



LLT LLTS

50Hz

Vertical Cooling

Tower Circulation Pump



REPRESENTATIVE IN GEORGIA

Address: Tbilisi; Libani street 2

Tel: +995 032 248 35 62

Email: info@cnp.ge

Website: cnp.ge

E220801
Code:150000000
subject to amendments



Stock code:300145

Pumping Water Pumping Honor



Company profile

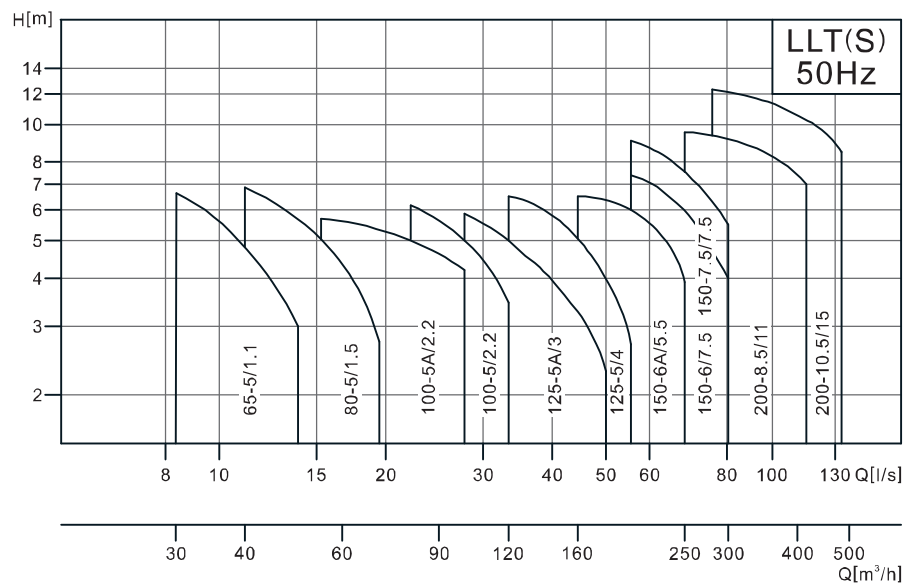
Nanfang Pump Industry Co., Ltd. (CNP), a subsidiary of Nanfang Zhongjin Environment Co., Ltd. was founded in 1991 and listed on Shenzhen Stock Exchange on 9th December 2010, Stock code 300145. In 2019, CNP'S annual output exceeded 900,000 sets and sales exceeded 3 billion RMB, and it continues to maintain high-speed growth. With a national-level enterprise technology center, CNP has its featured product-the innovative CDM (F) series light vertical multi-stage centrifugal pumps, which has ultra-high efficiency $MEI \geq 0.7$. And CNP has developed the same series of high temperature pump products in 2019 to meet the high temperature field pump demand. Its various stainless steel light industrial pump series products maintains stable growth, the complete sets of intelligent water supply and drainage equipment keep leading technology in the market. Its pumps products, including TD in-line circulation pump, NISO/ NIS/ NISF end suction pump, NSC split case pump, VTC vertical turbine pump, VTM series mixed flow pump, ZLB series submersible axial flow pump, NDS Series of multi-stage split case pump, WQ submersible pump, PQ stainless steel submersible fountain pump, BP silent tube pump, swimming pool pump, non-clogging self-priming sewage pump, diesel engine fire pump set, dosing pump, oil pump, NIH chemical process pump, provide pump solutions for the whole system. CNP has set up a perfect marketing network, not only its flagship sales and service in China domestic market, but also won the trust of the overseas market, and CNP has successfully set up good business relationship with distributors and customers from more than 60 countries and regions.

CNP, a green water expert beside you.

Content

Performance range.....	1
Performance parameters	1
Model definition	2
Structure features	2
Application	2
Motor.....	2
Curve conditions	2
LLT Sectional view、Parts material	3
LLTS Sectional view、Parts material	4
LLT(S)65-5/1.1、LLT(S)80-5/1.5 Installation dimension.....	5
LLT(S)65-5/1.1、LLT(S)80-5/1.5 Performance curves、Performance table	6
LLT(S)100-5/2.2、LLT(S)100-5A/2.2 Installation dimension	7
LLT(S)100-5/2.2、LLT(S)100-5A/2.2 Performance curves、Performance table	8
LLT(S)125-5A/3、LLT(S)125-5/4 Installation dimension	9
LLT(S)125-5A/3、LLT(S)125-5/4 Performance curves、Performance table.....	10
LLT(S)150-6A/5.5、LLT(S)150-6/7.5、LLT(S)150-7.5/7.5 Installation dimension	11
LLT(S)150-6A/5.5、LLT(S)150-6/7.5、LLT(S)150-7.5/7.5 Performance curves、Performance table.....	12
LLTS200-8.5/11、LLTS200-10.5/15 Installation dimension	13
LLTS200-8.5/11、LLTS200-10.5/15 Performance curves、Performance table	14

Performance range

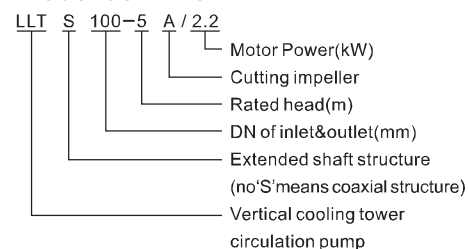


Performance parameters

No.	Pump model	Q (m³/h)	H (m)	Motor (kW)	n (r/min)
1	LLT(S)65-5/1.1	40	5	1.1	2900
2	LLT(S)80-5/1.5	55	5	1.5	
3	LLT(S)100-5A/2.2	80	5	2.2	
4	LLT(S)100-5/2.2	100	5	2.2	1450
5	LLT(S)125-5A/3	120	5	3	
6	LLT(S)125-5/4	160	5	4	
7	LLT(S)150-6A/5.5	200	6	5.5	
8	LLT(S)150-6/7.5	250	6	7.5	
9	LLT(S)150-7.5/7.5	250	7.5	7.5	1480
10	LLTS200-8.5/11*	350	8.5	11	
11	LLTS200-10.5/15*	400	10.5	15	

Note: Pumps marked with '*' only have LLTS structure.

