

ZD、ZDG、ZDF、ZDY、ZMD型 高效节能自平衡多级泵

ZD,ZDG,ZDY,ZDY,ZMD High Efficiency Energy Saving Self-balancing Multistage Pump



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部分客户 Customer Project

多年来三昌水泵被誉为湖南省“名优产品”、“重合同守信用企业”，深得广大用户好评
Honored as the “high quality well-known goods”, “Enterprise of observing contracts and keeping promise”, obtained well good reputation from users.



山西大同煤矿泵使用现场 (型号: MD450-60×6
数量: 10台) Shanxi Datong Mine Coal pump working site
(Model: MD450-60×6, 10 sets)



枣庄矿务局 (型号: MD155-67×9, 数量12台)
Zaozhuang Cocal Mining Administration
(Model: MD155-67×9, 12sets)



河南金大地化工有限公司应用现场 (型号: ZDF280-43×7
数量: 12台套) Henan Jingdadi Chemical Co., Ltd pump working site
(Model: ZDF280-43X7, 12 sets)



平煤集团联碱厂母液泵应用现场 (型号: ZDF150-30×7
数量: 7台套) Pingmei Group AI factory Mother liquor pump working site
(Model: ZDF150-30X7, 7sets.)



石油化工 中国石油化工集团公司
Petrochemical-Sinopec Petroleum Service



石油化工 上海氯碱化工股份有限公司
Petrochemical-Shanghai Chlor-Alkali Chemical Co., Ltd



山东魏桥集团不锈钢多级泵应用现场 (型号: DF450-60×7
数量: 7台套) Shandong weiqiao Group Stainless Steel Pump Working Site
(Model: DF450-60X7, 7 sets)



永煤集团循环水泵应用现场 (型号: 600S22 数量: 9台套)
Yongmei Group circulation pump working site (Model :600S22, 9sets)



电力能源 中国大唐集团公司
Electric Power-China Datang Corporation



有色金属行业 安阳钢铁集团有限公司
Nonferrous Industry-Anyang Iron-Steel Group Co., Ltd



中盐集团采卤泵、输卤泵应用现场 (型号: DF280-65×10
数量: 6台套) China National Salt Industry Company brine extraction pump working site (Model : DF280-65X10, 6 sets)



宜化集团化工流程泵应用现场 (型号: ZE300-400
数量: 11台套) Hubei Yihua Group Chemical process pump
(Model : ZE300-400, 11 sets)



造纸行业 晨鸣纸业
Paper Making Industry -Chenming Group



水利工程 河北省水利工程局
Hydraulic project-Hebei Water Conservancy Engineering Bureau

概述

该系列泵系卧式单吸多级分段式离心泵，拥有6项国家专利。具有效率高、性能范围广、运转安全和平稳、噪音低、寿命长、安装维修方便等优点。

可供输送含固体颗粒(颗粒直径小于叶轮流道的四分之一)的介质，也可通过改变泵的材质(或泵过流部分的材质)、密封形式和增加冷却系统用于输送热水、油类、腐蚀性或含磨料的介质等。

ZD、ZDG、ZDF、ZDY、ZMD系列卧式多级离心泵的使用温度 $-60^{\circ}\text{C} \sim 400^{\circ}\text{C}$ ，材质有：HT200、QT600、JM3、28#合金、304、304L、316L、317L、904IL、CD4、哈氏C、哈氏B等各种材质可供用户选用。

我公司已通过ISO9001:2000质量体系认证，产品的设计、生产与服务具有严格规范的控制体系，产品质量有充分保障。

参数范围 (设计点)

流量：7.5~864m³/h

扬程：46~2070m

型号说明

ZD (ZDG、ZDF、ZDY、ZMD) 46-30×4

ZD——表示自平衡多级清水离心泵

ZDG——表示自平衡多级耐磨离心泵

ZDF——表示自平衡多级耐腐离心泵

ZMD——表示自平衡矿用多级耐磨耐腐离心泵

46——表示设计点流量为46m³/h

30——表示设计点单级扬程为30m

4——表示级数为4级

结构特点

1、ZD、ZDG、ZDF、ZDY、ZMD型卧式多级离心泵叶轮采用对称布置，可基本消除轴向力，残余轴向力由一对背靠背的角接触球轴承承受。由于无平衡装置，即无平衡盘的圆盘摩擦损失又无平衡回流损失，所以泵效率比同类别多级泵提高5~14%，同时彻底解决因平衡装置失效而导致泵的各种故障，大大延长泵的使用寿命。

2、采用高端密封；传统矿用多级泵都是采用填料密封，填料密封的优点可以耐颗粒杂质，但在使用过程中存在泄漏问题。机械密封无泄漏，但在有颗粒杂质的介质中使用，使用寿命很短。现我公司生产的新式矿用多级泵采用的密封为高端密封，它结合了填料密封和机械密封的优点，可以在有颗粒杂质的介质中长期使用而无泄漏，此密封为我公司研发的一种新式专利耐颗粒杂质的高端密封。

3、轴承座永不进水；该技术为我公司新研发的专利技术，可确保泵在使用中和静止状态下，无液体进入轴承座内，进一步延长了轴承的使用寿命，减少了用户的维护成本。

General Description

This series pump is horizontal single suction multistage sectional centrifugal pump, owned 6 national patents, and with high efficiency, wide performance, steady and safety operation, low noise, long operation, easy installation.

It can deliver the medium with solid particles (the diameter of the solid particles should less than quarter of the impeller channel), besides, it can be changed the pump materials (or flow channel materials), seal way, add cooling system then can deliver the hot water, oils, corrosive liquid, and abrasive medium.

ZD、ZDG、ZDF、ZDY、ZMD series horizontal multistage pump using temperature range is $-60^{\circ}\text{C} \sim 400^{\circ}\text{C}$, Material: HT200、QT600、JM3、28# alloy、304、304L、316L、317L、904IL、CD4、Hastelloy C、Hastelloy B for clients choice.

We have passed ISO9001:2000 quality system certification, strictly control the pump design, production and service, totally make sure the pump quality

Performance Range (Design Point)

Capacity 7.5~864m³/h

Head 46~2070m

Model Designation

ZD (ZDG, ZDF, ZDY, ZMD) 46-30×4

ZD—Self-balancing multi-stage centrifugal pumps

ZDG—Self-balancing multi-stage boiler feed pumps

ZDF—Self-balancing multi-stage anti-corrosive pumps

ZMD—Self-balancing multi-stage anti-corrosive anti-erosive pumps

46—Rated Flow is 46 m³/h

30—Rated Head for 1 Stage is 30 m

4—Number of stage for Pump is 4 stages

Construction description

1, ZD、ZDG、ZDF、ZDY、ZMD horizontal multistage centrifugal pump adopt the symmetrical setting impeller, it can eliminate the axial force, the remain axial force can born by a pair of back to back angular contact ball bearing. As there is no balance device, that is no friction loss and return loss in the balance disc., so the pump efficiency is greatly higher 5~14% than common multistage pump. So totally solved the problems that caused by the loss efficiency of the balance device, so greatly longer the operation hours.

2, Adopt high-end mechanical seal; Traditional mining multistage pumps all adopt packing seal, the advantage of the packing seal is can anti-abrasive, but there is leakage in the operation. The mechanical seal with no leakage, but when there is solid particle in the medium, its operation hours is short. Now the mechanical seal for our new mining multistage pumps adopt high-end sealing, it combines the advantages of the packing seal and mechanical seal. It can make sure no leakage in long term operation.

The mechanical seal is a new patent product

3, The bearing seat can not allow the water in; this technology is our new and patent technology, it can make sure there is no liquid into the bearing seat when pump is working and rest. Greatly length the bearing operation life and reduce its maintenance cost for the users.

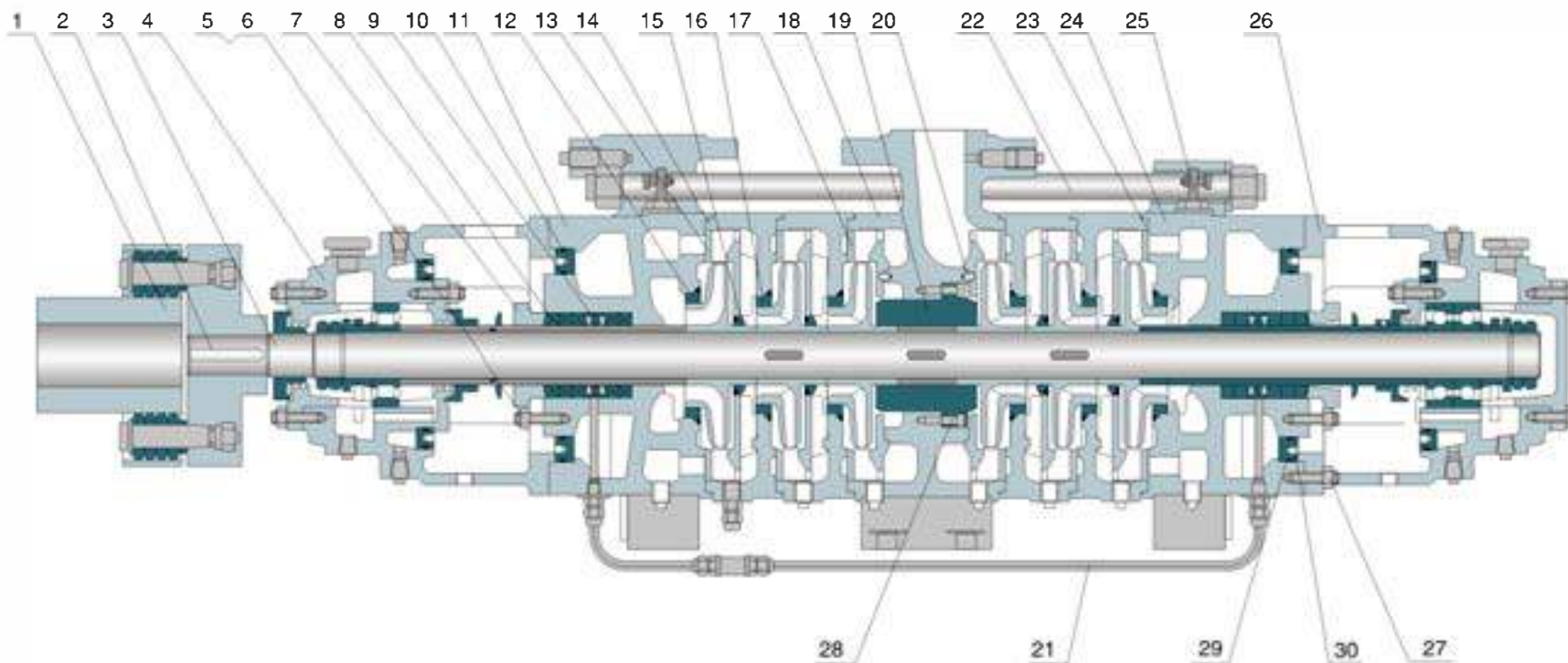
自平衡多级泵10大优势

Self-balancing Multistage Pump ten Advantages

1新结构 New structure	<p>具有叶轮对称布置的转子部件，使正、反两组叶轮在运行中产生的轴向推力基本得到相互抵消，从而不需要小间隙、高压降、易冲刷、易磨损、易出故障的平衡盘装置，突破了多级泵的传统结构。</p> <p>With symmetrically arranged impeller rotor components, axial forces generated by all levels of symmetrical impellers forces offset each other and automatic balancing of huge axial thrust within pump cavity can be realized without the balance disc structure.</p>
2新技术 New technology	<p>独有的节流、减压装置、奇数级的平衡装置，还能起到辅助支撑的作用。</p> <p>Unique throttling and pressure reduction devices, odd-level balancing device.</p>
3高效节能 Efficient energy-saving	<p>采用先进的水力模型，自主研发的高效节能产品：由于泵转子没有了平衡盘的磨损及轴向脉动，叶轮与导叶的对中性总是处于最佳状态，不会像普通多级泵结构随平衡盘的磨损、转子部件前移而出现效率明显下降；且没有了平衡水的泄漏，减少了容积损失，在整体上提高了泵的运行效率，降低了轴功率，比普通多级泵效率平均高2%~14%</p> <p>Using advanced hydraulic model, independent R&D energy efficient products. Good centering of impeller and guide vane channel and efficiency will not significantly drop as balancing disc wears and rotor components move forward. No leakage of balancing water reduces loss of volume and improves pump efficiency and pump efficiency is on average 2-5% higher than normal DG pump.</p>
4高可靠性 High reliability	<p>自相平衡的轴向力载荷使泵的磨损和系统干扰降到最小。极小部分残余轴向力由推力轴承承受，这样使泵轴始终处于受拉状态、轴的受力状态均匀，且应力峰值较原结构大大降低，从而提高了泵转子的刚性和临界转速，使泵转子运行的平稳性和可靠性显著提高。</p> <p>By canceling easy-failing balancing disc, pump reliability is greatly improved, maintenance frequency and maintenance cost are reduced.</p>
5高稳定性 Low maintenance cost and long life time	<p>通过对称叶轮和导叶的最佳搭配，以及合理的配合间隙和较宽的轴向节流设计，使泵在长期运行后仍然能保持冀版稳定性和极高的运行效率。</p> <p>By adopting precision casting and unique throttling and pressure reducing devices for auxiliary support, pump vibration and noise are greatly reduced and service life is prolonged.</p>
6汽蚀性能好 Excellent HPSH	<p>优化的水力模型及结构设计、特殊的首级叶轮双吸结构，加上精密的铸造、可靠的耐磨材质，使泵具有良好的抗汽蚀性能，整机运转平稳、噪音低，用户无需另外配置前置泵或提高进水箱的高度。</p> <p>Excellent hydraulic model and design, unique first stage double suction impeller, forging casting, reliable anti-abrasive materials make sure the pump with excellent NPSH, pump work steady, no noise and users do not need to add preposition pump or increase the height of the inlet chest.</p>
7机封性能强 High reliable mechanical seal	<p>泵启、停时转子部件没有轴向窜动，工作时没有轴向脉动，克服了一直困扰多级泵的机封可靠性差这一难题。</p> <p>No axial clearances when pump working and stop.</p>
8检修方便 Easy Maintenance	<p>快速的装配和拆卸设计，允许水泵在不拆卸泵体和进、出口管路的情况下更换密封、轴承，泵内没有了平衡盘等易损部件，节省了大修和检查时间。</p> <p>It can change mechanical seal, bearing without disassemble the inlet/outlet pipes.</p>
9低维护率 Low Maintenance cost	<p>采用精密铸造，减少了易损部件以及维修拆装次数，延长了产品寿命，最大限度地避免了由于拆装过多引起的一系列问题，降低了维护成本。</p> <p>Forging Casting spare parts can save the maintenance cost.</p>
10适用性强 Wide application	<p>先进的组合模块化的设计，经过大量使用、长期运行考验的局部组件，零部件具有高度的可互换性。取消了小间隙平衡盘装置，比传统结构多级泵更适应于介质性质更为恶劣的场合。</p> <p>No balance device make pump more wider application.</p>

自平衡多级离心泵结构图

Self-balancing multistage pump construction



1、联轴器部件
Coupling Assembly
2、键 Key
3、转子部件
Rotating Assembly
4、轴承部件甲
Bearing Housing A Assembly
5、螺栓 Stud
6、螺母 Nut

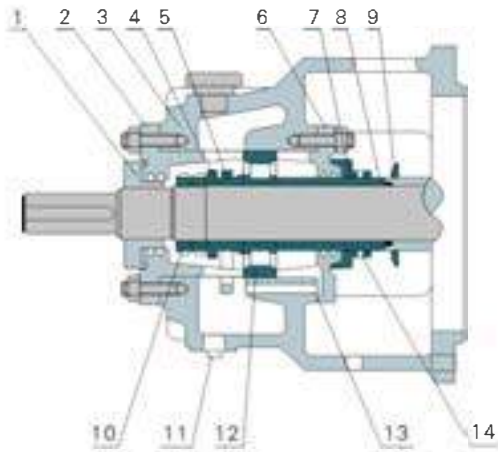
7、填料压盖
Packing Gland
8、填料 Packing
9、填料环 Lantern Ring
10、冷却腔盖
Cooling Chamber Cover
11、吸入段 Suction Casing
12、密封环 Wear ring

13、导叶 Diffuser
14、中段 Stage Casing
15、导叶套
Inter-stage Bushing
16、密封环 Wear ring
17、末级导叶
Discharge Diffuser
18、出水段 Discharge Casing

19、节流套 orifice sleeve
20、销 Dowel Pin
21、密封冲洗管部件
Seal Flush Pipe Assembly
22、拉紧螺杆 Tie bolt
23、垫 Gasket
24、次级吸入段
2nd Suction Casing

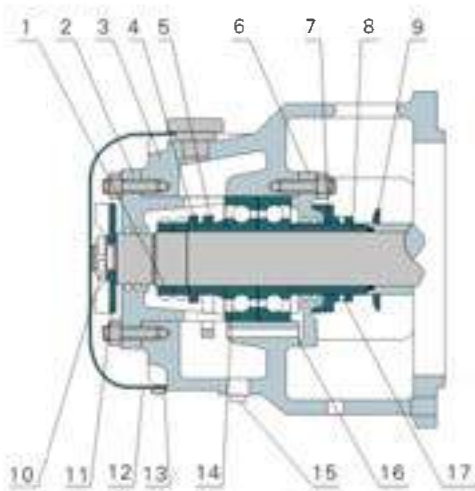
25、直嘴旋塞 Air Release Valve
26、轴承部件乙
Bearing Housing B Assembly
27、螺栓、螺母 Stud & Nut
28、螺钉
Hexagon Socket Head Cap Screw
29、O型圈 O-ring
30、O型圈 O-ring

轴承部件甲 Bearing Housing A Assembly

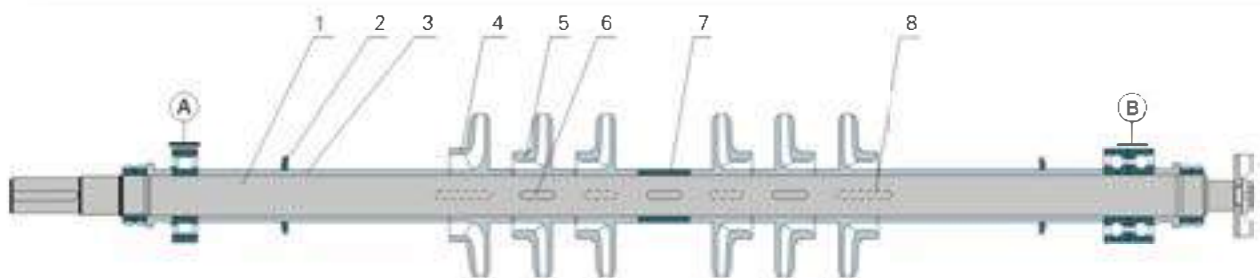


- | | | |
|---------|---------|-----------|
| 1、挡油盘 | 6、轴承压盖乙 | 11、1/4丝堵 |
| 2、轴承压盖甲 | 7、挡油盘 | 12、圆柱滚子轴承 |
| 3、轴承体 | 8、调整轴套甲 | 13、纸垫 |
| 4、护套 | 9、挡水圈 | 14、螺钉 |
| 5、甩油环 | 10、圆螺母 | |
-
- | | | |
|--------------------------|--------------------------|--------------------------------|
| 1, Bearing Cover Sealing | 6, Bearing End Cover B | 11, plug pad 1/4 |
| 2, Bearing End Cover A | 7, Bearing Cover Sealing | 12, cylindrical roller bearing |
| 3, Bearing Housing | 8, Adjustive sleeve A | 13, Gasket |
| 4, Oil Ring Sleeve | 9, Flinger | 14, Screw |
| 5, Oil Ring | 10, Locknut | |

轴承部件乙 Bearing Housing B Assembly



- | | | | | | | | | |
|---------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|
| 1、圆螺母 | 10、小圆螺母 | 11、风扇 | 12、风扇罩 | 13、螺钉 | 14、角接触球轴承 | 15、堵丝 | 16、纸垫 | 17、螺钉 |
| 2、轴承压盖丙 | 11、风扇 | 12、风扇罩 | 13、螺钉 | 14、角接触球轴承 | 15、堵丝 | 16、纸垫 | 17、螺钉 | |
| 3、轴承体 | 12、风扇罩 | 13、螺钉 | 14、角接触球轴承 | 15、堵丝 | 16、纸垫 | 17、螺钉 | | |
| 4、护套 | 13、螺钉 | 14、角接触球轴承 | 15、堵丝 | 16、纸垫 | 17、螺钉 | | | |
| 5、甩油环 | 14、角接触球轴承 | 15、堵丝 | 16、纸垫 | 17、螺钉 | | | | |
| 6、轴承压盖丁 | 15、堵丝 | 16、纸垫 | 17、螺钉 | | | | | |
| 7、挡油盘 | 16、纸垫 | 17、螺钉 | | | | | | |
| 8、调整轴套乙 | 17、螺钉 | | | | | | | |
| 9、挡水圈 | | | | | | | | |
-
- | | | | | | | | | |
|--------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------|------------|-----------|
| 1, Locknut | 10, Small Locknut | 11, Fan | 12, Fan Guard | 13, Screw | 14, Angular Contact Ball Bearing | 15, Plug cap | 16, Gasket | 17, Screw |
| 2, Bearing End Cover C | 11, Fan | 12, Fan Guard | 13, Screw | 14, Angular Contact Ball Bearing | 15, Plug cap | 16, Gasket | 17, Screw | |
| 3, Bearing Housing | 12, Fan Guard | 13, Screw | 14, Angular Contact Ball Bearing | 15, Plug cap | 16, Gasket | 17, Screw | | |
| 4, Oil Ring Sleeve | 13, Screw | 14, Angular Contact Ball Bearing | 15, Plug cap | 16, Gasket | 17, Screw | | | |
| 5, Flinger | 14, Angular Contact Ball Bearing | 15, Plug cap | 16, Gasket | 17, Screw | | | | |
| 6, Bearing End Cover D | 15, Plug cap | 16, Gasket | 17, Screw | | | | | |
| 7, Bearing Cover Sealing | 16, Gasket | 17, Screw | | | | | | |
| 8, Adjustive Sleeve | 17, Screw | | | | | | | |
| 9, Flinger | | | | | | | | |

