



川源(中国)机械有限公司
GSD (China) Co.,Ltd.



LZ

蒸发冷专用泵

LZ series evaporative cooling pump

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用途 Applications

LZ系列水泵特别适用于蒸发式冷凝器的配套，亦可用于某些大流量、低扬程的场合。

LZ series evaporative cooling pump is special applied on the evaporative condenser, it also can be used in some large flow and low head location.

特点 Features

- 叶轮采用优秀水力模型设计，具有极好的动静平衡，性能稳定。
- 泵轴为电机加长轴，同心度绝对可靠。
- 采用国际知名品牌轴承，振动小，噪音低。
- 单吸、单级卧式离心泵，采用封闭叶轮及泵体。
- 同轴直接式构造，效率高、体积小、重量轻，安装保养容易。
- 采用机械密封，不损轴心，不漏水，使用寿命长。
- 全线不过载：泵在其性能曲线上任意工作点运转时，泵消耗功率均不超过额定功率。
- 可根据客户要求采用不同材质或卧式泵类型的产品。
- The optimal hydraulic model is used for impeller, the pump is of an utmost dynamic-static balance and reliable performance.
- The pump shaft is an extended one from the motor, so the concentricity is absolutely reliable.
- The pump which is supported by well-known international brands' bearing, runs at little vibration and low noise.
- Single-stage single-suction horizontal centrifugal pump; closed impeller and volute chamber are adopted.
- Coaxial volute structure, high efficiency, small volume, light weight, easy installation and maintenance.
- Mechanical seal, no damage to shaft, no leakage, long performance life.
- No overload: when pump operate on the any point of the performance curve, the consumed power of the pump will not exceed the rated power.
- Can choose other materials and products with vetical installation according to the customer's requirement.



蒸发式冷凝器原理介绍 Evaporative condenser principle

蒸发式冷凝器是利用盘管外的喷淋水部分蒸发时，吸收盘管内高温气态制冷剂的热量，而使管内的制冷剂逐渐由气态被冷却为液态。

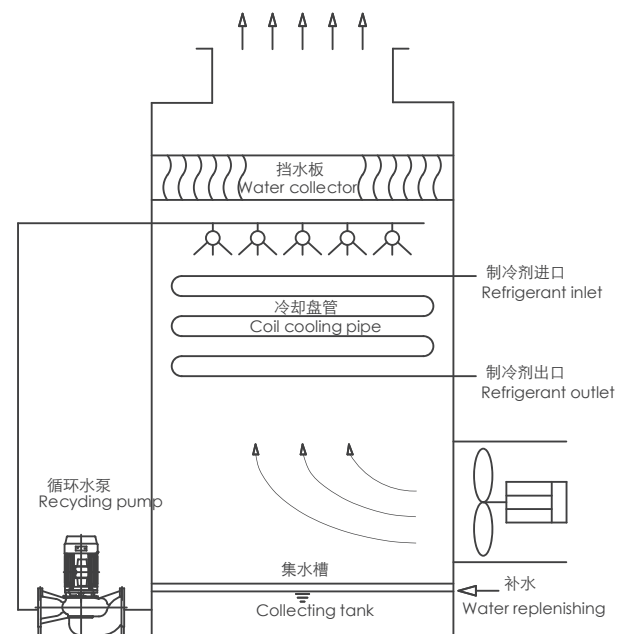
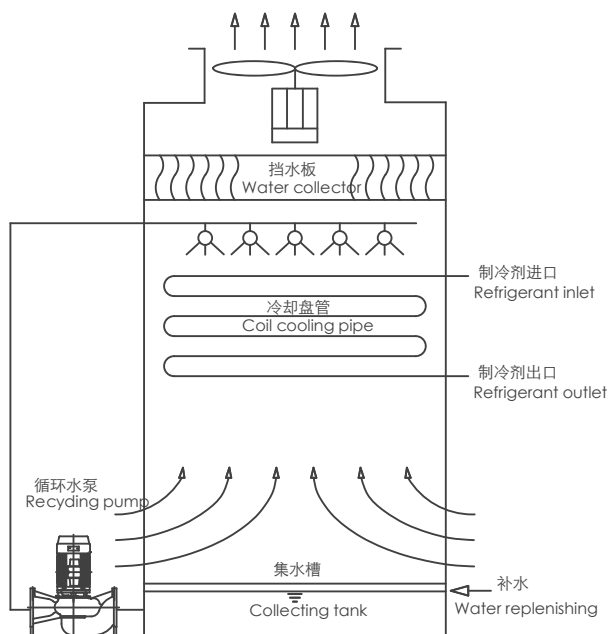
喷淋水由水泵将集水槽中的水输送到蒸发式冷凝器顶部的喷淋管，经喷嘴喷淋到冷凝排管的外表面形成很薄的水膜，水膜中部分水吸热后蒸发为水蒸气，其余落入集水槽，供水泵循环使用。

