PRODUCT CATALOGUE / 01.2024

WE ARE **SENSITIVE** TO **LIFE**



DUYAR

ABOUT US

We help you to choose the most suitable systems for your needs with our high-efficiency, environment-friendly and innovative pumps and booster sets.

With our expertise in the pump industry, we produce quality pumping systems in accordance with TSE, ISO and CE standards: we create reliable living spaces in residences, office buildings, industrial facilities, educational institutions, energy facilities, fuel and gas industry.

We adopt a customer-oriented approach to meet the expectations of our business stakeholders at the highest level, and we prioritize customer satisfaction in all processes from R&D to production of pump technologies. As **Duyar Pompa**, our mission is to provide the best service in the field of pump technologies as soon as possible, with a wide dealer and service network throughout Turkey.

INNOVATIVE REALIABLE HIGH QUALITY

As one of the new leading manufacturers of HVAC projects with its wide product range, benefiting from **Duyar Vana**'s more than 55 years of industry experience and knowledge, we will continue to produce and develop with our domestic roots and global vision.

SUCCESSFUL PROJECT DELIVERY

SAFE AND PROBLEM-FREE DELIVERY IN ALL OF OUR PROJECTS

WIDE SERVICE NETWORK TO EVERY POINT OF TURKEY

100% DOMESTIC PRODUCTION WITH OUR EXPERIENCED TEAM IN THE FIELD OF PUMP AND BOOSTER

TABLE OF CONTENTS



FIRE PUMP SYSTEMS

BOOSTER SETS

17-45



DIPIN-LINE PUMPS



OPUSVARIABLE SPEED
CIRCULATOR PUMPS

47-58

-71-86

59-69



DWWPWASTEWATER PUMPS



BLACK BOX

87-88







FIRE PUMP SYSTEMS



With its high efficiency fire pumps and wide after-sales service programs, **Duyar Pompa** helps in choosing the right pump and pumping systems for the needs. Duyar Pompa is a long-term business partner that saves time in the selection and evaluation of pumps and pumping systems for large industrial and public institutions of our country.

Duyar Pompa produces quality fire pumps and pumping systems, with its expertise in the field of fire, that work reliably when necessary and comply with NFPA20, TSE and CE standards. These devices can be used in;

- Building Technologies
- Industrial Facilities
- Energy Facilities
- Fuel and Gas Industry

Fire and Responsibility

Combustion; is a chemical reaction that takes place by the combination of oxygen, heat and combustible material. Fire, on the other hand, is a type of disaster that causes material and moral damages that occur outside of our will and control.

A fire protection system including a fire cabinet suitable for fire risk class, sprinkler line, hydrant, foam monitor etc. must be installed t building or facility within the scope of the regulation published for fire protection.

Duyar Pump's compact designed, split body, end-suction and staged fire pumps, which are produced in accordance with NFPA20 criteria with the latest technology in production can be used in new investments, package fire revisions and renovation projects.

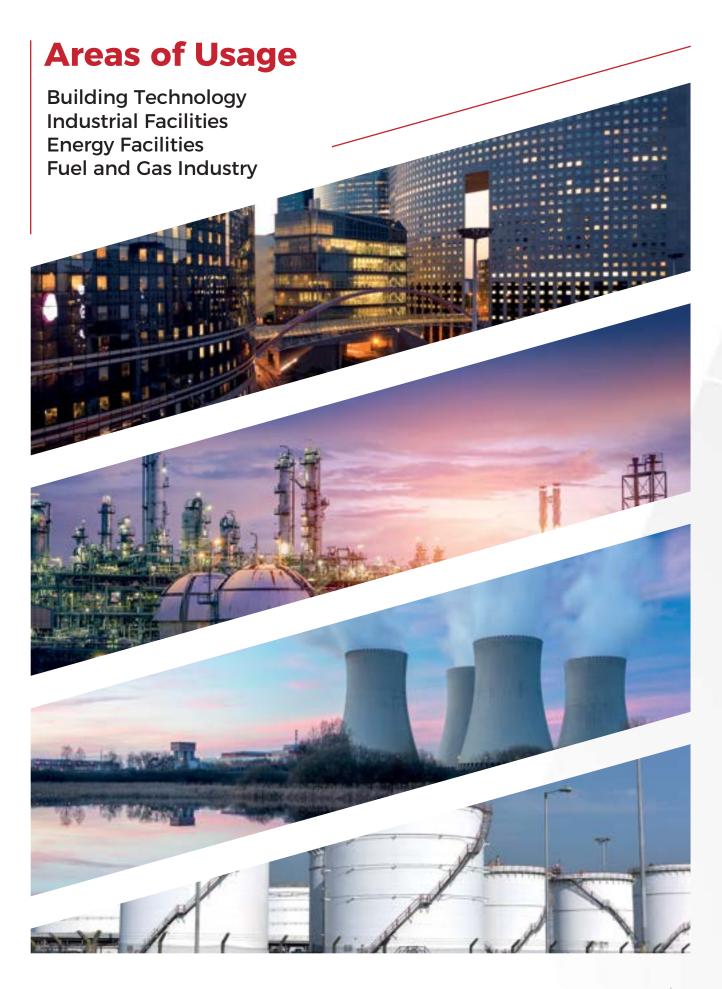
Low Installation and Usage Costs

Our technology-leading, high-efficiency pump designs;

- Consumes less power,
- Chooses smaller equipment,
- Provides smaller boards.

These factors contribute to lower equipment cost. Fabrication parts are manufactured as standard for high durability and accurate pump assembly. Rotating parts bring mechanical reliability, reliable operation and minimal maintenance costs with precision-bored balancing.





