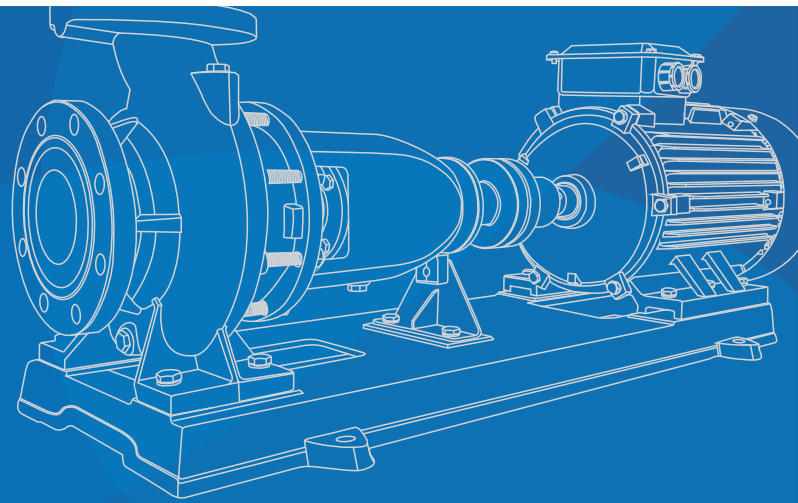


IS、IR系列
单级单吸离心泵

IS/IR series single stage single suction centrifugal pump



SEAPUMP

上海海洋泵阀制造有限公司
SHANGHAI SEA PUMP & VALVE MFG CO.,LTD



企业简介 + AOBUTS

上海海洋泵阀制造有限公司是专业从事水泵、生活消防设备及水泵智能控制开发、生产、销售为一体的股份制企业，本公司运用先进的软件开发、设计产品保证了向顾客提供更优质的产品。

“海洋水泵，泵的海洋”，海洋产品在全国各地设有分公司以及售后服务处，产品已应用于工矿企业、城市污水处理、城市供水、石油化工、农业灌溉等行业。本厂资金雄厚，生产设备先进，检测手段完善，并拥有一批高素质的专业人才队伍，同时ISO9001:2000国际质量管理体系的良好动作，为制造出优质、可靠的产品打下坚实基础。

本公司在“以人为本，科技兴业；以诚为用，质量立业；勇于开拓，锐意进取；追求卓越，走向未来”的方针指导下，不断开拓进取创新发展，在长期的实践中形成了一套完整的质量体系，并配备了一支安装调试维护的售后服务队伍。销售网点辐射全国各大城市，产品行销全国各省、市、自治区，并出口东南亚等国。并以一流的产品、一流的服务赢得了国内外广大用户的信赖和好评。本公司以“一切为了顾客的满意”为宗旨，继往开来，与时俱进。服务于人类建设美好家园。

Shanghai HAIYANG pump & valve Co., Ltd. Is a joint-stock enterprises which specializes in the manufacture of water pumps, fire fighting equipment and pumps intelligent controlling production, sales in one. our company uses advanced software to develop and design products to ensure that customers provide better quality products.

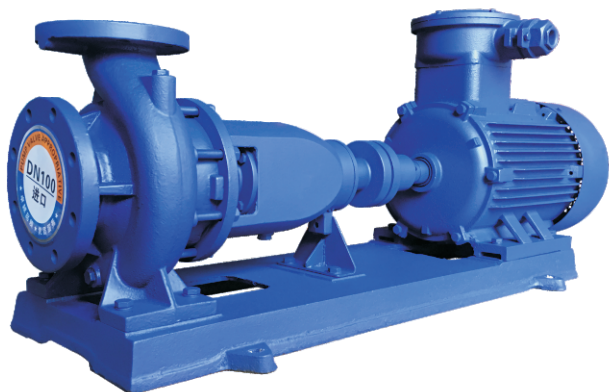
"HAIYANG water pumps, pump of the sea", the HAIYANG products throughout the country with more than 30 branch offices as well as after-sales service, products have been used in industrial and mining enterprises, urban sewage treatment, urban water supply, petrochemicals, agriculture and irrigation sectors. Factory with a strong financial background, advanced production equipment and means of improving the detection and has a number of high-quality professional talent, while ISO9001: 2000 international quality management system of good moves, in order to create high-quality, reliable products to lay a solid foundation.

In this "people-oriented, Industrial Science and Technology; to use for Prudential, the quality of establishing themselves; to open up the courage to strive for progress; the pursuit of excellence, into the future" under the guidance of continuous innovation and development to forge ahead in long-term practice of the formation of a complete set of The quality system and is equipped with an installation of the maintenance of after-sales service team. Radiation sales outlets in major cities nationwide, product marketing provinces, municipalities and autonomous regions, and exports in countries such as South-East Asia. And first-class products, first-class service to win customers at home and abroad trust and praise. The Company take "everything for the customer satisfied" as the purpose, advance with the times, in the service of humanity home.

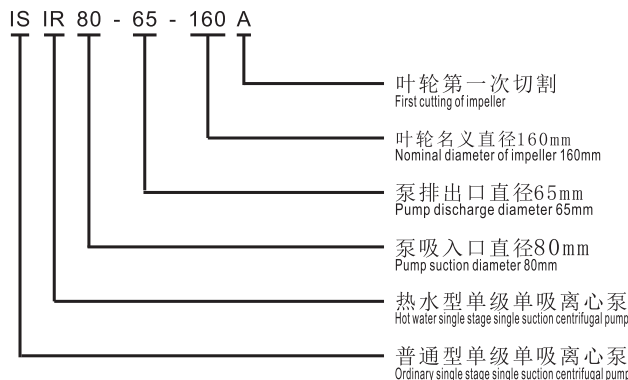
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型号意义 Type designation



产品概述

IS、IR型泵是卧式单级单吸清水离心泵，供吸送清水及物理化学性质类似水不含固体颗粒的液体。用于工农业及城市、排水、消防供水等。

IS、IR型泵系根据标准IS02858所规定的性能和尺寸设计，其技术标准均向标准靠拢，达到先进水平。它是我国推广的节能泵类产品之一。

IS、IR本泵结构简单，性能可靠，体积小，重量轻，抗汽蚀性能好，电耗低，使用维修方便。

IS、IR型泵通用性广，全系列共140种规格，但只用四种轴；同一规格的轴，轴承，轴封，叶轮紧固件等均能互换；全系列泵的悬架也只有四种。

泵转速分为2900和1450转/分两种。

性能如下：2900r/min 1450r/min

最大流量：240m³/h 400m³/h

最高总扬程：125m 55m

最高转速：3500r/min (用于60HZ调波电源时)

