



Pump • Fire Fighting Units • Booster Set

C

SUBMERSIBLE SEWAGE PUMPS

C Rev:11.09.2021

Handled Liquids

Domestic and industrial waste water, raw sewage, liquids with fibrous and solid substances.

Technical Data

Discharge Flange _____ DN 50.....DN 300 mm

Capacity _____ up to 1600 m³/h

Head _____ up to 95 m

Speed _____ up to 2900 rpm

Design Temperature _____ up to +40 °C*

Casing Pressure (Pmax) _____ 10 bar

(*) For higher temperatures, please contact with STANDART POMPA.

Design Features

•Vertical, wide volute casing, single stage, end suction submersible type centrifugal pump with enclosed, semi-open or vortex types impeller.

•20 basic sizes covering wide range of operational area.

•Electric motor isolation class is IP 68.

•Discharge flanges conform to EN 1092-2 / PN 10. (EN 1092-1 / PN 10 for steel or stainless steel casing)

Pump Designation

Pump Type _____

Discharge Nozzle (DN-mm) _____

Impeller Nominal Diameter (mm) _____

Impeller Type _____

C 100 - 240 B



•All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.

•Axial thrust is balanced by impeller back ribs.

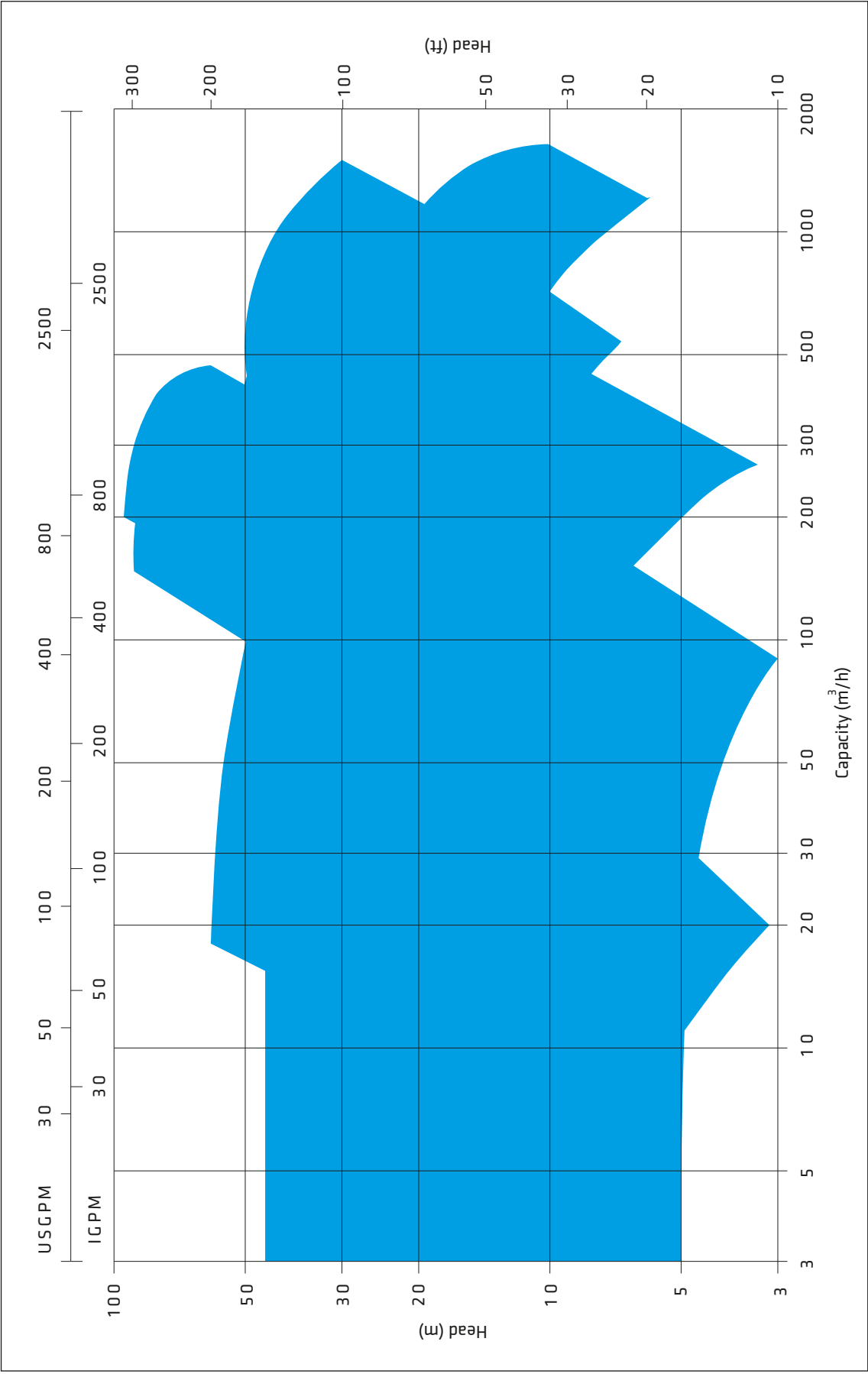
•In case of request motor cooling jacket is also applicable (for pumps having bigger than 200 frame motor)

