



# WLT, WLTS 50Hz

Cooling tower pump



Nanfang Pump Industry Co.,Ltd.

CNP Headquarter  
Address: Renhe Town, Hangzhou, China  
Post code: 311107  
Tel: +86 571 86397837,86397810  
Fax: +86 571 86397809  
E-mail: [info@nanfang-pump.com](mailto:info@nanfang-pump.com)  
<http://www.cnppump.com>

E161004  
Code1500035431  
subject to amendments



# Company Profile



Founded in 1991, Nanfang Pump Industry Co., Ltd. (hereinafter referred to as CNP) has been listed on the Shenzhen Stock Exchange on 9th December 2010; Stock name: CNP; Stock code: 300145.

As the first enterprise specializing in the research and large-scale production of stainless steel stamping welded centrifugal pump in China, CNP is currently the professional manufacturer with the highest volume of production and marketing in that industry. It ranks first in the country in terms of product scope, sales volume, and production quality. The company has set up a complete network of marketing services to meet the requirements of overseas markets as well as domestic needs. The products have seen a wide range of application in the area of pressurization, industry, living water, cycling of air-conditioning water, heat supply, fire extinguishing system, pumping of underground water, treatment of sewage and waste water, chemical industry and desalination of sea water etc.

CNP has now entered into the fast track of development and has taken a major step forward in forging China Strong Pump Enterprise and World's famous brand in the Pump Industry. In order to better meet the client's needs and requirements for expansion, it has set up a wide network of selling and service, as well as offices and service centers in major cities in China, which are aimed at providing timely and effective services for our clients. Meanwhile, our company has successfully penetrated into the world market by forging a good business relationship with more than 50 countries and regions in the Europe, Northern American, and Southeast Asia etc.

# Content

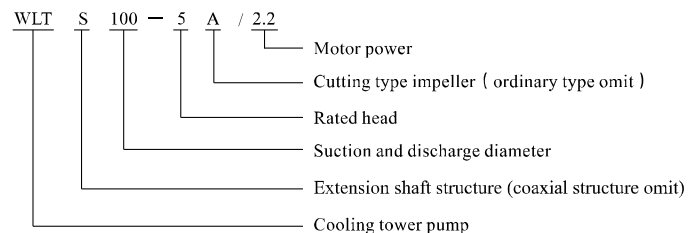
## General Data

Definition of model .....	3
Structure features .....	3
Applications .....	3
Motor .....	3
Curve conditions .....	3
WLT Section drawing .....	4
WLTS Section drawing .....	5
Performance table .....	6

## Technical Data

WLT Installation sketch .....	7
Size and weight .....	7
WLTS Installation sketch .....	8
Size and weight .....	8
Performance curve .....	9

## ● Definition of model



## ● Structure features

- Non-self-priming, single stage, single suction, horizontal; axial suction and radical discharge.
- Motor is fixed by base, easy to install.
- The back pull pattern structure makes it easy to repair.
- WLT Pump shaft is coaxial extended motor shaft, less occupied area, light weight. WLTS Pump is connected to the extended shaft by direct connection type.
- Impeller and casing adopt excellent hydraulic model, they can be designed according to market demand with high efficiency.
- Key components such as impeller and shaft are made of stainless steel.
- Casted by resin sand, the castings feature smooth and bright surface, nice shape, good quality, dense structure.

## ● Applications

- Water circulation of closed cooling tower and condenser; cooling of various unit equipment; circumstances in which need pump with large flow and low head.
- Clean, thin, non-corrosive, non-flammable or non-explosive liquid without solid grain or fiber which won't attack the pump chemically or mechanically. Liquid with high viscosity or big density will result the decrease of performance curve and the increase of energy consumption.
- Liquid temperature: -15°C~100°C
- Max. ambient temperature: +40°C
- Max. working pressure: 6 bar

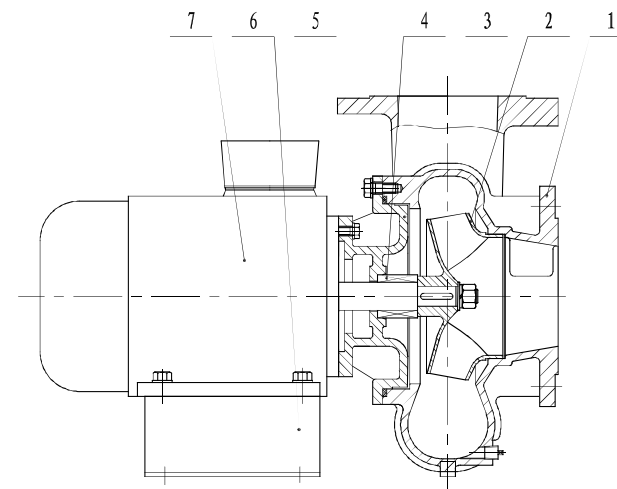
## ● Motor

- Totally closed fan cooled motor
- Protection level: IP55
- Insulation level: F
- Standard voltage: 50Hz: 1×220V  
3×380V