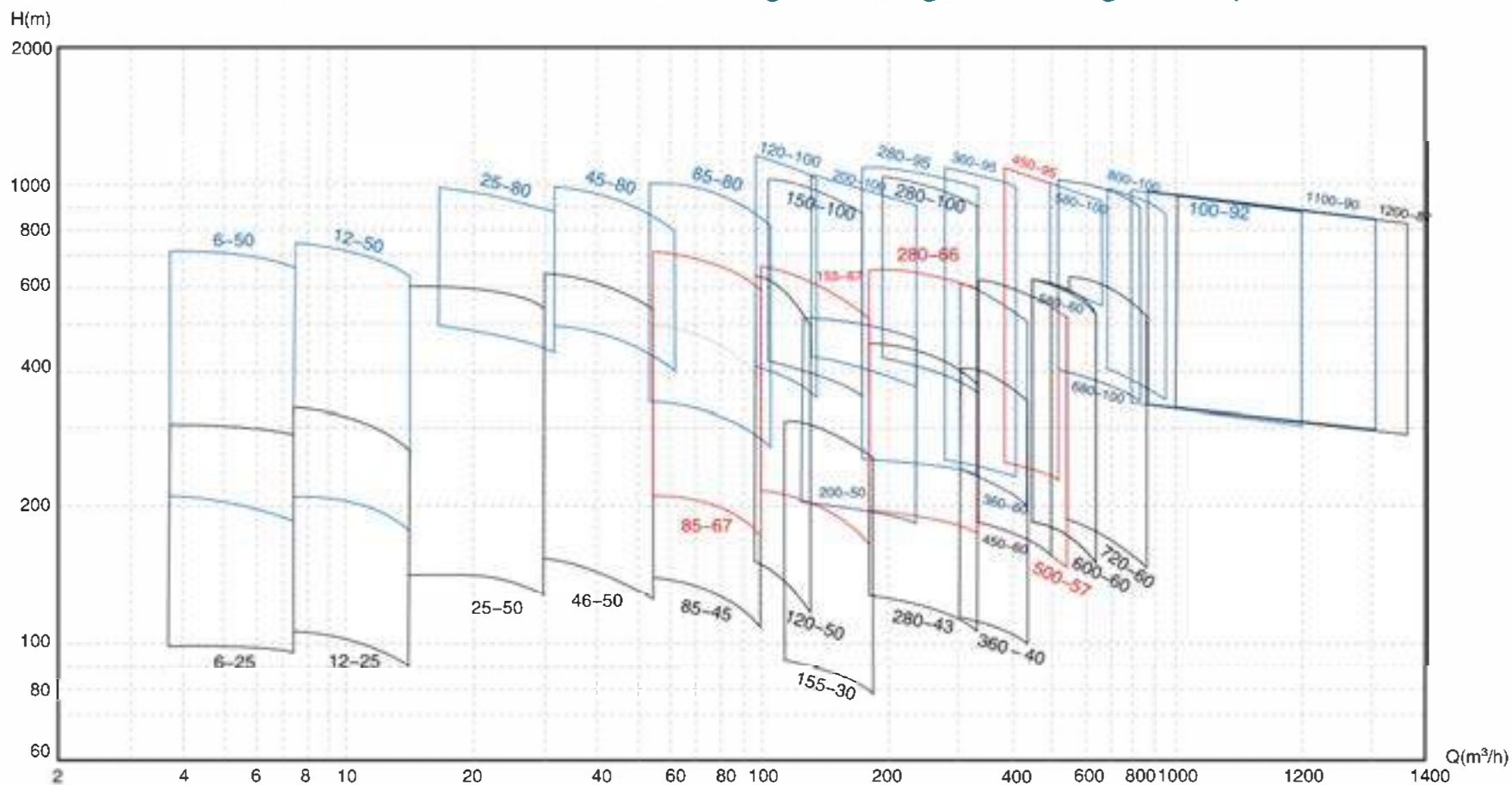


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|---------|--------|-------------------|---------------------|
| 1、轴 | 5、叶轮 | 1, Shaft | 5, Impeller |
| 2、O型密封圈 | 6、键 | 2, O-ring | 6, Key |
| 3、密封轴套 | 7、节流轴套 | 3, Sealing Sleeve | 7, Throttle Bushing |
| 4、首级叶轮 | 8、键 | 4, 1st impeller | 8, Key |

转子部件 Rotating Element

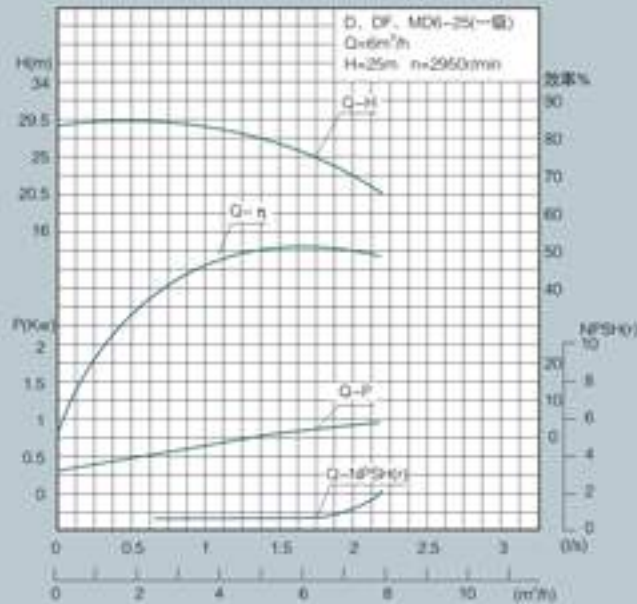
自平衡多级离心泵型谱图

Selection Chart for Self-balancing Multistage Centrifugal Pump



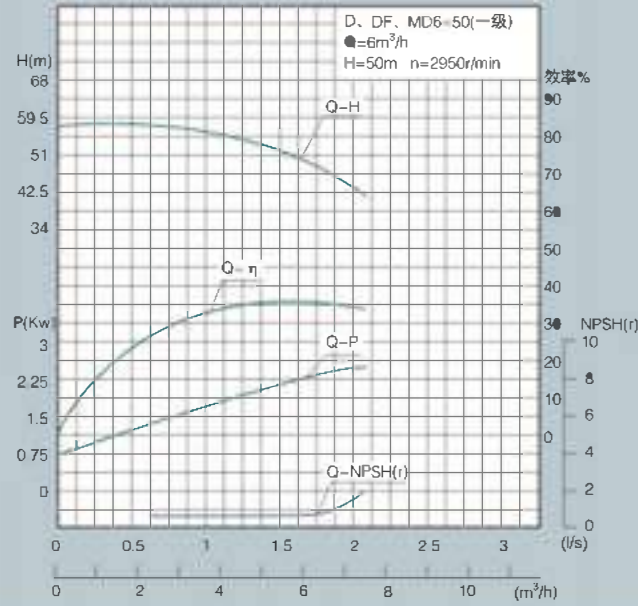
性能范围 流量: 3.75m³/h~1100m³/h 扬程: 20~1500m Performance Range : Capacity: 3.7m³/h~1100m³/h Head: 20~1500M.
 本手册中所列性能参数值为常温清水状态值 All the parameter data is get under clean cold water.

ZD、ZDG、ZDF、ZDY、ZMD 6-25型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 6-25



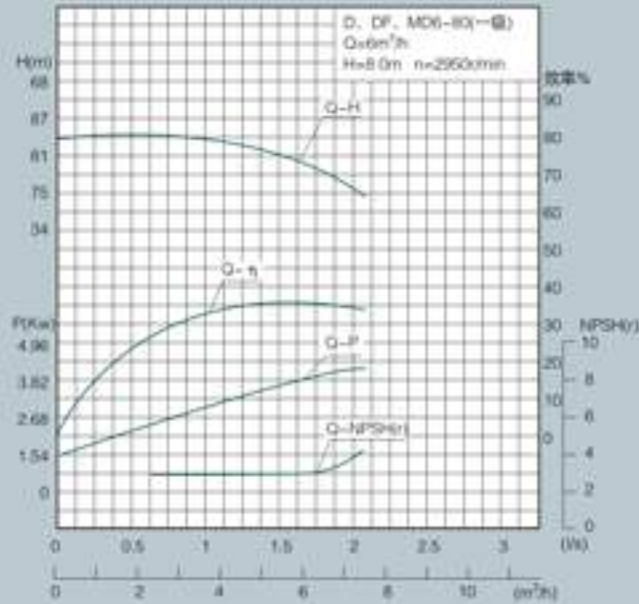
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
3	3.75	1.04	76.5	2950	40	1.95	4	Y2-112M-2	2.0	φ 139
	6.3	1.75	75.0		51	2.52			2.0	
	7.5	2.08	73.5		53	2.83			2.5	
4	3.75	1.04	102.0	2950	40	2.60	7.5	Y2-132S ₂ -2	2.0	φ 139
	6.3	1.75	100.0		51	3.36			2.0	
	7.5	2.08	98.0		53	3.77			2.5	
5	3.75	1.04	127.5	2950	40	3.05	7.5	Y2-132S ₂ -2	2.0	φ 139
	6.3	1.75	125.0		51	4.20			2.0	
	7.5	2.08	122.5		53	4.72			2.5	
6	3.75	1.04	153.0	2950	40	3.90	11	Y2-160M ₁ -2	2.0	φ 139
	6.3	1.75	150.0		51	5.04			2.0	
	7.5	2.08	147.0		53	5.66			2.5	
7	3.75	1.04	178.5	2950	40	4.55	11	Y2-160M ₁ -2	2.0	φ 139
	6.3	1.75	175.0		51	5.88			2.0	
	7.5	2.08	171.5		53	6.60			2.5	
8	3.75	1.04	204.0	2950	40	5.20	15	Y2-160M ₂ -2	2.0	φ 139
	6.3	1.75	200.0		51	6.72			2.0	
	7.5	2.08	196.0		53	7.55			2.5	
9	3.75	1.04	229.5	2950	40	5.85	15	Y2-160M ₂ -2	2.0	φ 139
	6.3	1.75	225.0		51	7.56			2.0	
	7.5	2.08	220.5		53	8.49			2.5	
10	3.75	1.04	255.0	2950	40	6.51	18.5	Y2-160L-2	2.0	φ 139
	6.3	1.75	250.0		51	8.41			2.0	
	7.5	2.08	245.0		53	9.44			2.5	
11	3.75	1.04	280.5	2950	40	7.16	18.5	Y2-160L-2	2.0	φ 139
	6.3	1.75	275.0		51	9.25			2.0	
	7.5	2.08	269.5		53	10.38			2.5	
12	3.75	1.04	306.0	2950	40	7.81	18.5	Y2-160L-2	2.0	φ 139
	6.3	1.75	300.0		51	10.09			2.0	
	7.5	2.08	294.0		53	11.33			2.5	

ZD、ZDG、ZDF、ZDY、ZMD 6-50型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 6-50



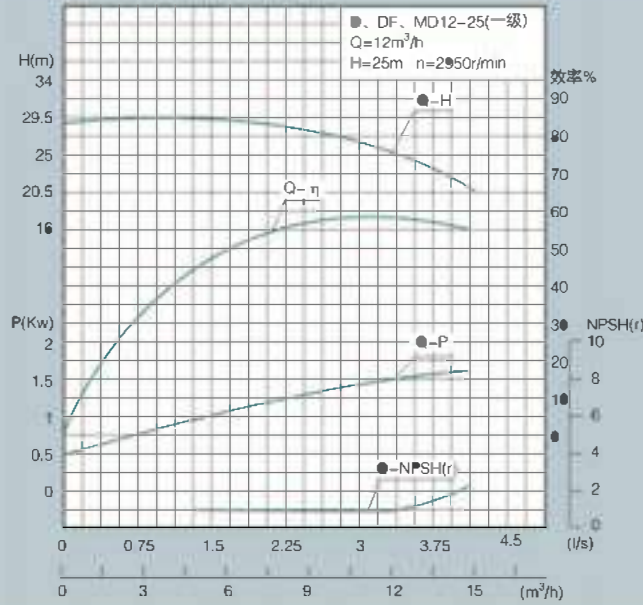
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
3	3.75	1.04	156	2950	32	4.97	11	Y2-160M1-2	3.0	φ 198
	6.3	1.75	150		36	7.14			3.0	
	7.5	2.08	144		35	8.40			3.5	
4	3.75	1.04	208	2950	32	6.63	18.5	Y2-160L-2	3.0	φ 198
	6.3	1.75	200		36	9.53			3.0	
	7.5	2.08	192		35	10.89			3.5	
5	3.75	1.04	260	2950	32	8.29	22	Y2-180M-2	3.0	φ 198
	6.3	1.75	250		36	12.25			3.0	
	7.5	2.08	240		35	13.61			3.5	
6	3.75	1.04	312	2950	32	9.95	30	Y2-200L1-2	3.0	φ 198
	6.3	1.75	300		36	14.29			3.0	
	7.5	2.08	288		35	16.33			3.5	
7	3.75	1.04	364	2950	32	11.61	30	Y2-200L1-2	3.0	φ 198
	6.3	1.75	350		36	16.68			3.0	
	7.5	2.08	336		35	19.08			3.5	
8	3.75	1.04	416	2950	32	13.27	37	Y2-200L2-2	3.0	φ 198
	6.3	1.75	400		36	19.60			3.0	
	7.5	2.08	384		35	21.78			3.5	
9	3.75	1.04	468	2950	32	14.93	37	Y2-200L2-2	3.0	φ 198
	6.3	1.75	450		36	22.05			3.0	
	7.5	2.08	432		35	24.50			3.5	
10	3.75	1.04	520	2950	32	16.59	45	Y2-225M-2	3.0	φ 198
	6.3	1.75	500		36	24.50			3.0	
	7.5	2.08	480		35	27.23			3.5	
11	3.75	1.04	572	2950	32	18.25	45	Y2-225M-2	3.0	φ 198
	6.3	1.75	550		36	26.96			3.0	
	7.5	2.08	528		35	29.95			3.5	
12	3.75	1.04	624	2950	32	19.91	55	Y2-250M-2	3.0	φ 198
	6.3	1.75	600		36	29.41			3.0	
	7.5	2.08	576		35	32.67			3.5	

ZD、ZDG、ZDF、ZDY、ZMD 6-80型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 6-80



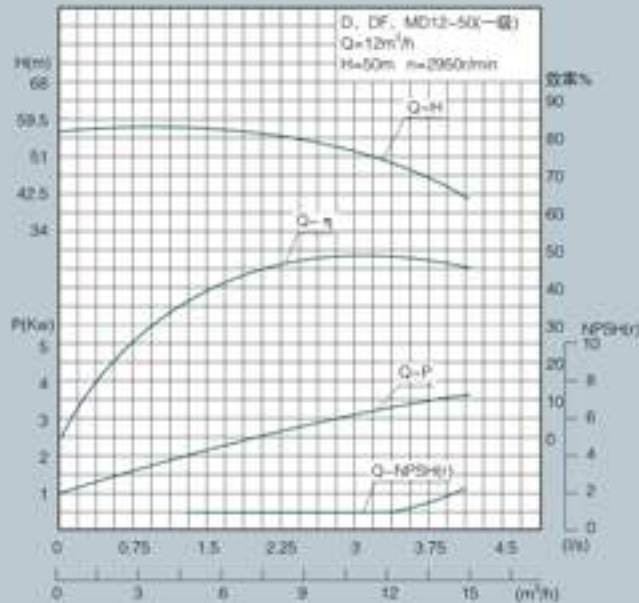
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH) _r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	3.75	1.04	252	2950	32	8.05	18.5	Y2-160L-2	3.0	φ 235
	6.3	1.75	240		36	11.45			3.0	
	7.5	2.08	220		35	12.85			3.5	
4	3.75	1.04	332	2950	32	10.60	22	Y2-180M-2	3.0	φ 235
	6.3	1.75	320		36	15.26			3.0	
	7.5	2.08	300		35	17.52			3.5	
5	3.75	1.04	412	2950	32	13.16	30	Y2-200L1-2	3.0	φ 235
	6.3	1.75	400		36	19.08			3.0	
	7.5	2.08	380		35	22.19			3.5	
6	3.75	1.04	492	2950	32	15.71	37	Y2-200L2-2	3.0	φ 235
	6.3	1.75	480		36	22.89			3.0	
	7.5	2.08	460		35	26.86			3.5	
7	3.75	1.04	572	2950	32	18.27	45	Y2-225M-2	3.0	φ 235
	6.3	1.75	560		36	26.71			3.0	
	7.5	2.08	540		35	31.53			3.5	
8	3.75	1.04	652	2950	32	20.82	45	Y2-225M-2	3.0	φ 235
	6.3	1.75	640		36	30.52			3.0	
	7.5	2.08	600		35	35.04			3.5	
9	3.75	1.04	732	2950	32	23.38	55	Y2-250M-2	3.0	φ 235
	6.3	1.75	720		36	34.33			3.0	
	7.5	2.08	680		35	39.70			3.5	
10	3.75	1.04	812	2950	32	25.93	55	Y2-250M-2	3.0	φ 235
	6.3	1.75	800		36	38.15			3.0	
	7.5	2.08	760		35	44.37			3.5	
11	3.75	1.04	892	2950	32	28.48	75	Y2-280S-2	3.0	φ 235
	6.3	1.75	880		36	41.97			3.0	
	7.5	2.08	840		35	49.05			3.5	
12	3.75	1.04	982	2950	32	31.35	75	Y2-280S-2	3.0	φ 235
	6.3	1.75	960		36	45.78			3.0	
	7.5	2.08	920		35	53.72			3.5	

ZD、ZDG、ZDF、ZDY、ZMD 12-25型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 12-25



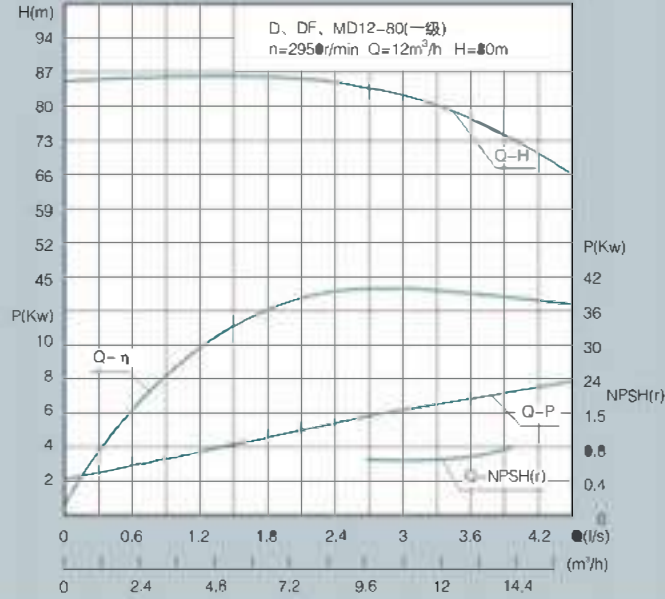
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH)r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	7.5	2.08	84.6	2950	48	3.59	7.5	Y2-132S2-2	2.0	φ 146
	12.5	3.47	75.0		58	4.40				
	15.0	4.17	69.0		57	4.94				
4	7.5	2.08	112.8	2950	48	4.79	11	Y2-160M1-2	2.0	φ 146
	12.5	3.47	100.0		58	5.86				
	15.0	4.17	92.0		57	6.59				
5	7.5	2.08	141.0	2950	48	5.99	11	Y2-160M1-2	2.0	φ 146
	12.5	3.47	125.0		58	7.33				
	15.0	4.17	115.0		57	8.24				
6	7.5	2.08	169.2	2950	48	7.19	15	Y2-160M2-2	2.0	φ 146
	12.5	3.47	150.0		58	8.80				
	15.0	4.17	138.0		57	9.88				
7	7.5	2.08	197.4	2950	48	8.39	15	Y2-160M2-2	2.0	φ 146
	12.5	3.47	175.0		58	10.27				
	15.0	4.17	161.0		57	11.53				
8	7.5	2.08	225.6	2950	48	9.59	18.5	Y2-160L-2	2.0	φ 146
	12.5	3.47	200.0		58	11.73				
	15.0	4.17	184.0		57	13.18				
9	7.5	2.08	253.8	2950	48	10.79	18.5	Y2-160L-2	2.0	φ 146
	12.5	3.47	225.0		58	13.20				
	15.0	4.17	207.0		57	14.83				
10	7.5	2.08	282.0	2950	48	11.99	22	Y2-180M-2	2.0	φ 146
	12.5	3.47	250.0		58	14.67				
	15.0	4.17	230.0		57	16.48				
11	7.5	2.08	310.2	2950	48	13.19	22	Y2-180M-2	2.0	φ 146
	12.5	3.47	275.0		58	16.14				
	15.0	4.17	253.0		57	18.13				
12	7.5	2.08	338.4	2950	48	14.39	30	Y2-200L1-2	2.0	φ 146
	12.5	3.47	300.0		58	17.60				
	15.0	4.17	276.0		57	19.77				

ZD、ZDG、ZDF、ZDY、ZMD 12-50型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 12-50



