



煤安认证



质量体系认证



三昌泵业  
SANCHANG PUMP

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SANCHANG PUMP



领跑水泵工业  
LEADER IN THE PUMP INDUSTRY

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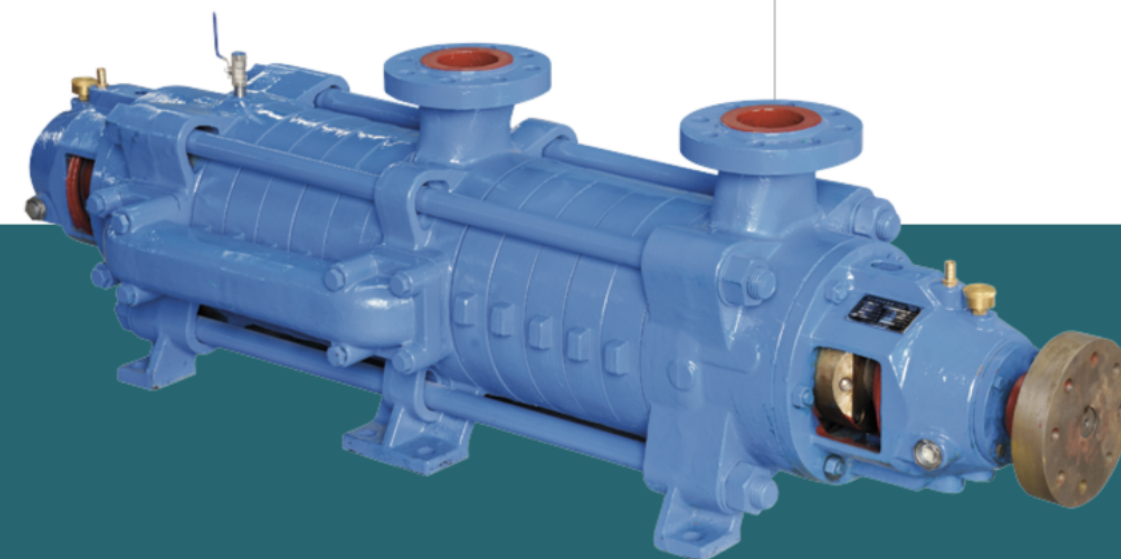
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## ZD、ZDG、ZDF、ZDY、ZMD型 高效节能自平衡多级泵

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



长沙三昌泵业有限公司  
CHANGSHA SANCHANG PUMP CO., LTD.

## 企业简介

## Enterprise Profile

长沙三昌泵业有限公司始建于1986年，总部坐落在风景秀丽的历史文化古城——中国·长沙，公司自创建以来，专业致力于工业水泵的研发与生产。在泵行业率先通过了ISO9001：2008质量体系认证。

公司技术力量雄厚，现有各类工程技术人员369人，固定资产过亿元，拥有铸造车间、机加工车间、模具制造中心等各类生产设备二百余台。2003年公司通过与国外水泵技术研究中心的精诚合作，成功的研发了高效自平衡多级离心泵，并成功的投入了用户工矿使用，至今成为了普通型多级泵最好的替代品。

公司有近三十余年的工业泵研发与生产经验，拥有的成熟稳定型主导产品有：自平衡多级离心泵，普通型多级离心泵，双吸中开式循环泵、耐腐蚀化工泵、矿用给排水泵、油泵、热水循环泵、单级离心清水泵、砂浆泵、污水泵等十余个系列。

多年来三昌人始终坚持以质量求生存，以优质的产品和服务求发展，以合理价格为基石，以最大满足客户需求为服务宗旨，为客户提供雄厚的技术支持和完善的配套服务，永恒致力于“让用户满意”工程。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。

全体三昌人愿与各界朋友精诚合作，携手谱写民族工业的新篇章！

Changsha Sanchang Pump Co., Ltd was established in 1986, headquarter is located in historical cultural city—China, Changsha . Since the foundation, we engaged in the research and production of industrial pump. And being the first to approve the ISO9001:2008 quality system.

Sanchang Pump has powerful technology, existing engineering technicians 369, fixed asset over a hundred million. We have over 200 sets production facilities in the casting workshop, machining workshop, mould manufacturing center, In 2003, we successfully researched and developed the high efficient self-balancing multistage centrifugal pump by introducing the technology from abroad and combined our in-home technology, and the self-balancing multistage pump being the best replacement of the common multistage pump in the working conditions.

Sanchang Pump have over 30 years' research and production experiences, our mature and steady products are : self-balancing multistage pump, common type multistage pump, double suction split case circulation pump, anti-corrosive chemical pump, mine dewatering pump, oil pump, hot water circulation pump, single stage clean water pump, sludge pump and sewage pump etc, about ten series products.

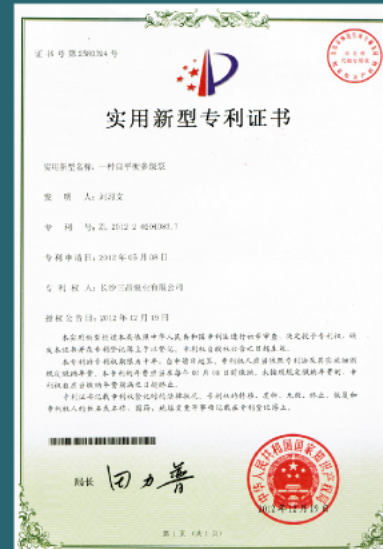
Sanchang Pump insist strive for survival on the basis of quality, developed by the high quality and excellent service, based on reasonable price, purposed for meet our client at the max needs, service the powerful technical support and perfect service, Committed to the eternal “ Satisfaction User” project. Over these years, Sanchang Pump are honored as the “high quality well-known goods” , “Enterprise of observing contracts and keeping promise” , obtained well good reputation from users.

All the Sanchang people agree to cooperate with friends from all walks of life, to write a new chapter of national industry.

网 址：[www.scbye.com](http://www.scbye.com)







企业资质  
Enterprise qualification



## 生产制造 Production-manufacturing

从毛坯制造开始到零件加工、检测、装配、性能测试、包装入库、出厂交付等每一个环节都得到严格的过程控制。

Strictly control every process: semi-finished product, spare parts machining, test, assemble, performance test, packing to store, leave factory and delivery.



宽敞明亮、整齐有序的机加车间。 Brightness, well in order machining workshop



采用上海申克制造的动平衡设备，保证了产品的平衡运行。  
Adopt dynamic balance facilities from Shanghai Shenke Manufacturer to make sure the operation of the dynamic balance test.



充分的毛坯库存和自然时效，保证了交货的及时性和产品质量的稳定性。  
Abundant semi-finished product in store and natural aging make sure the timely delivery and steady product



先进的涂装技术，能有效的保证产品在使用过程中长时间不易氧化生锈。  
Advanced coating technology can make sure the non oxidation rust during the long-term operation



专业的技术工程师采用精密的量具，时刻在为我们的产品质量把关。  
Professional and delicate workers are using the precision testing tool, strictly control the pump quality



经权威机构认证的测试设备，确保每个产品的性能稳定，使用安全。  
Authority certification test equipment, make sure the steady and safe use.



大量的库存保证交货的及时性  
Abundant storage can make sure timely delivery.



待发货区 Ready Shipping Storage



## 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 晨鸣纸业有限公司  
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：7.5~864m<sup>3</sup>/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46m<sup>3</sup>/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 : 7.5~864m<sup>3</sup>/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 m<sup>3</sup>/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

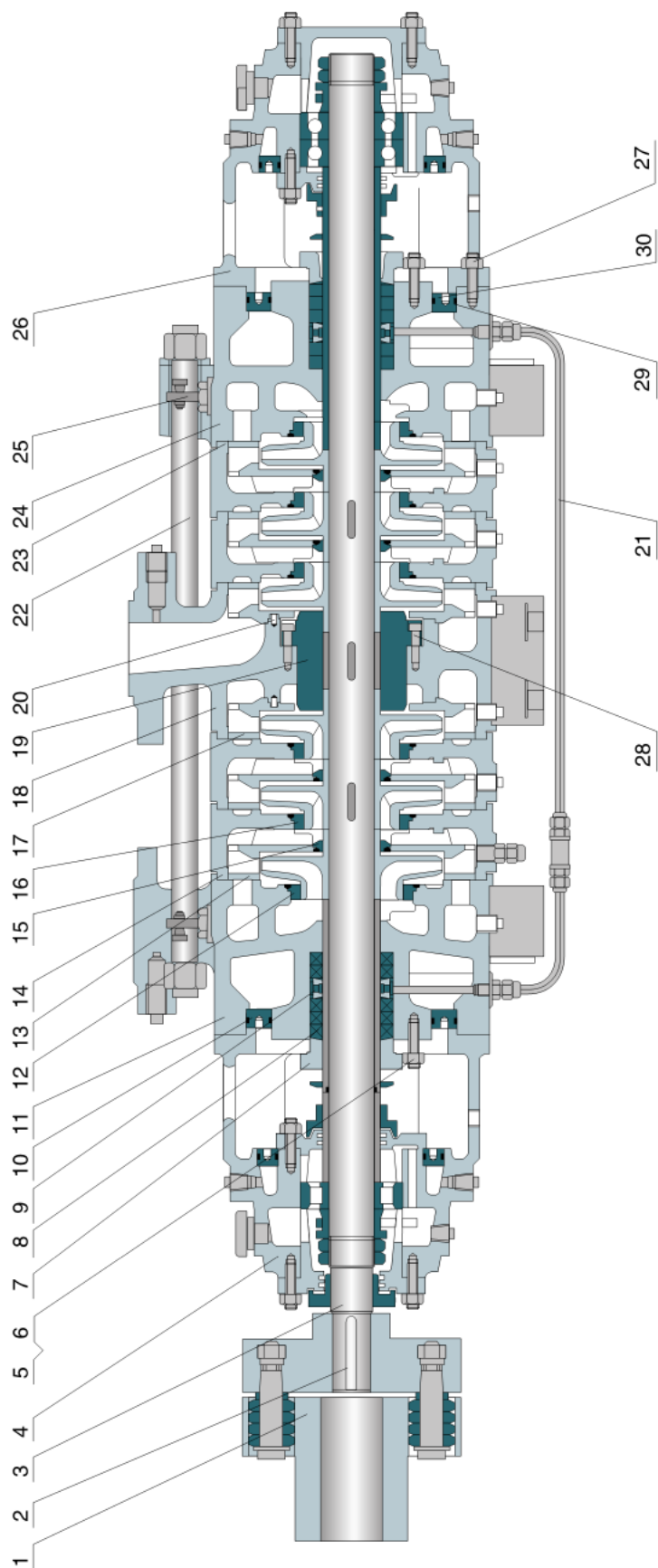
|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1新结构</b><br>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>                                                                                                                                                                                           |
| <b>2新技术</b><br>New technology                           | <p>独有的节流、减压装置、奇数级的平衡装置，还能起到辅助支承的作用。</p> <p>Unique throttling and pressure reduction devices, odd-level balancing device.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>3高效节能</b><br>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&amp;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> |
| <b>4高可靠性</b><br>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，且应力峰值较原型结构大大降低，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>                                                                                                                                                                                                                                                                                       |
| <b>5高稳定性</b><br>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翼板的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>                                                                                                                                                                                                                                                                                               |
| <b>6汽蚀性能好</b><br>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>                                                                                                                                                             |
| <b>7机封性能强</b><br>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>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>8检修方便</b><br>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>                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>9低维护率</b><br>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>                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>10适用性强</b><br>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

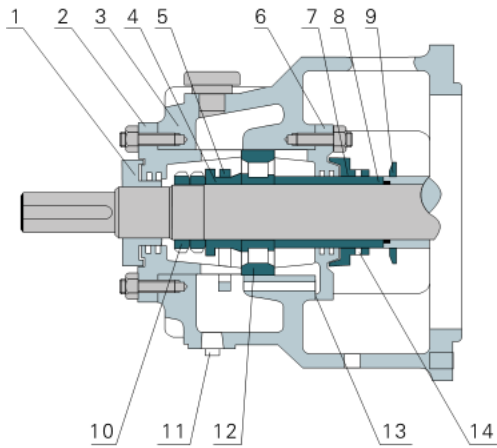
Self-balancing multistage pump construction



- |                                       |                                  |                               |                                        |                                        |
|---------------------------------------|----------------------------------|-------------------------------|----------------------------------------|----------------------------------------|
| 1、联轴器部件<br>Coupling Assembly          | 7、填料压盖<br>Packing Gland          | 13、导叶 Diffuser                | 19、节流套 orifice sleeve                  | 25、直嘴旋塞 Air Release Valve              |
| 2、键 Key                               | 8、填料 Packing                     | 14、中段 Stage Casing            | 20、销 Dowel Pin                         | 26、轴承部件乙<br>Bearing Housing B Assembly |
| 3、转子部件<br>Rotating Assembly           | 9、填料环 Lantern Ring               | 15、导叶套<br>Inter-stage Bushing | 21、密封冲洗管部件<br>Seal Flush Pipe Assembly | 27、螺母 Stud & Nut                       |
| 4、轴承部件甲<br>Bearing Housing A Assembly | 10、冷却腔盖<br>Cooling Chamber Cover | 16、密封环 Wear ring              | 22、拉紧螺杆 Tie bolt                       | 28、螺钉<br>Hexagon Socket Head Cap Screw |
| 5、螺栓 Stud                             | 11、吸入段 Suction Casing            | 17、末级导叶<br>Discharge Diffuser | 23、垫 Gasket                            | 29、O型圈 O-ring                          |
| 6、螺母 Nut                              | 12、密封环 Wear ring                 | 18、出水段 Discharge Casing       | 24、次级吸入段<br>2nd Suction Casing         | 30、O型圈 O-ring                          |

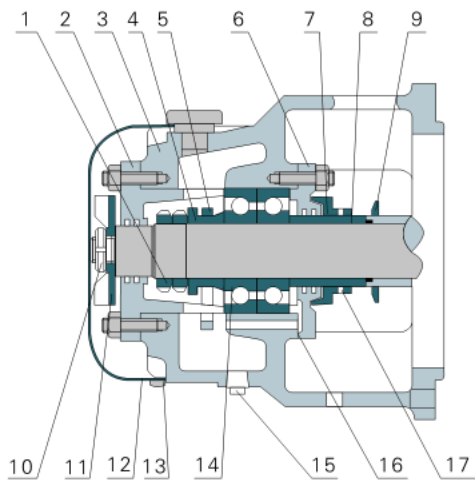


## 轴承部件甲 Bearing Housing A Assembly

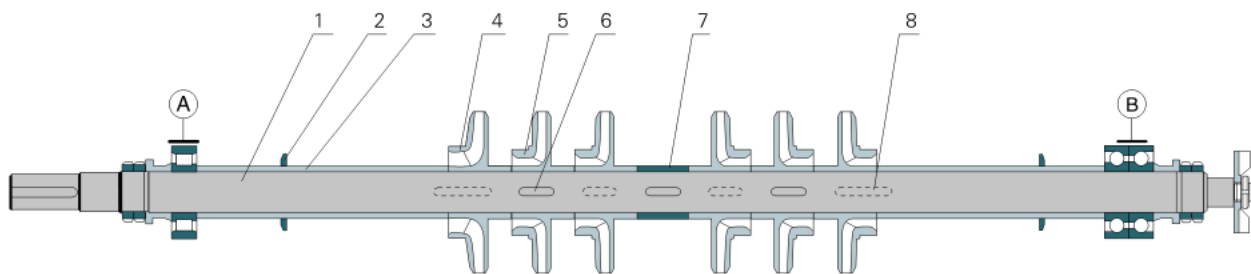


- |                          |                          |                                |
|--------------------------|--------------------------|--------------------------------|
| 1、挡油盘                    | 6、轴承压盖乙                  | 11、1/4丝堵                       |
| 2、轴承压盖甲                  | 7、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



