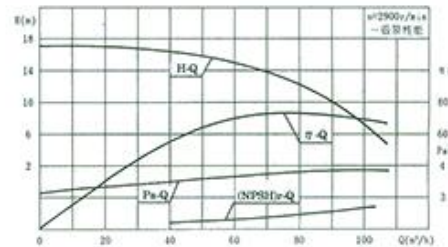
80GDL36



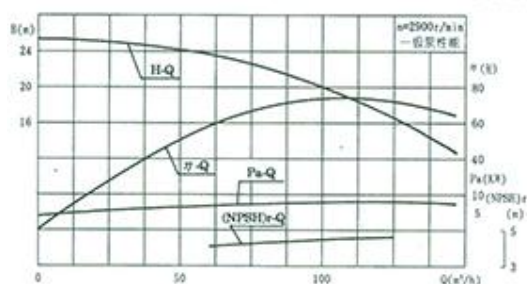
80GDL54



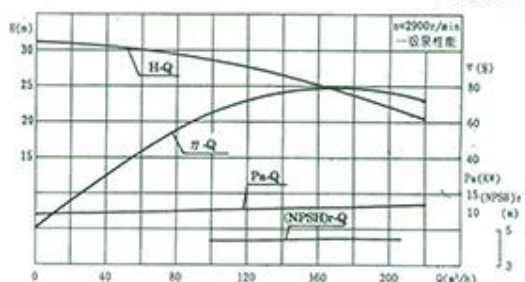
100GDL72



125GDL100



150GDL160



型号及性能参数表 Model and Performance Parameter Table

型号 model	流量 internet traffic		扬程 lift m	效率 efficiency %	转速 rotational speed r/min	功率 power KW		汽蚀余量 m	进出口 径 mm	高度 H mm	重量 kg	高度 h1mm
	m³/h	L/S				轴功率	电机功率					
25GDL2-12×3	1.4	0.39	38	23	2900	0.63	1.1	1.4	25	606	58	125
	2	0.56	36	30		0.65		1.7				
	2.4	0.67	33	32		0.67		1.8				
25GDL2-12×4	1.4	0.39	50	23	2900	0.83	1.1	1.4	25	646	62	165
	2	0.56	48	30		0.87		1.7				
	2.4	0.67	44	32		0.90		1.8				
25GDL2-12×5	1.4	0.39	63	23	2900	1.04	1.5	1.4	25	711	68	205
	2	0.56	60	30		1.09		1.7				
	2.4	0.67	55	32		1.12		1.8				
25GDL2-12×6	1.4	0.39	76	23	2900	1.26	1.5	1.4	25	751	72	245
	2	0.56	72	30		1.30		1.7				
	2.4	0.67	66	32		1.35		1.8				
25GDL2-12×7	1.4	0.39	88	23	2900	1.46	2.2	1.4	25	816	78	285
	2	0.56	84	30		1.52		1.7				
	2.4	0.67	77	32		1.57		1.8				
25GDL2-12×8	1.4	0.39	101	23	2900	1.63	2.2	1.4	25	856	82	325
	2	0.56	96	30		1.74		1.7				
	2.4	0.67	88	32		1.80		1.8				
25GDL2-12×9	1.4	0.39	114	23	2900	1.89	2.2	1.4	25	896	86	365
	2	0.56	108	30		1.96		1.7				
	2.4	0.67	99	32		2.02		1.8				
25GDL2-12×10	1.4	0.39	126	23	2900	2.01	3	1.4	25	981	98	405
	2	0.56	120	30		2.17		1.7				
	2.4	0.67	110	32		2.24		1.8				
25GDL2-12×11	1.4	0.39	139	23	2900	2.31	3	1.4	25	1021	102	445
	2	0.56	132	30		2.39		1.7				
	2.4	0.67	121	32		2.47		1.8				
25GDL2-12×12	1.4	0.39	152	23	2900	2.52	3	1.4	25	1061	106	485
	2	0.56	144	30		2.61		1.7				
	2.4	0.67	132	32		2.70		1.8				
25GDL4-11×3	2.8	0.78	36	32	2900	0.86	1.1	1.4	25	606	58	125
	4	1.11	33	40		0.90		1.7				
	4.8	1.33	28.5	41		0.91		1.8				
25GDL4-11×4	2.8	0.78	48	32	2900	1.14	1.5	1.4	25	671	65	165
	4	1.11	44	40		1.20		1.7				
	4.8	1.33	38	41		1.21		1.8				
25GDL4-11×5	2.8	0.78	60	32	2900	1.43	2.2	1.4	25	736	72	205
	4	1.11	55	40		1.50		1.7				
	4.8	1.33	47.5	41		1.51		1.8				
25GDL4-11×6	2.8	0.78	72	32	2900	1.72	2.2	1.4	25	776	76	245
	4	1.11	66	40		1.80		1.7				
	4.8	1.33	57	41		1.82		1.8				
25GDL4-11×7	2.8	0.78	84	32	2900	2.00	3	1.4	25	861	86	285
	4	1.11	77	40		2.10		1.7				
	4.8	1.33	66.5	41		2.12		1.8				
25GDL4-11×8	2.8	0.78	96	32	2900	2.29	3	1.4	25	901	90	325
	4	1.11	88	40		2.40		1.7				

