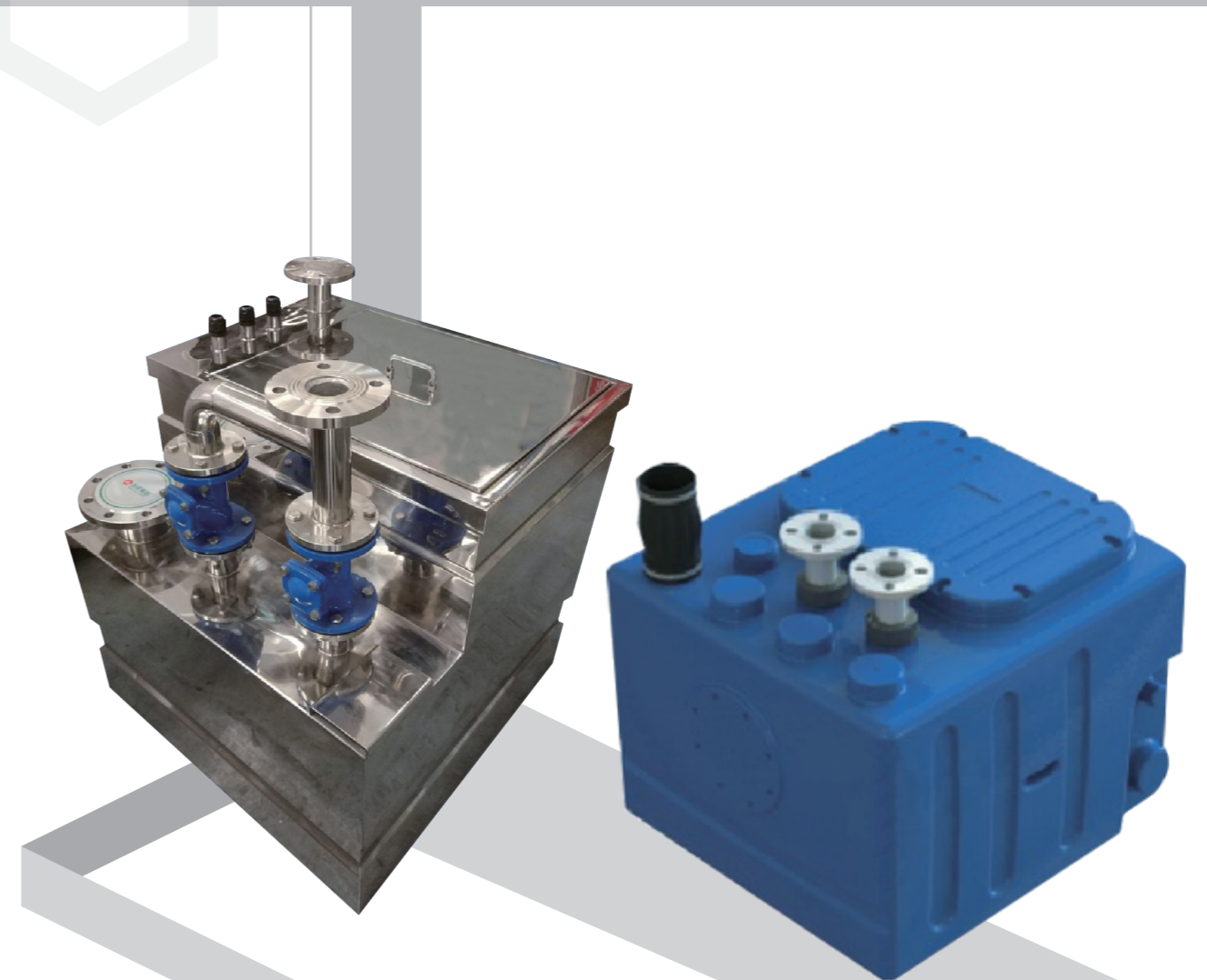




新型智能污水提升装置

NEW INTELLIGENT SEWQGE LIFTING DEVICE



上海连成（集团）有限公司
SHANGHAI LIANCHENG (GROUP) CO., LTD.

地址：上海市江桥镇曹安公路3616-3618号
邮编：201812
总机：(021) 59138888
传真：(021) 59136782
800免费咨询电话：800-820-5009
400免费咨询电话：400-188-3339

Address: 3616-3618 Can'an Road, Jiangqiao Shanghai
P.C.: 201812
Switchboard: (021) 59138888
Fax: (021) 59136782
800 Free consultation Tel: 800-820-5009
400 Free consultation Tel: 400-188-3339



连成集团微信订阅号

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产品概述 Outline

我公司全新推出的新型污水提升装置专门为别墅地下室卫生间排水和建筑卫生间改造排水等各种复杂场合提供一站式解决方案。我们的产品类似一个活动的污水提升系统，全面替代传统的挖集水坑、设置污水泵的落后方式，是现代消除地下建筑物污水排放二次环境污染的最佳选择。

新型切割粉碎性污水提升设备，使用带有割刀的高效排污泵，在污水中的杂物进入水泵前就将其切割成小块，避免水泵和管道产生缠绕和堵塞。设备采用优质304不锈钢箱体或进口优质高密度聚乙烯(PE)箱体，搭载我司精心研发的污水提升专用切割式排污泵并预装自动耦合和止回阀，方便连接、即装即用、维修更加便捷；智能控制，实现自动运行、故障报警提示等功能，多重保护且运行状态平稳；采用全密封设计，无泄漏、无异味，其密封状态下的污水排放对环境起到极好的保护作用。本产品高标准高规格，拥有极高的可靠性和稳定性。

先进的加工设备
Advanced processing equipment



Our company's new sewage lifting device is specially designed to provide a one-stop solution for various complex occasions such as drainage in the basement of villa and renovation of building toilet. Our product is similar to an active sewage lifting system. It is the best choice for the modern society to eliminate the secondary environmental pollution from the sewage discharge of underground buildings by comprehensively replacing the traditional backward way of digging sump and setting sewage pump.

The new type of cutting and crushing sewage lifting equipment uses an efficient sewage pump with a cutter to cut the debris in the waste water into small pieces before entering the water pump, so as to avoid winding and blocking of the water pump and pipeline. The equipment adopts high-quality 304 stainless steel box or imported high-quality high-density polyethylene (PE) box, equipped with our company's specially developed sewage lifting cutting sewage pump and pre installed with automatic coupling and check valve, which is convenient for connection, immediate installation and use, and more convenient for maintenance; intelligent control, realizing automatic operation, fault alarm prompt and other functions, multiple protection and stable operation state; fully sealed design, no leakage, no peculiar smell, its sealed state of sewage discharge plays an excellent role in environmental protection. This product has high standard, high specification, high reliability and stability.

高品质的零部件
High quality parts



应用范围 Application scope

居民用水：生活小区、别墅区等
公共场所：学校、医院、车站、机场、剧院、体育馆、花园、图书馆等
商用场所：宾馆、酒店、饭店、商场、写字楼、会所、KTV、酒吧等
生产场所：制造企业、加工企业、石油化工等

Residential water: living quarters, villas, etc
Public places: schools, hospitals, stations, airports, theaters, gymnasiums, gardens, libraries, etc
Business places: hotels, hotels, restaurants, shopping malls, office buildings, clubs, KTV, bars, etc
Production place: manufacturing enterprise processing enterprise, petrochemical industry, etc,

产品特点 Characteristics

优质的箱体

优质的304不锈钢箱体采用机器人自动焊接，焊缝美观、坚固耐用；
进口高密度聚乙烯(PE)箱体，一次成型，耐腐蚀、抗低温，经久耐用。

High quality box

The high-quality 304 stainless steel box is welded automatically by robot, with beautiful and durable welds;
Imported high density polyethylene (PE) box, one-time molding, corrosion resistance, low temperature resistance, durable.

精心研发的专用排污泵

污提专用排污泵，具有独特的双流道半开式叶轮、带独立切割系统，运行平稳、过流能力强，安全无堵塞；
泵与电机同轴直接传动，结构紧凑、噪声低；
独特的两道单端面机械密封，轴封更可靠、寿命更长；
电机内设有油水探头等多重保护装置，保证电机更加安全的运转。

Specially developed sewage pump

Special sewage pump for sewage lift, with unique double channel semi open impeller and independent cutting system, operates stably, has strong over-current capacity, and is safe and unblocked;
The pump and the motor are coaxially and directly driven, with compact structure and low noise;
Unique two single face mechanical seal, more reliable shaft seal, longer life;
The motor is equipped with multiple protection devices such as oil-water probe to ensure the safe operation of the motor.