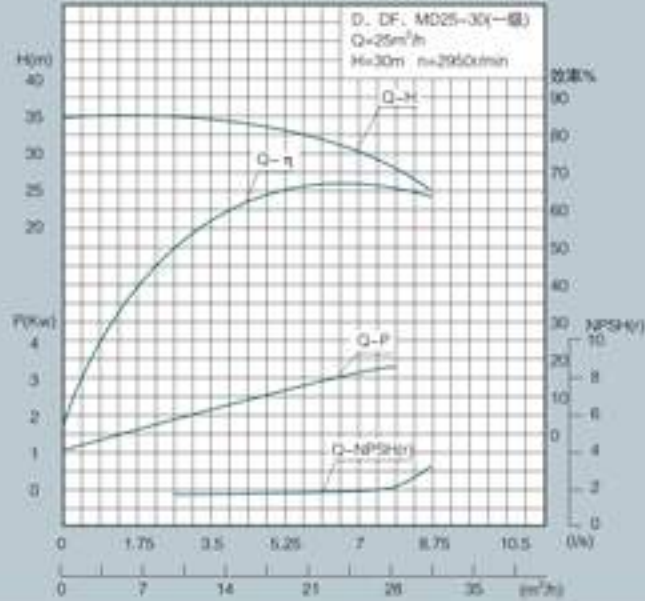
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSHr) m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	7.5	2.08	108.0	2950	42	7.87	15	Y2-160M2-2	2.0	φ198
	12.5	3.47	100.0		49	10.42			2.0	
	15.0	4.17	93.0		48	11.87			2.5	
4	7.5	2.08	216.0	2950	42	10.50	22	Y2-180M-2	2.0	φ198
	12.5	3.47	200.0		49	13.89			2.0	
	15.0	4.17	186.0		48	15.82			2.5	
5	7.5	2.08	270.0	2950	42	13.13	30	Y2-200L1-2	2.0	φ198
	12.5	3.47	250.0		49	17.36			2.0	
	15.0	4.17	232.5		48	19.78			2.5	
6	7.5	2.08	324.0	2950	42	15.75	30	Y2-200L1-2	2.0	φ198
	12.5	3.47	300.0		49	20.84			2.0	
	15.0	4.17	279.0		48	23.74			2.5	
7	7.5	2.08	378.0	2950	42	18.38	37	Y2-200L2-2	2.0	φ198
	12.5	3.47	350.0		49	24.31			2.0	
	15.0	4.17	325.5		48	27.70			2.5	
8	7.5	2.08	432.0	2950	42	21.00	45	Y2-225M-2	2.0	φ198
	12.5	3.47	400.0		49	27.78			2.0	
	15.0	4.17	372.0		48	31.61			2.5	
9	7.5	2.08	486.0	2950	42	23.63	45	Y2-225M-2	2.0	φ198
	12.5	3.47	450.0		49	31.26			2.0	
	15.0	4.17	418.5		48	35.61			2.5	
10	7.5	2.08	540.0	2950	42	26.26	55	Y2-250M-2	2.0	φ198
	12.5	3.47	500.0		49	34.73			2.0	
	15.0	4.17	465.0		48	39.57			2.5	
11	7.5	2.08	594.0	2950	42	28.88	55	Y2-250M-2	2.0	φ198
	12.5	3.47	550.0		49	38.20			2.0	
	15.0	4.17	511.5		48	43.53			2.5	
12	7.5	2.08	648.0	2950	42	31.51	75	Y2-280S-2	2.0	φ198
	12.5	3.47	600.0		49	41.68			2.0	
	15.0	4.17	558.0		48	47.48			2.5	

ZD、ZDG、ZDF、ZDY、ZMD 12-80型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 12-80



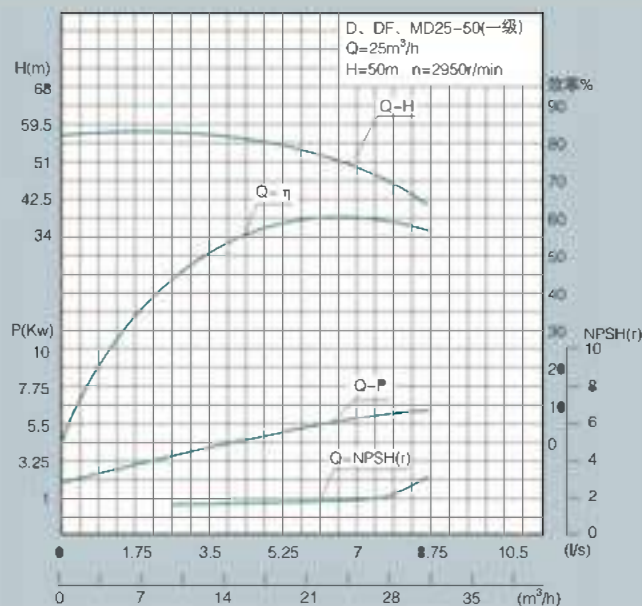
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH) _r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	7.5	2.08	252	2950	38	13.55	30	Y2-200L1-2	38	φ 235
	12.5	3.47	240		40	20.44			40	
	15.0	4.17	220		37	24.30			37	
4	7.5	2.08	332	2950	38	17.86	45	Y2-225M-2	38	φ 235
	12.5	3.47	320		40	27.25			40	
	15.0	4.17	300		37	33.14			37	
5	7.5	2.08	412	2950	38	22.16	55	Y2-250M-2	38	φ 235
	12.5	3.47	400		40	34.06			40	
	15.0	4.17	380		37	41.98			37	
6	7.5	2.08	492	2950	38	26.46	55	Y2-250M-2	38	φ 235
	12.5	3.47	480		40	40.86			40	
	15.0	4.17	460		37	50.82			37	
7	7.5	2.08	572	2950	38	30.76	75	Y2-280S-2	38	φ 235
	12.5	3.47	560		40	47.60			40	
	15.0	4.17	540		37	59.66			37	
8	7.5	2.08	652	2950	38	35.07	75	Y2-280S-2	38	φ 235
	12.5	3.47	640		40	54.50			40	
	15.0	4.17	600		37	66.28			37	
9	7.5	2.08	732	2950	38	39.37	90	Y2-280M-2	38	φ 235
	12.5	3.47	720		40	61.31			40	
	15.0	4.17	680		37	75.12			37	
10	7.5	2.08	812	2950	38	43.67	90	Y2-280M-2	38	φ 235
	12.5	3.47	800		40	68.13			40	
	15.0	4.17	760		37	83.96			37	
11	7.5	2.08	892	2950	38	47.97	110	Y2-315S-2	38	φ 235
	12.5	3.47	880		40	74.94			40	
	15.0	4.17	840		37	92.80			37	
12	7.5	2.08	982	2950	38	52.81	132	Y2-315M-2	38	φ 235
	12.5	3.47	860		40	73.23			40	
	15.0	4.17	920		37	101.64			37	

ZD、ZDG、ZDF、ZDY、ZMD 25-30型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 25-30



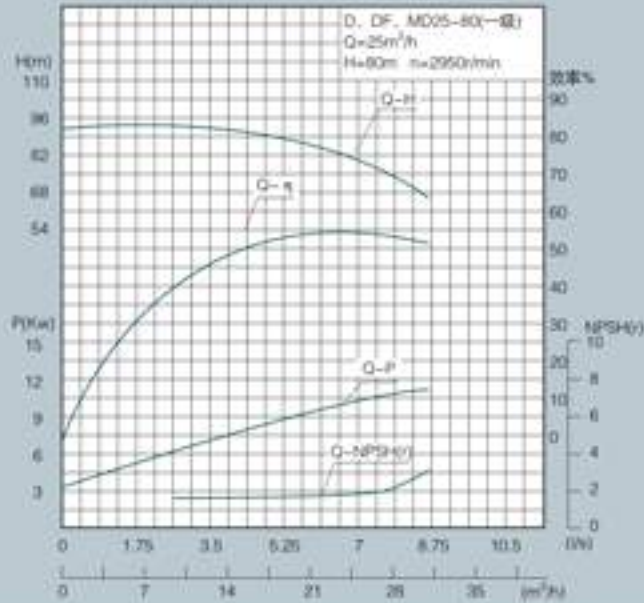
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH) _r	叶轮名义直径 Impeller Dia.
	m ³ /h	L/s					功率 Power	型号 Type		
3	15	4.17	102.0	2950	55	7.57	15	Y2-160M ₂ -2	2.2	φ160
	25	6.94	90.0		67	9.14			2.2	
	30	8.33	82.5		68	9.91			2.4	
4	15	4.17	136.0	2950	55	10.10	15	Y2-160M ₂ -2	2.2	φ160
	25	6.94	120.0		67	12.19			2.2	
	30	8.33	110.0		68	13.21			2.4	
5	15	4.17	170.0	2950	55	12.62	22	Y2-180M-2	2.2	φ160
	25	6.94	150.0		67	15.24			2.2	
	30	8.33	137.5		68	16.52			2.4	
6	15	4.17	204.0	2950	55	15.15	30	Y2-200L ₁ -2	2.2	φ160
	25	6.94	180.0		67	18.29			2.2	
	30	8.33	165.0		68	19.82			2.4	
7	15	4.17	238.0	2950	55	17.67	30	Y2-200L ₁ -2	2.2	φ160
	25	6.94	210.0		67	21.33			2.2	
	30	8.33	192.5		68	23.12			2.4	
8	15	4.17	272.0	2950	55	20.20	37	Y2-200L ₂ -2	2.2	φ160
	25	6.94	240.0		67	24.38			2.2	
	30	8.33	220.0		68	26.43			2.4	
9	15	4.17	306.0	2950	55	22.72	37	Y2-200L ₂ -2	2.2	φ160
	25	6.94	270.0		67	27.43			2.2	
	30	8.33	247.5		68	29.73			2.4	
10	15	4.17	340.0	2950	55	25.25	45	Y2-225M-2	2.2	φ160
	25	6.94	300.0		67	30.48			2.2	
	30	8.33	275.0		68	33.04			2.4	

ZD、ZDG、ZDF、ZDY、ZMD 25-50型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 25-50



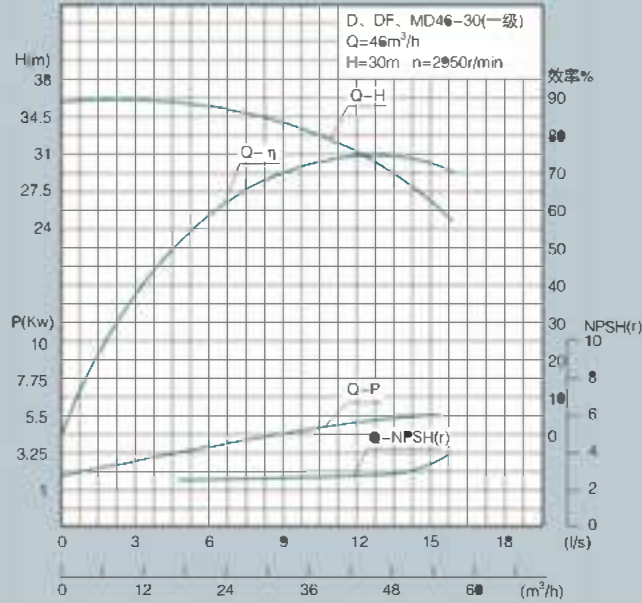
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					kW	型号 Type		
			m	r/min	%	kW			kW	m
3	15	4.17	154.5	2950	50	12.62	22	Y2-180M-2	2.4	φ 196
	25	6.94	150.0		60	17.02				
	28	7.78	144.0		61	18.00				
4	15	4.17	206.0	2950	50	16.83	30	Y2-200L1-2	2.4	φ 196
	25	6.94	200.0		60	22.69				
	28	7.78	192.0		61	24.00				
5	15	4.17	257.5	2950	50	21.03	37	Y2-200L2-2	2.4	φ 196
	25	6.94	250.0		60	28.36				
	28	7.78	240.0		61	30.00				
6	15	4.17	309.0	2950	50	25.24	45	Y2-225M-2	2.4	φ 196
	25	6.94	300.0		60	34.04				
	28	7.78	288.0		61	36.00				
7	15	4.17	360.5	2950	50	29.45	55	Y2-250M-2	2.4	φ 196
	25	6.94	350.0		60	39.71				
	28	7.78	336.0		61	42.00				
8	15	4.17	412.0	2950	50	33.66	75	Y2-2806-2	2.4	φ 196
	25	6.94	400.0		60	45.38				
	28	7.78	384.0		61	48.00				
9	15	4.17	463.5	2950	50	37.86	75	Y2-2806-2	2.4	φ 196
	25	6.94	450.0		60	51.06				
	28	7.78	432.0		61	54.00				
10	15	4.17	515.0	2950	50	42.07	75	Y2-2806-2	2.4	φ 196
	25	6.94	500.0		60	56.73				
	28	7.78	480.0		61	60.00				
11	15	4.17	566.0	2950	50	46.24	90	Y2-280M-2	2.4	φ 196
	25	6.94	550.0		60	62.40				
	28	7.78	528.0		61	66.00				
12	15	4.17	618.0	2950	50	50.49	110	Y2-315S-2	2.4	φ 196
	25	6.94	600.0		60	68.08				
	28	7.78	576.0		61	72.00				

ZD、ZDG、ZDF、ZDY、ZMD 25-80型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 25-80



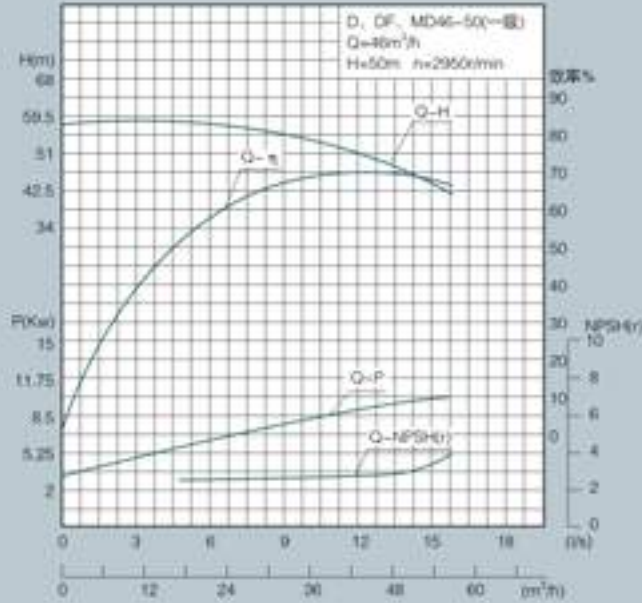
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电动机 Motor		必需汽蚀余量 (NPSH) m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
5	15	4.17	440	2950	47	38.24	75	Y2-280S-2	3.1	φ 260
	25	6.94	400		54	50.43			3.3	
	30	7.78	380		56	55.43			3.8	
6	15	4.17	528	2950	47	45.89	90	Y2-280M-2	3.1	φ 260
	25	6.94	480		54	60.51			3.3	
	30	7.78	456		56	66.52			3.8	
7	15	4.17	616	2950	47	53.53	90	Y2-280M-2	3.1	φ 260
	25	6.94	560		54	70.60			3.3	
	30	7.78	532		56	77.61			3.8	
8	15	4.17	704	2950	47	61.18	110	Y2-315S-2	3.1	φ 260
	25	6.94	640		54	80.69			3.3	
	30	7.78	608		56	88.70			3.8	
9	15	4.17	792	2950	47	68.83	132	Y2-315M-2	3.1	φ 260
	25	6.94	720		54	90.77			3.3	
	30	7.78	684		56	99.78			3.8	
10	15	4.17	880	2950	47	76.48	132	Y2-315M-2	3.1	φ 260
	25	6.94	800		54	100.86			3.3	
	30	7.78	760		56	110.87			3.8	
11	15	4.17	928	2950	47	86.30	160	Y2-315L1-2	3.1	φ 260
	25	6.94	880		54	110.72			3.3	
	30	7.78	818		56	120.36			3.8	
12	15	4.17	1013	2950	47	96.15	160	Y2-315L1-2	3.1	φ 260
	25	6.94	960		54	121.02			3.3	
	30	7.78	893		56	138.9			3.8	

ZD、ZDG、ZDF、ZDY、ZMD 46-30型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 46-30



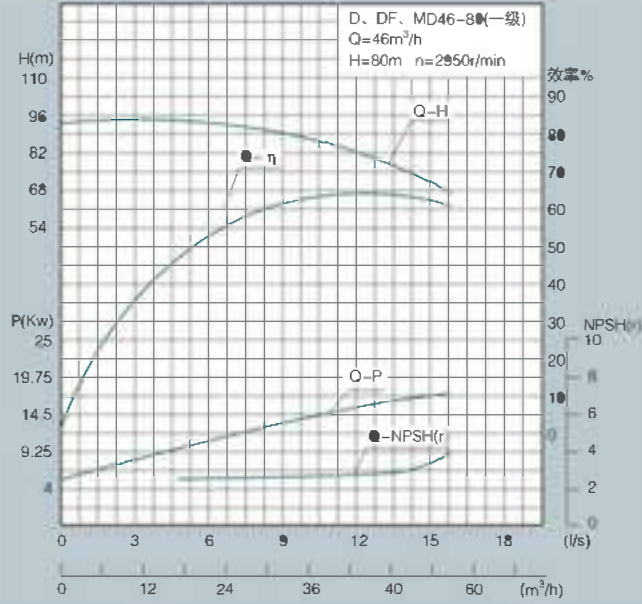
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电动机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia
	m³/h	L/s					功率 Power	型号 Type		
3	30	8.33	102	2950	69	12.07	22	Y2-180M-2	2.4	φ 162
	46	12.8	90		75	15.03			2.8	
	55	15.3	81		74	16.39			4.6	
4	30	8.33	136	2950	69	16.10	30	Y2-200L1-2	2.4	φ 162
	46	12.8	120		75	20.04			2.8	
	55	15.3	108		74	21.86			4.6	
5	30	8.33	170	2950	69	20.12	37	Y2-200L2-2	2.4	φ 162
	46	12.8	150		75	25.05			2.8	
	55	15.3	135		74	27.32			4.6	
6	30	8.33	204	2950	69	24.15	37	Y2-200L2-2	2.4	φ 162
	46	12.8	180		75	30.06			2.8	
	55	15.3	162		74	32.79			4.6	
7	30	8.33	238	2950	69	28.18	45	Y2-225M-2	2.4	φ 162
	46	12.8	210		75	35.07			2.8	
	55	15.3	189		74	38.25			4.6	
8	30	8.33	272	2950	69	32.20	55	Y2-250M-2	2.4	φ 162
	46	12.8	240		75	40.08			2.8	
	55	15.3	216		74	43.72			4.6	
9	30	8.33	306	2950	69	36.23	55	Y2-250M-2	2.4	φ 162
	46	12.8	270		75	45.09			2.8	
	55	15.3	243		74	49.18			4.6	
10	30	8.33	340	2950	69	40.25	75	Y2-280S-2	2.4	φ 162
	46	12.8	300		75	50.10			2.8	
	55	15.3	270		74	54.65			4.6	

ZD、ZDG、ZDF、ZDY、ZMD 46-50型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 46-50



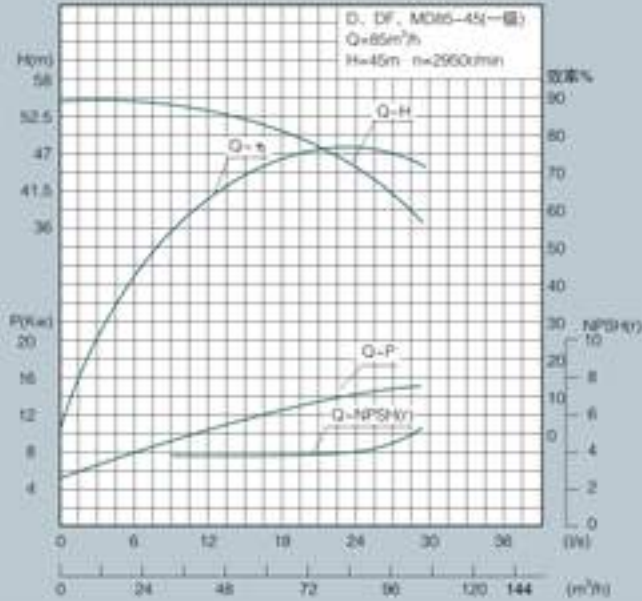
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
3	30	8.33	166.5	2950	61	22.29	37	Y2-200L1-2	2.5	φ 210
	46	12.78	150		70	26.84			2.8	
	55	15.28	138		71	29.11			3.2	
4	30	8.33	222	2950	61	29.73	45	Y2-225M-2	2.5	φ 210
	46	12.78	200		70	35.79			2.8	
	55	15.28	184		71	38.81			3.2	
5	30	8.33	277.5	2950	61	37.16	55	Y2-250M-2	2.5	φ 210
	46	12.78	250		70	44.74			2.8	
	55	15.28	230		71	48.52			3.2	
6	30	8.33	333	2950	61	44.59	75	Y2-280S-2	2.5	φ 210
	46	12.78	300		70	53.68			2.8	
	55	15.28	276		71	58.22			3.2	
7	30	8.33	388.5	2950	61	52.03	90	Y2-280M-2	2.5	φ 210
	46	12.78	350		70	62.63			2.8	
	55	15.28	322		71	67.92			3.2	
8	30	8.33	444	2950	61	59.46	90	Y2-280M-2	2.5	φ 210
	46	12.78	400		70	71.58			2.8	
	55	15.28	368		71	77.63			3.2	
9	30	8.33	499.5	2950	61	66.89	110	Y2-315S-2	2.5	φ 210
	46	12.78	450		70	80.53			2.8	
	55	15.28	414		71	87.33			3.2	
10	30	8.33	555	2950	61	74.33	132	Y2-315M-2	2.5	φ 210
	46	12.78	500		70	89.48			2.8	
	55	15.28	460		71	97.04			3.2	
11	30	8.33	610.5	2950	61	81.76	132	Y2-315M-2	2.5	φ 210
	46	12.78	550		70	98.42			2.8	
	55	15.28	506		71	106.74			3.2	
12	30	8.33	666	2950	61	89.19	132	Y2-315M-2	2.5	φ 210
	46	12.78	600		70	107.37			2.8	
	55	15.28	552		71	116.45			3.2	

ZD、ZDG、ZDF、ZDY、ZMD 46-80型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 46-80