Model definition



Structural features

The pump is non-self-priming, single-stage and single-suction vertical, with horizontal inlet and outlet water.

The LLT pump shaft and the motor shaft are coaxially connected, with small footprint and light weight; The LLTS pump adopts direct-connected elongated shaft structure.

The impeller and pump body are designed with excellent hydraulic model, and the best working conditions are customized according to market demand to achieve high efficiency.

Key components such as impeller and pump shaft are made of stainless steel.

The casting adopts resin sand casting process, with smooth surface, good appearance quality and dense organization.

Application

The pump is mainly used in the water circulation of closed cooling towers and condensers. It is also suitable for the cooling of various unit equipment. It can also be used in some occasions with large flow and low head.

The product is suitable for use in clean, thin, non-erosive, non-flammable and explosive liquids that do not contain any fixed particles and fibers that may cause mechanical or chemical damage to the pump. However, when the liquid is viscous or dense, it will cause a drop in the pump characteristic curve and an increase in energy consumption.

Liquid temperature: -15°C~100°C

Ambient temperature: up to +40°C

Maximum working pressure: 6bar

Motor

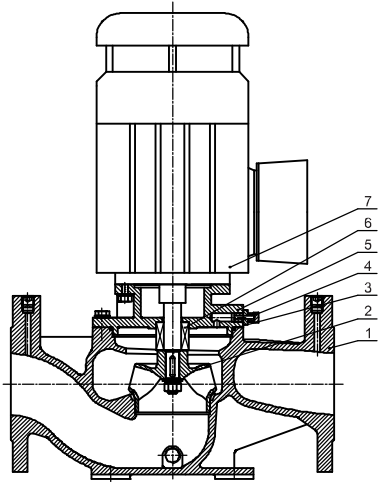
TEFC motor;
Protection class: IP55;
Insulation class: F
Standard voltage: 50Hz 1×220V
3×380V

Curve conditions

The requirements applies to all the performance curves below:

1. All curves are based on the measured value under 3×380V, constant speed of 2900rpm or 1450rpm.
2. Measurement is done with 20°C water without any foreign matter and air.
3. The pump use should refer to the performance range of the bold curve to prevent overheating by too little flow or motor overload by excessive flow.

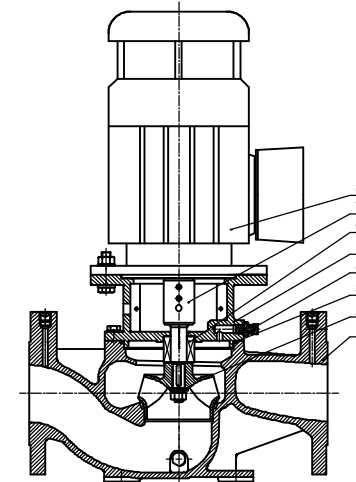
LLT Sectional view



Parts material

No.	Name	Material	AISI/ASTM
1	Pump body	Cast iron HT200	ASTM25B
2	Impeller	Stainless steel ZG07Cr19Ni9	AISI304
3	O-ring	NBR	
4	Air-vent assembly	Assembly	
5	Pump head	Cast iron HT200	ASTM25B
6	Knife type mechanical seal	SC/TC	
7	Motor		