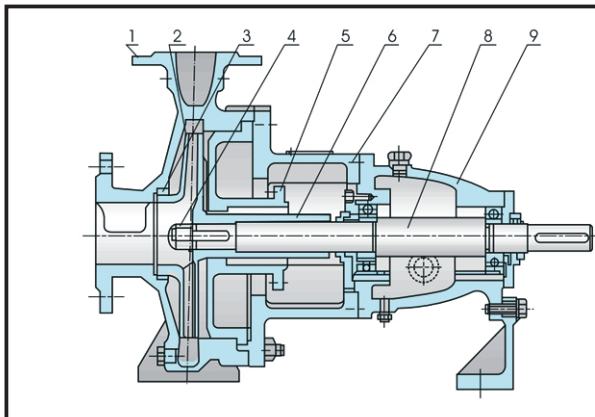
最高工作温度：80℃

允许吸入管路压力0.3MPa，泵的大使用压力1.6MPa。

结构说明

本泵为后开式，拆开泵盖和叶轮时不需拆卸吸水及排出管路。悬架内装有两个滚珠轴承，用机器油或润滑脂润滑。泵通过弹性联轴器由电动机直接驱动。涡室、脚、进水法兰和出水法兰铸成一个整体。

结构图



Product introduction

IS and IR type pumps are Horizontal single-stage single suction clean water centrifugal pumps. Suck clean water and liquid with similar physical and chemical properties and no solid particles. Used in industry, agriculture, city, drainage, fire water supply, etc.

The IS and IR pumps have the performance specified in the standard IS02858. And size design, its technical standards are close to the standards and reach the advanced level. It is one of the energy-saving pump products promoted in China.

The IS and IR pumps have the advantages of simple structure, reliable performance and small volume, Light weight, good cavitation resistance, low power consumption and convenient use and maintenance.

IS and IR pumps have wide versatility, with 140 specifications in the whole series. But only four axes; Shaft, bearing, shaft seal and impeller of the same specification. Fasteners can be interchanged; There are only four kinds of suspension for the whole series of pumps.

The pump speed is divided into 2900 and 1450 rpm. The performance is as follows: 2900r / min 1450r / min
Maximum flow: 240m³ / h 400m³ / h
Maximum total lift: 125m 55m
Maximum speed: 3500r / min (for 60Hz wave regulated power supply)
Maximum operating temperature: 80 °C
The allowable suction pipeline pressure is 0.3MPa, and the large service pressure of the pump is 1.6Mpa.

Structure description

The pump is rear open. It is not necessary to disassemble the suction and discharge pipelines when removing the pump cover and impeller. The suspension is equipped with two ball bearings, which are lubricated with machine oil or grease. The pump is directly driven by the motor through an elastic coupling. The vortex chamber, foot, inlet flange and outlet flange are cast as a whole.

Structure diagram

序号 Serial NO.	名称 name	序号 Serial NO.	名称 name
1	泵体 Pump body	6	中间支架 Intermediate support
2	叶轮 impeller	7	轴 axis
3	密封环 Sealing ring	8	悬架部件 Suspension components
4	叶轮螺母 Impeller nut	9	密封部件 Sealing parts
5	泵盖 Pump cover		

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海洋泵阀



清水泵系列 Clean water pump series

SEA PUMP & VALVE

结构说明

IS、IR型泵系根据国家标准ISO2858所规定的性能和尺寸设计的，主要由泵体、泵盖、叶轮、轴、密封环、轴套及悬架轴承部件等所组成。

IS、IR型泵的泵体和泵盖的部分，是从叶轮背面处剖分的，即通常所说的后开门结构形式。其优点是检修方便，检修时不动泵体，吸入管路，排出管路和电动机，只需拆下加长联轴器的中间联接件，即可退出转子部件，进行检修。

泵的壳体(即泵体和泵盖)构成泵的工作室、叶轮、轴和滚动轴承等为泵的转子。悬架轴承部件支承着泵的转子部件，滚动轴承承受泵的径向力和轴向力。

为了平衡泵的轴向力，大多数泵的叶轮前、后均设有密封环，并在叶轮后盖板上设有平衡孔，由于有些泵轴向力不大，叶轮背面未设密封环和平衡孔。

泵的轴向密封环是由填料压盖，填料环，和填料等组成，以防止进气或大量漏水。泵的叶轮如有平衡。则装有软填料的空腔与叶轮吸入口相通，若叶轮入口处液体处于真空状态，则很容易沿着轴套表面进气，故在填料腔内装有填料环通过泵盖上的小孔将泵室内压力水引至填料环进行密封。泵的叶轮如没有平衡孔，由于叶轮背面液体压力大于大气压，因而不存在漏气问题，故可不装填料环。

为避免轴磨损，在轴通过填料腔的部位装有轴套保护，轴套与轴之间装有O形密封圈，以防止沿着配合表面进气或漏水。

泵的传动方式是通过加长弹性联轴器与电动机联结的。泵的旋转方向，从驱动端看，为顺时针方向旋转。

Description of structure

IS and IR pumps are designed according to the performance and dimensions specified in the national standard ISO2858. They are mainly composed of pump body, pump cover, impeller, shaft, sealing ring, shaft sleeve and suspension bearing components.

The pump body and pump cover of is and IR pumps are divided from the back of the impeller, that is, the commonly known rear door structure. The utility model has the advantages of convenient maintenance, and the pump body, suction pipeline, discharge pipeline and For the motor, just remove the intermediate coupling of the extended coupling to exit the rotor parts for maintenance.

The pump shell (i.e. pump body and pump cover) constitutes the working chamber, impeller, shaft and rolling bearing of the pump, and is the rotor of the pump. The suspension bearing component supports the rotor component of the pump, and the rolling bearing bears the radial force and axial force of the pump.

In order to balance the axial force of the pump, seal rings are set at the front and rear of the impeller of most pumps, and balance holes are set on the rear cover plate of the impeller. Because the axial force of some pumps is small, seal rings and balance holes are not set at the back of the impeller.