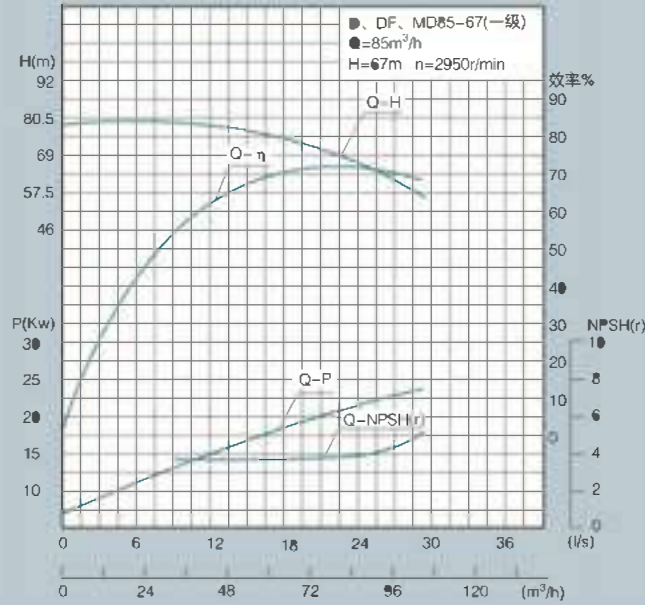
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH)r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
5	27	7.5	440	2950	59	54.83	110	Y2-315S-2	3.9	φ 260
	46	12.5	400		64	78.29			4.0	
	54	15.0	380		65	85.97			5.5	
6	27	7.5	528	2950	59	65.80	132	Y2-315M-2	3.9	φ 260
	46	12.5	480		64	98.95			4.0	
	54	15.0	456		65	103.16			5.5	
7	27	7.5	616	2950	59	76.76	160	Y2-315L1-2	3.9	φ 260
	46	12.5	560		64	109.61			4.0	
	54	15.0	532		65	120.36			5.5	
8	27	7.5	704	2950	59	87.73	185	Y2-315L-2	3.9	φ 260
	46	12.5	640		64	125.27			4.0	
	54	15.0	608		65	137.55			5.5	
9	27	7.5	792	2950	59	98.70	220	Y2-315M1-2	3.9	φ 260
	46	12.5	720		64	140.93			4.0	
	54	15.0	684		65	154.75			5.5	
10	27	7.5	880	2950	59	109.67	220	Y2-315M1-2	3.9	φ 260
	46	12.5	800		64	156.59			4.0	
	54	15.0	760		65	171.94			5.5	
11	27	7.5	968	2950	59	127.18	250	Y2-355M2-2	3.9	φ 260
	46	12.5	880		64	172.36			4.0	
	54	15.0	836		65	189.25			5.5	
12	27	7.5	1056	2950	59	131.69	280	Y2-355L1-2	3.9	φ 260
	46	12.5	960		64	188.03			4.0	
	54	15.0	912		65	206.66			5.5	

ZD、ZDG、ZDF、ZDY、ZMD 85-45型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-45



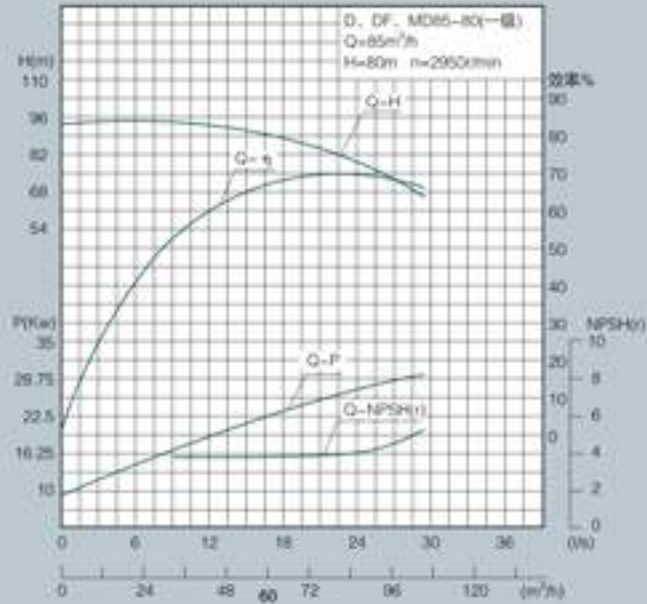
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power kW	型号 Type		
3	55	15.3	153	2950	68	33.70	55	Y2-250M-2	3.2	φ 200
	85	23.6	135		77	40.58			4.2	
	100	27.8	117		76	41.92			5.2	
4	55	15.3	204	2950	68	44.93	75	Y2-280S-2	3.2	φ 200
	85	23.6	180		77	54.11			4.2	
	100	27.8	156		76	55.89			5.2	
5	55	15.3	255	2950	68	56.16	90	Y2-280M-2	3.2	φ 200
	85	23.6	225		77	67.64			4.2	
	100	27.8	195		76	69.87			5.2	
6	55	15.3	306	2950	68	67.40	110	Y2-315S-2	3.2	φ 200
	85	23.6	270		77	81.16			4.2	
	100	27.8	234		76	83.84			5.2	
7	55	15.3	357	2950	68	78.63	132	Y2-315M-2	3.2	φ 200
	85	23.6	315		77	94.69			4.2	
	100	27.8	273		76	97.82			5.2	
8	55	15.3	408	2950	68	89.88	132	Y2-315M-2	3.2	φ 200
	85	23.6	360		77	108.22			4.2	
	100	27.8	312		76	111.79			5.2	
9	55	15.3	459	2950	68	101.10	160	Y2-315L-2	3.2	φ 200
	85	23.6	405		77	121.75			4.2	
	100	27.8	351		76	125.77			5.2	
10	55	15.3	510	2950	68	118.5	185	Y2-315L-2	3.2	φ 200
	85	23.6	450		77	140.7			4.2	
	100	27.8	390		76	148.6			5.2	

ZD、ZDG、ZDF、ZDY、ZMD 85-67型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-67



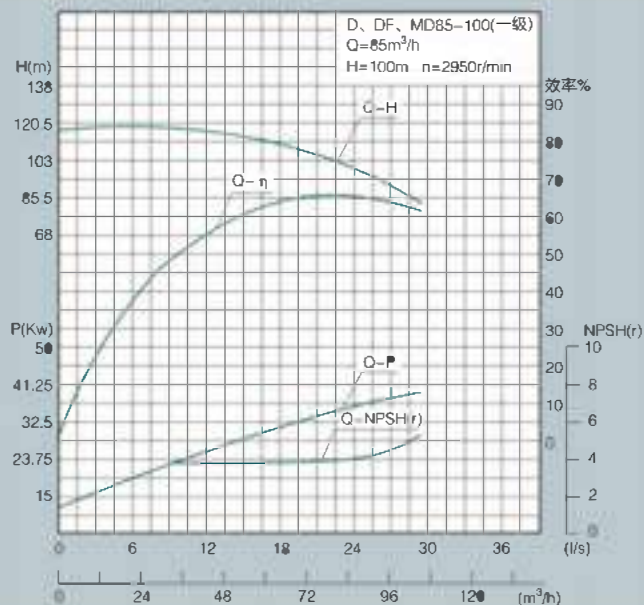
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m ³ /h	L/s					功率 Power	型号 Type		
			m	mm						
3	55	15.3	222	2950	62	53.63	90	Y2-280M-2	3.3	φ 235
	85	23.6	201		72	64.62			4.0	
	100	27.8	183		73	68.26			4.4	
4	55	15.3	296	2950	62	71.50	110	Y2-315S-2	3.3	φ 235
	85	23.6	268		72	86.16			4.0	
	100	27.8	244		73	91.02			4.4	
5	55	15.3	370	2950	62	89.38	132	Y2-315M-2	3.3	φ 235
	85	23.6	335		72	107.70			4.0	
	100	27.8	305		73	113.78			4.4	
6	55	15.3	444	2950	62	107.26	160	Y2-315L ₁ -2	3.3	φ 235
	85	23.6	402		72	129.24			4.0	
	100	27.8	366		73	136.53			4.4	
7	55	15.3	518	2950	62	125.14	185	Y2-315L-2	3.3	φ 235
	85	23.6	469		72	150.78			4.0	
	100	27.8	427		73	159.29			4.4	
8	55	15.3	592	2950	62	143.01	220	Y2-315M ₁ -2	3.3	φ 235
	85	23.6	536		72	172.32			4.0	
	100	27.8	488		73	182.05			4.4	
9	55	15.3	666	2950	62	160.89	250	Y2-355M ₂ -2	3.3	φ 235
	85	23.6	603		72	193.86			4.0	
	100	27.8	549		73	204.80			4.4	
10	55	15.3	740	2950	62	187.9	280	Y2-355L ₁ -2	3.3	φ 235
	85	23.6	670		72	220.0			4.0	
	100	27.8	610		73	239.0			4.4	

ZD、ZDG、ZDF、ZDY、ZMD 85-80型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-80



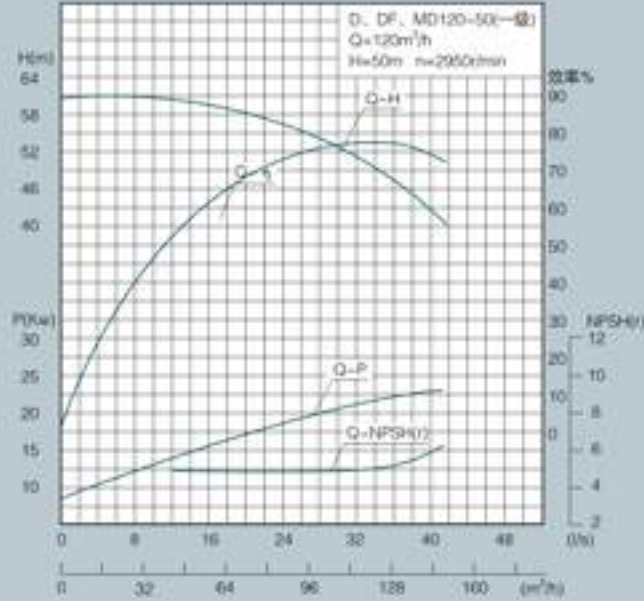
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽 蚀余量 (NPSHr)	叶轮名 义直径 Impeller Dia
	m³/h	L/s					功率 Power	型号 Type		
			m	mm	kW	m			mm	
4	51	14.17	352	2950	59	82.86	132	Y2-315M-2	3.5	φ255
	85	23.6	320		70	105.82			4.5	
	102	28.3	304		71	118.93			4.3	
5	51	14.17	440	2950	59	103.57	185	Y2-315L-2	3.5	φ255
	85	23.6	400		70	132.27			4.5	
	102	28.3	380		71	148.66			4.3	
6	51	14.17	528	2950	59	124.29	200	Y2-315L7-2	3.5	φ255
	85	23.6	480		70	158.73			4.5	
	102	28.3	456		71	178.40			4.3	
7	51	14.17	616	2950	59	145.00	250	Y2-315M0-2	3.5	φ255
	85	23.6	560		70	185.18			4.5	
	102	28.3	532		71	208.13			4.3	
8	51	14.17	704	2950	59	165.72	280	Y2-355L1-2	3.5	φ255
	85	23.6	640		70	211.64			4.5	
	102	28.3	608		71	237.87			4.3	
9	51	14.17	792	2950	59	186.44	315	Y2-355L7-2	3.5	φ255
	85	23.6	720		70	238.09			4.5	
	102	28.3	684		71	267.60			4.3	
10	51	14.17	880	2950	59	207.15	355	Y2-3555-2 (6KV)	3.5	φ255
	85	23.6	800		70	264.55			4.5	
	102	28.3	760		71	297.33			4.3	

ZD、ZDG、ZDF、ZDY、ZMD 85-100型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-100



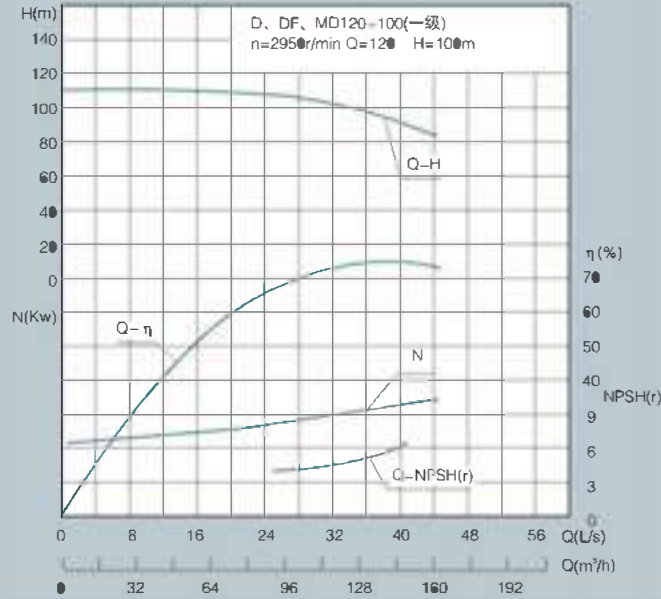
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	r/min	%	kW			kW	m
3	51	14.17	330	2950	49	93.53	132	Y2-315M-2	3.8	φ 282
	85	23.6	300		65	106.83			4.6	
	102	28.3	285		64	123.69			4.4	
4	51	14.17	440	2950	49	124.71	185	Y2-315L-2	3.8	φ 282
	85	23.6	400		65	142.45			4.6	
	102	28.3	380		64	164.93			4.4	
5	51	14.17	550	2950	49	155.89	220	Y2-355M1-2	3.8	φ 282
	85	23.6	500		65	178.06			4.6	
	102	28.3	475		64	206.16			4.4	
6	51	14.17	660	2950	49	187.07	280	Y2-355L1-2	3.8	φ 282
	85	23.6	600		65	213.67			4.6	
	102	28.3	570		64	247.39			4.4	
7	51	14.17	770	2950	49	218.25	315	Y2-355L2-2	3.8	φ 282
	85	23.6	700		65	249.28			4.6	
	102	28.3	665		64	288.62			4.4	
8	51	14.17	880	2950	49	249.43	355	Y2-3555-2 (6KV)	3.8	φ 282
	85	23.6	800		65	284.90			4.6	
	102	28.3	760		64	329.86			4.4	
9	51	14.17	990	2950	49	280.61	400	Y2-3556-2 (6KV)	3.8	φ 282
	85	23.6	900		65	320.51			4.6	
	102	28.3	855		64	371.09			4.4	
10	51	14.17	1100	2950	49	311.79	450	Y2-4001-2 (6KV)	3.8	φ 282
	85	23.6	1000		65	356.12			4.6	
	102	28.3	950		64	412.32			4.4	

ZD、ZDG、ZDF、ZDY、ZMD 120-50型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 120-50



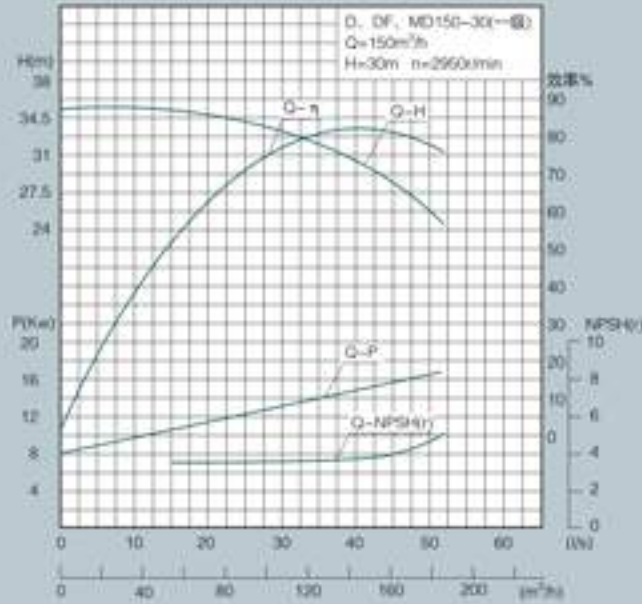
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH) m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
			m	r/min	%	kW			kW	
3	96	26.7	165.0	2950	71	60.75	90	Y2-280M-2	3.2	φ213
	120	33.3	150.0		78	62.84			5.1	
	140	38.9	126.9		77	62.83			6.7	
4	96	26.7	220.0	2950	71	81.00	110	Y2-315S-2	3.2	φ213
	120	33.3	200.0		78	83.79			5.1	
	140	38.9	169.2		77	83.77			6.7	
5	96	26.7	275.0	2950	71	101.26	132	Y2-315M-2	3.2	φ213
	120	33.3	250.0		78	104.74			5.1	
	140	38.9	211.5		77	104.72			6.7	
6	96	26.7	330.0	2950	71	121.51	160	Y2-315L1-2	3.2	φ213
	120	33.3	300.0		78	125.69			5.1	
	140	38.9	253.8		77	125.66			6.7	
7	96	26.7	385.0	2950	71	141.76	200	Y2-315L2-2	3.2	φ213
	120	33.3	350.0		78	146.63			5.1	
	140	38.9	296.1		77	146.61			6.7	
8	96	26.7	440.0	2950	71	162.01	200	Y2-315L2-2	3.2	φ213
	120	33.3	400.0		78	167.58			5.1	
	140	38.9	338.4		77	167.55			6.7	
9	96	26.7	495.0	2950	71	182.27	220	Y2-355M1-2	3.2	φ213
	120	33.3	450.0		78	188.53			5.1	
	140	38.9	380.7		77	188.50			6.7	
10	96	26.7	545.0	2950	71	200.80	250	Y2-355M2-2	3.2	φ213
	120	33.3	500.0		78	209.61			5.1	
	140	38.9	430.0		77	213.45			6.7	

ZD、ZDG、ZDF、ZDY、ZMD 120-100型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 120-100



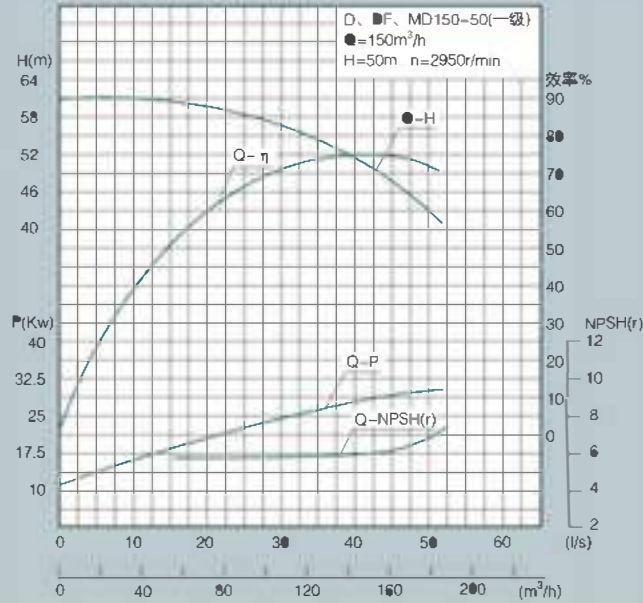
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH)r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
4	96	26.7	420.0	2950	68	161.5	220	Y2-355M ₁ -2	3.8	φ 275
	120	33.3	394.0		73	176.4			4.5	
	144	40.0	360.0		74	190.8			5.5	
5	96	26.7	525.0	2950	68	201.8	250	Y2-355M ₂ -2	3.8	φ 275
	120	33.3	492.5		73	220.5			4.5	
	144	40.0	450.0		74	238.5			5.5	
6	96	26.7	630.0	2950	68	242.2	315	Y2-355L ₂ -2	3.8	φ 275
	120	33.3	591.0		73	264.6			4.5	
	144	40.0	540.0		74	286.2			5.5	
7	96	26.7	735.0	2950	68	282.6	355	Y2-3555-2	3.8	φ 275
	120	33.3	689.5		73	308.7			4.5	
	144	40.0	630.0		74	333.9			5.5	
8	96	26.7	840.0	2950	68	323.0	400	Y2-3556-2	3.8	φ 275
	120	33.3	788.0		73	352.8			4.5	
	144	40.0	720.0		74	381.6			5.5	
9	96	26.7	945.0	2950	68	363.3	450	Y2-4001-2	3.8	φ 275
	120	33.3	886.5		73	396.9			4.5	
	144	40.0	810.0		74	429.3			5.5	
10	96	26.7	1050.0	2950	68	403.7	500	Y2-4002-2	3.8	φ 275
	120	33.3	985.0		73	441.0			4.5	
	144	40.0	900.0		74	476.9			5.5	
11	96	26.7	1155.0	2950	68	444.1	560	Y2-4003-2	3.8	φ 275
	120	33.3	1083.5		73	485.1			4.5	
	144	40.0	990.0		74	524.7			5.5	
12	96	26.7	1260.0	2950	68	484.5	630	Y2-4004-2	3.8	φ 275
	120	33.3	1182.0		73	529.2			4.5	
	144	40.0	1080.0		74	572.4			5.5	

ZD、ZDG、ZDF、ZDY、ZMD 150-30型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-30



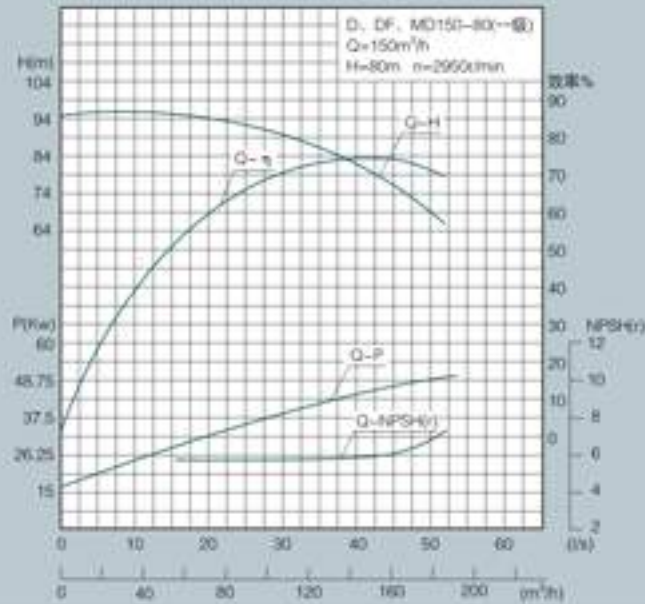
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
3	119	33.1	99.0	2950	72	44.56	75	Y2-280S-2	3.8	φ172
	150	41.7	90.0		82	44.82			4.3	
	190	52.8	85.5		81	54.61			5.0	
4	119	33.1	132.0	2950	72	59.41	90	Y2-280M-2	3.8	φ172
	150	41.7	120.0		82	59.78			4.3	
	190	52.8	114.0		81	72.82			5.0	
5	119	33.1	165.0	2950	72	74.26	110	Y2-315S-2	3.8	φ172
	150	41.7	150.0		82	74.72			4.3	
	190	52.8	142.5		81	95.34			5.0	
6	119	33.1	198.0	2950	72	89.12	132	Y2-315M-2	3.8	φ172
	150	41.7	180.0		82	89.67			4.3	
	190	52.8	171.0		81	109.23			5.0	
7	119	33.1	231.0	2950	72	103.97	160	Y2-315L1-2	3.8	φ172
	150	41.7	210.0		82	104.61			4.3	
	190	52.8	119.5		81	127.44			5.0	
8	119	33.1	264.0	2950	72	118.82	200	Y2-315L1-2	3.8	φ172
	150	41.7	240.0		82	119.56			4.3	
	190	52.8	228.0		81	145.64			5.0	
9	119	33.1	297.0	2950	72	133.68	200	Y2-315L1-2	3.8	φ172
	150	41.7	270.0		82	134.50			4.3	
	190	52.8	256.5		81	163.85			5.0	
10	119	33.1	330.0	2950	72	148.53	220	Y2-315L2-2	3.8	φ172
	150	41.7	300.0		82	149.45			4.3	
	190	52.8	285.0		81	182.05			5.0	

