# blue BOX

The **blueBOX** series consists of high quality rotary moulded polyethylene tanks for collecting white and black waste water.

The 60, 90, 150 and 250 litre models are equipped to house an electric pump, and are ideal for small domestic installations

The 400 litre model is intended for medium capacity applications and is designed for use with two electric pumps.

The tanks' special shape is inspired by Pininfarina's design for the blue Series of submersible pumps. Their construction characteristics and wide range of accessories make **blueBOX** systems extremely versatile and easy to install.

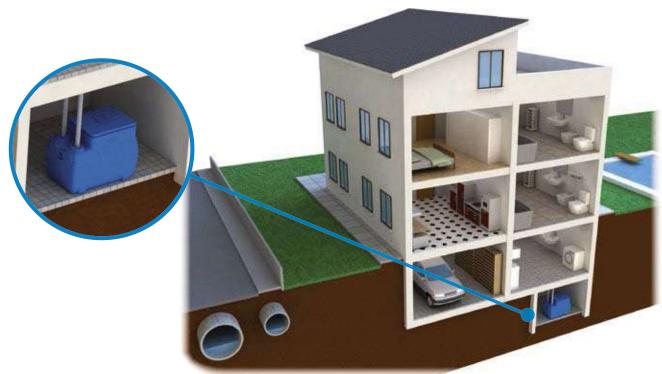


All product images are indicative only

#### **Operation and Use**

The collection tank collects the domestic waste water coming from discharges of any kind and any rainwater or infiltration water traps. The pump installed inside the tank allows the water to be sent to the sewer. The cover and the connections for passing the pipes have gaskets to guarantee a perfect seal. *BlueBOX* is prepared for collection to the input, output and ventilation pipes on every side, enabling an optimal use even in small spaces.

Inside a grinding pump can be installed capable of chopping the extraneous bodies contained in the wastewater and sending them a considerable distance. In this way the liquid can also be made to pass through small diameter pipes, permitting a significant financial savings on the total cost of the installation.





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## The **BlueBOX** range\*

**BluBOX** stations are suitable for collecting and lifting clear, rain and waste water from washing machines, sinks and WCs in systems installed at a lower level than the sewer, in locations such as garages or basements. The 60, 90 and 150 litre models are compact and easy to install, making them ideal for civil and residential contexts. Thanks to the rich assortment of electrical and hydraulic accessories available, the 250 and 400 litre versions are suitable for industrial and residential installations.



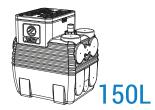
Capacity (I)	60
Dimensions (mm)	482x370x480
Nr. of pumps	1
Operation temperature	40°C (90°C short time)
Recommended pumps	DG blue, DG bluePRO, GR bluePRO, (DR blue and APblue with clear wastewaters only)

Including: cable gland, PVC delivery pipe\*\* Ø 1½", emergency draining connector, gasket kit for inlet pipe 1xØ110, 1x75, 1x50 mm, nr.1 special support to reduce the float switch level. Overflow alarm level OPTIONAL



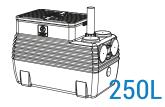
Capacity (I)	90
Dimensions (mm)	480x370x610
Nr. of pumps	1
Operation temperature	40°C (90°C short time)
Recommended pumps	DG blue, DG bluePRO, GR bluePRO

**Including:** cable gland, PVC delivery pipe\*\*  $\emptyset$  1½", emergency draining connector, gasket kit for inlet pipe 1x $\emptyset$ 110, 1x75, 1x50 mm, nr.1 special support to reduce the float switch level. Overflow alarm level OPTIONAL.



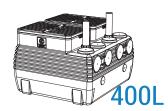
Capacity (I)	150
Dimensions (mm)	580x480x660
Nr. of pumps	1
Operation temperature	40°C (90°C short time)
Recommended pumps	DG blue, DG bluePRO, GR bluePRO

Including: cable gland, PVC delivery pipe\*\* Ø 1½", emergency draining connector, gasket kit for inlet pipes 2xØ110, 1xØ75 and 1xØ50 mm, nr.1 special support to reduce the float switch level. Overflow alarm level OPTIONAL.



Capacity (I)	250
Dimensions (mm)	900x500x660
Nr. of pumps	1
Operation temperature	40°C (90°C short time)
Recommended pumps	DG blue, DG bluePRO, GR bluePRO

Including: cable gland, nr. 2 gaskets pipe Ø110, nr. 1 gasket pipe Ø75 mm.



