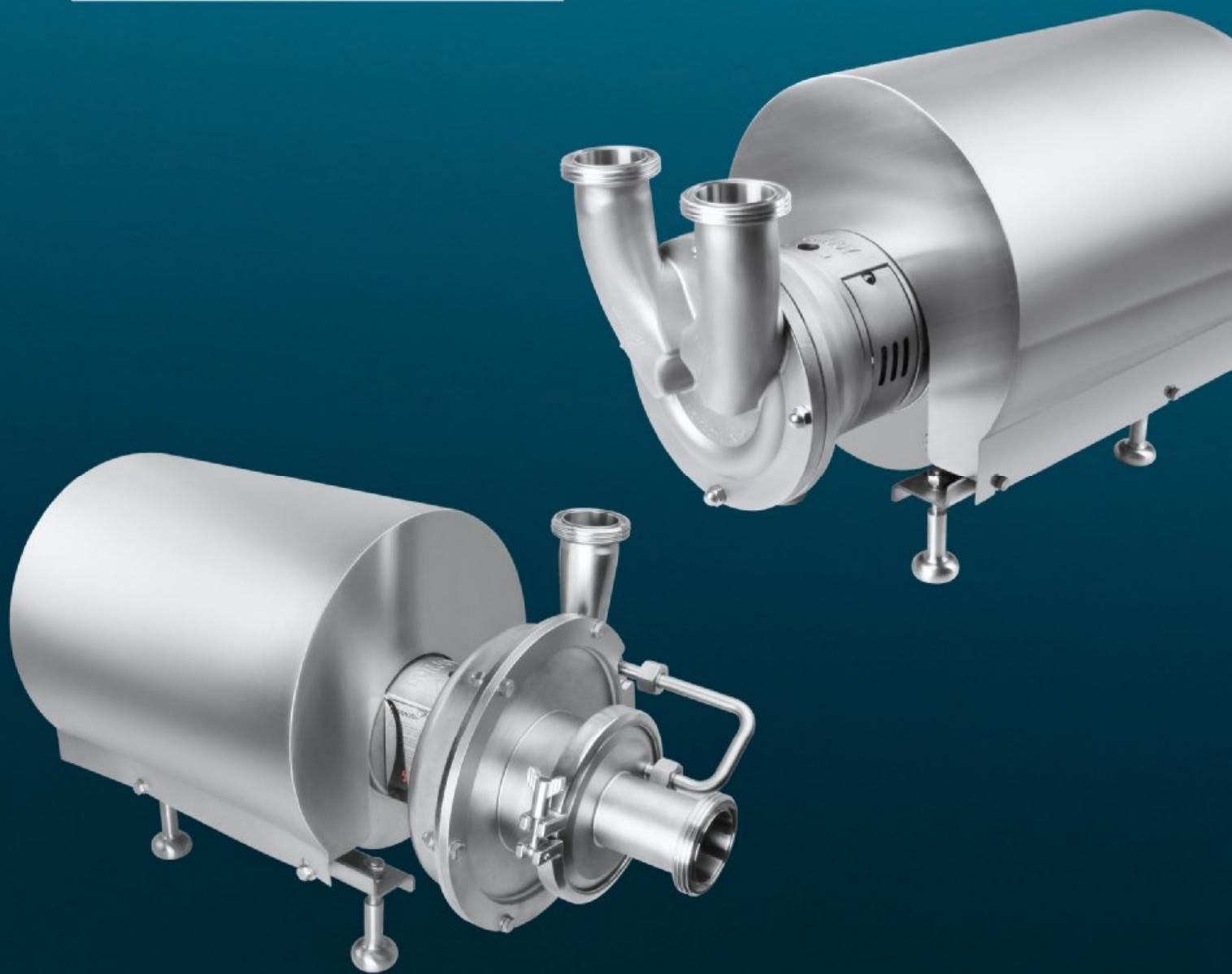


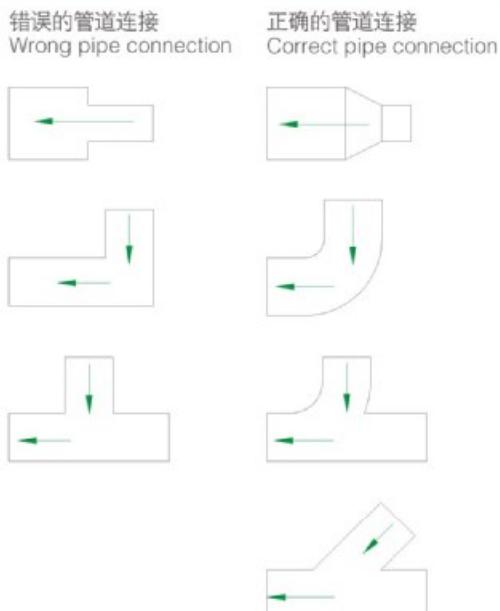
Self-priming pump series

自吸泵系列



工艺管道连接对泵使用的影响

The effect of pipe connections on pump usage



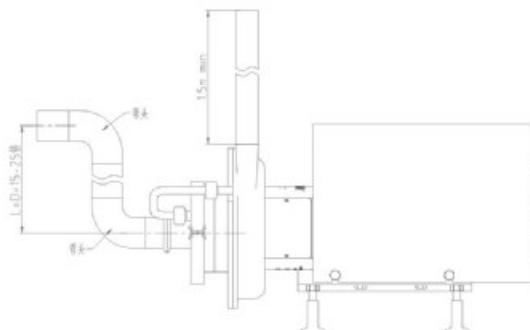
D-02

泵进口/出口连接管道的建议

液体在管道中会有能量的损失，分为沿程损失和局部阻力损失，这两种的损失最终会影响流量和扬程的损失。因此管道内部越光滑沿程损失越小，管径变化越小局部助力损失越小。因此尽可能不采用粗糙管道内壁和错误的连接方式，不要采用缩径过大、弯曲过多、弯曲过小等工艺管路。为了提高泵的使用寿命和泵的性能请尽量减少工艺管道弯曲和缩径等。(如图 (D-02)所示)

