一、产品描述

IR型通用端吸热水离心泵是一款符合国家标准的通用型热水离心泵。它采用卧式安装方式，水平轴向吸入液体，垂直向上吐出，方便检修时无需拆卸进出口管路，只需抽出转子部件即可进行检修。该泵提供多种材质选项，材质可分为普通铸铁、耐磨铸铁、铸钢和铸不锈钢等，以适应不同工况需求。

IR型通用端吸热水离心泵适用于输送清水或类似于清水的物理化学性质液体，介质温度不超过105℃。它具有结构简单、性能可靠、体积小巧、重量轻、抗腐蚀性能优秀、能耗低以及使用和维修便捷等优点。该泵系列共有140种规格可供选择，且设计统一，仅需四种轴、轴承、轴封和叶轮紧固件等配件即可互换，大大简化了备件管理和维护工作。此外，它还提供四种悬架类型，为用户提供更多的灵活性和便利性。

无论是在工业领域还是民用领域，IR型通用端吸热水离心泵都是一种可靠、高效的选择。它的优良性能和广泛适用性使其成为各种液体输送系统中不可或缺的设备。

1. Product description

IR universal end-suction centrifugal pump is a kind of universal centrifugal pump that meets the national standard. It adopts a horizontal installation mode, horizontal axial suction of liquid, vertical upward discharge, convenient maintenance without disassembling the import and export pipes, only need to pull out the rotor components can be repaired. The pump provides a variety of material options, materials can be divided into ordinary cast iron, wear-resistant cast iron, cast steel and cast stainless steel, etc., to meet the needs of different working conditions.

IR type general end suction centrifugal pump is suitable for transporting water or liquid with physical and chemical properties similar to water, and the medium temperature does not exceed 80℃. It has the advantages of simple structure, reliable performance, compact size, light weight, excellent corrosion resistance, low energy consumption and convenient use and maintenance. Available in 140 sizes and with a uniform design, the pump family is interchangeable with only four types of shaft, bearing, shaft seal and impeller fasteners, greatly simplifying spare parts management and maintenance. In addition, it offers four suspension types to provide users with more flexibility and convenience.

TheIR universal end-suction centrifugal pump is a reliable and efficient choice for both industrial and civil applications. Its excellent performance and wide applicability make it an indispensable equipment in various liquid conveying systems.

IR型系列性能范围(按设计点计):

IR series Performance range (by design point):

转速:2900r/min 和1450r/min

Speed :2900r/min and 1450r/min

进口直径:50 ~350mm

Inlet diameter :50 ~350mm

流量： 6.3-1080m³/h

Flow: 6.3-1080m³/h

扬程:5~125m

Head :5~125m

泵的标记：

Pump marking:

例如：

For example:

IR80-65J-160I(A,B,C)

IR：通用端吸热水离心泵

IR: universal end suction centrifugal pump

80:吸入口直径(mm)

80: suction diameter (mm)

65:泵排出口直径(mm)

65: pump outlet diameter (mm)

J：降速使用

J: Use at reduced speed

160:叶轮名义直径(mm)

160: nominal diameter of impeller (mm)

(A,B,C):叶轮第一、二、三次切割。

(A,B,C): impeller first, second and third cuts.

IR 通用端吸热水离心泵参数型号表 1
IR General end suction centrifugal pump parameter modelTable 1 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR50-32-125	7.5	2.08	23	2950	1.09	2.2	Y90L-2	43	2.0	44
	12.5	3.47	20		1.33			51	2.0	
	15	4.17	18		1.50			49	2.5	
IR50-32J-125	3.75	1.04	5.8	1480	0.16	0.55	Y801-4	36	2.0	44
	6.3	1.75	5		0.19			45	2.0	
	7.5	2.08	4.5		0.21			44	2.5	
IR50-32-125A	6.8	1.89	18.8	2950	0.87	1.5	Y90S-2	40	2.0	44
	11.3	3.14	16.4		1.01			50	2.0	
	13.6	3.78	14.7		1.16			47	2.5	
IR50-32J-125A	3.4	0.94	4.7	1480	0.13	0.55	Y801-4	33.3	2.0	44
	5.7	1.58	4.1		0.15			43	2.0	
	6.8	1.89	3.7		0.16			42	2.5	
IR50-32-160	7.5	2.08	34.5	2950	2.13	3	Y100L-2	33	2.0	48
	12.5	3.47	32		2.37			46	2.0	
	15	4.17	30		2.45			50	2.5	
IR50-32J-160	3.75	1.04	8.6	1480	0.30	0.55	Y801-4	29	2.0	48
	6.3	1.75	8		0.34			40	2.0	
	7.5	2.08	7.5		0.36			43	2.5	
IR50-32-160A	6.8	1.89	28.5	2950	1.76	3	Y100L-2	30	2.0	48
	11.3	3.14	26.4		1.85			44	2.0	
	13.6	3.78	24.8		1.91			48	2.5	
IR50-32J-160A	3.4	0.94	7.1	1480	0.25	0.55	Y801-4	25.9	2.0	48
	5.7	1.58	6.6		0.28			37.1	2.0	
	6.8	1.89	6.2		0.28			41	2.5	
IR50-32-200	7.5	2.08	51.8	2950	3.78	5.5	$Y132S_1$-2	28	2.0	60
	12.5	3.47	50		4.36			39	2.0	
	15	4.17	48		4.56			43	2.5	
IR50-32J-200	3.75	1.04	12.9	1480	0.57	0.75	Y90S-4	23	2.0	60
	6.3	1.75	12.5		0.65			33	2.0	
	7.5	2.08	12.0		0.68			36	2.5	
IR50-32-200A	7	1.94	45.5	2950	3.21	4	$Y132S_1$-2	27	2.0	60
	11.7	3.25	43.7		3.67			38	2.0	
	14	3.89	41.7		3.79			42	2.5	
IR50-32J-200A	3.4	0.94	10.6	1480	0.49	0.75	Y802-4	20	2.0	60
	5.7	1.59	10.3		0.52			31	2.0	
	6.8	1.89	9.9		0.54			34	2.5	

IR 通用端吸热水离心泵参数型号表 2
IR General end suction centrifugal pump parameter modelTable 2 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR50-32-200B	6.6	1.83	40.5		2.80			26	2.0	
	11	3.06	38.7	2950	3.14	4	Y112M-2	37	2.0	60
	13.2	3.67	36.7		3.22			41	2.5	
	3.3	0.92	10.1		0.43			21	2.0	
IR50-32J-200B	5.5	1.53	9.7	1480	0.47	0.55	Y801-4	31	2.0	60
	6.6	1.83	9.2		0.49			34	2.5	
	7.5	2.08	82		7.28			23	2.0	
IR50-32-250	12.5	3.47	80	2950	8.25	11	$Y160M_1$-2	33	2.0	99
	15	4.17	78.5		8.79			36.5	2.5	
	3.75	1.04	20.5		1.23			17	2.0	
IR50-32J-250	6.3	1.75	20	1480	1.27	1.5	$Y100L_1$-4	27	2.0	99
	7.5	2.08	19.6		1.29			31	2.5	
	7	1.94	71.9		6.22			22	2.0	
IR50-32-250A	11.7	3.25	70	2950	6.97	7.5	$Y160M_1$-2	32	2.0	99
	14	3.89	68.8		7.39			35.5	2.5	
	3.5	0.97	18 .0		1.07			16	2.0	
IR50-32J-250A	5.9	1.64	17.5	1480	1.08	1.5	Y90L-4	26	2.0	99
	7.02	1.95	17.2		1.10			30	2.5	
	6.6	1.83	63.6		5.71			20	2.0	
IR50-32-250B	11.0	3.06	62	2950	6.19	7.5	$Y132S_2$-2	30	2.0	99
	13.2	3.67	60.9		6.64			33	2.5	
	3.3	0.92	15.9		0.95			15	2.0	
IR50-32J-250B	5.5	1.53	15.5	1480	0.93	1.1	Y90L-4	25	2.0	99
	6.6	1.83	15.2		0.94			29	2.5	
	15	4.17	21.3		1.85			47	2.0	
IR65-50-125	25	6.94	20	2950	2.2	3	Y100L-2	62	2.0	45
	30	8.33	18.6		2.4			63	2.5	
	7.5	2.08	5.4		0.25			44	2.0	
IR65-50J-125	12.5	3.47	5	1480	0.31	0.55	Y801-4	55	2.0	45
	15	4.17	4.5		0.33			56	2.5	
	13.6	3.78	17.6		1.48			44	2.0	
IR65-50-125A	22.7	6.31	16.5	2950	1.67	2.2	Y90L-2	61	2.0	45
	27.3	7.58	15.4		1.91			59.9	2.5	
	6.8	1.89	4.5		0.20			41	2.0	
IR65-50J-125A	11.3	3.14	4.1	1480	0.23	0.55	Y801-4	54	2.0	45
	13.6	3.78	3.7		0.26			53	2.5	