不堵塞、免清掏

污水中的杂物在进入水泵前被切割粉碎，从而不会产生缠绕和堵塞，特别适合有长纤维或小颗粒的介质；外排时和污水一起排出，真正实现免清掏。

No blocking, no cleaning

The sundries in the sewage are cut and crushed before entering the water pump, so that there will be no winding and blocking, which is especially suitable for medium with long fiber or small particles; when discharged, they are discharged together with the sewage, so as to truly realize no cleaning.

环保无污染

设备整体采用全封闭设计，污水不外溢；并设有专用通气管道，可以将设备内部气体排放到户外空间，利于扩散、无异味，保护周围环境。

Environmental protection and pollution-free

The whole equipment adopts the totally closed design, and the sewage does not overflow; and there is a special ventilation pipe, which can discharge the gas inside the equipment to the outdoor space, which is conducive to diffusion, no peculiar smell, and protect the surrounding environment.

水位检测可靠

高精度的液位控制装置和检测装置、配合自动控制箱，实现机组的自动启停和高液位报警等功能，控制灵敏、精确可靠；

根据客户需求，设备可选配远程监控系统，使值班人员足不出户，直观了解设备运行状态。

安装方式灵活多变

既可地上安装、也可埋地安装，安装方便即装即用。

维修便捷

自动耦合装置，方便水泵维修、保养。

节约占地面积

箱体紧凑、美观，设备整体占地面积小。

Reliable water level detection

The high-precision liquid level control device and detection device, together with the automatic control box, realize the automatic start and stop of the unit and the high liquid level alarm and other functions, with sensitive, accurate and reliable control;

According to the needs of customers, the equipment can be equipped with remote monitoring system, so that the personnel on duty can stay indoors and understand the operation status of the equipment directly.

Flexible installation mode

It can be installed on the ground or buried. It is easy to install and use.

Convenient maintenance

Automatic coupling device, convenient for water pump maintenance.

Save floor space

The box is compact and beautiful, and the overall floor area of the equipment is small.

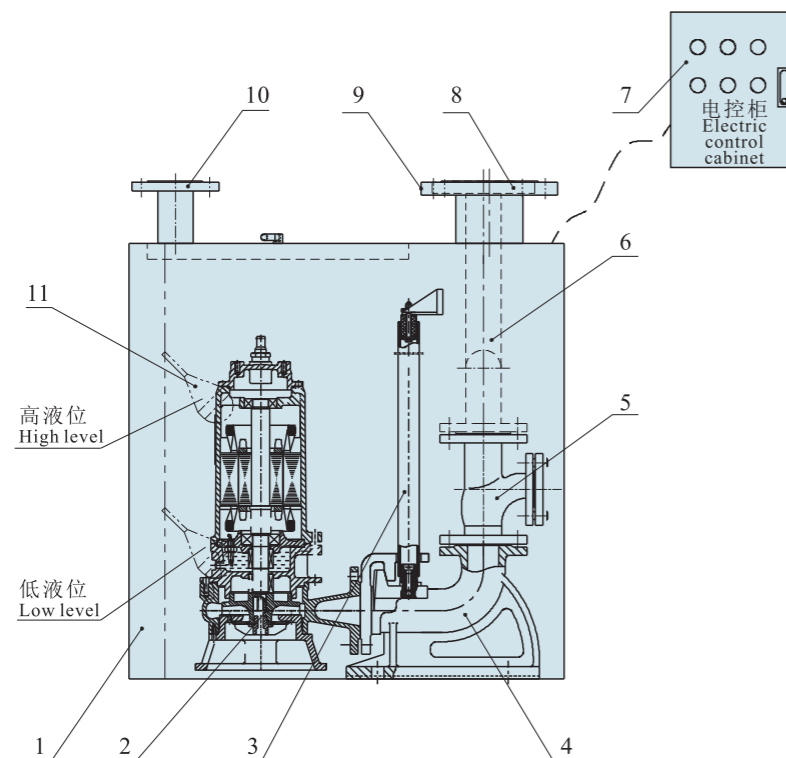
产品配置清单 Product configuration list

序号 No.	名称 Name	型号规格 Model and specification	数量Number		备注 Remarks
			双泵 Double pump	单泵 Single pump	
1	箱体 Box body	配套 Matching	1个 One		SUS304不锈钢材质或进口PE材质 SUS304 stainless steel or imported PE
2	切割型排污泵 Cutting sewage pump	WQX或WQG系列 WQX or WQG series	2台 2 stations	1台 1 station	材质标配 Material standard
3	导杆 Guide bar	配套 Matching	4根 4 roots	2根 2 roots	镀锌或SUS304不锈钢材质（可选） Galvanized or SUS304 stainless steel (optional)
4	耦合装置 Coupling device	配套 Matching	2套 2 sets	1套 1 set	铸铁材质 Cast iron material
5	球形止回阀 Ball check valve	DN50或DN65 DN50 or DN65	2个 Two	1个 One	铸铁或SUS304不锈钢材质 Cast iron or SUS304 stainless steel
6	成套基础管路 Complete foundation pipeline	DN50或DN65 DN50 or DN65	1套 1 set		Q235或SUS304不锈钢材质或其他 Q235 or SUS304 stainless steel or other
7	配套控制柜 Supporting control cabinet	LEC-2ACS(1S)-WT-N LEC-2ACS(1S)-WT-N	1个 One		一控二/一控一 One control two / one control one
8	出水口 Outlet	DN50或DN65 DN50 or DN65	1个 One		Q235或SUS304不锈钢材质 Q235 or SUS304 stainless steel
9	进水口 Intake	DN100	1个 One		Q235或SUS304不锈钢材质或其他 Q235 or SUS304 stainless steel or other
10	通气口 Vent	DN50或DN32 DN50 or DN32	1个 One		Q235或SUS304不锈钢材质或其他 Q235 or SUS304 stainless steel or other
11	液位控制器 Level controller	配套 Matching	2个 Two	1个 One	标配5米浮球液位控制器 Standard 5-meter floating ball liquid level controller

设备图解及配置清单 Equipment diagram and configuration list

下图为我司新型污水提升装置的通用结构示例（具体结构类型见后文“产品选型”），其主要配置见下表

The following figure shows the general structure example of our new sewage lifting device (see the following "product selection" for specific structure type), and its main configuration is shown in the table below



工作原理 Working principle

含有杂质的污水由进水口直接进入污水储存箱，达到单泵启动液位时，此液位的浮球开关上浮接通内部触点、发出信号，经控制柜处理后启动一台排污泵，直至液位下降到停泵液位，泵停止运行。

若进入污水提升装置的污水流量较大、单台泵流量小于进水流量，则液位会持续上升至双泵启动液位，双泵启动液位的浮球开关发出信号，经控制柜处理后启动两台排污泵，两泵并联运行，直到液位下降至停泵液位。

污水储存箱内的气体经由通气孔排出，此通气孔与大气连通，还能防止形成负压。

合理的入口管路设计与流量搭配使得双泵运行时工作流量总是大于入口流量，因此液位至多只会达到双泵启动液位浮球开关处。即便泵发生故障、浮球开关漂离原本位置或发生故障、内部管路损坏等情况发生，还有最后一道保障---即箱体顶部的浮子开关，当其接触到水后，会发出报警信号，提醒值班人员停机检修(该功能选配)。

The sewage containing impurities enters the sewage storage tank directly from the water inlet. When the start-up level of single pump is reached, the float switch of this level floats upward to connect the internal contact and send a signal. After being processed by the control cabinet, start a sewage pump until the level drops to the stop level, and the pump stops running.

If the sewage flow into the sewage lifting device is large and the flow of a single pump is less than the inflow flow, the liquid level will continue to rise to the start-up liquid level of the two pumps, and the float switch of the start-up liquid level of the two pumps will send a signal, and the two sewage pumps will be started after being processed by the control cabinet, and the two pumps will operate in parallel until the liquid level drops to the stop liquid level.