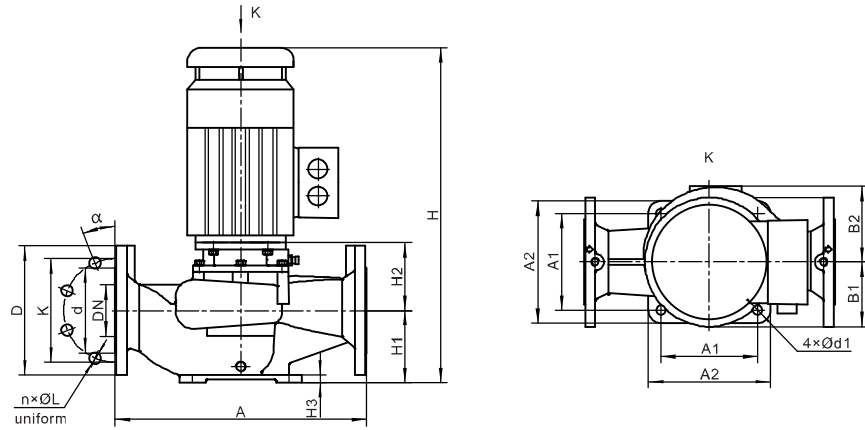
LLTS Sectional view



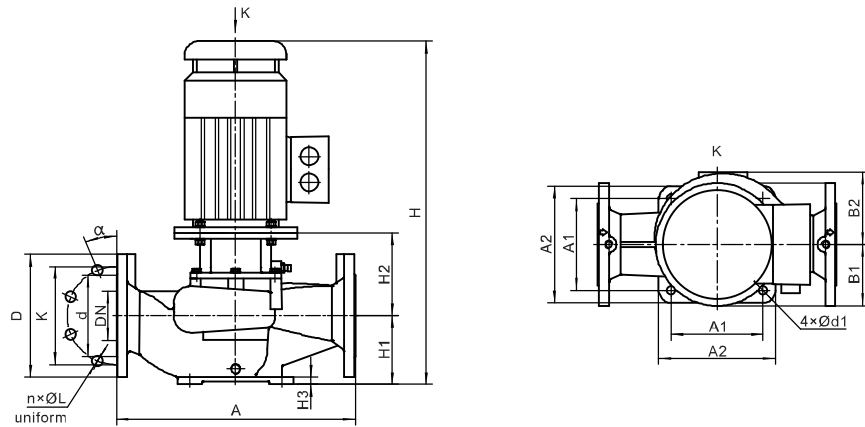
Parts material

No.	Name	Material	AISI/ASTM
1	Pump body	Cast iron HT200	ASTM25B
2	Impeller	Stainless steel ZG07Cr19Ni9	AISI304
3	O-ring	NBR	
4	Air-vent assembly	Assembly	
5	Pump head	Cast iron HT200	ASTM25B
6	Knife type mechanical seal	SC/TC	
7	Pump shaft	Stainless steel 20Cr13	AISI420
8	Motor		

LLT/LLTS Installation dimension



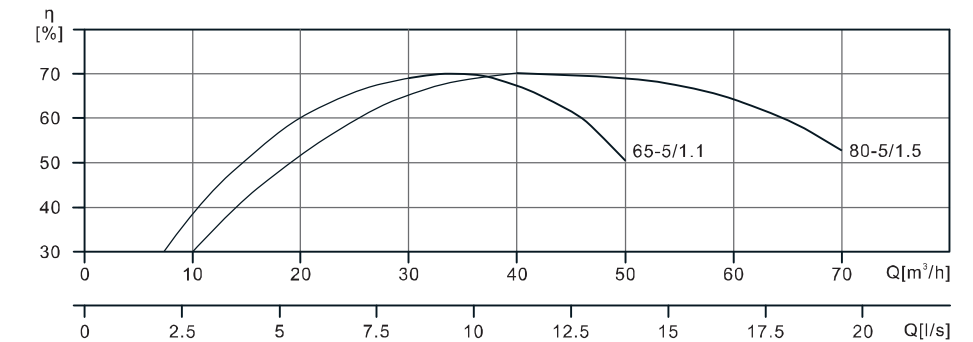
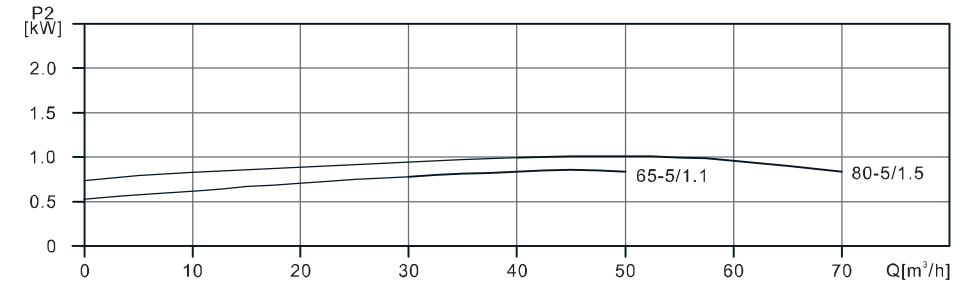
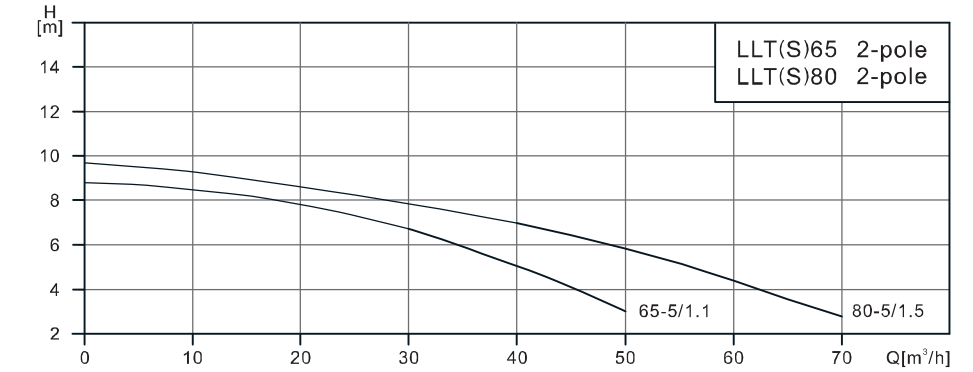
Pump model	Appearance dimension				Installation dimension					Dimension of Inlet&outlet flange					Weight (kg)		
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D		α	$n \times L$
LLT65-5/1.1	340	100	110	490	130	170	15	100	105	12	65	118	145	185	45	4×18	32
LLT80-5/1.5	390	100	120	545	150	190	15	112	105	12	80	132	160	200	22.5	8×18	39



Pump model	Appearance dimension				Installation dimension					Dimension of Inlet&outlet flange					Weight (kg)		
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D		α	$n \times L$
LLTS65-5/1.1	340	100	110	535	130	170	15	100	135	12	65	118	145	185	45	4×18	35
LLTS80-5/1.5	390	100	120	607	150	190	15	112	135	12	80	132	160	200	22.5	8×18	41

Note: Inlet and outlet flange apply to GB/T17241.6 Standard, PN 10RF.