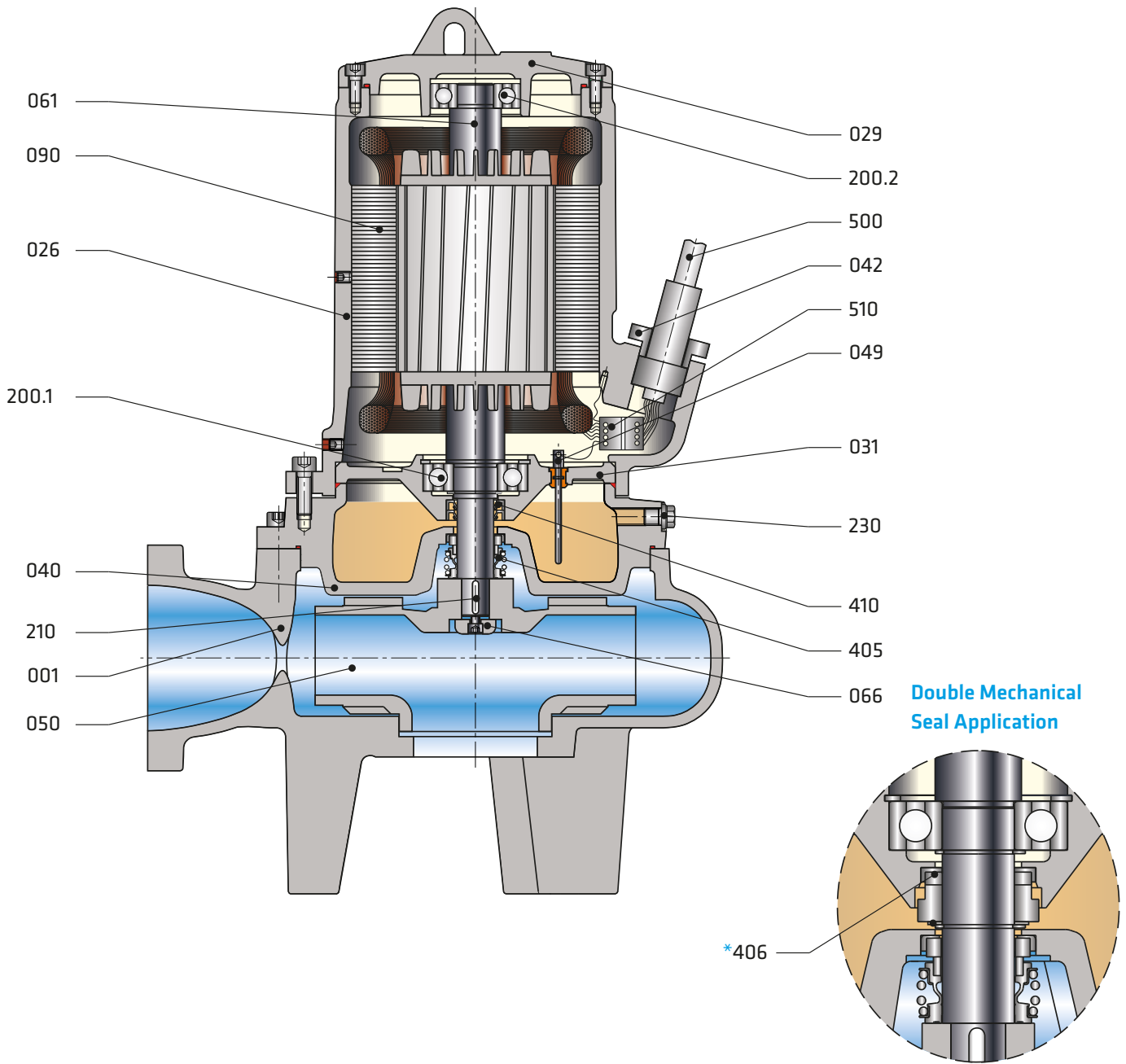
•Bearings of C type pumps are “life time grease lubricated” ball bearings.

Shaft Sealing

•For pumps bigger than 12 HP, always double mechanical seal is applied while for pumps up to 12 HP, single mechanical seal is applied as standard.

•In case of request, double mechanical seal can also be applied for pumps up to 12HP.