IR 通用端吸热水离心泵参数型号表 3
IR General end suction centrifugal pump parameter modelTable 3 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR65-50-160	15	4.17	34.2	2950	3.18	5.5	$Y132S_1$-2	44	2.0	50
	25	6.94	32		3.82			57	2.0	
	30	8.33	30		4.15			59	2.5	
IR65-50J-160	7.5	2.08	8.55	1480	0.45	0.75	Y802-4	39	2.0	50
	12.5	3.47	8		0.53			51	2.0	
	15	4.17	7.5		0.58			52.5	2.5	
IR65-50-160A	13.6	3.78	28.4	2950	2.56	4.0	Y112M-2	41	2.0	50
	22.7	6.31	26.5		2.93			56	2.0	
	27.3	7.58	24.8		3.29			56	2.5	
IR65-50J-160A	6.8	1.89	7.09	1480	0.37	0.75	Y801-4	35.5	2.0	50
	11.3	3.14	6.6		0.41			49.6	2.0	
	13.6	3.78	6.2		0.46			49.9	2.5	
IR65-40-200	15	4.17	53.2	2950	5.30	7.5	$Y160M_1$-2	41	2.0	64
	25	6.94	50		6.55			52	2.0	
	30	8.33	47.6		7.27			53.5	2.5	
IR65-40J-200	7.5	2.08	13.3	1480	0.78	1.1	Y90L-4	35	2.0	64
	12.5	3.47	12.5		0.93			46	2.0	
	15	4.17	11.9		1.02			47.5	2.5	
IR65-40-200A	14	3.89	46.9	2950	4.47	7.5	$Y132S_2$-2	40	2.0	64
	23.4	6.50	43.7		5.46			51	2.0	
	28.1	7.81	41.3		6.02			52.5	2.5	
IR65-40J-200A	1.94	11.7		1480	0.65	1.1	Y90L-4	34.8	2.0	64
	3.25	10.9	1480		0.77			45	2.0	
	3.89	9.8			0.82			46.5	2.5	
IR65-40-200B	13.2	3.67	41.9	2950	3.87	5.5	$Y132S_2$-2	39	2.0	64
	22.0	6.11	38.7		4.64			50	2.0	
	26.4	7.33	36.3		5.07			51.5	2.5	
IR65-40J-200B	6.6	1.83	10.5	1480	0.55	1.1	Y90S-4	34	2.0	64
	11.0	3.06	9.7		0.66			44	2.0	
	13.2	3.67	9.1		0.72			45.5	2.5	
IR65-40-250	15	4.17	81.2	2950	9.76	15	$Y160M_2$-2	34	2.0	103
	25	6.94	80		11.84			46	2.0	
	30	8.33	78.4		12.8			50	2.5	
IR65-40J-250	7.5	2.08	20.3	1480	1.48	2.2	$Y100L_2$-4	28	2.0	103
	12.5	3.47	20		1.75			39	2.0	
	15	4.17	19.6		1.86			43	2.5	
IR65-40-250A	14	3.89	71.0	2950	8.71	15	$Y160M_2$-2	33	2.0	103
	23.4	6.50	70.0		9.92			45	2.0	
	28	7.78	68.6		10.68			49	2.5	

IR 通用端吸热水离心泵参数型号表 4
IR General end suction centrifugal pump parameter modelTable 4 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR65-40J-250A	7.0 11.7 14.0	1.94 3.25 3.89	17.8 17.5 17.2	1480	1.25 1.47 1.55	2.2	$Y100L_1$-4	27 38 42	2.0 2.0 2.5	103
IR65-40-250B	13.2 22 26.4	3.67 6.11 7.33	62.8 61.8 60.4	2950	7.07 8.42 9.05	11	$Y160M_1$-2	32 44 48	2.0 2.0 2.5	103
IR65-40J-250B	6.6 11 13.2	1.83 3.06 3.67	15.7 15.5 15.1	1480	1.08 1.26 1.33	1.5	$Y100L_1$-4	26 37 41	2.0 2.0 2.5	103
IR65-40-315	15 25 30	4.17 6.94 8.33	126.8 125 124	2950	18.5 21.8 23.8	30	$Y200L_1$-2	28 39 42.5	2.0 2.0 2.5	115
IR65-40J-315	7.5 12.5 15	2.08 3.47 4.17	32.4 32 31.7	1480	3.0 3.3 3.5	4	Y132S-4	22 33 37	2.0 2.0 2.5	115
IR65-40-315A	14 23.4 28	3.89 6.50 7.78	111.2 109.5 108.8	2950	16.97 18.37 20.76	30	$Y200L_1$-2	25 38 40	2.0 2.0 2.5	115
IR65-40J-315A	7.0 11.7 14.0	1.94 3.25 3.89	28.4 28.0 27.8	1480	2.84 2.88 3.12	4	Y112M-4	19 31 34.5	2.0 2.0 2.5	115
IR65-40-315B	13.2 22.0 26.4	3.67 6.11 7.33	98.0 96.5 95.9	2950	14.7 15.6 17.7	22	Y180M-2	24 37 39	2.0 2.0 2.5	115
IR65-40J-315B	6.6 11.0 13.2	1.83 3.06 3.67	24.5 24.1 24.0	1480	2.44 2.41 2.62	4	Y112M-4	18 30 33	2.0 2.0 2.5	115
IR80-65-125	30 50 60	8.33 13.89 16.67	23.2 20 17.6	2950	3.16 3.95 4.29	5.5	$Y132S_1$-2	60 69 67	3.0 3.0 4.0	54
IR80-65J-125	15 25 30	4.17 6.94 8.33	5.8 5 4.4	1480	0.44 0.53 0.58	0.75	Y802-4	54 64 62	2.5 2.5 3.0	54
IR80-65-125A	27.2 45.3 54.4	7.56 12.60 15.12	19.1 16.5 14.5	2950	2.48 3.04 3.36	4	Y112M-2	57 67 64	3.0 3.0 4.0	54

IR 通用端吸热水离心泵参数型号表 5
IR General end suction centrifugal pump parameter modelTable 5 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR80-65J-125A	13.6	3.78	4.8	1480	0.35	0.55	Y801-4	51	2.5	54
	22.6	6.28	4.2		0.41			62	2.5	
	27.2	7.56	3.6		0.45			59	3.0	
IR80-65-160	30	8.33	36	2950	5.16	7.5	$Y160M_1$-2	57	2.0	60
	50	13.89	32		6.50			67	2.3	
	60	16.67	28.4		7.14			65	3.3	
IR80-65J-160	15	4.17	9	1480	0.74	1.5	Y90L-4	50	2.0	60
	25	6.94	8		0.88			62	2.3	
	30	8.33	7.2		0.95			62	3.3	
IR80-65-160A	27.2	7.56	29.7	2950	4.08	7.5	$Y132S_2$-2	54	2.0	60
	45.4	12.6	26.4		5.02			65	2.3	
	54.4	15.12	23.4		5.59			62	3.3	
IR80-65J-160A	13.6	3.78	7.4	1480	0.58	1.1	Y90S-4	47.3	2.0	60
	22.7	6.31	6.6		0.68			60	2.3	
	27.2	7.56	5.9		0.74			59	3.3	
IR80-50-200	30	8.33	55.2	2950	8.5	15	$Y160M_2$-2	53	2.0	60
	50	13.89	50		10.8			63	2.5	
	60	16.67	45.2		11.9			62	3.2	
IR80-50J-200	15	4.17	13.5	1480	1.25	2.2	$Y100L_1$-4	44	2.0	60
	25	6.94	12.5		1.49			57	2.0	
	30	8.33	11.5		1.6			58	2.5	
IR80-50-200A	28.08	7.56	48.9	2950	7.19	11	$Y160M_1$-2	52	2.0	60
	46.8	13.0	43.7		8.98			62	2.5	
	56.2	15.61	38.9		9.76			61	3.2	
IR80-50J-200A	14.04	3.9	11.9	1480	1.06	1.5	Y90L-4	43	2.0	60
	23.4	6.5	10.9		1.24			56	2.0	
	28.08	7.8	9.9		1.33			57	2.5	
IR80-50-200B	26.4	7.33	43.9	2950	6.19	11	$Y160M_1$-2	51	2.0	60
	44	12.22	38.7		7.6			61	2.5	
	52.8	14.67	33.9		8.13			60	3.2	
IR80-50J-200B	13.2	3.67	10.7	1480	0.92	1.5	Y90L-4	42	2.0	60
	22	6.11	9.7		1.06			55	2.0	
	26.4	7.33	8.7		1.12			56	2.5	
IR80-50-250	30	8.33	83.5	2950	14.8	22	$Y200L_1$-2	46	2.5	98
	50	13.89	80		18.8			58	2.5	
	60	16.67	76		20.7			60	3.0	

IR 通用端吸热水离心泵参数型号表 6
IR General end suction centrifugal pump parameter modelTable 6 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR80-50J-250	15	4.17	20.8	1480	1.97	3	Y112M-4	43	2.5	98
	25	6.94	20		2.43			52	2.5	
	30	8.33	19.3		2.92			54	3.0	
IR80-50-250A	28.08	7.8	73.6	2950	12.5	18.5	Y180M-2	45	2.5	98
	46.8	13.0	70		15.7			57	2.5	
	56.16	15.6	67.4		17.5			59	3.0	
IR80-50J-250A	14.04	3.9	18.2	1480	1.66	3	Y112M-4	42	2.5	98
	23.4	6.5	17.5		2.19			51	2.5	
	28.08	7.8	16.7		2.41			53	3.0	
IR80-50-250B	26.4	7.33	64.8	2950	10.6	15	Y160L-2	44	2.5	98
	44	12.22	62		13.3			56	2.5	
	52.8	14.67	60.0		14.9			58	3.0	
IR80-50J-250B	13.2	3.67	16.2	1480	1.50	2.2	$Y100L_2$-4	39	2.5	98
	22	6.11	15.6		1.95			48	2.5	
	26.4	7.33	15		2.11			51	3.0	
IR80-50-315	30	8.33	127.6	2950	26.1	37	Y225M-2	40	2.0	115
	50	13.89	125		32.8			52	2.0	
	60	16.67	122		35.6			56	2.5	
IR80-50J-315	15	4.17	32.9	1480	4.02	5.5	Y132M-4	33.4	2.0	115
	25	6.94	32		4.74			46	2.0	
	30	8.33	31		5.10			49.7	2.5	
IR80-50-315A	28.08	7.8	113.4	2950	22.2	37	$Y200L_2$-2	39	2.0	115
	46.8	13.0	110		27.5			51	2.0	
	56.16	15.6	107.7		30.0			55	2.5	
IR80-50J-315A	14.04	3.90	29.2	1480	3.51	5.5	Y132M-4	31.8	2.0	115
	23.4	6.50	28		4.06			44	2.0	
	28.08	7.80	27.1		4.39			47.2	2.5	
IR80-50-315B	26.4	7.33	100.5	2950	19.0	30	$Y200L_1$-2	38	2.0	115
	44	12.22	97		23.2			50	2.0	
	52.8	14.67	95		25.3			54	2.5	
IR80-50J-315B	13.2	3.67	25.1	1480	3.01	5.5	Y132S-4	30	2.0	115
	22	6.11	24.3		3.47			42	2.0	
	26.4	7.33	23.8		3.8			45	2.5	
IR100-80-125	60	16.67	24 .7	2950	5.95	11	$Y160M_1$-2	67.7	3.0	63
	100	27.78	20		7.47			73	4.5	
	120	33.33	16.1		7.6			69.2	5.6	