ZD、ZDG、ZDF、ZDY、ZMD 150-50型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-50



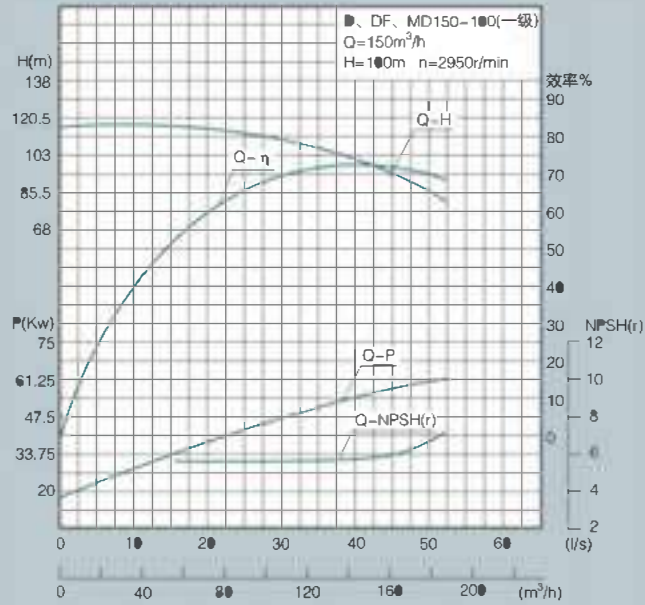
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia
	m³/h	L/s					功率 Power kW	型号 Type		
			m	r/min	%	kW			m	mm
2	120	33.3	110.0	2950	72	49.93	75	Y2-280S-2	3.2	φ 218
	150	41.7	100.0		75	54.47			5.0	
	180	50.0	85.0		74	56.31			6.6	
3	120	33.3	165.0	2950	72	74.89	110	Y2-315S-2	3.2	φ 218
	150	41.7	150.0		75	81.70			5.0	
	180	50.0	127.5		74	84.46			6.6	
4	120	33.3	220.0	2950	72	99.85	132	Y2-315M-2	3.2	φ 218
	150	41.7	200.0		75	108.93			5.0	
	180	50.0	170.0		74	112.61			6.6	
5	120	33.3	275.0	2950	72	124.82	160	Y2-315L ₁ -2	3.2	φ 218
	150	41.7	250.0		75	136.17			5.0	
	180	50.0	212.5		74	140.77			6.6	
6	120	33.3	330.0	2950	72	149.78	185	Y2-315L-2	3.2	φ 218
	150	41.7	300.0		75	163.40			5.0	
	180	50.0	255.0		74	168.92			6.6	
7	120	33.3	385.0	2950	72	174.75	250	Y2-355M ₂ -2	3.2	φ 218
	150	41.7	350.0		75	190.63			5.0	
	180	50.0	297.5		74	197.07			6.6	
8	120	33.3	440.0	2950	72	199.71	280	Y2-355L ₁ -2	3.2	φ 218
	150	41.7	400.0		75	217.86			5.0	
	180	50.0	340.0		74	225.23			6.6	
9	120	33.3	495.0	2950	72	224.67	315	Y2-355L ₂ -2	3.2	φ 218
	150	41.7	450.0		75	245.10			5.0	
	180	50.0	382.5		74	253.38			6.6	
10	120	33.3	550.0	2950	72	249.64	355	Y2-355S-2 (IP23/6KV)	3.2	φ 218
	150	41.7	500.0		75	272.33			5.0	
	180	50.0	425.0		74	281.53			6.6	

ZD、ZDG、ZDF、ZDY、ZMD 150-80型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-80



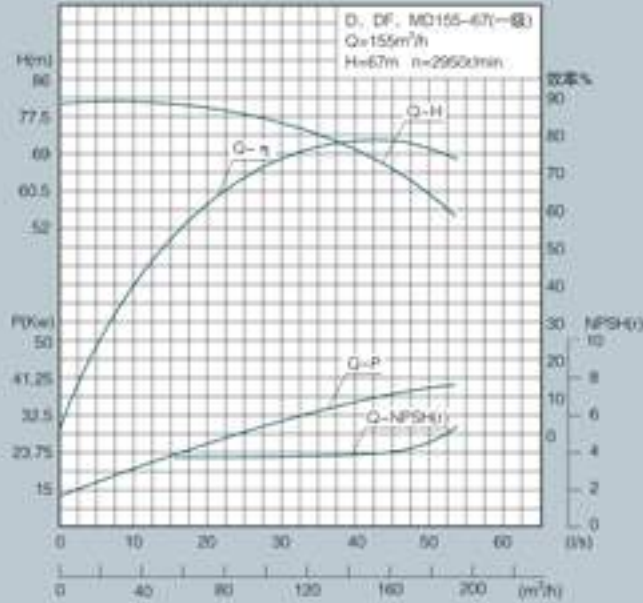
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia
	m³/h	L/s					功率 Power	型号 Type		
			m	r/min	%	kW			kW	m
3	90	25.0	264	2950	65	99.55	185	Y2-315L-2	3.2	φ254
	150	41.7	240		75	130.72				
	180	50.0	228		74	151.03				
4	90	25.0	352	2950	65	132.73	220	Y2-3551-2	3.2	φ254
	150	41.7	320		75	174.29				
	180	50.0	304		74	201.38				
5	90	25.0	440	2950	65	165.91	280	Y2-3553-2	3.2	φ254
	150	41.7	400		75	217.86				
	180	50.0	380		74	251.72				
6	90	25.0	528	2950	65	199.10	315	Y2-3554-2 (IP23/6KV)	3.2	φ254
	150	41.7	480		75	261.44				
	180	50.0	456		74	302.07				
7	90	25.0	616	2950	65	232.28	355	Y2-3555-2 (IP23/6KV)	3.2	φ254
	150	41.7	560		75	305.01				
	180	50.0	532		74	352.41				
8	90	25.0	704	2950	65	265.46	450	Y2-4001-2 (IP23/6KV)	3.2	φ254
	150	41.7	640		75	348.58				
	180	50.0	608		74	402.76				
9	90	25.0	792	2950	65	298.64	500	Y2-4002-2 (IP23/6KV)	3.2	φ254
	150	41.7	720		75	392.16				
	180	50.0	684		74	453.10				
10	90	25.0	880	2950	65	331.83	630	Y2-4004-2 (IP23/6KV)	3.2	φ254
	150	41.7	800		75	435.73				
	180	50.0	760		74	503.44				

ZD、ZDG、ZDF、ZDY、ZMD 150-100型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-100



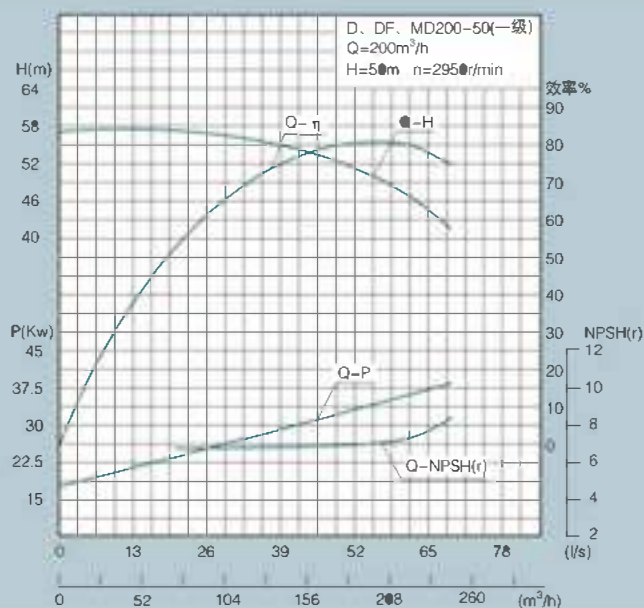
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia
	m ³ /h	L/s					功率 Power	型号 Type		
			kW		m	mm				
3	120	33.3	330	2950	59	137.09	200	Y2-315L ₂ -2	3.8	φ 289
	150	41.7	300		73	167.87			4.5	
	180	50.0	285		71	196.77			5.0	
4	120	33.3	440	2950	59	182.78	280	Y2-315L ₁ -2	3.8	φ 289
	150	41.7	400		73	223.83			4.5	
	180	50.0	380		71	262.36			5.0	
5	120	33.3	550	2950	59	228.48	355	Y2-3555-2 (IP23/6KV)	3.8	φ 289
	150	41.7	500		73	279.79			4.5	
	180	50.0	475		71	327.95			5.0	
6	120	33.3	660	2950	59	274.18	450	Y2-4001-2 (IP23/6KV)	3.8	φ 289
	150	41.7	600		73	335.75			4.5	
	180	50.0	570		71	392.54			5.0	
7	120	33.3	770	2950	59	319.87	500	Y2-4002-2 (IP23/6KV)	3.8	φ 289
	150	41.7	700		73	391.71			4.5	
	180	50.0	665		71	459.13			5.0	
8	120	33.3	880	2950	59	365.57	630	Y2-4002-2 (IP23/6KV)	3.8	φ 289
	150	41.7	800		73	447.67			4.5	
	180	50.0	760		71	524.72			5.0	
9	120	33.3	990	2950	59	411.27	630	Y2-4004-2 (IP23/6KV)	3.8	φ 289
	150	41.7	900		73	503.63			4.5	
	180	50.0	855		71	590.31			5.0	
10	120	33.3	1100	2950	59	456.96	710	Y2-4501-2 (IP23/6KV)	3.8	φ 289
	150	41.7	1000		73	559.58			4.5	
	180	50.0	950		71	655.9			5.0	

ZD、ZDG、ZDF、ZDY、ZMD 155-67型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 155-67



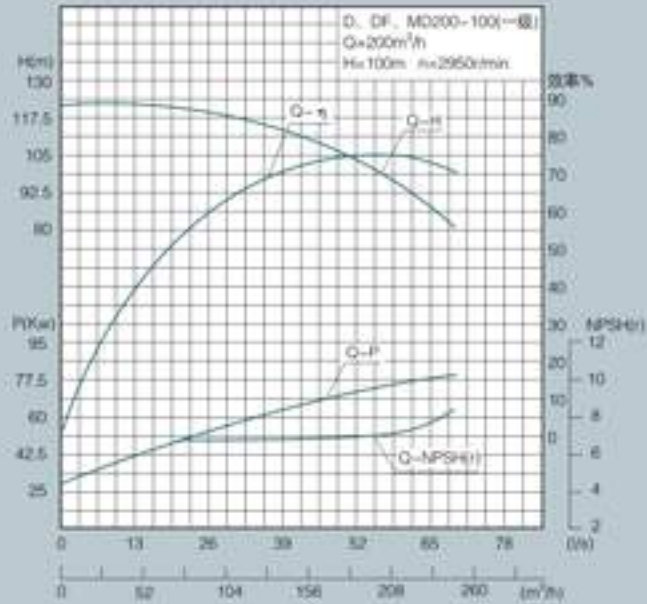
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH) m	叶轮名义直径 Impeller Dia mm
	m ³ /h	L/s					功率 Power kW	型号 Type		
2	100	27.8	152	2950	69	59.99	90	Y2-280M-2	3.2	φ 235
	155	43.1	134		79	71.59				
	185	51.4	118		77	77.20				
3	100	27.8	228	2950	69	89.98	132	Y2-315M-2	3.2	φ 235
	155	43.1	201		79	107.39				
	185	51.4	177		77	115.81				
4	100	27.8	304	2950	69	119.98	185	Y2-315L-2	3.2	φ 235
	155	43.1	268		79	143.19				
	185	51.4	236		77	154.41				
5	100	27.8	380	2950	69	149.97	200	Y2-355M-2	3.2	φ 235
	155	43.1	335		79	178.99				
	185	51.4	295		77	193.01				
6	100	27.8	456	2950	69	179.97	280	Y2-355L-2	3.2	φ 235
	155	43.1	402		79	214.79				
	185	51.4	354		77	231.62				
7	100	27.8	532	2950	69	209.97	315	Y2-355L-2	3.2	φ 235
	155	43.1	469		79	250.59				
	185	51.4	413		77	270.22				
8	100	27.8	608	2950	69	239.96	355	Y2-355-2 (6KV)	3.2	φ 235
	155	43.1	536		79	286.39				
	185	51.4	472		77	308.83				
9	100	27.8	684	2950	69	269.96	400	Y2-355-2 (IP23/6KV)	3.2	φ 235
	155	43.1	603		79	322.19				
	185	51.4	531		77	347.43				
10	100	27.8	760	2950	69	299.96	450	Y2-400-2 (IP23/6KV)	3.2	φ 235
	155	43.1	670		79	357.99				
	185	51.4	590		77	386.04				

ZD、ZDG、ZDF、ZDY、ZMD 200-50型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-50



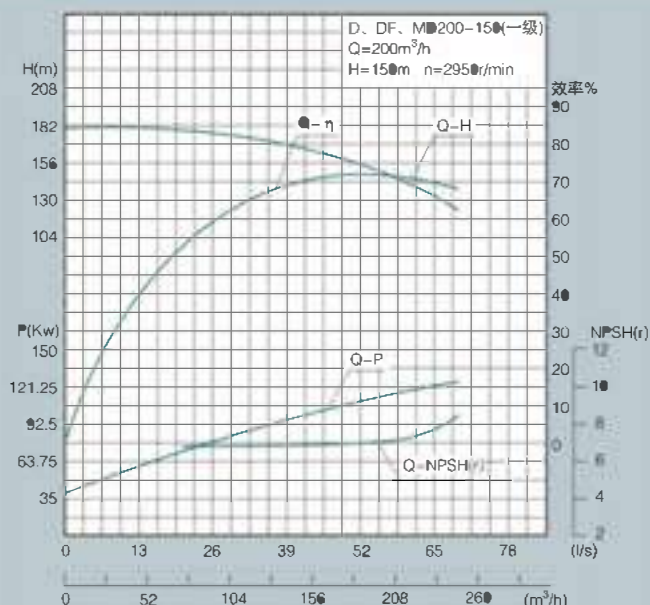
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽 蚀余量 (NPSH)r	叶轮名 义直径 Impeller Dia.
	m ³ /h	L/s					功率 Power kW	型号 Type		
			m	r/min	%	kW			m	mm
3	120	33.3	174	2950	79	71.97	132	Y2-315M-2	4.5	φ 213
	200	55.5	150		81	100.86			5.0	
	240	66.6	135		78	113.12			5.8	
4	120	33.3	232	2950	79	95.97	185	Y2-315L-2	4.5	φ 213
	200	55.5	200		81	134.48			5.0	
	240	66.6	180		78	150.82			5.8	
5	120	33.3	290	2950	79	121.50	200	Y2-315L ₂ -2	4.5	φ 213
	200	55.5	250		81	168.10			5.0	
	240	66.6	225		78	188.53			5.8	
6	120	33.3	348	2950	79	143.95	250	Y2-355M ₂ -2	4.5	φ 213
	200	55.5	300		81	201.72			5.0	
	240	66.6	270		78	226.24			5.8	
7	120	33.3	406	2950	79	167.94	280	Y2-355L ₁ -2	4.5	φ 213
	200	55.5	350		81	235.34			5.0	
	240	66.6	315		78	263.95			5.8	
8	120	33.3	464	2950	79	191.94	315	Y2-355L ₂ -2	4.5	φ 213
	200	55.5	400		81	268.96			5.0	
	240	66.6	360		78	301.65			5.8	
9	120	33.3	522	2950	79	215.93	355	Y2-3555-2 (6KV)	4.5	φ 213
	200	55.5	450		81	302.59			5.0	
	240	66.6	405		78	339.36			5.8	
10	120	33.3	580	2950	79	240.07	400	Y2-3556-2 (6KV)	4.5	φ 213
	200	55.5	500		81	336.42			5.0	
	240	66.6	455		78	381.50			5.8	

ZD、ZDG、ZDF、ZDY、ZMD 200-100型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-100



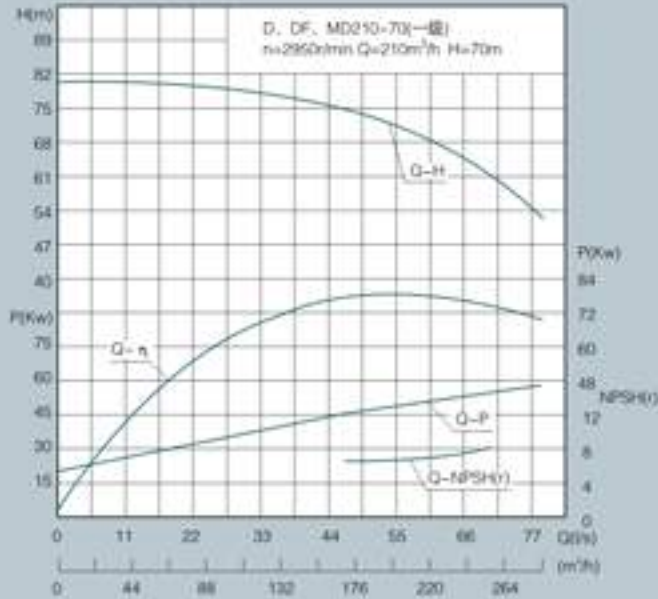
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH _r)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
2	150	41.7	226	2950	70	131.89	185	Y2-315L-2	3.5	φ290
	200	55.6	200		76	143.33				
	240	66.7	168		74	148.38				
3	150	41.7	339	2950	70	197.83	280	Y2-355L-2	3.5	φ290
	200	55.6	300		76	215.00				
	240	66.7	252		74	222.58				
4	150	41.7	452	2950	70	263.77	355	Y2-355S-2 (IP23/6KV)	3.5	φ290
	200	55.6	400		76	286.66				
	240	66.7	336		74	296.77				
5	150	41.7	565	2950	70	329.72	450	Y2-4001-2 (IP23/6KV)	3.5	φ290
	200	55.6	500		76	358.33				
	240	66.7	420		74	370.96				
6	150	41.7	678	2950	70	395.66	560	Y2-4003-2 (IP23/6KV)	3.5	φ290
	200	55.6	600		76	430.00				
	240	66.7	504		74	445.15				
7	150	41.7	791	2950	70	461.60	630	Y2-4004-2 (IP23/6KV)	3.5	φ290
	200	55.6	700		76	501.66				
	240	66.7	588		74	519.34				
8	150	41.7	904	2950	70	527.54	710	Y2-4501-2 (IP23/6KV)	3.5	φ290
	200	55.6	800		76	573.33				
	240	66.7	672		74	593.53				
9	150	41.7	1017	2950	70	593.49	800	Y2-4502-2 (IP23/6KV)	3.5	φ290
	200	55.6	900		76	644.99				
	240	66.7	756		74	667.73				
10	150	41.7	1130	2950	70	659.43	900	Y2-4503-2 (IP23/6KV)	3.5	φ290
	200	55.6	1000		76	716.66				
	240	66.7	840		74	741.92				

ZD、ZDG、ZDF、ZDY、ZMD 200-150型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-150



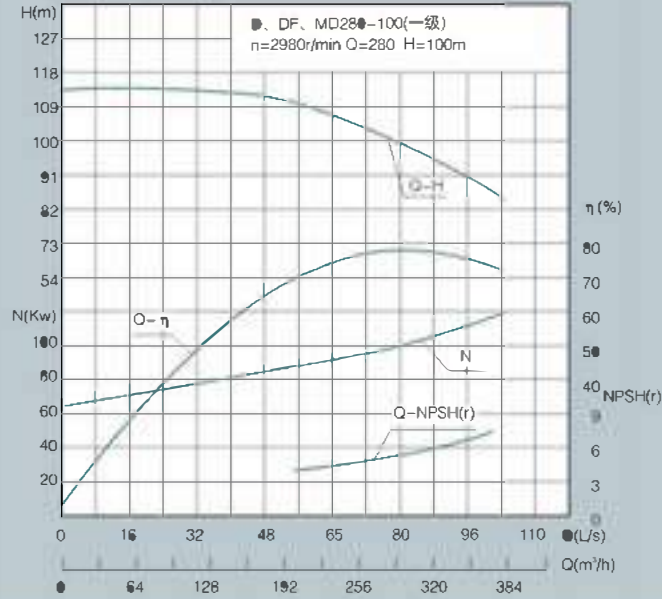
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH) _r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	150	41.7	517	2950	65	325.33	400	Y2-3556-2 (IP23/6KV)	2.5	φ 343
	200	55.6	450		72	340.41			2.5	
	240	66.7	378		70	352.94			3.0	
4	150	41.7	690	2950	65	433.63	560	Y2-4003-2 (IP23/6KV)	2.5	φ 343
	200	55.6	600		72	453.89			2.5	
	240	66.7	504		70	470.59			3.0	
5	150	41.7	862	2950	65	542.04	710	Y2-4501-2 (IP23/6KV)	2.5	φ 343
	200	55.6	750		72	567.36			2.5	
	240	66.7	630		70	588.24			3.0	
6	150	41.7	1035	2950	65	650.45	900	Y2-4503-2 (IP23/6KV)	2.5	φ 343
	200	55.6	900		72	680.83			2.5	
	240	66.7	756		70	705.88			3.0	
7	150	41.7	1207	2950	65	758.86	1000	Y2-4504-2 (IP23/6KV)	2.5	φ 343
	200	55.6	1050		72	794.30			2.5	
	240	66.7	882		70	823.53			3.0	
8	150	41.7	1380	2950	65	867.27	1120	Y2-5001-2 (IP23/6KV)	2.5	φ 343
	200	55.6	1200		72	907.77			2.5	
	240	66.7	1008		70	941.18			3.0	
9	150	41.7	1552	2950	65	975.68	1250	Y2-5002-2 (IP23/6KV)	2.5	φ 343
	200	55.6	1350		72	1021.24			2.5	
	240	66.7	1134		70	1058.82			3.0	
10	150	41.7	1725	2950	65	1084.09	1400	Y2-5003-2 (IP23/6KV)	2.5	φ 343
	200	55.6	1500		72	1134.71			2.5	
	240	66.7	1260		70	1176.47			3.0	