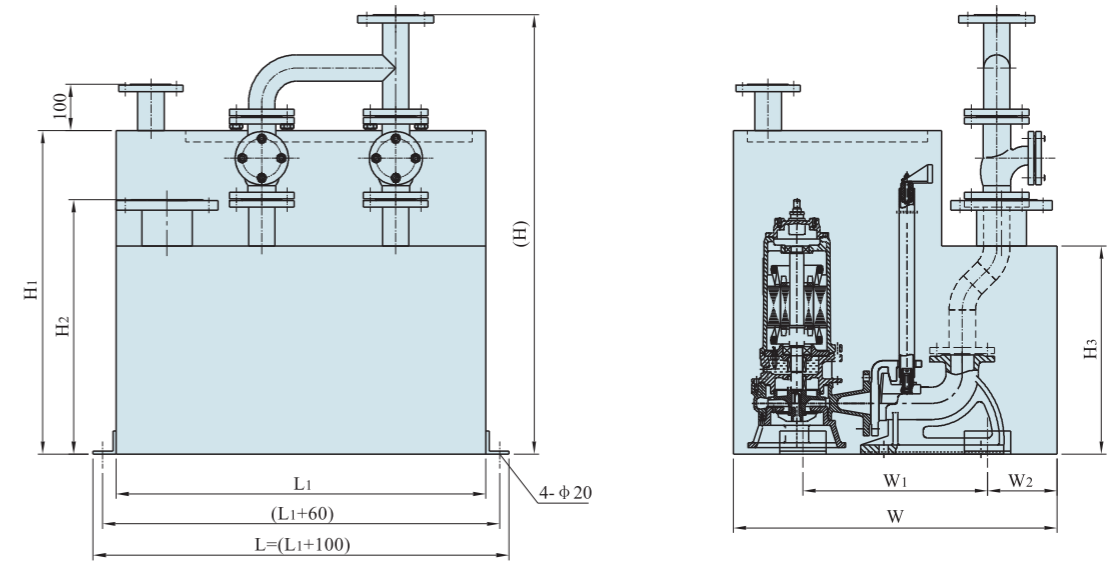
The gas in the sewage storage tank is discharged through the air vent, which is connected with the atmosphere and can prevent the formation of negative pressure.

The reasonable design of the inlet pipeline and the flow matching make the working flow of the double pump always greater than the inlet flow, so the liquid level can only reach the start level float switch of the double pump at most. Even if the pump fails, the float switch drifts away from the original position or fails, or the internal pipeline is damaged, there is a final guarantee-the float switch on the top of the box, when it contacts the water, it will send an alarm signal to remind the personnel on duty to stop the machine for maintenance (this function is optional).

工作条件 Working conditions

- 1、电源频率为50Hz，三相交流380V（若要配置220V电源，需同我司技术中心另行沟通确认）；额定电压和额定频率的偏差不大于±5%。
- 2、污水中杂物（包括柔性杂物及小固体颗粒）须能在管道内自行流动。
- 3、污水温度不能超过40℃，介质密度不超过1050Kg/m³（如密度超过此值需另行考虑配置潜污泵的参数），PH值在5-9范围内。
- 4、控制柜环境温度不得超过80℃。

1. The power frequency is 50Hz, three-phase AC 380V (if you want to configure 220V power supply, you need to communicate with our technical center for confirmation); the deviation between rated voltage and rated frequency is not more than ± 5%.
2. Sundries (including flexible sundries and small solid particles) in sewage shall be able to flow automatically in the pipeline.
3. The sewage temperature shall not exceed 40 °C, the medium density shall not exceed 1050kg/m³ (if the density exceeds this value, the parameters of submersible sewage pump shall be considered separately), and the PH value shall be within the range of 5-9.
4. The ambient temperature of the control cabinet shall not exceed 80 °C.



型号说明及产品选型 Model description and product selection

1. 不锈钢箱体污水提升装置型号说明及产品选型

Model description and product selection of stainless steel box sewage lifting device

1.1 型号说明 Model description

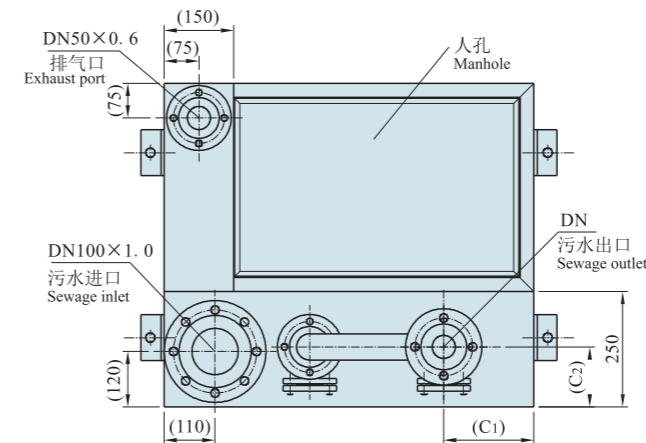
WT(G) □ - □ - □ (□)

- 后缀，如是否“带辅泵”等特殊要求
Suffix, such as "with auxiliary pump" and other special requirements
- 设计扬程 Design head (m)
- 设计流量 Design flow (m³/h)
- 内置水泵数量：2或者1 Number of built-in water pumps: 2 or 1
- 切割式污水提升装置，默认阀门外置式
WT(G')代表阀门内置式机型
Cutting sewage lifting device, default valve external type
WT(G') stands for valve door built-in type

1.2 常规产品选型 Selection of conventional products

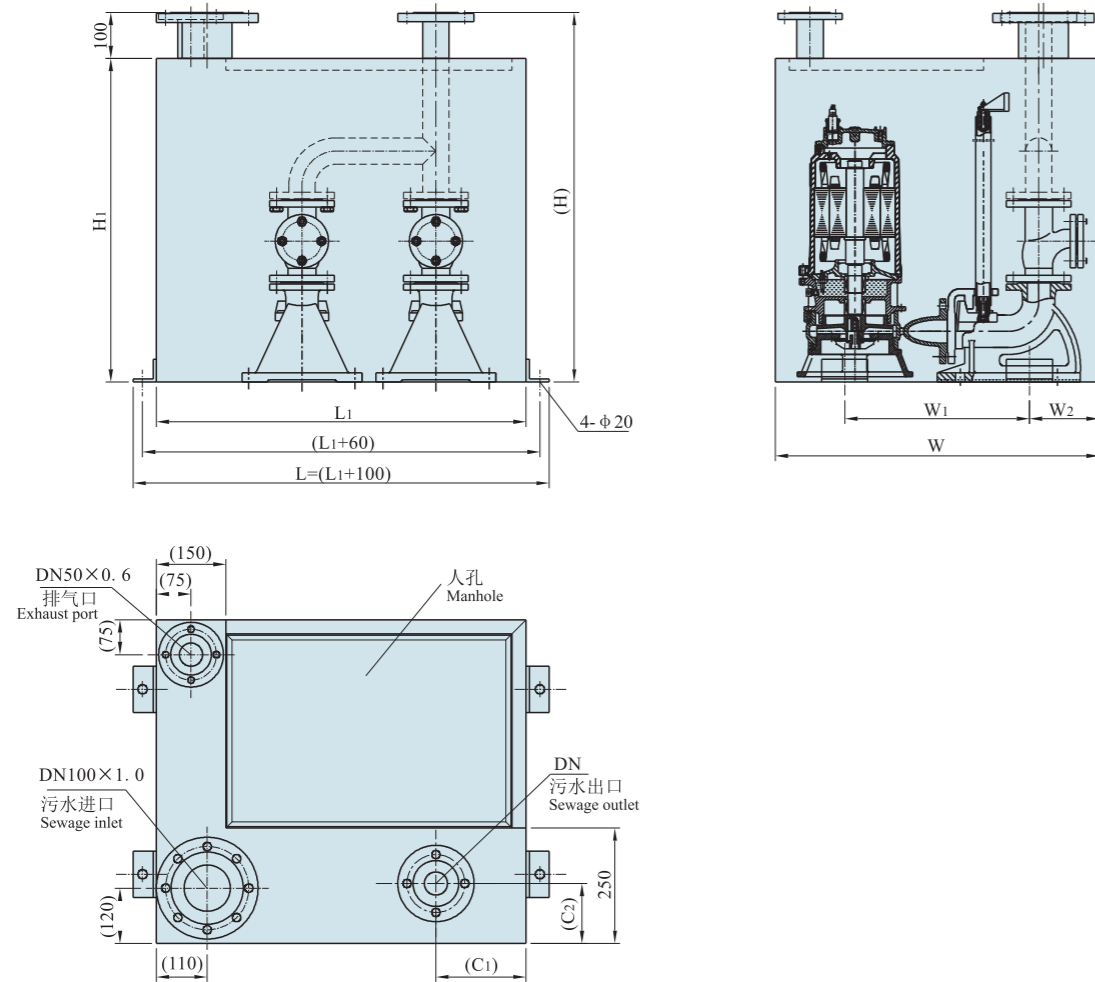
1.2.1 标准双泵机型（阀门外置式）

Standard double pump model (valve external type)