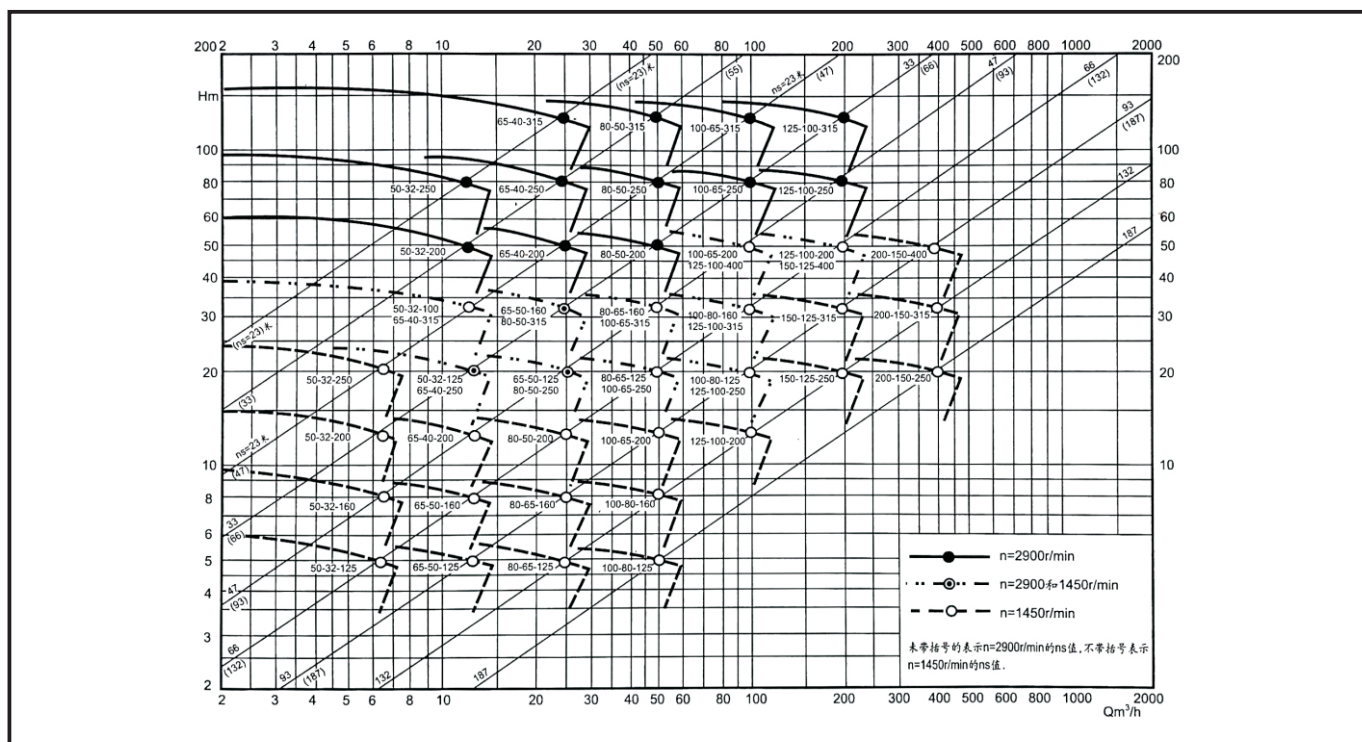
The axial seal ring of the pump is composed of packing gland, packing ring and packing to prevent air inlet or large amount of water leakage.

If the impeller of the pump is balanced. The cavity with soft packing is connected with the suction port of the impeller. If the liquid at the inlet of the impeller is in a vacuum state, it is easy to air along the surface of the shaft sleeve. Therefore, a packing ring is installed in the packing cavity, and the pressure water in the pump chamber is led to the packing ring through the small hole on the pump cover for sealing. If the impeller of the pump has no balance hole, there is no air leakage problem because the liquid pressure on the back of the impeller is greater than the atmospheric pressure, so the packing ring can not be installed. In order to avoid shaft wear, a shaft sleeve is installed at the part where the shaft passes through the packing cavity, and an O-ring seal is installed between the shaft sleeve and the shaft to prevent air inlet or water leakage along the mating surface.

The transmission mode of the pump is connected with the motor through an extended elastic coupling. The rotation direction of the pump, viewed from the drive end, is clockwise.

性能范围图

Performance range diagram





性能参数 Performance parameter

序号 Serial NO.	型号 Model number	流量 Flow		扬程 Head m	效率 Efficiency η (%)	转速 Speed r/min	轴功率 Shaft power kW	电机功率 Motor power kW	必需汽蚀余量 Required cavitation allowance (NPSH)r(m)
		m ³ /h	L/s						
1	50-32-125	7.5 12.5 15	2.08 3.47 4.17	20	60	2900	1.13	2.2	2.0
2	50-32-125A	6.72 11.2 13.4	1.86 3.11 3.74	16	60	2900	0.81	1.1	2.0
3	50-32-160	7.5 12.5 15	2.08 3.47 4.17	32	54	2900	2.02	3	2.0
4	50-32-160A	7.02 11.7 14	1.95 3.25 3.9	28	48	2900	1.65	2.2	2.0
5	50-32-160B	6.5 10.8 13	1.81 3.01 3.62	24	54	2900	1.32	1.5	2.0
6	50-32-200	7.5 12.5 15	2.08 3.47 4.17	50	48	2900	3.45	5.5	2.0
7	50-32-200A	7.02 11.7 14	1.95 3.25 3.9	44	48	2900	2.91	4	2.0
8	50-32-200B	6.53 10.8 13.1	1.81 3.01 3.63	38	48	2900	2.34	3	2.0
9	50-32-250	7.5 12.5 15	2.08 3.47 4.17	80	38	2900	7.16	11	2.0
10	50-32-250A	7.02 11.7 14	1.95 3.25 3.9	70	38	2900	5.87	7.5	2.0
11	50-32-250B	6.53 10.8 13.1	1.81 3.01 3.63	60	38	2900	4.65	5.5	2.0
12	65-50-125	15 25 30	4.17 6.94 8.33	20	69	2900	1.97	3	2.0
13	65-50-125A	13.4 22.4 26.9	3.73 6.22 7.46	16	69	2900	1.42	2.2	2.0
14	65-50-160	15 25 30	4.17 6.94 8.33	32	65	2900	3.35	5.5	2.0
15	65-50-160A	14 23.4 28	3.89 6.5 6.48	28	65	2900	2.73	4	2.0
16	65-50-160B	13 21.7 26	3.62 6.03 7.23	24	65	2900	2.19	3	2.0
17	65-40-200	15 25 30	4.17 6.94 8.33	50	60	2900	5.67	7.5	2.0
18	65-40-200A	14 23.4 28	3.89 6.5 6.48	44	60	2900	4.67	5.5	2.0
19	65-40-200B	13 21.7 26	3.62 6.03 7.23	38	60	2900	3.76	4	2.0
20	65-40-250	15 25 30	4.17 6.94 8.33	80	50	2900	10.89	15	2.0
21	65-40-250A	14 23.4 28	3.80 6.5 6.48	70	53	2900	8.42	11	2.0
22	65-40-250B	13 21.7 26	3.62 6.03 7.23	60	53	2900	6.7	7.5	2.0
23	65-40-315	15 25 30	4.17 6.94 8.33	125	40	2900	21.3	30	2.5
24	65-40-315A	14.3 23.9 28.7	3.98 6.64 7.96	114	40	2900	18.6	22	2.5
25	65-40-315B	13.6 22.7 27.2	3.78 6.3 7.56	103	40	2900	15.9	18.5	2.5
26	65-40-315C	12.8 21.4 25.7	3.57 6.04 7.14	92	40	2900	11.5	15	2.5
27	80-65-125	30 50 60	8.33 13.9 16.7	20	75	2900	3.6	5.5	3.0
28	80-65-125A	27.3 44.7 54.5	7.57 12.4 15.2	16	75	2900	2.72	4	3.0
29	80-65-160	30 50 60	8.33 13.9 16.7	32	73	2900	5.97	7.5	2.5
30	80-65-160A	28 46.8 56	7.78 13 15.6	28	73	2900	4.87	5.5	2.5