## ● Curve conditions

- Following conditions are suitable for performance curve
- Curve tolerance in conformity with ISO9906:2012,3B.
  - All curves are based on the measured values of 50Hz (3×380V) : constant motor speed 2900rpm or 1450rpm.
  - Test medium is clean water with temperature of 20 °C without any solid impurity and air.
  - The operation of pump should refer to the performance range of curve shown in boldface to prevent overheating due to too small flow rate or overloading due to too large flow rate.

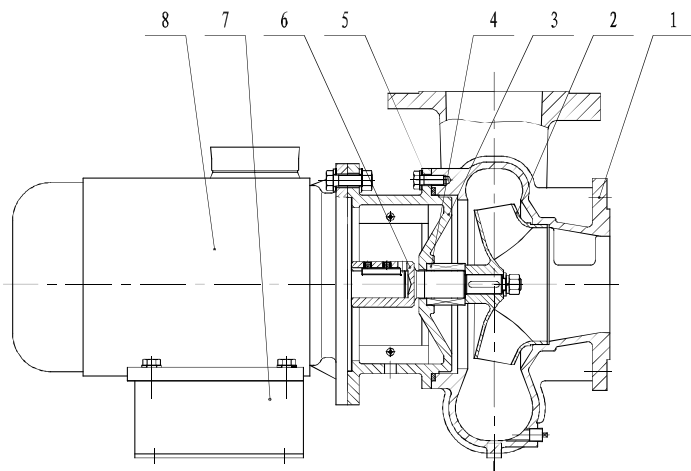
## ● WLT Section drawing



## ● Material

NO.	Name	Material	AISI/ASTM
1	Casing	Cast iron	ASTM25B
2	Impeller	ZG07Cr19Ni9	AISI304
3	pump head	Cast iron	ASTM25B
4	Mechanical seal	Graphite /Silicon carbide	
5	O ring	NBR	
6	Base	Q235-A	AISI A570
7	Motor		

## ● WLTS Section drawing



## ● WLT,WLTS Performance table

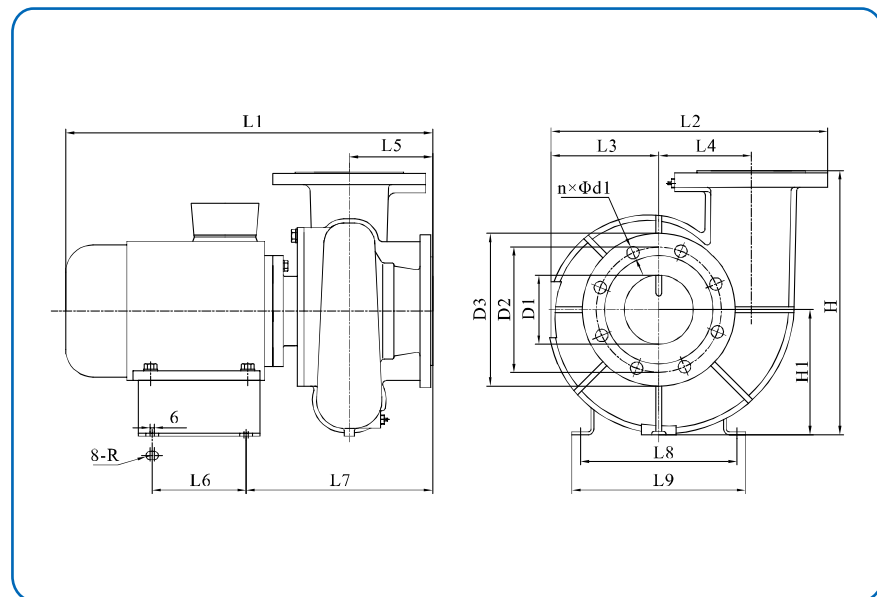
NO	Model	Q [m <sup>3</sup> /h]	H [m]	Motor [kW]	n [r/min]
1	65-5/1.1	45	5	1.1	2900
2	80-5/1.5	65	5	1.5	2900
3	100-5/2.2	120	5	2.2	1450
4	125-5A/3	150	5	3	1450
5	125-5/4	180	5	4	1450
6	150-6/5.5	230	6	5.5	1450