序号 No.	常用设备 型号 Common equipment model	主要尺寸 Main dimensions											名义 容积 Nominal volume	主要适配泵型 Main matching pump type		
		L (mm)	L1 (mm)	W (mm)	W1 (mm)	W2 (mm)	H (mm)		H1 (mm)	H2 (mm)	H3 (mm)	C1*C2 (mm)			DN	
							碳钢管路 Carbon steel pipeline	不锈钢管路 Stainless steel pipeline				碳钢管路 Carbon steel pipeline				不锈钢管路 Stainless steel pipeline
1	WT(G)2-7-7	900	800	700	400	150	950	900	700	550	450	195*130	50	400	40WQX7-7-0.75	
2	WT(G)2-8-10														40WQX8-10-1.1	
3	WT(G)2-8-15														40WQX8-15-1.5	
4	WT(G)2-15-7														50WQX15-7-1.1	
5	WT(G)2-15-11														50WQX15-11-1.5	
6	WT(G)2-15-16														50WQX15-16-2.2	
7	WT(G)2-15-22	1100	1000	900	500	200	1000	1000	900	600	500	250*130	50	800	50WQX15-22-3	
8	WT(G)2-15-30														50WQX15-30-4	
9	WT(G)2-25-25														50WQX25-25-5.5	
10	WT(G)2-25-32														50WQX25-32-7.5	
11	WT(G)2-30-10	1100	1000	900	500	200	1100	1000	900	600	500	250*130	65	800	65WQX30-10-3	
12	WT(G)2-30-15														65WQX30-15-4	
13	WT(G)2-30-22														65WQX30-22-5.5	
14	WT(G)2-30-30														65WQX30-30-7.5	

1.2.2 标准双泵机型（阀门内置式）
Standard double pump model (valve built-in type)



序号 No.	常用设备型号 Common equipment model	主要尺寸 Main dimensions										名义容积 Nominal volume	主要适配泵型 Main matching pump type
		L (mm)	L1 (mm)	W (mm)	W1 (mm)	W2 (mm)	H (mm)		C1*C2 (mm)		DN		
						碳钢管路 Carbon steel pipeline	不锈钢管路 Stainless steel pipeline	H1 (mm)	碳钢管路 Carbon steel pipeline	不锈钢管路 Stainless steel pipeline	DN		
1	WT(G)2-7-7	900	800	700	400	150	800	700	195*130	50	400	40WQX7-7-0.75	
2	WT(G)2-8-10											40WQX8-10-1.1	
3	WT(G)2-8-15											40WQX8-15-1.5	
4	WT(G)2-15-7											50WQX15-7-1.1	
5	WT(G)2-15-11											50WQX15-11-1.5	
6	WT(G)2-15-16											50WQX15-16-2.2	
7	WT(G)2-15-22	900	800	800	500	150	800	700	195*130	50	450	50WQX15-22-3	
8	WT(G)2-15-30											50WQX15-30-4	
9	WT(G)2-25-25	1100	1000	900	500	200	1000	900	250*130	50	800	50WQX25-25-5.5	
10	WT(G)2-25-32											50WQX25-32-7.5	
11	WT(G)2-30-10	1100	1000	900	500	200	1000	900	250*130	65	800	65WQX30-10-3	
12	WT(G)2-30-15											65WQX30-15-4	
13	WT(G)2-30-22											65WQX30-22-5.5	
14	WT(G)2-30-30											65WQX30-30-7.5	

2. PE箱体污水提升装置型号说明及产品选型
Model description and product selection of PE box sewage lifting device

(备注：PE污提配置不锈钢阀门，标配PVC管路、高配机型为不锈钢管路)

(Note: PE waste lift is equipped with stainless steel valve, PVC pipeline as standard, stainless steel pipeline for high configuration model)

2.1 型号说明 Model description

LEEBOX □ - □ - □ - □ (□)

后缀 The suffix

水泵安装形式
Installation of water pump

配置水泵数量
Quantity of water pumps

水泵功率
The pump power

箱体名义容积
Nominal volume of box

PE材质箱体的污水提升装置
Sewage lifting device of PE box

比如部分机型的细分款型代号
For example, some models of the segmentation code
N=水泵内置 W=水泵外置 (“mini” 机型可省略此标记)
N= pump inside W= pump outside (this mark can be omitted for "Mini" models)
D=单泵 S=双泵 (“mini” 机型可省略此标记)
D= single pump S= double pump (this mark can be omitted for "Mini" models)
040=0.4kw 075=0.75kw 110=1.1kw 150=1.5kw
220=2.2kw 300=3.0kw 370=3.7kw 400=4.0kw
550=5.5kw 750=7.5kw
水泵内置机型 Pump built-in model: mini 100L 180L
250L 500L 1000L 水泵外置机型 Pump external model: 60L 120L 150L 450L