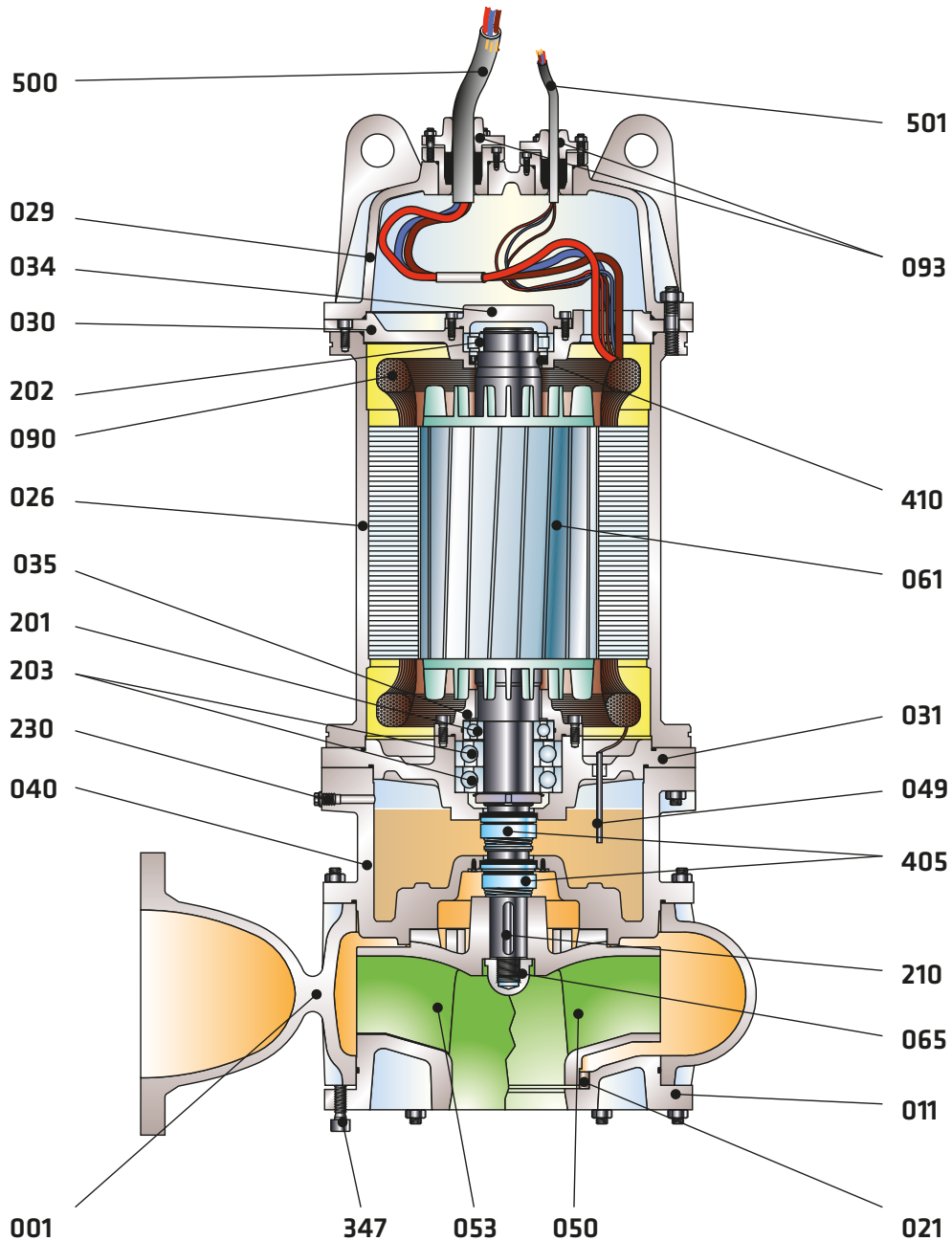


Part List

001	Volute Casing	090	Stator
026	Motor Casing	200.1	Bottom Bearing
029	Top Cover	200.2	Top Bearing
031	Bearing Housing	210	Impeller Key
040	Oil Chamber	230	Oil Plug
042	Gland	405	Mechanical Seal
049	Water Leakage Electrode	*406	Mechanical Seal