	4.8	1.33	76	41		2.42		1.8				
25GDL4-11×9	2.8	0.78	108	32	2900	2.57	3	1.4	25	941	94	365
	4	1.11	99	40		2.70		1.7				
	4.8	1.33	85.5	41		2.73		1.8				
25GDL4-11×10	2.8	0.78	120	32	2900	2.86	4	1.4	25	1011	110	405
	4	1.11	110	40		3.00		1.7				
	4.8	1.33	95	41		3.03		1.8				
25GDL4-11×11	2.8	0.78	132	32	2900	3.14	4	1.4	25	1051	114	445
	4	1.11	121	40		3.30		1.7				
	4.8	1.33	104.5	41		3.33		1.8				
25GDL4-11×12	2.8	0.78	144	32	2900	3.43	4	1.4	25	1091	118	485
	4	1.11	132	40		3.60		1.7				
	4.8	1.33	114	41		3.64		1.8				
25GDL4-11×13	2.8	0.78	156	32	2900	3.72	4	1.4	25	1131	122	525
	4	1.11	143	40		3.90		1.7				
	4.8	1.33	123.5	41		3.94		1.8				

注：1、GDLs、GDL-B、GDLs-B 型除重量及 H 尺寸稍有不同外其性能参数与 GDL 型相同。2、h1 尺寸仅用于 GDLs 及 GDLs-B 型。

Note: 1. GDLs, GDL-B, and GDLs-B models have the same performance parameters as GDL models except for slight differences in weight and H size. 2. The h1 size is only used for GDLs and GDLs-B models.

型号及性能参数表 2 Model and Performance Parameter Table2

型号	流量		扬程	效率	转速	功率 KW		汽蚀余量 m	进出口径 mm	高度 H mm	重量 kg	高度 h1mm
	m³/h	L/S	m	%	r/min	轴功率	电机功率					
40GDL6-12×3	4.2	1.17	41	43	2900	1.09	1.5	1.4	40	657	72	125
	6	1.67	36	52		1.13		1.7				
	7.2	2.0	30.5	52		1.15		1.8				
40GDL6-12×4	4.2	1.17	54	43	2900	1.45	2.2	1.4	40	722	78	165
	6	1.67	48	52		1.5		1.7				
	7.2	2.0	40.6	52		1.53		1.8				
40GDL6-12×5	4.2	1.17	68	43	2900	1.81	2.2	1.4	40	762	82	205
	6	1.67	60	52		1.88		1.7				
	7.2	2.0	51	52		1.92		1.8				
40GDL6-12×6	4.2	1.17	82	43	2900	2.18	3	1.4	40	847	92	245
	6	1.67	72	52		2.26		1.7				
	7.2	2.0	61	52		2.30		1.8				
40GDL6-12×7	4.2	1.17	95	43	2900	2.54	3	1.4	40	887	96	285
	6	1.67	84	52		2.64		1.7				
	7.2	2.0	71	52		2.69		1.8				
40GDL6-12×8	4.2	1.17	109	43	2900	2.91	4	1.4	40	967	112	325
	6	1.67	96	52		3.01		1.7				
	7.2	2.0	81	52		3.07		1.8				
40GDL6-12×9	4.2	1.17	123	43	2900	2.27	4	1.4	40	1007	116	365
	6	1.67	108	52		3.39		1.7				
	7.2	2.0	91	52		3.45		1.8				
40GDL6-12×10	4.2	1.17	136	43	2900	3.36	4	1.4	40	1047	120	405
	6	1.67	120	52		3.77		1.7				
	7.2	2.0	102	52		3.84		1.8				
40GDL6-12×11	4.2	1.17	150	43	2900	4.0	5.5	1.4	40	1132	140	445
	6	1.67	132	52		4.15		1.7				
	7.2	2.0	112	52		4.22		1.8				
40GDL6-12×12	4.2	1.17	164	43	2900	4.36	5.5	1.4	40	1172	146	485
	6	1.67	144	52		4.52		1.7				
	7.2	2.0	122	52		4.60		1.8				
50GDL12-15×2	8.4	2.33	36	48	2900	1.72	2.2	1.4	50	766	113	158
	12	3.33	30	56		1.75		1.8				
	14.4	4.0	24	53		1.85		1.8				
50GDL12-15×3	8.4	2.33	54	48	2900	2.57	3	1.4	50	866	129	233
	12	3.33	45	56		2.63		1.8				
	14.4	4.0	36	53		2.78		1.8				
50GDL12-15×4	8.4	2.33	72	48	2900	3.43	4	1.4	50	1001	149	308
	12	3.33	60	56		3.5		1.8				
	14.4	4.0	48	53		3.70		1.8				
50GDL12-15×5	8.4	2.33	90	48	2900	4.2	5.5	1.4	50	1126	181	383
	12	3.33	75	56		4.27		1.8				
	14.4	4.0	60	53		4.63		1.8				