Suggestion for pump inlet/outlet connect to pipeline

Liquid in the pipeline will have energy loss, divided into along damage and local resistance damage, which will eventually affect the flow and head loss. Therefore, the smoother the inner part of the pipeline, the smaller the damage along the path; the smaller the diameter change, the smaller the local power loss. As a result, rough inner wall and connection should be avoided as much as possible. do not use the shrinkage diameter too large, too much bending, bending too small and so on process pipelines. In order to improve the service life of the pump and the performance of the pump, please try to reduce the process pipe bending and shrinkage diameter. (As shown in (D-02))



D-03

泵进口/出口连接距离的建议

为确保自吸式离心泵产生一定的自吸能力及稳定运行和延长使用寿命，要求严格按照泵进口和出口尺寸安装，严禁使用小于出口尺寸的进口管道，否则容易造成泵抖动、噪音、汽蚀余量增加等现象；泵进口连接需要保持一定的高度；建议直管高度按照进口管道尺寸的15-25倍直径。(如图 (D-03) 所示)

Suggestions for pump inlet/outlet connection distance

In order to ensure a certain self-priming capacity & stable operation and prolong the service life of the self-priming centrifugal pump, it is required to install strictly according to the inlet and outlet dimensions of the pump. It is strictly forbidden to use inlet pipeline smaller than the outlet size, otherwise it will easily cause pump shake, noise, NPSH increase, etc.; the pump inlet connection needs to maintain a certain height; it is recommended that the straight pipe height be 15-25 times the diameter of inlet pipeline. (As shown in (D-03))

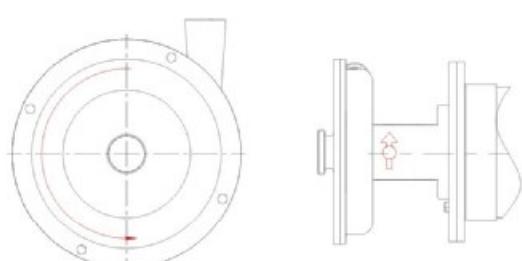
泵电机和叶轮旋转方向

电机和叶轮的旋转方向是一致的，安装调试时要注意旋转方向，否则会产生流量和扬程不正常，长时间反向旋转，会产生机封损坏等情况。(如图(D-04)箭头方向所示)

Pump motor and impeller rotation direction

Rotation direction of motor and impeller is same. Pay attention to rotation direction when installation and debugging. Otherwise, the flow and head will be abnormal. Long-term reverse rotation will result in damage to mechanical seal.(As picture(D-04)arrow direct shown)

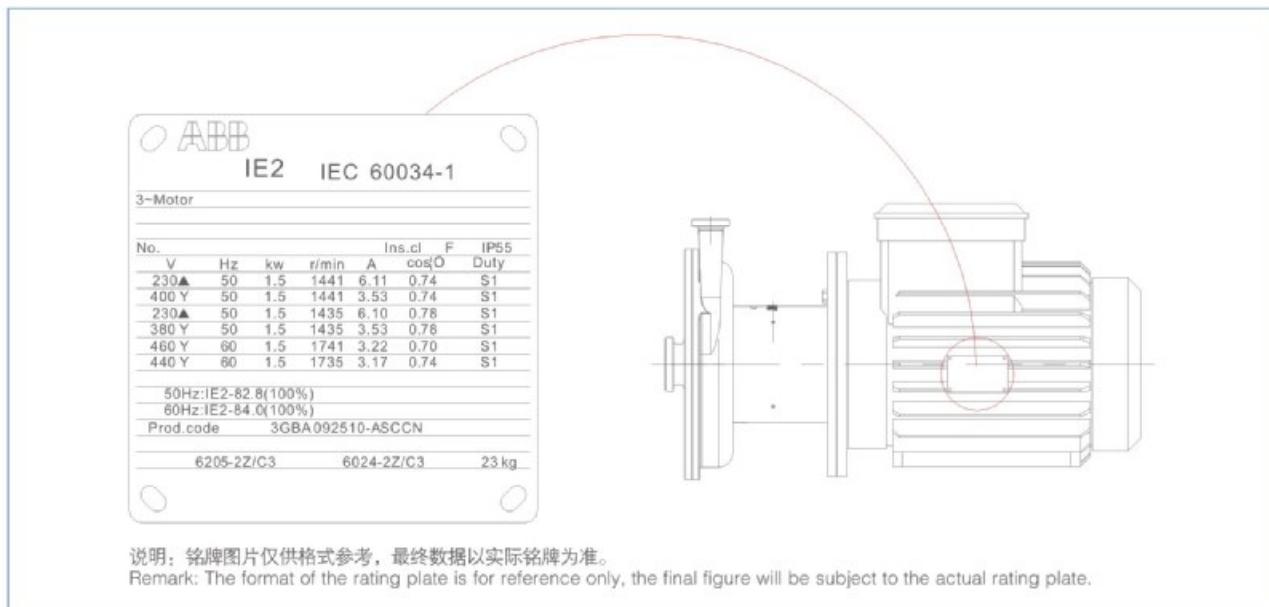
泵旋转方向 Pump rotation direction



D-04

工艺管道连接对泵使用的影响

The effect of pipe connections on pump usage



宽电压电机 Wide voltage motor

功率 Power(KW)	电压范围 Voltage	功率 Power(KW)	电压范围 Voltage
0.55	210V~230V/50HZ	4.0~5.5	360V~400V/50HZ
0.75	360V~400V/50HZ	7.5~11	630V~690V/50HZ
1.1~1.5	420V~460V/60HZ	15~18.5	420V~480V/60HZ
2.2~3.0		22~30	

注意：电机采用 IEC EN IE2 能效等级，PTC热敏电阻。(相当于中国二级能效)
Note: The motor adopts IEC EN IE2 energy efficiency class, PTC thermistor. (Corresponding to China level two energy efficiency)
注意：其他电机功率、电压、频率等，请联系东正。
Note: Other motor power, voltage, frequency, etc., please contact DONJOY

O型圈配置 O-ring configuration

我们所采用密封橡胶都符合FDA 177.2600; 3-A-18-03; Class II; USP Class VI Chapter 88 GB 4806.11; 等各种卫生高洁净的要求。

EPDM=标准

适用范围：温度 -10°C 到 130°C; PH值约 5~9, 可耐受各种卫生领域介质及工业化学品，成本低(推荐)。

FKM(Viton)=选项

适用范围：温度 -10°C 到 150°C; 可耐受各种卫生领域介质及工业化学品、油品等各种介质。

FFKM=选项

适用范围：温度 -30°C 到 250°C; 可耐受各种卫生领域介质及工业化学品、油品等各种介质，几乎可以涵盖所有介质，成本较高。

HNBR=选项

适用范围：温度 -10°C 到 150°C; 可耐受各种卫生领域介质及工业油品等各种介质，特别适用于油品。

The sealing rubbers we use are in compliance with hygienic and high purity requirements, such as FDA 177.2600; 3-A-18-03; Class II; USP Class VI Chapter 88 GB 4806.11 and so on.

