

Lifting stations

Flood Pump Kit • miniBOX • nanoBOX • blueBOX



Lifting stations

PE lifting stations are an effective solution for collecting and pumping wastewater to the sewer system, when a gravity feed is not available or distances are too great.

They are mainly used in rural or hilly areas with low population density, without an extensive municipal sewer system; or else following rezoning when connecting an area to the mains water network.

Given their many advantages, lifting stations are today the best choice for a low cost, safe and eco-compatible solution.

Flood Pump Kit



The kit comprises a DR steel pump and a discharge hose contained in a practical box. Always ready for use, it allows action to be taken quickly to drain areas subject to flooding in emergencies.

*mini*BOX



Allows you to create a bathroom in any part of a house, even if it is a great distance from the soil stack or below the invert level of the drain. *mini*BOX is able to grind all waste and pump it through normal diameter pipes to the soil stack.

*nano*BOX



Ideal for collecting water exclusively from domestic drains, including washing machines, showers and sinks [not suited for WCs]

*blue*BOX



Suitable for collecting and lifting clear, rain and wastewater from washing machines, sinks and WCs in systems installed at a lower level than the sewer, in locations such as garages or basements.

Flood Pump Kit



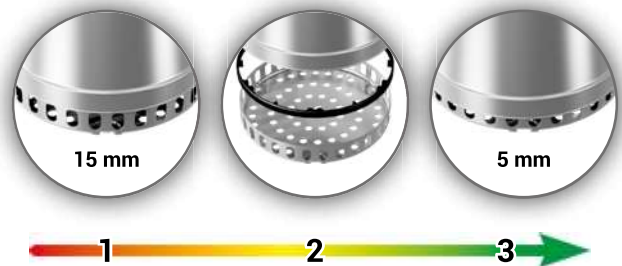
Range characteristics

Pumps	1 x DR steel 25
Start	Automatic with floatswitch/manual
Cable	10 m with Schuko plug
Outlet pipe	Ø 2" - 10 m
kg	12

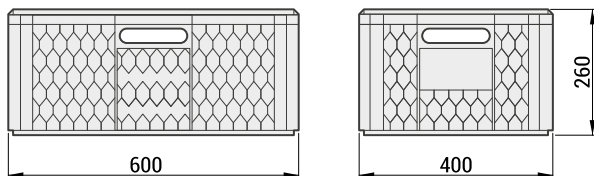
Zenit's **anti-flooding kit** comprises a DR steel TCG pump and a discharge pipe contained in a practical box. The quick fitting means the hose can be easily attached to the pump for quick intervention in emergencies. The incorporated float switch allows for automatic operation. All materials are corrosion resistant.

Operation and Use

Ideal for emergency drainage/pumping out of cellars, garages, basements, and all environments subject to flooding.



Dimensions



Recommended pumps

	0	0.5	1.0	1.5	2.0	2.5									
	l/s	0	30	60	90	120	150								
	l/min	0	1.8	3.6	5.4	7.2	9.0								
	m ³ /h	0	1.8	3.6	5.4	7.2	9.0								
DR steel 25/2 M50		8.5	7.0	5.7	4.0	1.3		230	1	-	0.25	2.3	2900	G 1¼"	Free passage 10 mm



Range characteristics

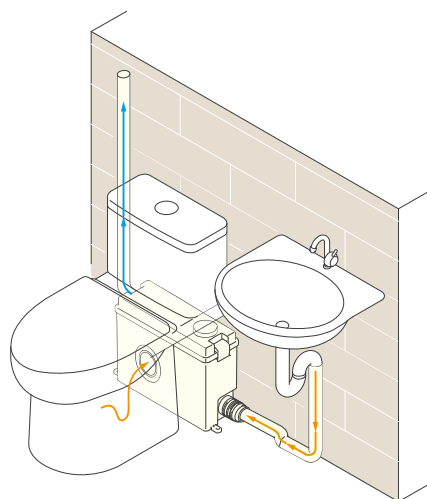
Capacity [l]	6
Installation	External, wall
Pump	GR steel
Start	Automatic with floatswitch
Cable	3x1 length 1.5 m
Outlet	DN32 / DN40
kg	13.5

miniBOX makes it possible to create a bathroom in any part of a house, even if it is a great distance from the soil stack or below the invert level of the drain.