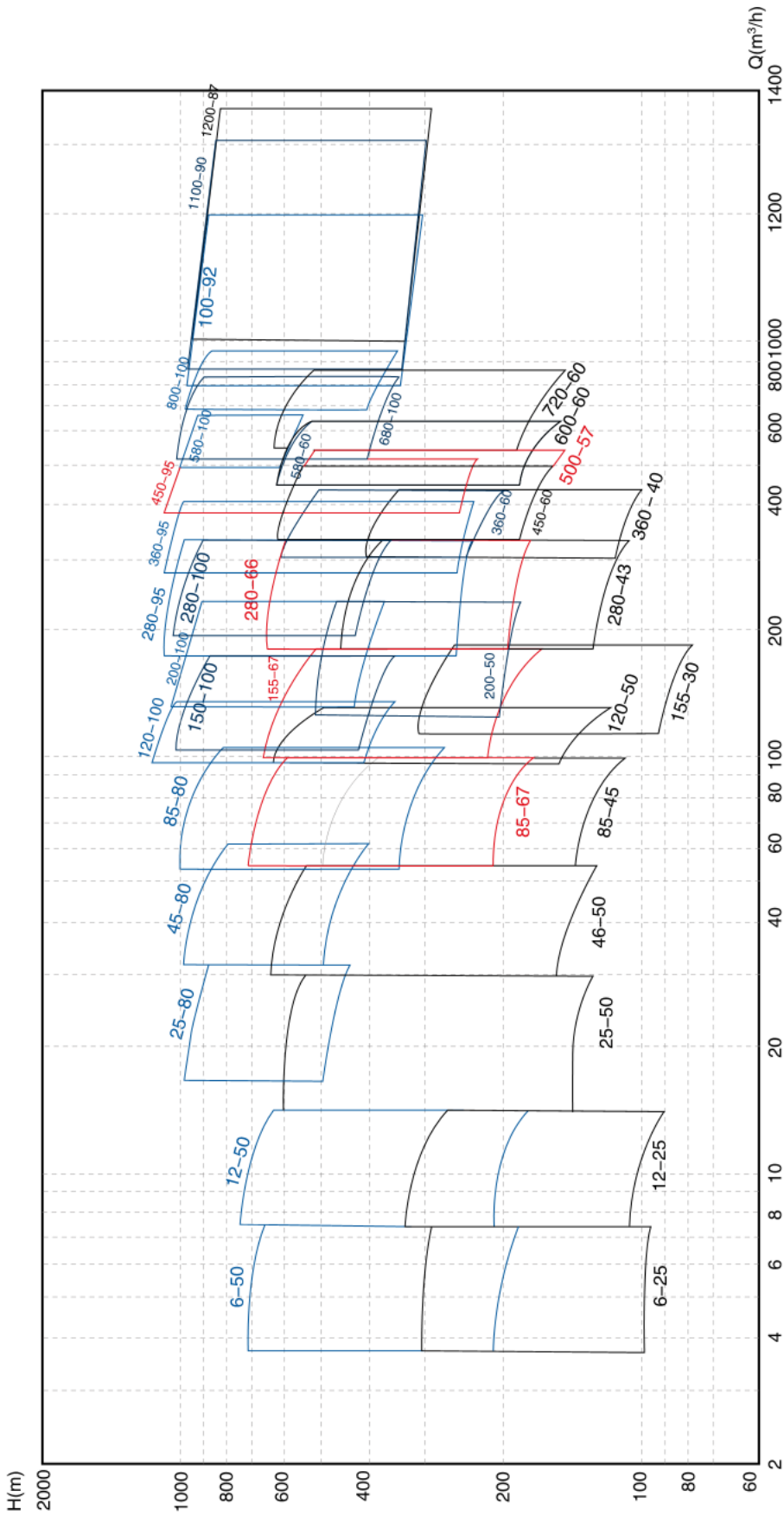
- |         |        |                   |                     |
|---------|--------|-------------------|---------------------|
| 1、轴     | 5、叶轮   | 1, Shaft          | 5, Impeller         |
| 2、O型密封圈 | 6、键    | 2, O-ring         | 6, Key              |
| 3、密封轴套  | 7、节流轴套 | 3, Sealing Sleeve | 7, Throttle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

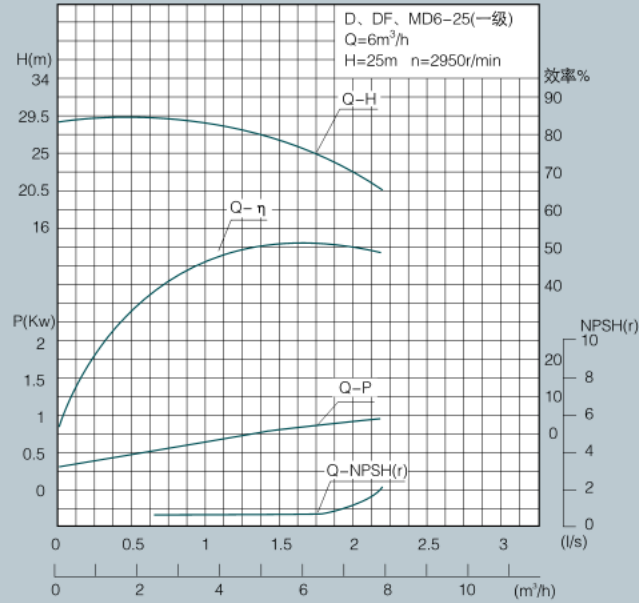
Selection Chart for Self-balancing Multistage Centrifugal Pump



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

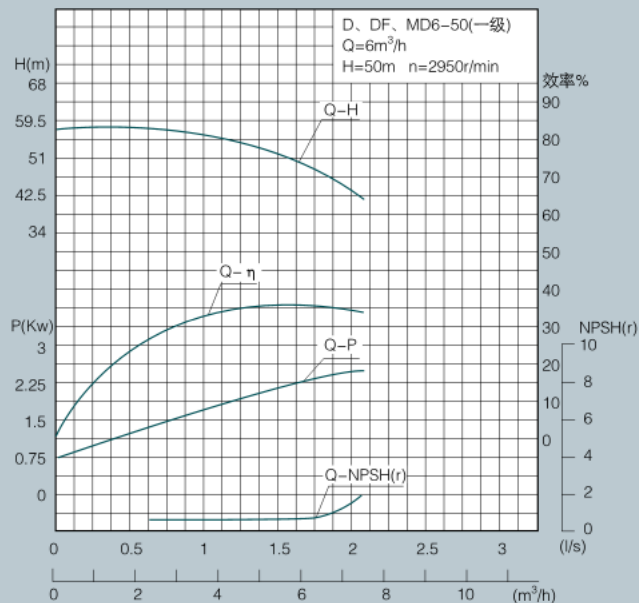


| 级数<br>Number of<br>Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽<br>蚀余量<br>(NPSH) <sub>r</sub> | 叶轮名<br>义直径<br>Impeller<br>Dia. |
|--------------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-----------------------------------|--------------------------------|
|                          | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                                 | mm                             |
|                          |                     |      |                 |                  |                 |                          | kW            |                         |                                   |                                |
| 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 <sub>2</sub> -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 <sub>2</sub> -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 <sub>1</sub> -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 <sub>1</sub> -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 <sub>2</sub> -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 <sub>2</sub> -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                               |                                |



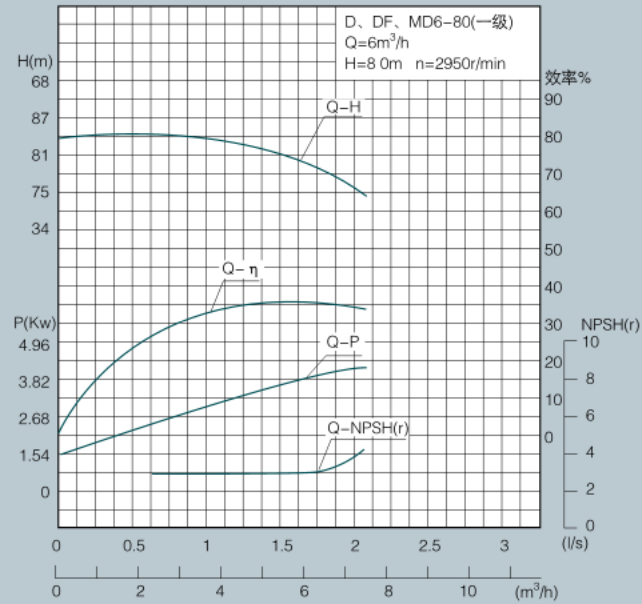


ZD、ZDG、ZDF、ZDY、ZMD 6-50型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 6-50



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |            | 扬程<br>Head<br>H<br>m | 转速<br>Speed<br>n<br>r/min | 效率<br>Eff.<br>η<br>% | 轴功率<br>Shaft power<br>Pa<br>kW | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r<br>m | 叶轮名义直径<br>Impeller Dia.<br>mm |
|-----------------------|---------------------|------------|----------------------|---------------------------|----------------------|--------------------------------|---------------|------------|------------------------|-------------------------------|
|                       | 功率<br>Power<br>kW   | 型号<br>Type |                      |                           |                      |                                |               |            |                        |                               |
|                       |                     |            |                      |                           |                      |                                | m³/h          | L/s        |                        |                               |
| 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

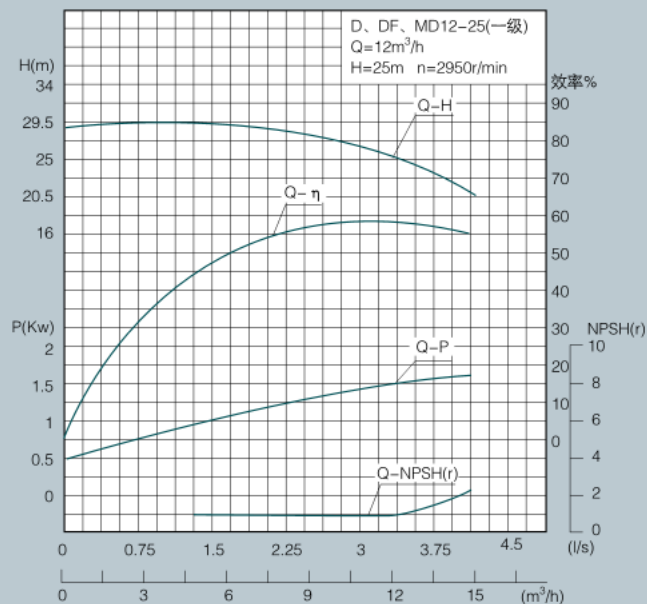


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号         | m                 | mm                      |
|                       |                     |      |                 |                  |                 |                          | kW            | 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               |                         |



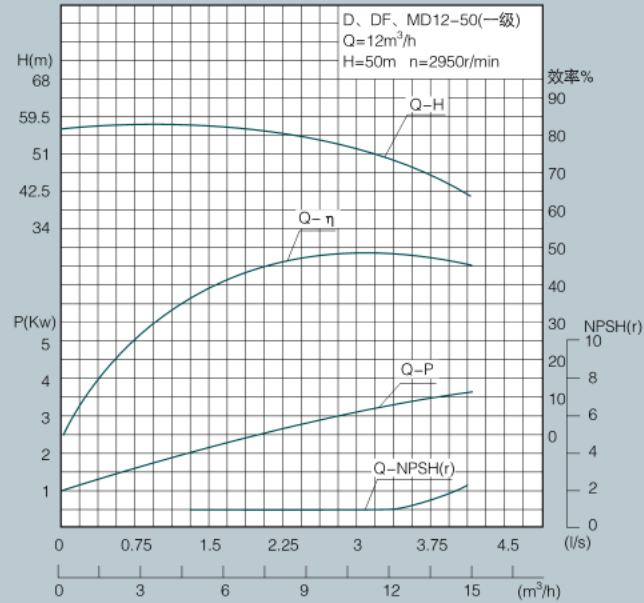


ZD、ZDG、ZDF、ZDY、ZMD 12-25型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 12-25



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                 | mm                      |
|                       |                     |      |                 |                  |                 |                          | kW            |                         |                   |                         |
| 3                     | 7.5                 | 2.08 | 84.6            | 2950             | 48              | 3.59                     | 7.5           | Y2-132S <sub>2</sub> -2 | 2.0               | φ 146                   |
|                       | 12.5                | 3.47 | 75.0            |                  | 58              | 4.40                     |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 69.0            |                  | 57              | 4.94                     |               |                         | 2.5               |                         |
| 4                     | 7.5                 | 2.08 | 112.8           | 2950             | 48              | 4.79                     | 11            | Y2-160M <sub>1</sub> -2 | 2.0               | φ 146                   |
|                       | 12.5                | 3.47 | 100.0           |                  | 58              | 5.86                     |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 92.0            |                  | 57              | 6.59                     |               |                         | 2.5               |                         |
| 5                     | 7.5                 | 2.08 | 141.0           | 2950             | 48              | 5.99                     | 11            | Y2-160M <sub>1</sub> -2 | 2.0               | φ 146                   |
|                       | 12.5                | 3.47 | 125.0           |                  | 58              | 7.33                     |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 115.0           |                  | 57              | 8.24                     |               |                         | 2.5               |                         |
| 6                     | 7.5                 | 2.08 | 169.2           | 2950             | 48              | 7.19                     | 15            | Y2-160M <sub>2</sub> -2 | 2.0               | φ 146                   |
|                       | 12.5                | 3.47 | 150.0           |                  | 58              | 8.80                     |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 138.0           |                  | 57              | 9.88                     |               |                         | 2.5               |                         |
| 7                     | 7.5                 | 2.08 | 197.4           | 2950             | 48              | 8.39                     | 15            | Y2-160M <sub>2</sub> -2 | 2.0               | φ 146                   |
|                       | 12.5                | 3.47 | 175.0           |                  | 58              | 10.27                    |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 161.0           |                  | 57              | 11.53                    |               |                         | 2.5               |                         |
| 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                    |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 184.0           |                  | 57              | 13.18                    |               |                         | 2.5               |                         |
| 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                    |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 207.0           |                  | 57              | 14.83                    |               |                         | 2.5               |                         |
| 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                    |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 230.0           |                  | 57              | 16.48                    |               |                         | 2.5               |                         |
| 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                    |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 253.0           |                  | 57              | 18.13                    |               |                         | 2.5               |                         |
| 12                    | 7.5                 | 2.08 | 338.4           | 2950             | 48              | 14.39                    | 30            | Y2-200L <sub>1</sub> -2 | 2.0               | φ 146                   |
|                       | 12.5                | 3.47 | 300.0           |                  | 58              | 17.60                    |               |                         | 2.0               |                         |
|                       | 15.0                | 4.17 | 276.0           |                  | 57              | 19.77                    |               |                         | 2.5               |                         |