IR 通用端吸热水离心泵参数型号表 7
IR General end suction centrifugal pump parameter modelTable 7 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR100-80J-125	30 50 60	8.33 13.89 16.67	6.19 5 4	1480	0.78 1.0 1.08	1.5	Y90L-4	65 68 60.5	3.0 3.6 4.0	63
IR100-80-125A	55.1 91.8 110.2	15.31 25.5 30.6	20.7 16.8 13.4	2950	4.65 5.92 6.3	7.5	$Y132S_2$-2	66.8 71.0 63.8	3.0 4.5 5.6	63
IR100-80J-125A	27.5 45.8 54.9	7.64 12.72 15.25	5.17 4.19 3.36	1480	0.16 0.79 0.88	1.1	Y90S-4	63.5 66 57.1	3.0 3.6 4.0	63
IR100-80-160	60 100 120	16.67 27.78 33.33	37 32 28	2950	10.1 11.9 12.5	15	$Y160M_2$-2	60 73 73	3.8 4.3 5.0	95
IR100-80J-160	30 50 60	8.33 13.89 16.67	9.25 8 7	1480	1.3 1.58 1.68	2.2	$Y100L_1$-4	58 69 68	3.0 3.4 3.7	95
IR100-80-160A	54.6 91 109.2	15.17 25.28 30.34	30.6 26.5 23.2	2950	7.98 9.25 9.85	15	$Y160M_2$-2	57 71 70.4	3.8 4.3 5.0	95
IR100-80J-160A	27.3 45.5 54.6	7.58 12.64 15.16	7.66 6.6 6.37	1480	1.03 1.22 1.45	2.2	Y90L-4	55.3 67 65.3	3.0 3.4 3.7	95
IR100-65-200	60 100 120	16.67 27.78 33.33	56 50 44	2950	14.5 18.9 20.3	22	Y180M-2	63 72 71	3.4 3.9 5.2	96
IR100-65J-200	30 50 60	8.33 13.89 16.67	14 12.5 11	1480	1.91 2.50 2.85	3	$Y100L_2$-4	60 68 63	2.5 2.5 3.0	96
IR100-65-200A	56.1 93.5 112.2	15.58 25.97 31.17	49 43.7 38.5	2950	12.08 15.68 16.8	18.5	Y180M-2	62 71 70	3.4 3.9 5.2	96
IR100-65J-200A	28.05 46.8 56.1	7.79 13.04 15.58	12.3 10.9 9.6	1480	1.59 2.07 2.37	3	$Y100L_2$-4	59 67 62	2.5 2.5 3.0	96
IR100-65-200B	52.7 87.8 105.4	14.64 24.39 29.28	43.2 38.5 33.9	2950	10.2 13.2 14.1	15	Y160L-2	61 70 69	3.4 3.9 5.2	96

IR 通用端吸热水离心泵参数型号表 8
IR General end suction centrifugal pump parameter modelTable 8 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR100-65J-200B	26.4 43.9 52.7	7.33 12.19 14.64	10.8 9.6 8.5	1480	1.34 1.74 2.00	2.2	$Y100L_2$-4	58 66 61	2.5 2.5 3.0	96
IR100-65-250	60 100 120	16.67 27.78 33.33	88 80 74	2950	25.2 32.0 36.1	37	$Y200L_2$-2	57 68 67	3.0 3.6 4.5	107
IR100-65J-250	30 50 60	8.33 13.89 16.67	22 20 18.5	1480	3.6 4.3 4.7	5.5	Y132S-4	50 63 64	2.5 2.5 3.0	107
IR100-65-250A	56.1 93.5 112.2	15.58 25.97 31.17	77 70 64.7	2950	21.8 27.4 28.9	30	$Y200L_2$-2	54 65 64	3.0 3.6 4.5	107
IR100-65J-250A	28.05 46.8 56.1	7.79 13.00 15.58	19.2 17.4 16.2	1480	3.12 3.53 4.06	5.5	Y132S-4	47 61 60.9	2.5 2.5 3.0	107
IR100-65-250B	52.7 87.8 105.4	14.64 24.39 29.28	67.9 61.7 57.0	2950	18.3 23.1 26.0	30	$Y200L_1$-2	53.3 64 62.9	3.0 3.6 4.5	107
IR100-65J-250B	26.4 43.9 52.7	7.33 12.19 14.64	17.0 15.4 14.3	1480	2.66 3.07 3.47	4	Y112M-4	46 62 59	2.5 2.5 3.0	107
IR100-65-315	60 100 120	16.67 27.78 33.33	132 125 119	2950	44.9 54.9 60.8	75	Y280S-2	48 62 64	2.8 3.2 4.2	117
IR100-65J-315	30 50 60	8.33 13.89 16.67	33.5 32 30.5	1480	6.2 7.5 8.3	11	Y160M-4	44 58 60	2.0 2.0 2.5	117
IR100-65-315A	56.1 93.5 112.2	15.58 25.97 31.17	115.5 109 104	2950	39.2 45.5 52.1	55	Y250M-2	45 61 61	2.8 3.2 4.2	117
IR100-65J-315A	28.05 46.8 56.1	7.79 13.00 15.58	29.3 28 26.7	1480	5.46 6.33 7.15	7.5	Y160M-4	41 56 57	2.0 2.0 2.5	117
IR100-65-315B	52.7 87.8 105.4	14.64 24.39 29.28	102 97 92	2950	33.3 38.7 44.0	55	Y250M-2	44 60 60	2.8 3.2 4.2	117
IR100-65J-315B	26.4 43.9 52.7	7.33 12.19 14.64	25.5 24.3 23.0	1480	4.58 5.29 5.88	7.5	Y132M-4	40 55 56	2.0 2.0 2.5	117

IR 通用端吸热水离心泵参数型号表 9
IR General end suction centrifugal pump parameter modelTable9 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR125 -80 - 160	96 160 192	26.7 44.4 53.3	37 32 27	2900	14 17.7 18.8	22	Y180M-2	69 79 75	5.0 5.6 6.2	
IR125 -80J- 160	48 80 96	13.3 22.2 26.7	9.3 8 6.65	1450	1.9 2.3 2.45	3	$Y100L_2$ -4	63 75 71	5.0 5.6 6.2	
IR125-80-160	149.4	41.5	28	2900	14.8	18.5	Y160L-4	77	5.6	
IR125-80, - 160	74.7	20.75	7	1450	1.95	3	$Y100L_2$ -4	73	5.6	
IR125-80 - 160	138.4	38.4	24	2900	12.1	15	$Y100M_2$ -2	75	5.6	
IR125 -80- 160	69.2	19.2	6	1450	1.6	2.2	$Y100L_1$ -4	71	5.6	
IR125-80-200	96 160 192	26.7 44.4 53.3	56.5 50 45	2900	21.4 27.6 30.2	37	$Y200L_2$ -2	69 79 78	4.5 5.2 5.7	
IR125-80,-200	48 80 96	13.3 22.2 26.7	14.1 12.5 11.3	1450	2.9 3.6 4.0	5.5	Y132S-4	63 75 73	4.5 5.2 5.7	
IR125-80-200	150.3	41.75	44	2900	23.4	30	$Y200L_1$ -2	77	5.2	
IR125-80,-200	75.1	20.9	11	1450	3.08	5.5	Y132S-4	73	5.2	
IR125-80-200	139.4	38.7	38	2900	19.2	30	$Y200L_1$ -2	75	5.2	
IR125-80- 200	69.7	19.4	9.5	1450	2.5	4	Y112M-4	71	5.2	
IR125-80-250	96 160 192	44.4	89 80 72	2900	35.8 45.3 50.9	55	Y250M-2	65 77 74	4.5 4.8 6.1	
IR125-80-250	48 80 96	13.3 22.2 26.7	22.3 20 18	1450	4.8 66.1 6.7	7.5	Y132M-4	60 72 70	4.5 4.8 6.1	
IR125-80-250	149.6	41.5	70	2900	38.6	55	Y250M-2	74	4.8	
IR125 -80J-250	74.8	20.8	17.5	1450	5.1	7.5	Y132M-4	70	4.8	
IR125-80-250	138.4	38.4	60	2900	31.4	37	$Y200L_2$ -2	72	4.8	
IR125-80J-250B	69.2	19.2	15	1450	4.2	5.5	Y132S-4	68	4.8	

IR 通用端吸热水离心泵参数型号表 10
IR General end suction centrifugal pump parameter modelTable10 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR125-100-200	120	33.33	61	2950	29.3	45	Y225M-2	68	4.5	103
	200	55.56	50		35.4			77	5.0	
	240	66.67	41		38.3			70	5.8	
IR125-100-200	60	16.67	15.25	1480	3.89	7.5	Y132M-4	64	2.5	103
	100	27.78	12.5		4.66			73	2.9	
	120	33.33	10.25		5.08			66	3.6	
IR125-100-200A	112	31.11	50.5	2950	23.75	37	$Y200L_2$-2	64.9	4.5	103
	186.5	51.81	41.4		28.1			75	5.0	
	224	62.22	34		30.9			67.1	5.8	
IR125-100-200A	56	15.56	12.6	1480	3.15	5.5	Y132S-4	61	2.5	103
	93.3	25.29	10.3		3.69			71	2.9	
	112	31.11	8.5		4.12			63	3.6	
IR125-100-200B	105.5	29.31	47.0	2950	21.45	30	$Y200L_1$-2	63	4.5	103
	175.5	48.75	38.5		24.88			74	5.0	
	211.0	58.61	31.6		27.95			65	5.8	
IR125-100-200B	52.8	14.67	11.8	1480	2.83	4	Y132S-4	60	2.5	103
	87.8	24.39	9.6		3.28			70	2.9	
	105.5	29.31	7.9		3.66			62	3.6	
IR125-100-250	120	33.33	90	2950	47.4	75	Y280S-2	62	3.7	170
	200	56.56	80		58.1			75	4.5	
	240	66.67	73		64.5			74	5.5	
IR125-100-250A	60	16.67	22.5	1480	6.23	11	Y160M-4	59	2.0	170
	100	27.78	20		7.56			72	2.3	
	120	33.33	18.25		8.40			71	3.0	
IR125-100-250A	112	31.11	78	2950	40.3	55	Y280S-2	59	3.7	170
	186.5	51.81	69.5		48.4			73	4.5	
	224	62.22	63.5		54.5			71	5.5	
IR125-100J-250A	56	15.56	19.5	1480	5.31	7.5	Y160M-4	56	2.0	170
	93.3	25.92	17.4		6.29			70	2.3	
	112	31.11	15.9		7.13			68	3.0	
IR125-100-250B	105.5	29.31	69.0	2950	34.2	45	Y250M-2	58	3.7	170
	175.5	48.75	61.5		41.4			71	4.5	
	211.0	58.61	56		44.0			69.9	5.5	
IR125-100J-250B	52.8	14.67	17.3	1480	4.62	7.5	Y132M-4	54	2.0	170
	87.8	24.39	15.4		5.42			68	2.3	
	105.5	29.31	14		6.10			66	3.0	
IR125-100-315	120	33.33	132	2950	69.5	132	Y315M-2	62	4.2	198
	200	55.56	125		100.2			68	5.0	
	240	66.67	119		119.7			65	5.8	