Capacity (I)	400
Dimensions (mm)	900x1.000x660
Nr. of pumps	2
Operation temperature	40°C (90°C short time)
Recommended pumps	DG blue, DG bluePRO, GR bluePRO

Including: cable gland, nr. 4 gaskets pipe Ø110, nr. 2 gasket pipe Ø75 mm.

- \* Dimension in mm Data without pump and accessories All weights and dimensions are indicative only
- \*\* Union for connection to existing system.



## How it's made

#### **Technical features**

- 60, 90 and 150 litres version for one pump directly installed;
- 250 litre version for one pump and 400 litre version for two pumps with coupling device or directly installed;
- Walk-over cover;
- · O-ring seal between tank and cover;
- · Simplified inlet, outlet and air venting pipe connections with seal;
- · Integral lifting handles;
- · Emergency drainage fitting located low down in the unit;
- Patented airtight cable gland allowing easy pump removal for any maintenance work;
- The side fins, in the middle of the tank, guarantee an excellent grip if the unit is installed in-floor (refer to relevant manual).



All product images are indicative only



Sturdy walk-over cover The large top opening allows a backup pump to be used for emergency emptying, ensuring operations are simple and hygienic.



PATENTED modular cable gland system allowing the pump to be removed with no need to disconnect or extract the power supply cable (refer to relevant manual).



Guaranteed airtight thanks to NBR rubber seals. The seal allows the blueBOX to be connected to the various pipelines quickly, solving the vibration problem and avoiding the use of silicone or glue.



Wastewater pipeline inlet ports also provided on sides.



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



Emergency drainage fitting located low down in the unit.



# Recommended pumps

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

							Free	Suitable for blueBOX				
VORTEX IMPELLER	V	Phases	P2 (kW)	Α	Rpm	Ø	passage	60L	90L		250L	400L
DG blue 40/2/G40V A1BM/50	230	1	0.3	2.3	2900	G 1½"	40 mm	•	•			
DG blue 50/2/G40V A1BM/50	230	1	0.37	2.8	2900	G 1½"	40 mm	•	•	•		
DG blue 75/2/G40V A1BM/50	230	1	0.55	4.1	2900	G 1½"	40 mm	•	•	•		
DG blue 100/2/G40V A1BM/50	230	1	0.74	5.6	2900	G 1½"	40 mm	•	•	•	•	•
DG bluePRO 50/2/G40V A1BM/50	230	1	0.37	2.8	2900	G 1½"	40 mm	•	•	•		
DG bluePRO 75/2/G40V A1BM/50	230	1	0.55	4.1	2900	G 1½"	40 mm	•	•	•		
DG bluePRO 100/2/G40V A1BM/50	230	1	0.74	5.6	2900	G 1½"	40 mm	•	•	•	•	•
DG bluePRO 150/2/G50V A1CM/50	230	1	1.1	7.5	2900	G 2"	50 mm				•	•
DG bluePRO 200/2/G50V A1CM/50	230	1	1.5	10.0	2900	G 2"	50 mm				•	•
DG bluePRO 50/2/G40V A1BT/50	400	3	0.37	1.15	2900	G 1½"	40 mm	•	•	•		
DG bluePRO 75/2/G40V A1BT/50	400	3	0.55	1.6	2900	G 1½"	40 mm	•	•	•		
DG bluePRO 100/2/G40V A1BT/50	400	3	0.74	2.15	2900	G 1½"	40 mm	•	•	•	•	•
DG bluePRO 150/2/G50V A1CT/50	400	3	1.1	3.2	2900	G 2"	50 mm				•	•
DG bluePRO 200/2/G50V A1CT/50	400	3	1.5	4.3	2900	G 2"	50 mm				•	•
GRINDER IMPELLER												
GR bluePRO 100/2/G40H A1CM/50	230	1	0.74	5.5	2900	G 1½" -	DN32 PN6	•	•	•	•	•
GR bluePRO 150/2/G40H A1CM/50	230	1	1.1	7.5	2900	G 1½" -	DN32 PN6				•	•
GR bluePRO 200/2/G40H A1CM/50	230	1	1.5	10.0	2900	G 1½" -	DN32 PN6				•	•
GR bluePRO 100/2/G40H A1CT/50	400	3	0.74	2.7	2900	G 1½" -	DN32 PN6	•	•	•	•	•
GR bluePRO 150/2/G40H A1CT/50	400	3	1.1	3.2	2900	G 1½" -	DN32 PN6				•	•
GR bluePRO 200/2/G40H A1CT/50	400	3	1.5	4.3	2900	G 1½"	DN32 PN6				•	•