EPDM=Standard

Scope of application: Temperature -10 °C to 130 °C; PH value about 5~9, can tolerate with various media in the health field and industrial chemicals, low cost (recommended)

FKM(Viton)=Option

Scope of application: Temperature -10 °C to 150 °C; can tolerate with various media in the health field, industrial chemicals, oils and so on.

FFKM=Option

Scope of application: Temperature -30 °C to 250 °C; can tolerate with various media in the health field, industrial chemicals, oils, etc., can cover almost all media, higher cost

HNBR=Option

Scope of application: Temperature -10 °C to 150 °C; can tolerate with various media in the health field, industrial oils, etc., especially suitable for oil products.

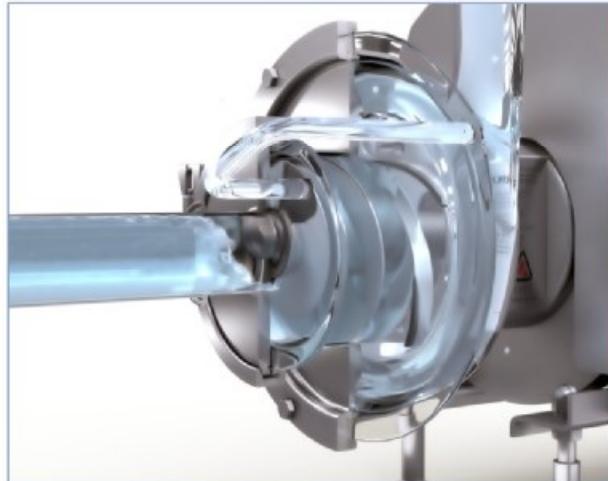


ZLX 系列自吸式离心泵

ZLX series self-priming centrifugal pump

高效率、低噪音、CIP回程、物料输送、高洁净解决方案

High efficiency, low noise, CIP backhaul, material transport, high clean solution



ZLX 系列是一款自吸式离心泵，它可以在CIP系统中作为自吸回流循环泵，也可作为离心泵使用，输送物料最高粘度500CP.S(mPas)。该泵具有效率高、噪音低、高洁净、过液体部件易清洗等技术优势。

ZLX Series is a self priming centrifugal pump. It can be applied to CIP system as self – priming backflow circulating pump, also as centrifugal pump, material–transport. Max. viscosity 500CP.S(mPas). Advantages of this pump are high efficiency, low noise, high cleaning and easy cleaning of liquid components and so on.