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IS/IR series single stage single suction centrifugal pump

海洋泵阀



清水泵系列 Clean water pump series

SEA PUMP & VALVE

性能参数

序号 Serial NO.	型号 Model number	流量 Flow		扬程 Head m	效率 Efficiency η (%)	转速 Speed r/min	轴功率 Shaft power kW	电机功率 Motor power kW	必需汽蚀余量 Required cavitation allowance (NPSH)r(m)
		m ³ /h	L/s						
31	80-65-160B	26 43.3 52	7.21 12 14.5	24	73	2900	3.36	4	2.5
32	80-50-200	30 50 60	8.33 13.9 16.7	50	69	2900	9.87	15	2.5
33	80-50-200A	28.1 46.8 56.3	7.82 13 15.7	44	69	2900	8.15	11	2.5
34	80-50-200B	28.1 46.8 56.3	7.62 12 14.6	38	69	2900	6.53	7.5	2.5
35	80-50-250	30 50 60	8.33 13.9 16.7	80	63	2900	17.3	22	2.5
36	80-50-250A	28.1 46.8 56.3	7.82 13 15.7	70	63	2900	14.2	18.5	2.5
37	80-50-250B	28.1 46.8 56.3	7.26 12 14.6	60	63	2900	11.2	15	2.5
38	80-50-315	30 50 60	8.33 13.9 16.7	125	54	2900	31.5	37	2.5
39	80-50-315A	28.7 47.7 57.3	7.96 13.3 15.9	114	54	2900	26.3	30	2.5
40	80-50-315B	27.2 45.4 54.5	7.56 12.9 15.2	103	54	2900	23.6	30	2.5
41	80-50-315C	25.7 42.9 51.4	7.14 11.9 14.3	92	54	2900	17	22	2.5
42	100-80-125	60 100 120	16.7 27.8 33.3	20	78	2900	7.0	11	4.5
43	100-80-125A	53.7 89.4 107	15 24.8 29.8	16	78	2900	5.03	7.5	4.5
44	100-80-160	60 100 120	16.7 27.8 33.3	32	78	2900	11.2	15	4.0
45	100-80-160A	56.1 93.5 112	15.6 26 31.1	28	78	2900	9.16	11	4.0
46	100-80-160B	50 83.5 100	13.9 23.2 28	22.3	78	2900	6.95	7.5	4.0
47	100-65-200	60 100 120	16.7 27.8 33.3	50	76	2900	17.9	22	3.6
48	100-65-200A	56.1 93.5 112	15.6 26 31.1	44	76	2900	14.2	18.5	3.6
49	100-65-200B	52.3 86.6 100.5	14.6 24.1 29	38	73	2900	9.94	15	3.6
50	100-65-250	60 100 120	16.7 27.8 33.3	80	72	2900	30.3	37	3.8
51	100-65-250A	56.1 93.5 112	15.6 26 31.1	70	72	2900	24.8	30	3.8
52	100-65-250B	52.3 86.6 105	14.6 24.1 29	60	72	2900	19.7	22	3.8
53	100-65-315	60 100 120	16.7 27.8 33.3	125	66	2900	51.6	75	3.6
54	100-65-315A	57.3 95.5 114	16 26.5 31.8	114	66	2900	45	55	3.6
55	100-65-315B	54.5 90.8 109	15.2 25.2 30.2	103	66	2900	38.6	45	3.6
56	100-65-315C	51.4 85.8 103	14.3 23.8 28.8	92	66	2900	32.5	37	3.6
57	125-100-200	120 200 240	33.3 55.6 66.7	50	81	2900	33.6	45	4.5
58	125-100-200A	113 187 225	31.2 52 62.5	44	81	2900	27.7	37	4.5
59	125-100-200B	105 193 209	29.1 48.1 58.2	38	81	2900	22.3	30	4.5
60	125-100-250	120 200 240	33.3 55.6 66.7	80	78	2900	55.9	75	4.2