轴流风机强迫空气从顶部和侧壁下部被吸入流经盘管，填料、饱和热湿空气则被排到周围大气中，热湿空气中夹带的部分水滴通过收水器截留，有效地控制水滴飘散损失，水蒸气的飘逸率不到0.001%，散失至大气中的水蒸气在系统中由浮球阀控制补充。

Evaporative condenser is utilizing sprayed water part outside the coil pipe to absorb the heat of high temperature gaseous refrigerant inside coil pipe through evaporation to cool refrigerant inside the pipe gradually from gaseous state to liquid state.

Sprayed water is conveyed by water pump from collecting tank to spraying pipe on top of evaporative condenser, and sprayed by the nozzle to exterior surface of condensing reed pipe to form a very thin water film, part water of which will be evaporated to vapor after heat absorption, the rest will fall to collecting tank for recycled use of water pump.

Axial-flow fan forces the air to be absorbed into and flow through coil pipe from the top and side wall, whereas hot wet air of feeding and saturate hot wet air are exhausted to ambient atmosphere, part water drops included in hot wet air are retained by water collector, for effective loss control of water drop scattering, thus scattering rate of vapor is less than 0.001%, vapor scattered and lost in atmosphere will be complemented through control of ball float valve in the system.



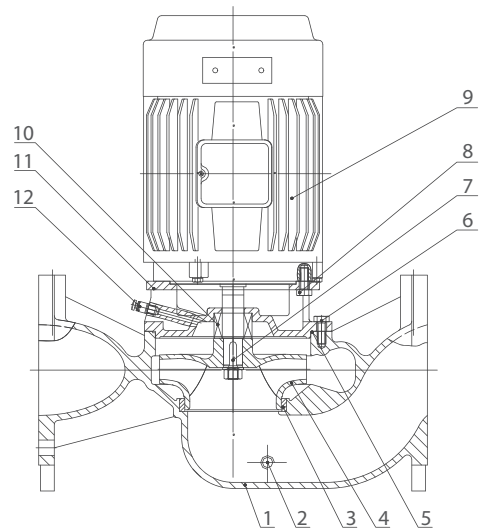
型号说明 Type description

LZ-3 10-150

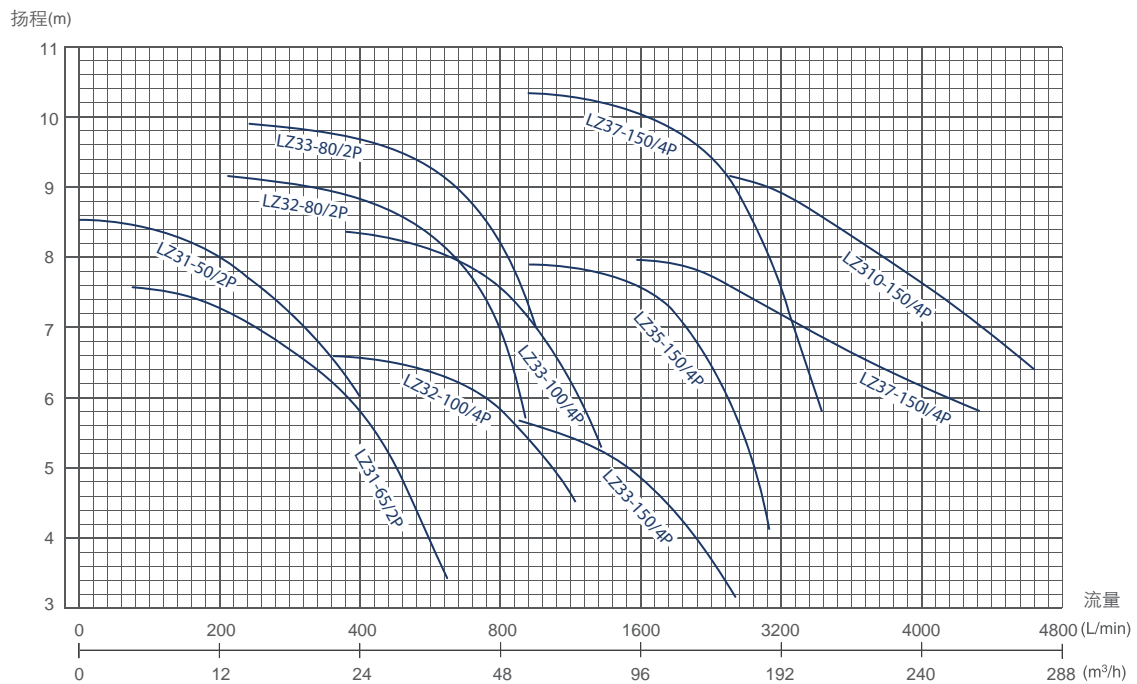
- 进口口径 SUC Diameter(mm)
- 额定功率 Rated power(hp)
- 相数 Phase
- 蒸发冷凝泵 LZ Series evaporative cooling pump

结构简图 Construction

NO.	名称	Name	材质	Material
1	泵体	Pump casing	HT200	
2	丝堵	Plug	Q235A	
3	密封环	Seal ring	ZCuPb10Sn10	
4	叶轮	Impeller	HT200	
5	O型圈	O-ring	NBR	
6	螺栓	Bolts	Q235A	
7	键	Key	45	
8	螺栓	Bolts	Q235A	
9	电机	Motop	-	
10	机械密封	Mechanical seal	C/AL ₂ O ₃	
11	中承座	Bracket	HT200	
12	针式排气阀	Needle type veut	ZCuPb10Sn10	