50GDL12-15×6	8.4 12 14.4	2.33 3.33 4.0	108 90 72	48 56 53	2900	5.15 5.25 5.55	5.5	1.4 1.8 1.8	50	1201	190	458
50GDL12-15×7	8.4 12 14.4	2.33 3.33 4.0	126 105 84	48 56 53	2900	6.0 6.12 6.48	7.5	1.4 1.8 1.8	50	1276	204	533
50GDL12-15×8	8.4 12 14.4	2.33 3.33 4.0	144 120 96	48 56 53	2900	6.86 7.0 7.40	7.5	1.4 1.8 1.8	50	1351	212	608
50GDL12-15×9	8.4 12 14.4	2.33 3.33 4.0	162 135 108	48 56 53	2900	7.72 7.87 8.33	11	1.4 1.8 1.8	50	1556	265	683
50GDL12-15×10	8.4 12 14.4	2.33 3.33 4.0	180 150 120	48 56 53	2900	8.58 8.75 9.25	11	1.4 1.8 1.8	50	1631	273	758
50GDL18-15×2	12.6 18 21.6	3.5 5 6	36 30 25	53 62 62	2900	2.33 2.37 2.37	3	1.4 1.8 1.8	50	791	122	158
50GDL18-15×3	2.6 18 21.6	3.5 5 6	54 45 37.5	53 62 62	2900	3.5 3.56 3.56	4	1.4 1.8 1.8	50	926	142	233
50GDL18-15×4	2.6 18 21.6	3.5 5 6	72 60 50	53 62 62	2900	4.66 4.75 4.75	5.5	1.4 1.8 1.8	50	1051	175	308
50GDL18-15×5	2.6 18 21.6	3.5 5 6	90 75 62.5	53 62 62	2900	5.83 5.93 5.93	7.5	1.4 1.8 1.8	50	1126	189	383
50GDL18-15×6	2.6 18 21.6	3.5 5 6	108 90 75	53 62 62	2900	7.0 7.12 7.12	7.5	1.4 1.8 1.8	50	1201	198	458
50GDL18-15×7	2.6 18 21.6	3.5 5 6	126 105 82.5	53 62 62	2900	8.16 8.30 8.31	11	1.4 1.8 1.8	50	1406	252	533
50GDL18-15×8	2.6 18 21.6	3.5 5 6	144 120 100	53 62 62	2900	9.32 9.49 9.49	11	1.4 1.8 1.8	50	1481	261	608
50GDL18-15×9	2.6 18 21.6	3.5 5 6	162 135 112.5	53 62 62	2900	10.49 10.68 10.68	15	1.4 1.8 1.8	50	1556	280	683
50GDL18-15×10	2.6 18 21.6	3.5 5 6	180 150 125	53 62 62	2900	11.66 11.87 11.87	15	1.4 1.8 1.8	50	1631	289	758

注：1、GDLS、GDL-B、GDLS-B 型除重量及 H 尺寸稍有不同外其性能参数与 GDL 型相同。2、h1 尺寸仅用于 GDLS 及 GDLS-B 型。

Note: 1. GDLS, GDL-B, and GDLS-B models have the same performance parameters as GDL models except for slight differences in weight and H size. 2. The h1 size is only used for GDLS and GDLS-B models.

型号及性能参数表 3 Model and Performance Parameter Table3

型号	流量		扬程	效率	转速	功率 KW		汽蚀余量 m	进出口 径 mm	高度 H mm	重量 kg	高度 h1mm
	m³/h	L/S	m	%	r/min	轴功率	电机功率					
65GDL24-12×2	16.8 24 28.8	4.67 6.67 8	27 24 22	56 65 67	2900	2.21 2.41 5.57	3	2.9 3 3.1	65	821	131	160
65GDL24-12×3	16.8 24 28.8	4.67 6.67 8	40.5 36 33	56 65 67	2900	3.31 3.62 3.87	4	2.9 3 3.1	65	936	153	235
65GDL24-12×4	16.8 24 28.8	4.67 6.67 8	54 48 44	56 65 67	2900	4.41 4.83 5.15	5.5	2.9 3 3.1	65	1061	182	310
65GDL24-12×5	16.8 24 28.8	4.67 6.67 8	67.5 60 55	56 65 67	2900	5.52 6.03 6.44	7.5	2.9 3 3.1	65	1136	198	385
65GDL24-12×6	16.8 24 28.8	4.67 6.67 8	81 72 66	56 65 67	2900	6.62 7.24 7.73	7.5	2.9 3 3.1	65	1211	214	460
65GDL24-12×7	16.8 24	4.67 6.67	94.5 84	56 65	2900	7.72 8.45	11	2.9 3	65	1416	263	535