性能参数 Performance parameter

序号 Serial NO.	型号 Model number	流量 Flow		扬程 Head m	效率 Efficiency η (%)	转速 Speed r/min	轴功率 Shaft power kW	电机功率 Motor power kW	必需汽蚀余量 Required cavitation allowance (NPSH)r(m)
		m ³ /h	L/s						
61	125-100-250A	113	31.2	70	78	2900	45.7	55	4.2
		225	62.5						
62	125-100-250B	105	29.1	60	78	2900	36.4	45	4.2
		173	48.1						
63	125-100-315	120	33.3	125	75	2900	90.8	110	4.5
		200	55.6						
64	125-100-315A	115	31.8	114	75	2900	78.9	90	4.2
		229	63.6						
65	125-100-315B	109	30.2	103	75	2900	68.1	75	4.2
		182	50.4						
66	125-100-315C	193	28.6	92	75	2900	57.4	75	4.2
		172	47.7						
67	50-32-125	3.75	1.04	5	54	1450	0.16	0.75	2.0
		6.3	1.74						
68	50-32-125A	3.36	0.93	4	54	1450	0.04	0.75	2.0
		5.6	1.56						
69	50-32-160	3.75	1.04	8	48	1450	0.29	0.75	2.0
		6.3	1.74						
70	50-32-160A	3.51	0.97	7	48	1450	0.23	0.75	2.0
		5.9	1.64						
71	50-32-160B	3.25	0.91	6	48	1450	0.18	0.75	2.0
		5.4	1.5						
72	50-32-200	3.75	1.04	12.5	42	1450	0.51	0.75	2.0
		6.3	1.74						
73	50-32-200A	3.51	0.97	11	42	1450	0.33	0.75	2.0
		5.9	1.64						
74	50-32-200B	3.26	0.91	9.5	42	1450	0.42	0.75	2.0
		5.4	1.5						
75	50-32-250	3.75	1.04	20	32	1450	1.07	1.5	2.0
		6.3	1.74						
76	50-32-250A	3.51	0.97	17.5	32	1450	0.88	1.5	2.0
		5.9	1.64						
77	50-32-250B	3.26	0.91	15	32	1450	0.69	1.1	2.0
		5.4	1.5						
78	65-50-125	7.5	2.08	5	64	1450	0.27	0.75	2.0
		12.5	3.47						
79	65-50-125A	6.72	1.86	4	64	1450	0.19	0.75	2.0
		11.2	3.11						
80	65-50-160	7.5	2.08	8	60	1450	0.45	0.75	2.0
		12.5	3.47						
81	65-50-160A	7	1.94	7	60	1450	0.37	0.75	2.0
		11.7	3.25						
82	65-50-160B	6.5	1.8	6	60	1450	0.29	0.75	2.0
		10.8	3.01						
83	65-40-200	7.5	2.08	12.5	55	1450	0.77	1.1	2.0
		12.5	3.47						
84	65-40-200A	7	1.94	11	55	1450	0.63	0.75	2.0
		11.7	3.25						
85	65-40-200B	6.5	1.8	9.5	55	1450	0.51	0.75	2.0
		10.8	3.04						
86	65-40-250	7.5	2.08	20	46	1450	1.48	2.2	2.0
		12.5	3.47						
87	65-40-250A	7	1.94	17.5	48	1450	1.17	2.2	2.0
		11.7	3.25						
88	65-40-250B	6.5	1.8	15	48	1450	0.9	1.1	2.0
		10.8	3.01						
89	65-40-315	7.5	2.08	32	37	1450	2.94	4	2.5
		12.5	3.47						
90	65-40-315A	7.17	1.99	28.5	37	1450	2.57	4	2.5
		11.9	3.32						

IS、IR系列单级单吸离心泵

IS/IR series single stage single suction centrifugal pump

海洋泵阀



清水泵系列 Clean water pump series

SEA PUMP & VALVE

性能参数

序号 Serial NO.	型号 Model number	流量 Flow		扬程 Head m	效率 Efficiency η (%)	转速 Speed r/min	轴功率 Shaft power kW	电机功率 Motor power kW	必需汽蚀余量 Required cavitation allowance (NPSH)r(m)
		m³/h	L/s						
91	65-40-315B	6.8 11.3	1.89 3.18	25.8	37	1450	2.2	3	2.5
92	65-40-315C	6.43 10.7	1.78 3.57	23	37	1450	1.85	2.2	2.5
93	80-65-125	15 25	4.17 8.33	5	71	1450	0.48	0.75	2.5
94	80-65-125A	13.6 22.3	3.79 7.57	4	71	1450	0.36	0.75	2.5
95	80-65-160	15 25	4.17 8.33	8	69	1450	0.79	1.5	2.5
96	80-65-160A	14 23.4	3.9 7.78	7	69	1450	0.64	0.75	2.5
97	80-50-200	15 25	4.17 8.33	12.5	65	1450	1.31	2.2	2.5
98	80-50-200A	14.1 23.4	3.91 7.82	11	65	1450	1.08	1.5	2.5
99	80-50-200B	13.1 21.7	3.63 7.26	9.5	65	1450	0.87	1.1	2.5
100	80-50-250	15 25	4.17 8.33	20	60	1450	2.27	3	2.5
101	80-50-250A	14.1 23.4	3.91 7.82	17.5	60	1450	1.86	3	2.5
102	80-50-250B	13.1 21.7	3.63 7.26	15	60	1450	1.47	2.2	2.5
103	80-50-315	15 25	4.17 8.33	32	52	1450	4.19	5.5	2.5
104	80-50-315A	14.3 23.8	3.98 7.96	28.5	52	1450	3.66	5.5	2.5
105	80-50-315B	13.6 22.7	3.79 7.56	25.8	52	1450	3.14	5.5	2.5
106	80-50-315C	12.9 21.4	3.57 7.14	23	52	1450	2.63	4	2.5
107	100-80-125	30 50	8.33 16.7	5	75	1450	0.91	1.5	2.5
108	100-80-125A	26.9 44.7	7.46 15	4	75	1450	0.65	0.75	2.5
109	100-80-160	30 50	8.33 16.7	8	75	1450	1.45	2.2	2.5
110	100-80-160A	28 46.8	7.79 15.6	7	75	1450	1.19	1.5	2.5
111	100-65-200	30 50	8.33 16.7	12.5	73	1450	2.33	4	2.5
112	100-65-200A	28 46.8	7.79 15.6	11	73	1450	1.93	3	2.5
113	100-65-200B	26.2 43.5	7.26 14.6	9.5	73	1450	1.54	2.2	2.5
114	100-65-250	30 50	8.33 16.7	20	68	1450	4.0	5.5	2.0
115	100-65-250A	28 46.8	7.79 15.6	17.5	68	1450	3.27	4	2.0
116	100-65-250B	26.2 43.5	7.26 14.6	15	68	1450	2.6	3	2.0
117	100-65-315	30 50	8.33 16.7	32	63	1450	6.92	11	2.0
118	100-65-315A	28.7 47.7	7.96 16	28.5	63	1450	6.03	7.5	2.0
119	100-65-315B	27.2 45.4	7.56 15.2	25.8	63	1450	5.18	7.5	2.0
120	100-65-315C	25.7 42.9	7.14 14.3	23	63	1450	4.36	5.5	2.0