Once installed, **miniBOX** is able to grind all waste and pump it through normal diameter pipes to the soil stack.

It is composed of a PE tank with a GR steel pump with grinder inside it. It requires a normal electricity supply and can be installed directly on the toilet with significant space savings.

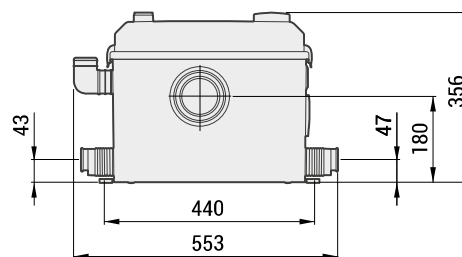
Installation



Operation and Use

miniBOX is suitable for collection and lifting of domestic black water and grey water from toilets, bidets, washing machines or dishwashers.

Dimensions



Recommended pumps

	Impeller type	V	Phases	P2 [kW]	A	Ø	Free passage
DR steel 25/2 M50	with grinder	230	1	0.37	3.1	G 1¼"	-

nanoBOX



Range characteristics

Capacity [l]	33
[kg]	8 [DR steel 25/2] ÷ 8.7 [DR steel 37/2]
Number of pumps	1
Power supply	220/240V ~1
Frequency	50 Hz
Protection	IP68
Inlet / Outlet	1 x DN30, 1 x DN40 / DN32 [male thread]
Start	Automatic with floatswitch
C° max water	35°C [for short periods up to 75°C]
Free passage	10 mm

Including: Zenit DR steel 25/2 or 37/2 pump; 10 m cable and integral float switch.

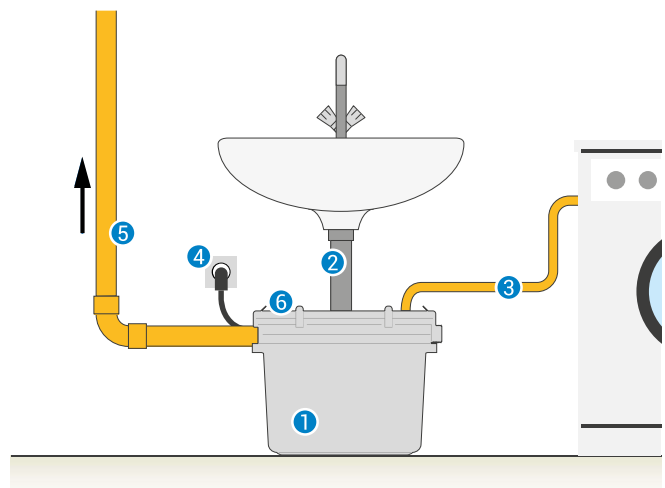
nanoBOX is a high quality polyethylene tank intended for collecting water exclusively from domestic drains, including washing machines, showers and sinks (not suited for WC's). The tank has a 33 L maximum capacity and is supplied with a Zenit Steel series submersible pump already installed.

Thanks to its construction and small footprint, **nanoBOX** is very versatile and easy to install.

Operation and Use

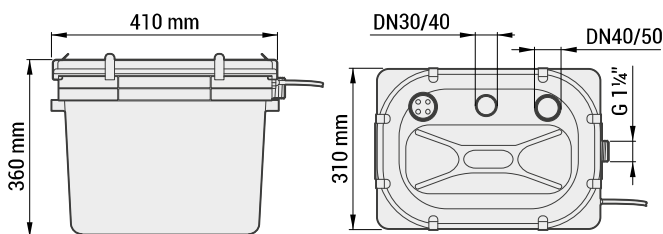
Ideal for collecting water exclusively from domestic drains, including washing machines, showers and sinks (not suited for WC's).