ZD、ZDG、ZDF、ZDY、ZMD 210-70型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 210-70



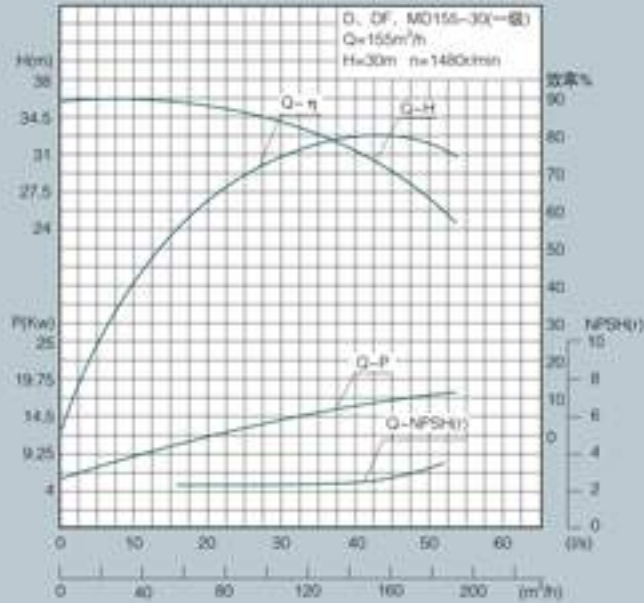
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSHr) m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	160	44.44	222	2950	77	125.70	200	Y2-315L ₂ -2	6.2	φ252
	210	58.33	210		79.2	151.73				
	260	72.22	186		74	178.08				
4	160	44.44	292	2950	77	165.34	280	Y2-355L ₁ -2	6.2	φ252
	210	58.33	280		79.2	202.31				
	260	72.22	256		74	245.10				
5	160	44.44	362	2950	77	204.98	355	Y2-3555-2 (IP23/6KV)	6.2	φ252
	210	58.33	350		79.2	252.89				
	260	72.22	326		74	312.12				
6	160	44.44	432	2950	77	244.61	450	Y2-4001-2 (IP23/6KV)	6.2	φ252
	210	58.33	420		79.2	303.47				
	260	72.22	396		74	379.14				
7	160	44.44	502	2950	77	284.25	500	Y2-4002-2 (IP23/6KV)	6.2	φ252
	210	58.33	490		79.2	354.04				
	260	72.22	466		74	446.16				
8	160	44.44	572	2950	77	323.89	560	Y2-4003-2 (IP23/6KV)	6.2	φ252
	210	58.33	560		79.2	404.62				
	260	72.22	536		74	513.18				
9	160	44.44	642	2950	77	363.52	630	Y2-4004-2 (IP23/6KV)	6.2	φ252
	210	58.33	630		79.2	455.20				
	260	72.22	606		74	580.20				
10	160	44.44	712	2950	77	403.16	710	Y2-4501-2 (IP23/6KV)	6.2	φ252
	210	58.33	700		79.2	385.35				
	260	72.22	676		74	647.22				

ZD、ZDG、ZDF、ZDY、ZMD 280-100型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 280-100



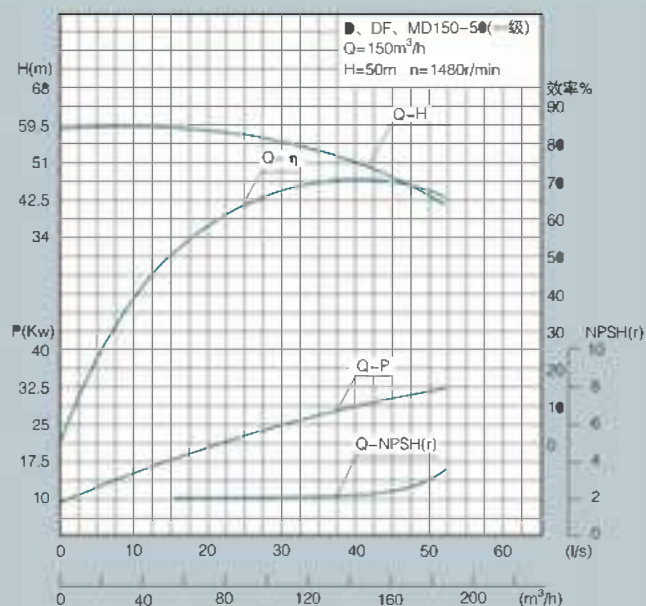
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH) _r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
4	196	54.4	440	2980	69	340	500	Y2-4002-2	4.0	φ 290
	280	77.8	400		78.5	389			5.5	
	336	93.3	368		77	437			6.5	
5	196	54.4	550	2980	69	425	630	Y2-4004-2	4.0	φ 290
	280	77.8	500		78.5	486			5.5	
	336	93.3	460		77	547			6.5	
6	196	54.4	660	2980	69	511	710	Y2-4501-2	4.0	φ 290
	280	77.8	600		78.5	583			5.5	
	336	93.3	552		77	656			6.5	
7	196	54.4	770	2980	69	596	900	Y2-4503-2	4.0	φ 290
	280	77.8	700		78.5	680			5.5	
	336	93.3	644		77	765			6.5	
8	196	54.4	880	2980	69	681	1000	Y2-4504-2	4.0	φ 290
	280	77.8	800		78.5	777			5.5	
	336	93.3	736		77	875			6.5	
9	196	54.4	990	2980	69	766	1120	Y2-5001-2	4.0	φ 290
	280	77.8	900		78.5	874			5.5	
	336	93.3	828		77	984			6.5	
10	196	54.4	1100	2980	69	851	1250	Y2-5002-2	4.0	φ 290
	280	77.8	1000		78.5	971			5.5	
	336	93.3	920		77	1093			6.5	

ZD、ZDG、ZDF、ZDY、ZMD 155-30型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 155-30



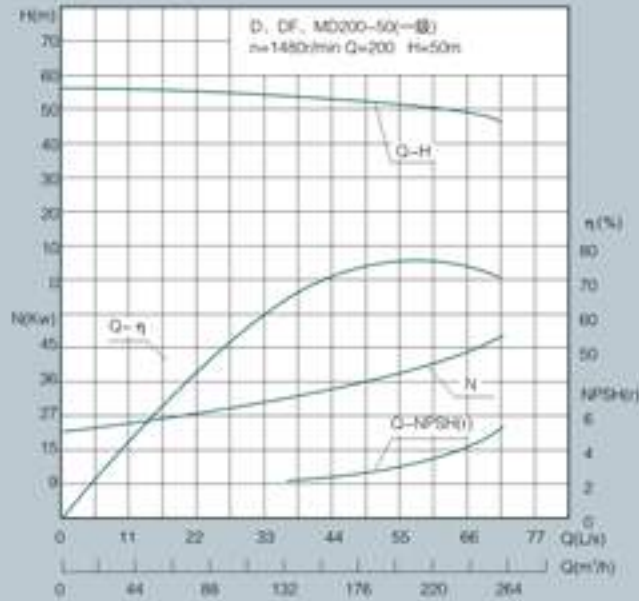
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	r/min	%	kW			kW	m
2	119	33.0	64	1480	75	27.65	45	Y2-225M-4	3.2	φ305
	155	43.0	60		80	31.65			3.9	
	190	52.8	54		82	34.07			4.8	
3	119	33.0	96	1480	75	41.48	75	Y2-280S-4	3.2	φ305
	155	43.0	90		80	47.48			3.9	
	190	52.8	81		82	51.11			4.8	
4	119	33.0	128	1480	75	55.30	90	Y2-280M-4	3.2	φ305
	155	43.0	120		80	63.31			3.9	
	190	52.8	108		82	68.14			4.8	
5	119	33.0	160	1480	75	69.13	110	Y2-315S-4	3.2	φ305
	155	43.0	150		80	79.14			3.9	
	190	52.8	135		82	85.18			4.8	
6	119	33.0	192	1480	75	82.96	132	Y2-315M-4	3.2	φ305
	155	43.0	180		80	94.97			3.9	
	190	52.8	162		82	102.22			4.8	
7	119	33.0	224	1480	75	96.79	160	Y2-315L ₁ -4	3.2	φ305
	155	43.0	210		80	110.80			3.9	
	190	52.8	189		82	119.26			4.8	
8	119	33.0	256	1480	75	110.61	160	Y2-315L ₁ -4	3.2	φ305
	155	43.0	240		80	126.63			3.9	
	190	52.8	216		82	136.29			4.8	
9	119	33.0	288	1480	75	124.44	200	Y2-315L ₂ -4	3.2	φ305
	155	43.0	270		80	142.46			3.9	
	190	52.8	243		82	153.33			4.8	
10	119	33.0	320	1480	75	138.27	200	Y2-315L ₂ -4	3.2	φ305
	155	43.0	300		80	158.29			3.9	
	190	52.8	270		82	170.37			4.8	

ZD、ZDG、ZDF、ZDY、ZMD 150-50型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-50



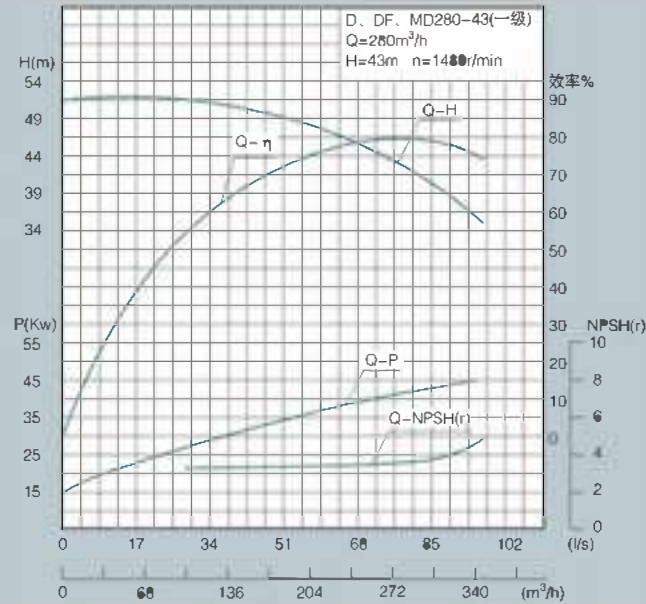
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	mm						
3	120	33.3	165.0	1480	70	77.03	110	Y2-315S-4	3.2	φ 397
	150	41.7	150.0		71	86.30			5.0	
	180	50.0	127.5		69	90.58			6.6	
4	120	33.3	220.0	1480	70	102.71	160	Y2-315L ₁ -4	3.2	φ 397
	150	41.7	200.0		71	115.07			5.0	
	180	50.0	170.0		69	120.77			6.6	
5	120	33.3	275.0	1480	70	128.38	185	Y2-315L ₂ -4	3.2	φ 397
	150	41.7	250.0		71	143.84			5.0	
	180	50.0	212.5		69	150.97			6.6	
6	120	33.3	330.0	1480	70	154.06	220	Y2-355M ₁ -4	3.2	φ 397
	150	41.7	300.0		71	172.60			5.0	
	180	50.0	255.0		69	181.16			6.6	
7	120	33.3	385.0	1480	70	179.74	250	Y2-355M ₂ -4	3.2	φ 397
	150	41.7	350.0		71	201.37			5.0	
	180	50.0	297.5		69	211.35			6.6	
8	120	33.3	440.0	1480	70	205.42	280	Y2-355L ₁ -4	3.2	φ 397
	150	41.7	400.0		71	230.14			5.0	
	180	50.0	340.0		69	241.55			6.6	
9	120	33.3	495.0	1480	70	231.09	315	Y2-355L ₂ -4	3.2	φ 397
	150	41.7	450.0		71	258.91			5.0	
	180	50.0	382.5		69	271.74			6.6	
10	120	33.3	550.0	1480	70	256.77	355	Y2-4001-4 (IP23/6KV)	3.2	φ 397
	150	41.7	500.0		71	287.67			5.0	
	180	50.0	425.0		69	301.93			6.6	

ZD、ZDG、ZDF、ZDY、ZMD 200-50型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-50



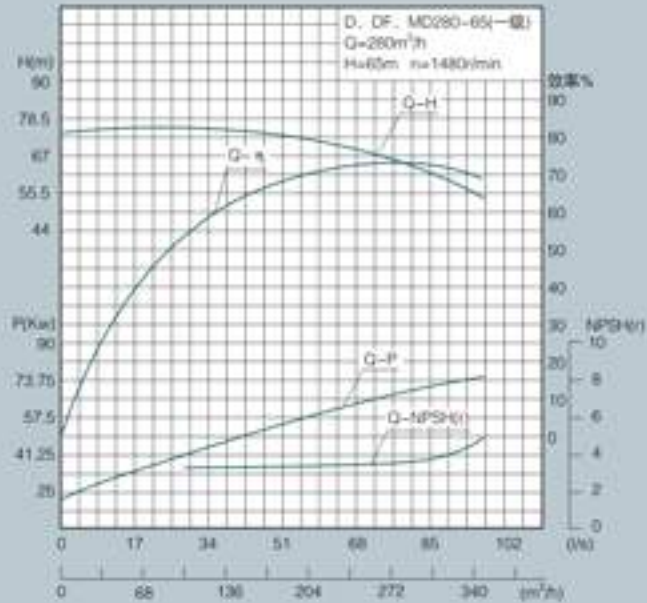
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH) m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
4	132	36.7	218	1480	63	124.2	185	Y2-315L-4	2.3	φ385
	200	55.6	208		75	151.1				
	240	66.7	198		74	175.2				
5	132	36.7	272	1480	63	155.2	250	Y2-355M2-4	2.3	φ385
	200	55.6	260		75	188.8				
	240	66.7	248		74	219.0				
6	132	36.7	326	1480	63	186.2	280	Y2-355L-4	2.3	φ385
	200	55.6	312		75	226.6				
	240	66.7	298		74	262.9				
7	132	36.7	381	1480	63	217.3	315	Y2-355L2-4	2.3	φ385
	200	55.6	364		75	264.3				
	240	66.7	347		74	306.7				
8	132	36.7	435	1480	63	248.3	355	Y2-4001-4	2.3	φ385
	200	55.6	416		75	302.1				
	240	66.7	397		74	350.5				
9	132	36.7	490	1480	63	279.4	400	Y2-3556-4	2.3	φ385
	200	55.6	468		75	339.9				
	240	66.7	445		74	394.3				
10	132	36.7	544	1480	63	310.4	450	Y2-4001-4	2.3	φ385
	200	55.6	520		75	377.6				
	240	66.7	496		74	438.1				

ZD、ZDG、ZDF、ZDY、ZMD 280-43型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 280-43



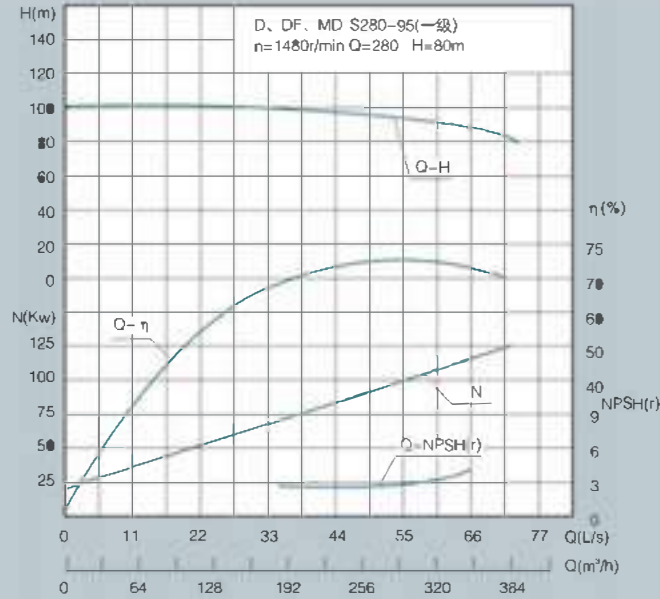
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	r/min	%	kW			kW	m
2	185	51.4	94	1480	75	63.14	110	Y2-315S-4	2.5	φ 360
	280	77.8	86		80	81.97			4.0	
	335	93.1	76		81	85.59			5.2	
3	185	51.4	141	1480	75	94.71	160	Y2-315L ₁ -4	2.5	φ 360
	280	77.8	129		80	122.95			4.0	
	335	93.1	114		81	128.69			5.2	
4	185	51.4	188	1480	75	126.28	200	Y2-315L ₂ -4	2.5	φ 360
	280	77.8	172		80	163.94			4.0	
	335	93.1	152		81	171.19			5.2	
5	185	51.4	235	1480	75	157.86	250	Y2-355M-4	2.5	φ 360
	280	77.8	215		80	204.92			4.0	
	335	93.1	190		81	213.99			5.2	
6	185	51.4	282	1480	75	189.43	280	Y2-355L ₁ -4	2.5	φ 360
	280	77.8	258		80	245.91			4.0	
	335	93.1	228		81	256.79			5.2	
7	185	51.4	329	1480	75	221.00	355	Y2-355L ₂ -4	2.5	φ 360
	280	77.8	301		80	286.90			4.0	
	335	93.1	266		81	299.59			5.2	
8	185	51.4	376	1480	75	252.57	450	Y2-4002-4 (IP23/6KV)	2.5	φ 360
	280	77.8	344		80	327.88			4.0	
	335	93.1	304		81	342.39			5.2	
9	185	51.4	423	1480	75	284.15	450	Y2-4003-4 (IP23/6KV)	2.5	φ 360
	280	77.8	387		80	368.87			4.0	
	335	93.1	342		81	385.19			5.2	
10	185	51.4	470	1480	75	341.8	500	Y2-4004-4 (IP23/6KV)	2.5	φ 360
	280	77.8	430		80	417.5			4.0	
	335	93.1	380		81	450.5			5.2	

ZD、ZDG、ZDF、ZDY、ZMD 280-65型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 280-65



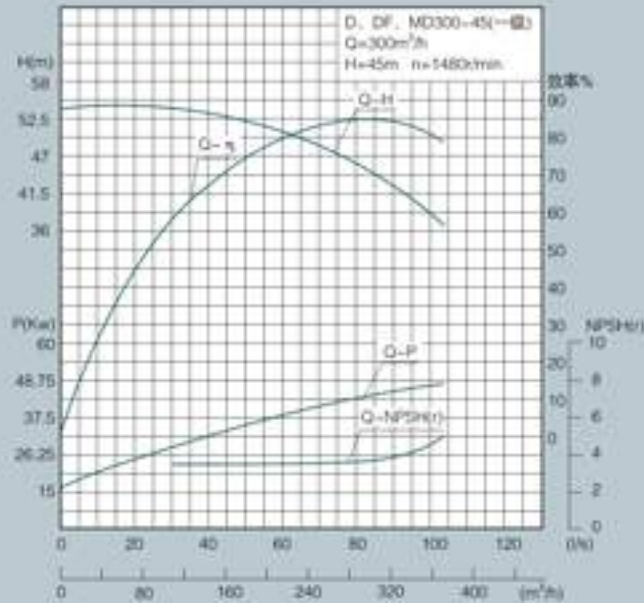
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH)r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	185	51.4	204	1480	61	168.48	280	Y2-3555-4 (IP23/6KV)	2.8	φ430
	280	77.8	195		73	203.68				
	335	93.1	186		74	229.31				
4	185	51.4	272	1480	61	224.65	355	Y2-4001-4 (IP23/6KV)	2.8	φ430
	280	77.8	260		73	271.58				
	335	93.1	248		74	305.74				
5	185	51.4	340	1480	61	280.81	450	Y2-4003-4 (IP23/6KV)	2.8	φ430
	280	77.8	325		73	339.48				
	335	93.1	310		74	382.18				
6	185	51.4	408	1480	61	336.97	500	Y2-4004-4 (IP23/6KV)	2.8	φ430
	280	77.8	390		73	407.37				
	335	93.1	372		74	458.62				
7	185	51.4	476	1480	61	393.13	630	Y2-4004-4 (IP23/6KV)	2.8	φ430
	280	77.8	455		73	475.27				
	335	93.1	434		74	535.05				
8	185	51.4	544	1480	61	449.30	710	Y2-4501-4 (IP23/6KV)	2.8	φ430
	280	77.8	520		73	543.17				
	335	93.1	496		74	611.49				
9	185	51.4	612	1480	61	505.46	800	Y2-4503-4 (IP23/6KV)	2.8	φ430
	280	77.8	585		73	611.06				
	335	93.1	558		74	687.93				
10	185	51.4	680	1480	61	561.62	900	Y2-4504-4 (IP23/6KV)	2.8	φ430
	280	77.8	650		73	678.96				
	335	93.1	620		74	764.36				

ZD、ZDG、ZDF、ZDY、ZMD S280-95型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD S280-95