性能参数 Performance parameter

序号 Serial NO.	型号 Model number	流量 Flow		扬程 Head m	效率 Efficiency η (%)	转速 Speed r/min	轴功率 Shaft power kW	电机功率 Motor power kW	必需汽蚀余量 Required cavitation allowance (NPSH)r(m)
		m ³ /h	L/s						
121	125-100-200	60 100 120	16.7 27.8 33.3	12.5	76	1450	4.48	7.5	2.5
122	125-100-200A	56.3 93.5 113	15.7 26 31.2	11	76	1450	3.69	5.5	2.5
123	125-100-250	60 100 120	16.7 27.8 33.3	20	76	1450	7.17	11	2.5
124	125-100-250A	56.3 93.5 113	15.7 26 31.2	17.5	76	1450	5.87	7.5	2.5
125	125-100-250B	52.4 86.5 105	14.6 24.1 29.1	15	76	1450	4.67	5.5	2.5
126	125-100-315	60 100 120	16.7 27.8 33.3	32	73	1450	11.9	15	2.2
127	125-100-315A	57.3 95.5 115	15.9 26.9 31.8	28.5	73	1450	10.3	15	2.2
128	125-100-315B	54.5 90.8 109	15.2 25.5 30.2	25.8	73	1450	8.92	11	2.2
129	125-100-315C	51.4 85.8 103	14.3 23.8 28.6	23	73	1450	7.5	11	2.2
130	125-100-400	60 100 120	16.7 27.8 33.3	50	65	1450	21	30	2.5
131	125-100-400A	56.3 93.5 113	15.7 26 31.2	44	65	1450	17.3	22	2.5
132	125-100-400B	52.4 86.5 150	14.6 24 29.1	38	65	1450	13.9	18.5	2.5
133	150-125-250	120 200 240	33.3 55.6 66.7	20	81	1450	13.5	18.5	3.0
134	150-125-250A	113 187 225	31.2 52 62.5	17.5	81	1450	11.1	15	3.0
135	150-125-250B	105 173 209	29.1 48.1 58.2	15	81	1450	8.75	11	3.0
136	150-125-315	120 200 240	33.3 55.6 66.7	32	79	1450	21.08	30	2.5
137	150-125-315A	113 187 225	31.2 52 62.5	28	80	1450	17.8	22	2.5
138	150-125-315B	105 173 209	29.1 48.1 58.2	24	80	1450	14.2	18.5	2.5
139	150-125-400	120 200 240	33.3 55.6 66.7	50	75	1450	36.3	45	2.8
140	150-125-400A	113 187 225	31.2 52 62.5	44	75	1450	29.9	37	2.8
141	150-125-400B	105 173 209	29.1 48.1 58.2	38	75	1450	24.1	30	2.8
142	200-150-250	240 400 460	66.7 111.1 128	20	82	1450	26.6	37	4.2
143	200-150-250A	225 372 431	62.5 104 120	17.5	82	1450	21.8	30	4.2
144	200-150-250B	208 346 398	57.7 96.2 111	15	82	1450	17.2	22	4.2
145	200-150-315	240 400 460	66.7 111 128	32	82	1450	42.5	55	3.5
146	200-150-315A	225 372 431	62.5 104 120	28	82	1450	35.4	45	3.5
147	200-150-315B	208 346 398	57.7 96.2 111	24	82	1450	27.9	37	3.5
148	200-150-400	240 400 460	240 400 460	50	81	1450	67.2	90	3.8
149	200-150-400A	225 372 431	225 372 431	44	81	1450	55.5	75	3.8
150	200-150-400B	208 346 398	208 346 398	38	81	1450	44.6	55	3.8



装配与拆卸

泵在装配前应首先检查零件有无影响装配的缺陷，并清洗干净，方可进行装配。

1. 预先将各处的连接螺栓、丝堵等分别拧紧在相应的零件上。

2. 预先将O形密封圈、纸垫、毛毡等分别放置在相应的零件上。

3. 预先将密封环和填料、填料环、填料压盖等依次装到泵盖内。

4. 将滚动轴承装到轴上，然后装到悬架内，再合上压盖，压紧滚动轴承，并在轴上套上挡水圈。

5. 将轴套装到轴上，再将泵盖装到悬架上，然后将叶轮止动垫圈、叶轮螺母等装上并拧紧。最后将上述组件装到泵体内，并拧紧泵体、泵盖上的连接螺栓。

在上述装配过程中，一些小件如平键、挡油盘、挡水圈轴套内O形密封圈等容易遗漏或装错顺序，应特别注意。

泵拆卸顺序基本上可按装配顺序的反向进行。

安装

泵安装的好坏对泵的运行和寿命有重要影响，所以安装和校正必须仔细进行。

1. 安装和校正

- (1) 清除底座上的油腻和污垢，把底座放在地基上。
- (2) 用水平仪检查底座的水乎度，允许用楔铁找平。
- (3) 用水泥浇灌底座和地脚螺栓孔眼。
- (4) 水泥干固后应检查底座和地脚螺栓孔眼是否松动，合适后拧紧地脚螺栓，重新检查水乎度。
- (5) 清理底座的支持平面，水泵脚及电机脚的平面，并把水泵和电机安装到底座上去。
- (6) 联轴器之间应保持一定的间隙，检查水泵轴与电机轴中心线是否一致，可用薄垫片调整使其同心。测量联轴器的外圆，上下、左右的偏差不得超过0.1mm，两联轴器端面一周间隙偏差不得超过0.3mm。

2. 安装说明

- (1) 安装高度、管路长度与直径、流速应符合计算，减少不必要的损失，可参考安装外形尺寸表进行核算。
- (2) 长距输送时应取较大管径。管路应有自己的支架，不允许管路的重量加在泵上，避免把泵压坏。
- (3) 排出管路如装逆止阀应装在闸阀的外面。

Assembly and disassembly

Before the assembly of the pump, first check whether the parts have defects that affect the assembly, and scrub them clean before assembly.

1. Tighten the connecting bolts and plugs on the corresponding parts in advance.
2. Place the O-ring, paper pad, felt, etc. on the corresponding parts in advance.
3. Install the sealing ring and packing, packing ring, packing gland, etc. into the pump cover in turn in advance.
4. Install the rolling bearing on the shaft, then into the suspension, close the gland, press the rolling bearing, and put a water retaining ring on the shaft.
5. Put the shaft on the shaft, install the pump cover on the suspension, and then install and tighten the impeller stop washer and impeller nut.

Finally, install the above components into the pump body, and tighten the connecting bolts on the pump body and pump cover. In the above assembly process, some small parts such as flat key, oil baffle, water baffle, O-ring in shaft sleeve are easy to be omitted or installed in the wrong order, so special attention shall be paid.

The disassembly sequence of the pump can basically be carried out in the reverse of the assembly sequence.

Performance range diagram

The quality of pump installation has an important impact on the operation and service life of the pump, so the installation and correction must be carried out carefully.

1. Installation and calibration

- (1) Remove grease and dirt from the base and place the base on the foundation.
- (2) Check the levelness of the base with a level gauge, and it is allowed to level with a wedge iron.
- (3) Grout the base and anchor bolt holes with cement.
- (4) After the cement is dry, check whether the base and anchor bolt holes are loose, tighten the anchor bolts when appropriate, and recheck the levelness.
- (5) Clean the support plane of the base, the plane of the water pump foot and motor foot, and install the water pump and motor on the base.
- (6) A certain clearance shall be maintained between the couplings. Check whether the center line of the water pump shaft and the motor shaft is consistent, and adjust it with a thin gasket to make it concentric. Measure the outer circle of the coupling, and the deviation of the upper, lower, left and right shall not exceed 0.1mm, and the circumferential gap deviation of the end faces of the two couplings shall not exceed 0.3mm.