IR 通用端吸热水离心泵参数型号表 11
IR General end suction centrifugal pump parameter modelTable 11 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR125-100J-315	60 100 120	16.67 27.78 33.33	33 32 30.5	1480	9.0 13.4 16.3	18.5	Y180M-4	60 65 63	2.1 2.5 2.9	198
IR125-100-315A	112.7 187.9 225.5	31.31 52.19 62.64	116.5 110.4 105	2950	59.6 85.6 102.2	110	Y315M-2	60 66 63	4.2 5.0 5.8	198
IR125-100J-315A	56.4 94 112.8	15.67 26.21 31.33	31 28.3 26.5	1480	8.5 12.1 14.3	15	Y160L-4	56 60 57	2.1 2.5 2.9	198
IR125-100-315B	105.5 175.9 211.1	29.31 48.86 58.64	102.1 96.7 92.0	2950	50.5 72.4 88.1	90	Y280M-2	58 64 60	4.2 5.0 5.8	198
IR125-100J-315B	52.8 87.8 105.5	14.67 24.39 29.31	25.5 24.2 23	1480	6.81 9.99 12.02	15	Y160L-4	54 58 55	2.1 2.5 2.9	198
IR125-100-400	60 100 120	16.67 27.78 33.33	52 50 48.5	1480	15.2 22 26.4	30	Y200L-4	56 62 60	2.1 2.5 2.9	220
IR125-100-400A	56.1 93.5 118.2	15.58 25.97 32.83	45.4 43.7 42.4	1480	12.9 18.3 20.5	22	Y200L-4	54 61 58	2.1 2.5 2.9	220
IR125-100-400B	52.8 88 105.6	14.67 24.44 29.33	40.2 38.7 37.5	1480	10.9 15.4 16.9	18.5	Y180L-4	53 60 57	2.1 2.5 2.9	220
IR150-125-250	120 200 240	33.33 55.56 66.67	24.8 20 15	1480	12.3 14.1 14.4	18.5	Y180M-4	66 77 68	2.5 2.8 3.5	150
IR150-125-250A	112.2 187 224.4	31.17 51.94 62.33	22.3 17.5 12.5	1480	10.5 11.7 11.4	15	Y160L-4	65 76 67	2.5 2.8 3.5	150
IR150-125-250B	105.6 176 211.2	29.33 48.89 58.67	20.3 15.5 10.5	1480	9.2 9.9 9.2	15	Y160L-4	64 75 66	2.5 2.8 3.5	150
IR150-125-315	120 200 240	33.33 55.56 66.67	36.3 32 28.5	1480	18.8 23.2 25.9	30	Y200L-4	63 75 72	2.5 2.8 3.5	170
IR150-125-315A	112.2 187 224.4	31.17 51.94 62.33	32.3 28 24.9	1480	15.9 19.3 21.4	22	Y200L-4	62 74 71	2.5 2.8 3.5	170

IR 通用端吸热水离心泵参数型号表 12
IR General end suction centrifugal pump parameter modelTable 12 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR150-125-315B	105.6 176 211.2	29.33 48.89 58.67	29.0 24 21.2	1480	13.7 15.8 17.4	18.5	Y180L-4	61 73 70	2.5 2.8 3.5	170
IR150-125-400	120 200 240	33.33 55.56 66.67	57.5 50 44.0	1480	30.8 38.9 43.7	45	Y250M-4	61 70 63	2.0 2.5 3.0	198
IR150-125-400A	112.2 187 224.4	31.17 51.94 62.33	51.2 43.7 37.7	1480	26.1 32.3 35.2	37	Y225M-4	60 69 62	2.0 2.5 3.0	198
IR150-125-400B	105.6 176 211.2	29.3 48.9 58.7	46.2 38.7 32.7	1480	22.5 27.3 28.8	30	Y225S-4	59 68 61	2.0 2.5 3.0	198
IR150-150-450	280	77.8	72	1480	78.5	90	Y280M-4	70	5.5	285
IR150-150-450A	265	73.6	64	1480	66	75	Y280S-4	70	5.5	285
IR150-150-450B	245	68	55	1480	52.4	75	Y280S-4	70	5.5	285
IR200-150-250	240 400 480	66.7 111.1 133.3	22.6 20 17.2	1480	19.7 27.3 28.3	37	Y225S-4	75 80 76	3.8 4.3 5.0	210
IR200-150-250A	224.5 374.2 449.0	62.4 103.9 124.7	19.8 17.5 15.1	1480	16.6 22.9 25.0	30	Y200L-4	73 78 74	3.8 4.3 5.0	210
IR200-150-250B	211.3 352.1 422.6	58.7 97.8 117.4	17.5 15.5 13.3	1480	14.2 19.6 21.3	30	Y200L-4	71 76 72	3.8 4.3 5.0	210
IR200-150-315	240 400 480	66.7 111.1 133.3	35.6 32 29.4	1480	34.7 44.1 49.9	55	Y250M-4	67 79 77	3.0 3.5 4.0	268
IR200-150-315A	224.5 374.2 449.0	62.4 103.9 124.7	31.1 28 25.7	1480	28.8 36.6 41.4	45	Y225M-4	66 78 76	3.0 3.5 4.0	268
IR200-150-315B	211.3 352.1 422.6	58.7 97.8 117.4	27.5 24.7 22.7	1480	24.4 30.8 34.9	37	Y225S-4	65 77 75	3.0 3.5 4.0	268
IR200-150-400	240 400 480	66.7 111.1 133.3	55.8 50 47	1480	54.4 68.8 78.5	90	Y280M-4	67 78 75	3.0 3.5 4.0	325
IR200-150-400A	224.5 374.2 449.0	62.4 103.9 124.7	48.8 43.7 41.1	1480	45.3 57.8 67.9	75	Y280S-4	66 77 74	3.0 3.5 4.0	325

IR 通用端吸热水离心泵参数型号表 13
IR General end suction centrifugal pump parameter modelTable 13 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR200-150-400B	211.3	58.7	43.2	1480	38.3	55	Y280S-4	65	3.0	325
	352.1	97.8	38.7		46.5			76	3.5	
	422.6	117.4	31.4		45.4			73	4.0	
IR200-150-500	400	111.1	80	1480	116.2	160	Y315L1-4	75	5.5	575
IR200-150-500A	376	104.4	70	1480	96.82	132	Y315M-4	74	5.5	575
IR200-150-500B	352	97.7	62	1480	82.5	110	Y315S-4	72	5.5	575
IR250-200-250	400	111.1	22	1480	30.74	45	Y225M-4	78	5	280
	550	152.8	20		36.11			83	5.5	
	660	183.3	18.5		40.58			82	6	
IR250-200-250A	365	101.4	19	1480	24.54	37	Y225S-4	77	5	280
	500	138.9	17		28.60			81	5.5	
	600	166.7	14		28.61			80	6	
IR250-200-315	400	111.1	35	1480	50.20	75	Y280S-4	76	5	425
	550	152.8	32		58.49			82	5.5	
	660	183.3	30		70.99			76	6	
IR250-200-315A	365	101.4	31	1480	42.34	55	Y250M-4	74	5	425
	500	138.9	28		47.69			80	5.5	
	600	166.7	23		50.14			75	6	
IR250-200-400	400	111.1	54	1480	76.54	110	Y315S-4	74	5	573
	550	152.8	50		94.86			79	5.5	
	660	183.3	46		108.86			76	6	
IR250-200-400A	365	101.4	47	1480	63.17	90	Y280M-4	74	5	573
	500	138.9	44		77.86			77	5.5	
	600	166.7	35		78.39			73	6	
IR250-200-400B	336	93.3	40	1480	51.58	75	Y280S-4	71	5	573
	460	127.8	37		62.68			74	5.5	
	552	153.3	30		64.47			70	6	
IR250-200-450	400	111.1	64	1480	91.79	160	Y315L1-4	76	5.0	742
	550	152.8	60		112.41			80	5.5	
	660	183.3	56		130.8			77	6.0	
IR250-200-450A	365	101.4	54	1480	71.91	132	Y315M-4	75	5.0	742
	500	138.9	51		89.09			78	5.5	
	600	166.7	47		101.11			76	6.0	
IR250-200-450B	336	93.3	46	1480	58.50	110	Y315S-4	72	5.0	742
	460	127.8	43		71.87			75	5.5	
	552	153.3	40		82.42			73	6.0	
IR300-250-235	480	133.3	20	980	33.97	55	Y280M-6	77	5.0	660
	750	200	18		43.60			81	5.5	
	864	240	15.5		49.32			74	6.0	

IR 通用端吸热水离心泵参数型号表 14
IR General end suction centrifugal pump parameter modelTable 14 of