## ● Material

NO.	Name	Material	AISI/ASTM
1	Casing	Cast iron	ASTM25B
2	Impeller	ZG07Cr19Ni9	AISI304
3	pump head	Cast iron	ASTM25B
4	Mechanical seal	Graphite /Silicon carbide	
5	O ring	NBR	
6	Shaft	20Cr13	ASTM420
7	Base	Q235-A	AISIA570
8	Motor		

# General Data

## WLT Installation sketch

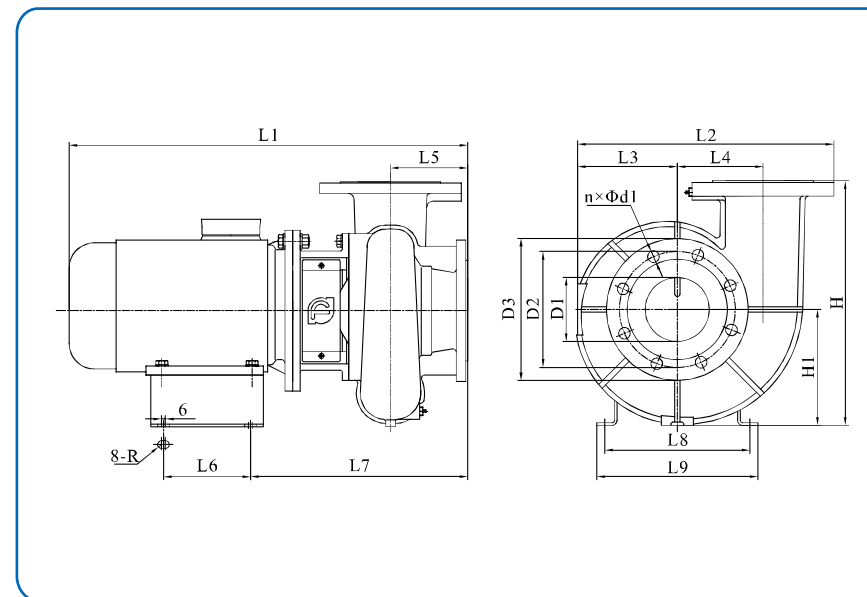


## Size and weight

Model	External dimension					Installation dimension						Inlet and outlet flange dimension					Weight (kg)	
	L1	H	H1	L2	L3	L7	L9	L5	L4	L8	L6	d2	D1	D2	D3	n		d1
WLT65-5/1.1	439	240	120	285	107	247	215	100	85	185	95	5	65	145	185	4	18	29
WLT80-5/1.5	488	270	130	305	115	263	230	110	90	200	120	5	80	160	200	8	18	35
WLT100-5/2.2	562	380	180	400	155	295	250	120	135	225	135	6	100	180	220	8	18	50
WLT125-5A/3	577	432	212	450	175	310	250	135	150	225	135	6	125	210	250	8	18	60
WLT125-5/4	582	432	212	450	175	317	280	135	150	255	135	6	125	210	250	8	18	77
WLT150-6/5.5	653	462	232	510	195	361	350	150	170	310	135	6	150	240	285	8	22	102

# General Data

## WLTS Installation sketch

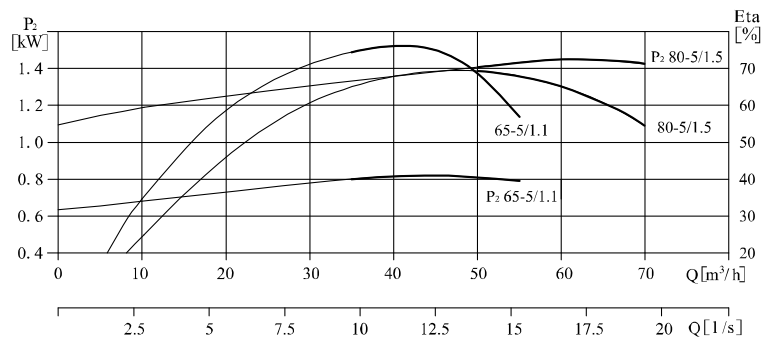
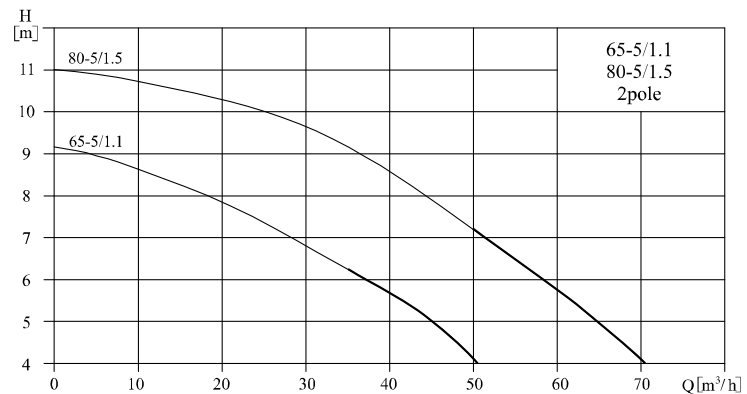