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

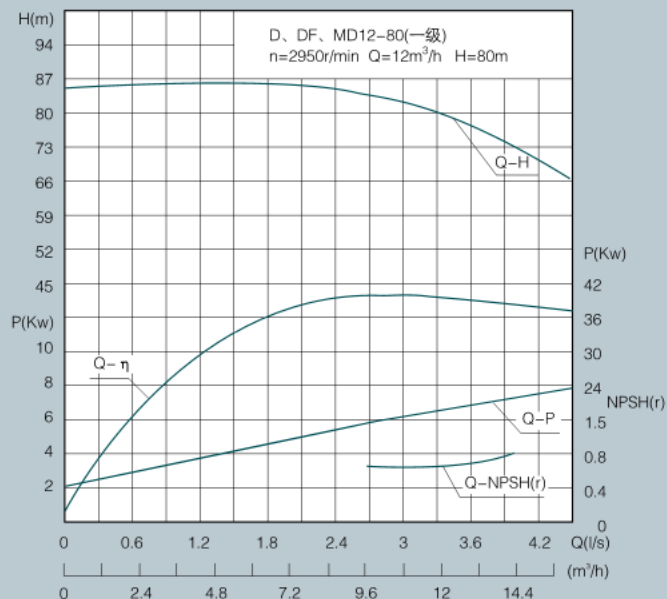


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type | m                 | mm                      |
|                       |                     |      |                 |                  |                 |                          | kW            |            |                   |                         |
| 3                     | 7.5                 | 2.08 | 108.0           | 2950             | 42              | 7.87                     | 15            | Y2-160M2-2 | 2.0               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 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               | φ 198                   |
|                       | 12.5                | 3.47 | 600.0           |                  | 49              | 41.68                    |               |            | 2.0               |                         |
|                       | 15.0                | 4.17 | 558.0           |                  | 48              | 47.48                    |               |            | 2.5               |                         |



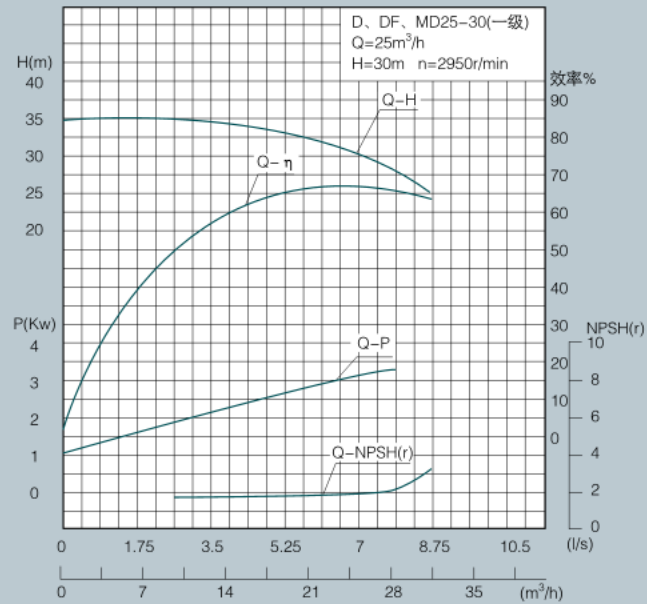


ZD、ZDG、ZDF、ZDY、ZMD 12-80型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 12-80



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |            | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | 功率<br>Power         | 型号<br>Type |                 |                  |                 |                          |               |            |                   |                         |
|                       |                     |            |                 |                  |                 |                          | m³/h          | L/s        | m                 | r/min                   |
| 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

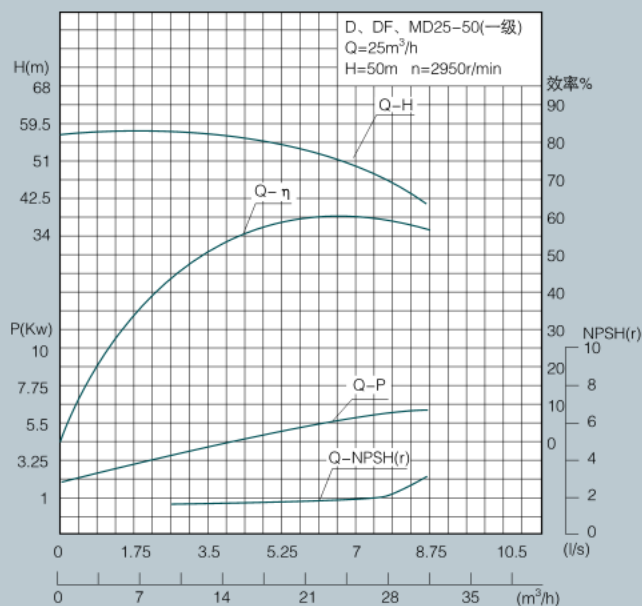


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 3                     | 15                  | 4.17 | 102.0           | 2950             | 55              | 7.57                     | 15            | Y2-160M <sub>2</sub> -2 | 2.2               | φ 160                   |
|                       | 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 <sub>2</sub> -2 | 2.2               | φ 160                   |
|                       | 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               | φ 160                   |
|                       | 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 <sub>1</sub> -2 | 2.2               | φ 160                   |
|                       | 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 <sub>1</sub> -2 | 2.2               | φ 160                   |
|                       | 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 <sub>2</sub> -2 | 2.2               | φ 160                   |
|                       | 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 <sub>2</sub> -2 | 2.2               | φ 160                   |
|                       | 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               | φ 160                   |
|                       | 25                  | 6.94 | 300.0           |                  | 67              | 30.48                    |               |                         | 2.2               |                         |
|                       | 30                  | 8.33 | 275.0           |                  | 68              | 33.04                    |               |                         | 2.4               |                         |



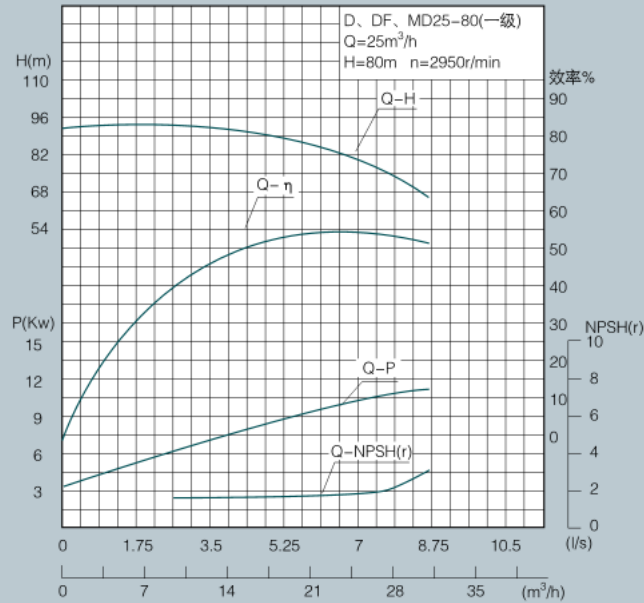


ZD、ZDG、ZDF、ZDY、ZMD 25-50型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 25-50



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径 |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|--------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号         | m                 | mm     |
|                       |                     |      |                 |                  |                 |                          | kW            | Type       |                   |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 144.0           |                  | 61              | 18.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 192.0           |                  | 61              | 24.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 240.0           |                  | 61              | 30.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 288.0           |                  | 61              | 36.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 336.0           |                  | 61              | 42.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 384.0           |                  | 61              | 48.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 432.0           |                  | 61              | 54.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 480.0           |                  | 61              | 60.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 528.0           |                  | 61              | 66.00                    |               |            | 2.8               |        |
| 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                    |               |            | 2.7               |        |
|                       | 28                  | 7.78 | 576.0           |                  | 61              | 72.00                    |               |            | 2.8               |        |

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

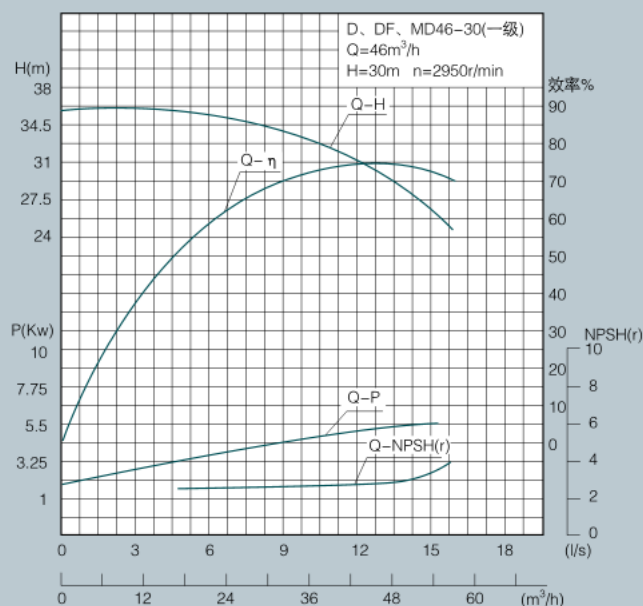


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>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               |                         |



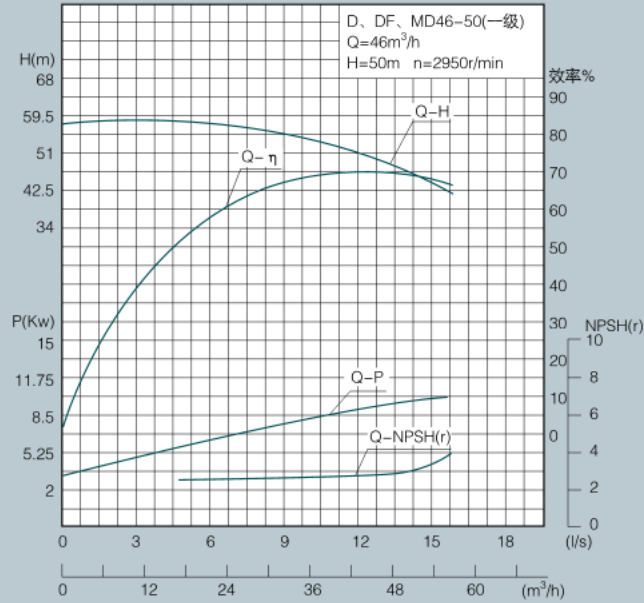


ZD、ZDG、ZDF、ZDY、ZMD 46-30型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 46-30



| 级数<br>Number<br>of<br>Stage | 流量<br>Capacity<br>Q |            | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径<br>Impeller<br>Dia. |
|-----------------------------|---------------------|------------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-----------------------|--------------------------------|
|                             | 功率<br>Power         | 型号<br>Type |                 |                  |                 |                          |               |            |                       |                                |
|                             |                     |            |                 |                  |                 |                          | m³/h          | L/s        | m                     | r/min                          |
| 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

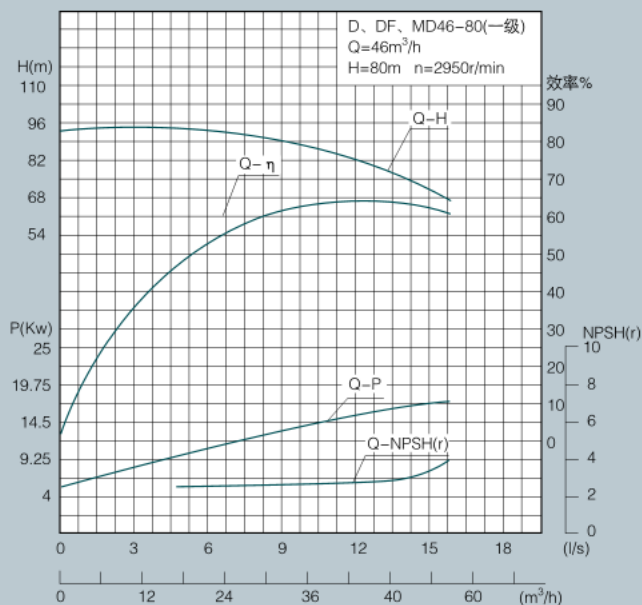


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s   |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type |                   |                         |
| 3                     | 30                  | 8.33  | 166.5           | 2950             | 61              | 22.29                    | 37            | Y2-200L2-2 | 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                   | 160           | Y2-315L1-2 | 3.2               |                         |



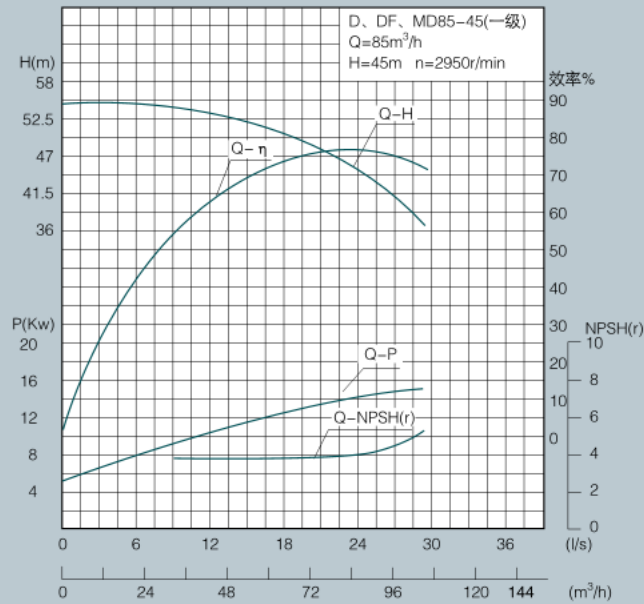


ZD、ZDG、ZDF、ZDY、ZMD 46-80型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 46-80



| 级数<br>Number of<br>Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径 |
|--------------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-----------------------|------------|
|                          | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                     | mm         |
|                          |                     |      |                 |                  |                 |                          | kW            |                         |                       |            |
| 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           | Y2-315L <sub>1</sub> -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           | Y2-315M <sub>1</sub> -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           | Y2-315M <sub>1</sub> -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           | Y2-355M <sub>2</sub> -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           | Y2-355L <sub>1</sub> -2 | 3.9                   | φ 260      |
|                          | 46                  | 12.5 | 960             |                  | 64              | 188.03                   |               |                         | 4.0                   |            |
|                          | 54                  | 15.0 | 912             |                  | 65              | 206.66                   |               |                         | 5.5                   |            |