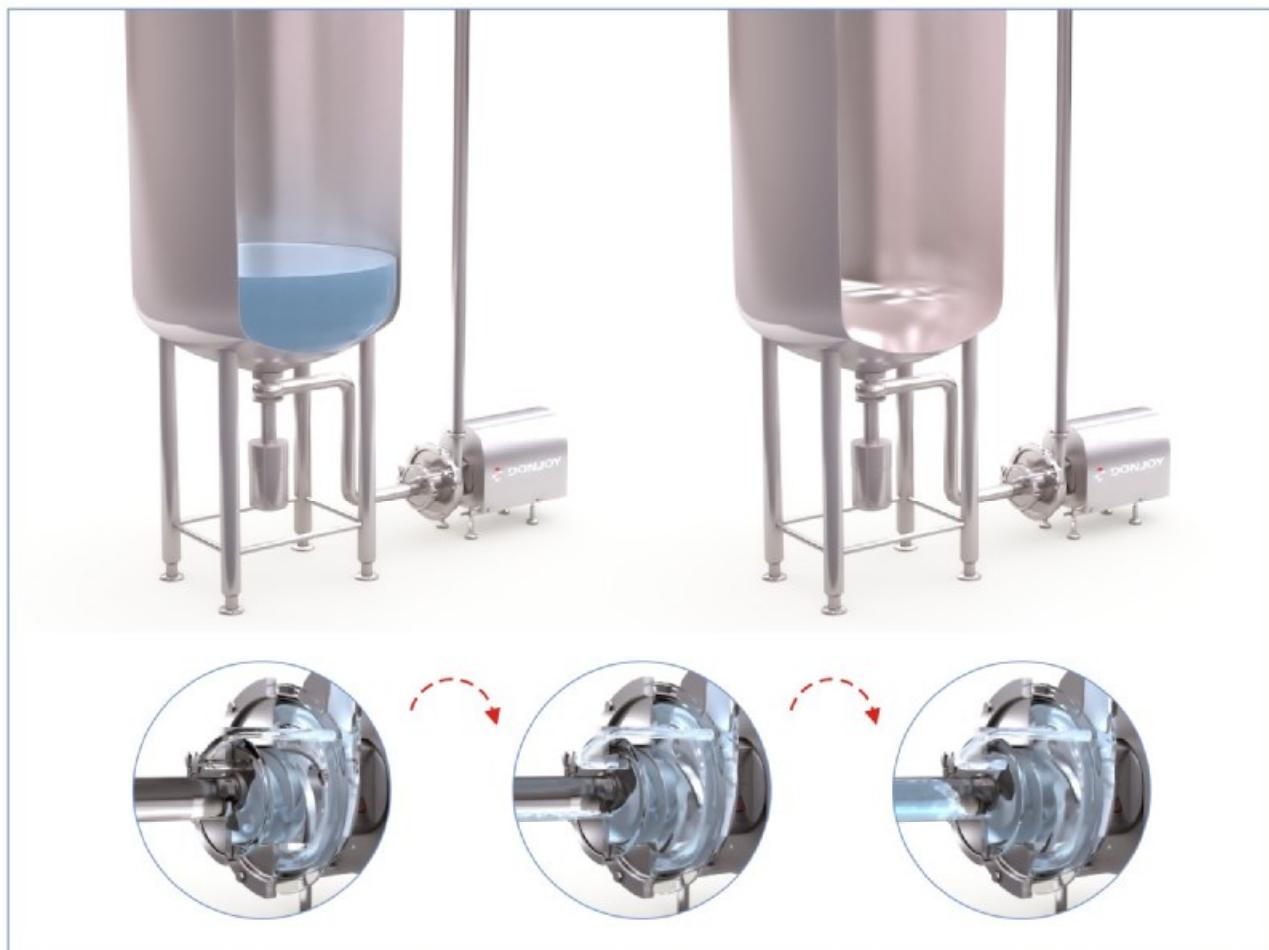
技术参数 Technical Specifications

最大流量 Max Flow rate	50m ³ /h
最高扬程 Max Head	66M
最高温度 Max temperature	-20°C 到 150°C / -20°C to 150°C
材质 Material	304 /316L, 1.431/1.4404, ASME BPE 316L, 1.4435 NB2 Fe≤0.5%
表面处理 Surface treatment	≤ Ra0.8 μ m, ≤ Ra0.6 μ m, ≤ Ra0.4 μ m
机封 Mechanical seal	单机封、双机封 Single mechanical seal, double mechanical seal (见配置方案 see configuration scheme)
进/出口连接 Inlet/Outlet	螺纹、卡箍、法兰、无菌法兰、 Threaded, clamped, flange, Aseptic flange
认证 Certification	3-A-02-10(N.O.1579); MD/06/42-EC (N.O.70521616101-00); FDA 177.2600; USP CLASS-II; EG/VO1935/2004;

ZLX 系列自吸式离心泵

ZLX series self-priming centrifugal pump

典型的应用 Typical Application



ZLX 系列各种应用 ZLX series' various application

啤酒厂 Brewery	乳品 Dairy products	食品 Food	其他应用 Other Application
<ul style="list-style-type: none">● 啤酒 Beer● 麦汁 Wort● 酵母 Yeast● 水 Water● CIP 解决方案 CIP solution	<ul style="list-style-type: none">● 牛奶 Milk● 奶油 Cream● 酸奶 Yogurt● 乳清 Whey● 盐水 Saline● CIP 解决方案 CIP solution	<ul style="list-style-type: none">● 食用油 Edible Oil● 调味汁 Soup-sauce● 高汤 Soup-stock● 盐水 Saline● 调味料 Flavouring● 冰淇淋混合料 Ice cream mixture● CIP 解决方案 CIP solution	<ul style="list-style-type: none">● CIP 解决方案 CIP solution● 储罐清空 Storage tank empty



非常简单的维护、无需专用工具、专业人员

Very simple maintenance, no special tools required,
no professionals required



技术优势

- 维护拆卸和安装时，无需专业人员和专用工具，即可完成。
- 初始使用安装调试时，即使出现短暂反向旋转也不会损坏。
- 叶轮和轴之间是通过键槽连接固定，叶轮和机封动环之间是通过销钉固定，机封静环和泵体之间是通过异形法兰固定。
- 兼容单机封和双机封，只需要更换机封即可实现。

Technical Advantages

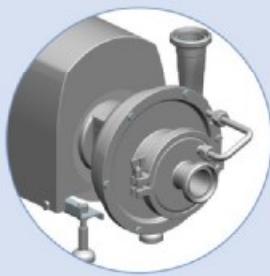
- Maintenance disassembly and installation can be completed without professional staff and special tools.
- Initial use of installation debugging, even if a short reverse rotation will not be damaged.
- Impeller and shaft are connected by keyway; impeller and mechanical seal rotating ring are connected by pin; mechanical seal static ring and pump body are connected by special-shaped flange.
- Compatible with single and double machine seal, only need to change machine seal.

ZLX 系列自吸式离心泵各种配置

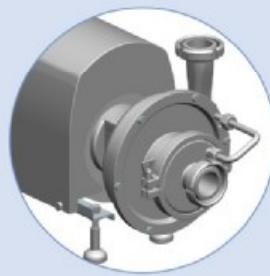
ZLX series self-priming centrifugal pump various configurations



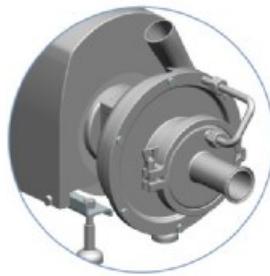
法兰 进 / 出口
Flange Inlet / Outlet



螺纹 进 / 出口
Thread Inlet / Outlet



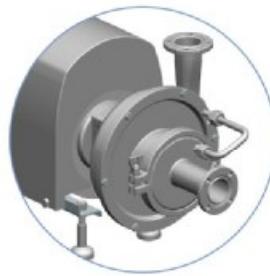
螺纹由任
Union Inlet/Outlet



90° 135° 倾斜出口
90° 135° inclined outlet



卡箍进/出口
Clamp Inlet/Outlet



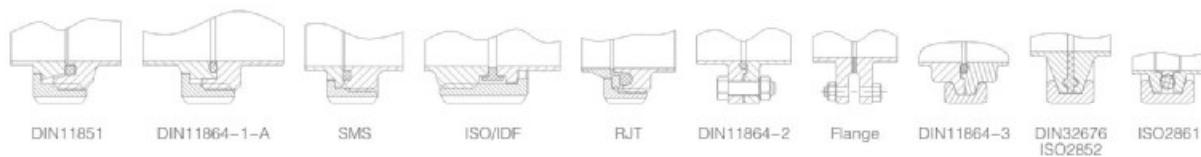
无菌法兰(DIN 11864)进/出口
Aseptic Flange (DIN 11864) Inlet/Outlet