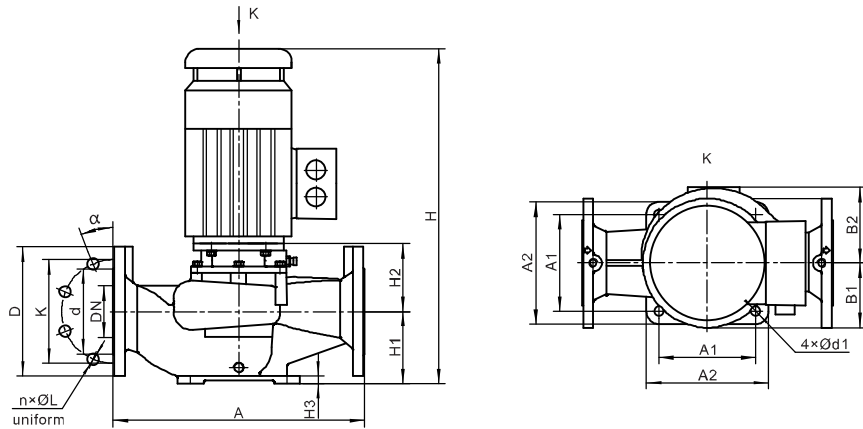
LLT/LLTS Performance curves



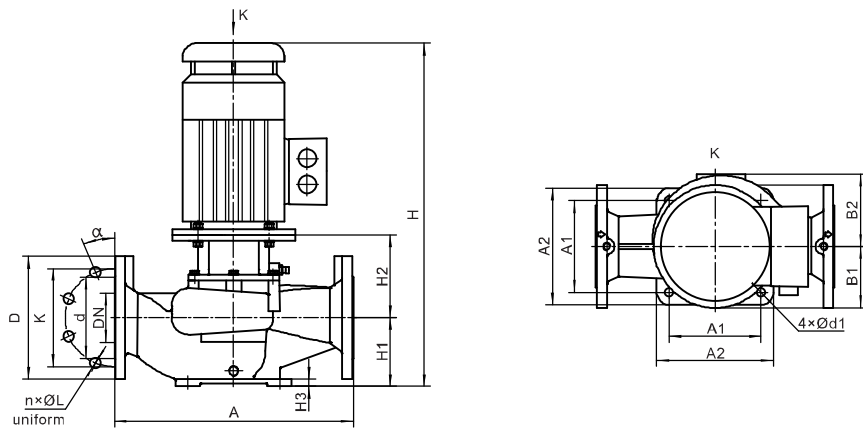
LLT/LLTS Performance table

Pump model	Q(m³/h)	30	35	40	45	50	55	60	65	70
65-5/1.1	H(m)	6.6	5.9	5.0	4.3	3.1				
80-5/1.5				6.9	6.4	5.8	5.0	4.3	3.4	2.8

LLT/LLTS Installation dimension



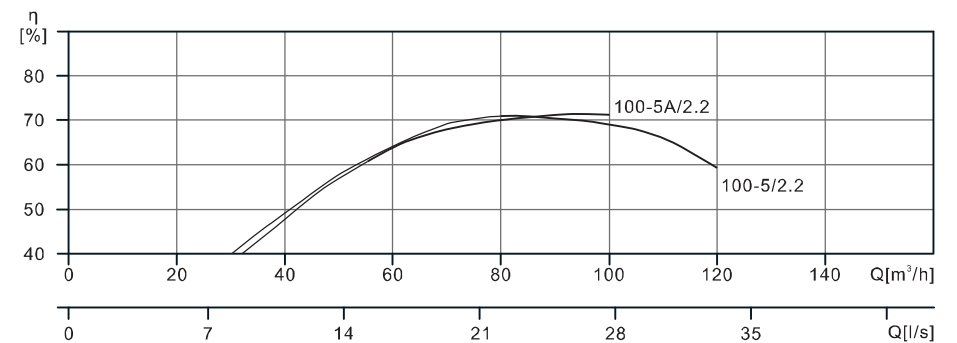
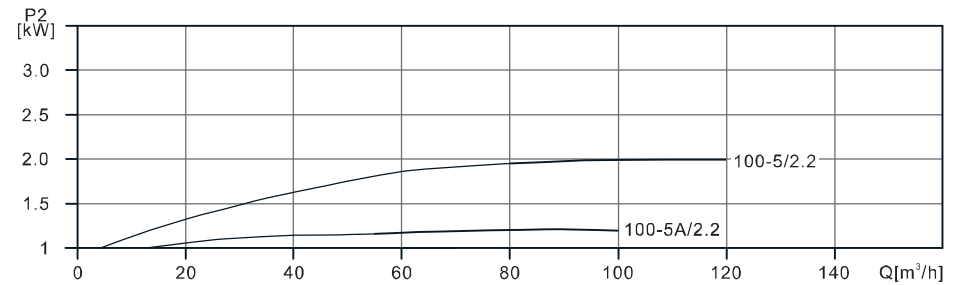
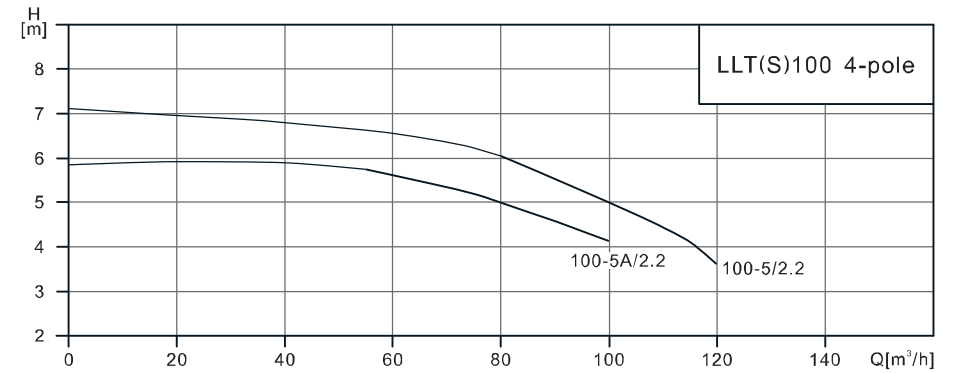
Pump model	Appearance dimension				Installation dimension						Dimension of Inlet&outlet flange					Weight (kg)	
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D	α		n×L
LLT100-5/2.2	560	130	173	702	160	200	15	170	110	30	100	156	180	220	22.5	8×18	66
LLT100-5A/2.2	560	130	173	702	160	200	15	170	110	30	100	156	180	220	22.5	8×18	66