	l/s	0	1	2	3	4	5	6	8	10	12
	l/min	0	60	120	180	240	300	360	480	600	720
	m³∕h	0	3.6	7.2	10.8	14.4	18.0	21.6	28.8	36.0	43.2
DG blue 40/2/G40V A1BM/50		6.0		4.0		1.7					
DG blue 50/2/G40V A1BM/50		7.6		5.5		2.9					
DG blue 75/2/G40V A1BM/50		10.1		8.5		5.7		2.6			
DG blue 100/2/G40V A1BM/50		11.6		10.2		7.6		4.3			
DG bluePRO 50/2/G40V A1BM(T)/50		7.0		4.9		2.4					
DG bluePRO 75/2/G40V A1BM(T)/50		10.2		8.0		5.5		2.6			
DG bluePRO 100/2/G40V A1BM(T)/50		11.4		9.8		7.4		4.4			
DG bluePRO 150/2/G50V A1CM(T)/50		12.3		10.7		8.8		6.5	4.4	2.4	
DG bluePRO 200/2/G50V A1CM(T)/50		15.3		13.7		11.7		9.4	7.1	4.7	2.5
GR bluePRO 100/2/G40H A1CM(T)/50		18.0	16.4	14.4	11.5	6.9					
GR bluePRO 150/2/G40H A1CM(T)/50		21.1	19.6	17.9	15.1	10.4	3.0				
GR bluePRO 200/2/G40H A1CM(T)/50		27.0	25.6	23.6	20.7	16.1	9.3				

## Types of installation

**blueBOX** lifting stations can be installed on-floor or in-floor. They are prefitted for use with Zenit pumps with vortex impeller or with grinding systems, which must be ordered separately depending on the customer's specific requirements.

The large number of intake and outlet pipeline fittings allow optimal installation even on existing plants. What's more the many hydraulic and electric accessories make **blueBOX** lifting stations convenient to install and use.

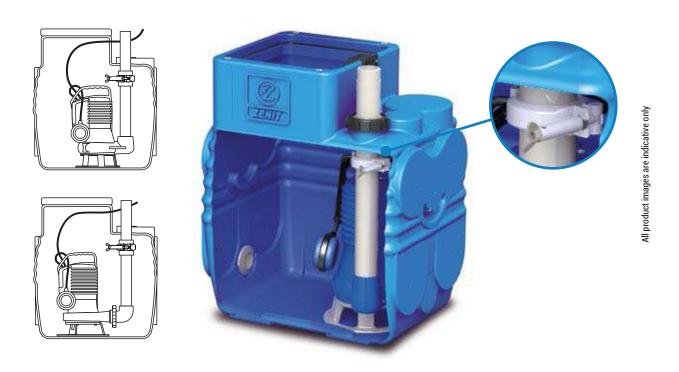
### blue**BOX** 60 - 90 - 150

#### **Installations**

In view of their small size, 60, 90 and 150 litre models can be installed coupled directly to the pump. The bottom of the **blueBOX** is shaped to hold the pump in position without the aid of additional accessories. DG blue pumps with vortex impeller or GRblue models with grinder can be used. With grinders, an ordinary threaded 90° bend must be used to change the direction of the delivery line.

The blueBOX 60 can be used with Zenit DR blue or APblue pumps for higher heads when pumping clear or washbasin wastewaters. The PVC outlet pipe connected to the pump has a coupling which allows the pump to be easily separated from the pump for any maintenance requirements, without disconnecting the pipelines from the lifting stations.

A ball check valve and/or a gate valve can be connected to the end of the delivery pipeline.

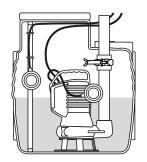


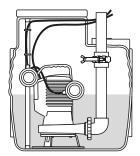
#### **Electrical accessories**

In these models, the use of pumps with start/stop float-switch is recommended.

This makes installation simple and inexpensive.

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







## blue**BOX** 250 - 400

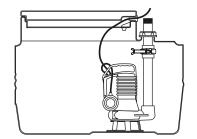
#### **Installations**

#### **Fixed installation**

Ideal installation for pump with vertical delivery outlet up to 2½". The pump rests on the bottom of the tank. The specially shaped bottom keeps the pump in the correct position.

A ball check valve and/or a gate valve can be connected to the end of the delivery pipeline.

Permanent installation is definitely the simplest and most economical.



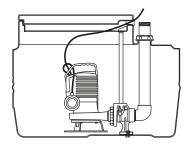
#### Installation with bottom coupling device (DAC)

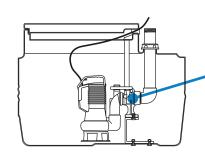
Installation with the bottom coupling device allows the pump to be raised and repositioned easily, with no need to empty the tank.