泵进口/出口连接标准

连接方式: 螺纹、卡箍、法兰、无菌法兰、KF、等
标准: DIN SMS ISO IDF RJT ASME BPE 3A I-line

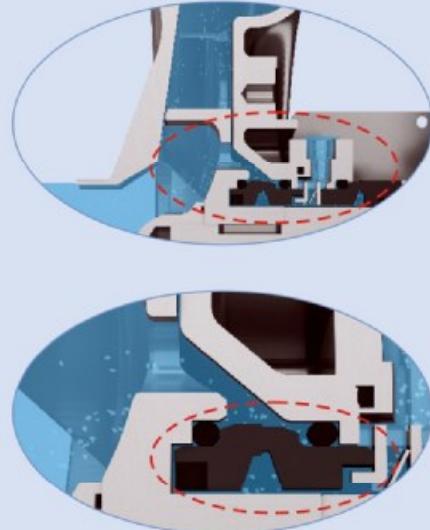
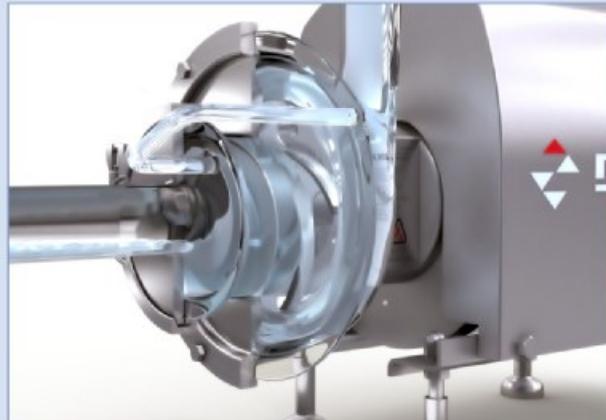
Pump Inlet/outlet Connection Standard

Connection: Threaded, Clamped, Flange, Aseptic flange, KF etc.
Standard: DIN SMS ISO IDF RJT ASME BPE 3A I-line



DJ-ZLX 系列自吸式离心泵机封设计

DJ-ZLX series self-priming centrifugal pump mechanical seal design



双机封设计
Double mechanical seal design



单机封设计
Single mechanical seal design

机封系统

DONJOY DJ-ZLX 系列自吸式离心泵机封，联合欧洲瑞典著名公司合作研发，机封设计具有压力平衡设计、超长使用寿命、极易拆装维护、无需特殊专用工具，卫生洁净符合和认证：欧盟 EHEDG, 美国 3-A-02-11, FDA1772600 等高洁净要求。并有丰富的机封配置方案。

Mechanical Seal Features

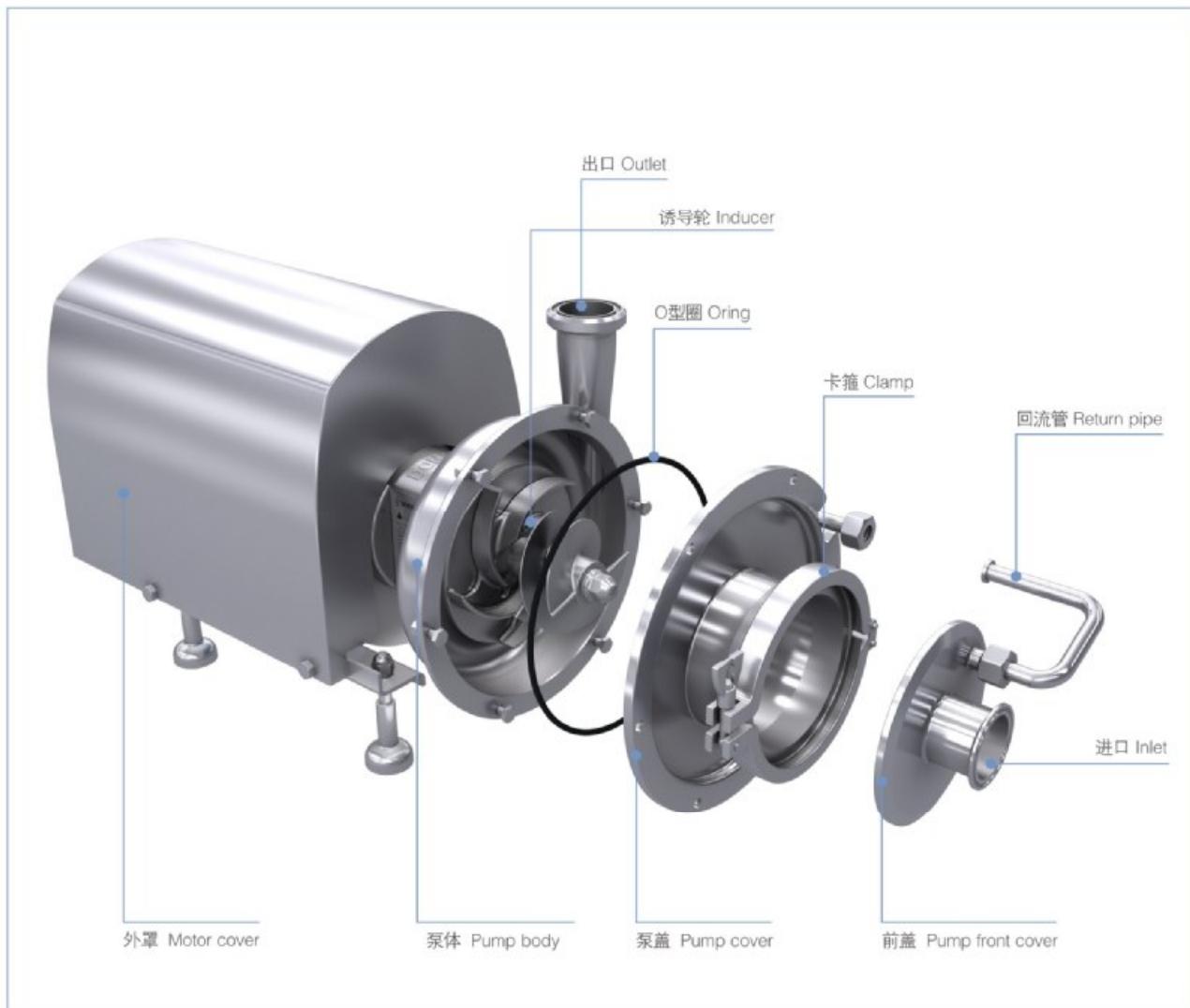
Donjoy DJ-ZLX series self-priming centrifugal pump mechanical seal is researched and developed together with European Swedish famous company. The mechanical seal is designed with pressure balance and super long working life, can be disassembled and maintained easily without special tools. The sanitary purity is according to EU EHEDG, USA 3-A-02-11, FDA1772600 and so on. and has lots of configuration.

机封配置 Mechanical Seal Configuration

1)SIC/C/EPDM	标准配置 Standard
2)SIC/C/FKM	
3)SIC/C/HNBR	
4)SIC/SIC/EPDM	
5)SIC/SIC/FKM	
6)SIC/SIC/HNBR	
7)TC/TC/EPDM	
8)TC/TC/FKM	
9)TC/TC/HNBR	

注意：以上配置适用于单机封和双机封。
Note: Above configurations are suitable for single and double mechanical seal.