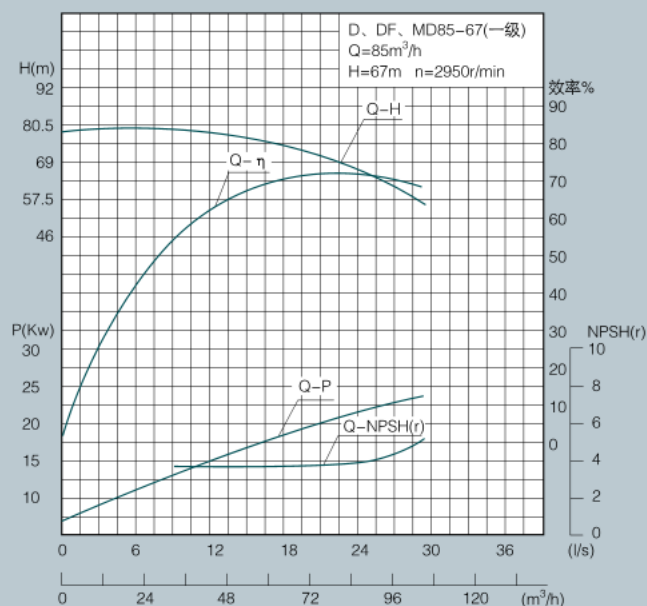
ZD、ZDG、ZDF、ZDY、ZMD 85-45型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-45



| 级数<br>Number of<br>Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径<br>Impeller<br>Dia. |
|--------------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-----------------------|--------------------------------|
|                          | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号         | m                     | mm                             |
|                          |                     |      |                 |                  |                 |                          | kW            | 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           | Y2-315L1-2 | 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                   |                                |



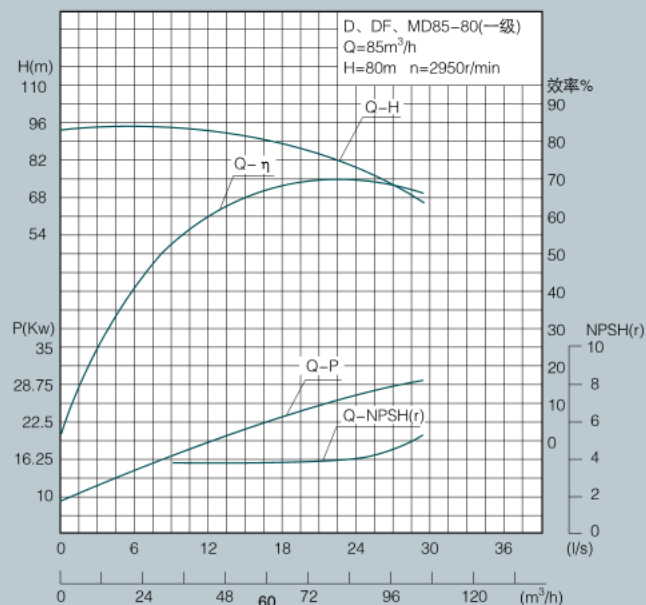
ZD、ZDG、ZDF、ZDY、ZMD 85-67型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-67



| 级数<br>Number of<br>Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径 |
|--------------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-----------------------|------------|
|                          | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type | m                     | mm         |
|                          |                     |      |                 |                  |                 |                          | kW            |            |                       |            |
| 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           | Y2-315L1-2 | 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           | Y2-315M1-2 | 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           | Y2-355M2-2 | 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           | Y2-355L1-2 | 3.3                   | φ 235      |
|                          | 85                  | 23.6 | 670             |                  | 72              | 220.0                    |               |            | 4.0                   |            |
|                          | 100                 | 27.8 | 610             |                  | 73              | 239.0                    |               |            | 4.4                   |            |



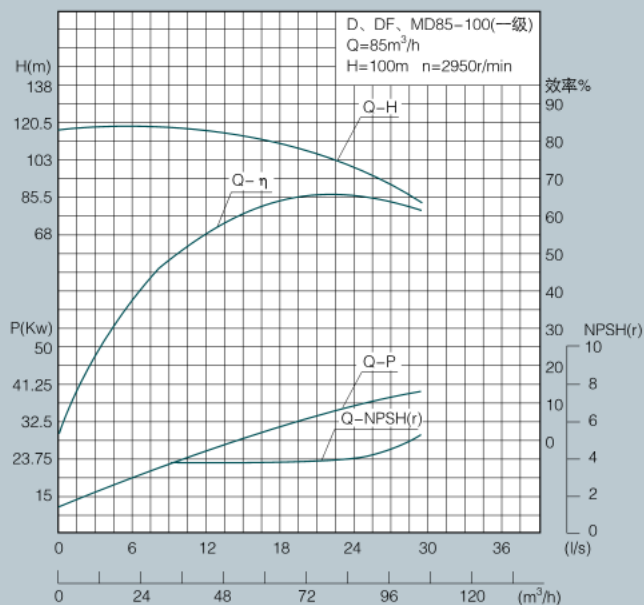
ZD、ZDG、ZDF、ZDY、ZMD 85-80型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-80



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s   | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                 | mm                      |
|                       |                     |       |                 |                  |                 |                          | kW            |                         |                   |                         |
| 4                     | 51                  | 14.17 | 352             | 2950             | 59              | 82.86                    | 132           | Y2-315M-2               | 3.5               | φ 255                   |
|                       | 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               | φ 255                   |
|                       | 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           | Y2-315L <sub>2</sub> -2 | 3.5               | φ 255                   |
|                       | 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           | Y2-315M <sub>2</sub> -2 | 3.5               | φ 255                   |
|                       | 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           | Y2-355L <sub>1</sub> -2 | 3.5               | φ 255                   |
|                       | 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           | Y2-355L <sub>2</sub> -2 | 3.5               | φ 255                   |
|                       | 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           | Y2-355-2<br>(6KV)       | 3.5               | φ 255                   |
|                       | 85                  | 23.6  | 800             |                  | 70              | 264.55                   |               |                         | 4.5               |                         |
|                       | 102                 | 28.3  | 760             |                  | 71              | 297.33                   |               |                         | 4.3               |                         |

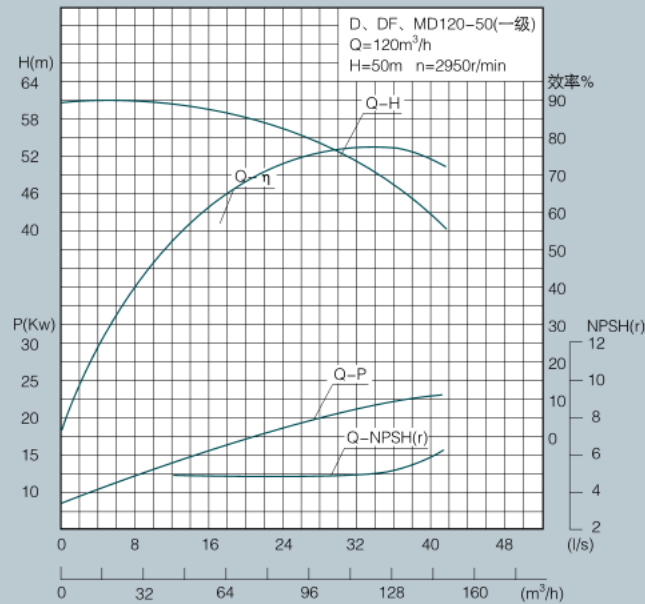


ZD、ZDG、ZDF、ZDY、ZMD 85-100型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 85-100



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                    | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径 |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|--------------------|-----------------------|------------|
|                       | m³/h                | L/s   | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type         | m                     | mm         |
|                       |                     |       |                 |                  |                 |                          | kW            |                    |                       |            |
| 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           | Y2-355-2<br>(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           | Y2-355-2<br>(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<br>(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

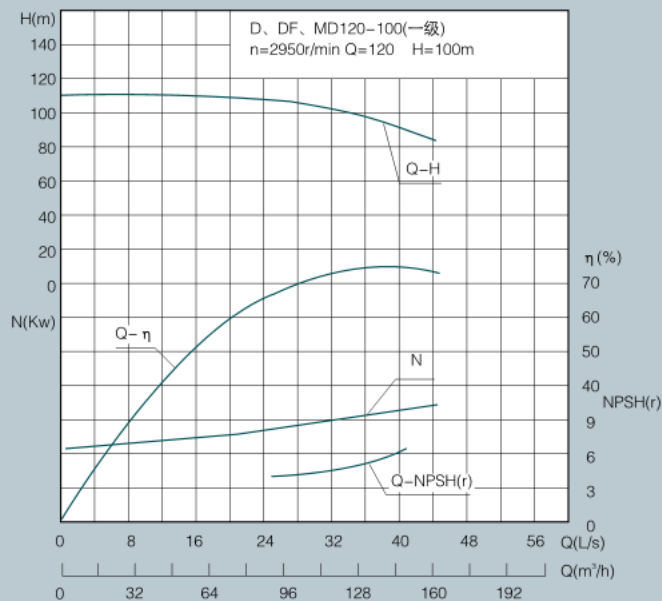


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type | m                 | mm                      |
|                       |                     |      |                 |                  |                 |                          | kW            |            |                   |                         |
| 3                     | 96                  | 26.7 | 165.0           | 2950             | 71              | 60.75                    | 90            | Y2-280M-2  | 3.2               | φ 213                   |
|                       | 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               | φ 213                   |
|                       | 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               | φ 213                   |
|                       | 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               | φ 213                   |
|                       | 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               | φ 213                   |
|                       | 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               | φ 213                   |
|                       | 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               | φ 213                   |
|                       | 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               | φ 213                   |
|                       | 120                 | 33.3 | 500.0           |                  | 78              | 209.61                   |               |            | 5.1               |                         |
|                       | 140                 | 38.9 | 430.0           |                  | 77              | 213.45                   |               |            | 6.7               |                         |



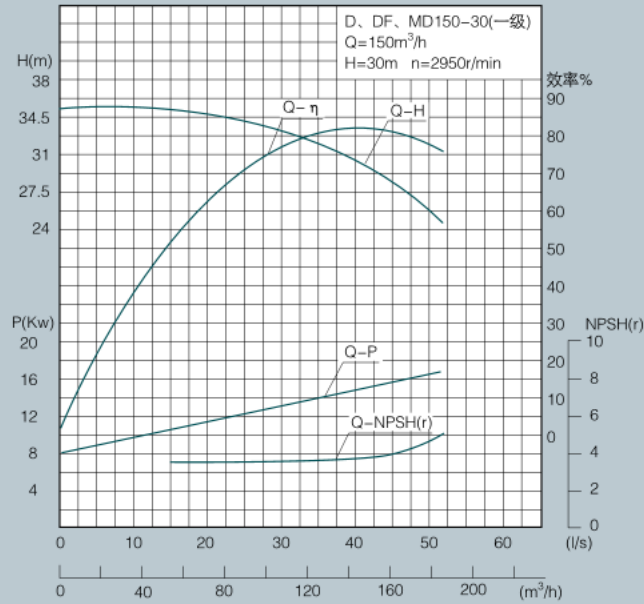


ZD、ZDG、ZDF、ZDY、ZMD 120-100型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 120-100



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH) <sub>r</sub> | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                               |                         |
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | kW            |                         | m                             | mm                      |
| 4                     | 96                  | 26.7 | 420.0           | 2950             | 68              | 161.5                    | 220           | Y2-355M <sub>1</sub> -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 <sub>2</sub> -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 <sub>2</sub> -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           | Y2-355-2                | 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           | Y2-355-2                | 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           | Y2-400-2                | 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           | Y2-400-2                | 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           | Y2-400-2                | 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           | Y2-400-2                | 3.8                           | φ 275                   |
|                       | 120                 | 33.3 | 1182.0          |                  | 73              | 529.2                    |               |                         | 4.5                           |                         |
|                       | 144                 | 40.0 | 1080.0          |                  | 74              | 572.4                    |               |                         | 5.5                           |                         |

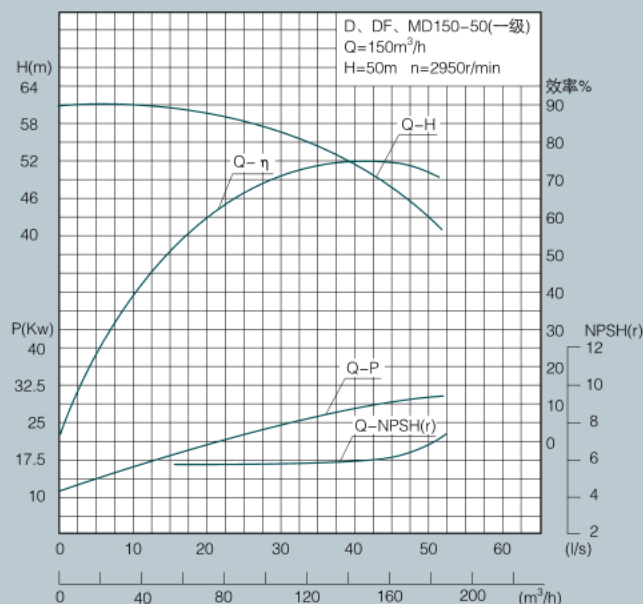
ZD、ZDG、ZDF、ZDY、ZMD 150-30型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-30



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 3                     | 119                 | 33.1 | 99.0            | 2950             | 72              | 44.56                    | 75            | Y2-280S-2               | 3.8               | φ 172                   |
|                       | 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               | φ 172                   |
|                       | 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               | φ 172                   |
|                       | 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               | φ 172                   |
|                       | 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           | Y2-315L <sub>1</sub> -2 | 3.8               | φ 172                   |
|                       | 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           | Y2-315L <sub>1</sub> -2 | 3.8               | φ 172                   |
|                       | 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           | Y2-315L <sub>1</sub> -2 | 3.8               | φ 172                   |
|                       | 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           | Y2-315L <sub>2</sub> -2 | 3.8               | φ 172                   |
|                       | 150                 | 41.7 | 300.0           |                  | 82              | 149.45                   |               |                         | 4.3               |                         |
|                       | 190                 | 52.8 | 285.0           |                  | 81              | 182.05                   |               |                         | 5.0               |                         |



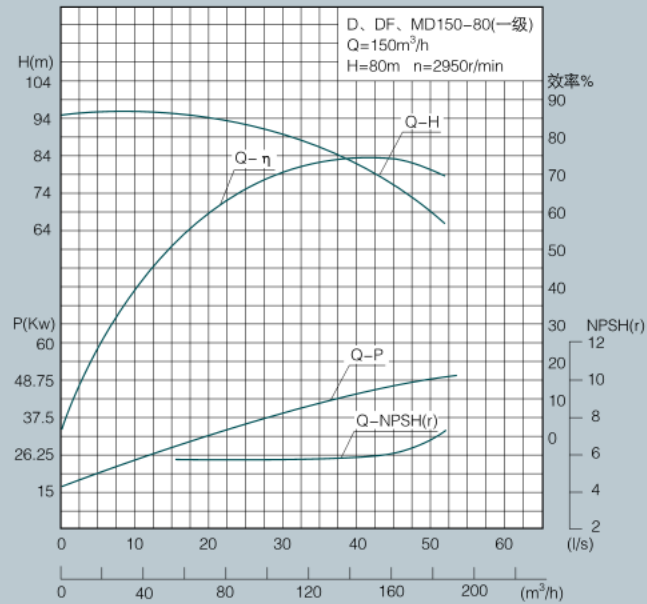
ZD、ZDG、ZDF、ZDY、ZMD 150-50型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-50



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径<br>Impeller<br>Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-----------------------|--------------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                     | mm                             |
|                       |                     |      |                 |                  |                 |                          | kW            |                         |                       |                                |
| 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 <sub>1</sub> -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 <sub>2</sub> -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 <sub>1</sub> -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 <sub>2</sub> -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<br>(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                   |                                |