型谱图 Performance curves

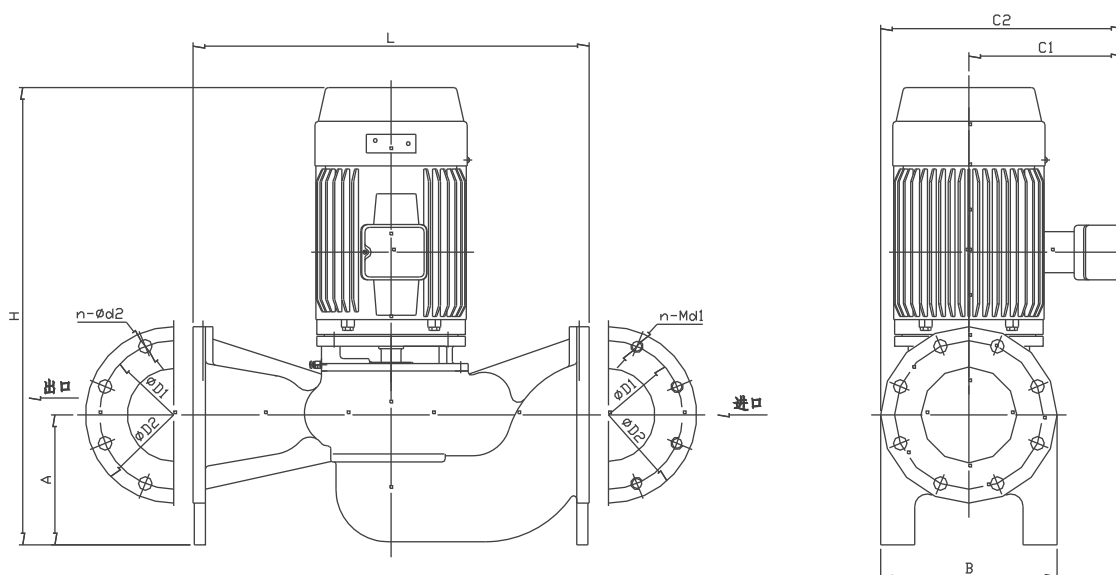


性能参数 Performance parameters

型号 Type	转速 Speed (r/min)	流量 Capacity (m ³ /h)	扬程 Head(m)	效率 Eff(%)	电动机功率 Motor power		必须气蚀余量 NPSHr(m)	口径 Dia(mm)	重量 Weight(kg)
					(hp)	(kW)			
LZ31-50	2900	16	7.5	57	1	0.75	2.5	50	40
		20	7	62			2.5		
		22	6.5	61			2.5		
LZ31-65	2900	23	6	58	1	0.75	2.5	65	41
		30	5	60			2.5		
		35	4.2	56			2.5		
LZ32-80	2900	35	8.2	59	2	1.5	2.5	80	46
		45	7.5	63			2.5		
		55	6	62			2.5		
LZ33-80	2900	40	9	64	3	2.2	2.5	80	50
		50	8	67			2.5		
		60	7	66			2.5		
LZ32-100	1450	30	6.5	56	2	1.5	3.0	100	57
		45	6	66			3.0		
		60	5.3	65			3.0		
LZ33-100	1450	40	8	63	3	2.2	3.0	100	66
		60	7	69			3.0		
		75	6	64			3.0		
LZ33-150	1450	90	5.2	60	3	2.2	3.5	150	86
		114	4.5	64.5			3.5		
		130	4.0	63			3.5		
LZ35-150	1450	112	7.5	71	5	3.7	3.5	150	96
		140	6.5	73			3.5		
		170	5.4	71			3.5		
LZ37-150	1450	120	9.8	72.5	7	5.5	3.5	150	120
		160	9	77			3.5		
		192	7.3	74			3.5		
LZ37-150I	1450	200	7	76	7	6.5	3.5	150	125
		220	6.5	77			3.5		
		255	6	78			3.5		
LZ310-150	1450	200	8.5	78	10	7.5	3.5	150	160
		240	7.5	82			3.5		
		270	7	80			3.5		



外形及安装尺寸 Installation dimensions



型号 Type	外形尺寸						法兰尺寸			
	A	B	C1	C2	H	L	D1	D2	n-Md1	n-Ød2
LZ31-50/2P	85	165	144	235	400	250	125	165	4-M16	4-Ø18
LZ31-65/2P	100	165	144	235	400	340	145	175	4-M16	4-Ø18
LZ32-80/2P	120	190	178	283	482.5	370	160	190	8-M16	8-Ø18
LZ33-80/2P	120	190	178	283	482.5	370	160	190	8-M16	8-Ø18
LZ32-100/4P	140	220	178	288	512	450	180	220	8-M16	8-Ø18
LZ33-100/4P	140	220	202	312	551	450	180	220	8-M16	8-Ø18
LZ33-150/4P	190	285	202	345	613.5	560	240	285	8-M20	8-Ø22
LZ35-150/4P	190	285	212	355	630	560	240	285	8-M20	8-Ø22
LZ37-150/4P	190	285	249	392	688	560	240	285	8-M20	8-Ø22
LZ37-150I/4P	210	285	249	392	739	640	240	285	8-M20	8-Ø22
LZ310-150/4P	210	285	249	392	739	640	240	285	8-M20	8-Ø22



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400-657-9066

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