	28.8	8	77	67		9.01		3.1				
65GDL24-12×8	16.8 24 28.8	4.67 6.67 8	108 96 88	56 65 67	2900	8.83 9.65 10.3	11	2.9 3 3.1	65	1491	273	610
65GDL24-12×9	16.8 24 28.8	4.67 6.67 8	121.5 108 99	56 65 67	2900	9.93 10.85 11.59	15	2.9 3 3.1	65	1556	293	685
65GDL24-12×10	16.8 24 28.8	4.67 6.67 8	135 120 110	56 65 67	2900	11.0 12.06 12.88	15	2.9 3 3.1	65	1641	303	760
80GDL36-12×2	25.2 36 43.2	7 10 12	27 24 21	59 68 67	2900	3.14 3.46 3.68	4	3.5 4 4.2	80	917	193	182
80GDL36-12×3	25.2 36 43.2	7 10 12	40.5 36 31.5	59 68 67	2900	4.71 5.19 5.53	5.5	3.5 4 4.2	80	1052	227	267
80GDL36-12×4	25.2 36 43.2	7 10 12	54 48 42	59 68 67	2900	6.29 6.92 7.37	7.5	3.5 4 4.2	80	1137	244	352
80GDL36-12×5	25.2 36 43.2	7 10 12	67.5 60 52.5	59 68 67	2900	7.86 8.67 9.22	11	3.5 4 4.2	80	1352	292	437
80GDL36-12×6	25.2 36 43.2	7 10 12	81 72 63	59 68 67	2900	9.43 10.39 11.06	11	3.5 4 4.2	80	1437	302	522
80GDL36-12×7	25.2 36 43.2	7 10 12	94.5 84 73.5	59 68 67	2900	11.0 12.12 12.9	15	3.5 4 4.2	80	1522	322	607
80GDL36-12×8	25.2 36 43.2	7 10 12	108 96 84	59 68 67	2900	12.58 13.85 14.75	15	3.5 4 4.2	80	1607	332	692
80GDL36-12×9	25.2 36 43.2	7 10 12	121.5 108 94.5	59 68 67	2900	14.14 15.59 16.5	18.5	3.5 4 4.2	80	1737	365	777
80GDL36-12×10	25.2 36 43.2	7 10 12	135 120 115	59 68 67	2900	15.71 17.31 18.4	18.5	3.5 4 4.2	80	1822	375	862
80GDL54-14×2	37.8 54 64.8	10.5 15 18	32 28 25	62 70 73.5	2900	5.32 5.88 6.01	7.5	3.7 4 4.2	80	967	218	182
80GDL54-14×3	37.8 54 64.8	10.5 15 18	48 42 37.5	62 70 73.5	2900	7.97 8.82 9.01	11	3.7 4 4.2	80	1182	267	267
80GDL54-14×4	37.8 54 64.8	10.5 15 18	64 56 50	62 70 73.5	2900	10.13 11.76 12.01	15	3.7 4 4.2	80	1267	287	352
80GDL54-14×5	37.8 54 64.8	10.5 15 18	80 70 62.5	62 70 73.5	2900	13.3 14.7 15.0	18.5	3.7 4 4.2	80	1397	320	437
80GDL54-14×6	37.8 54 64.8	10.5 15 18	96 84 75	62 70 73.5	2900	15.9 17.64 18.0	18.5	3.7 4 4.2	80	1482	330	522
80GDL54-14×7	37.8 54 64.8	10.5 15 18	112 98 87.5	62 70 73.5	2900	18.6 20.58 21.0	22	3.7 4 4.2	80	1592	373	607
80GDL54-14×8	37.8 54 64.8	10.5 15 18	128 112 100	62 70 73.5	2900	21.3 23.54 24	30	3.7 4 4.2	80	1607	400	692
80GDL54-14×9	37.8 54 64.8	10.5 15 18	144 126 112.5	62 70 73.5	2900	23.9 26.49 27	30	3.7 4 4.2	80	1757	421	777
80GDL54-14×10	37.8 54 64.8	10.5 15 18	160 140 125	62 70 73.5	2900	26.6 29.43 30	37	3.7 4 4.2	80	1882	432	862

注：1、GDLs、GDL-B、GDLs-B 型除重量及 H 尺寸稍有不同外其性能参数与 GDL 型相同。2、h1 尺寸仅用于 GDLs 及 GDLs-B 型。

Note: 1. GDLs, GDL-B, and GDLs-B models have the same performance parameters as GDL models except for slight differences in weight and H size. 2. The h1 size is only used for GDLs and GDLs-B models.