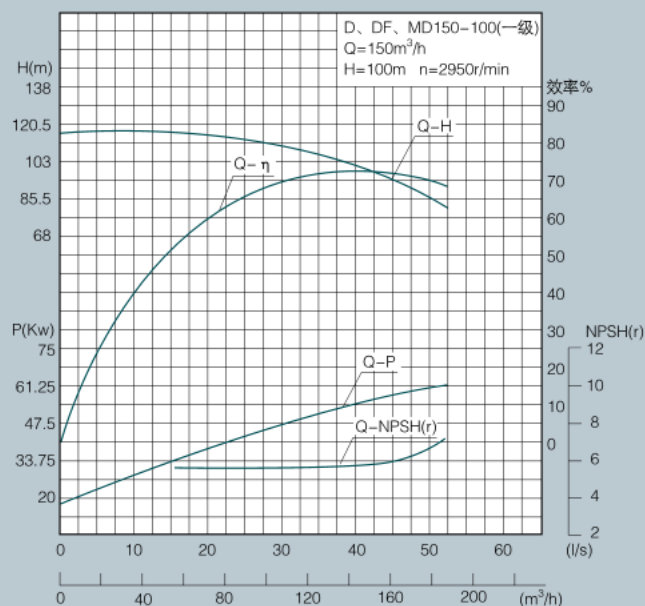
ZD、ZDG、ZDF、ZDY、ZMD 150-80型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-80



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 3                     | 90                  | 25.0 | 264             | 2950             | 65              | 99.55                    | 185           | Y2-315L-2               | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 240             |                  | 75              | 130.72                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 228             |                  | 74              | 151.03                   |               |                         | 6.6               |                         |
| 4                     | 90                  | 25.0 | 352             | 2950             | 65              | 132.73                   | 220           | Y2-3551-2               | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 320             |                  | 75              | 174.29                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 304             |                  | 74              | 201.38                   |               |                         | 6.6               |                         |
| 5                     | 90                  | 25.0 | 440             | 2950             | 65              | 165.91                   | 280           | Y2-3553-2               | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 400             |                  | 75              | 217.86                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 380             |                  | 74              | 251.72                   |               |                         | 6.6               |                         |
| 6                     | 90                  | 25.0 | 528             | 2950             | 65              | 199.10                   | 315           | Y2-3554-2<br>(IP23/6KV) | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 480             |                  | 75              | 261.44                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 456             |                  | 74              | 302.07                   |               |                         | 6.6               |                         |
| 7                     | 90                  | 25.0 | 616             | 2950             | 65              | 232.28                   | 355           | Y2-3555-2<br>(IP23/6KV) | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 560             |                  | 75              | 305.01                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 532             |                  | 74              | 352.41                   |               |                         | 6.6               |                         |
| 8                     | 90                  | 25.0 | 704             | 2950             | 65              | 265.46                   | 450           | Y2-4001-2<br>(IP23/6KV) | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 640             |                  | 75              | 348.58                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 608             |                  | 74              | 402.76                   |               |                         | 6.6               |                         |
| 9                     | 90                  | 25.0 | 792             | 2950             | 65              | 298.64                   | 500           | Y2-4002-2<br>(IP23/6KV) | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 720             |                  | 75              | 392.16                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 684             |                  | 74              | 453.10                   |               |                         | 6.6               |                         |
| 10                    | 90                  | 25.0 | 880             | 2950             | 65              | 331.83                   | 630           | Y2-4004-2<br>(IP23/6KV) | 3.2               | φ 254                   |
|                       | 150                 | 41.7 | 800             |                  | 75              | 435.73                   |               |                         | 5.0               |                         |
|                       | 180                 | 50.0 | 760             |                  | 74              | 503.44                   |               |                         | 6.6               |                         |

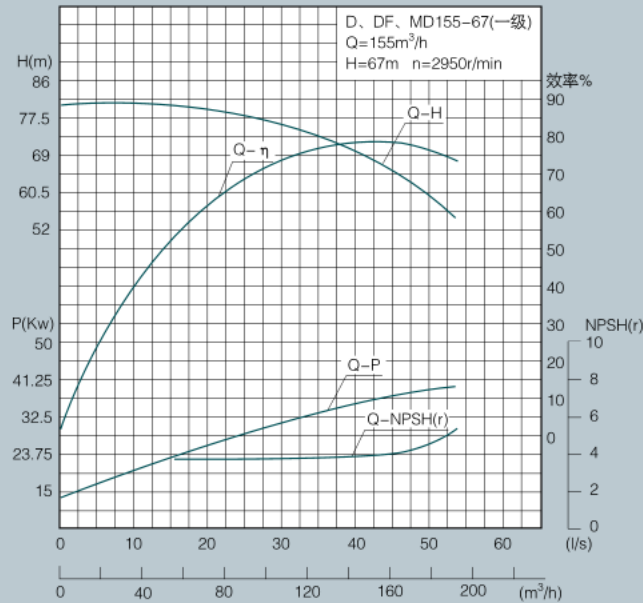


ZD、ZDG、ZDF、ZDY、ZMD 150-100型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-100



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径 |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|--------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号                      | m                 | mm     |
|                       |                     |      |                 |                  |                 |                          | kW            | Type                    |                   |        |
| 3                     | 120                 | 33.3 | 330             | 2950             | 59              | 137.09                   | 200           | Y2-315L <sub>2</sub> -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 <sub>1</sub> -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<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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

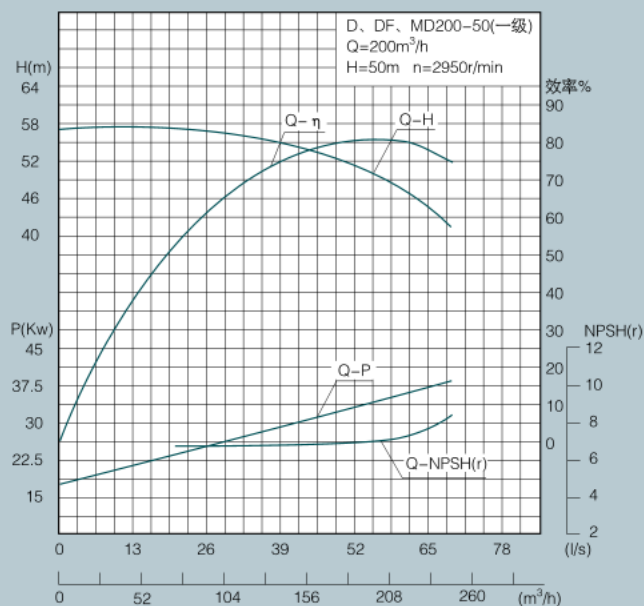


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                 | mm                      |
|                       |                     |      |                 |                  |                 |                          | kW            |                         |                   |                         |
| 2                     | 100                 | 27.8 | 152             | 2950             | 69              | 59.99                    | 90            | Y2-280M-2               | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 134             |                  | 79              | 71.59                    |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 118             |                  | 77              | 77.20                    |               |                         | 6.6               |                         |
| 3                     | 100                 | 27.8 | 228             | 2950             | 69              | 89.98                    | 132           | Y2-315M-2               | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 201             |                  | 79              | 107.39                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 177             |                  | 77              | 115.81                   |               |                         | 6.6               |                         |
| 4                     | 100                 | 27.8 | 304             | 2950             | 69              | 119.98                   | 185           | Y2-315L-2               | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 268             |                  | 79              | 143.19                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 236             |                  | 77              | 154.41                   |               |                         | 6.6               |                         |
| 5                     | 100                 | 27.8 | 380             | 2950             | 69              | 149.97                   | 200           | Y2-355M <sub>1</sub> -2 | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 335             |                  | 79              | 178.99                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 295             |                  | 77              | 193.01                   |               |                         | 6.6               |                         |
| 6                     | 100                 | 27.8 | 456             | 2950             | 69              | 179.97                   | 280           | Y2-355L <sub>1</sub> -2 | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 402             |                  | 79              | 214.79                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 354             |                  | 77              | 231.62                   |               |                         | 6.6               |                         |
| 7                     | 100                 | 27.8 | 532             | 2950             | 69              | 209.97                   | 315           | Y2-355L <sub>2</sub> -2 | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 469             |                  | 79              | 250.59                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 413             |                  | 77              | 270.22                   |               |                         | 6.6               |                         |
| 8                     | 100                 | 27.8 | 608             | 2950             | 69              | 239.96                   | 355           | Y2-355-2<br>(6KV)       | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 536             |                  | 79              | 286.39                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 472             |                  | 77              | 308.83                   |               |                         | 6.6               |                         |
| 9                     | 100                 | 27.8 | 684             | 2950             | 69              | 269.96                   | 400           | Y2-355-2<br>(IP23/6KV)  | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 603             |                  | 79              | 322.19                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 531             |                  | 77              | 347.43                   |               |                         | 6.6               |                         |
| 10                    | 100                 | 27.8 | 760             | 2950             | 69              | 299.96                   | 450           | Y2-4001-2<br>(IP23/6KV) | 3.2               | φ 235                   |
|                       | 155                 | 43.1 | 670             |                  | 79              | 357.99                   |               |                         | 5.0               |                         |
|                       | 185                 | 51.4 | 590             |                  | 77              | 386.04                   |               |                         | 6.6               |                         |



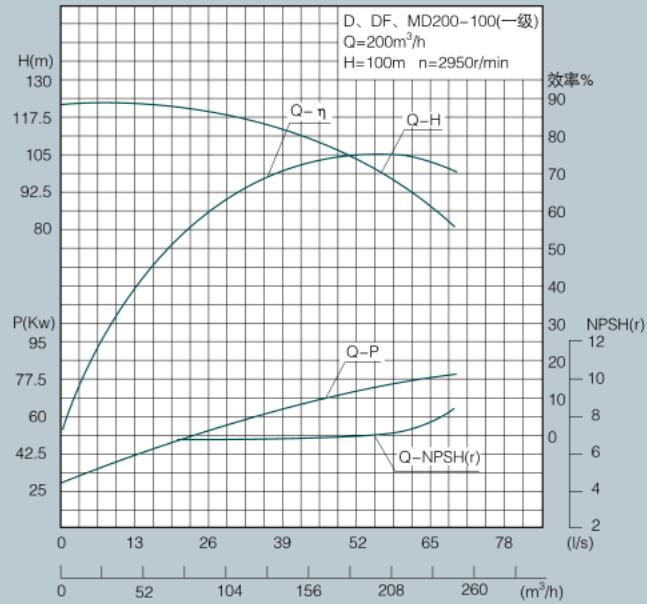


ZD、ZDG、ZDF、ZDY、ZMD 200-50型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-50



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH) <sub>r</sub> | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------------------|-------------------------|
|                       |                     |      |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                               |                         |
|                       | m³/h                | L/s  |                 |                  |                 |                          |               |                         |                               |                         |
| 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 <sub>2</sub> -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 <sub>2</sub> -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 <sub>1</sub> -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 <sub>2</sub> -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           | Y2-355-2<br>(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           | Y2-355-2<br>(6KV)       | 4.5                           | φ 213                   |
|                       | 200                 | 55.5 | 500             |                  | 81              | 336.42                   |               |                         | 5.0                           |                         |
|                       | 240                 | 66.6 | 455             |                  | 78              | 381.50                   |               |                         | 5.8                           |                         |

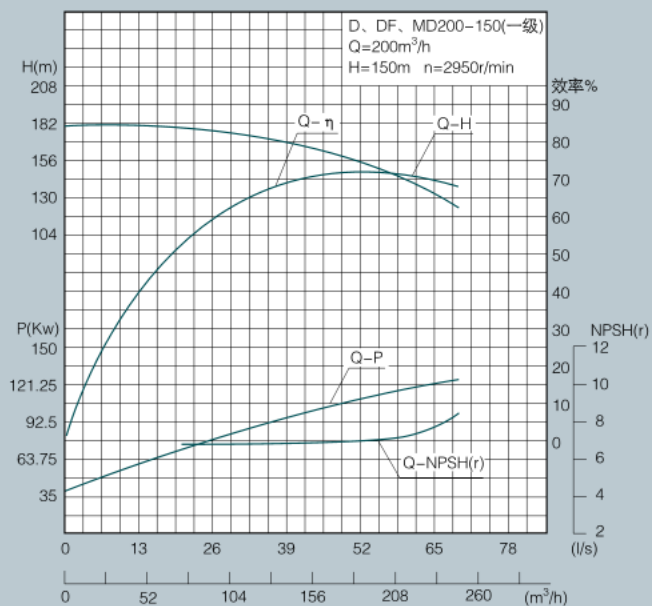
ZD、ZDG、ZDF、ZDY、ZMD 200-100型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-100



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 2                     | 150                 | 41.7 | 226             | 2950             | 70              | 131.89                   | 185           | Y2-315L-2               | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 200             |                  | 76              | 143.33                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 168             |                  | 74              | 148.38                   |               |                         | 5.0               |                         |
| 3                     | 150                 | 41.7 | 339             | 2950             | 70              | 197.83                   | 280           | Y2-355L-2               | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 300             |                  | 76              | 215.00                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 252             |                  | 74              | 222.58                   |               |                         | 5.0               |                         |
| 4                     | 150                 | 41.7 | 452             | 2950             | 70              | 263.77                   | 355           | Y2-355S-2<br>(IP23/6KV) | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 400             |                  | 76              | 286.66                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 336             |                  | 74              | 296.77                   |               |                         | 5.0               |                         |
| 5                     | 150                 | 41.7 | 565             | 2950             | 70              | 329.72                   | 450           | Y2-4001-2<br>(IP23/6KV) | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 500             |                  | 76              | 358.33                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 420             |                  | 74              | 370.96                   |               |                         | 5.0               |                         |
| 6                     | 150                 | 41.7 | 678             | 2950             | 70              | 395.66                   | 560           | Y2-4003-2<br>(IP23/6KV) | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 600             |                  | 76              | 430.00                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 504             |                  | 74              | 445.15                   |               |                         | 5.0               |                         |
| 7                     | 150                 | 41.7 | 791             | 2950             | 70              | 461.60                   | 630           | Y2-4004-2<br>(IP23/6KV) | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 700             |                  | 76              | 501.66                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 588             |                  | 74              | 519.34                   |               |                         | 5.0               |                         |
| 8                     | 150                 | 41.7 | 904             | 2950             | 70              | 527.54                   | 710           | Y2-4501-2<br>(IP23/6KV) | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 800             |                  | 76              | 573.33                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 672             |                  | 74              | 593.53                   |               |                         | 5.0               |                         |
| 9                     | 150                 | 41.7 | 1017            | 2950             | 70              | 593.49                   | 800           | Y2-4502-2<br>(IP23/6KV) | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 900             |                  | 76              | 644.99                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 756             |                  | 74              | 667.73                   |               |                         | 5.0               |                         |
| 10                    | 150                 | 41.7 | 1130            | 2950             | 70              | 659.43                   | 900           | Y2-4503-2<br>(IP23/6KV) | 3.5               | φ 290                   |
|                       | 200                 | 55.6 | 1000            |                  | 76              | 716.66                   |               |                         | 4.5               |                         |
|                       | 240                 | 66.7 | 840             |                  | 74              | 741.92                   |               |                         | 5.0               |                         |