NFPA



National Fire Protection Association (NFPA) was established in the United States in 1896 by a group of insurers to minimize the effects of fire and other risks. NFPA 20 is the most common and detailed resource used in fire suppression systems worldwide, describing the requirements for the installation of fire pumps used for fire protection. NFPA 20; covers the selection, installation, acceptance testing and operation of fire pumps.

Material Properties

Body : GG25 (Gray Cast Iron)Impeller : CuSn10 (Bronze) - AISI 304

• Shaft : AISI 316 - AISI 304 • Shaft Bushing : AISI 316 - AISI 304

Sealing : At least five (5) turns must be supplied with a mild sealing

gland.

Bearing : Bearings must have a service life of at least 5000 hours at

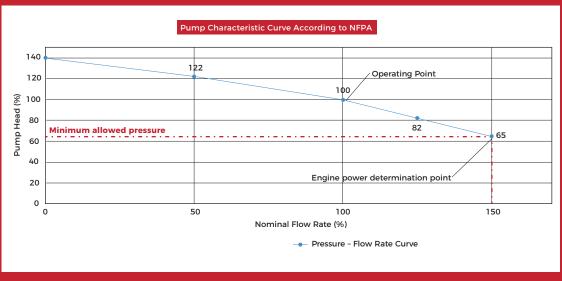
maximum load.

What Are the Characteristics of a Pump System That Complies with NFPA 20?

- Standard pump types are specified as Horizontal split case pump, Horizontal end suction, Horizontal Gradual End suction, In-line pumps and line shaft vertical turbine.
- NFPA 20 allows suction from negative elevation for fire pumps only for "Vertical Turbine" pumps, End-suction and split-case pumps should never be operated with negative suction.
- The fire pump curve must provide a capacity value of 150% of the rated flow, and the pressure value at a capacity of 150% flow cannot be less than 65% of the nominal (rated) pressure.
- The closed valve pressure value of the fire pump (the maximum pressure that the pump can give at zero flow) should not exceed 140% of the nominal value.

- Control panels of each pump must be separate.
- At nominal flow, the flow velocity in the suction pipe is less than 3 m/s.
- In NFPA 20, fire pump suction diameters are determined according to the maximum speed condition at 150% of the rated flow rate (4.6 m/s). Service factor (overload factor) of electric motors should not exceed 1.15.
- Fire pumps must have a rising spindle valve between the suction line and the suction collector.
- It is absolutely necessary not to put a strainer on the suction line.
- There should be check valves and butterfly valves in the discharge line of fire pumps, respectively.
- If the fire pumps are selected as 2 electric, there must be a reliable power source to feed the pumps and panels even if the electricity is cut off. In the absence of a reliable power source, at least one of the pumps must be selected with a diesel engine.
- The jockey pump is used to eliminate small pressure drops in the fire installation before the main fire pumps are activated and its flow rate is min. It should be 1/100th of it, and its pressure is min. Of the main fire pump pressure. It should be above 1bar.

Performance Curves



TS EN 12845 + A1



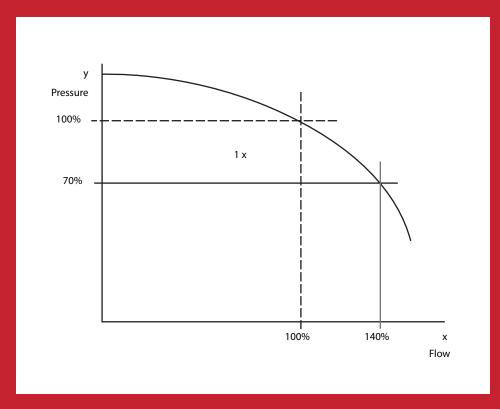
This Standard CEN/TC 191 "Fixed firefighting systems" was prepared by the Technical Committee, it was approved by CEN on 12.12.2019 and it was accepted as a Turkish Standard at the meeting of the Technical Board of the Turkish Standards Institute on 03.02.2020 and it was decided to be published.

"EN 12845 + Al" is the national standard criterion of Germany, Austria, Belgium, United Kingdom, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Croatia, Netherlands, Ireland, Spain, Sweden, Switzerland, Italy, Iceland, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Macedonia, Malta, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Turkey and Greece.

The "EN 12845" standard, which Europe has created in the field of fire, is accepted in English by the TSE institution directly under the title of TS EN 12845 Standard in our country. The main basic features that should be in fire pump systems according to EN 12845 standards are as follows.

- According to TS EN 12845 + Al standards, pumps must have a stable H (Q) curve.
- If the pump is required, it must be able to operate at a minimum of 140% of the rated flow and the pump pressure at 140% flow must be 70% of the minimum pump rated pressure.
- The pumps should be able to be activated automatically and manually depending on the pressure drop in the system and should be deactivated manually only. Pumps must not be automatically switched off.
- The pressure drop in the system, which will give the command to the fire pumps to work, is felt through the pressure switches and starts the pump. Each pump should have two pressure switches, one of which is spare.
- According to EN 12845 + Al standards, if two pumps are used in the system, each pump must meet the 100% capacity flow of the system need.
 In cases where multiple pumps are required, for example, when a system with three pumps is designed, each pump must meet the flow rate of 50% of the system demand at the specified pressure.