美言壹泵阀

MEIYAN YI PUMP VALVE



型号及性能参数表 4 Model and Performance Parameter Table4

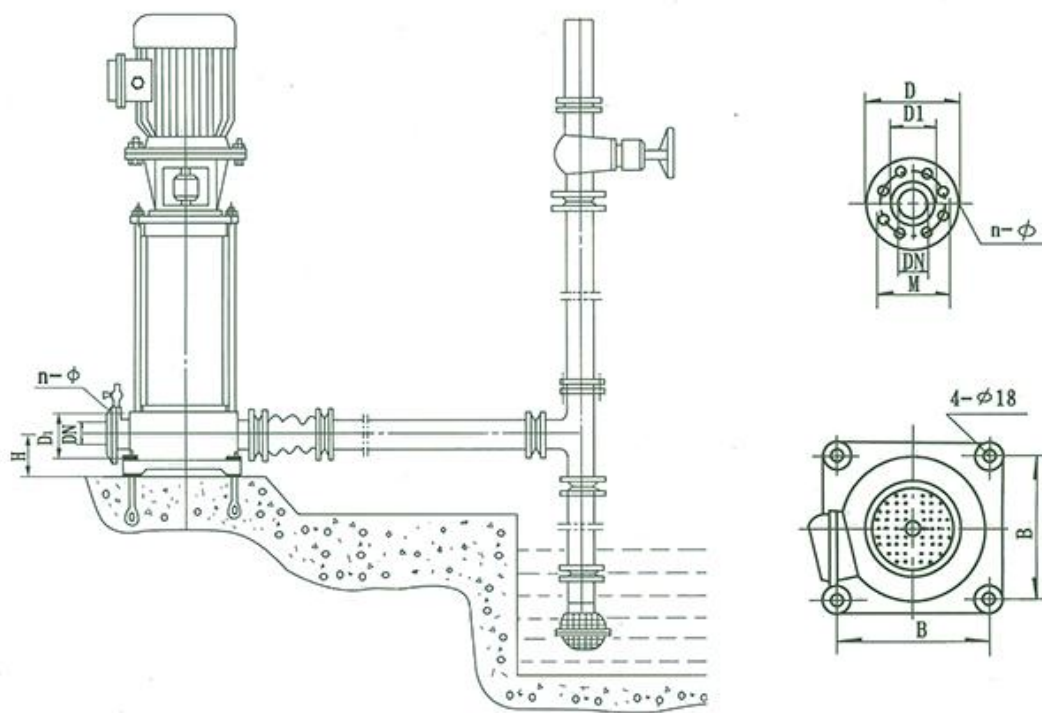
型号	流量		扬程 m	效率 %	转速 r/min	功率 KW		汽蚀余量 m	进出口 径 mm	高度 H mm	重量 kg	高度 h1mm
	m³/h	L/S				轴功率	电机功率					
100GDL72-14×2	50.4	14	32	64	2900	6.87	11	4.2	100	1200	276	187
	72	20	28	72		7.53		4.5				
	86.4	24	24	73		7.74		4.7				
100GDL72-14×3	50.4	14	48	64	2900	10.3	15	4.2	100	1335	298	272
	72	20	42	72		11.29		4.5				
	86.4	24	36	73		11.61		4.7				
100GDL72-14×4	50.4	14	64	64	2900	13.7	18.5	4.2	100	1460	336	357
	72	20	56	72		15.05		4.5				
	86.4	24	48	73		15.48		4.7				
100GDL72-14×5	50.4	14	80	64	2900	17.17	22	4.2	100	1650	381	442
	72	20	70	72		18.81		4.5				
	86.4	24	60	73		19.35		4.7				
100GDL72-14×6	50.4	14	96	64	2900	20.6	30	4.2	100	1740	453	527
	72	20	84	72		22.57		4.5				
	86.4	24	72	73		23.22		4.7				
100GDL72-14×7	50.4	14	112	64	2900	24.03	30	4.2	100	1825	466	612
	72	20	98	72		26.34		4.5				
	86.4	24	84	73		27.09		4.7				
100GDL72-14×8	50.4	14	128	64	2900	27.4	37	4.2	100	1900	493	697
	72	20	112	72		30.1		4.5				
	86.4	24	96	73		30.96		4.7				
100GDL72-14×9	50.4	14	144	64	2900	30.9	37	4.2	100	1980	582	782
	72	20	126	72		33.9		4.5				
	86.4	24	108	73		34.83		4.7				
100GDL72-14×10	50.4	14	160	64	2900	34.3	45	4.2	100	2070	595	867
	72	20	140	72		37.6		4.5				
	86.4	24	120	73		38.7		4.7				
125GDL100-20×2	70	19.4	46	65	2900	13.5	18.5	4.2	125	1185	292	204
	100	27.7	40	73		14.7		4.5				
	120	33.3	34	73		15.2		4.7				
125GDL100-20×3	70	19.4	69	65	2900	20.2	30	4.2	125	1315	430	289
	100	27.7	60	73		22.1		4.5				
	120	33.3	51	73		22.8		4.7				
125GDL100-20×4	70	19.4	92	65	2900	27	37	4.2	125	1410	463	394
	100	27.7	80	73		29.5		4.5				
	120	33.3	68	73		30.4		4.7				
125GDL100-20×5	70	19.4	115	65	2900	33.7	45	4.2	125	1585	555	489
	100	27.7	100	73		36.8		4.5				
	120	33.3	85	73		38.1		4.7				
125GDL100-20×6	70	19.4	138	65	2900	40.5	55	4.2	125	1865	640	584
	100	27.7	120	73		44.2		4.5				
	120	33.3	102	73		45.7		4.7				
125GDL100-20×7	70	19.4	161	65	2900	47.2	75	4.2	125	1960	840	479
	100	27.7	140	73		51.5		4.5				
	120	33.3	119	73		53.3		4.7				
125GDL100-20×8	70	19.4	181	65	2900	54	75	4.2	125	2055	855	774
	100	27.7	160	73		58.9		4.5				
	120	33.3	136	73		60.9		4.7				
125GDL100-20×9	70	19.4	207	65	2900	60.7	75	4.2	125	2225	870	869
	100	27.7	180	73		66.3		4.5				
	120	33.3	153	73		68.5		4.7				
125GDL100-20×10	70	19.4	230	65	2900	67.5	90	4.2	125	2370	955	964
	100	27.7	200	73		73.6		4.5				
	120	33.3	170	73		76.1		4.7				
150GDL160-25×2	112	31.1	56	69	2900	24.77	37	4.4	150	1325	437	205
	160	44.4	50	78		27.95		4.5				
	192	53.3	44	77		29.9		4.7				
150GDL160-25×3	112	31.1	84	69	2900	37.15	55	4.4	150	1420	596	300
	160	44.4	75	78		41.92		4.5				
	192	53.3	66	77		44.84		4.7				
150GDL160-25×4	112	31.1	112	69	2900	49.54	75	4.4	150	1705	737	395
	160	44.4	100	78		55.9		4.5				
	192	53.3	88	77		59.79		4.7				
150GDL160-25×5	112	31.1	140	69	2900	61.92	90	4.4	150	1875	856	490
	160	44.4	125	78		69.87		4.5				