Vertical delivery pumps can be installed using a special kit for horizontal DAC units.

This is a versatile installation option which simplifies pump maintenance or replacement.

See Accessories section for further information.

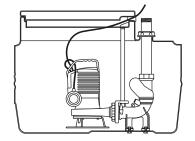






## Installation with bottom coupling device (DAC) and ball valve (VAP)

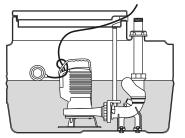
This special, compact accessory provides all the benefits of an ordinary DAC, and also, thanks to an integral venting valve, it prevents air pockets from forming inside the pump body if the unit runs dry. Thanks to this feature, a special ball check valve can be directly connected to the outlet of the DAC inside the **blueBOX**, ensuring compact size and removing installation constraints.



#### **Electrical accessories**

#### With integral float switch

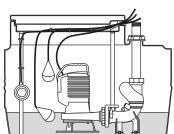
In the event of use of pumps with float switch, **blueBOX** lifting stations can be used with no further electric accessories. The float switch starts and stops the pump depending on the level reached.



#### Without integral float switch

In the event of use of pumps without float switch, the **blueBOX** lifting station must be equipped with minimum and maximum level float switches, and alarm float switch if required.

The electrical panel complete with all features required for operation of one or two pumps (*blueBOX* 400L) and accessories such as alternating control device or alarm with buzzer and light is available on request.





## How to install it

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



The **blueBOX** tank can be installed on-floor or in-floor. Inlet and output pipeline fittings are provided on three sides, allowing installation to be optimised to requirements.



Before the unit is actually placed in position, holes are drilled in the sides using a flared grinding tool to take the seals and then the pipes in the chosen positions.



To ensure perfect sealing, the double lip seal provided is fitted. No additional sealants are required, making installation an extremely quick procedure.



Once our **blueBOX** has been placed in the installation position, the wastewater inlet and ventilation pipes are fitted.



The next step is to install the pump, which will certainly be easier if a **blueBOX** with DAC was chosen. In this case, the flange provided has only to be slid along the guide tubes to achieve perfect coupling to the body of the DAC. The **blueBOX** contains an accessory that can be fitted to allow emptying in emergencies through the drainage hole low down in the unit.



The electrical cables are passed through special patented rubber cable glands that ensure a perfectly airtight seal. Before fitting the cable, perforate the chosen cable glands with a sharp tool, but leave the others intact to keep liquids or smells inside the unit.



Once installation is complete and operation of the pump and its float switches has been checked, the cover can be screwed into place. The cover is walk-over but will not support vehicles.



The **blueBOX** lifting station is ready for use.

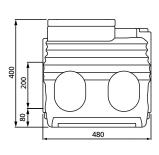
The vast range of plumbing and electrical accessories covers all installation requirements.

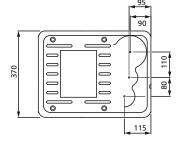


## Overall dimensions and weights\*

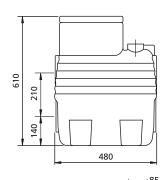
	Inlet	Outlet	Weight (kg)
blueBOX 60L	9 x Ø 110 - 1 x Ø 75	1 x Ø 1½" - 1 x Ø 2"	8
blueBOX 90L	9 x Ø 110 - 1 x Ø 75	1 x Ø 1½"- 1 x Ø 2"	9
blueBOX 150L	10 x Ø 75 ÷ 110	1 x Ø 1½" ÷ 2"	11
blueBOX 250L	10 x Ø 75 ÷ 110	1 x Ø 1½" ÷ 2"	15
blueBOX 400L	20 x Ø 75 ÷ 110	2 x Ø 1½" ÷ 2½"	31

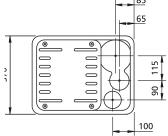
## blueBOX 60L



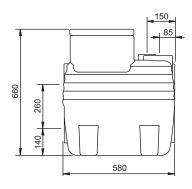


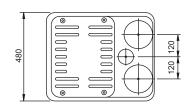
## blueBOX 90L



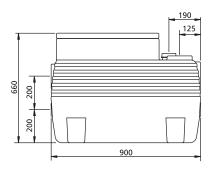


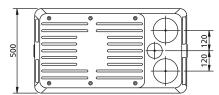
## blueBOX 150L





## blueBOX 250L





## blueBOX 400L