Pump model	Appearance dimension				Installation dimension						Dimension of Inlet&outlet flange					Weight (kg)	
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D	α		n×L
LLTS100-5/2.2	560	130	173	762	160	200	15	170	152	30	100	156	180	220	22.5	8×18	70
LLTS100-5A/2.2	560	130	173	762	160	200	15	170	152	30	100	156	180	220	22.5	8×18	70

Note: Inlet and outlet flange apply to GB/T17241.6 Standard, PN 10RF.

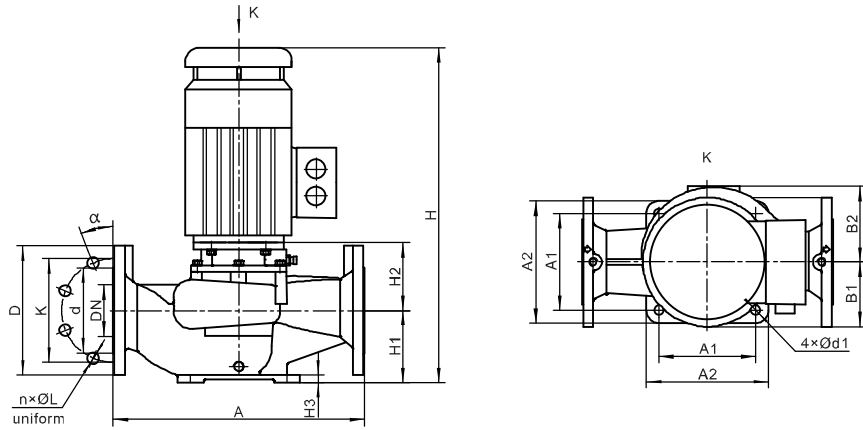
LLT/LLTS Performance curves



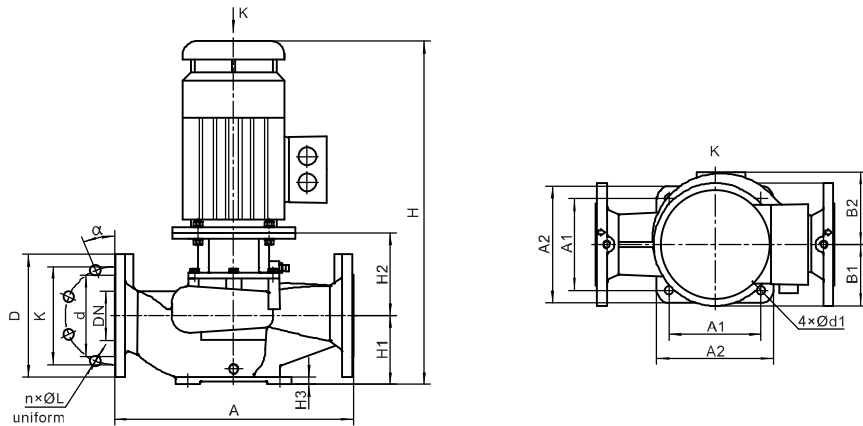
LLT/LLTS Performance table

Pump model	Q(m³/h)	55	60	70	80	90	100	110	120
100-5A/2.2	H(m)	5.7	5.5	5.2	5.0	4.6	4.2		
					6.1	5.6	5.0	4.4	3.5