ZLX 系列自吸式离心泵 ZLX series self-priming centrifugal pump



ZLX 自吸式离心泵型号说明

ZLX self-priming centrifugal pump model instruction



ZLX 15 8T 22 1.5KW 380V 50HZ M 2/1.5 S

Connection standard
连接标准: DIN (D) SMS (S) 3A(A) RJT (R) ISO/IDF (I)

Inlet/Outlet SIZE
进/出口规格

Connection method: Thread (M) Clamp (C) Flange (F)
连接方式: 螺纹(M)卡箍(C) 法兰(F)

Motor frequency
电机频率: 50HZ; 60HZ

Voltage: 110V 220V 380V (See selection table)
电压: 110V 220V 380V (详见选型表)

Motor power: 1.1kw 1.5kw 2.2kw.....
电机功率: 1.1kw 1.5kw 2.2kw.....

Pump head (See selection table)
泵扬程(详见选型表)

Pump flow (See selection table)
泵流量(详见选型表)

Centrifugal pump model
离心泵型号

Self-priming centrifugal pump code: ZLX
自吸式离心泵代码: ZLX

For example:

举例: ZLX-15-8T-22-1.5KW-380V-50HZ-M-2/1.5-S

ZLX 自吸式离心泵选型表

ZLX self-priming centrifugal pump selection table

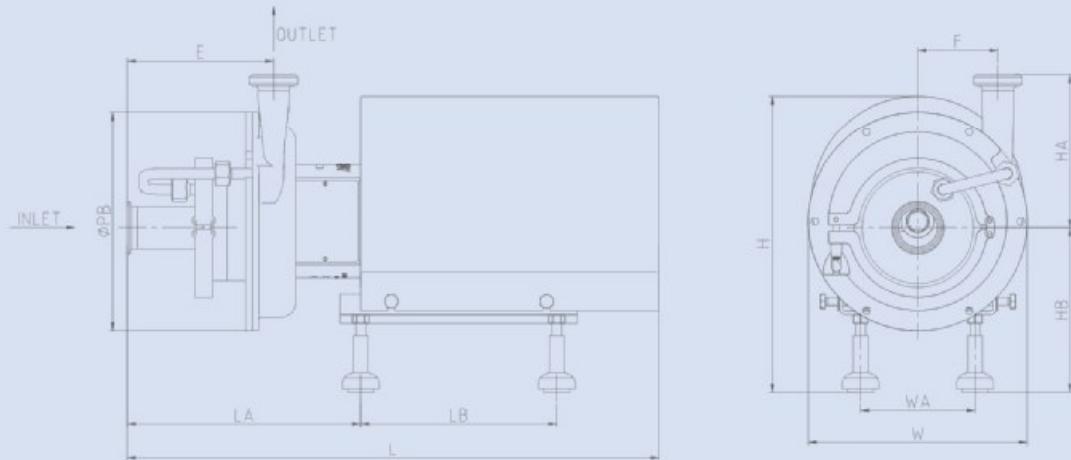


型号 Model	电机功率 Motor power	流量 Flow rate (m³)	扬程 Head (M)	进口/出口 Inlet&outlet	重量 Weight (KG)	
ZLX-15	1.5KW	3	25	2"/1.5"	42	
	1.5KW	5	25		42	
	1.5KW	8	22		42	
	2.2KW				42	
	2.2KW	10	20		42	
	2.2KW	15	19		42	
	2.2KW	18	15		42	
	3.0KW				54	
	2.2KW	20	13		45	
	3.0KW				54	
ZLX-20-1	2.2KW	5	32	2.5"/2"	51	
	3.0KW				60	
	3.0KW	10	32		60	
	4.0KW				64	
	4.0KW	15	31		64	
	4.0KW	20	29		64	
	4.0KW	25	26		64	
	5.5KW				82	
	5.5KW	30	26		82	
	5.5KW	38	18		82	
ZLX20-2	5.5KW	20	36	2.5"/2"	86	
	5.5KW	25	33		86	
	5.5KW	30	32		86	
	5.5KW	36	28		86	
	7.5KW	40	26		90	
	7.5KW	45	24		90	

型号 Model	电机功率 Motor power	流量 Flow rate (m³)	扬程 Head (M)	进口/出口 Inlet&outlet	重量 Weight (KG)	
ZLX-25	4.0KW	5	46	2.5"/1.5"	70	
	5.5KW	10	45		88	
	5.5KW	15	44		88	
	5.5KW	20	40		88	
ZLX-30	5.5KW	10	54	2.5"/1.5"	93	
	5.5KW	15	50		93	
	5.5KW	20	47		93	
	7.5KW				97	
	7.5KW	25	42		97	
	7.5KW	30	36		97	
	11KW	10	66		159	
ZLX-35-1	11KW	15	61	3"/1.5"	159	
	11KW	20	61		159	
	11KW	25	56		159	
	11KW	30	56		159	
	11KW	35	51		159	
	15KW	40	46		172	
	15KW	45	46		172	
	15KW	50	41		172	
	15KW	20	64		172	
	15KW	25	62		172	
ZLX-35-2	15KW	30	62	3"/1.5"	172	
	15KW	35	61		172	
	15KW	40	59		172	
	18.5KW	45	56		180	
	18.5KW	50	51		180	