2.2 常规产品选型 Selection of conventional products

2.2.1 水泵内置式机型

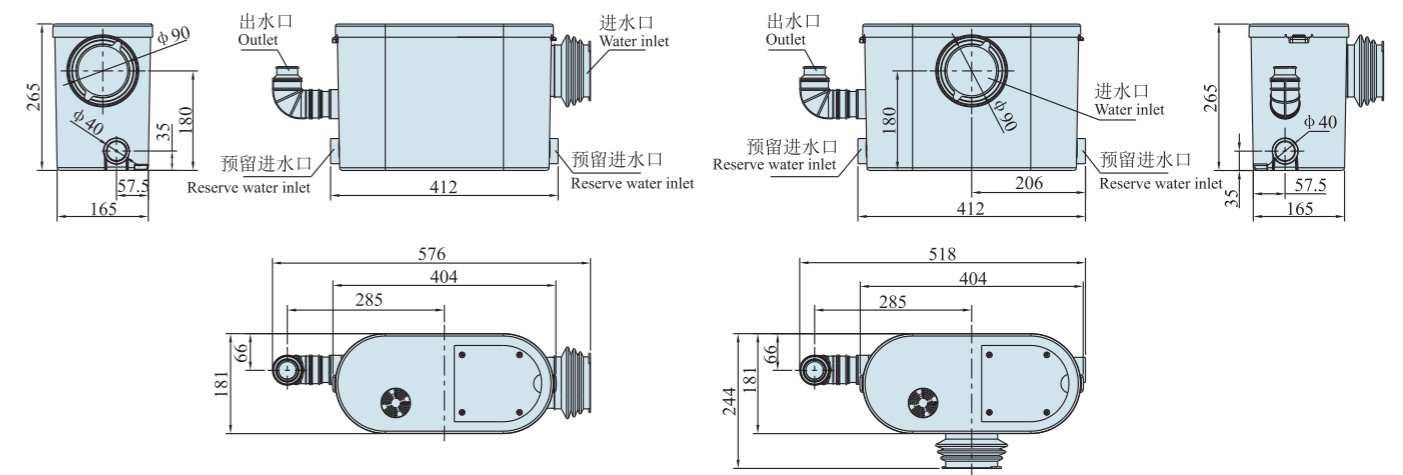
2.2.1 built in type of water pump

2.2.1.1 LEEBOXmini 单泵内置系列（马桶专用）

2.2.1.1 LEEBOXmini single pump built-in series (special for toilet)

A型 Type

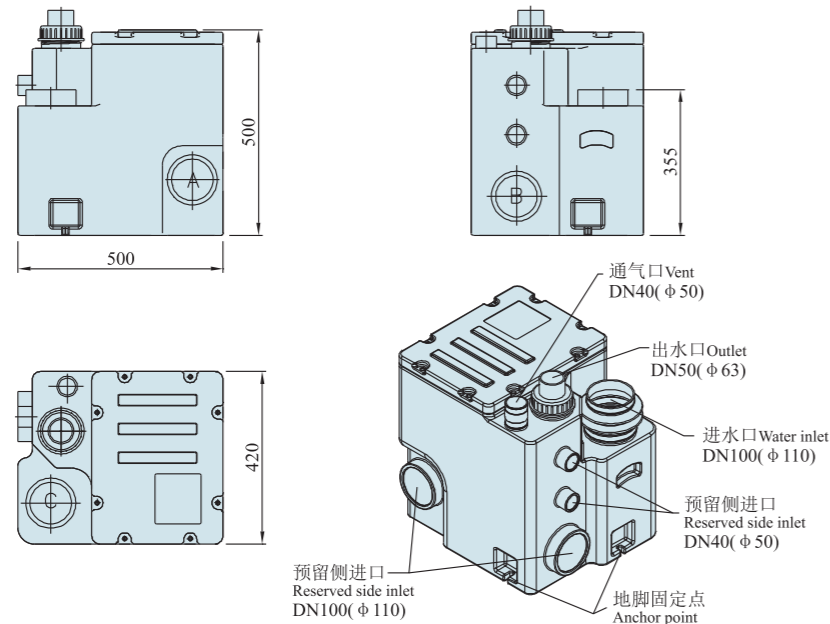
B型 Type



设备型号 Equipment model	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	3.5	4.5	5	5.5	6	6.5	7
LEEBOXmini040(A)	576*181*265	17	0.4	220	流量 Flow (m³/h)	6	5.4	4.8	4.2	3.6	3	2.4
LEEBOXmini040(B)	518*244*265											

2.2.1.2 LEEBOX100L 单泵内置系列

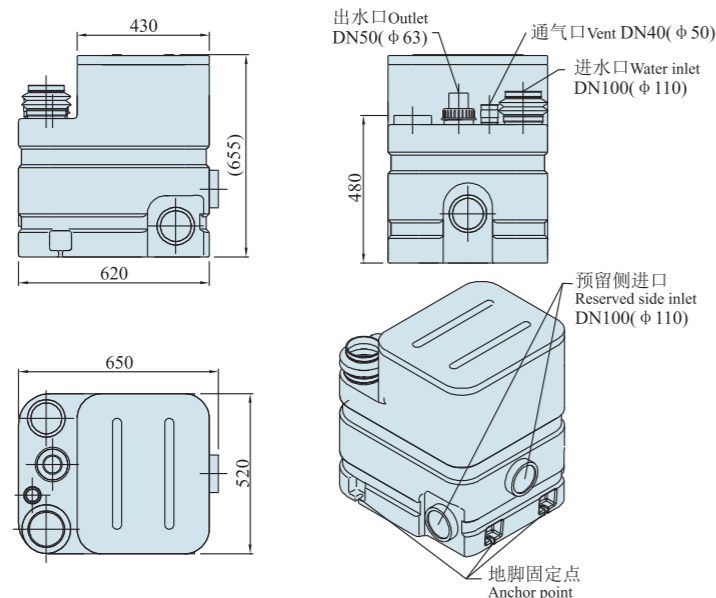
2.2.1.2 LEEBOX100L single pump built-in series



设备型号 Equipment model (Q(m ³ /h), H(m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	6	8	10	12	14
LEEBOX100L075DN	500*420*500	100	0.75	220	流量 Flow (m ³ /h)	16	14	10		
LEEBOX100L110DN			1.1	220		20	18	15	10	5
LEEBOX100L075DN			0.75	380	16	14	10			
LEEBOX100L110DN			1.1	380	20	18	15	10	5	

2.2.1.3 LEEBOX180L 单泵内置系列

2.2.1.3 LEEBOX180L single pump built-in series

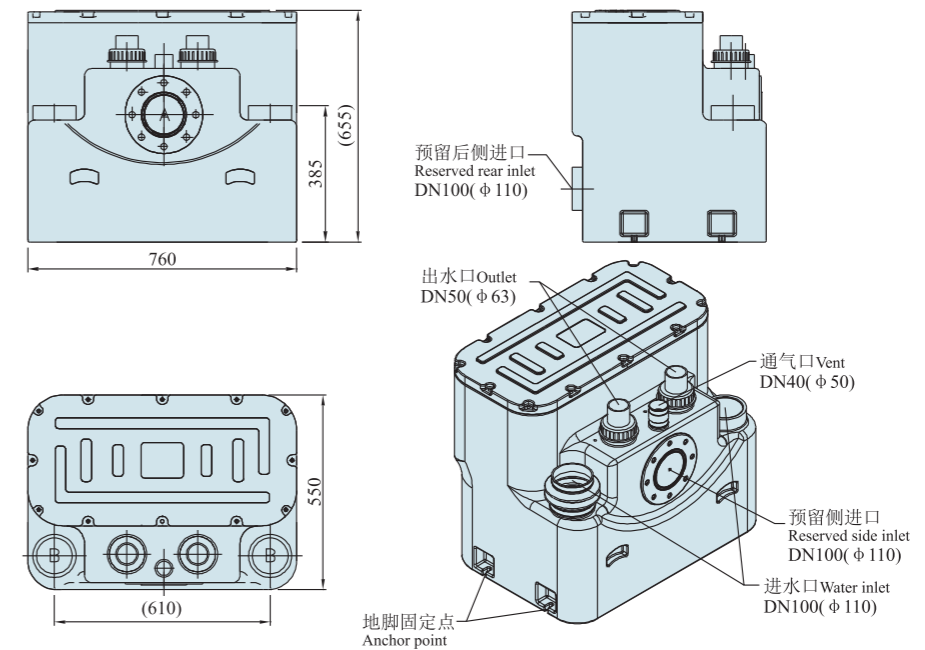


NEW INTELLIGENT SEWAGE LIFTING DEVICE

设备型号 Equipment model (Q(m ³ /h), H(m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	6	8	10	12	14	16	18
LEEBOX180L075DN	650*520*655	180	0.75	220	流量 Flow (m ³ /h)	16	14	10				
LEEBOX180L110DN			1.1	220		20	18	15	10	5		
LEEBOX180L150DN			1.5	220				24	21	17	13	8
LEEBOX180L075DN			0.75	380		16	14	10				
LEEBOX180L110DN			1.1	380		20	18	15	10	5		
LEEBOX180L150DN			1.5	380				24	21	17	13	8

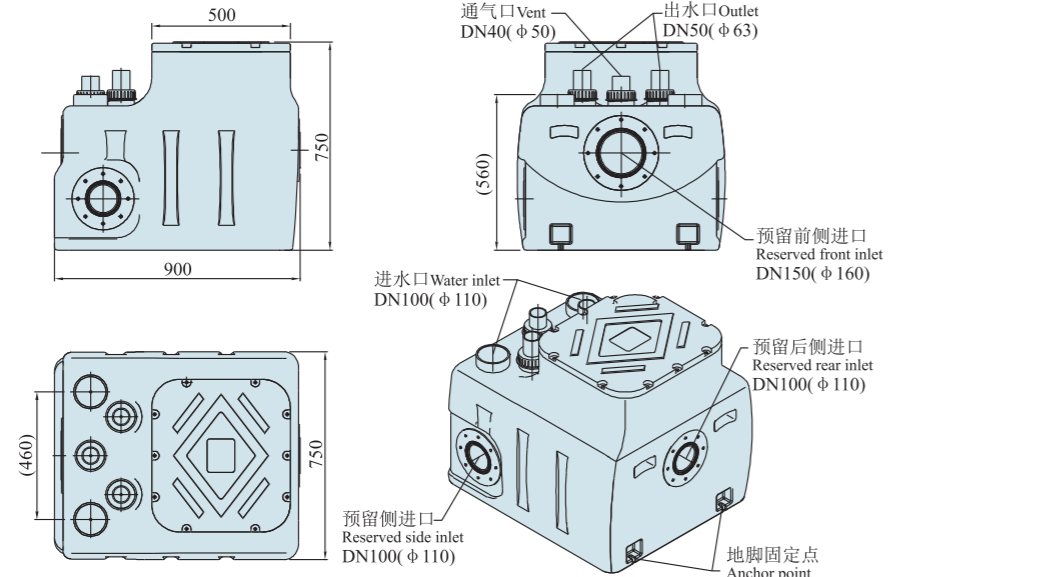
2.2.1.4 LEEBOX250L 双泵内置系列

2.2.1.4 LEEBOX250L double pump built-in series



设备型号 Equipment model (Q(m ³ /h), H(m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	6	8	10	12	14	16	18	20
LEEBOX250L075SN	760*550*655	250	0.75	220	流量 Flow (m ³ /h)	16	14	10					
LEEBOX250L110SN			1.1	220		20	18	15	10	5			
LEEBOX250L150SN			1.5	220				24	21	17	13	8	
LEEBOX250L075SN			0.75	380		16	14	10					
LEEBOX250L110SN			1.1	380		20	18	15	10	5			
LEEBOX250L150SN			1.5	380				24	21	17	13	8	
LEEBOX250L220SN		2.2	380					28	21	15	8		