Performance Curves





Horizontal Split Case Pump

Material Specifications		
Pump Casing GG25 (Cast Iron) - GGG40 (Nodular Cast Iron)		
Impeller	CuSn10 (Bronze) - GG25 (Cast Iron)	
Shaft	AISI 304 - AISI 316	
Sealing	Gland Packing	

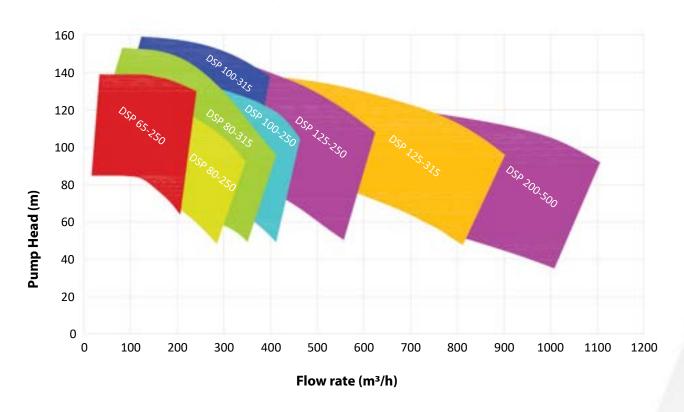
Technical Specifications		
Fluid Temperature	-20 / +80 °C	
Electricity Grid	3 - 440 V, 50 Hz / 60 Hz	
Operating Pressure	16 Bar	
Flow Rate Q (GPM)	100 - 2.500	
Pressure Hm (PSI)	76 - 189	
Speed (rpm)	1.450 - 3.000	
Suction Flange	DN 100 - DN 250	
Discharge Flange	DN 65 - DN 200	

System Equipment			
Air Release Valve	Check Valve	Jockey Pump	Prosestat
Body Relief Valve	Manometer	Expansion Tank	Pressure Switch

Product Specifications

- The pumps are double-suction, axially split case, suction and pressure flanges are located on the lower body, on the same level.
- · Provides low usage costs due to optimized efficiency.
- · Provides cavitation-free operation due to its low NPSH values.
- · Impeller is balanced in accordance with ISO 1940 class 6.3.
- · Greased bearing and soft sealing.
- · The direction of pump rotation is clockwise when viewed from the motor side.
- · The equipment used in the suction and discharge lines are of the brand "Duyar Valve".
- · Suction and pressure flanges comply with ISO 7005-2/PN16 standard.
- · It is optionally suitable for production in ANSI flange norm.

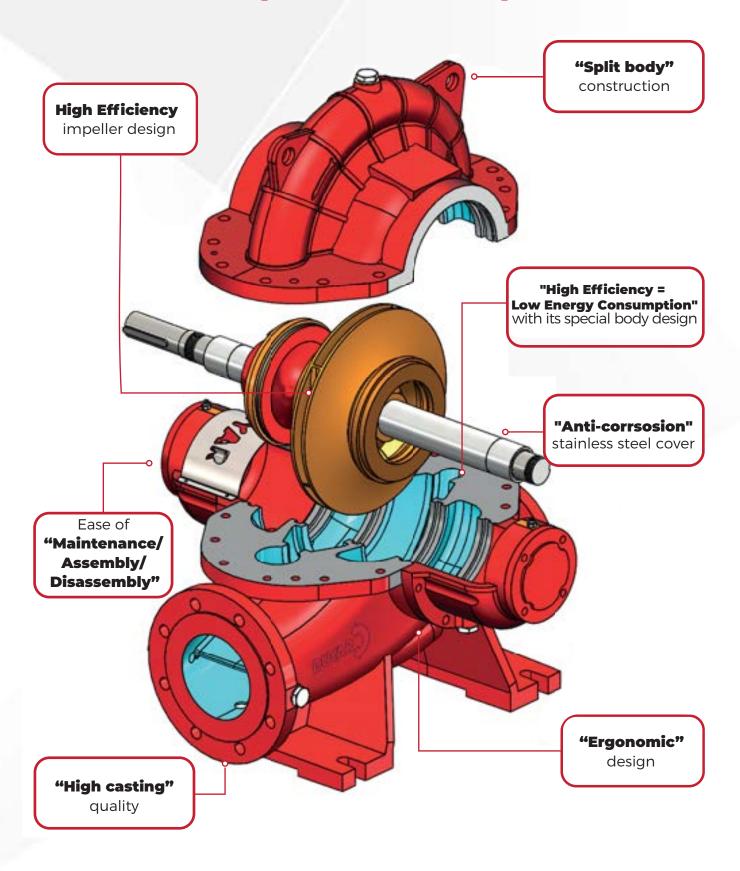
Hydraulic Range



DSP Series Horizontal Split Case Pump Set - NFPA 20



Horizontal Split Case Pump





Horizontal End Suction Pump

Material Specifications		
Pump Casing GG25 (Cast Iron)		
Impeller	CuSn10 (Bronze) - GG25 (Cast Iron)	
Shaft AISI 316 - AISI 304		
Sealing	Gland Packing	

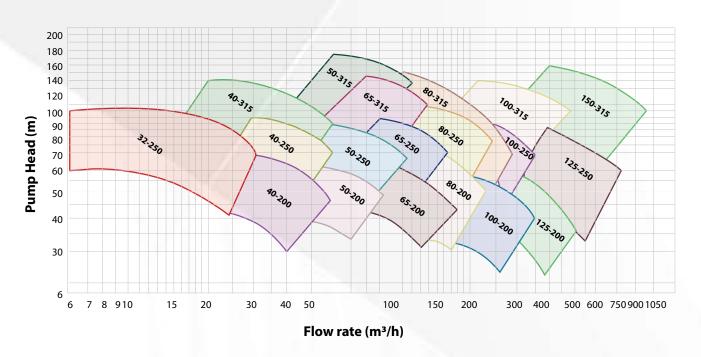
Technical Specifications		
Fluid Temperature -20 / +80 °C		
Electricity Grid	380 - 440 Volt, 50 Hz / 60 Hz	
Operating Pressure	5 - 14 Bar	
Flow Rate Q (GPM)	88 - 3.500	
Pressure Hm (PSI)	70 - 197	
Speed (rpm)	1.450 - 2.950 d/d	
Suction Flange	DN 50 - DN 250	
Discharge Flange	DN 32 - DN 200	

System Equipments			
Casing Relief Valve	Manometer	Expansion Tank	Air Release Valve
Check Valve	Jockey Pump	Pressure Switch	Prosestat

Product Specifications

- · Single-stage, end-suction, axial type pumps with closed impellers.
- · Pump and motor connection is made on a common chassis using a flexible coupling.
- Equipped with grease-lubricated, long-life bearings.
- · Soft sealing is used for sealing.
- The direction of pump rotation is clockwise when viewed from the motor side.
- The equipment used in the suction and discharge lines are of the brand "Duyar Vana.
- · Suction and discharge flanges comply with ISO 7005-2/PN16 standard.