	192	53.3	110	77		74.74		4.7				
150GDL160-25×6	112	31.1	168	69		74.31		4.4				
	160	44.4	150	78	2900	83.85	110	4.5	150	1970	951	585
	192	53.3	142	77		96.49		4.7				
150GDL160-25×7	112	31.1	186	69		82.27		4.4				
	160	44.4	175	78	2900	97.82	110	4.5	150	2115	978	680
	192	53.3	144	77		97.85		4.7				

注：1、GDLS、GDL-B、GDLS-B 型除重量及 H 尺寸稍有不同外其性能参数与 GDL 型相同。2、h1 尺寸仅用于 GDLS 及 GDLS-B 型。

Note: 1. GDLS, GDL-B, and GDLS-B models have the same performance parameters as GDL models except for slight differences in weight and H size. 2. The h1 size is only used for GDLS and GDLS-B models.

外形尺寸及安装图 Dimensions and Installation Diagram



外形安装尺寸表 Outline installation dimension table

型号 model	H	L	B×B	进出口法兰 Import and export flanges			
				DN	D	D1	n-φ
25 GDL	80	300	205 4~φ14	φ25	115	85	4~φ14
40 GDL	85	330	205 4~φ14	φ40	150	110	4~φ18
50 GDL	105	365	225 4~φ18	φ50	165	125	4~φ18
65 GDL	105	365	225 4~φ18	φ65	185	145	4~φ18
80 GDL	130	420	290 4~φ20	φ80	200	160	8~φ18
100 GDL	140	520	350	φ100	220	180	8~φ18

			4~ ϕ 20				
125 GDL	150	540	370 4~ ϕ 24	ϕ 125	250	210	8~ ϕ 18
150 GDL	175	580	410 4~ ϕ 24	ϕ 150	285	240	8~ ϕ 22

安装说明 Installation instructions

- 1、安装时管路重量不应承受在泵上，否则易损坏水泵；
- 2、泵与电机是整体结构，出厂时已由厂家校正，所以安装时无需调整，因此安装时十分方便；
- 3、安装时必须拧紧地脚螺栓，且每间隔一定时段应对泵进行检查防止其松动，以免水泵启动时发生剧烈振动而影响泵的性能。
- 4、安装水泵前应仔细检查泵流道内有无影响水泵运行的硬质物（如石块、铁砂等）以免水泵运行时损坏过流部件；
- 5、为了维修方便和使用安全，在泵的进出口管路上安装一只调节阀及在泵进出口附近安装一只压力表，对于高扬程泵，为防止水锤，还应在出口闸阀前安装一只止回阀以应付突然断电等失去动力事故，从而确保水泵在最佳工况下运行，增长水泵的使用寿命；
- 6、对于液面低于泵进口及没有真空泵的工况下，需根据安装图的安装方法，先把泵进口处灌满后才能开机运转同时进口管路不应有过多弯道，不得有漏水、漏气现象，以免影响水泵的吸入性能。
- 7、为不使杂质进入泵内而堵塞流道影响性能，应在泵进口前面安装过滤器；
- 8、安装管路前转动水泵的转子部件，应无摩擦声或卡死现象，否则应将泵拆开检查原因。

1. The weight of the pipeline should not be borne on the pump during installation, otherwise it is easy to damage the water pump;
2. The pump and motor are integral structures that have been calibrated by the manufacturer before leaving the factory, so there is no need to adjust them during installation, making installation very convenient;
3. During installation, the anchor bolts must be tightened, and the pump should be checked at regular intervals to prevent loosening, in order to avoid severe vibrations during pump start-up that may affect its performance.
4. Before installing the water pump, carefully check whether there are any hard objects (such as stones, iron sand, etc.) in the pump flow channel that affect the operation of the water pump to avoid damaging the overcurrent components during the operation of the water pump;
5. For the convenience of maintenance and safety of use, a regulating valve should be installed on the inlet and outlet pipelines of the pump, and a pressure gauge should be installed near the inlet and outlet of the pump. For high lift pumps, to prevent water hammer, a check valve should also be installed in front of the outlet gate valve to cope with sudden power outages and other power loss accidents, so as to ensure that the pump operates under optimal conditions and increase its service life;
6. For working conditions where the liquid level is below the pump inlet and there is no vacuum pump, the installation method according to the installation diagram should be followed. The pump inlet should be filled before starting up and running. At the same time, the inlet pipeline should not have too many bends, and there should be no water or air leakage to avoid affecting the suction performance of the water pump.
7. To prevent impurities from entering the pump and blocking the flow path, a filter should be installed in front of the pump inlet to improve performance;