Installation



- ① nanoBOX
- ② Inlet from wash basin [with siphon]
- ③ Inlet from washing machine
- ④ Power supply
- ⑤ Outlet pipe
- ⑥ Breather outlet with activated carbon filter. Suitable to external breather pipe [optional]

Dimensions



Recommended pumps

	l/s	0	0.5	1.0	1.5	2.0	2.5								
	l/min	0	30	60	90	120	150								
	m³/h	0	1.8	3.6	5.4	7.2	9.0	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
DR steel 25/2 M50		8.5	7.0	5.7	4.0	1.3		230	1	-	0.25	2.3	2900	G 1 1/4"	10 mm
DR steel 37/2 M50		13.6	11.6	9.5	7.0	4.5	1.9	230	1	-	0.37	3.1	2990	G 1 1/4"	10 mm

blue **BOX**

The **blueBOX** range of high quality polyethylene tanks are extremely versatile and easy to install. They are suitable for collecting clear, rain and wastewater from washing machines, sinks and WCs in systems installed at a lower level than the sewer, in locations such as garages or basements.

The entire range use **blue** or **bluePRO** Series pumps, and are styled to match them.

The **60, 90, 150** and **250** models, suitable for domestic and small residential installations, are equipped to house one electric pump.

The **400** model, intended for civil plants, can be equipped with two electric pumps for complete reliability.

DESIGN BASED ON IN-DEPTH ANALYSIS OF THE CRITICALITIES REPORTED BY PROFESSIONAL USERS IN THE COLLECTION AND DISPOSAL OF DOMESTIC WASTEWATER



Range characteristics

60, 90, 150 and 250 models fitted to take one pump; up to two pumps can be installed for 400 model.

Direct installation possible for all models; coupler can be used for 250 and 400 models.

Walk-over cover

Gasket between tank and cover

Simplified intake, discharge and breather pipe installation with watertight gasket

Integral lifting handles

Emergency drainage fitting located low down in the unit

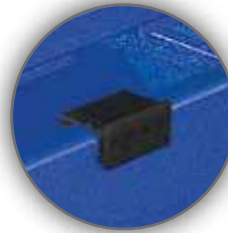
Patented watertight cable gland allowing easy pump removal

Side fins provide an excellent grip for in-floor installation



COVER

Rugged walk-over cover with gasket. The large cover allows a second pump to be added in emergencies, for easy, hygienic drainage.



CABLE GLAND

PATENTED modular cable gland system allowing the pump or float switches to be removed with no need to disconnect or extract the power supply cable.



INTAKES

Wastewater pipeline intake ports also provided on sides.



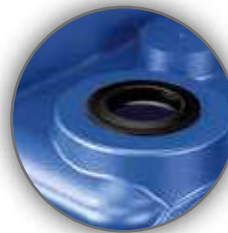
HANDLES

Two integral handles for lifting and transport, for easy transfer by hand.



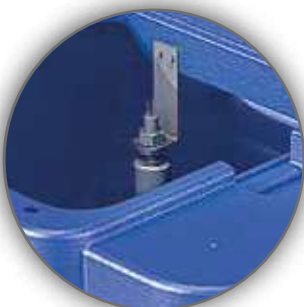
DRAINAGE

Emergency drainage fitting located low down in the unit (threaded union included).



GASKETS

Guaranteed airtight thanks to NBR rubber seals which allow quick connection of pipes to the blueBOX with no need for sealants.



ANTI-OVERFLOW FLOAT SWITCH [OPTIONAL]

Connection to the alarm light and buzzer of a control panel, the float switch warns that the maximum filling threshold has been passed in the case of a pump failure or excessive inflow of wastewater to the tank, allowing quick action to prevent overflows.

blueBOX lifting stations can be installed on-floor or in-floor. They are prefitted for use with Zenit **blue** and **bluePRO** series pumps with vortex impeller [DRAGA] or with grinding system [GRINDER], which must be ordered separately depending on the requirements. Specifically, the **blueBOX 60** can also be used with multi-channel open impeller (DRENO) or high head (HIGH HEAD) pumps for higher heads when pumping clear or washbasin wastewaters.

The large number of intake and outlet pipeline fittings allow optimal installation even on existing plants.

The many hydraulic and electric accessories make **blueBOX** lifting stations convenient to install and use. All models are suitable for direct installation thanks to the bottom shaped to hold the pump in position without the aid of additional accessories.