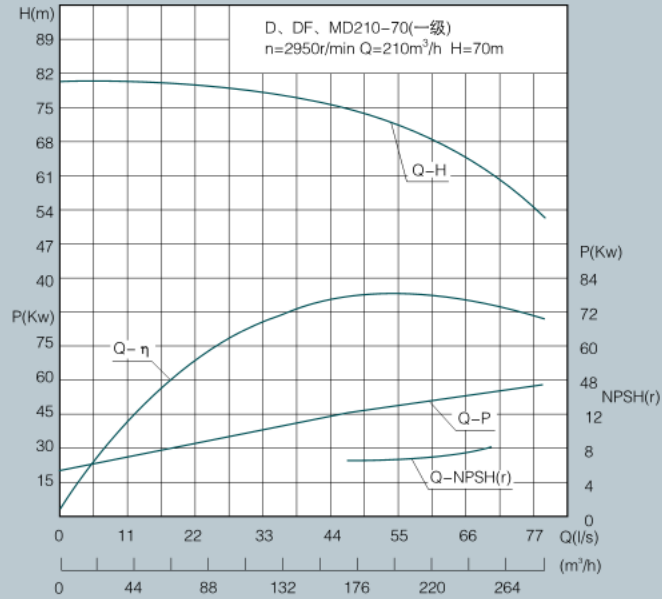
ZD、ZDG、ZDF、ZDY、ZMD 200-150型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-150



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号                      | m                 | mm                      |
|                       |                     |      |                 |                  |                 |                          | kW            | Type                    |                   |                         |
| 3                     | 150                 | 41.7 | 517             | 2950             | 65              | 325.33                   | 400           | Y2-3556-2<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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<br>(IP23/6KV) | 2.5               | φ 343                   |
|                       | 200                 | 55.6 | 1500            |                  | 72              | 1134.71                  |               |                         | 2.5               |                         |
|                       | 240                 | 66.7 | 1260            |                  | 70              | 1176.47                  |               |                         | 3.0               |                         |



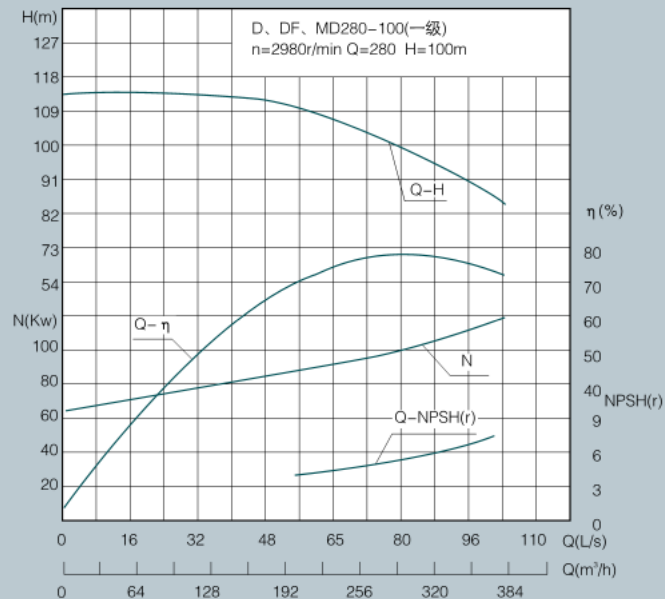
ZD、ZDG、ZDF、ZDY、ZMD 210-70型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 210-70



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s   |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 3                     | 160                 | 44.44 | 222             | 2950             | 77              | 125.70                   | 200           | Y2-315L <sub>2</sub> -2 | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 210             |                  | 79.2            | 151.73                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 186             |                  | 74              | 178.08                   |               |                         | 7.8               |                         |
| 4                     | 160                 | 44.44 | 292             | 2950             | 77              | 165.34                   | 280           | Y2-355L <sub>1</sub> -2 | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 280             |                  | 79.2            | 202.31                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 256             |                  | 74              | 245.10                   |               |                         | 7.8               |                         |
| 5                     | 160                 | 44.44 | 362             | 2950             | 77              | 204.98                   | 355           | Y2-3555-2<br>(IP23/6KV) | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 350             |                  | 79.2            | 252.89                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 326             |                  | 74              | 312.12                   |               |                         | 7.8               |                         |
| 6                     | 160                 | 44.44 | 432             | 2950             | 77              | 244.61                   | 450           | Y2-4001-2<br>(IP23/6KV) | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 420             |                  | 79.2            | 303.47                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 396             |                  | 74              | 379.14                   |               |                         | 7.8               |                         |
| 7                     | 160                 | 44.44 | 502             | 2950             | 77              | 284.25                   | 500           | Y2-4002-2<br>(IP23/6KV) | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 490             |                  | 79.2            | 354.04                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 466             |                  | 74              | 446.16                   |               |                         | 7.8               |                         |
| 8                     | 160                 | 44.44 | 572             | 2950             | 77              | 323.89                   | 560           | Y2-4003-2<br>(IP23/6KV) | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 560             |                  | 79.2            | 404.62                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 536             |                  | 74              | 513.18                   |               |                         | 7.8               |                         |
| 9                     | 160                 | 44.44 | 642             | 2950             | 77              | 363.52                   | 630           | Y2-4004-2<br>(IP23/6KV) | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 630             |                  | 79.2            | 455.20                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 606             |                  | 74              | 580.20                   |               |                         | 7.8               |                         |
| 10                    | 160                 | 44.44 | 712             | 2950             | 77              | 403.16                   | 710           | Y2-4501-2<br>(IP23/6KV) | 6.2               | φ 252                   |
|                       | 210                 | 58.33 | 700             |                  | 79.2            | 385.35                   |               |                         | 7.0               |                         |
|                       | 260                 | 72.22 | 676             |                  | 74              | 647.22                   |               |                         | 7.8               |                         |

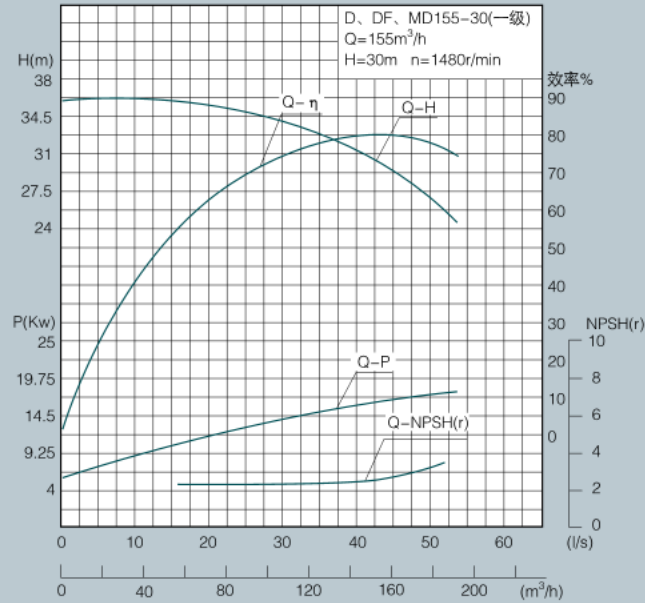


ZD、ZDG、ZDF、ZDY、ZMD 280-100型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 280-100



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |       |   |    |    |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|-------|---|----|----|
|                       |                     |      |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type |                   |                         |       |   |    |    |
|                       | m³/h                | L/s  |                 |                  |                 |                          | m             |            |                   |                         | r/min | % | kW | kW |
| 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

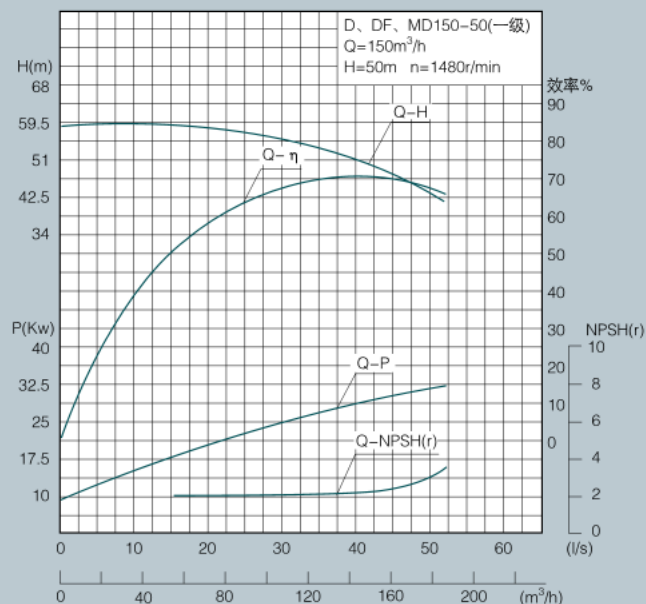


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 2                     | 119                 | 33.0 | 64              | 1480             | 75              | 27.65                    | 45            | Y2-225M-4               | 3.2               | φ 305                   |
|                       | 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               | φ 305                   |
|                       | 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               | φ 305                   |
|                       | 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               | φ 305                   |
|                       | 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               | φ 305                   |
|                       | 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 <sub>1</sub> -4 | 3.2               | φ 305                   |
|                       | 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 <sub>1</sub> -4 | 3.2               | φ 305                   |
|                       | 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 <sub>2</sub> -4 | 3.2               | φ 305                   |
|                       | 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 <sub>2</sub> -4 | 3.2               | φ 305                   |
|                       | 155                 | 43.0 | 300             |                  | 80              | 158.29                   |               |                         | 3.9               |                         |
|                       | 190                 | 52.8 | 270             |                  | 82              | 170.37                   |               |                         | 4.8               |                         |



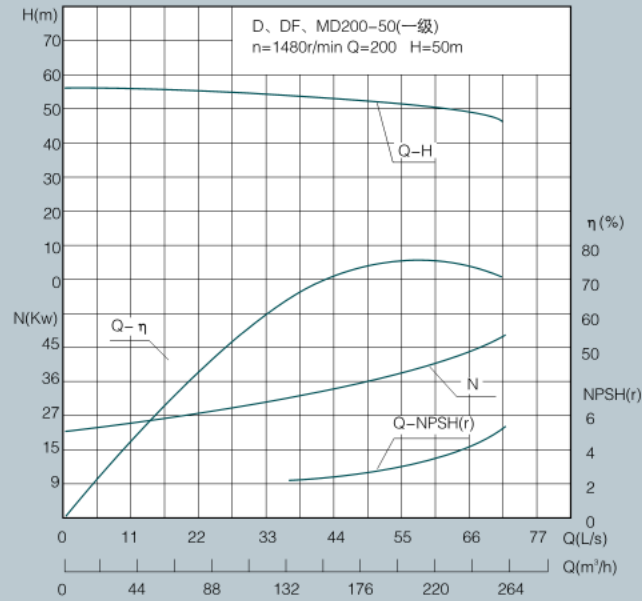


ZD、ZDG、ZDF、ZDY、ZMD 150-50型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 150-50



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |            | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | 功率<br>Power         | 型号<br>Type |                 |                  |                 |                          |               |                         |                   |                         |
|                       |                     |            |                 |                  |                 |                          | m³/h          | L/s                     |                   |                         |
| 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 <sub>1</sub> -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 <sub>2</sub> -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 <sub>1</sub> -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 <sub>2</sub> -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 <sub>1</sub> -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 <sub>2</sub> -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<br>(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               |                         |

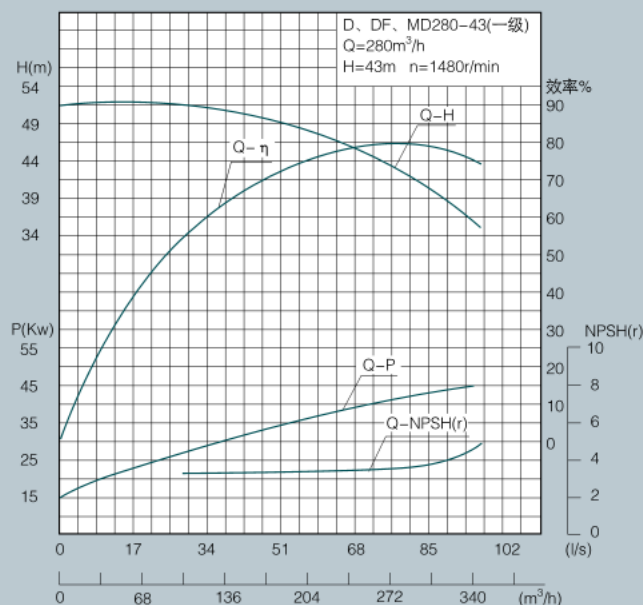
ZD、ZDG、ZDF、ZDY、ZMD 200-50型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 200-50



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | kW            |                         | m                 | mm                      |
| 4                     | 132                 | 36.7 | 218             | 1480             | 63              | 124.2                    | 185           | Y2-315L-4               | 2.3               | φ 385                   |
|                       | 200                 | 55.6 | 208             |                  | 75              | 151.1                    |               |                         | 3.0               |                         |
|                       | 240                 | 66.7 | 198             |                  | 74              | 175.2                    |               |                         | 4.1               |                         |
| 5                     | 132                 | 36.7 | 272             | 1480             | 63              | 155.2                    | 250           | Y2-355M <sub>2</sub> -4 | 2.3               | φ 385                   |
|                       | 200                 | 55.6 | 260             |                  | 75              | 188.8                    |               |                         | 3.0               |                         |
|                       | 240                 | 66.7 | 248             |                  | 74              | 219.0                    |               |                         | 4.1               |                         |
| 6                     | 132                 | 36.7 | 326             | 1480             | 63              | 186.2                    | 280           | Y2-355L-4               | 2.3               | φ 385                   |
|                       | 200                 | 55.6 | 312             |                  | 75              | 226.6                    |               |                         | 3.0               |                         |
|                       | 240                 | 66.7 | 298             |                  | 74              | 262.9                    |               |                         | 4.1               |                         |
| 7                     | 132                 | 36.7 | 381             | 1480             | 63              | 217.3                    | 315           | Y2-355L <sub>2</sub> -4 | 2.3               | φ 385                   |
|                       | 200                 | 55.6 | 364             |                  | 75              | 264.3                    |               |                         | 3.0               |                         |
|                       | 240                 | 66.7 | 347             |                  | 74              | 306.7                    |               |                         | 4.1               |                         |
| 8                     | 132                 | 36.7 | 435             | 1480             | 63              | 248.3                    | 355           | Y2-4001-4               | 2.3               | φ 385                   |
|                       | 200                 | 55.6 | 416             |                  | 75              | 302.1                    |               |                         | 3.0               |                         |
|                       | 240                 | 66.7 | 397             |                  | 74              | 350.5                    |               |                         | 4.1               |                         |
| 9                     | 132                 | 36.7 | 490             | 1480             | 63              | 279.4                    | 400           | Y2-3556-4               | 2.3               | φ 385                   |
|                       | 200                 | 55.6 | 468             |                  | 75              | 339.9                    |               |                         | 3.0               |                         |
|                       | 240                 | 66.7 | 445             |                  | 74              | 394.3                    |               |                         | 4.1               |                         |
| 10                    | 132                 | 36.7 | 544             | 1480             | 63              | 310.4                    | 450           | Y2-4001-4               | 2.3               | φ 385                   |
|                       | 200                 | 55.6 | 520             |                  | 75              | 377.6                    |               |                         | 3.0               |                         |
|                       | 240                 | 66.7 | 496             |                  | 74              | 438.1                    |               |                         | 4.1               |                         |