Hydraulic Range



DNP Series End-Suction Pump Set - NFPA 20





Horizontal Multi-Stage Pump

Material Properties		
Pump Casing GG25 (Cast Iron) - GGG40 (Nodular Cast Iron		
Impeller	CuSn10 (Bronze) - GG25 (Cast Iron)	
Shaft AISI 304 - AISI 41050		
Sealing	Gland Packing	

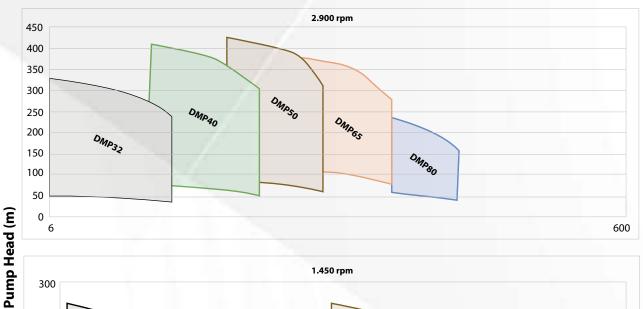
Technical Specifications		
Fluid Temperature	-20 / +80 °C	
Electricity Grid	380 - 440 Volt, 50 Hz / 60 Hz	
Operating Pressure	5 - 24 Bar	
Flow Rate Q (GPM)	17.6 - 704	
Pressure Hm (PSI)	70 -338	
Speed (rpm)	1.450 - 2.950 d/d	
Suction Flange	DN 40 - DN 250	
Discharge flange	DN 32 - DN 200	

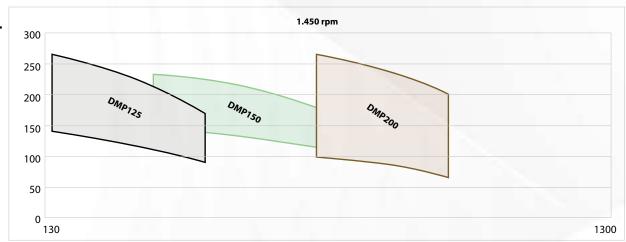
System Equipments			
Casing Relief Valve	Manometer	Expansion Tank	Air Release Valve
Check Valve	Jockey Pump	Pressure Switch	Prosestat

Product Specifications

- · It is used in projects where high pressure is required.
- · Soft sealing is used for sealing.
- · Impellers are produced with balance holes to meet axial loads.
- · Long-lasting cylindrical roller bearings that can withstand heavy conditions are used in the pumps.
- The direction of pump rotation is clockwise when viewed from the motor side.
- · Suction and pressure flanges can be PN16, PN25 or PN40 as needed.
- Body castings can be GG25 (CAST IRON) or GG40 (SFERO) castings depending on the required pressure value.

Hydraulic Range





Flow rate (m³/h)

DMP Series Horizontal Multistage Fire Pump - Diesel Engine



CONTROL PANELS

Electric and/or diesel driven, automatic or manual control is provided for each pump separately and independently with an electrical and/or diesel control panel. Our panels, manufactured according to NFPA20 standards, are compact, fire-fighting equipment suitable for automation, easy to use and maintain, with alarm and control features.

ELECTRIC DRIVE CONTROL PANEL

- Measuring 3 phase voltage values and monitoring the screen
- Memorizing the past twenty events with time and date information
- · Voltage protection 'Active and 'Passive selection'
- · Ability to test 2 days a week
- · Pump screen monitoring
- · Displaying the pump run time on the screen

- Float protection against running without water, selection of 'Active and 'Passive'
- · Possibility of using a pressure transmitter
- · Relay contact notification of all faults / operations with BMS feature
- · Turkish/English menu
- · Displaying date and time information on the screen
- · 4x20 LCD screen



DIESEL DRIVE CONTROL PANEL

- · Dual battery system
- · Battery voltage value display monitoring
- Displaying the temperature value on the screen with the temperature sensor
- · Displaying the oil pressure on the screen with the oil sensor
- · Display the fuel status on the screen
- · Possibility to limit the number of starters
- · Possibility to adjust the cranking time
- · Manual start/stop feature
- · Diesel run time screen tracking
- · Possibility to set diesel stop delay (0-240 minutes)
- · Low battery voltage notification
- · Displaying the diesel rpm (RPM) on the screen
- · Ability to test 2 days a week
- · Possibility to use a pressure transmitter
- Relay contact notification of all faults/operations with BMS feature
- · Turkish/English menu
- · Ability to see date and time information on the screen
- · 4x20 LCD screen
- · Auto Manual start switch



DMVP JOCKEY PUMP SET

These systems are used to keep the fire line constantly under pressure. At the same time, it prevents unnecessary start-ups and exits of the main pumps by meeting the small leaks that may occur in the line. This product, which is supplied as a set with a vertical shaft pump, expansion tank, control panel and other necessary equipment, is included in the fire pump set.