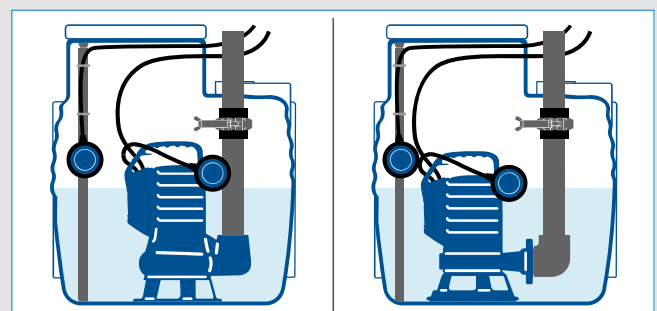
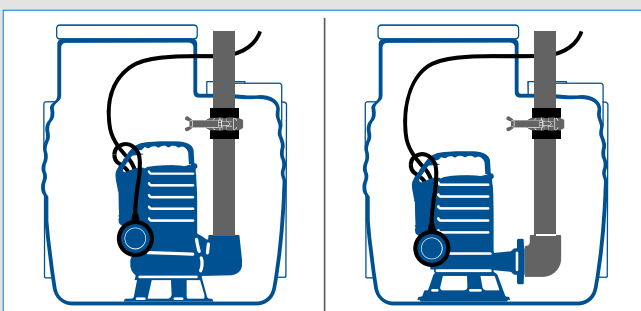
Convenient installation with a bottom coupler is also an option for the **250** and **400** models. A ball check valve and/or a gate valve can be connected to the end of the discharge pipe.



A coupling allows the pump to be easily separated from the plant for **any maintenance requirements, without disconnecting the pipes** from the lifting station.

For simple, labour-saving installation, use of pumps with START/STOP float switch is recommended.

An optional float switch with an overflow alarm function [for connection to an electrical control panel] can be also be used if required.



Installing a **blueBOX** lifting station could not be easier. The **blueBOX** lifting station is supplied partially assembled to minimise installation times. A large number of construction features simplify installation, and the accessories supplied allow the system to be optimised in all conditions.



Before putting the pump in place, drill holes in the sides of the tank in the chosen points using a flared grinding tool of the right diameter for the pipe to be used.



Fit the double lip seal provided. It guarantees perfect watertightness, with no further sealants required.



An emergency drainage hole should be drilled and then sealed using the through-wall fitting provided, or with an optional gate-valve.

The **blueBOX** can be installed on-floor or in-floor. Intake and discharge pipe fittings are provided on three sides, allowing installation to be optimised to requirements.



Connect the wastewater intake lines and the breather line (if used).

Then install the pump; this will be easier if the **blueBOX** is fitted with the bottom coupler. In this case, simply lower the pump along the guide pipes until it mates with the coupler.

For direct installation, fix the pump to the tube segment and connect this to the discharge pump using the metal collar.



The electrical cables are passed through special patented cable glands that ensure a perfectly watertight seal. Before fitting the cable, perforate the cable glands to be used with a sharp tool, but leave the others intact to keep liquids or smells inside the unit. If the pump has a plug, make a longitudinal cut down one side of the cable gland to allow the cable to pass without jeopardising the seal.



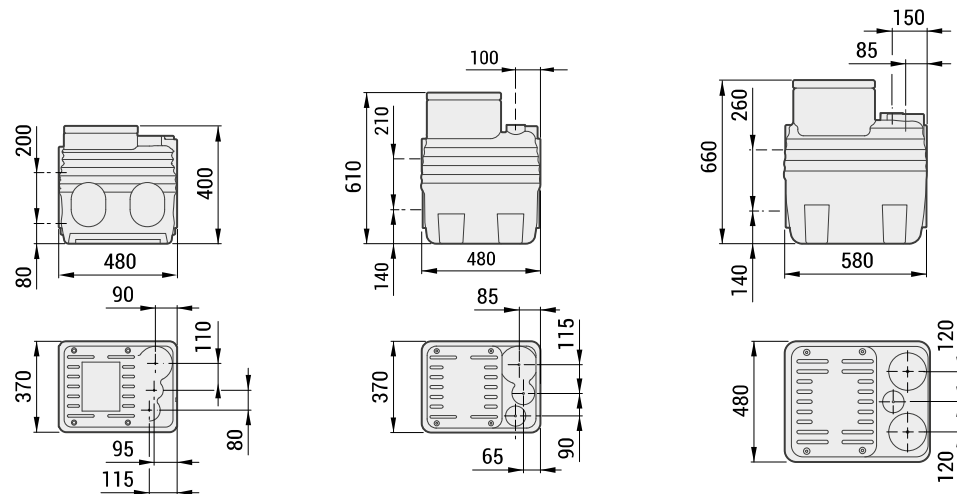
Once installation is complete, check operation of the pump and its float switches. Then replace the cover on the tank and secure it with the screws.