2. Installation instructions

- (1) The installation height, pipeline length and diameter and flow rate shall comply with the calculation to reduce unnecessary losses, which can be calculated with reference to the installation outline dimension table.
- (2) Larger pipe diameter shall be adopted for long-distance transportation. The pipeline shall have its own support. The weight of the pipeline is not allowed to be added to the pump to avoid crushing the pump.
- (3) If the discharge pipeline is equipped with a check valve, it shall be installed outside the gate valve.



起动、停止与运转

1、起动：

- ①应在电动机与清水离心泵联结前确定电动机的旋转方向是否正确，泵的转动是否灵活。
- ②关闭吐出管路上的闸阀。
- ③向泵内灌满水，或用真空泵引水。
- ④接通电源，当泵达到正常转速后，再逐渐打开吐出管路的闸阀，并调他到所需要的工况。在吐出管上的闸阀关闭的情况下，泵连续工作的时间不能超过3分钟。

2、停止：

- ①逐渐关闭吐出管路上的闸阀，切断电源。
- ②如环境温度低于0℃，应将泵内水放出，以免冻裂。
- ③如长期停止使用，应将泵拆卸清洗上油，包装保管。

3、运转：

- ①在开车及运转过程中，必须注意观察仪表读数，轴承发热，填料漏水和发热及泵的振动和杂音等是否正常，如果发现异常情况，应及时处理。
- ②轴承最高温度应不高于80℃，轴承温度不得比周围温度超过40℃。
- ③填料正常漏水，应该是少量均匀的。
- ④轴承油位应保持在正常位置上，不能过高和过低，过低时应及时补充润滑油。
- ⑤如密封环与叶轮配合部位的间隙磨损过大应更换新的密封环或叶轮。

Start, stop and run

1. Starting:

- ① Before connecting the motor with the clean water centrifugal pump, determine whether the rotation direction of the motor is correct and whether the pump rotates flexibly.
- ② Close the gate valve on the discharge pipeline.
- ③ Fill the pump with water or draw water with vacuum pump.
- ④ Turn on the power supply. When the pump reaches the normal speed, gradually open the gate valve of the discharge pipeline and adjust it to the required working condition. When the gate valve on the discharge pipe is closed, the continuous operation time of the pump shall not exceed 3 minutes.

2. Stop:

- ① Gradually close the gate valve on the discharge pipeline and cut off the power supply.
- ② If the ambient temperature is lower than 0℃, the water in the pump shall be discharged to avoid frost crack.
- ③ If the pump is stopped for a long time, it shall be disassembled, cleaned, oiled, packaged and kept.

3. Operation:

- ① During start-up and operation, pay attention to observe whether the instrument reading, bearing heating, filler water leakage and heating, pump vibration and noise are normal. If any abnormality is found, it shall be handled in time.
- ② The maximum bearing temperature shall not be higher than 80℃, and the bearing temperature shall not exceed 40℃ higher than the surrounding temperature.
- ③ The filler leaks normally and should be small and uniform.
- ④ The bearing oil level shall be kept at the normal position, and shall not be too high or too low. When it is too low, the lubricating oil shall be supplemented in time.
- ⑤ If the clearance between the seal ring and the impeller is worn too much, replace it with a new seal ring or impeller.

IS、IR系列单级单吸离心泵

IS/IR series single stage single suction centrifugal pump

海洋泵阀

SEA PUMP & VALVE



清水泵系列 Clean water pump series

故意原因及解决方法

Intentional causes and Solutions

故障 Fault	原因 Reason	解决方法 Resolvent
<p>1、水泵不吸水，压力表及真空表的指针在剧烈摆动。</p> <p>1. The water pump does not absorb water, and the pointers of the pressure gauge and vacuum gauge are swinging violently.</p>	<p>注入泵的水不够，水管或仪表漏气</p> <p>The water injected into the pump is not enough, and the water pipe or instrument leaks</p>	<p>再往水泵内注入或拧紧堵塞漏气处</p> <p>Then inject or tighten into the water pump to block the air leakage.</p>
<p>2、水泵不吸水，真空表表示高度真空</p> <p>1. The water pump does not absorb water, and the vacuum gauge indicates high vacuum</p>	<p>底阀没有打开，或已淤塞吸水管阻力太大，吸水管高太大</p> <p>The bottom valve is not opened, or the suction pipe is blocked, the resistance of the suction pipe is too large, and the suction pipe is too high</p>	<p>校正或更改底阀。清洗或更改泵水管，减低吸水高度</p> <p>Correct or change the bottom valve. Clean or change the pump pipe to reduce the suction height</p>
<p>3、看压力表水泵出水处是有压力，然而水管仍不出水</p> <p>3. Look at the pressure gauge, there is pressure at the water outlet of the water pump, but the water pipe still doesn't come out</p>	<p>出水管阻力太大，旋转方向不对，叶轮淤塞</p> <p>The resistance of the outlet pipe is too large, the rotation direction is wrong, and the impeller is blocked</p>	<p>检查或缩短水管及检查电机取下水管接头，清洗叶轮</p> <p>Check or shorten the water pipe and check the motor, remove the water pipe joint and clean the impeller</p>
<p>4、流量不够</p> <p>4. Insufficient flow</p>	<p>水泵淤塞，口环磨损过多</p> <p>The water pump is blocked and the mouth ring is worn too much</p>	<p>清洗水泵及管子，更换口环</p> <p>Clean the water pump and pipe, and replace the mouth ring</p>
<p>5、水泵耗费的功率过大</p> <p>5. The water pump consumes too much power</p>	<p>填料压的太紧，填料发热，因磨损叶轮坏了，供水量增加</p> <p>The packing is pressed too tightly, the packing is heated, the impeller is damaged due to wear, and the water supply increases</p>	<p>拧紧填料，或更换填料切割叶轮，降低流量</p> <p>Tighten the packing, or replace the packing and cut the impeller to reduce the flow</p>
<p>6、水泵内部声音反常水泵不上水</p> <p>6. The sound inside the water pump is abnormal, and the water pump does not feed water</p>	<p>流量过大，吸水管内阻力过大，吸水高度过高，在吸水处有空气渗入，所输送的液体温度过高</p> <p>The flow is too large, the resistance in the suction pipe is too large, the suction height is too high, there is air infiltration at the suction point, and the temperature of the transported liquid is too high</p>	<p>增加出水管内的阻力以减低流量，检查泵吸入管内阻力，检查底阀减小吸水高度。拧紧堵塞漏气处，降低液体温度。</p> <p>Increase the resistance in the outlet pipe to reduce the flow, check the resistance in the suction pipe of the pump, check the bottom valve to reduce the water absorption height, tighten and block the air leakage to reduce the liquid temperature</p>
<p>7、轴承过热</p> <p>7. Bearing Overheating</p>	<p>没有油，水泵轴与电机轴不在一条中心线上</p> <p>There is no oil, and the water pump shaft and motor shaft are not on the same centerline</p>	<p>注油，把轴中心对准</p> <p>Fill the oil and align the shaft center</p>
<p>8、水泵振动</p> <p>8. Pump vibration</p>	<p>泵轴与电机轴不在一条中心线上或泵轴斜了</p> <p>The pump shaft and motor shaft are not on the same center line or the pump shaft is inclined</p>	<p>把水泵和电机的轴中心线对准</p> <p>Align the shaft centerline of the water pump and motor</p>