050	Impeller	410	Oil Seal
061	Rotor Shaft	500	Energy and Control Cable with Plug
066	Impeller Nut	510	Socket

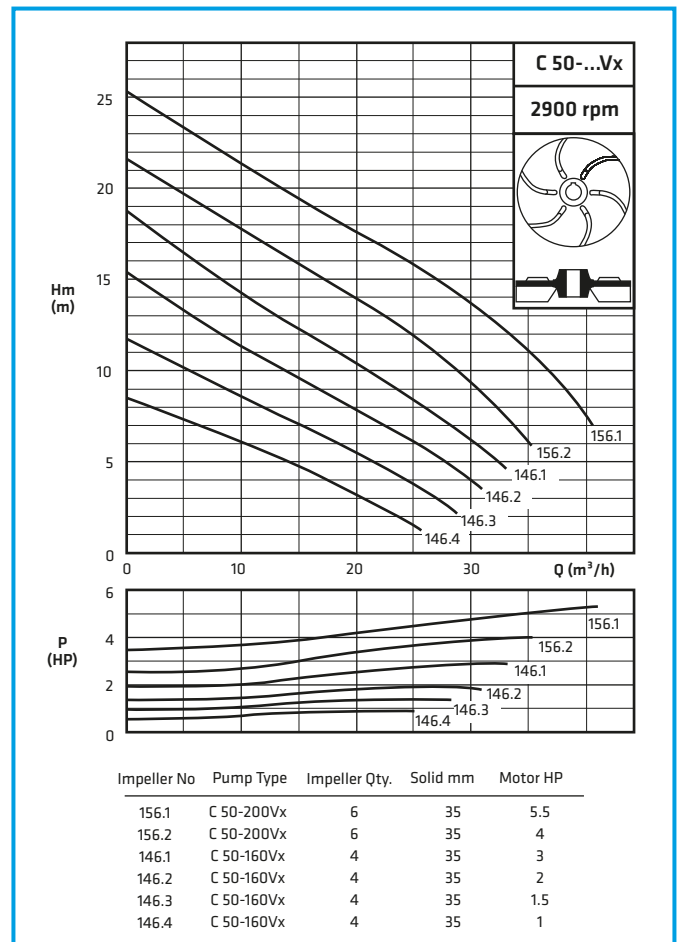
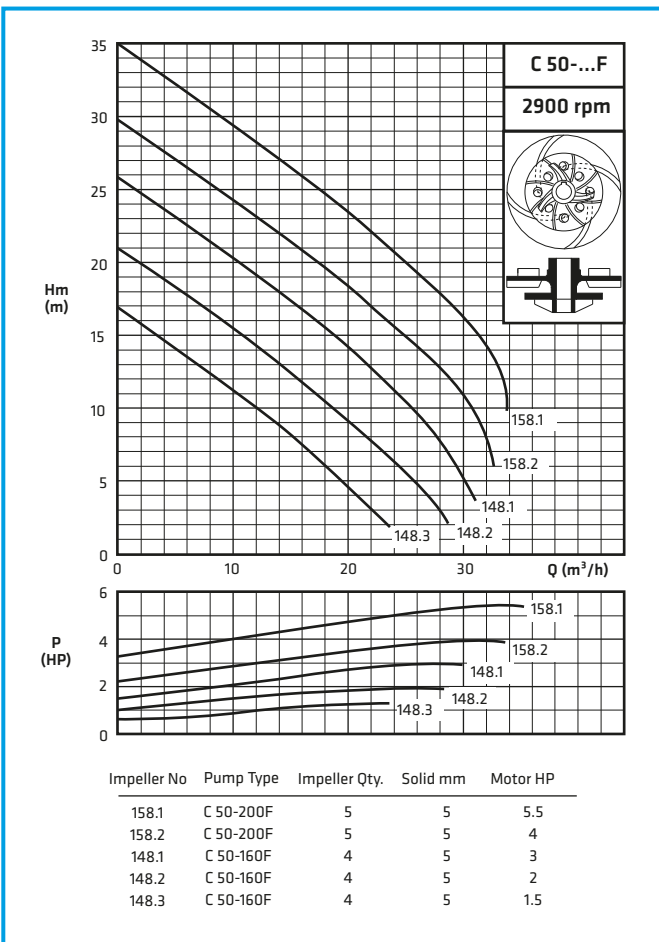
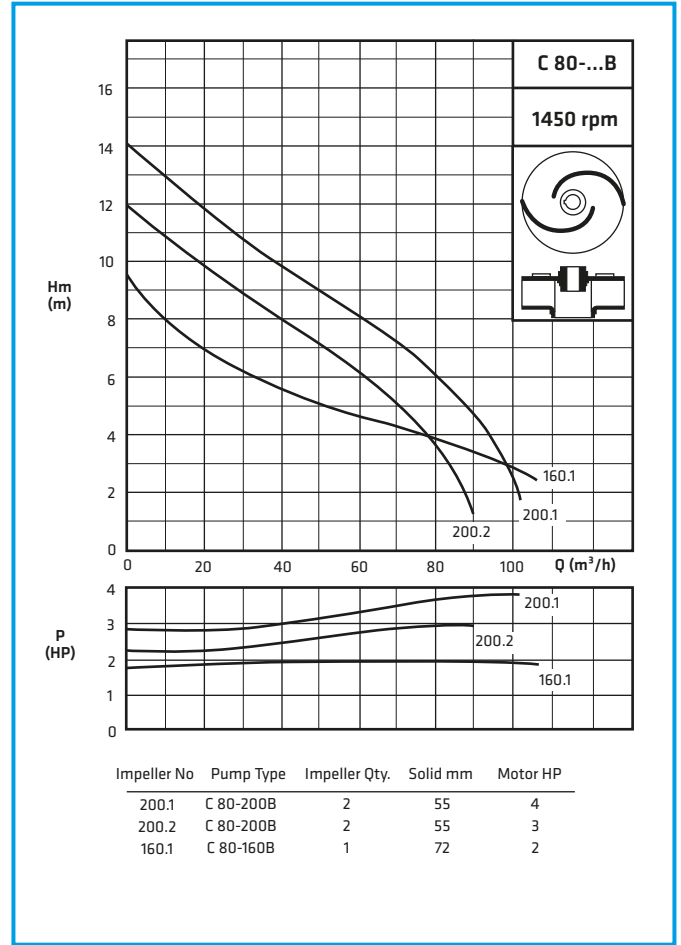
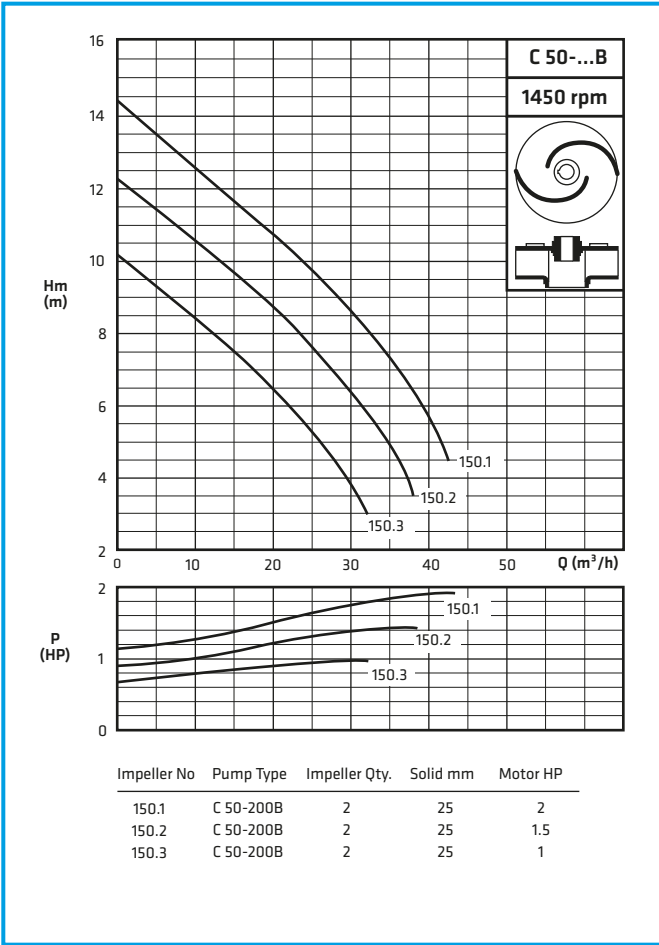
(*) Optional