LLT/LLTS Installation dimension



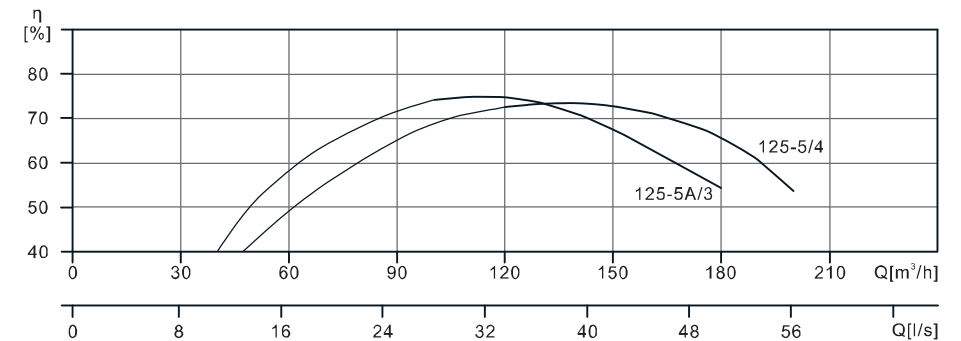
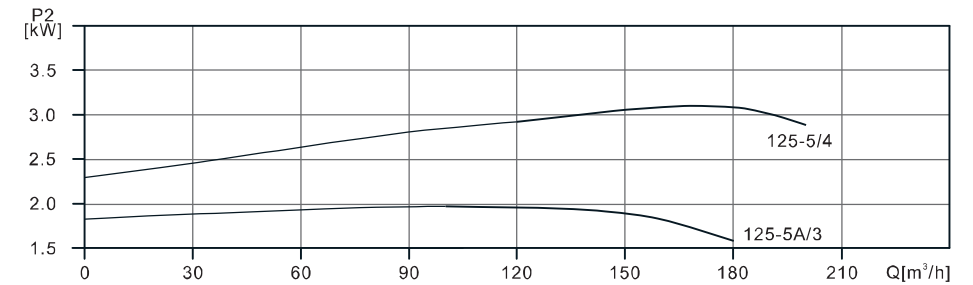
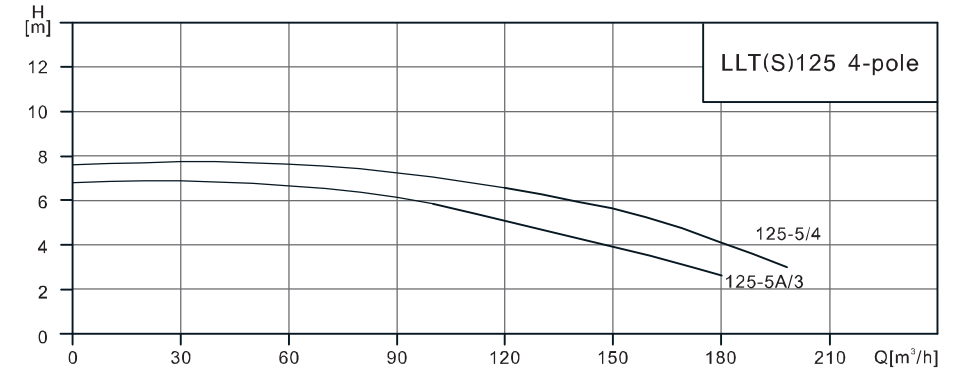
Pump model	Appearance dimension				Installation dimension					Dimension of Inlet&outlet flange					Weight (kg)		
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D		α	n×L
LLT125-5A/3	560	145	195	732	200	240	15	170	140	30	125	184	210	250	22.5	8×18	72
LLT125-5/4	560	145	195	731	200	240	15	170	140	30	125	184	210	250	22.5	8×18	83



Pump model	Appearance dimension				Installation dimension					Dimension of Inlet&outlet flange					Weight (kg)		
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D		α	n×L
LLTS125-5A/3	560	145	195	792	200	240	15	170	182	30	125	184	210	250	22.5	8×18	82
LLTS125-5/4	560	145	195	797	200	240	15	170	182	30	125	184	210	250	22.5	8×18	93

Note: Inlet and outlet flange apply to GB/T17241.6 Standard, PN 10RF.

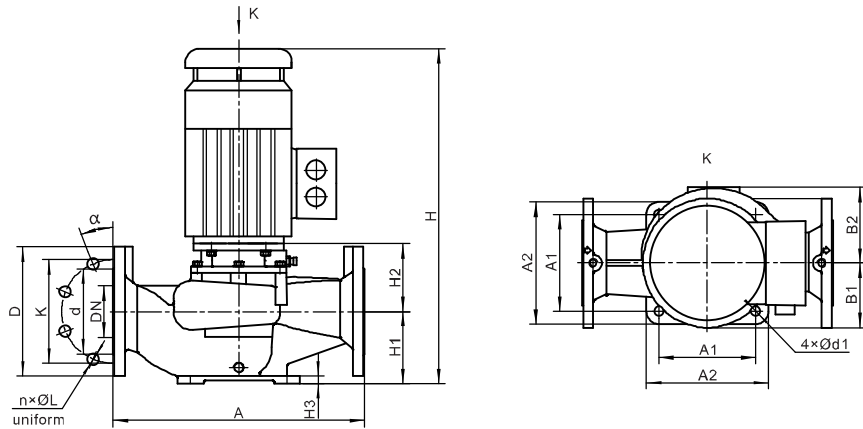
LLT/LLTS Performance curves



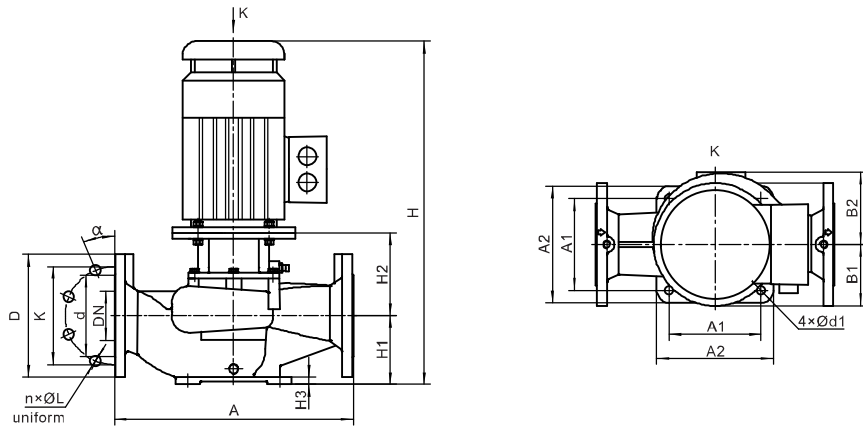
LLT/LLTS Performance table

Pump model	Q(m³/h)	100	110	120	130	140	150	160	170	180	190	200
125-5A/3	H(m)	5.9	5.5	5.0	4.3	4.2	3.9	3.4	2.9	2.3		
				6.5	6.1	5.7	5.2	5.0	4.3	4.1	3.7	2.7