型号 Model number	流 量 Q Flow rate Q		扬程 H Lift H	转速 n Speed n	轴功率 Pa Shaft power Pa	电 机 Electric machine		效率 η Efficiency η	必须汽蚀余量 NPSHrRequired cavitation allowance NPSHr	泵重 Pump weight
						功率 P Power P	型 号 Model number			
	m^3/h	l/s	m	rpm	kW	kW		%	m	kg
IR300-250-235A	438 657 788	121.7 182.5 218.9	16.5 15 13	980	26.26 33.99 38.77	45	Y280S-6	75 79 72	5.0 5.5 6.0	660
IR300-250-235B	400 600 720	111.1 166.7 200	14 12.5 11	980	20.90 26.54 30.83	37	Y250M-6	73 77 70	5.0 5.5 6.0	660
IR300-250-300	480 720 864	133.3 200 240	31 28 24	980	52.66 67.82 73.38	75	Y315S-6	77 81 77	4.5 5.0 5.5	743
IR300-250-300A	444 666 799	123.3 185 221.9	26.5 24 21.5	980	42.19 54.45 61.59	75	Y315S-6	76 80 76	4.5 5 5.5	743
IR300-250-300B	415 623 747	115.3 173.1 207.5	23 21 18.5	980	34.68 45.13 50.21	55	Y280M-6	73 77 70	4.5 5 5.5	743
IR300-250-315	800	222.2	32	1480	82.00	90	Y280M-4	85	4 4.5 5	792
IR300-250-315A	765	212.5	27	1480	66.90	75	Y280S-4	84	4 4.5 5	792
IR300-250-380	480 720 864	133.3 200.0 240.0	48 44 34	980	76.57 102.77 97.62	132	Y315L2-6	82 84 82	4.5 5 5.5	835
IR300-250-380A	444 666 799	123.3 185 221.9	41.4 30 38	980	64.22 68.06 106.07	110	Y315L1-6	78 80 78	4.5 5 5.5	835
IR350-300-315	1080	300	40	1480	143.47	160	Y315L1-4	78	5	947
IR350-300-315A	965	268	32	1480	105.10	132	Y315M-4	80	5	947
IR350-250-500	1080	300	80	1480	290.49	315	Y355L2-4	81	6	950
IR350-250-500A	1000	277.78	70	1480	241.31	280	Y355L1-4	79	6	950
IR350-250-500B	934	259.5	60	1480	198.20	250	Y355M2-4	77	6	950

二、结构说明

IR泵系根据国际标准IR02858 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、及悬架部件等所组成。

泵的壳体(即泵体和泵盖)构成泵的工作室，叶轮、轴和滚动轴承为泵的转子。悬架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。由于有些泵的轴向力不大，叶轮背面未设密封环和平衡孔。

泵的轴向密封是填料压盖，填料环和填料等组成，以防止进气或大量漏水。泵的叶轮如有平衡孔，则装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形密封圈以防沿着配合表面进气或漏水。

泵的传动方式是通过爪型联抽器与电动机联结的，泵的旋转方向，从驱动端看，为顺时针方向旋转。

IR 热水泵在泵盖与悬架之间设置有冷却室盖，与泵盖形成冷却水腔，同时在泵盖外圆上加工有3/8”的丝孔。泵的轴向密封采用机械密封或填料密封两种形式，正常供货时采用机械密封。

用户使用时，必须按外形尺寸图所示在冷却水进口接头引入压力不小于0.15MPa的冷却水，并将冷却水出口接头的冷却水引入水池或其它不影响泵正常工作之处。若用户采用填料密封，在出厂时，A处另加装有一个3/8”的管接头，必须引入压力不小于0.15MPa的清水进行密封。

2. Structure description

TheIR pump system is designed according to the performance and size specified in the international standardIR02858, which is mainly composed of the pump body, pump cover, impeller, shaft, seal ring, shaft sleeve, and suspension components.

The housing of the pump (that is, the pump body and the pump cover) constitutes the workshop of the pump, and the impeller, shaft and rolling bearing are the rotor of the pump. The suspension components support the rotor components of the pump, and the rolling bearings bear the radial and axial forces of the pump.

In order to balance the axial force of the pump, the front and back of the impeller of most pumps are provided with a sealing ring, and a balance hole is provided on the back cover of the impeller. Because the axial force of some pumps is not large, there is no sealing ring and balance hole on the back of the impeller.

The axial seal of the pump is composed of packing gland, packing ring and packing to prevent the intake air or a large amount of water leakage. If the impeller of the pump has a balance hole, the cavity of the soft packing is connected with the inlet of the impeller. If the liquid at the inlet of the impeller is in a vacuum state, it is easy to take air along the surface of the shaft sleeve, so the packing ring is installed in the packing chamber, and the pressure water in the pump room is led to the packing ring for sealing through the small hole on the pump cover. If the impeller of the pump does not have a balance hole, because the liquid pressure on the back of the impeller is greater than atmospheric pressure, there is no air leakage problem, so the packing ring is not installed.

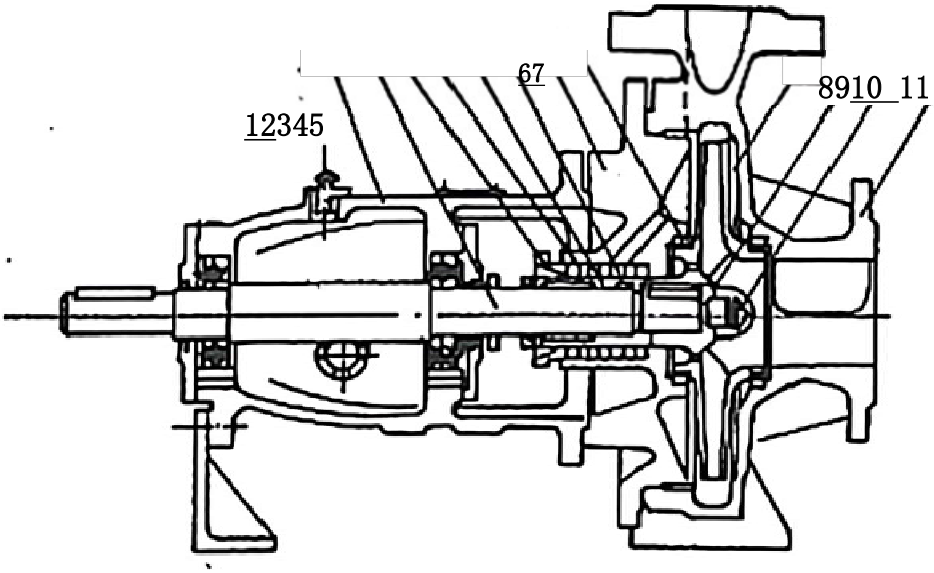
In order to avoid shaft wear, shaft sleeve protection is provided at the part where the shaft passes through the packing chamber. An O-ring is installed between the shaft sleeve and the shaft to prevent air intake or water leakage along the mating surface.

The transmission mode of the pump is connected with the motor through the claw type coupling pump, and the rotation direction of the pump, from the driving end, is clockwise rotation.

The IR hot water pump is provided with a cooling chamber cover between the pump cover and the suspension, forming a cooling water chamber with the pump cover, and a 3/8 "silk hole is processed on the outer circle of the pump cover. The axial seal of the pump adopts two forms of mechanical seal or packing seal, and the mechanical seal is used when the normal supply is used.

When using, the user must introduce cooling water with a pressure of not less than 0.15MPa into the cooling water inlet joint according to the outline size diagram, and introduce the cooling water of the cooling water outlet joint into the pool or other places that do not affect the normal operation of the pump. If the user uses A packing seal, A 3/8 "pipe joint is installed at the factory, and water with a pressure of not less than 0.15MPa must be introduced to seal it.

IR型结构图
IR structure diagram



1.悬架部件 2.轴	1. Suspension components 2. Shaft
3.压盖 4.填料	3. Gland 4. Packing
5.轴套 6.填料环	5. Shaft sleeve 6. Packing ring
7.泵盖	7. Pump cover
8.密封环	8. Sealing ring
9.叶轮	9. Impeller
10.止动垫	10. Stop pad
11.叶轮螺母 12.泵体	11. Impeller nut 12. Pump body

IR型泵外形尺寸图
IR pump dimensions

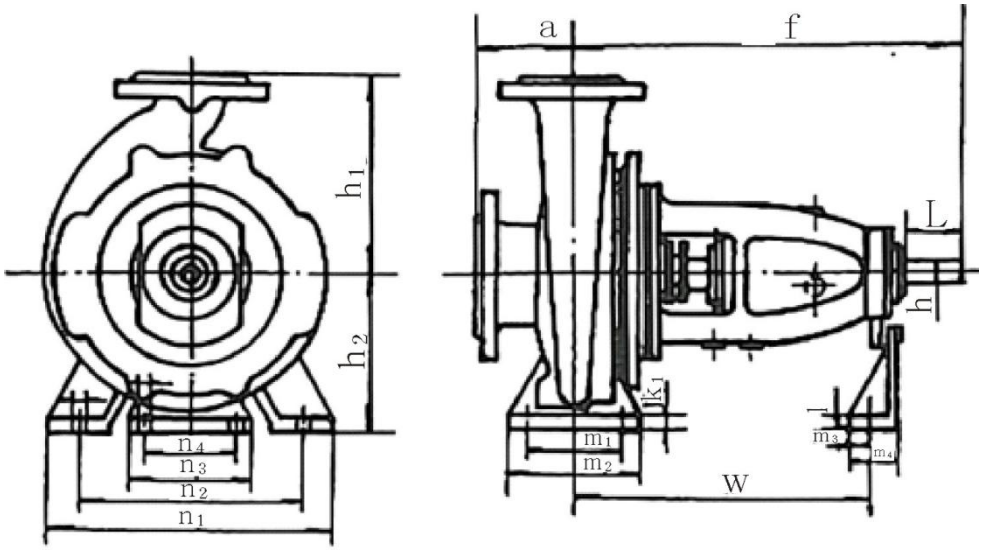


表2IR型泵外形尺寸

Table 2 Dimensions ofIR pump

表1Table 1

产品型号 Product model	泵pump				泵脚座 Pump foot seat											W	螺栓孔 Bolt hole		轴端 Shaft end	
	a	f	h_1	h_2	b	m_1	m_2	m_3	m_4	n!	n_2	n_3	n_4	k_1	k_2		S_1	S_2	d	L
IR50 -32 -125	80	385	112	140	50	100	70	19	60	190	140	110	145		10	285	M12	M12	24	50
IR50-32 -160			132	160						240										
IR50-32-200			160	180																
IR50 -32-250	100	500	180	225	65	125	95	25	65	320	250				14	370			32	80
IR65-50 -125	80	385	112	140	50	100	70	19	60	210	160	110	145		10	285	M12	M12	24	50
IR65 -50 -160			132	160						240	190									
IR65 -40 -200	100		160	180						265	212									
IR65 -40 -250		500	180	225	65	125	95	25	65	320	250				14	370			32	80
IR65 -40 -315	125		200	250						345	280									
IR80-65-125	100	385	132	160	50	100	70	19	60	240	190	110	145		10	285	M12	M12	24	50
IR80 -65 - 160			160	180						265	212									
IR80 -50 -200				200																
IR80 -50 -250	125	500	180	225	65	125	95	25	65	320	250				14	370			32	80
IR80 -50 -315			225	280						345	280									
IR125 -80 - 160	125	500	180	225		95	125	21	60	320	250	110	145		14	370	M12	M12	32	80
IR125 -80 -200				250						345	280		155		18					