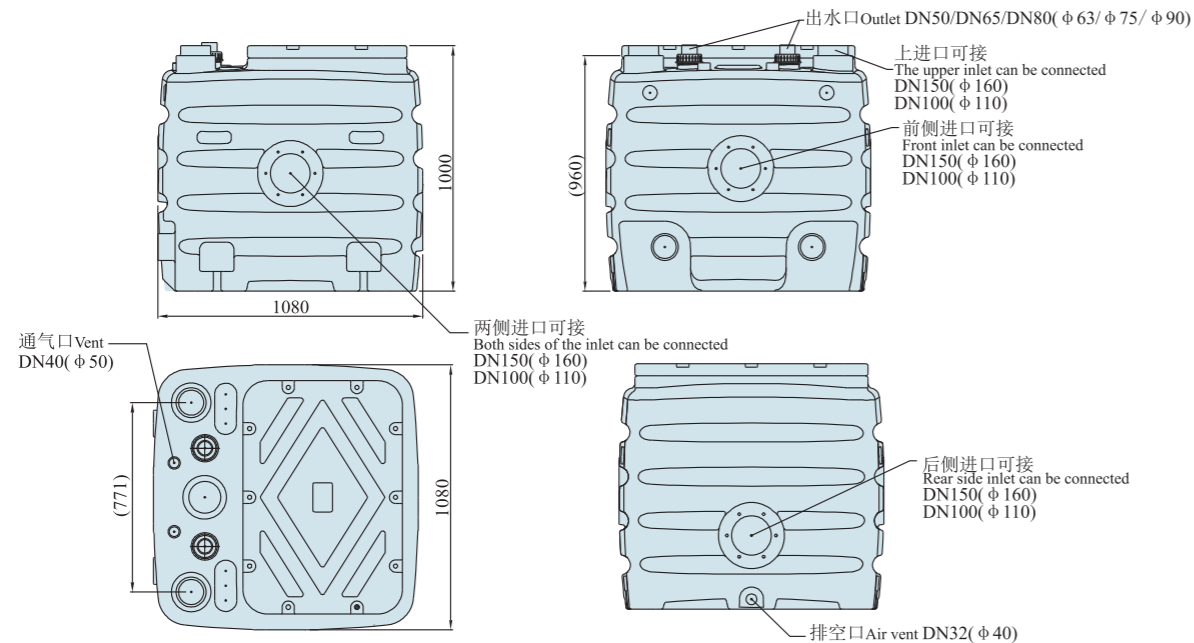
2.2.1.5 LEEBOX500L 双泵内置系列



2.2.1.5 LEEBOX500L double pump built-in series

设备型号 Equipment model (Q (m ³ /h), H (m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	流量 Flow (m ³ /h)														
						6	8	10	12	14	16	18	20	22	24					
LEEBOX500L075SN	900*750*750	500	0.75	220	流量 Flow (m ³ /h)	16	14	10												
LEEBOX500L110SN			1.1	220		20	18	15	10	5										
LEEBOX500L150SN			1.5	220				24	21	17	13	8								
LEEBOX500L075SN			0.75	380		16	14	10												
LEEBOX500L110SN			1.1	380		20	18	15	10	5										
LEEBOX500L150SN			1.5	380				24	21	17	13	8								
LEEBOX500L220SN			2.2	380							28	21	15	8						
LEEBOX500L300SN			3	380									32	26	18	12	6			

2.2.1.6 LEEBOX1000L 双泵内置系列



2.2.1.6 LEEBOX1000L double pump built-in series

NEW INTELLIGENT SEWAGE LIFTING DEVICE

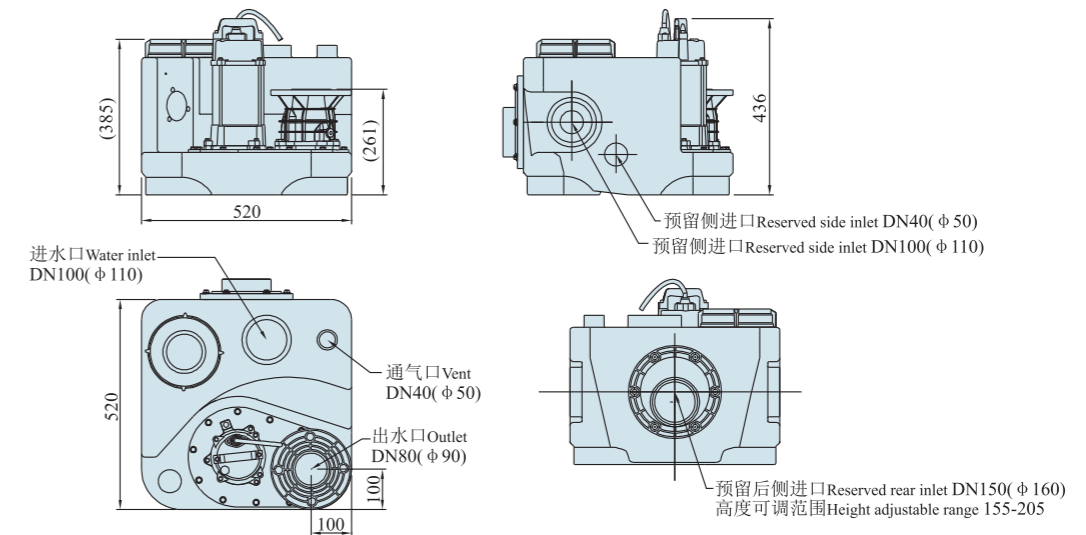
设备型号 Equipment model (Q (m ³ /h), H (m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	流量 Flow (m ³ /h)														
						10	12	14	16	18	20	22	24	26	28	30	32	34		
LEEBOX1000L150SN	1080*1080*1000	1000	1.5	220	流量 Flow (m ³ /h)	24	21	17	13	8										
LEEBOX1000L150SN			1.5	380		24	21	17	13	8										
LEEBOX1000L220SN			2.2	380				28	21	15	8									
LEEBOX1000L300SN			3	380						32	26	18	12	6						
LEEBOX1000L400SN			4	380							49	42	35	28	18	9				
LEEBOX1000L550SN			5.5	380								66	59	52	44	37	28	19	9	
LEEBOX1000L750SN			7.5	380									80	71	61	50	40	31	19	8

2.2.2 水泵外置式机型

2.2.2 water pump external type

2.2.2.1 LEEBOX60L 单泵外置系列

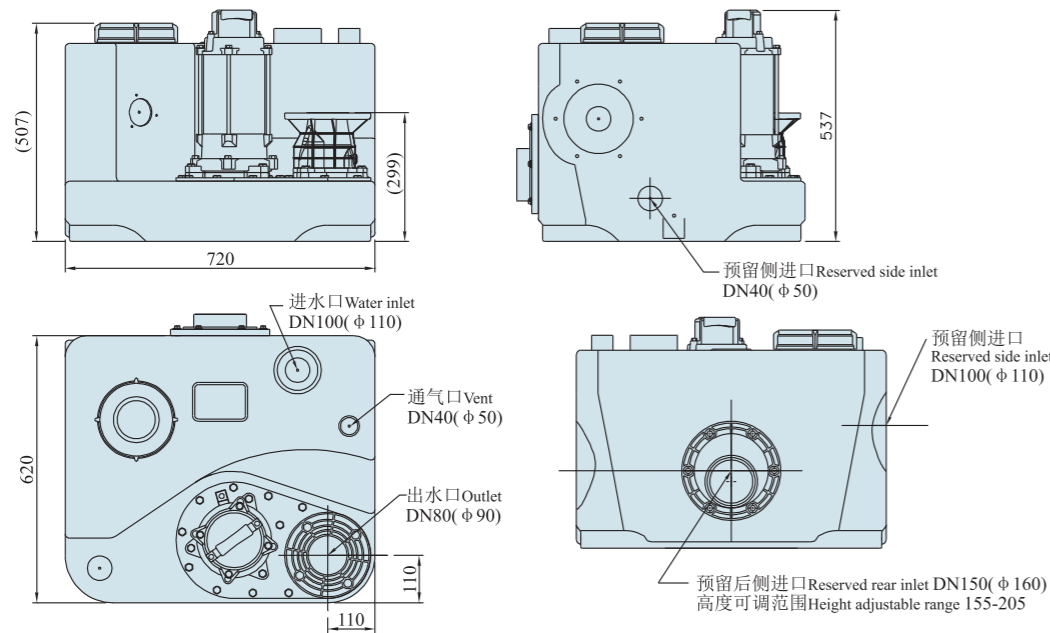
2.2.2.1 LEEBOX60L single pump external series