LLT/LLTS Installation dimension



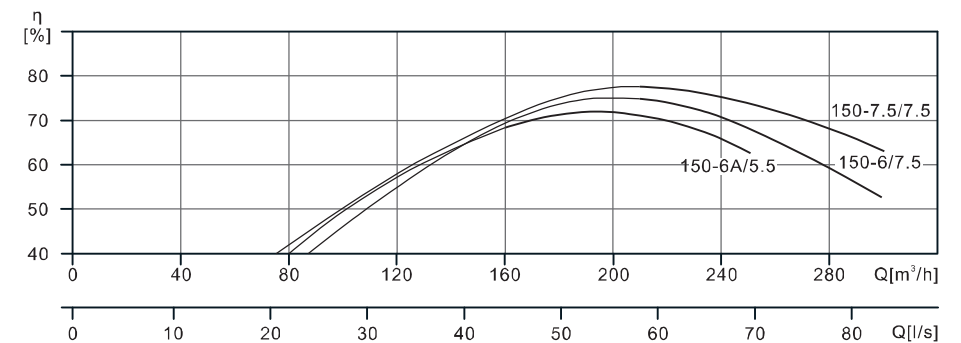
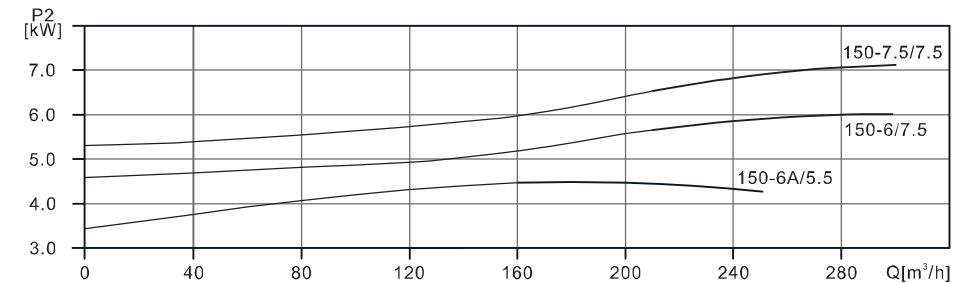
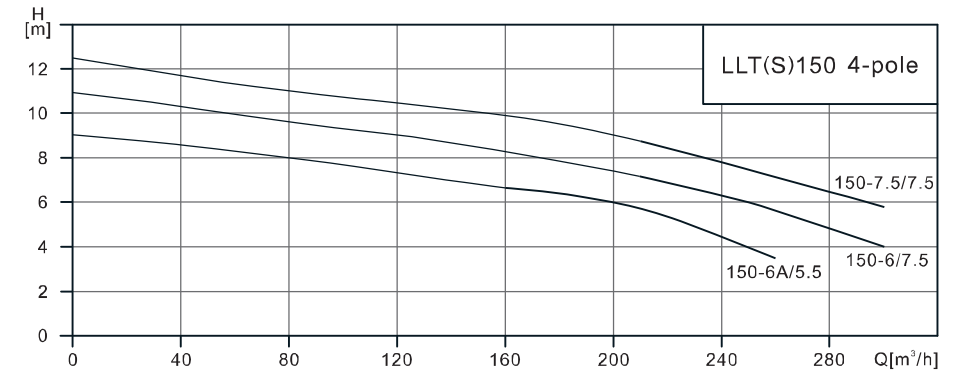
Pump model	Appearance dimension				Installation dimension					Dimension of Inlet&outlet flange					Weight (kg)		
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D		α	$n \times L$
LLT150-6A/5.5	720	175	232	765	260	300	15	200	120	18	150	200	225	265	22.5	8×18	133
LLT150-6/7.5	720	175	232	803	260	300	15	200	120	18	150	200	225	265	22.5	8×18	145
LLT150-7.5/7.5	720	175	232	803	260	300	15	200	120	18	150	200	225	265	22.5	8×18	146



Pump model	Appearance dimension				Installation dimension					Dimension of Inlet&outlet flange					Weight (kg)		
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D		α	$n \times L$
LLTS150-6A/5.5	720	175	232	840	260	300	15	200	165	18	150	200	225	265	22.5	8×18	140
LLTS150-6/7.5	720	175	232	878	260	300	15	200	165	18	150	200	225	265	22.5	8×18	152
LLTS150-7.5/7.5	720	175	232	878	260	300	15	200	165	18	150	200	225	265	22.5	8×18	153

Note: Inlet and outlet flange apply to GB/T17241.6 Standard, PN 6RF.