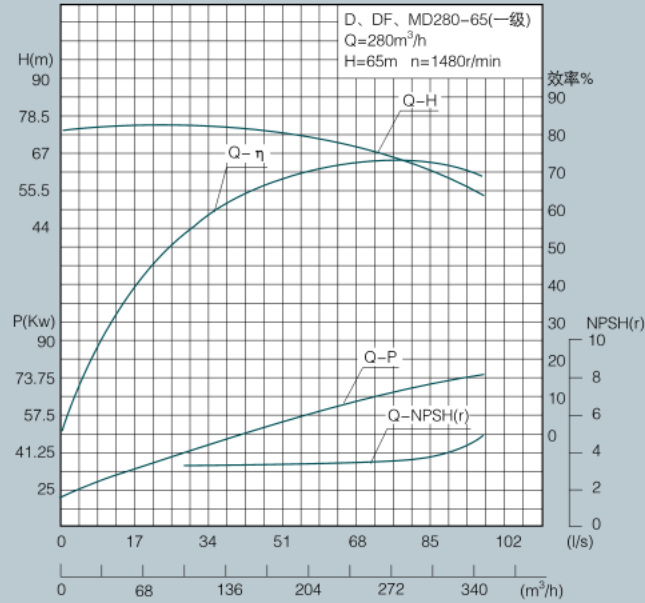


ZD、ZDG、ZDF、ZDY、ZMD 280-43型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 280-43



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                 | mm                      |
|                       |                     |      |                 |                  |                 |                          | kW            |                         |                   |                         |
| 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 <sub>1</sub> -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 <sub>2</sub> -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 <sub>1</sub> -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 <sub>2</sub> -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<br>(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<br>(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<br>(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

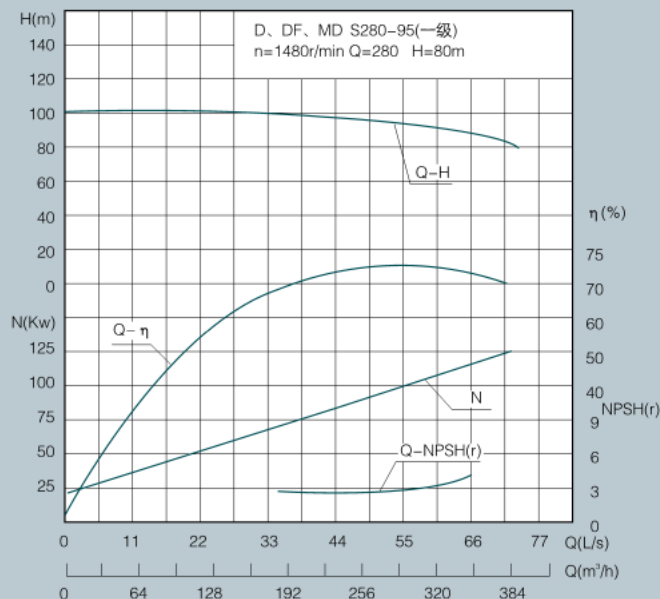


| 级数<br>Number of<br>Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径<br>Impeller<br>Dia. |
|--------------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-----------------------|--------------------------------|
|                          | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号                      | m                     | mm                             |
|                          |                     |      |                 |                  |                 |                          | kW            | Type                    |                       |                                |
| 3                        | 185                 | 51.4 | 204             | 1480             | 61              | 168.48                   | 280           | Y2-3555-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 195             |                  | 73              | 203.68                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 186             |                  | 74              | 229.31                   |               |                         | 5.0                   |                                |
| 4                        | 185                 | 51.4 | 272             | 1480             | 61              | 224.65                   | 355           | Y2-4001-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 260             |                  | 73              | 271.58                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 248             |                  | 74              | 305.74                   |               |                         | 5.0                   |                                |
| 5                        | 185                 | 51.4 | 340             | 1480             | 61              | 280.81                   | 450           | Y2-4003-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 325             |                  | 73              | 339.48                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 310             |                  | 74              | 382.18                   |               |                         | 5.0                   |                                |
| 6                        | 185                 | 51.4 | 408             | 1480             | 61              | 336.97                   | 500           | Y2-4004-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 390             |                  | 73              | 407.37                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 372             |                  | 74              | 458.62                   |               |                         | 5.0                   |                                |
| 7                        | 185                 | 51.4 | 476             | 1480             | 61              | 393.13                   | 630           | Y2-4004-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 455             |                  | 73              | 475.27                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 434             |                  | 74              | 535.05                   |               |                         | 5.0                   |                                |
| 8                        | 185                 | 51.4 | 544             | 1480             | 61              | 449.30                   | 710           | Y2-4501-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 520             |                  | 73              | 543.17                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 496             |                  | 74              | 611.49                   |               |                         | 5.0                   |                                |
| 9                        | 185                 | 51.4 | 612             | 1480             | 61              | 505.46                   | 800           | Y2-4503-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 585             |                  | 73              | 611.06                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 558             |                  | 74              | 687.93                   |               |                         | 5.0                   |                                |
| 10                       | 185                 | 51.4 | 680             | 1480             | 61              | 561.62                   | 900           | Y2-4504-4<br>(IP23/6KV) | 2.8                   | φ 430                          |
|                          | 280                 | 77.8 | 650             |                  | 73              | 678.96                   |               |                         | 3.7                   |                                |
|                          | 335                 | 93.1 | 620             |                  | 74              | 764.36                   |               |                         | 5.0                   |                                |



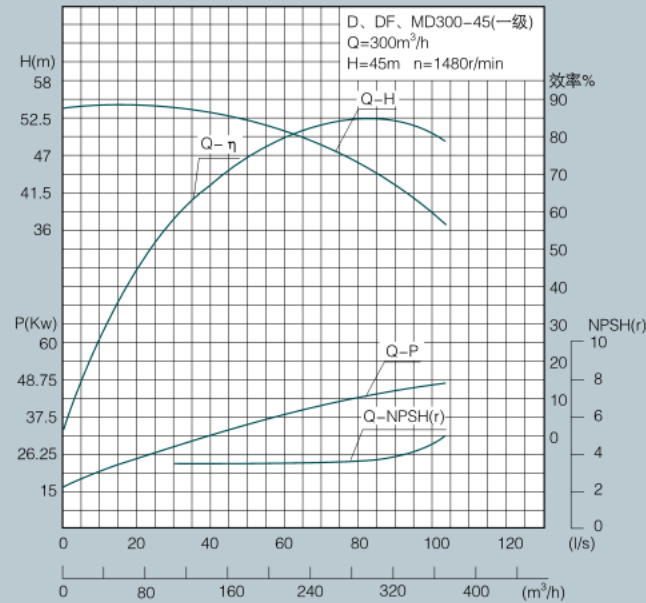


ZD、ZDG、ZDF、ZDY、ZMD S280-95型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD S280-95



| 级数<br>Number<br>of<br>Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径 |
|-----------------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-----------------------|------------|
|                             | m³/h                | L/s  | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type | m                     | mm         |
|                             |                     |      |                 |                  |                 |                          | kW            |            |                       |            |
| 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                   |            |

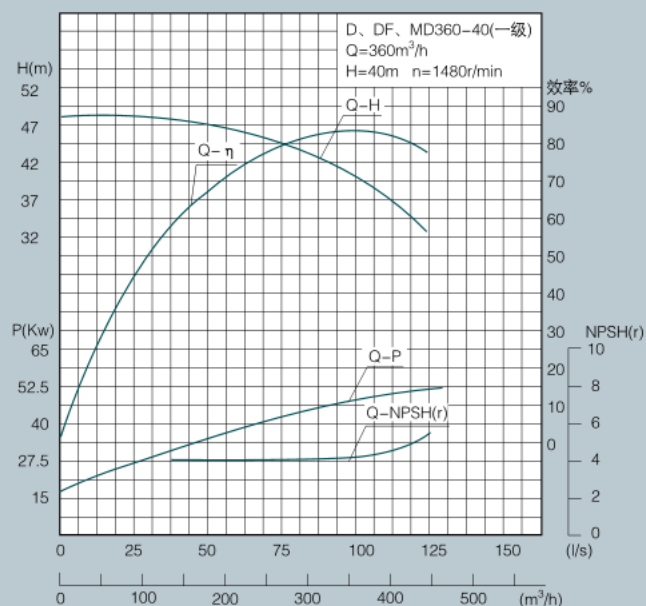
ZD、ZDG、ZDF、ZDY、ZMD 300-45型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 300-45



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |      | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s  |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 2                     | 200                 | 55.6 | 97              | 1480             | 78              | 67.73                    | 110           | Y2-315S-4               | 2.5               | φ 360                   |
|                       | 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 <sub>1</sub> -4 | 2.5               | φ 360                   |
|                       | 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 <sub>2</sub> -4 | 2.5               | φ 360                   |
|                       | 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 <sub>2</sub> -4 | 2.5               | φ 360                   |
|                       | 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 <sub>2</sub> -4 | 2.5               | φ 360                   |
|                       | 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<br>(IP23/6KV) | 2.5               | φ 360                   |
|                       | 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<br>(IP23/6KV) | 2.5               | φ 360                   |
|                       | 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<br>(IP23/6KV) | 2.5               | φ 360                   |
|                       | 300                 | 83.3 | 405             |                  | 83              | 398.65                   |               |                         | 4.0               |                         |
|                       | 350                 | 97.2 | 364             |                  | 85              | 408.17                   |               |                         | 5.2               |                         |

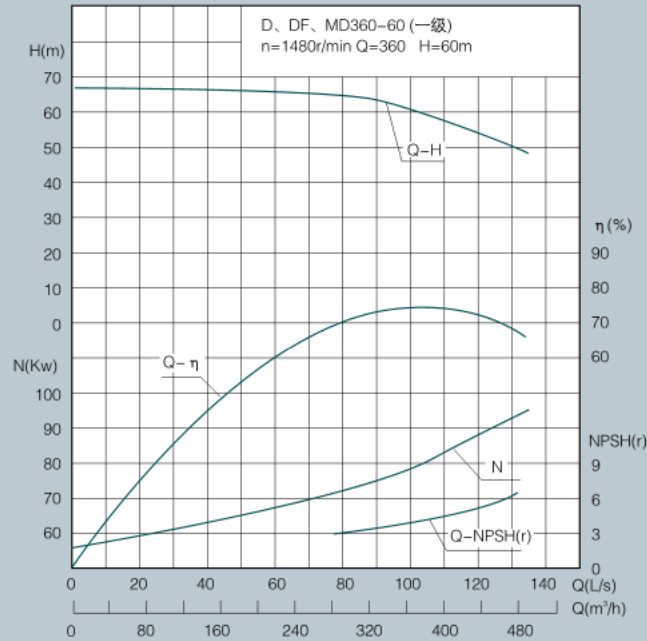


ZD、ZDG、ZDF、ZDY、ZMD 360-40型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 360-40



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s   | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type              | m                 | mm                      |
|                       |                     |       |                 |                  |                 |                          | kW            |                         |                   |                         |
| 3                     | 300                 | 83.3  | 126.0           | 1480             | 81              | 127.08                   | 185           | Y2-315L <sub>2</sub> -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           | Y2-355M <sub>2</sub> -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           | Y2-355L <sub>2</sub> -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<br>(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<br>(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<br>(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<br>(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<br>(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

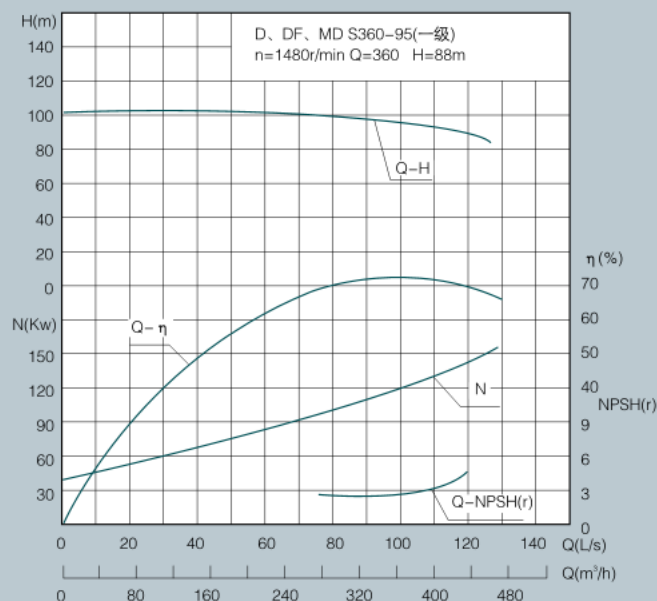


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |            | 扬程<br>Head<br>H<br>m | 转速<br>Speed<br>n<br>r/min | 效率<br>Eff.<br>η<br>% | 轴功率<br>Shaft power<br>Pa<br>kW | 配用电机<br>Motor |           | 必需汽蚀余量<br>(NPSH)r<br>m | 叶轮名义直径<br>Impeller Dia.<br>mm |
|-----------------------|---------------------|------------|----------------------|---------------------------|----------------------|--------------------------------|---------------|-----------|------------------------|-------------------------------|
|                       | 功率<br>Power<br>kW   | 型号<br>Type |                      |                           |                      |                                |               |           |                        |                               |
|                       |                     |            |                      |                           |                      |                                | m³/h          | L/s       |                        |                               |
| 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                    |                               |



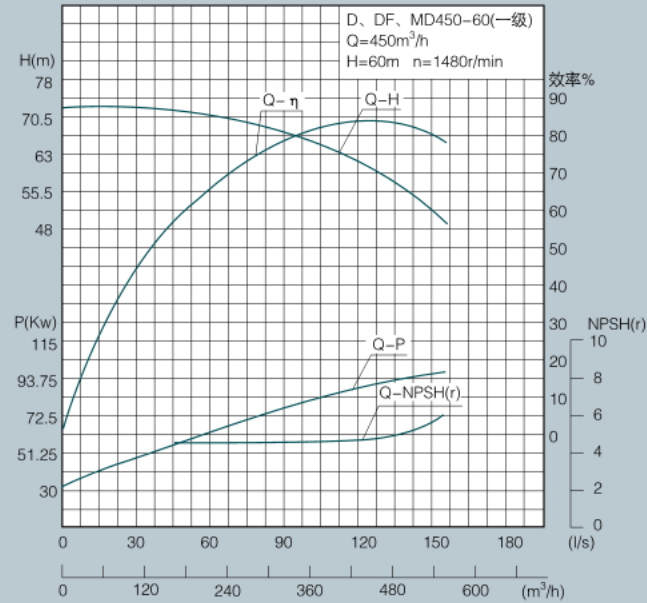


ZD、ZDG、ZDF、ZDY、ZMD S360-95型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD S360-95



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径 |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|--------|
|                       |                     |       |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type |                   |        |
|                       | m³/h                | L/s   | m               | r/min            | %               | kW                       | 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               |        |