The **blueBOX** lifting station is ready for use. The vast range of plumbing and electrical accessories covers all installation requirements.



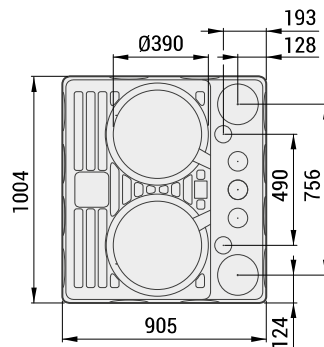
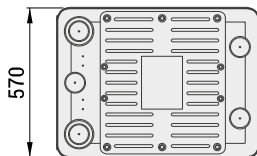
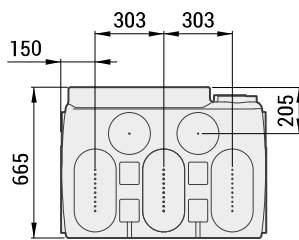
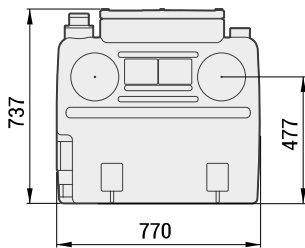


	<i>blue</i> BOX 60	<i>blue</i> BOX 90	<i>blue</i> BOX 150	
Capacity [l]	60	90	150	
Number of pumps	1	1	1	
Pump type	clear wastewater	DR steel	DR steel	
	heavily soiled wastewater	DG steel	DG steel	
Max operation temperature	40°C [90°C short time]	40°C [90°C short time]	40°C [90°C short time]	
Inlet [Ø max]	9xØ110 - 1xØ75	9xØ110 - 1xØ75	10 x Ø110	
Outlet	1xØ1 ½" - 1xØ2"	1xØ1 ½" - 1xØ2"	1xØ1 ½" - 1xØ2"	
Including	Accessories	cable gland, emergency draining connector, special support to reduce the float switch level [<i>blue</i> series pumps only]		
	Outlet pipe	Ø1 ½" [PVC]	Ø1 ½" [PVC] - Ø2" [PVC]	Ø1 ½" [PVC] - Ø2" [PVC]
	Gaskets	1xØ110mm, 2xØ50mm	1xØ110mm, 1xØ50mm	1xØ110mm, 1xØ50mm
<i>blue</i> BOX only	8	9	11	





<i>blueBOX 250</i>	<i>blueBOX 400</i>
250	400
1	2
DR steel	DR steel
DG steel - DG bluePRO - GR bluePRO	DG steel - DG bluePRO - GR bluePRO
40°C [90°C short time]	40°C [90°C short time]
6 x Ø110	12 x Ø110
1 x Ø1½" ÷ Ø2"	2 x Ø1½" ÷ Ø2"
cable gland, emergency draining connector	
Ø1½" [PVC] - Ø2" [ZN]	Ø1½" [PVC] - Ø2" [ZN]
2xØ110mm, 1xØ75mm	4xØ110mm, 2xØ75mm
1xØ1½", 1xØ2" [Outlet]	2xØ1½", 2xØ2" [Outlet]
15	31



Accessories supplied

Cable glands



Drain plug



Float switch stroke reducer



Additional configurations with submersible pumps from other Zenit families are possible. For further information, contact the Zenit Customer Service.

Optional accessories

Electrical panel