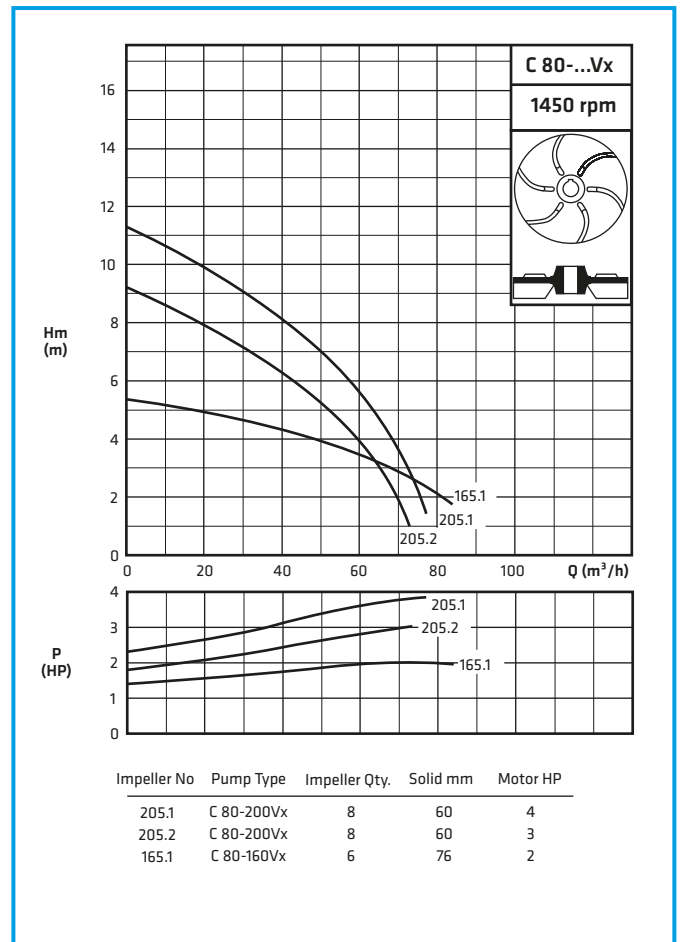
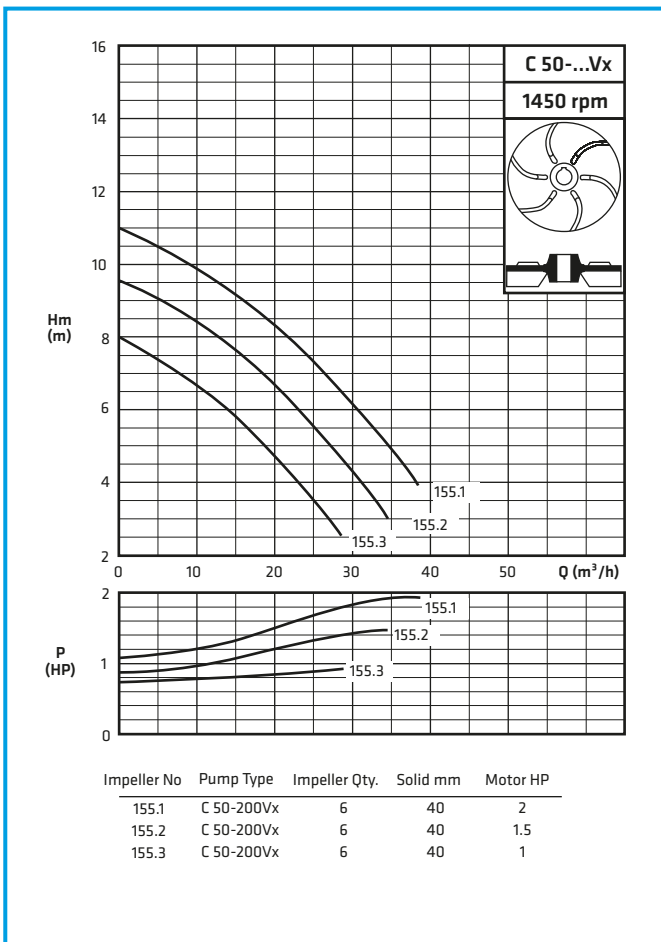
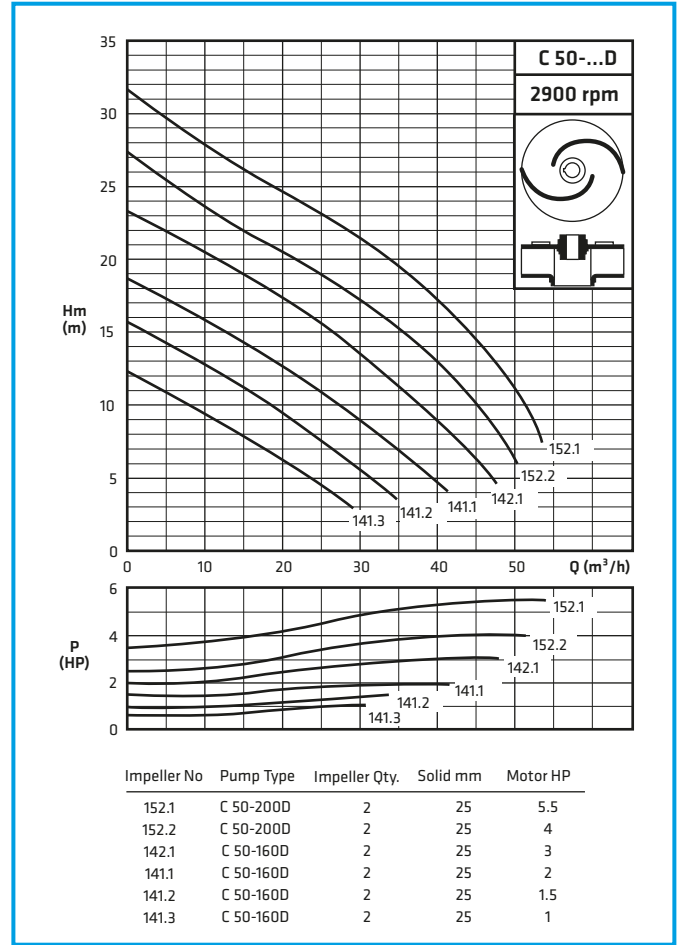
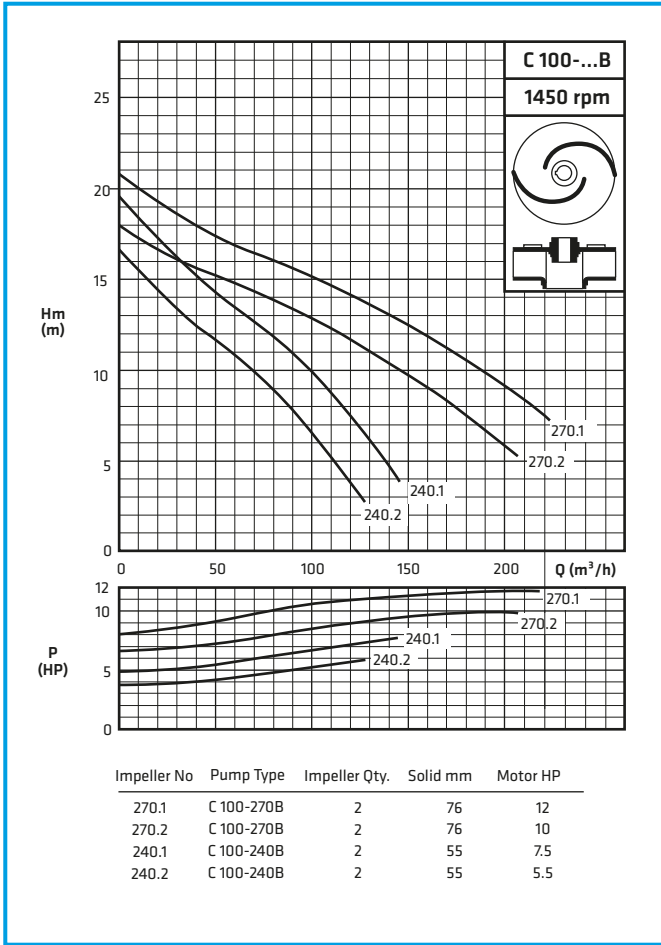
Sectional Drawing (bigger than 12 HP)