- · Multistage Pump (with base plate)
- · Electric motor
- · Control Panel
- · 100 L expansion tank
- · Ball valve
- · Check valve
- · Pressure Switch
- · Level Floater





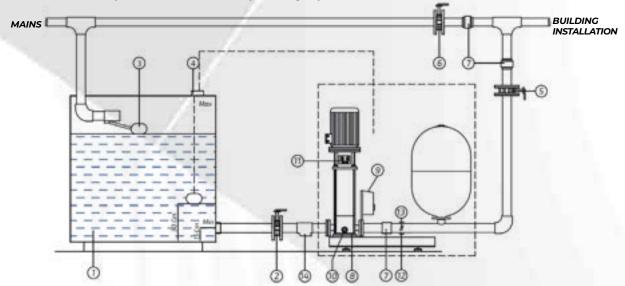




BOOSTER SYSTEMS

BOOSTER

Booster is a system that enables the water that it absorbs from a certain water reservoir to reach the desired points with the help of high pressure.



No	Part Name	No	Part Name
01	Warehouse	08	Booster Unit
02	Valve	09	Booster Control Panel
03	Warehouse Floater	10	Booster Pump
04	Booster Level Flasher	11	Pump Coupler
05	Booster Discharge Line Valve	12	Pressure Switch
06	City Mains Line Valve	13	Manometer
07	Check valve	14	Strainer

BOOSTER EQUIPMENTS

- Boosters are produced as standard with single, double or triple pumps according to the desired flow rate. In case of capacity requirement, 6 Booster sets can be made.
- · Boosters can be manufactured with vertical or horizontal pumps as standard.
- Sequence change, phase control and liquid level control are standard features in Boosters with multiple pumps.
- · Boosters can operate in two different modes, automatic and manual..

FREQUENCY CONTROLLED BOOSTER SYSTEMS

Conventional fixed speed booster systems operate the pump at full power even at the lowest water consumption and stop and start very frequently. This situation causes fluctuations in water pressure up to 2 bar and shortens the life of the pump. Booster systems with frequency control drive, on the other hand, control the motor speed and adjust the pump performance in a wide range according to the system needs and provide optimum operation. Thus; Boosters with equal aging feature, energy saver up to 40%, redundant and uninterrupted operation, controllable with pressure transmitter, providing maximum comfort during consumption, low noise level, long life, low operation feature are obtained.

BOOSTER SELECTION CRITERIA!

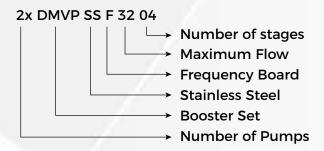


It is important to pay attention to the following criteria in the determination of the booster suitable for its intended use (domestic, industrial, agricultural, etc.)

- · If it is to make a suction, the determination of the suction depth of the booster is of great importance for the life of the pump.
- The quality of the space where the booster will be installed is important in calculating the booster flow rate. Flow rate is calculated differently for a booster to be used at home and a booster to be used in places such as sports facilities, dormitories, and schools.
- · Attention should be paid to the quality of the water to be pressurized (Temperature, pollution level, presence of salt water, etc.).
- The nominal pressure of the balance tank in the booster system should be higher than the closed valve pressure (Pmax) of the pumps in the system. (For example, the nominal pressure of the buffer tank in the booster containing a DMVP 8-12 3 kw pump with a closed valve pressure of 145 mSS (14.5 Bar) must be at least PN16.)



PRODUCT DESCRIPTION



HOW TO DETERMINE BOOSTER WORKING PRESSURE (HM) AND FLOW (Q)?

The pressure in the outlet collector of the Booster is the sum of the inlet pressure in the suction collector of the Booster and the pressure created by the Booster itself. However, in Turkey, the pressure at the inlet of the Booster is at negligible levels, since the Boosters are generally fed from a water tank open to the atmosphere at the same level as the Booster.

While determining the working pressure of the Booster;

- · Static height of the building
- · Minimum flow pressure on the top floors
- Friction losses in pipes
- · Losses in the water meter
- The sum of losses in filters and other equipment must be calculated.

Ha (Lower pressure) : Hs+Höd +Hkr+Hakma mSS

Hü (Higher pressure) : Ha+15 mSS

Hs : Statis height mSS

Höd : Specific resistances (water meter, valve, elbow etc.)

Hkr : Critical circuit pressure loss mSS

Hakma : Top floor faucet flow pressure Min 15 Mss

While determining the flow rate of the Booster;

- If it is a domestic water Booster, the peak water requirement to be used should be calculated.

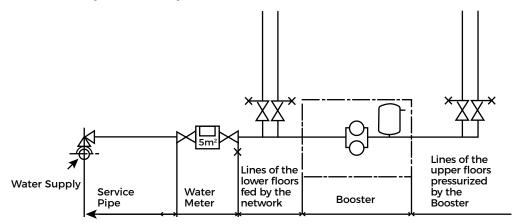
Qps : 0,3x1,1x4x150xN hourly peak water requirement (lt/h)

Synchronization factor : 0,3
Safety coefficient : 1,1
Average number of people in a family : 4
A person's daily water requirement : 150 lt
Number of flats : N

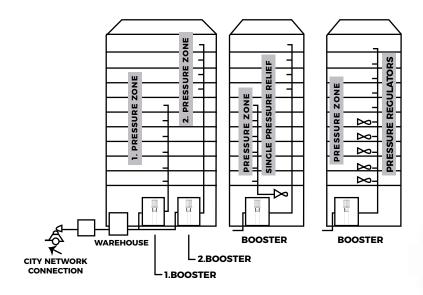
- If it is a fire water Booster, the required flow rate should be calculated according to the fire regulations.

BOOSTER INSTALLATION

Boosters can operate in a warehouse or directly connected to the city network. It is a prerequisite that the inlet pressure should not fluctuate more than 1 bar and should not be lower than 1 bar in the Boosters connected directly to the city network. In networks where these conditions cannot be met, it would not be correct to connect the boosters directly to the network. Due to the inadequacy of the mains pressures, this system has not been used very often in Turkey until today.