表2IR型泵外形尺寸

Table 2 Dimensions ofIR pump　　表2 Table 2

产品型号 Product model	泵pump				泵脚座 Pump foot seat											W	螺栓孔 Bolt hole		轴端 Shaft end	
	a	f	h_1	h_2	b	m_1	m_2	m_3	m_4	n_1	n_2	n_3	n_4	k_1	k_2		S_1	S_2	d	L
IR125-80 -250	125	500	225	280		120	160	25	65	400	315	110	140		14	370	M16	M12	32	80
IR100 -80-125	100	385	160	180	65	125	95	19	60	280	212	110	145		10	285	M12	M12	24	50
IR100 -80 - 160		500		200				24								370			32	80
IR100-65 -200			180	225				25	65	320	250				14					
IR100-65 -250	125		200	250	80	160	120			360	280						M16			
IR100 -65 -315		530	225	280				28		400	315								42	110
IR125 -100-200	125	500	200	280	80	160	120	25	65	360	280	110	145		14	370	M16	M12	32	80
TDI125 -100-250	140	530	225					28		400	315								42	110
TDI125 -100-315			250	315																
IR125 - 100 -400			280	355	100	200	150			500	400						M12			
IR150 -125 -250	140	530	250	355	80	160	120	28	65	400	315	110	145		14	370	M16	M12	42	110
IR150 -125 -315			280		100	200	150			500	400						M20			
IR150 -125 -400			315	400																
IR200 -150 - 250	160	530	280	375	100	200	150	28	65	500	400	110	145		14	370	M20	M12	42	110
IR200 -150 -315		670	315	400				38	80	550	450	140	200		30	500		M16	48	
IR200 -150 -400				450																

表3（1）IR 型泵吸入口和排出口法兰外形尺寸

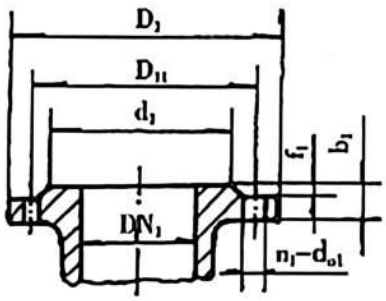
Table 1 Dimensions of inlet and outlet flanges ofIR pump

产品型号 Product type	吸入口法兰尺寸 Suction mouth flange inch							排出口法兰尺寸 Discharge port flange inch						
	DN_1	D_1	D_{11}	d_2	bt	f_1	n_1-d。	DN_2	D_2	D_{12}	d_2	b_2	f_2	n_2-$d_{。2}$
IR50-32 -125	50	165	125	102	20	3	4-17.5	32	140	100	78	18	2	4-17.5
IR50-32-160														
IR50 -32 -200														
IR50-32 -250														
IR65 - 50 - 125	65	185	145	122	20	3	4-17.5	50	165	125	102	20	3	4-17.5
IR65 -50 -160														
IR65-40 -200								40	150	110	88	18	3	4-17.5
IR65-40-250														
IR65 -40-315														
IR80 -65 - 125	80	200	160	133	22	3	8-17.5	65	185	145	122	20	3	4-17.5
IR80-65 - 160														
IR80 -50 -200								50	165	125	102	20	3	4-17.5
IR80-50 -250														
IR80-50 -315														
IR100-80 -125	100	220	180	158	24	3	8-17.5	80	200	160	133	22	3	8-17.5
IR100-80-160														
IR100 -65 -200								65	185	145	122	20	3	4-17.5
IR100 -65 -250														
IR100 -65 - 315														

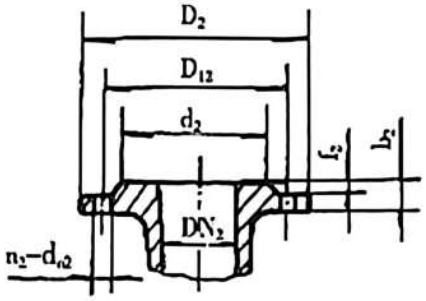
表3（2）IR 型泵吸入口和排出口法兰外形尺寸

Table 2 Dimensions of inlet and outlet flanges ofIR pump

产品型号 Product type	吸入口法兰尺寸 Suction mouth flange inch							排出口法兰尺寸 Discharge port flange inch						
	DN_1	D_1	D_{12}	d_1	b_1	f_1	n_1-dn_1	DN_2	D_2	D_{12}	d_2	b_2	f_2	n_2-d_{62}
IR125 -100-200	125	250	210	184	26	3	8-17.5	100	220	180	158	24	3	8-17.5
IR125 -100-250														
IR125 - 100-315														
IR125 -100 -400														
IR150 -125 -250	150	285	240	212	28	3	8-22	125	250	210	184	26	3	8-17.5
IR150 -125 -315														
IR150 -125-400														
IR200 -150 -250	200	340	295	268	30	3	12-22	150	285	240	212	28	3	8-22
IR200 -150-315														
IR200 -150 -400														
IR125 - 80 - 160	125	250	210	184	26	3	8-17.5	80	200	160	133	22	3	8-17.5
IR125-80 -200														
IR125 - 80 -250														



吸入口法兰



排出口法兰

三、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，并擦洗干净，方可进行装配。

1. 预先可将各处的连接螺栓、丝堵等分别拧紧在相应的零件上。

2. 预先可将0形密封圈、纸垫、毛毡等分别放置在相应的零件上。

3. 预先可将密封环和填料、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，然而再将叶轮、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0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。

Assembly and disassembly

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

1. In advance, the connection bolts and wire plugs can be tightened on the corresponding parts.

2. The 0-shaped sealing ring, paper pad, felt, etc. can be placed on the corresponding parts in advance.

3. The sealing ring and packing, packing ring, packing gland can be installed in turn into the pump cover in advance.

4. Install the rolling bearing on the shaft, and then install it in the suspension, and then close the gland, press the rolling bearing, and cover the shaft with a water retaining ring.

5. Install the shaft sleeve on the shaft, and then install the pump cover on the suspension, and then install and tighten the impeller, stop washer, impeller nut, etc. 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 keys, oil baffle, and 0-shaped sealing rings in the shaft sleeve of the water baffle are easy to miss or install in the wrong order, and special attention should be paid to them.

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

四、安　装

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平度，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是否松动，合适后拧紧地脚螺栓，重新检查水平度。

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、左右的差别不得超过0.1㎜，两联轴器端面间隙一周上最大和最小的间隙不得超过0.3㎜。

2. 安装说明:

①泵的安装高度，管路的长度、直径、流速应符合计算，力求减少不必要的损失，可参考表5进行核算。

②长距输送时应取较大管径。泵的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。

Fourth, installation

1. Installation and calibration:

① Remove the grease and dirt on the base and put the base on the foundation.

② Use a level to check the levelness of the base, allowing wedge iron leveling.

③ Pour cement into the holes of the base and anchor bolts.

④ After the cement is solidified, check whether the base and anchor bolt holes are loose, tighten the anchor bolts properly, and check the levelness again.

⑤ Clean the support plane of the base, the plane of the pump foot and the motor foot, and install the pump and the motor on the base.

6 A certain gap should be maintained between the couplings, check whether the pump shaft is consistent with the motor shaft center line, and the thin gasket can be adjusted to make it concentric.

The difference between the outer circle of the coupling shall not exceed 0.1mm, and the maximum and minimum gap between the end clearance of the two couplings shall not exceed 0.3mm.

2. Installation instructions:

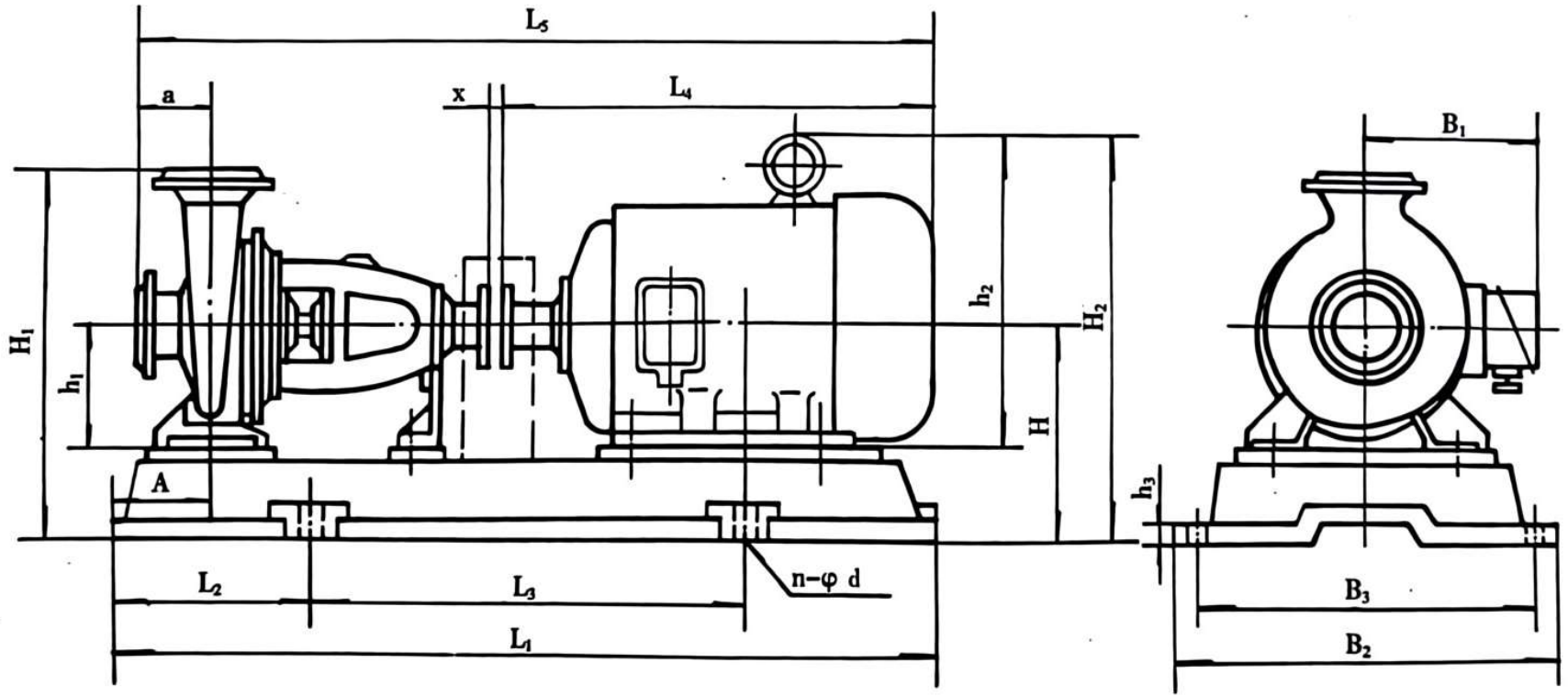
① The installation height of the pump, the length, diameter and flow rate of the pipeline should be calculated in accordance with the calculation, and strive to reduce unnecessary losses, which can be calculated by referring to Table 5.