Part List

001	Volute Casing	040	Oil Chamber	202	Bottom Bearing
011	Bottom Cover	049	Water Leakage Electrode	203	Angular Contact Ball Bearing
021	Wear Ring	050	Closed Impeller	210	Impeller Key
026	Motor Casing	053	Semi-open Impeller	230	Oil Plug
029	Top Cover	061	Rotor Shaft	347	Adjustment Bolt
030	Top Bearing Housing	065	Impeller Nut	405	Mechanical Seal
031	Bottom Bearing Housing	090	Stator	410	Oil Seal
034	Top Bearing Cover	093	Gasket Compress Cover	500	Energy Cable
035	Bottom Bearing Cover	201	Bottom Bearing	501	Control Cable





Impeller Type

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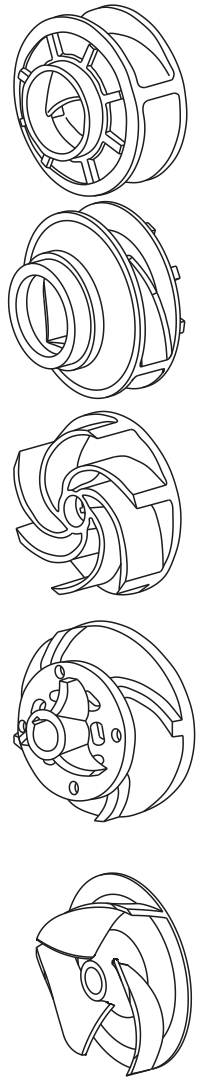
B and G2K Type Impeller: Enclosed type impellers with wide channels capable of pumping large size solid particles without clogging, for big capacity and low pressure. It is mainly used for 4 pole motors.

D Type Impeller: It is also enclosed type like B type but suitable for high speed motors (2 pole). It is convenient for high pressure, small capacity and smaller size solid particles.

VX Type Impeller: Semi-open free vortex type impeller is placed on top of the volute. It creates a forced vortex motion in the casing. It is mostly suitable for fibrous materials. They are suitable for low head applications but pump efficiency is lower compare to other impeller types. The increased clearances limit the head that can be generated and reduce the attainable efficiency. Recessed type impellers are also possible for some models. With this type of design solid particles up to pump flanges size can pass through the pump. Please ask for more information.

F Type Impeller: Semi-open type impeller with cutter. The cutting system is placed in front of the impeller and it breaks up the solid particles into smaller sizes that makes passing possible through the smaller pipes without sticking. F type impeller is suitable for small capacity, high pressure, but the pump efficiency is also low.

AB Type Impeller: Semi-open type impellers with wide channels capable of pumping large size solid particles without clogging, for big capacity and low pressure. It is more suitable for 4 pole motors. Designed for aggressive applications. Impeller works against a wear plate. Clearance between the wear plate and impeller blades is between 0.25 - 0.40 mm.



1 - Temperature **SENSOR** (130°C) in F class winding head protection for overheating.

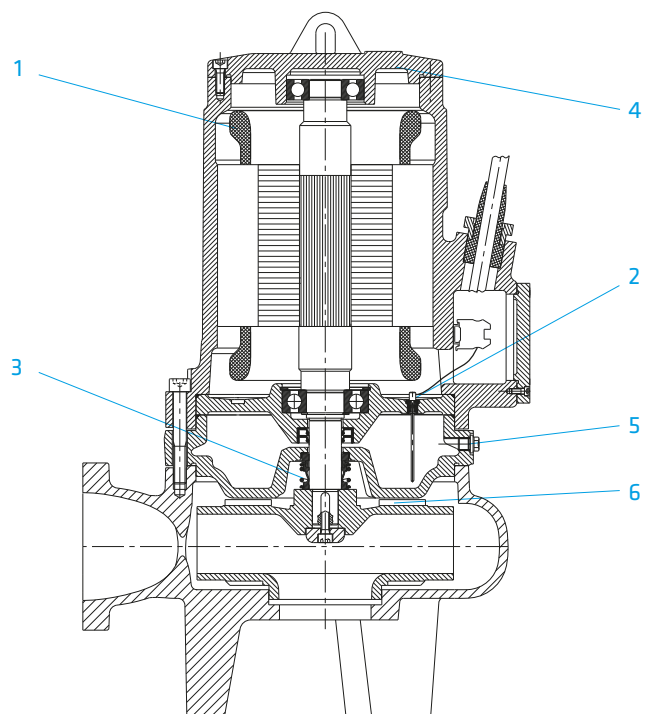
2 - Signaling **ELECTRODE** in case of leakage into the motor or into the oil chamber.

3 - **MECHANICAL SEAL** running in pumping liquid.

4 - Demountable **TOP COVER** for easy motor winding.

5 - Oil filling and inspection **PLUG**.

6 - **BACK VANES** for reducing axial load and sealing pressure.



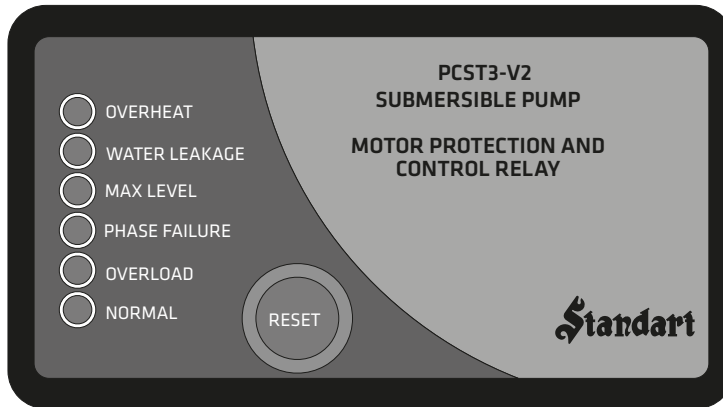
PCST3-V2 MOTOR PROTECTION AND CONTROL RELAY

C

Standart PCST3-V2 Motor Protection and Control Relay is an indispensable part of Standart C type pumps. It is supplied with the pump and it shall be used to secure smooth operation of motor and the pump.

FUNCTION:

When the device is switched on, all indicator lights blink in order and the control unit makes a self-check. If there is not any failure, NORMAL indicator light switches on in green indicating it is ready to run the motor.