In Booster systems operating by taking water from a tank, the water should be able to flow from the tank to the pump with its own weight and a pre-pressure of 0.2 bar should be created at the suction port of the pump. It is basically not correct to operate the Boosters with suction. However, when this is necessary, the installation should be designed by using a pipe whose inner diameter is at least one length larger than the suction port of the pump. The installation should be determined in the shortest possible way, using at least elbows and fittings. The valve diameter should be kept as large as possible. Each pump must have a separate suction line.



PANEL OPTIONS

Two types of panels are used as standard in boosters.

They are conventional type electrical panels. These panels start and stop the pumps according to the pressure information they receive from a separate pressure switch for each pump. In this type of Booster with panel, sufficient volume of expansion tank is used to minimize the number of switchgears.

Frequency controlled electrical panels. Comfort is at the forefront in the facilities where they are used. It processes the pressure information received from the transmitter on the PLC on the frequency converter and keeps the line pressure constant by reducing the pump speed according to the flow rate used in the system.

PANEL FEATURES WITH PRESSURE SWITCH CONTROL

- It works with 380-460 V AC 50 Hz / 60 Hz mains voltage.
- The cabinet frame is manufactured from thermoplastic material or DKP sheet in IP 54 protection class and is painted with RAL 7032 electrostatic paint.
- There is MANUEL 0 AUTOMATIC selector switch on the panels.
- In AUTO mode at panel, There is:
 - Protection against waterless operation with floater
 - Protection against phase loss and instability
 - Peer aging application by changing the order.
- During the failure of the protection relay of the panels, it does not leave the facility without water by working and stopping over the pressure switches in the MANUEL position.



FEATURES OF MOTOR MOUNTED VARIABLE SPEED PANELS

- · Multipump feature from 1 pump to 4 pumps.
- · Automatic pump change, master pump selection.
- · MODBUS communication with RS 485.
- Ability to operate 1 pump, 1 main + 1 backup, 2 pumps 2 main + 1 backup,
 3 pumps, 3 main + 1 backup.
- · Simple programming, emergency response with fault codes.
- Ability to set all transition times.
- Possibility to adjust the protection settings at the desired sensitivity.
- IP 55 protection class. 11 kW IP 20 protection.
- · Cable communication between drives.
- · Single-phase and three-phase.



EXPANSION TANK PRODUCT LIST

Name of the Product	Connection
DGT 24 LT (Horizontal)	1"
DGT 50 LT	1"
DGT 100 LT	1"
DGT 140 LT	1"
DGT 200 LT	1"1/4
DGT 300 LT	1"1/4
DGT 500 LT	1"1/4
DGT 750 LT	2"
DGT 1000 LT	2"
DGT 1250 LT	2"
DGT 1500 LT	2"
DGT 2000 LT	2"
DGT 2500 LT	2"
DGT 3000 LT	2"1/2
DGT 4000 LT	3"
DGT 5000 LT	3"



WHAT ARE THE SUBJECTS TO BE **CONSIDERED WHILE SELECTING THE EXPANSION TANK?**

Among the factors that should be considered when determining the expansion tank for a system include:

- · Temperature of the liquid
- Liquid type
- The size of the tank

Stainless Expansion Tank can be used in environments where hygiene is important or very humid. There are expansion tanks in different sizes according to the characteristics of the pump system. The volume of the expansion tank varies between 25-5000 Liters and 10-25 bars. There are also types of tanks such as sphere, cylinder, horizontal and vertical. On average, pressure vessels last about 5-7 years. The following issues should be considered when purchasing an expansion tank;

- Capacity (Liters)
- · Height of the place to be used
- Pressure resistance
- Auxiliary equipment to work with the expansion tank

The total volume calculation of the membrane tank can be practically calculated according to DIN 1988 part 3 as follows;

0.33 = constant coefficient

Qmax = Maximum flow rate of the booster Pa = Upper Working pressure of the booster ΔP (a-e) = booster working differential; difference between working upper pressure and lower pressure

S = Number of switches; Number of activation and deactivation of the booster per hour

VE = 0.33 x Qmax $\frac{(\Gamma A + 1)}{\Delta P (A-E) \times S}$ (M³)

DMVP SERIES VERTICAL SHAFT MULTISTAGE BOOSTERS

DOMESTIC WATER BOOSTER



FIRE BOOSTER



DOMESTIC WATER BOOSTER

Material Properties	
Standard EN-DIN	
Pump Body	AISI 304 - Stainless Steel
Shaft	AISI 304 - Stainless Steel
Impeller/Diffuser	Noryl
Suction - Discharge Body	GG25 - Cast Iron
Mechanical Seal	Carbon / Ceramic

Technical	Specifications							
Flow	2 - 60 m3/h							
Pump head	20 - 150 mSS							
Operating pressure	16 Bar (Max.)							
Temperature Range	0 - 50 °C							
Speed	2900 rev/min							
Input - Output	DN100-DN80							
Strength	From 0,75 kW to 15 kW							
Panel	Fully automatic, Co-aging, Optional: with Frequency Converter							

System Equipment

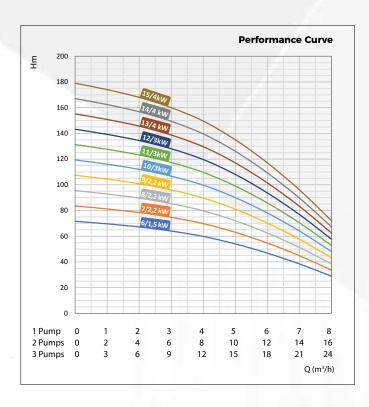
- Manometer
- Suction and discharge collectors
- · Ball valves
- · Check valves
- Corded level floater to prevent running without water
- Fully automatic electrical control panel mounted on the chassis.
 (Direct start <0.75 kW <Star delta starting)
- · Rotation (row control) system that distributes the operating time equally between the pumps.
- · Specially manufactured elastic wedges that prevent vibration