8. Before installing the pipeline, rotate the rotor components of the water pump without any friction sound or jamming phenomenon. Otherwise, the pump should be disassembled to check the cause.

起动与停车 Start and Stop

起动前准备

- 1、用手拔转联轴器，叶轮应无卡磨现象，转动灵活；
- 2、打开进口阀门，打开排气阀使液体充满整个泵腔，然后关闭排气嘴；
- 3、如输送热液体时，起动前应预热，升温速度为 50℃/h，泵的预热是用所输送液体不断循环来达到，以使各部位受热均匀；
- 4、应先用手盘动泵几圈以使润滑水进入机械密封端面；
- 5、点动电机，确定转向是否正确。

起动与运行

- 1、全开进口阀门，关闭吐出管路阀门；
- 2、接通电源，当泵达到正常转速后，再逐渐打开吐出管路上的阀门，并调节到所需工况；
- 3、注意观察仪表读数，检查轴封泄漏情况，正常时机械密封泄漏为 3 滴/分，检查电机、轴承处温度 $\leq 75^{\circ}\text{C}$ ，如果发现异常情况，应及时处理。

停车

- 1、逐渐关闭吐出管路阀门，切断电源；
 - 2、关闭进口阀门；
 - 3、如环境温度低于 0℃，应将泵内液体放尽，以免冻裂水泵；
- 如长期停用，应将泵拆卸清洗，包装保管。

Preparation before starting

1. Pull and rotate the coupling by hand, and the impeller should have no jamming or grinding phenomenon, and rotate flexibly;
2. Open the inlet valve, open the exhaust valve to fill the entire pump chamber with liquid, and then close the exhaust nozzle;
3. When transporting hot liquids, preheating should be carried out before starting, with a heating rate of 50 °C/h. The preheating of the pump is achieved by continuously circulating the transported liquid to ensure uniform heating of all parts;
4. The pump should be manually rotated a few times to allow lubricating water to enter the mechanical seal end face;
5. Tap the motor to confirm if the steering is correct.

Start up and operation

1. Fully open the inlet valve and close the outlet pipeline valve;
2. Connect the power supply, gradually open the valve on the discharge pipeline when the pump reaches normal speed, and adjust it to the desired working condition;
3. Pay attention to the instrument reading and check the leakage of the shaft seal. Normally, the mechanical seal leakage is 3 drops/minute. Check that the temperature at the motor and bearing is $\leq 75^{\circ}\text{C}$. If any abnormal situation is found, it should be dealt with in a timely manner.

park

1. Gradually close the valve of the discharge pipeline and cut off the power supply;
2. Close the inlet valve;
3. If the ambient temperature is below 0 °C, the liquid inside the pump should be drained to prevent

the water pump from freezing and cracking;

If the pump is not used for a long time, it should be disassembled, cleaned, packaged and stored.

泵的维护与保养 Maintenance and upkeep of pumps

运行中的维护和保养

- 1、进水管路必须高度密封，不能漏水、漏气；
- 2、禁止泵在汽蚀状态下长期运行；
- 3、禁止泵在大流量工况运行时，电机超电流长期运行；
- 4、定时检查泵运行中的电机电流值，尽量使泵在设计工况范围内运行；
- 5、泵在运行中应有专人看管，以免发生意外；
- 6、泵每运行 500 小时应对轴承进行加油；
- 7、泵进行长期运行后，由于机械磨损，使机组噪声及振动增大时，应停车检查，必要时可更换易损零件及轴承，机组大修期一般为一年。

机械密封的维护与保养

- 1、机械密封润滑液应清洁无固体颗粒；
- 2、严禁机械密封在干磨情况下工作；

起动前应盘动泵（电机）几圈，以免突然起动造成机械密封断裂损坏。

Maintenance and upkeep during operation

1. The inlet pipeline must be highly sealed and must not leak or leak water;
2. Prohibit long-term operation of pumps under cavitation conditions;
3. Prohibit long-term operation of motor overcurrent when the pump operates under high flow conditions;
4. Regularly check the motor current value during pump operation to ensure that the pump operates within the design operating range as much as possible;
5. The pump should be supervised by a dedicated person during operation to avoid accidents;
6. Oil should be added to the bearings every 500 hours of pump operation;
7. After long-term operation of the pump, if the noise and vibration of the unit increase due to mechanical wear, it should be stopped for inspection. If necessary, vulnerable parts and bearings can be replaced. The overhaul period of the unit is generally one year.