## Size and weight

Model	External dimension					Installation dimension						Inlet and outlet flange dimension					Weight (kg)	
	L1	H	H1	L2	L3	L7	L9	L5	L4	L8	L6	d2	D1	D2	D3	n		d1
WLTS65-5/1.1	470	240	120	285	107	277	215	100	85	185	95	5	65	145	185	4	18	31
WLTS80-5/1.5	527	270	130	305	115	293	230	110	90	200	120	5	80	160	200	8	18	38
WLTS100-5/2.2	609	380	180	400	155	337	250	120	135	225	135	6	100	180	220	8	18	53
WLTS125-5A/3	624	432	212	450	175	352	250	135	150	225	135	6	125	210	250	8	18	63
WLTS125-5/4	642	432	212	450	175	359	280	135	150	255	135	6	125	210	250	8	18	80
WLTS150-6/5.5	700	462	232	510	195	402	350	150	170	310	135	6	150	240	285	8	22	105

## ● Performance curve

2900rpm

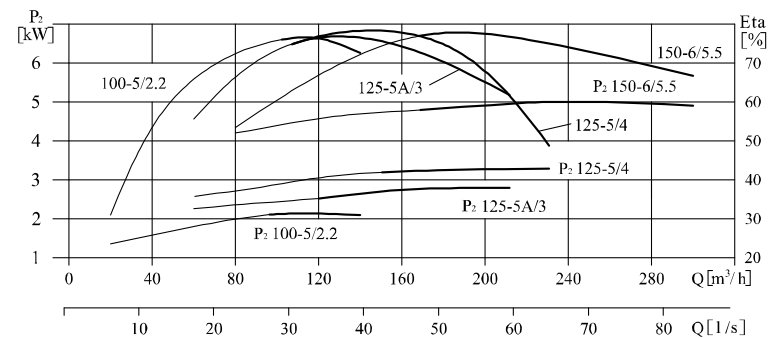
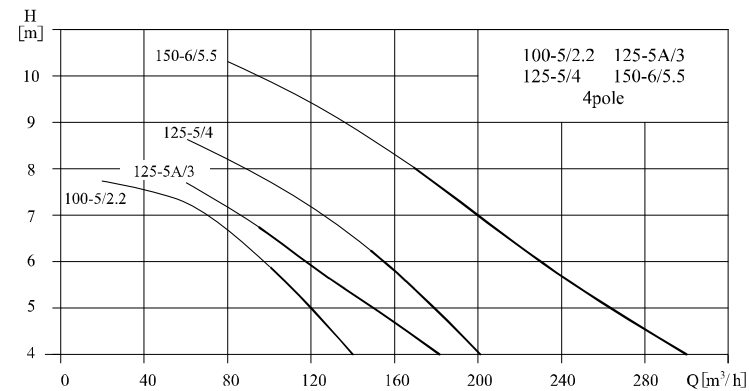


## ● Performance table

Model	Motor (kW)	Q (m³/h)	35	40	45	50	55	60	65	70
65-5/1.1	1.1	H (m)	6.2	5.7	5	4.1				
80-5/1.5	1.5					7.2	6.4	5.8	5	4

## ● Performance curve

1450rpm



## ● Performance table

Model	Motor (kW)	Q (m³/h)	100	110	120	130	140	150	160	170	180	190	200	210	230	250	270	300
100-5/2.2	2.2	H (m)	5.9	5.4	5	4.5	4											
125-5A/3	3		6.6	6.2	5.9	5.6	5.3	5	4.7	4.4	4							
125-5/4	4							6.2	5.8	5.4	5	4.5	4					
150-6/5.5	5.5										8	7.6	7.3	7	6.7	6	5.4	4.8