设备型号 Equipment model (Q (m ³ /h), H (m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	流量 Flow (m ³ /h)			
						6	8	10	12
LEEBOX60L075DW	520*520*436	60	0.75	220	流量 Flow (m ³ /h)	25	18	11	6
LEEBOX60L075DW			0.75	380		25	18	11	6

2.2.2.2 LEEBOX120L 单泵外置系列

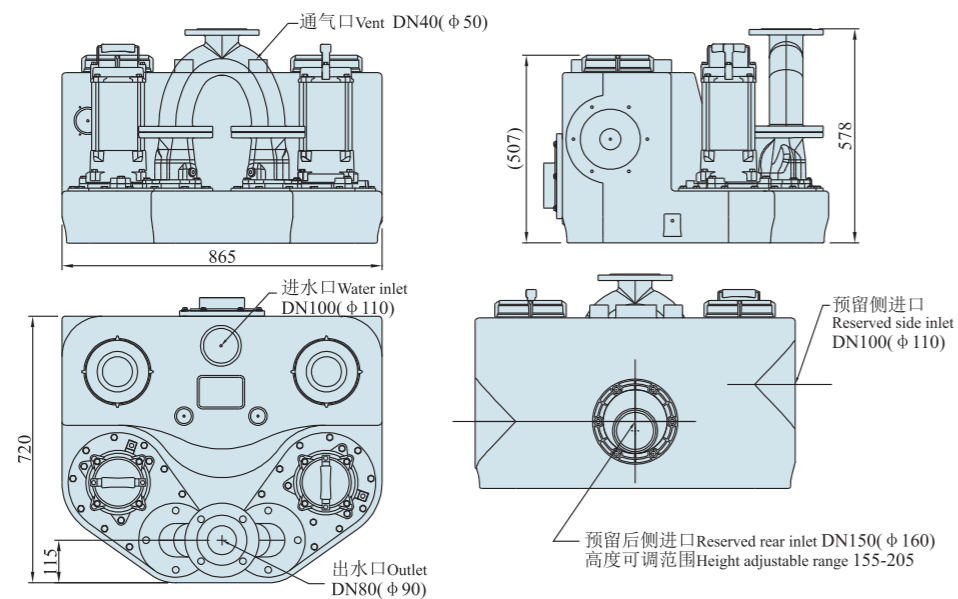
2.2.2.2 LEEBOX120L single pump external series



设备型号 Equipment model (Q (m ³ /h), H (m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	6	8	10	12	14	16	18
LEEBOX120L150DW	720*620*537	120	1.5	220	流量 Flow (m ³ /h)	33	27	21	14	7		
LEEBOX120L220DW			2.2	220		36	31	26	20	12	7	
LEEBOX120L150DW			1.5	380		33	27	21	14	7		
LEEBOX120L220DW			2.2	380		36	31	26	20	12	7	

2.2.2.3 LEEBOX150L 双泵外置系列

2.2.2.3 LEEBOX150L double pump external series

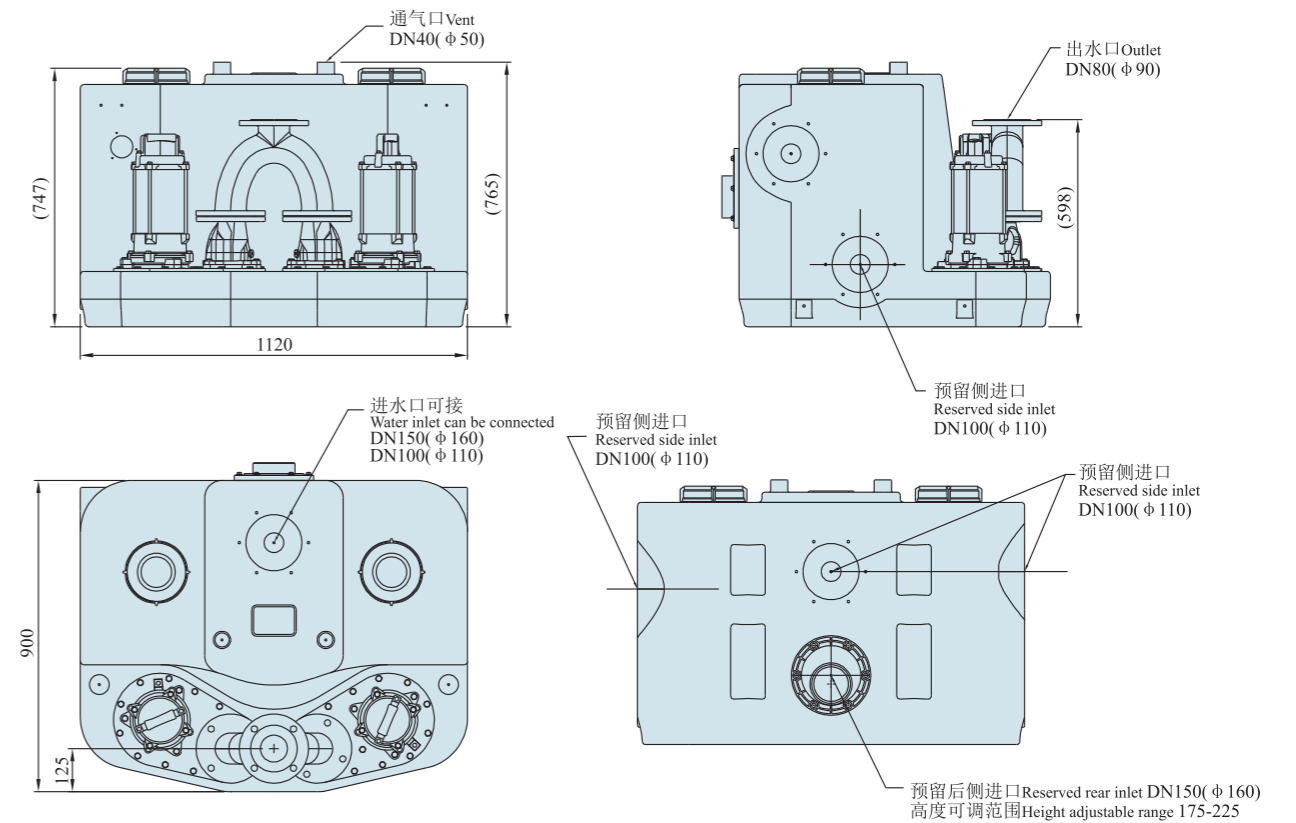


NEW INTELLIGENT SEWAGE LIFTING DEVICE

设备型号 Equipment model (Q (m ³ /h), H (m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	6	8	10	12	14	16	18
LEEBOX150L150SW	865*720*578	150	1.5	220	流量 Flow (m ³ /h)	33	27	21	14	7		
LEEBOX150L220SW			2.2	220		36	31	26	20	12	7	
LEEBOX150L150SW			1.5	380		33	27	21	14	7		
LEEBOX150L220SW			2.2	380		36	31	26	20	12	7	

2.2.2.4 LEEBOX450L 双泵外置系列

2.2.2.4 LEEBOX450L double pump external series



设备型号 Equipment model (Q (m ³ /h), H (m))	设备标称外形尺寸 长*宽*高(mm) Nominal overall dimension of equipment Length * width * height (mm)	名义容积 Nominal volume (L)	功率 Power (kw)	电压 Voltage (V)	扬程 Heam (m)	8	10	12	14	16	18	20	22	24
LEEBOX450L220SW	1120*900*747	450	2.2	220	流量 Flow (m ³ /h)	36	31	26	20	12	7			
LEEBOX450L220SW			2.2	380		36	31	26	20	12	7			
LEEBOX450L370SW			3.7	380		52	47	42	36	30	24	17	9	