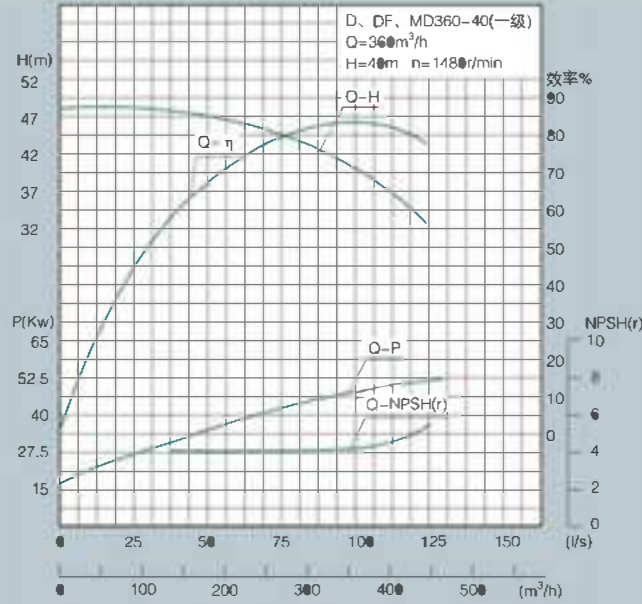
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽 蚀余量 (NPSH)r	叶轮名 义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	r/min	%	kW			kW	m
3	180	50.0	272.7	1480	68	196.6	355	Y2-355-4	2.5	φ 526
	280	77.8	257.0		72.5	270.3			2.7	
	335	93.1	244.0		72	309.2			3.7	
4	180	50.0	373.7	1480	68	269.4	450	Y2-4001-4	2.5	φ 526
	280	77.8	352.0		72.5	370.2			2.7	
	335	93.1	334.5		72	423.8			3.7	
5	180	50.0	437.7	1480	68	341.5	560	Y2-4003-4	2.5	φ 526
	280	77.8	447.0		72.5	470.1			2.7	
	335	93.1	425.0		72	538.5			3.7	
6	180	50.0	575.7	1480	68	415.0	710	Y2-4501-4	2.5	φ 526
	280	77.8	524.0		72.5	570.1			2.7	
	335	93.1	515.5		72	653.2			3.7	
7	180	50.0	676.7	1480	68	487.8	800	Y2-4502-4	2.5	φ 526
	280	77.8	367.0		72.5	670.0			2.7	
	335	93.1	606.0		72	767.9			3.7	
8	180	50.0	777.7	1480	68	560.6	900	Y2-4503-4	2.5	φ 526
	280	77.8	732.0		72.5	769.9			2.7	
	335	93.1	696.5		72	882.5			3.7	
9	180	50.0	878.7	1480	68	633.4	1000	Y2-4504-4	2.5	φ 526
	280	77.8	827.0		72.5	869.8			2.7	
	335	93.1	787.0		72	997.2			3.7	
10	180	50.0	979.7	1480	68	706.2	1120	Y2-5001-4	2.5	φ 526
	280	77.8	922.0		72.5	969.7			2.7	
	335	93.1	877.5		72	1111.9			3.7	

ZD、ZDG、ZDF、ZDY、ZMD 300-45型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 300-45



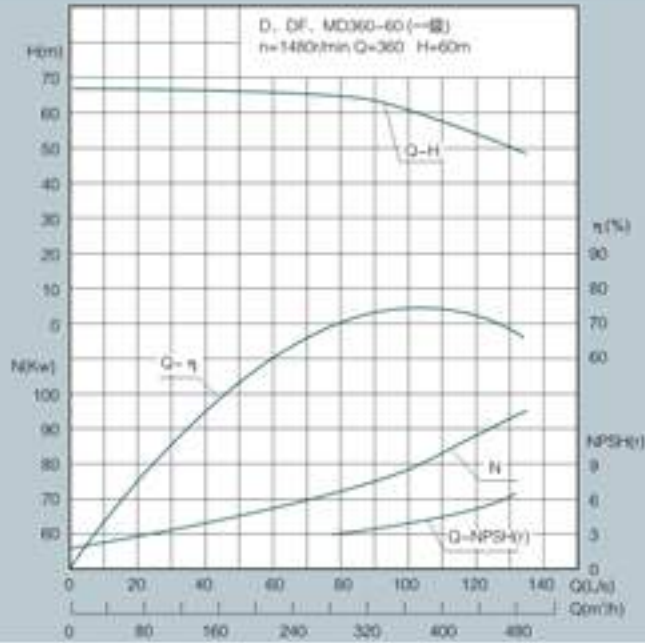
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电动机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	r/min	%	kW			kW	m
2	200	55.6	97	1480	78	67.73	110	Y2-315S-4	2.5	φ360
	300	83.3	90		83	88.58			4.0	
	350	97.2	80		85	89.70			5.2	
3	200	55.6	148	1480	78	103.34	160	Y2-315L-4	2.5	φ360
	300	83.3	135		83	132.88			4.0	
	350	97.2	121		85	135.68			5.2	
4	200	55.6	197	1480	78	137.56	200	Y2-315L-4	2.5	φ360
	300	83.3	180		83	177.17			4.0	
	350	97.2	162		85	181.66			5.2	
5	200	55.6	246	1480	78	171.77	250	Y2-355M-4	2.5	φ360
	300	83.3	225		83	221.47			4.0	
	350	97.2	202		85	226.51			5.2	
6	200	55.6	297	1480	78	207.39	315	Y2-355L-4	2.5	φ360
	300	83.3	270		83	265.76			4.0	
	350	97.2	243		85	272.49			5.2	
7	200	55.6	346	1480	78	241.60	355	Y2-4001-4 (IP23/6KV)	2.5	φ360
	300	83.3	315		83	310.06			4.0	
	350	97.2	283		85	317.34			5.2	
8	200	55.6	396	1480	78	276.52	400	Y2-4002-4 (IP23/6KV)	2.5	φ360
	300	83.3	360		83	354.35			4.0	
	350	97.2	324		85	363.32			5.2	
9	200	55.6	445	1480	78	310.73	450	Y2-4003-4 (IP23/6KV)	2.5	φ360
	300	83.3	405		83	398.65			4.0	
	350	97.2	364		85	408.17			5.2	

ZD、ZDG、ZDF、ZDY、ZMD 360-40型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 360-40



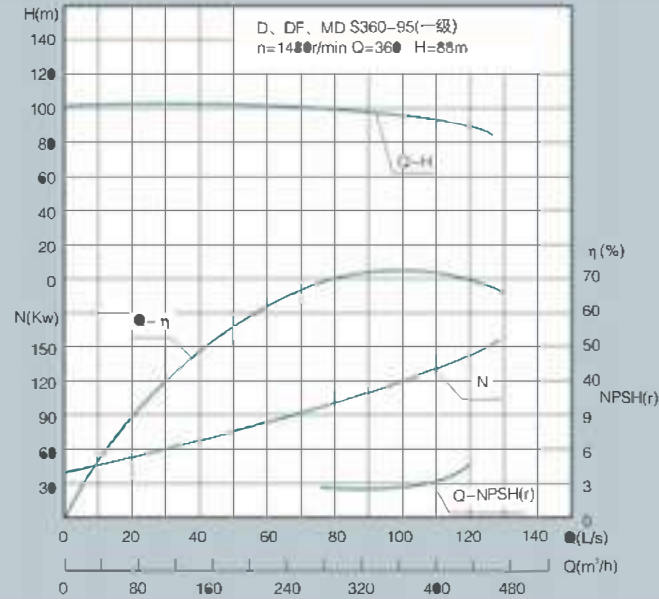
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff. η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH)r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	300	83.3	126.0	1480	81	127.08	185	Y2-315L2-4	4.65	φ 360
	360	100	120.0		84	140.05			4.7	
	440	122.2	106.5		82	155.62			5.4	
4	300	83.3	168.0	1480	81	169.45	250	Y2-355M2-4	81	φ 360
	360	100	160.0		84	186.74			84	
	440	122.2	142.0		82	207.50			82	
5	300	83.3	210.0	1480	81	211.81	315	Y2-355L2-4	81	φ 360
	360	100	200.0		84	233.42			84	
	440	122.2	177.5		82	259.37			82	
6	300	83.3	252.0	1480	81	254.17	400	Y2-3556-4 (IP23/6KV)	81	φ 360
	360	100	240.0		84	288.11			84	
	440	122.2	213.0		82	311.25			82	
7	300	83.3	294.0	1480	81	296.53	450	Y2-4002-4 (IP23/6KV)	81	φ 360
	360	100	280.0		84	326.79			84	
	440	122.2	248.5		82	363.13			82	
8	300	83.3	336.0	1480	81	338.90	500	Y2-4003-4 (IP23/6KV)	81	φ 360
	360	100	320.0		84	373.48			84	
	440	122.2	284.0		82	415.00			82	
9	300	83.3	378.0	1480	81	381.26	560	Y2-4004-4 (IP23/6KV)	81	φ 360
	360	100	360.0		84	420.16			84	
	440	122.2	319.5		82	466.88			82	
10	300	83.3	420.0	1480	81	423.62	630	Y2-4501-4 (IP23/6KV)	81	φ 360
	360	100	400.0		84	466.85			84	
	440	122.2	355.0		82	518.75			82	

ZD、ZDG、ZDF、ZDY、ZMD 360-60型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 360-60



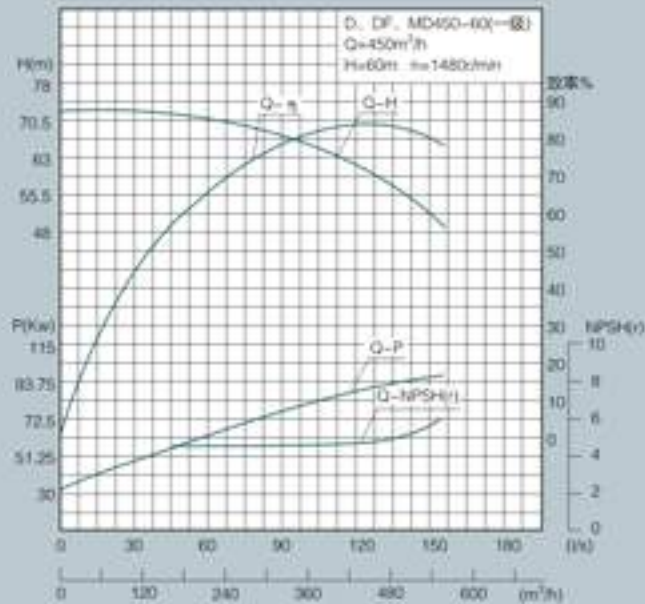
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power kW	型号 Type		
			m	r/min	%	kW			m	mm
4	300	83.3	256	1480	72	290.4	400	Y2-3556-4	3.1	φ 430
	360	100.0	240		74.5	315.8			4.0	
	440	122.2	210		71	354.3			5.3	
5	300	83.3	320	1480	72	363.0	500	Y2-4002-4	3.1	φ 430
	360	100.0	300		74.5	394.8			4.0	
	440	122.2	262		71	442.9			5.3	
6	300	83.3	384	1480	72	435.6	560	Y2-4003-4	3.1	φ 430
	360	100.0	360		74.5	473.7			4.0	
	440	122.2	315		71	531.5			5.3	
7	300	83.3	448	1480	72	508.1	710	Y2-4501-4	3.1	φ 430
	360	100.0	420		74.5	552.7			4.0	
	440	122.2	367		71	620.1			5.3	
8	300	83.3	512	1480	72	580.7	800	Y2-4502-4	3.1	φ 430
	360	100.0	480		74.5	631.7			4.0	
	440	122.2	420		71	708.7			5.3	
9	300	83.3	576	1480	72	654.3	900	Y2-4503-4	3.1	φ 430
	360	100.0	540		74.5	710.6			4.0	
	440	122.2	472		71	797.3			5.3	
10	300	83.3	640	1480	72	725.9	1000	Y2-4504-4	3.1	φ 430
	360	100.0	600		74.5	789.6			4.0	
	440	122.2	525		71	885.9			5.3	

ZD、ZDG、ZDF、ZDY、ZMD S360-95型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD S360-95



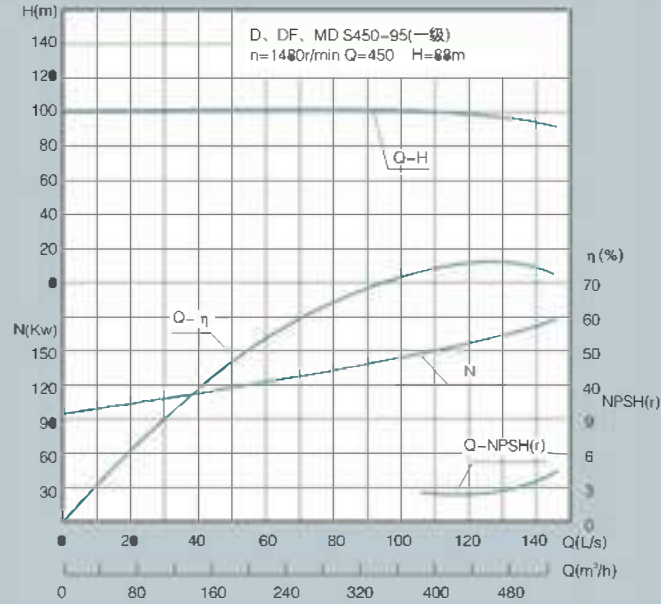
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH) _r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power kW	型号 Type		
			m	r/min	%	kW			m	mm
3	280	77.7	272.7	1480	70	297.1	400	Y2-3556-4	2.6	φ 534
	360	100.0	257.0		73	245.2			2.8	
	410	113.8	244.0		71	407.1			3.8	
4	280	77.7	373.7	1480	70	472.7	560	Y2-4003-4	2.6	φ 534
	360	100.0	352.0		73	526.0			2.8	
	410	113.8	334.5		71	516.0			3.8	
5	280	77.7	437.7	1480	70	600.3	710	Y2-4501-4	2.6	φ 534
	360	100.0	447.0		73	668.4			2.8	
	410	113.8	425.0		71	627.1			3.8	
6	280	77.7	575.7	1480	70	727.9	900	Y2-4503-4	2.6	φ 534
	360	100.0	524.0		73	810.7			2.8	
	410	113.8	515.5		71	737.1			3.8	
7	280	77.7	676.7	1480	70	855.5	1000	Y2-4504-4	2.6	φ 534
	360	100.0	367.0		73	953.0			2.8	
	410	113.8	606.0		71	847.2			3.8	
8	280	77.7	777.7	1480	70	983.1	1120	Y2-5001-4	2.6	φ 534
	360	100.0	732.0		73	1095.3			2.8	
	410	113.8	696.5		71	957.2			3.8	
9	280	77.7	878.7	1480	70	1110.7	1400	Y2-5003-4	2.6	φ 534
	360	100.0	827.0		73	1237.6			2.8	
	410	113.8	787.0		71	1067.2			3.8	
10	280	77.7	979.7	1480	70	1238.2	1400	Y2-5007-7	2.6	φ 534
	360	100.0	922.0		73	1380.0			2.8	
	410	113.8	877.5		71	1177.2			3.8	

ZD、ZDG、ZDF、ZDY、ZMD 450-60型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 450-60



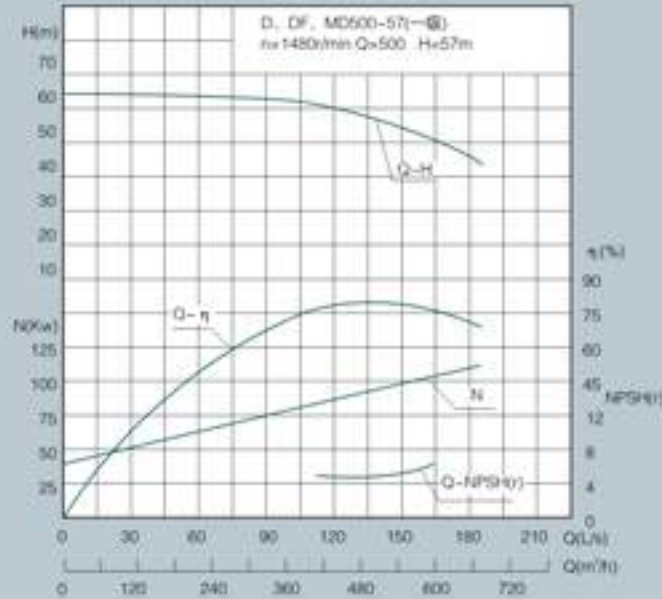
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH _r)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	r/min	%	kW			kW	m
2	335	93.1	130	1480	76	156.05	250	Y2-3554-4 (IP23/6KV)	4.1	φ430
	450	125.0	120		84	175.07			5.2	
	500	138.9	113		83	185.38			6.3	
3	335	93.1	195	1480	76	234.07	355	Y2-4001-4 (IP23/6KV)	4.1	φ430
	450	125.0	180		84	262.60			5.2	
	500	138.9	171		83	280.53			6.3	
4	335	93.1	260	1480	76	312.10	400	Y2-4002-4 (IP23/6KV)	4.1	φ430
	450	125.0	240		84	350.14			5.2	
	500	138.9	228		83	374.04			6.3	
5	335	93.1	325	1480	76	390.13	500	Y2-4004-4 (IP23/6KV)	4.1	φ430
	450	125.0	300		84	437.67			5.2	
	500	138.9	285		83	467.55			6.3	
6	335	93.1	390	1480	76	468.15	630	Y2-4501-4 (IP23/6KV)	4.1	φ430
	450	125.0	360		84	525.21			5.2	
	500	138.9	342		83	561.06			6.3	
7	335	93.1	455	1480	76	546.18	710	Y2-4502-4 (IP23/6KV)	4.1	φ430
	450	125.0	420		84	612.74			5.2	
	500	138.9	399		83	654.57			6.3	
8	335	93.1	520	1480	76	624.21	800	Y2-4503-4 (IP23/6KV)	4.1	φ430
	450	125.0	480		84	700.28			5.2	
	500	138.9	456		83	748.09			6.3	
9	335	93.1	585	1480	76	702.23	900	Y2-4504-4 (IP23/6KV)	4.1	φ430
	450	125.0	540		84	787.81			5.2	
	500	138.9	513		83	841.60			6.3	
10	335	93.1	650	1480	76	780.26	1000	Y2-5001-4 (IP23/6KV)	4.1	φ430
	450	125.0	600		84	875.35			5.2	
	500	138.9	570		83	935.11			6.3	

ZD、ZDG、ZDF、ZDY、ZMD S450-95型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD S450-95



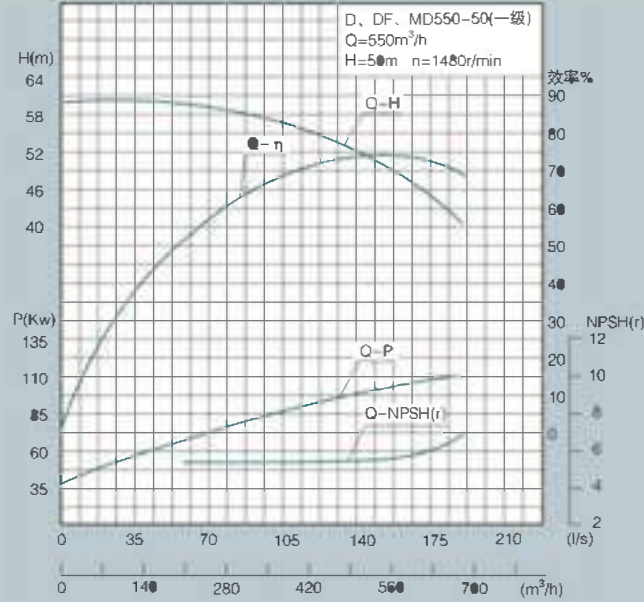
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH)r	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
3	385	106.9	272.7	1480	72	397.1	500	Y2-4002-4	2.8	φ 534
	450	125.0	257.0		75	419.9			3.0	
	515	143.1	244.0		73	468.6			4.0	
4	385	106.9	373.7	1480	72	544.2	710	Y2-4501-4	2.8	φ 534
	450	125.0	352.0		75	575.2			3.0	
	515	143.1	334.5		73	642.7			4.0	
5	385	106.9	437.7	1480	72	689.8	900	Y2-4503-4	2.8	φ 534
	450	125.0	447.0		75	730.4			3.0	
	515	143.1	425.0		73	816.5			4.0	
6	385	106.9	575.7	1480	72	838.3	1000	Y2-4504-4	2.8	φ 534
	450	125.0	524.0		75	885.6			3.0	
	515	143.1	515.5		73	990.4			4.0	
7	385	106.9	676.7	1480	72	985.4	1250	Y2-5002-4	2.8	φ 534
	450	125.0	367.0		75	1040.8			3.0	
	515	143.1	606.0		73	1164.3			4.0	
8	385	106.9	777.7	1480	72	1132.5	1400	Y2-5003-4	2.8	φ 534
	450	125.0	732.0		75	1196.1			3.0	
	515	143.1	696.5		73	1138.1			4.0	
9	385	106.9	878.7	1480	72	1279.6	1600	Y2-5601-4	2.8	φ 534
	450	125.0	827.0		75	1351.3			3.0	
	515	143.1	787.0		73	1512.0			4.0	
10	385	106.9	979.7	1480	72	1426.7	1800	Y2-5602-4	2.8	φ 534
	450	125.0	922.0		75	1506.5			3.0	
	515	143.1	877.5		73	1685.9			4.0	

ZD、ZDG、ZDF、ZDY、ZMD 500-57型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 500-57



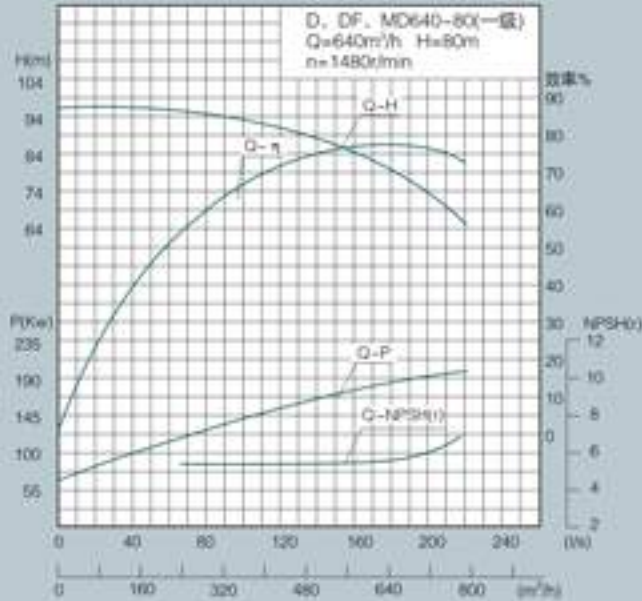
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
3	450	125.0	180	1480	81	272.6	355	Y2-3555-4	4.4	φ430
	500	138.9	171		82	284.1				
	550	152.7	162		80	303.7				
4	450	125.0	240	1480	81	363.5	450	Y2-4001-4	4.4	φ430
	500	138.9	228		82	378.8				
	550	152.7	216		80	404.9				
5	450	125.0	300	1480	81	454.4	630	Y2-4004-4	4.4	φ430
	500	138.9	285		82	473.5				
	550	152.7	270		80	506.3				
6	450	125.0	360	1480	81	545.3	710	Y2-4501-4	4.4	φ430
	500	138.9	342		82	568.2				
	550	152.7	324		80	607.4				
7	450	125.0	420	1480	81	636.1	800	Y2-4502-4	4.4	φ430
	500	138.9	399		82	662.9				
	550	152.7	378		80	708.6				
8	450	125.0	480	1480	81	727.0	1000	Y2-4504-4	4.4	φ430
	500	138.9	456		82	757.6				
	550	152.7	432		80	809.8				
9	450	125.0	540	1480	81	817.9	1120	Y2-5001-4	4.4	φ430
	500	138.9	513		82	852.3				
	550	152.7	486		80	911.0				
10	450	125.0	600	1480	81	908.8	1250	Y2-5002-4	4.4	φ430
	500	138.9	570		82	947.0				
	550	152.7	540		80	1012.3				