② Large pipe diameter should be taken for long distance transportation. The pipeline of the pump should have its own support, and the weight of the pipeline is not allowed to be added to the pump to avoid crushing the pump.

③ If the discharge pipe is installed with a check valve, it should be installed outside the gate valve.

IR 型泵外形安装尺寸图

IR pump outline installation dimensions



外型尺寸图表 4　Exterior dimensions Chart 4

Table 1

产品型号 Product model	机座号/功率 Frame number/power	外型及安装尺寸 External shape and mounting size																		
		A	L_1	L_2	L_3	L_4	a	f	X	L_5	B_1	B_2	B_3	h_1	h_2	h_3	H	H_1	H_2	n-Φd
IR 50-32-125	$Y80_1$ -4/0.55	80	750	150	450	296	80	396	2	774	150	360	320	112	170	25	187	327	282	4-Φ20
	Y90S-2/1.5					321				799	160				190				292	
	Y90L-2/2.2		830	170	490	346				824		390	350							
IR 50-32-160	$Y80_1$ -4/0.55		750	150	450	296				774	150	360	320	132	170		207	367	297	
	Y90L-2/2.2		830	170	490	346				824	160	390	350		190				312	
	Y100L-2/3					391				869	180				245				352	
IR50-32-200	$Y80_1$ -4/0.55	94	750	150	450	296				774	150	360	320	160	170		235	415	330	
	$Y80_2$ -4/0.75																			
	Y112M-2/4		830	170	490	411				889	190	390	350		265				388	
	$Y132S_1$ -2/5.5		950	190	570	487		397		966	210	450	400		315	30			418	4-Φ25
IR 50-32-250	Y90S-4/1.1	95				321	100	511		934	155			180	190		255	480	360	
	Y90L-4/1.5					346				959										
	$Y132S_2$ -2/7.5		1050	210	630	487		512		1101	210	490	440		315		270	495	453	
	$Y160M_1$ -2/11		1190	225	740	615		515	3	1233	265	540	490		385		270	495	595	
IR 65-50-125	$Y80_1$ -4/0.55	80	750	150	450	296	80	396	2	774	150	360	320	112	170	25	187	327	282	4-Φ20
	Y90L-2/2.2		830	170	490	346				824	160	390	350		190				292	
	Y100L-2/3					391				869	180				245				332	

外型尺寸图表 4　Exterior dimensions Chart 4

Table2

产品型号 Product model	机座号/功率 Frame number/power	外型及安装尺寸 External shape and mounting size																		
		A	L_1	L_2	L_3	L_4	a	f	x	L_5	B_1	B_2	,B_3	h_1	h_2	h_3	H	H_1	H_2	n-Φd
IR 65 -50 -160	$Y80_1$ -4/0.55	80	750	150	450	296	80	396	2	774	150	360	320	132	170	25	207	630	302	4-Φ20
	$Y80_2$ -4/0.75																			
	Y112M-2/4		830	170	490	411				889	190	390	350		265				360	
	$Y132S_1$ -2/5.5		910	190	570	487		397		966	210	450	400		315	30			390	4-Φ25
IR 65-40-200	Y90S-4/1.1		830	170	490	321	100	396		819	160	390	350	160	190	25	235	415	340	4-Φ20
	$Y132S_1$ -2/5.5		950	190	570	487		397		986	210	450	400		315	30			418	4-Φ25
	$Y132S_2$ -2/7.5																			
	Y112M-2/4		830	170	490	411		396		910	190	390	350		265	25			388	4-Φ20
IR 65-40-250	Y90L-4/1.5	95	950	190	570	346		511		959	160	450	400	180	190	30	225	480	330	4-Φ25
	$Y100L_1$ -4/2.2					391				1004	180				245		255		400	
	$Y160M_1$ -2/11		1190	225	740	615		515	3	1233	265	540	490		385		270	495	495	
	$Y160M_2$ -2/15																			
IR 65 -40-315	$Y100L_2$ -4/3		1050	210	367	391	125	511	2	1029	180	490	440	200	245			540	435	
	Y112M-4/4					411				1049	190				265				443	
	Y160L-2/18.5		1190	225	740	660		515	3	1303	265	540	490		385		290	540	515	
	Y180M-2/22					685				1328	285				430				540	
	$Y200L_1$ -2/30		1290	250	830	792		517		1437	315	610	550		475	40	305	555	580	4-Φ28
IR 80-65- 125	$Y80_1$ -4/0.55	80	750	150	450	296	100	396	2	794	150	360	320	132	170	25	207	367	302	4-Φ20
	$Y80_2$ -4/0.75																			
	Y112M-2/4		830	170	490	411				909	190	390	350		265				360	
	$Y132S_1$ -2/5.5		910	190	570	487		397		986	210	450	400		315	30			390	4-Φ25

外型尺寸图表 4　Exterior dimensions Chart 4

Table3

产品型号 Product model	机座号/功率 Frame number/power	外型及安装尺寸 External shape and mounting size																	
		A	L_1	L_2	L_2	L_4	a	f	x	Ls	B_1	B_2	B_3	h_1	h_2	h_3	H	H_1	H_2	n-Φd
IR 80-65-160	Y90S-4/1.1	80	830	170	490	321	100	396	2	819	160	390	350	160	190	25	235	415	340	4-Φ20
	Y90L-4/1.5					346				844										
	Y132S_1 -2/5.5		950	190	570	487		397		986	210	450	400		315	30			418	4-Φ25
	Y132S_2 -2/7.5																			
IR 80-50-200	Y90L-4/1.5		830	170	490	346		396		844	160	390	350		190	25		435	340	4-Φ20
	Y100L_1 -4/2.2					391				889	180				245				380	
	Y160M_1 -2/11		1050	210	630	615		400	3	1118	265	490	440		385	30	250	450	475	4-Φ25
	Y160M_2 -2/15																			
IR 80-50-250	Y100L_1 -4/2.2		950	190	570	391		511	2	1029	180	450	400		245		255	480	400	
	Y100L_2 -4/3																			
	Y160M_2 -2/15		1190	225	740	615		515	3	1258	265	540	490	180	385		270	495	495	
	Y160L-2/18.5					660				1303										
	Y180M-2/22					685				1328	285				430				520	
IR 80-50-315	Y112M-4/4	95	1050	210	630	411	125	511	2	1049	190	490	440	225	265		315	598	468	
	Y132S-4/5.5					487		512		1126	210				315				498	
	Y132M-4/7.5																			
	Y200L_1 -2/30		1290	250	830	792		517	3	1437	315	610	550		475	40	330	613	605	4-Φ30
	Y200L_2 -2/37																			

外型尺寸图表 4　Exterior dimensions Chart 4

Table4

产品型号 Product model	机座号/功率 Frame number/power	外型及安装尺寸 External shape and mounting size																		
		A	L_1	L_2	L_3	L_4	a	f	x	L_5	B_1	B_2	B_3	h_1	h_2	h_3	H	H_1	H_2	n-Φd
IR 100-80-125	Y90S-4/1.1	95	830	170	490	321	100	396	2	819	160	390	350	160	190	25	235	415	340	4-Φ20
	Y90L-4/1.5					346				844										
	$Y132S_2$-2/7.5		950	190	570	487		397		986	210	450	400		315	30			418	4-Φ25
	$Y160M_1$ -2/11		1050	210	630	615		400	3	1118	265	490	440		385		250	430	475	
IR 100-80-160	Y90L-4/1.5		950	190	570	346		511	2	959	160	450	400		190		235	435	340	
	$Y100L_1$-4/2.2					391				1004	180				245				380	
	$Y160M_1$-2/11		1190	225	740	615		515	3	1233	265	540	490		385		250	450	475	
	$Y160M_2$-2/15																			
IR 100-65-200	$Y100L_1$ -4/2.2		1050	210	630	391		511	2	1044	180	490	440	180	245		270	495	415	
	$Y100L_2$-4/3																			
	Y112M-4/4					411				1024	190				265				423	
	$Y160M_2$-2/15		1190	225	740	615		515	3	1233	265	540	490		385				495	
	Y160L-2/18.5					660				1278										
	Y180M-2/22					685				1303	285				430				520	
IR 100-65-250	Y112M-4/4	110	1050	210	630	411	125	511	2	1049	190	490	440	200	265		290	540	443	
	Y132S-4/5.5					287		512		1126	210				315				473	
	$Y200L_1$ -2/30		1290	250	830	792		517	3	1437	315	610	550		475	40	305	555	580	4-Φ28
	$Y200L_2$-2/37																			