OVER HEAT

In case of overheating of motor windings, in which the temperature exceeds 130°C, the red indicator light switches on and the relay shuts down the motor. Indicator light blinks in short periods at alarming position. When motor has cooled down, relay restarts the motor while alarming goes on until the RESET button is pressed. Pressing the RESET button disables the alarm relay and indicator light stops blinking.

WATER LEAKAGE

In case of water leakage into the motor casing or oil chamber, red indicator light switches on and the relay shuts down the motor. Alarm relay becomes activated and until the RESET button is pressed, alarming goes on by blinking of red indicator light in short periods. When this failure occurs, the pump needs to be overhauled.

MAX LEVEL

When water level reaches the maximum level, which is set by the user, float switch sends on alarm signal and yellow indicator light starts blinking. This alarm does not affect the current state (run or stop) of the pump. Pressing the RESET button disables the alarm relay and indicator light stops blinking.

PHASE FAILURE

An external phase protection relay, mounted in the control panel, is connected to PCST3-V2 for checking phase sequence and phase failures. When there is a failure in mains voltage or in phase sequence, the motor is shut down by the relay and red indicator light starts blinking. By the time the failure is fixed, the motor restarts automatically while alarming goes on until the RESET button is pressed.

OVERLOAD

The relay shuts down the motor, if the current overload limit is exceeded. Meanwhile, alarm relay becomes activated and red indicator light starts blinking. As the failure is fixed, pressing the RESET button will disable the overload and the alarm relay, so the system turns back to normal conditions.

NORMAL

By the time all red indicator lights on PCST3-V2 switch off, green indicator light switches on, meaning that it is ready to run the motor. In case of failure, green indicator light switches off and the relay shuts down the motor.

PCST3-V2 is an indispensable part of Standart C type pumps. If it is damaged, do not try to operate the motor without it.

Optional Motor Protections

- Humidity Sensor
- Bearing Thermal Sensor (PTC or/and PT100)



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PACKAGE TYPE WASTE WATER PUMPING STATION

Conflux Rev.11 09.2021



Package Type Waste Water Pumping Station

Package type waste water pumping stations consist of submersible pump, valves, float switches and control unit is suitable and a good solution for places with lower elevation of main waste water pipeline. They can be used everywhere safely where there is no sewer system or not possible (not economic) to build a sewer system.

They present an environmental approach with preventing pollution of underground waters. They also prevent developing of malodor. Their design permit easy installation and provide long life with corrosion resistant materials.

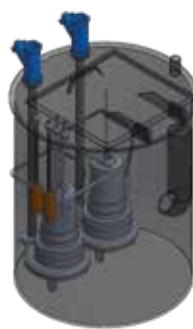
Technical Data

- Tank Volume : 300 - 500 liter
- Number of Pumps : 1 main or 1 main + 1 spare
- Piping Diameter : DN 50
- Material : Fiberglass composite with polyester added
- Equipments : Connection pipes, rail pipes, valves, check valve and çekvalfleri, basket grid
- Water Temperature (max) : 40 °C