ZD、ZDG、ZDF、ZDY、ZMD 550-50型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 550-50



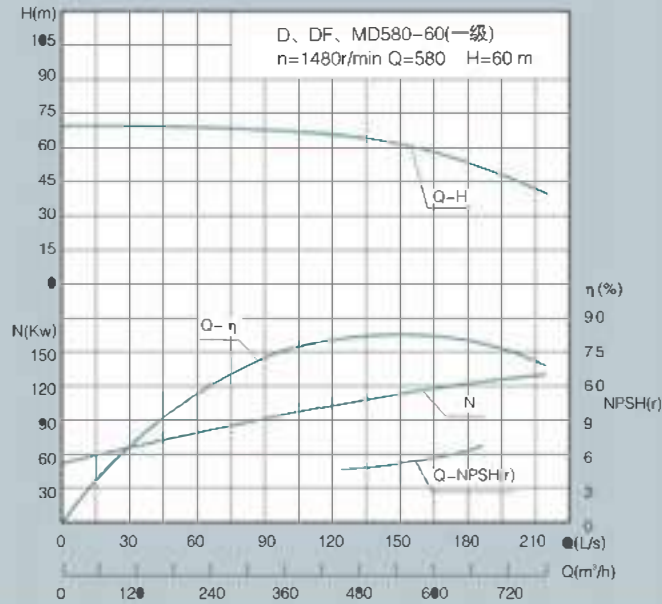
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH) _r	叶轮名义直径 Impeller Dia.
	m ³ /h	L/s					功率 Power kW	型号 Type		
			m	r/min	%	kW			m	mm
2	450	125.0	120	1480	83	177.18	220	Y2-355M1-4 (IP23/6KV)	5.2	φ 410
	550	152.7	100		84	178.31			5.8	
	590	163.9	90		80	180.76			6.5	
3	450	125.0	180	1480	83	265.77	355	Y2-4001-4 (IP23/6KV)	5.2	φ 410
	550	152.7	150		84	267.47			5.8	
	590	163.9	135		80	271.14			6.5	
4	450	125.0	240	1480	83	354.36	450	Y2-4003-4 (IP23/6KV)	5.2	φ 410
	550	152.7	200		84	356.62			5.8	
	590	163.9	180		80	361.52			6.5	
5	450	125.0	300	1480	83	442.95	560	Y2-4005-4 (IP23/6KV)	5.2	φ 410
	550	152.7	250		84	445.78			5.8	
	590	163.9	225		80	451.90			6.5	
6	450	125.0	360	1480	83	531.54	710	Y2-4502-4 (IP23/6KV)	5.2	φ 410
	550	152.7	300		84	534.94			5.8	
	590	163.9	270		80	542.28			6.5	
7	450	125.0	420	1480	83	620.13	800	Y2-4503-4 (IP23/6KV)	5.2	φ 410
	550	152.7	350		84	624.09			5.8	
	590	163.9	315		80	632.66			6.5	
8	450	125.0	480	1480	83	708.72	900	Y2-4504-4 (IP23/6KV)	5.2	φ 410
	550	152.7	400		84	713.25			5.8	
	590	163.9	360		80	723.04			6.5	
9	450	125.0	540	1480	83	797.31	1000	Y2-5001-4 (IP23/6KV)	5.2	φ 410
	550	152.7	450		84	802.40			5.8	
	590	163.9	405		80	813.42			6.5	

ZD、ZDG、ZDF、ZDY、ZMD 640-80型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 640-80



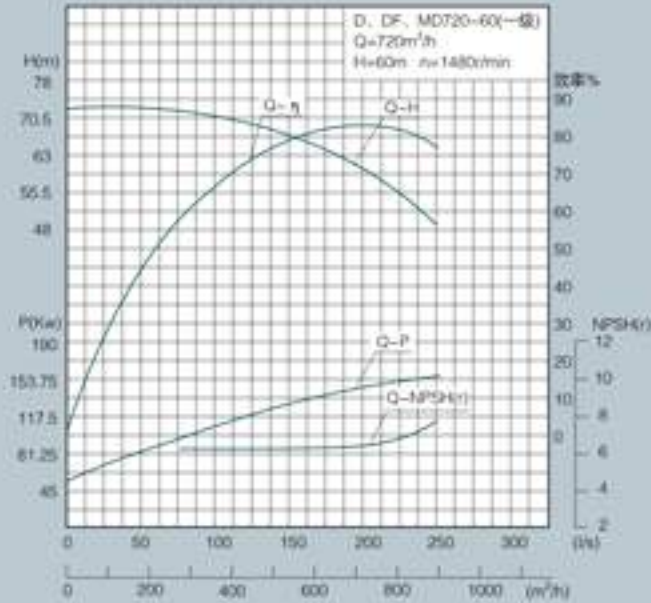
级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia.
	m³/h	L/s					功率 Power	型号 Type		
			m	mm						
3	530	147.2	271.2	1480	74	528.97	710	Y2-4502-4 (IP23/6KV)	7.2	φ495
	640	177.8	240.0		78	536.28				
	760	211.1	201.6		77	541.89				
4	530	147.2	361.6	1480	74	705.29	900	Y2-4504-4 (IP23/6KV)	7.2	φ495
	640	177.8	320.0		78	715.04				
	760	211.1	268.8		77	722.52				
5	530	147.2	452.0	1480	74	881.62	1120	Y2-5002-4 (IP23/6KV)	7.2	φ495
	640	177.8	400.0		78	893.80				
	760	211.1	336.0		77	903.15				
6	530	147.2	542.4	1480	74	1057.94	1400	Y2-5004-4 (IP23/6KV)	7.2	φ495
	640	177.8	480.0		78	1072.57				
	760	211.1	403.2		77	1083.78				
7	530	147.2	632.8	1480	74	1234.26	1600	Y2-5601-4 (IP23/6KV)	7.2	φ495
	640	177.8	560.0		78	1251.33				
	760	211.1	470.4		77	1264.41				
8	530	147.2	723.2	1480	74	1410.59	1800	Y2-5602-4 (IP23/6KV)	7.2	φ495
	640	177.8	640.0		78	1430.09				
	760	211.1	537.6		77	1445.04				
9	530	147.2	813.6	1480	74	1586.91	2000	Y2-5603-4 (IP23/6KV)	7.2	φ495
	640	177.8	720.0		78	1608.85				
	760	211.1	604.8		77	1625.67				
10	530	147.2	904.0	1480	74	1763.26	2240	Y2-6301-4 (IP23/6KV)	7.2	φ495
	640	177.8	800.0		78	1787.61				
	760	211.1	672.0		77	1806.30				

ZD、ZDG、ZDF、ZDY、ZMD 580-60型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 580-60



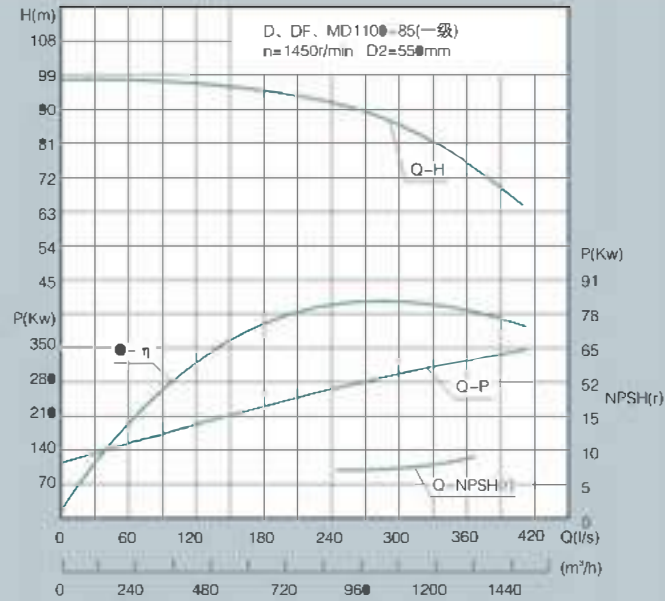
级数 Number of Stage	流量 Capacity Q		扬程 Head H m	转速 Speed n r/min	效率 Eff η %	轴功率 Shaft power Pa kW	配用电机 Motor		必需汽蚀余量 (NPSH)r m	叶轮名义直径 Impeller Dia. mm
	m³/h	L/s					功率 Power kW	型号 Type		
3	450	125.0	195	1480	80.0	299	450	Y2-4003-4	3.16	φ 455
	580	161.1	180		82.5	344			4.84	
	638	177.2	165		81.0	355			5.16	
4	450	125.0	260	1480	80.0	398	560	Y2-4005-4	3.16	φ 455
	580	161.1	240		82.5	459			4.84	
	638	177.2	220		81.0	473			5.16	
5	450	125.0	325	1480	80.0	498	710	Y2-4502-4	3.16	φ 455
	580	161.1	300		82.5	574			4.84	
	638	177.2	275		81.0	591			5.16	
6	450	125.0	390	1480	80.0	597	800	Y2-4503-4	3.16	φ 455
	580	161.1	360		82.5	689			4.84	
	638	177.2	330		81.0	709			5.16	
7	450	125.0	455	1480	80.0	697	900	Y2-5002-4	3.16	φ 455
	580	161.1	420		82.5	803			4.84	
	638	177.2	385		81.0	828			5.16	
8	450	125.0	520	1480	80.0	796	1120	Y2-5003-4	3.16	φ 455
	580	161.1	480		82.5	918			4.84	
	638	177.2	440		81.0	946			5.16	
9	450	125.0	585	1480	80.0	896	1250	Y2-5003-4	3.16	φ 455
	580	161.1	540		82.5	1033			4.84	
	638	177.2	495		81.0	1064			5.16	
10	450	125.0	650	1480	80.0	995	1250	Y2-5003-4	3.16	φ 455
	580	161.1	600		82.5	1147			4.84	
	638	177.2	550		81.0	1183			5.16	

ZD、ZDG、ZDF、ZDY、ZMD 720-60型泵性能曲线和性能参数表
 Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 720-60



级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电动机 Motor		必需汽蚀余量 (NPSHr)	叶轮名义直径 Impeller Dia
	m³/h	L/s					功率 Power	型号 Type		
3	550	152.8	198	1480	75	310.59	560	Y2-4005-4 (IP23/6KV)	7.0	φ450
	720	200.0	180		82	430.42				
	850	236.1	171		80	502.94				
4	550	152.8	264	1480	75	414.12	710	Y2-4502-4 (IP23/6KV)	7.0	φ450
	720	200.0	240		82	573.89				
	850	236.1	228		80	670.59				
5	550	152.8	330	1480	75	517.65	900	Y2-4504-4 (IP23/6KV)	7.0	φ450
	720	200.0	300		82	717.36				
	850	236.1	285		80	838.24				
6	550	152.8	396	1480	75	621.18	1120	Y2-5002-4 (IP23/6KV)	7.0	φ450
	720	200.0	360		82	860.83				
	850	236.1	342		80	1005.88				
7	550	152.8	462	1480	75	724.71	1250	Y2-5003-4 (IP23/6KV)	7.0	φ450
	720	200.0	420		82	1004.3				
	850	236.1	399		80	1173.53				
8	550	152.8	528	1480	75	828.24	1400	Y2-5004-4 (IP23/6KV)	7.0	φ450
	720	200.0	480		82	1147.78				
	850	236.1	456		80	1341.18				
9	550	152.8	594	1480	75	931.76	1600	Y2-5601-4 (IP23/6KV)	7.0	φ450
	720	200.0	540		82	1291.25				
	850	236.1	513		80	1508.82				
10	550	152.8	660	1480	75	1035.29	1800	Y2-5602-4 (IP23/6KV)	7.0	φ450
	720	200.0	600		82	1434.72				
	850	236.1	570		80	1676.47				

ZD、ZDG、ZDF、ZDY、ZMD 1100-85型泵性能曲线和性能参数表
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 1100-85



级数 Number of Stage	流量 Capacity Q		扬程 Head H	转速 Speed n	效率 Eff. η	轴功率 Shaft power Pa	配用电机 Motor		必需汽蚀余量 (NPSH) _r	叶轮名义直径 Impeller Dia
	m³/h	L/s	m	r/min	%	kW	功率 Power	型号 Type	m	mm
							kW			
3	850	236.11	267	1450	82	754.2	1250	Y2-5003-4 (IP23/6KV)	7.0	φ 550
	1100	305.56	255		84	910				
	1350	375.00	221		78	1042.3				
4	850	236.11	352	1450	82	994.3	1600	Y2-5601-4 (IP23/6KV)	7.0	φ 550
	1100	305.56	340		84	1213.3				
	1350	375.00	306		78	1443.2				
5	850	236.11	437	1450	82	1234.4	2000	Y2-5603-4 (IP23/6KV)	7.0	φ 550
	1100	305.56	425		84	1516.6				
	1350	375.00	391		78	1844.1				
6	850	236.11	500	1450	82	1474.5	2500	Y2-6301-4 (IP23/6KV)	7.0	φ 550
	1100	305.56	510		84	1820				
	1350	375.00	476		78	2245				
7	850	236.11	607	1450	82	1714.6	3150	Y2-710-1-4 (IP44/6KV)	7.0	φ 550
	1100	305.56	595		84	2123.2				
	1350	375.00	561		78	2645.9				
8	850	236.11	692	1450	82	1954.7	3550	Y2-710-2-4 (IP44/6KV)	7.0	φ 550
	1100	305.56	680		84	2426.5				
	1350	375.00	646		78	3046.8				
9	850	236.11	777	1450	82	2194.8	4000	Y2-710-3-4 (IP44/6KV)	7.0	φ 550
	1100	305.56	765		84	2730				
	1350	375.00	731		78	3447.6				
10	850	236.11	862	1450	82	2435	4500	Y2-710-4-4 (IP44/6KV)	7.0	φ 550
	1100	305.56	850		84	3266.5				
	1350	375.00	816		78	3848.5				

泵的装配与拆卸

泵拆卸时应注意的事项

- 1、按停车顺序停车；
- 2、泵壳内液体(包括冷却水)应放掉，轴承部件是稀油润滑时，应放掉润滑油；
- 3、拆去妨碍拆卸的附属管路。
- 4、拆卸应严格保护零件的制造精度不受损伤，拆卸穿杆的同时应将各中段用垫块垫起，以免各中段止口松动下沉将轴压弯。

泵的拆卸顺序

- 1、拧下次级吸入段轴承端盖上的螺栓和次级吸入段、轴承体二个部件之间的联接螺栓，卸下轴承端盖、轴承体等轴承部件；
- 2、拧下轴上网螺母并依次卸下护套、轴承内圈、轴承压盖和挡圈；
- 3、依次卸下轴上的O型密封圈、轴套后，卸下次级吸入段；
- 4、卸下中段、导叶；按此依次卸下各级叶轮、中段、导叶和出水段，直到卸下首级叶轮为止；
- 5、卸下泵联轴器后，拧下进水段和轴承体的联接螺母和轴承压盖上的螺栓后，卸下进水段侧轴承部件；
- 6、将轴从进水段抽出，拧下轴上固定螺母，依次将轴承内圈、O型密封圈、轴套等卸下；
- 7、采用滑动轴承的泵，其拆卸顺序基本相同，仅在拆卸轴承部件时略有不同。

泵的装配

泵的装配顺序一般按拆卸顺序相反方向进行。装配质量好坏直接影响泵能否正常运行，并影响泵的使用寿命和性能参数。泵装配时应注意以下几点：

- 1、应保护好零件的加工精度和表面粗糙度，不允许有硬伤、划伤等现象，紧固螺钉和螺栓应受力均匀；
- 2、叶轮出口流道与导叶进口流道对中性是依各零件的轴向尺寸来保证，流道对中性的好坏直接影响泵的性能，故泵的尺寸不能随意调整；
- 3、泵装配完毕后，在未装填料前，用手转动泵转子，检查转子在泵中旋转是否灵活；
- 4、检查合格后压入填料，并注意填料环在填料腔的相对位置。

泵的安装

本型泵安装时除满足一般要求外，还应注意以下几点：

- 1、安装泵的基础平面应用水平仪找平。基础水泥凝固后，应检查底座和地脚螺栓孔是否松动；
- 2、电机、泵和底座组装后，应严格检查泵轴和电机轴的同轴度，保证两轴线在同一水平线上；
- 3、电机和水泵组装时，保证泵和电机两联轴器端面的轴向间隙值；
- 4、泵的吸入管路和压出管路应有各自的支架，泵只能承受自身内力，不能承受任何外力，以免将泵压坏。

Assembling and Disassembling

Notices when disassembling the pump.

1. stop strictly by stop orders;
2. Let the water(include the cooling water) in pump out, When the bearing is thin oil bearing, also should let the lubrication oil out.
3. Disassemble the accessory pipes.
4. Strictly protect the parts accuracy from damage. When disassemble the poles, all the parts should support by heal block to allow the seam allowance loose then lead to shaft bend,

Pump disassembly sequence

1. Screw out the bolts on the bearing end cover of the 2nd Suction Casing and the bearing parts, discharge the coupling end cover and bearing body.
2. Discharge the nuts in the shaft, and then screw the protect sleeve, bearing inner race, bearing cover and check ring in turn.
3. Discharge the O-ring, shaft sleeve and secondary suction stage in turn.
4. Discharge middle stage, diffuser, then discharge impeller, middle stage, diffuser, discharge stage in turn until the discharge the first stage impeller.
5. After discharge the coupling, screw out the connect nuts in the suction stage and the bearing body. Disassemble the suction stage side bearing parts.
6. Take the shaft out from the suction stage side, screw out the steady nut in the shaft, then disassemble the bearing inner ring, O-ring and shaft sleeve.
7. The sliding bearing pump have the same disassemble order, only some different in the disassemble the bearing parts.

Pump Assembling

The pump assembling turn are always totally different then the pump disassemble. The pump assemble quality directly effect the working status, pump working life and the parameter data.

When assembling, should pay more attention to the below points:

- 1, Protect the spare working accuracy and surface roughness, no damage and no scratch. Tense the bolt and screw to balance the power.
- 2, The neutral of the impeller discharge channel and diffuser suction channel is measured by the axial dimension of every spares, the neutral of the channel affect the pump performance, so the pump size can not adjust at will.
- 3, After pump assembling well, before assembling the soft packing, rotate the rotor of the pump to check it flexibility.
- 4, Assemble the packing after check well, and notice the packing in the right position of the chamber.

Pump Installation

More Notices:

1. The base for the pump installation should be horizontal. After the cement is setting hardly, check if the base and the bolts are loose.
2. After the installation of the pump, motor, base, strictly check the concentricity of the pump and motor to make sure two shaft lines are in one horizontal.
3. When assembling the pump and motor make sure the axial clearance value between the pump and motor face.
4. The pump suction pipe and discharge pipe have its own support, the pump can not bear outside force only its internal force to avoid the pump damage.

泵的启动、运行和停机

(一) 启动

1、泵启动前应转动泵转子，检查转子是否灵活；在轴承箱内加入CD30或CD40机械油至油镜中心位置；

2、检查电机转向是否与泵转向一致；

3、打开泵吸入阀，关闭泵出口管路闸阀及压力表旋塞，使泵内充满液体，打开泵吸入段和次级吸入段上的排气阀排空泵里面的空气，或用真空系统排除吸入管和泵内空气；

4、检查泵和电机联接螺栓的松紧程度和泵周围的安全情况，使泵处于准备启动状态；

5、启动电机，待泵运转正常后，打开压力表旋塞，慢慢开启泵出口闸阀，直到压力表指针指到所需压力为止(按出口压力表读数控制泵给定的扬程)。

(二) 运行

1、在开车和运行过程中，必须注意观察仪表读数；轴承发热、填料漏水和泵的振动、声音等是否正常，如发现异常情况，应及时处理；

2、轴承温升变化反映了泵的装配质量，轴承温升不得高于环境温度35℃，轴承的最高温度不得高于75℃；

3、泵的运行期间应定期检查叶轮、密封环、导叶套、轴套等零件的磨损情况，磨损过大时应及时更换，定期更换轴承润滑油，定期检查油位。

(三) 停机

1、停机前应先关闭压力表旋塞，慢慢关闭出口闸阀，待出口阀关闭完毕后再停电机，泵停稳后再关闭泵的吸入阀；

2、泵内水放出，如果长期停用，应防止有异物掉入泵腔内。

Pump start, operation and stop

Starting

1、Turn the rotor parts before start the pump, check the flexibility of the rotor parts. In the bearing chamber, add CD30 or CD40 machine oil up to the oil immersion lens position.

2、Check the motor rotating direction to make sure it is the same to the pump.

3、Open the suction valves, close the outlet pipe valves and the pressure gauge, make sure the pump filled with water. Open the vent valves in the pump suction stage and the secondary suction, let the air out, or use the vacuum system to exclude the air in the suction pipe and pump chamber.

4、Check the tightness degree of the attachment bolt and the safety of the pump surrounding. And make sure the pump in ready starting conditions.

5、Star the motor, when pump running well, open the pressure gauge, slowly open the sluice valves of the pump discharge until the gauge hand point to the needed pressure position.(Control the pump head by the pressure gauge reading)

Operation

1、when the pump under operation, pay attention to the meter reading, bearing temperature, packing seal leakage, vibration, noise etc. If with unusual circumstances, should be dealt with in a timely manner.

2、The bearing temperature up show the pump assembling quality, the bearing temperature can not higher 35℃ than the environment temperature. The highest temperature for the bearing is not more than 75℃.

3、Should regular check the wear pattern of the impeller, seal ring, diffuser, shaft sleeve etc.

When oversize abrasive should replace, and change the bearing lubrication oil and oil position regularly.

Shutdown

1、Before stop the pump, the pressure gage should turn off, and then slowly turn off the discharge sluice valves, after the outlet valve closed then stop the motor. When the pump keeps steady, then close the suction valve.

2、Let the pump inside water out, if stop long period, it should protect the foreign matters into the pump chamber.