ZLX 系列自吸式离心泵数据图

ZLX series self-priming centrifugal pump-data chart

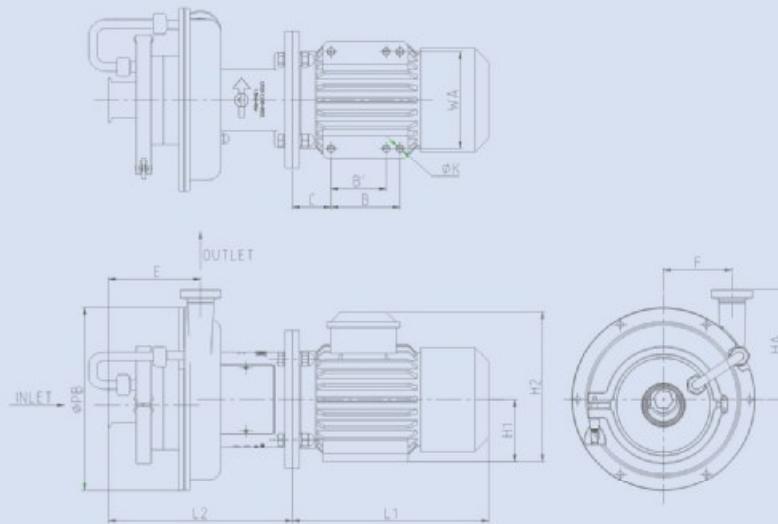


ZLX 系列 ZLX series	外形安装尺寸 Assembly Dimension											进/出口连接方式 Inlet/outlet connection							
	功率(KW) Power	进口 Inlet	出口 Outlet	ΦPB	F	H	HB	HC	LB	W	WA	SMS螺纹连接 Thread connection				INCH卡箍连接 Clamp connection			
												E	LA	L	HA	E	LA	L	HA
ZLX-15	1.5-2.2KW	2"	1.5"	268	98	362	189	95	240	260	140	187	293	658	188	179	286	651	181
	3.0KW	2"	1.5"	268	98	413	218	95	300	320	160	187	275	700	188	179	268	693	181
ZLX-20-1	3.0KW	2.5"	2"	282	100	413	218	95	300	320	160	191	283	641	208	184	275	633	201
	4.0KW	2.5"	2"	282	100	421	210	95	300	340	190	191	279	711	208	184	268	700	201
ZLX-20-2	5.5-7.5KW	2.5"	2"	282	100	466	231	95	330	380	216	200	332	807	208	193	320	800	201
ZLX-25	4.0KW	2.5"	1.5"	328	104	421	211	95	300	340	190	194	294	714	218	183	283	703	211
	5.5-7.5KW	2.5"	1.5"	328	104	466	231	95	330	380	216	194	328	808	218	183	317	796	211
ZLX-30	5.5-7.5KW	2.5"	1.5"	328	104	466	231	95	330	380	216	194	328	808	218	183	317	796	211
ZLX-35-1	11-15KW	3"	1.5"	363	141	551	260	95	450	470	254	201	357	932	243	189	345	920	236
ZLX-35-2	15.0KW	3"	1.5"	363	141	551	260	95	450	470	254	208	362	937	243	197	351	926	236
	18.5KW	3"	1.5"	363	141	551	260	95	450	470	254	208	362	937	243	197	351	926	236

注意：以上数据图相关尺寸不作为实物最终依据。东正保留对于数据更新权限不再另行通知。
Note: The relevant dimensions of the above data diagrams are not regarded as the final basis of the actual object.
DONJOY reserves the right to update the data without further notice.

ZLX 系列自吸式离心泵数据图(不带外罩)

ZLX series self-priming centrifugal pump-data chart (without cover)



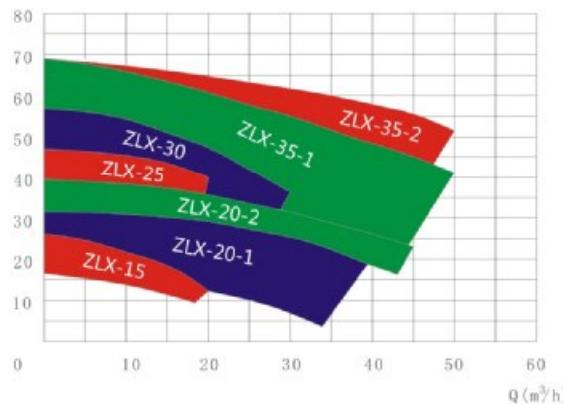
ZLX 系列 ZLX series	外形安装尺寸 Assembly Dimension												进/出口连接方式 Inlet/outlet connection						
	功率(KW) Power	进口 Inlet	出口 Outlet	ΦPB	B	B'	C	F	H1	H2	K	L1	WA	SMS螺纹连接 Thread connection			INCH卡箍连接 Clamp connection		
														E	L2	HA	E	L2	HA
ZLX-15	1.5KW	2"	1.5"	268	100	\	56	98	90	217	10	285	140	187	317	188	179	310	181
	2.2KW	2"	1.5"	268	125	\	56	98	90	217	10	301	140	187	317	188	179	310	181
	3.0KW	2"	1.5"	268	140	\	63	98	100	240	12	346	160	187	317	188	179	310	181
ZLX-20-1	3.0KW	2.5"	2"	282	140	\	63	100	100	240	12	346	160	191	328	208	184	317	201
	4.0KW	2.5"	2"	282	140	\	70	100	112	252	12	351	190	191	328	208	184	317	201
ZLX-20-2	5.5-7.5KW	2.5"	2"	282	140	\	89	100	132	301	12	399	216	200	328	208	193	317	201
ZLX-25	4.0KW	2.5"	1.5"	328	140	\	70	104	112	252	12	351	190	194	329	218	183	318	211
	5.5-7.5KW	2.5"	1.5"	328	140	\	89	104	132	301	12	399	216	194	329	218	183	318	211
ZLX-30	5.5-7.5KW	2.5"	1.5"	328	140	\	89	104	132	301	12	399	216	194	354	218	183	343	211
ZLX-35-1	11-15KW	3"	1.5"	363	254	210	108	141	160	413	15	477	254	201	400	243	189	388	236
	15.0KW	3"	1.5"	363	254	210	108	141	160	413	15	477	254	208	400	243	197	388	236
	18.5KW	3"	1.5"	363	254	210	108	141	160	413	15	477	254	208	400	243	197	388	236

注意：以上数据图相关尺寸不作为实物最终依据，东正保留对于数据更新权限不再另行通知。
Note: The relevant dimensions of the above data diagrams are not regarded as the final basis of the actual object.
DONJOY reserves the right to update the data without further notice.