DMVP VERTICAL SHAFT PUMP PRODUCT LIST

Name of the Product	Motor Power (kW)	Connections
DMVP 8-06	1,5	1 1/4"- 1 1/4"
DMVP 8-07	2,2	1 1/4"- 1 1/4"
DMVP 8-08	2,2	1 1/4"- 1 1/4"
DMVP 8-09	2,2	1 1/4"- 1 1/4"
DMVP 8-10	3	1 1/4"- 1 1/4"
DMVP 8-11	3	1 1/4"- 1 1/4"
DMVP 8-12	3	1 1/4"- 1 1/4"
DMVP 8-13	4	1 1/4"- 1 1/4"
DMVP 8-14	4	1 1/4"- 1 1/4"
DMVP 8-15	4	1 1/4"- 1 1/4"
DMVP 12-05	2,2	1 1/2" - 1 1/2"
DMVP 12-06	2,2	1 1/2" - 1 1/2"
DMVP 12-07	3	1 1/2" - 1 1/2"
DMVP 12-08	3	1 1/2" - 1 1/2"
DMVP 12-09	4	1 1/2" - 1 1/2"
DMVP 12-10	4	1 1/2" - 1 1/2"
DMVP 12-11	5,5	1 1/2" - 1 1/2"
DMVP 12-12	5,5	1 1/2" - 1 1/2"
DMVP 12-13	5,5	1 1/2" - 1 1/2"
DMVP 16-05	3	1 1/2"- 1 1/2"
DMVP 16-06	4	1 1/2"/1 1/2"
DMVP 16-07	5,5	1 1/2"/1 1/2"
DMVP 16-08	5,5	1 1/2"/1 1/2"
DMVP 16-09	5,5	1 1/2"- 1 1/2"
DMVP 32-04	3	2"-1 1/2"
DMVP 32-05	4	2"-1 1/2"
DMVP 32-06	5,5	2"-1 1/2"
DMVP 32-07	5,5	2"-1 1/2"
DMVP 32-08	7,5	2"-1 1/2"



DMVP 8 SERIES

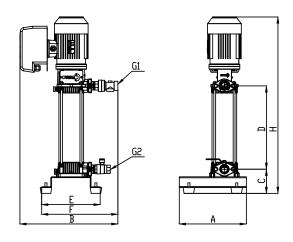




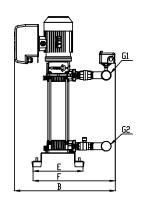
	Booster Type	Motor Power (kW)	Number of Floors	Number of Flats	Recommended Minimum Balance Tank to Use (It)	Collector Inlet / Outlet
	1xDMVP 8 -6	1,5	1-4			
	1xDMVP 8 -7	2,2	5-7		100	
	1xDMVP 8 -8	2,2	8-9			
CINICIE	1xDMVP 8 -9	2,2	10-12			
SINGLE	1xDMVP 8 -10	3	13-14	25-35	200	1 1/4"- 1 1/4"
PUMP	1xDMVP 8 -11	3	15-16	25-55		1 1/4 - 1 1/4
	1xDMVP 8 -12	3	16-17]
	1xDMVP 8 -13	4	17-18			
	1xDMVP 8 -14	4	19-20		300	
	1xDMVP 8 -15	4	21-22			
	2xDMVP 8 -6	1,5	1-4			
	2xDMVP 8 -7	2,2	5-7		200	
	2xDMVP 8 -8	2,2	8-9			
	2xDMVP 8 -9	2,2	10-12			
DUAL	2xDMVP 8 -10	3	13-14		300	
PUMP	2xDMVP 8 -11	3	15-16	50-70		2"-2"
	2xDMVP 8 -12	3	16-17			
	2xDMVP 8 -13	4	17-18		500	
	2xDMVP 8 -14	4	19-20		500	
	2xDMVP 8 -15	4	21-22			
	3xDMVP 8 -6	1,5	1-4			
	3xDMVP 8 -7	2,2	5-7			
	3xDMVP 8 -8	2,2	8-9			
	3xDMVP 8 -9	2,2	10-12			
TRIPLE	3xDMVP 8 -10	3	13-14			
PUMP	3xDMVP 8 -11	3	15-16	75-105	500	2" - 2"
	3xDMVP 8 -12	3	16-17			
	3xDMVP 8 -13	4	17-18			
	3xDMVP 8 -14	4	19-20			
	3xDMVP 8 -15	4	21-22	1		

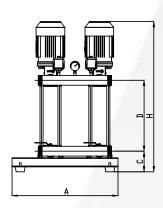
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

	Α	В	С	D	Н	Е	F	G1	G2	
1XDMVP 08-06-1,5 KW				322	830					
1XDMVP 08-07-2,2 KW]	512	E12	512	.,,	360	868			
1XDMVP 08-08-2,2 KW				398	906					
1XDMVP 08-09-2,2 KW	350			436	944					
1XDMVP 08-10-3 KW			126	474	982	306	400	1 1	1/4"	
1XDMVP 08-11-3 KW	330		120	512	1020	300	400	1 1/4	/4	
1XDMVP 08-12-3 KW	1			550	1058					
1XDMVP 08-13-4 KW	532		588	1096						
1XDMVP 08-14-4 KW		532		626	1134					
1XDMVP 08-15-4 KW	1			664	1172					