安装与调试 Installation and commissioning

(一) 设备的安装

1、现场需具备相应的进出水管和通气管、三相五线制电源等安装条件，并预留设备所需的安装空间及设备搬运的通道：

1.1 设备进水管(污废水来源管道)高度须满足设备安装和运行的要求(能顺利自流进入设备箱体，同时能满足箱体内水泵的最低液位要求)；

1.2 设备的进、出水口与现场管网之间须设置开关阀(比如闸阀，客户自备)可随时切断设备与外围管网之间的联系，以便维护与检修；

1.3 设备旁边应设有排水沟或集水井，便于维修和紧急事故排水；

1.4 其他未尽事宜请参照土建、结构、设备安装等相应技术规范要求。

2、安装程序：将设备进、出水管及通气管与相应的外围管路连接(口径不一致时请自行转接)并按要求用膨胀螺栓对设备进行固定，将控制系统连接并接通电源。

※注意：电源必须可靠接地，防止漏电。

(二) 设备的调试

1、控制系统电源为380V动力电，控制柜“电源指示”亮起表明电源已经接通。

2、“手动/自动”转换开关正常状态下应置于“自动”档位；控制柜面板上的各指示灯显示设备的相关运行状况。

3、当“手动/自动”转换开关在手动档位时水泵不能自动运行，转由操作面板上的启动/停止按钮控制。

(1) Installation of equipment

1. The site shall be equipped with corresponding installation conditions such as water inlet and outlet pipes and vent pipes, three-phase five wire power supply, etc., and the installation space required by the equipment and the channel for equipment handling shall be reserved:

1.1 the height of equipment water inlet pipe (sewage source pipe) must meet the requirements of equipment installation and operation (it can flow into the equipment box smoothly, and at the same time it can meet the minimum level requirements of water pump in the box);

1.2 on off valves (such as gate valves, provided by the customer) shall be set between the water inlet and outlet of the equipment and the on-site pipe network to cut off the connection between the equipment and the peripheral pipe network at any time, so as to facilitate maintenance and repair;

1.3 drainage ditch or sump shall be set beside the equipment to facilitate maintenance and emergency drainage;

1.4 for other matters not mentioned, please refer to the requirements of relevant technical specifications such as civil engineering, structure, equipment installation, etc.

2. Installation procedure: connect the water inlet and outlet pipes and vent pipes of the equipment with the corresponding peripheral pipes (if the caliber is inconsistent, please transfer them by yourself), fix the equipment with expansion bolts as required, connect the control system and connect the power supply.

※Note: the power supply must be reliably grounded to prevent leakage.

(2) Commissioning of equipment

1. The power supply of the control system is 380V power, and the "power indication" of the control cabinet lights up to indicate that the power supply has been connected.

2. The "manual / automatic" change-over switch shall be placed in the "automatic" position under normal state; each indicator light on the control cabinet panel displays the relevant operation status of the equipment.

3. When the "manual / automatic" change-over switch is in the manual gear, the water pump cannot run automatically, and the switch is controlled by the start / stop button on the operation panel.

选购须知 Purchase instructions

1、对于不锈钢箱体的污提装置，推荐优先选用阀门外置式机型，方便维修。前文表单中主要罗列了常用的标准双泵机型，若需单泵或者其他非标尺寸机型，请与我司技术部门沟通确认；

对于PE材质箱体的污提装置，前文表单中主要罗列了最常用的几款机型，若需非标尺寸或其他结构样式，请与我司技术部门沟通确认。

2、箱体内部标配双泵或单泵，若需在设备外配置辅泵，请与我司技术部门沟通确认；

3、请提前确认设备采用地上式安装还是埋地式安装，务必注意设备的外形尺寸和各接口位置/口径，确认现场安装空间是否宽裕、设备和管路能否顺利搬运、安装和连接！

※尤其是进水口的位置、高度和连接方式，必须注意！

※“箱体尺寸”与“设备整机外形尺寸”必须区分清楚，不能混淆。

维护和保养 Maintenance and service

1、设备在运输过程中，严禁颠簸、抛扔和翻滚，避免雨淋和化学物品侵蚀。

2、水泵的进水管路必须充满水，当控制按钮处于“手动”位置时，严禁在水箱缺水的状态下启动设备。

3、设备必须有专人管理和维护，并定期、定时检查清理：

3.1 定期检查各个液位探测器触点和液位浮球开关，并进行清理；

3.2 定期检查自动控制柜内各电气元件的灵活性，清理控制柜内的灰尘；

3.3 定期检查设备连接处螺栓紧固件是否松动，并定期紧固；

1. For the sewage lifting device of stainless steel box, it is recommended to select the valve external type for maintenance. The above form mainly lists the commonly used standard double pump models. If you need single pump or other non-standard size models, please communicate with our technical department for confirmation;

For the pollution lifting device of PE box, the above list mainly lists the most commonly used models. If non-standard size or other structural style is required, please communicate with our technical department for confirmation.

2. The box is equipped with double pump or single pump as standard. If you need to configure auxiliary pump outside the equipment, please communicate with our technical department for confirmation;

3. Please confirm whether the equipment is installed on the ground or buried in advance, pay attention to the external dimension of the equipment and the position / caliber of each interface, and confirm whether the installation space on site is ample, and whether the equipment and pipeline can be handled, installed and connected smoothly

※In particular, attention must be paid to the position, height and connection mode of the water inlet

※"Box size" and "overall dimension of equipment" must be clearly distinguished and cannot be confused.

1. During the transportation of the equipment, it is strictly prohibited to bump, throw or roll, to avoid rain and chemical erosion.

2. The water inlet pipe of the water pump must be full of water. When the control button is in the "manual" position, it is strictly prohibited to start the equipment when the water tank is short of water.

3. The equipment must be managed and maintained by specially assigned personnel, and checked and cleaned regularly:

3.1 regularly check the contact of each liquid level detector and liquid level float switch, and clean them;

3.2 regularly check the flexibility of all electrical components in the automatic control cabinet, and clean the dust in the control cabinet;

3.3 regularly check whether the bolt fasteners at the equipment connection are loose and fasten them regularly;

3.4 定期检查水泵的机械密封，查看是否有泄漏现象，必要时可更换；

3.5 定期检查设备的启动频繁程度，从而判断止回阀是否有泄漏情况，保证设备的工作效率和稳定性。

3.4 regularly check the mechanical seal of the water pump to see if there is any leakage, and replace it if necessary;

3.5 regularly check the start frequency of the equipment, so as to judge whether there is leakage of the check valve and ensure the working efficiency and stability of the equipment.

故障原因及排除方法 Failures causes and troubleshooting

故障现象 Failure	故障原因 Possible causes	排除方法 Troubleshooting
流量不足或不出水 Insufficient flow or no water	水泵损坏 Water pump damaged 箱内淤泥量较大 Large amount of sludge in the tank 通气管堵塞 Vent pipe blocked 转速太低 Speed too low 泵送液体的密度较大或粘度较高 High density or viscosity of pumped liquid	修理水泵 Repair water pump 冲刷箱体 Scour box 处理通气管的污物 Handling the dirt in the vent pipe 检查电源接线等 Check power wiring, etc 改变泵送液体的密度和粘度 Change the density and viscosity of the pumped liquid
潜污泵运行不稳定 Unstable operation of submersible sewage pump	水泵叶轮不平衡 Pump impeller imbalance 水泵轴承损坏 Water pump bearing damaged 水泵过载运行 Pump overload operation 水泵安装倾斜不正 The installation of water pump is not inclined properly	更换或进行叶轮动平衡 Replace or balance the impeller 更换轴承 Replace bearing 调节出口管网阀门 Regulating outlet pipe network valve 重新安装 Reinstall
电流过大 Excessive current	工作电压低 Low working voltage 叶轮被卡或堵 Impeller stuck or blocked 阀门开度过大 Valve opening too large	调整工作电压 Adjust the working voltage 清理管道和叶轮堵塞物 Clean pipe and impeller plug 调节阀门开度 Adjust valve opening
故障灯亮 Fault light on	水位过高 Water level too high 水泵堵塞 Water pump blocked	手动排水 Manual drainage 清理水泵堵塞物 Clean up water pump blockage