Maintenance and upkeep of mechanical seals

1. Mechanical seal lubricant should be clean and free of solid particles;
2. Mechanical seals are strictly prohibited from working under dry grinding conditions;

Before starting, the pump (motor) should be turned a few times to avoid mechanical seal breakage and damage caused by sudden starting.

故障原因及排除方法 Fault causes and troubleshooting methods

故障现象 Fault phenomenon	可能产生的原因 Possible causes	排除方法 Troubleshooting
1、水泵不出水 1. The water pump is not producing water	①进出口阀门未打开，进出管路阻塞，叶轮流道阻塞 ②电机运行方向不对，电机缺相转速很慢 ③吸入管漏气 ④泵没灌满液体，泵腔内有空气 ⑤进口供水不足，吸程过高，底阀漏水 ⑥管路阻力过大，泵选型不当	①检查，去除阻塞物 ②调整电机转向，紧固电机接线 ③拧紧各密封面，排除空气 ④打开泵上盖或打开排气阀，排尽空气 ⑤停机检查、调整（并网自来水管和带吸程使用易出现此现象） ⑥减少管路弯道，重新选泵

	① The import and export valves are not open, the inlet and outlet pipelines are blocked, and the impeller flow channel is blocked ② The motor is running in the wrong direction and has a slow speed due to phase loss ③ Leakage of suction pipe ④ The pump is not filled with liquid and there is air inside the pump chamber ⑤ Insufficient imported water supply, high suction, and bottom valve leakage ⑥ Excessive pipeline resistance and improper pump selection	① Check and remove blockages ② Adjust the motor direction and tighten the motor wiring ③ Tighten all sealing surfaces and eliminate air ④ Open the pump cover or open the exhaust valve to exhaust all the air ⑤ Shutdown inspection and adjustment (this phenomenon is prone to occur when using grid connected water pipes and suction pumps) ⑥ Reduce pipeline bends and reselect pumps
2、水泵流量不足 2. Insufficient water pump flow	①先按 1、原因检查 ②管道、泵流道或叶轮部分阻塞，水垢沉积、阀门开度不足 ③电压偏低 ④叶轮磨损 ① First, press 1 to check the cause ② Pipeline, pump flow channel or impeller blockage, scale deposition, insufficient valve opening ③ Low voltage ④ Impeller wear	①先按 1、排除 ②去除阻塞物，重新调整阀门开度 ③稳压 ④更换叶轮 ① First press 1, exclude ② Remove the obstruction and readjust the valve opening ③ Voltage stabilization ④ Replace the impeller
3、功率过大 3. Excessive power	①超过额定流量使用 ②吸程过高 ③泵轴承磨损 ① Exceeding the rated flow usage ② High suction distance ③ Pump bearing wear	①调节流量，关小出口阀门 ②降低 ③更换轴承 ① Adjust the flow rate and turn down the outlet valve ② Reduce ③ Replace bearings
4、杂音振动 4. Noise vibration	①管路支撑不稳 ②液体混有气体 ③产生汽蚀 ④轴承损坏 ⑤电机超载运行 ① Unstable pipeline support ② Liquid mixed with gas ③ Generate cavitation ④ Bearing damage ⑤ Motor overload operation	①稳固管路 ②提高吸入压力，排气 ③降低真空度 ④更换轴承 ⑤调整按 5、 ① Stable pipeline ② Increase suction pressure and exhaust ③ Reduce the vacuum degree ④ Replace bearings ⑤ Adjust according to 5
5、电机发热 5. Motor overheating	①流量过大，超载运行 ②局部摩擦 ③电机轴承损坏 ④电压不足 ① Excessive traffic and overloaded operation ② Local friction ③ Motor bearings damaged ④ Insufficient voltage	①关小出口阀门 ②检查排除 ③更换轴承 ④稳压 ① Close the outlet valve ② Check and exclude ③ Replace bearings ④ Voltage stabilization
6、水泵漏水 6. Water pump leakage	①机械密封磨损 ②泵体有砂孔或破裂 ③密封面不平整 ④安装螺栓松懈 ① Mechanical seal wear ② The pump body has sand holes or cracks ③ Uneven sealing surface ④ Loosening of installation bolts	①更换 ②焊补或更换 ③修整 ④紧固 ① Replace ② Welding repair or replacement ③ Repair and maintenance ④ Tighten up

非常感谢您的阅读！

Thank you very much for reading!

上海美言壹泵阀有限公司

地址：上海市嘉定区南翔镇翔乐路 318 号

电话：+86（21）5640 2009

传真：+86（21）5635 8373

网址：[HTTP://WWW.MY1PV.COM](http://www.my1pv.com)

E-mail: my1pv@lbengfa.com

Shanghai Meiyanyi Pump Valve Co., Ltd

Address: No. 318 Xiangle Road, Nanxiang Town, Jiading District, Shanghai

Phone:+ 86（21）5640 2009

Fax:+ 86（21）5635 8373

website: [HTTP://WWW.MY1PV.COM](http://www.my1pv.com)

E-mail: my1pv@lbengfa.com