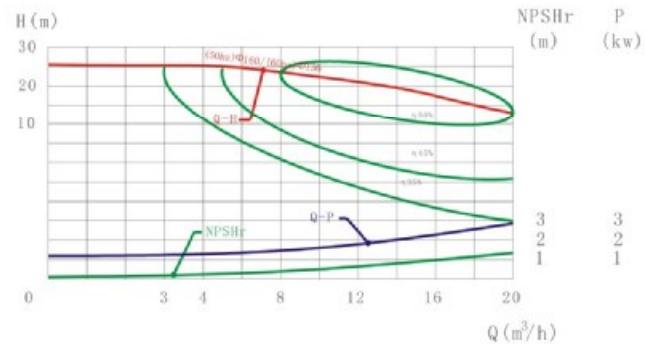
ZLX 系列自吸式离心泵曲线图

ZLX series self-priming centrifugal pump graph

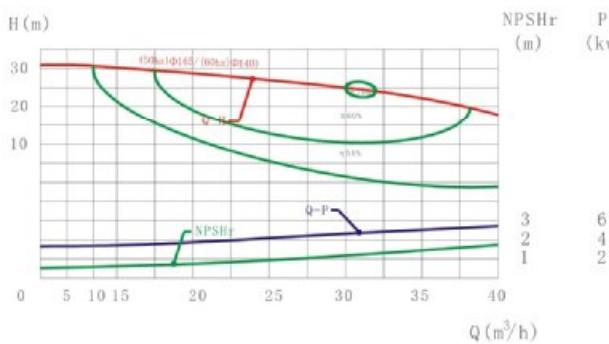
H (m)



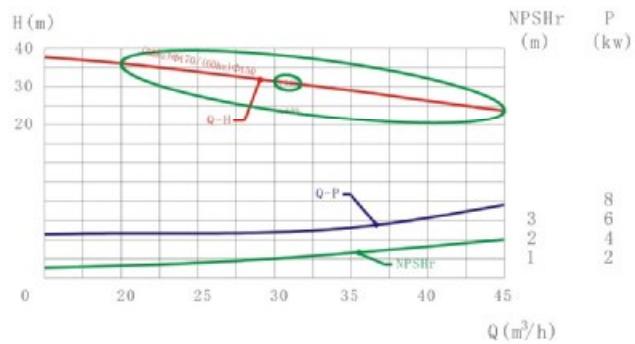
ZLX-15(Q-H曲线图/Graph)



ZLX-20-1(Q-H曲线图/Graph)



ZLX-20-2(Q-H曲线图/Graph)



测试条件：介质清水，温度20°C，叶轮转速2900 R.P.M

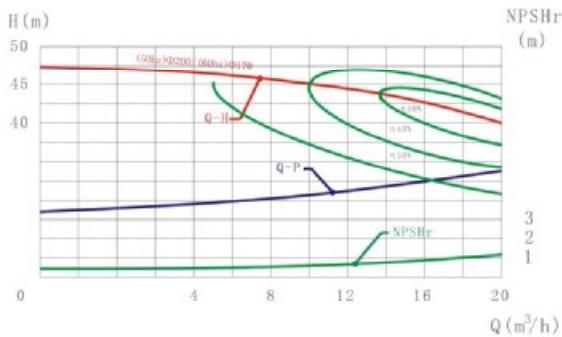
(此曲线图亦适用于电机60Hz, 叶轮转速3600R.P.M) Q—流量(m^3/H), H—扬程(M), P—功率(KW), η %—泵效率。

Testing condition: medium water, temperature 20 °C, impeller speed 2900 RPM (This graph also applies to motor 60HZ, impeller speed 3600RPM) Q—Flow rate (m^3/H), H—head (meter), P—power (KW), η % pump efficiency

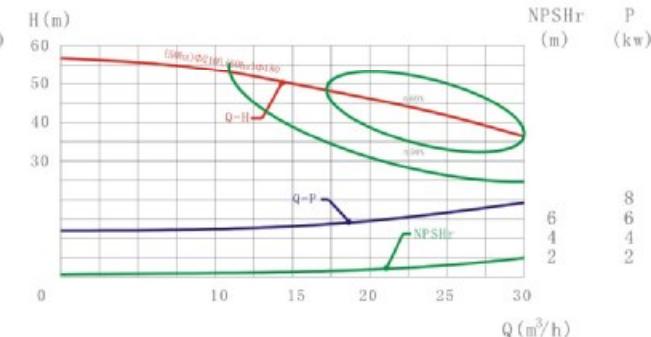
ZLX 系列自吸式离心泵曲线图

ZLX series self-priming centrifugal pump graph

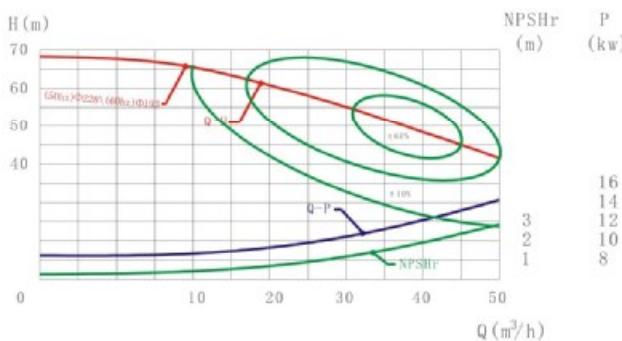
ZLX-25(Q-H曲线图/Graph)



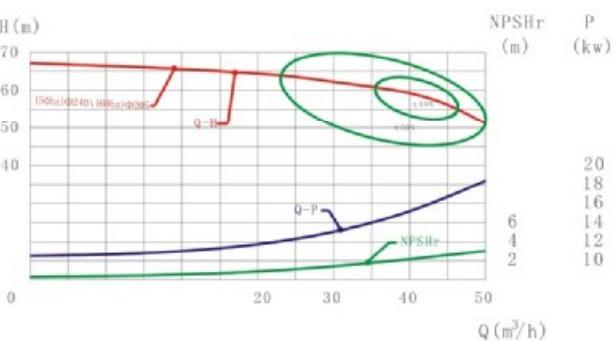
ZLX-30(Q-H曲线图/Graph)



ZLX-35-1(Q-H曲线图/Graph)



ZLX-35-2(Q-H曲线图/Graph)



测试条件：介质清水，温度20°C，叶轮转速2900 R.P.M

(此曲线图亦适用于电机60Hz, 叶轮转速3600R.P.M) Q—流量(m^3/h), H—扬程(M), P—功率(KW), η %—泵效率。

Testing condition: medium water, temperature 20 °C, impeller speed 2900 RPM (This graph also applies to motor 60HZ, impeller speed 3600RPM) Q—Flow rate (m^3/h), H—head (meter), P—power (KW), η % pump efficiency