管路损耗参考表 Pipeline friction loss table

管径 pipe diameter (mm)	流量 Flow (L/s)																								
	1	2	4	6	8	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130	140	160	180	200	
25	3.27	13.0																							
40	3.5	14	15				15	20																	
50	0.8	3.1	13	29					25	30															
65		0.8	3.2	7.1	13	20					40	50													
75		0.4	1.6	3.3	5.9	9.6	21.6						60	70											
100			0.4	0.8	1.3	2.1	6.8	8.6	13	19.4															
125				0.23	0.4	0.63	1.3	2.7	4.1	5.9	10.7														
150					0.16	0.26	0.58	1.1	1.6	2.3	4.2	6.4	9.4												
175						0.11	0.27	0.5	0.74	1.05	1.9	2.9	4.3	5.8	7.7	9.6									
200							0.13	0.26	0.37	0.53	0.93	1.5	2.1	2.9	3.7	4.7	6.1	7.2	8.5						
250								0.07	0.12	0.18	0.30	0.48	0.68	0.93	1.2	1.5	1.9	2.3	2.8	3.3	3.7	4.9	5.2		
300										0.07	0.12	0.19	0.27	0.37	0.49	0.6	0.76	0.9	1.1	1.3	1.5	2.0	2.4	3.0	

阀及弯管折合直管长度(每个)

Length of straight pipe converted from valve and elbow (each)

种类 type	折合直管直径倍数 Multiple of converted straight pipe diameter	备注 remarks
全开闸阀 Fully open gate valve	12	未畅开加倍 Not open double
全开弯管 Full opening elbow	25	
止回阀 Check valve	100	
底阀 Bottom valve	100	部分堵塞加倍 Partial blockage doubling

注：例如100mm直径管，底阀折100倍直径等于100×100=10000mm=10m直径长度，假定流量为8L/S上表，直管每100m损失1.3m，则10m损失0.13m，即一个100m底阀，流量为8L/S时，则损失扬程0.13米。

Note: for example, for 100mm diameter pipe, 100 times the diameter of the bottom valve is equal to 100 × 100 = 10000mm = 10m diameter length, assuming that the flow is 8L/s. according to the above table, if the loss of straight pipe is 1.3m per 100m, the loss of 10m is 0.13M, that is, a 100m bottom valve. When the flow is 8L/s, the loss head is 0.13M.

一定管路直径之最大流量限制
Maximum flow limit of a certain pipeline diameter

管径直径 Pipe diameter (mm)	最大流量 Maximum flow (L/s)	最大流速 Maximum velocity (m/s)	管径直径 Pipe diameter (mm)	最大流量 Maximum flow (L/s)	最大流速 Maximum velocity (m/s)
25	1	2.04	125	30.0	2.44
38	2.5	1.69	150	43.0	2.45
50	4.17	2.12	175	60.0	2.49
65	6.67	2.01	200	83.3	2.69
75	10.0	2.26	250	133.3	2.72
100	18.4	2.33	300	192.0	2.71

超过此限使管路损失显著增加。
Exceeding this limit will significantly increase the pipeline loss

IS、IR系列单级单吸离心泵

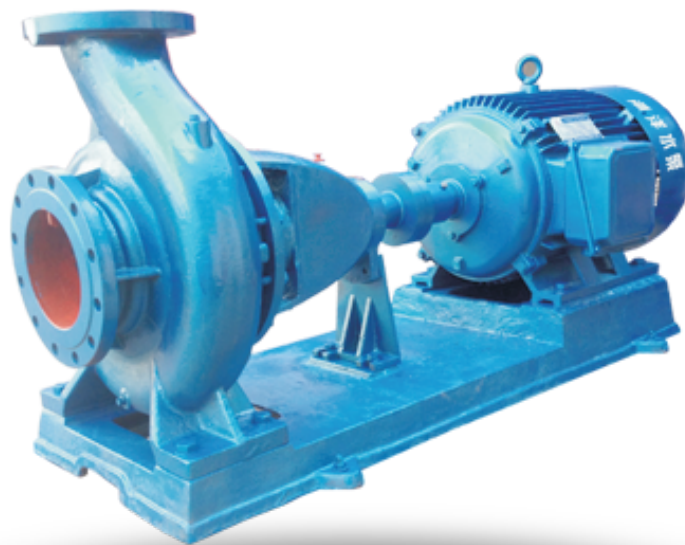
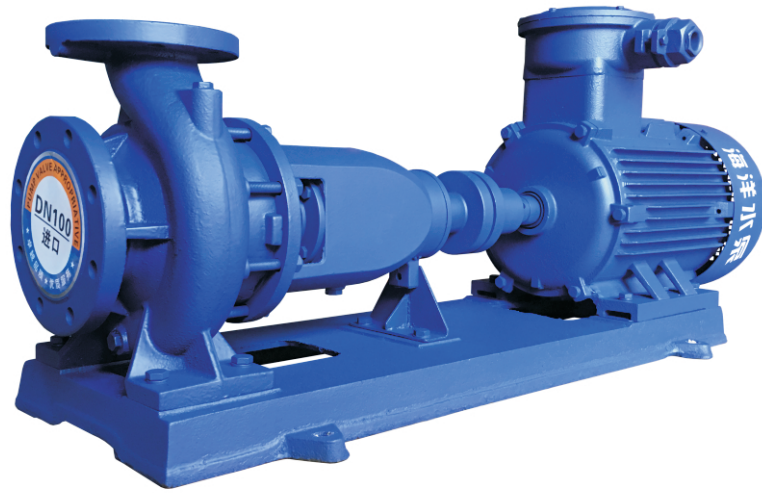
IS\IR series single stage single suction centrifugal pump

海洋泵阀

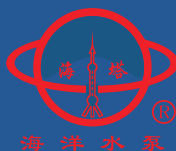
SEA PUMP & VALVE



清水泵系列 Clean water pump series



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