外型尺寸图表 4　Exterior dimensions Chart 4

Table5

产品型号 Product model	机座号/功率 Frame number/power	外型及安装尺寸 External shape and mounting size																	
		A	L_1	L_2	L_3	L_4	a	f	x	L_5	B_1	B_2	B_3	h_2	h_2	h_3	H	H_1	H_2	n-Φd
IR 100-65-315	Y132M-4/7.5	110	1190	225	740	527	125	542	2	1196	210	540	490	225	315	30	335	615	518	4-Φ25
	Y160M-4/11					615		545	3	1288	265				385				560	
	Y225M-2/45		1450	290	870	832		547		1507	345	660	600		530	40	325	605	630	4-Φ30
	Y250M-2/55					947				1622	385				575		365	645	690	
	Y280S -2/75		1590	320	1070	1017				1692	410	730	670		640		385	665	745	
IR 125-100-200	Y112M-4/4		1050	210	630	411		511		1049	190	490	440	200	265 315	30	290	570	443	4-Φ25
	Y132S-4/5.5					487		512	2	1126	210								473	
	Y132M-4/7.5					527				1166										
	$Y200L_1$ -2/30		1290	250	830	792		517	3	1437	315	610	550		475	40	305	585	580	4-Φ28
	$Y200L_2$ -2/37																			
	Y225M-2/45					832				1477	345				530		325	605	630	
IR 125-100-250	Y132M-4/7.5		1190	225	740	527	140	542	2	1211	210	540	490	225	315	30	315	595	518	4-Φ25
	Y160M-4/11					615		545	3	1303	265				385				540	
	Y225M -2/45		1450	290	870	832		547		1522	345	660	600		530	40	325	605	630	4-Φ30
	Y250M-2/55					947				1637	385				575		365	645	690	
	Y280S-2/75		1590	320	1070	1017				1707	410	730	670		640		385	665	745	

外型尺寸图表 4　Exterior dimensions Chart 4

Table6

产品型号 Product model	机座号/功率 Frame number/power	外型及安装尺寸 External shape and mounting size																		
		A	L_1	L_2	L_3	L_4	a	f	x	L_3	B_1	B_2	B_3	h_1	h_2	h_3	H	H_1	H_2	n-Φd
IR 125-100-315	Y160M-4/11	110	1190	225	740	615	140	545	3	1303	265	540	490	250	385	30	340	655	540	4-Φ25
	Y160L-4/15		1290	250	830	660				1348		610	550			40	355	670	580	4-Φ30
	Y280S-2/75		1590	320	1070	1020		550		1713	410	730	670		640		410	725	770	
	Y280M-2/90					1070				1763										
	Y315S-2/110		1630			1210				1903	576	800	740		760		450	765	1000	
IR 125-100-400	Y180M-4/18.5	130	1390	290	870	685		545		1373	285	660	600	280	430		380	735	630	
	Y180L-4/22					725				1413									655	
	Y200L-4/30					792		547		1482	315				475					
IR 150-125-250	Y160L-4/15	110	1290	250	830	662		547		1352	265	610	550	250	385		355	710	580	
	Y180M-4/18.5					687				1377 1417	285				430				605	
IR 150-125-315	Y180M-4/18.5	130	1450	290	870							660	600	280			380	735	630	
	Y180L-4/22					727														
	Y200L-4/30		1390			792				1482	315				455				655	
IR 150-125-400	Y200L-4/30		1450							1482								815	690	
	Y225S-4/37		1390			840		550		1533 1558	345			315	530		415		720	
	Y225M-4/45					865														

外型尺寸图表 4　Exterior dimensions Chart 4

Table7

产品型号 Product model	机座号/功率 Frame number/power	外型及安装尺寸 External shape and mounting size																		
		A	L_1	L_2	L_2	L_4	a	f	x	L_3	B_1	B_2	B_3	h_1	h_2	h_3	H	H_1	H_2	n-Φd
IR 200-150-250	Y180L-4/22	130	1450 1390	290	870	727	160	547 690	3	1437	285	660	660	280	430 475 530	40	380	755	630	4-Φ30
	Y200L-4/30					792				1502	315 345								655	
	Y225S-4/37					837				1547									685	
IR 200-150-315	Y225S-4/37		1590	320	1070	840				1693		730	670	315			415	815	720	
	Y225M-4/45					865				1718										
	Y250M-4/55		1710			950				1803	385				575			865	740	
IR 200-150-400	Y250M-4/55																			
	Y280S-4/75					1022		692	4	1878	410				640				775	
	Y280M-4/90					1072				1928										
IR 125-80-160	Y100L_1 -4/2.2	95	950	190	570	391				1029	180	450	400		245 385 430	30	255	480	380	4-Φ25
	Y100L_2 -4/3																			
	Y160M_2 -2/15		1190	225	740	615				1257	265	540	490	180			270	495	495	
	Y160L-2/18.5					660				1302										
	Y180M-2/22					685				1327	285								520	
IR 125-80-200	Y112M-4/4	110	1050	210	630	411				924	190	490	440		265			520	423	
	Y132S-4/5.5					487	125		2	1126	210				315				453	
	Y200L_1 -2/30		1290	250	830	792				1311	315	610	550		475	40	305	555	580	4-Φ30
	Y200L_2 -2/37																			
IR 125-80-250	Y132S-4/5.5		1190	225	740	492				1131	210	540	490	225	315	30	315	595	498	4-Φ25
	Y132M-4/7.5					527				1161										
	Y200L_2 -2/37		1290	250	830	792				1436	310	610	550		475	40	330	610	605	4-Φ30
	Y250M-2/55		1450	290	870	947				1591	385	660	600		575		365	645	690	

五、起动、停止与运转

1. 起动:

①应在机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上的闸阀，并调节到所需要的工况。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轴承最高温度不大于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。

5. Start, stop and run

1. Start:

(1) Whether the rotation direction of the motor is correct and whether the rotation of the pump is flexible should be determined before the connection of the pump.

② Close the gate valve on the discharge line.

Fill the pump with water, or use a vacuum pump to divert water.

④ Power on. When the pump reaches the normal speed, then gradually open the gate valve on the spit pipe, and adjust to the required working condition. With the gate valve on the discharge pipe closed, the continuous operation time of the pump cannot exceed 3 minutes.

2. Stop:

① Gradually close the gate valve on the spit pipe and cut off the power supply.

② If the ambient temperature is below 0 ° C, the water in the pump should be released to avoid freezing and cracking.

③ If it is stopped for a long time, the pump should be disassembled, cleaned and oiled, packed and kept.

3. Operation:

① In the process of driving and running, we must pay attention to observe whether the meter reading, bearing heating, filling water leakage and heating and pump vibration and noise are normal, if abnormal conditions are found, they should be handled in time.

The maximum temperature of the bearing is not more than 80℃, and the bearing temperature shall not exceed 40℃ than the surrounding temperature.

③ The packing is normal, and the water leakage should be a small amount and even.

The bearing oil level should be kept in the normal position, not too high and too low, too low should be timely added lubricating oil.

⑤ If the gap between the sealing ring and the impeller is too large, a new sealing ring should be replaced.

六、故障原因及其解决办法

表6

故　　障	原　　因	解 决 方 法
①水泵不吸水，压力表及真空表的指针在剧烈摆动。	注入水泵的水不够，水管或仪表漏气。	再往水泵内注水或拧紧堵塞漏气处。
②水泵不吸水，真空表表示高度真空。	底阀没有打开，或已淤塞，吸水管阻力太大，吸水管高度太大。	校正或更改底阀。清洗或更改吸水管，减低吸水高度。
③看压力表水泵出水处是有压力，然而水管仍不出水。	出水管阻力太大，旋转方向不对，叶轮淤塞。	检查或缩短水管及检查电机。取下水管接头，清洗叶轮。
④流量低于预计。	水泵淤塞，口环磨损过多。	清洗水泵及管子，更换口环。
⑤水泵耗费的功率过大。	填料函压的太紧了，填料函发热，因磨损叶轮坏了，水泵供水量增加。	拧紧填料函，或将填料取出来打开一些，更换叶轮，增加出水管阻力，来降低流量。
⑥水泵内部声音反常，水泵不上水。	流量太大，吸水管内阻力过大，吸水高度过大，在吸水处有空气渗入，所输送的液体温度过高。	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，降低液体的温度。
⑦轴承过热。	没有油，水泵轴与电机轴不在一条中心线上。	注油。把轴中心对准。
⑧水泵振动。	泵轴与电机轴不在一条中心线上或泵轴斜了。	把水泵和电机的轴中心对准。

6. Failure causes and solutions

Table 6

Old obstacle	Cause	Solution method
① The pump does not absorb water, the pointer of the pressure gauge and the vacuum meter is swinging violently.	Not enough water is injected into the pump, and the pipe or meter is leaking.	Then fill the pump with water or tighten to plug the leak.
② The pump does not absorb water, and the vacuum meter indicates a high vacuum.	The bottom valve is not opened, or has been blocked, the resistance of the suction pipe is too large, and the height of the suction pipe is too large.	Correct or change the bottom valve. Clean or change the suction pipe to reduce the suction height.
③ Look at the pressure gauge pump outlet is pressure, but the water pipe is still not outlet.	The resistance of the outlet pipe is too large, the rotation direction is wrong, and the impeller is silted.	Check or shorten the water pipe and check the motor. Remove the pipe joint and clean the impeller.
④ Traffic is lower than expected.	The pump is blocked and the mouth ring is worn too much.	Clean the pump and pipe, replace the mouth ring.
⑤ The pump consumes too much power.	The pressure of the stuffing box is too tight, the stuffing box is heated, and the impeller is broken due to wear, and the water supply of the pump is increased.	Tighten the stuffing box, or remove the stuffing to open some, replace the impeller, and increase the resistance of the outlet pipe to reduce the flow rate.
⑥ The sound inside the pump is abnormal, the pump does not fill the water.	The flow rate is too large, the resistance in the suction pipe is too large, the suction height is too large, there is air infiltration at the suction, and the liquid temperature is too high。	Increase the resistance in the outlet pipe to reduce the flow, check the pump suction pipe resistance, check the bottom valve to reduce the suction height. Tighten and plug the leak to reduce the temperature of the liquid.
⑦ Bearing overheating.	Without oil, the pump shaft is not in a Central Line with the motor shaft.	Fill in the oil. Align the center of the shaft.
⑧ The pump vibrates.	The pump shaft and the motor shaft are not in the same center line or the pump shaft is tilted.	Align the shaft center of the pump with that of the motor.