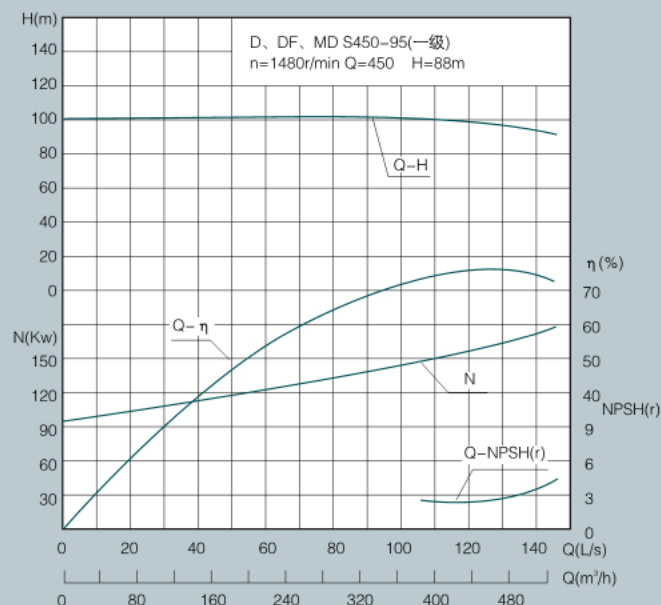
ZD、ZDG、ZDF、ZDY、ZMD 450-60型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 450-60



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH) <sub>r</sub> | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------------------|-------------------------|
|                       | m³/h                | L/s   |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                               |                         |
| 2                     | 335                 | 93.1  | 130             | 1480             | 76              | 156.05                   | 250           | Y2-3554-4<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 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<br>(IP23/6KV) | 4.1                           | φ 430                   |
|                       | 450                 | 125.0 | 600             |                  | 84              | 875.35                   |               |                         | 5.2                           |                         |
|                       | 500                 | 138.9 | 570             |                  | 83              | 935.11                   |               |                         | 6.3                           |                         |

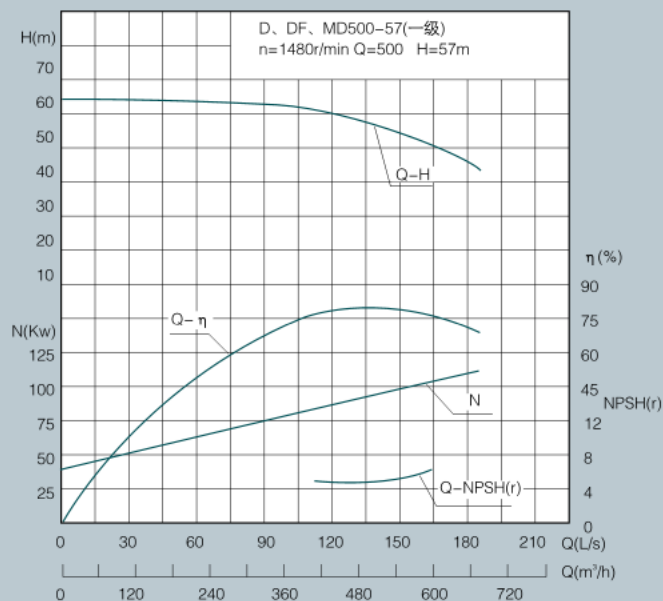


ZD、ZDG、ZDF、ZDY、ZMD S450-95型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD S450-95



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s   | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号<br>Type | m                 | mm                      |
|                       |                     |       |                 |                  |                 |                          | kW            |            |                   |                         |
| 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

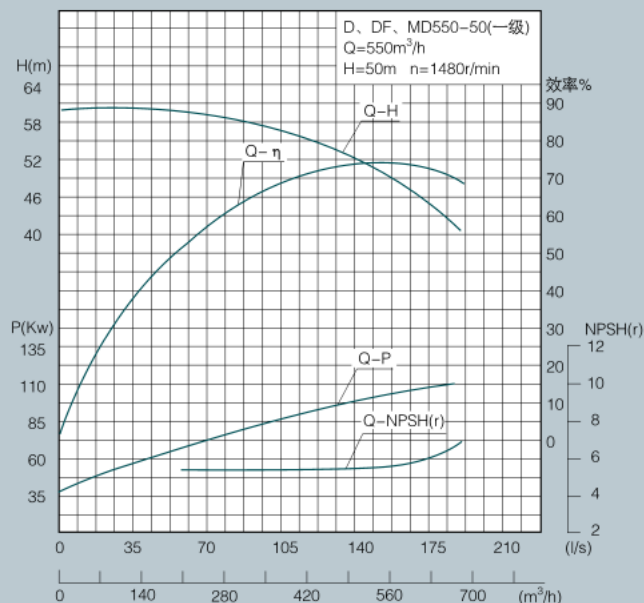


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s   |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type |                   |                         |
| 3                     | 450                 | 125.0 | 180             | 1480             | 81              | 272.6                    | 355           | Y2-3555-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 171             |                  | 82              | 284.1                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 162             |                  | 80              | 303.7                    |               |            | 5.8               |                         |
| 4                     | 450                 | 125.0 | 240             | 1480             | 81              | 363.5                    | 450           | Y2-4001-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 228             |                  | 82              | 378.8                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 216             |                  | 80              | 404.9                    |               |            | 5.8               |                         |
| 5                     | 450                 | 125.0 | 300             | 1480             | 81              | 454.4                    | 630           | Y2-4004-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 285             |                  | 82              | 473.5                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 270             |                  | 80              | 506.3                    |               |            | 5.8               |                         |
| 6                     | 450                 | 125.0 | 360             | 1480             | 81              | 545.3                    | 710           | Y2-4501-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 342             |                  | 82              | 568.2                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 324             |                  | 80              | 607.4                    |               |            | 5.8               |                         |
| 7                     | 450                 | 125.0 | 420             | 1480             | 81              | 636.1                    | 800           | Y2-4502-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 399             |                  | 82              | 662.9                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 378             |                  | 80              | 708.6                    |               |            | 5.8               |                         |
| 8                     | 450                 | 125.0 | 480             | 1480             | 81              | 727.0                    | 1000          | Y2-4504-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 456             |                  | 82              | 757.6                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 432             |                  | 80              | 809.8                    |               |            | 5.8               |                         |
| 9                     | 450                 | 125.0 | 540             | 1480             | 81              | 817.9                    | 1120          | Y2-5001-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 513             |                  | 82              | 852.3                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 486             |                  | 80              | 911.0                    |               |            | 5.8               |                         |
| 10                    | 450                 | 125.0 | 600             | 1480             | 81              | 908.8                    | 1250          | Y2-5002-4  | 4.4               | φ 430                   |
|                       | 500                 | 138.9 | 570             |                  | 82              | 947.0                    |               |            | 5.0               |                         |
|                       | 550                 | 152.7 | 540             |                  | 80              | 1012.3                   |               |            | 5.8               |                         |



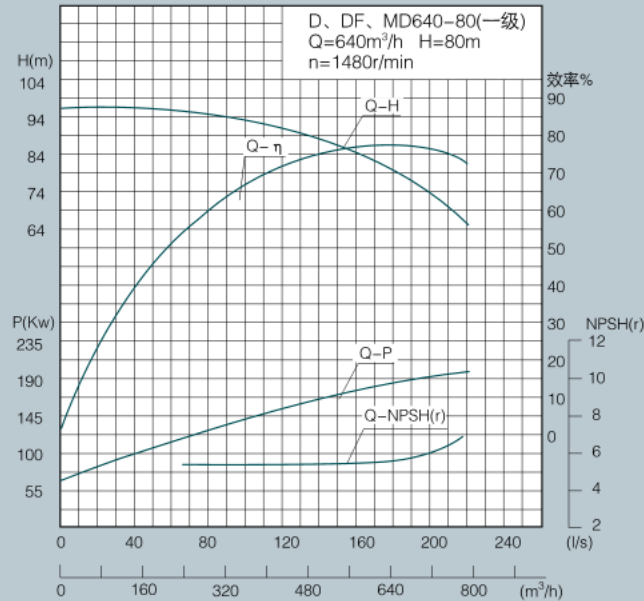


ZD、ZDG、ZDF、ZDY、ZMD 550-50型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 550-50



| 级数<br>Number of<br>Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                                       | 必需汽<br>蚀余量<br>(NPSH)r | 叶轮名<br>义直径 |
|--------------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|---------------------------------------|-----------------------|------------|
|                          | m³/h                | L/s   | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号                                    | m                     | mm         |
|                          |                     |       |                 |                  |                 |                          | kW            | Type                                  |                       |            |
| 2                        | 450                 | 125.0 | 120             | 1480             | 83              | 177.18                   | 220           | Y2-355M <sub>1</sub> -4<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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<br>(IP23/6KV)               | 5.2                   | φ 410      |
|                          | 550                 | 152.7 | 450             |                  | 84              | 802.40                   |               |                                       | 5.8                   |            |
|                          | 590                 | 163.9 | 405             |                  | 80              | 813.42                   |               |                                       | 6.5                   |            |

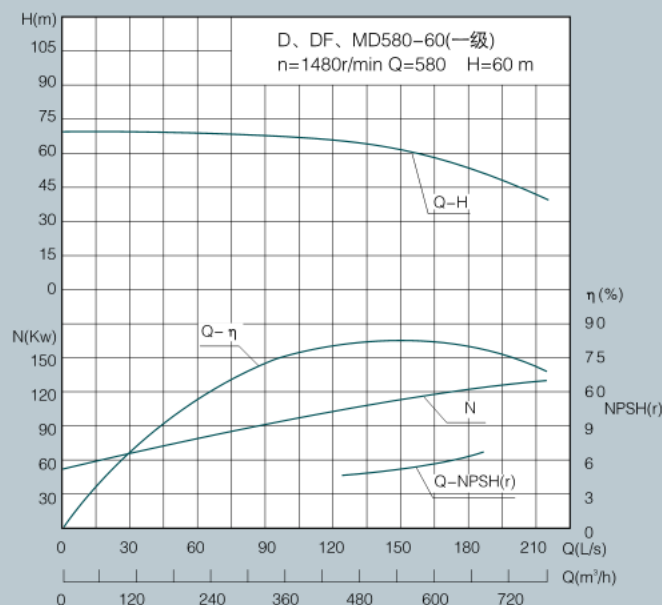
ZD、ZDG、ZDF、ZDY、ZMD 640-80型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 640-80



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s   |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type              |                   |                         |
| 3                     | 530                 | 147.2 | 271.2           | 1480             | 74              | 528.97                   | 710           | Y2-4502-4<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 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<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 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<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 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<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 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<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 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<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 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<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 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<br>(IP23/6KV) | 7.2               | φ 495                   |
|                       | 640                 | 177.8 | 800.0           |                  | 78              | 1787.61                  |               |                         |                   |                         |
|                       | 760                 | 211.1 | 672.0           |                  | 77              | 1806.30                  |               |                         |                   |                         |

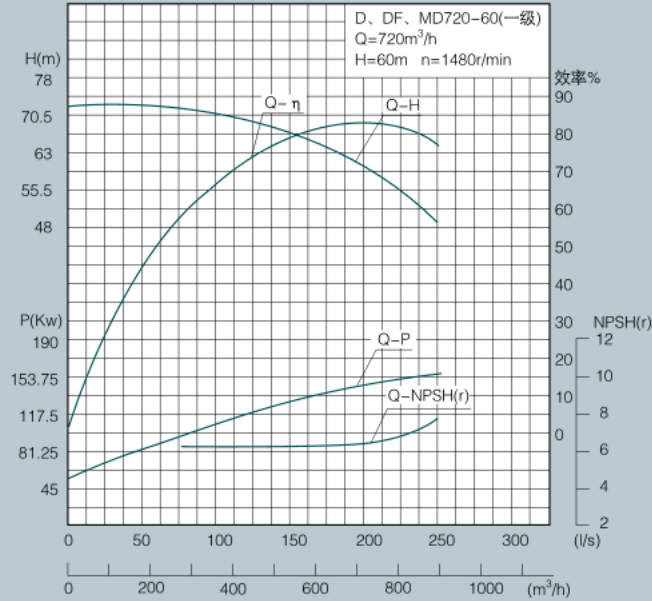


ZD、ZDG、ZDF、ZDY、ZMD 580-60型泵性能曲线和性能参数表  
Performance Curve and Data Table for ZD, ZDG, ZDF, ZDY, ZMD 580-60



| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |            | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|------------|-------------------|-------------------------|
|                       | m³/h                | L/s   |                 |                  |                 |                          | 功率<br>Power   | 型号<br>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

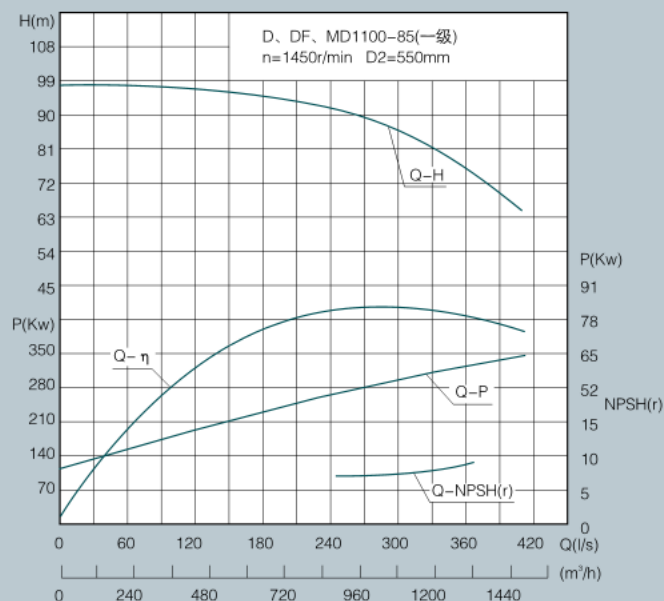


| 级数<br>Number of Stage | 流量<br>Capacity<br>Q |       | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                         | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|-------|-----------------|------------------|-----------------|--------------------------|---------------|-------------------------|-------------------|-------------------------|
|                       | m³/h                | L/s   | m               | r/min            | %               | kW                       | 功率<br>Power   | 型号                      | m                 | mm                      |
|                       |                     |       |                 |                  |                 |                          | kW            | Type                    |                   |                         |
| 3                     | 550                 | 152.8 | 198             | 1480             | 75              | 310.59                   | 560           | Y2-4005-4<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>(IP23/6KV) | 7.0               | φ 450                   |
|                       | 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<br>Number of Stage | 流量<br>Capacity<br>Q |        | 扬程<br>Head<br>H | 转速<br>Speed<br>n | 效率<br>Eff.<br>η | 轴功率<br>Shaft power<br>Pa | 配用电机<br>Motor |                          | 必需汽蚀余量<br>(NPSH)r | 叶轮名义直径<br>Impeller Dia. |
|-----------------------|---------------------|--------|-----------------|------------------|-----------------|--------------------------|---------------|--------------------------|-------------------|-------------------------|
|                       |                     |        |                 |                  |                 |                          | 功率<br>Power   | 型号<br>Type               |                   |                         |
|                       | m³/h                | L/s    | m               | r/min            | %               | kW                       | kW            |                          | m                 | mm                      |
| 3                     | 850                 | 236.11 | 267             | 1450             | 82              | 754.2                    | 1250          | Y2-5003-4<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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，拧下次级吸入段；
- 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，不允许有碰伤、划伤等现象，紧同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心率，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.