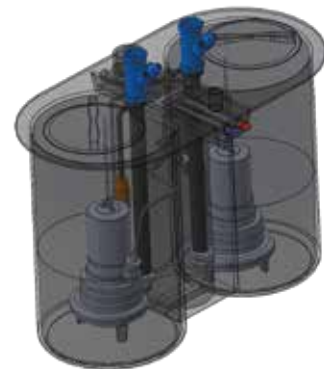
Package Types



Conflux 300-1



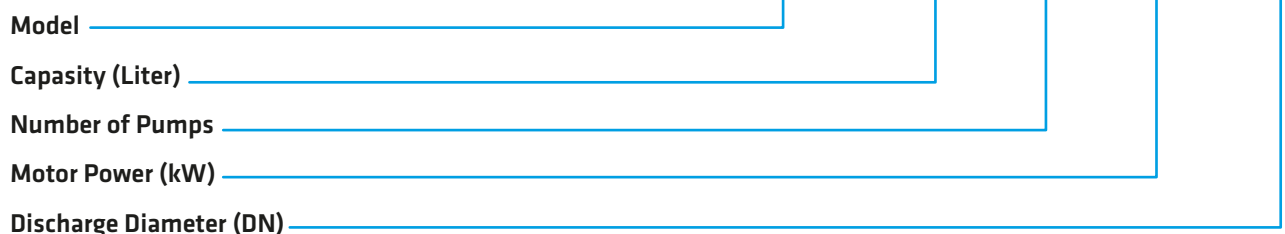
Conflux 300-2



Conflux 500-2

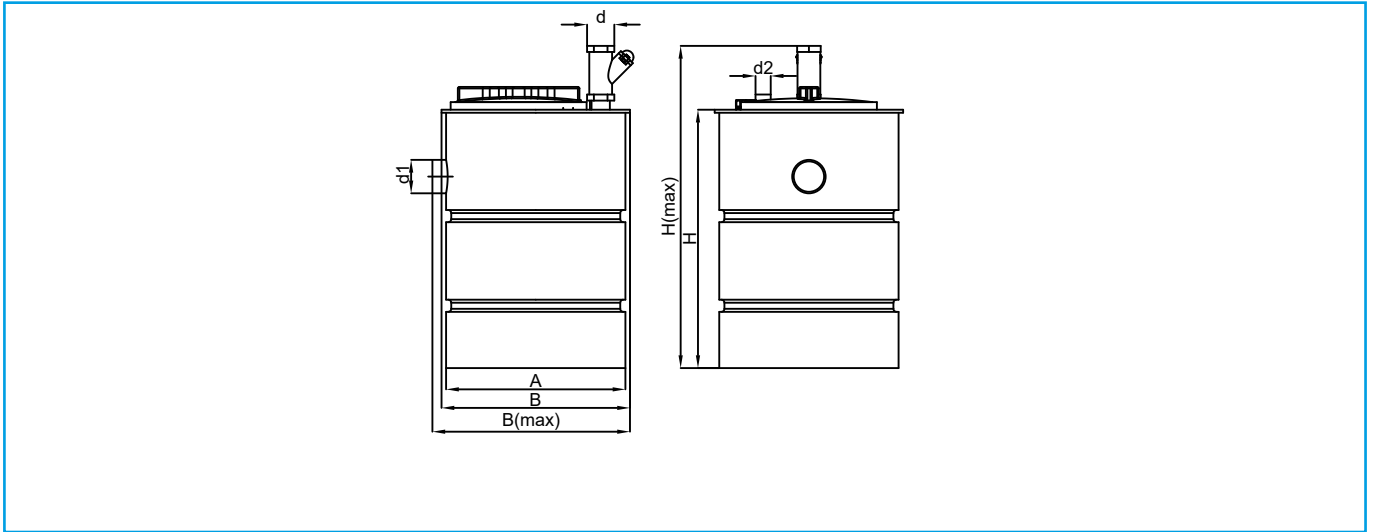
Pump Designation

Conflux 500 - 2 x 1.5 - 50

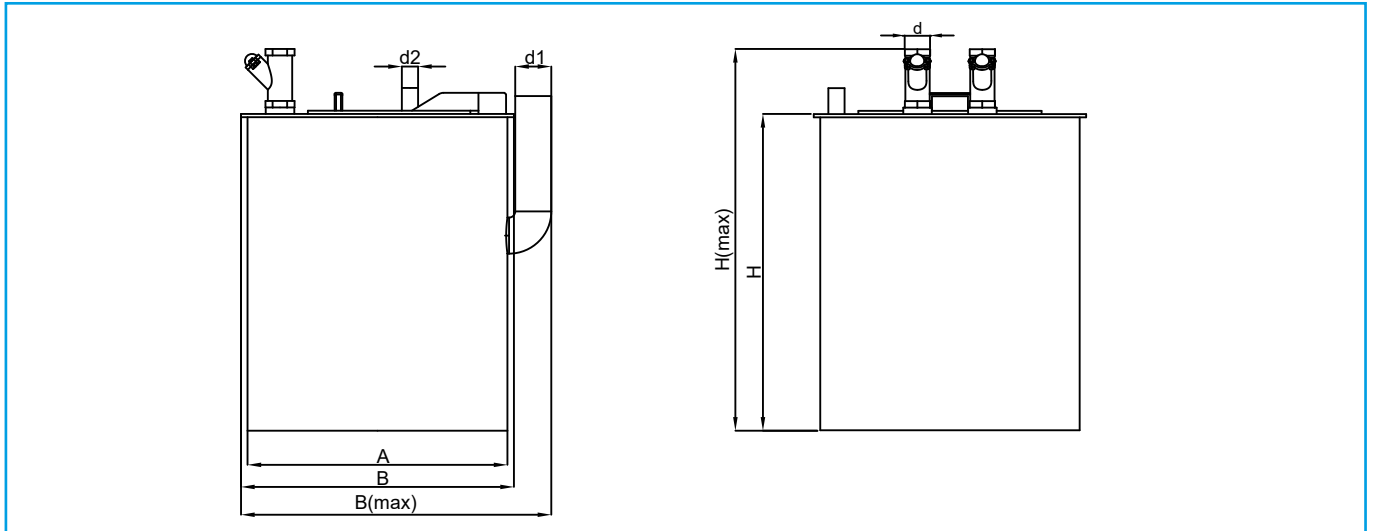


Dimensions

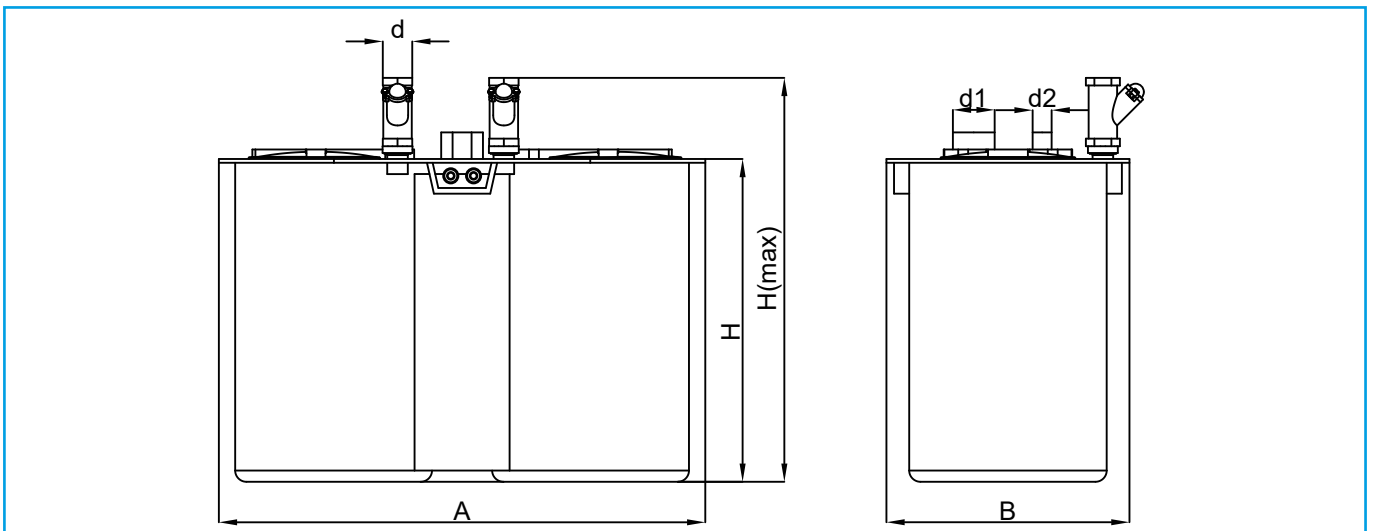
Conflux 300-1



Conflux 300-2



Conflux 500-2



Package Type	Conflux Dimension Table							
	A	B	B(max)	H	H(max)	d	d1	d2
Conflux 300-1	590	620	640	850	1040	2"	3"	1 1/2"
Conflux 300-2	630	680	500	850	1040	2"	3"	1 1/2"
Conflux 500-2	1280	640	-	850	1040	2"	3"	1 1/2"