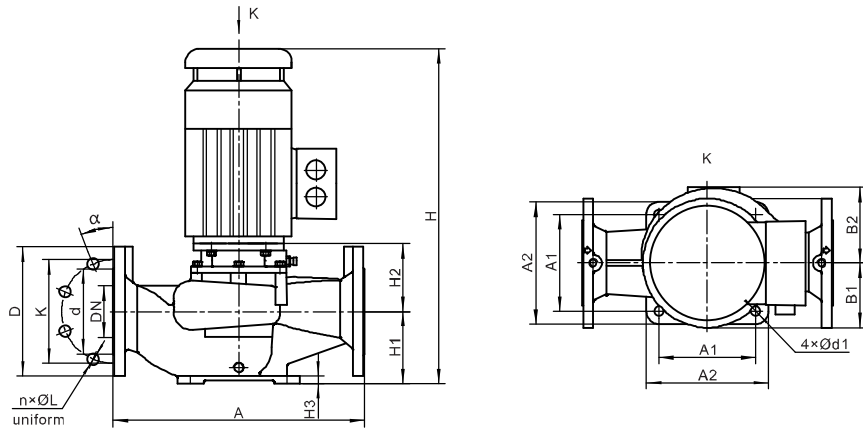
LLT/LLTS Performance curves



LLT/LLTS Performance table

Pump model	Q(m³/h)	160	170	180	190	200	210	220	230	250	270	280	300	
150-6A/5.5	H(m)	6.5	6.4	6.3	6.1	6.0	5.8	5.3	4.9	3.9				
150-6/7.5						7.4	6.9	6.3	6.0	5.1	4.6	4.0		
150-7.5/7.5							8.9	8.5	8.2	7.5	6.8	6.4	5.6	

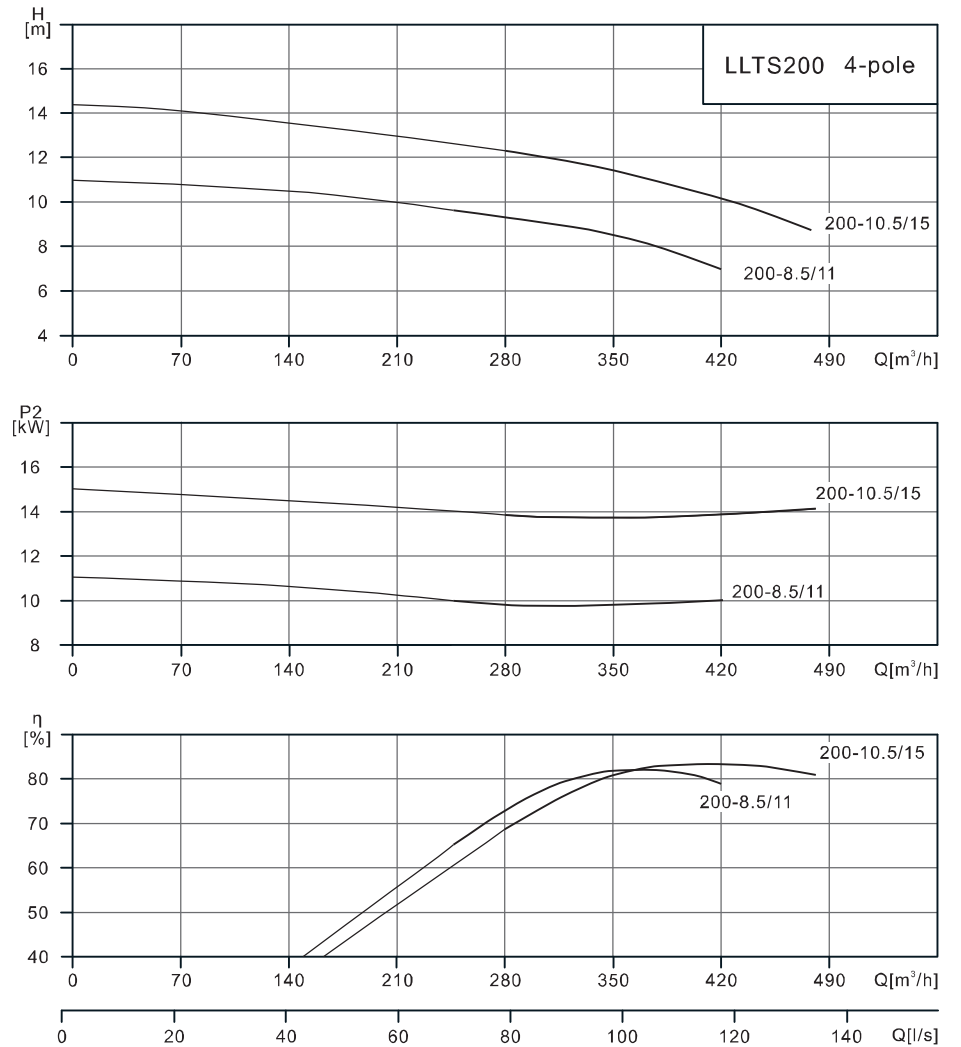
LLT/LLTS Installation dimension



Pump model	Appearance dimension				Installation dimension					Dimension of Inlet&outlet flange					Weight (kg)		
	A	B1	B2	H	A1	A2	d1	H1	H2	H3	DN	d	K	D		α	n×L
LLTS200-8.5/11	1000	215	295	1095	360	420	24	325	201.5	30	200	266	295	340	15	12×23	340
LLTS200-10.5/15	1000	215	295	1139	360	420	24	325	201.5	30	200	266	295	340	15	12×23	362

Note: Inlet and outlet flange apply to GB/T17241.6 Standard, PN 16RF.

LLT/LLTS Performance curves



LLT/LLTS Performance table

Pump model	Q(m³/h)	250	280	300	320	340	350	380	400	420	440	460	480
LLTS200-8.5/11	H(m)	9.6	9.4	9.1	8.9	8.7	8.5	8	7.5	7			
LLTS200-10.5/15	H(m)		12.2	12	11.8	11.5	11.4	11	10.5	10.1	9.9	9.2	8.7