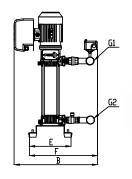


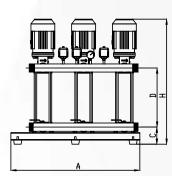
	Α	В	С	D	Н	E	F	G1	G2
2XDMVP 08-06-1,5 KW	650			322	830				
2XDMVP 08-07-2,2 KW		618		360	868				
2XDMVP 08-08-2,2 KW		010		398	906				
2XDMVP 08-09-2,2 KW				436	944				
2XDMVP 08-10-3 KW			126	474	982	306	505	2	
2XDMVP 08-11-3 KW	030	628	120	512	1020	300	303		
2XDMVP 08-12-3 KW				550	1058				
2XDMVP 08-13-4 KW	1			588	1096				
2XDMVP 08-14-4 KW		638		626	1134				
2XDMVP 08-15-4 KW	1			664	1172				



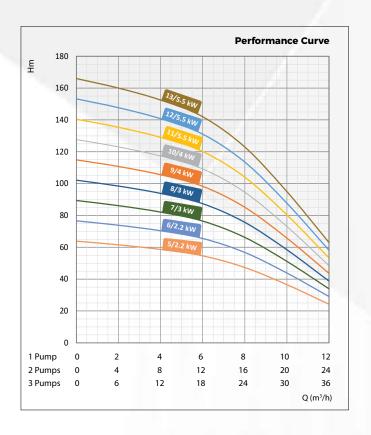


	Α	В	С	D	Н	Е	F	G1	G2	
3XDMVP 08-06-1,5 KW				322	830					
3XDMVP 08-07-2,2 KW		618		360	868			2''		
3XDMVP 08-08-2,2 KW	950	010		398	906					
3XDMVP 08-09-2,2 KW				436	944					
3XDMVP 08-10-3 KW			126	474	174 982	306	505			
3XDMVP 08-11-3 KW		628	120	512	1020	300	505			
3XDMVP 08-12-3 KW				550	1058					
3XDMVP 08-13-4 KW				588	1096					
3XDMVP 08-14-4 KW		638		626	1134					
3XDMVP 08-15-4 KW				664	1172					





DMVP 12 SERIES

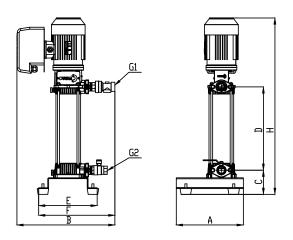




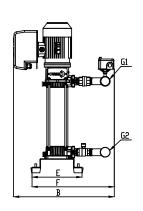
	Booster Type	Motor Power (kW)	Number of Floors	Number of Flats	Recommended Minimum Balance Tank to Use (It)	Collector Inlet / Outlet
	1xDMVP 12 -05	2,2	1-4			
	1xDMVP 12 -06	2,2	2-6		200	
	1xDMVP 12 -07	3	5-7			
SINGLE	1xDMVP 12 -08	3	7-8		300	
PUMP	1xDMVP 12 -09	4	9-12	30-50	300	1 1/2"-1 1/2"
	1xDMVP 12 -10	4	13-18			
	1xDMVP 12 -11	5,5	18-20		500	
	1xDMVP 12 -12	5,5	20-22		500	
	1xDMVP 12 -13	5,5	22-24			
	2xDMVP 12 -05	2,2	1-4			
	2xDMVP 12 -06	2,2	2-6		300	
	2xDMVP 12 -07	3	5-7		300	
	2xDMVP 12 -08	3	7-8			
DUAL	2xDMVP 12 -09	4	9-12	60-100	500	
PUMP	2xDMVP 12 -10	4	13-18			
	2xDMVP 12 -11	5,5	18-20		750	
	2xDMVP 12 -12	5,5	20-22		750	
	2xDMVP 12 -13	5,5	22-24			2 1/2"-2 1/2"
	3xDMVP 12 -05	2,2	1-4			2 1/2 -2 1/2
	3xDMVP 12 -06	2,2	2-6		500	
	3xDMVP 12 -07	3	5-7		300	
	3xDMVP 12 -08	3	7-8	90-150		
TRIPLE	3xDMVP 12 -09	4	9-12	90-150		
PUMP	3xDMVP 12 -10	4	13-18			
	3xDMVP 12 -11	5,5	18-20		750	
	3xDMVP 12 -12	5,5	20-22			
	3xDMVP 12 -13	5,5	22-24			

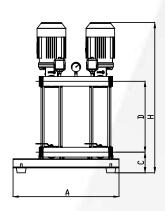
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

	Α	В	С	D	н	Е	F	G1	G2	
1XDMVP 12-05-2,2 KW	, · ·			284	792	_	•	<u> </u>		
1XDMVP 12-06-2,2 KW	350	51	512		322	830				
1XDMVP 12-07-3 KW				360	868					
1XDMVP 12-08-3 KW		522		398	906					
1XDMVP 12-09-4 KW			126	436	944	306	400	1 1	/2"	
1XDMVP 12-10-4 KW		532		474	982			,	•	
1XDMVP 12-11-5,5 KW	1			512	1020					
1XDMVP 12-12-5,5 KW		554		550	1058					
1XDMVP 12-13-5,5 KW	1			588	1096					

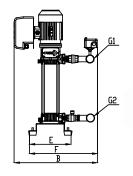


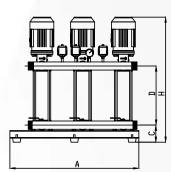
	Α	В	С	D	Н	E	F	G1	G2					
2XDMVP 12-05-2,2 KW		618	C10		284	792								
2XDMVP 12-06-2,2 KW				322	830									
2XDMVP 12-07-3 KW	650	620	628	628	629	629	628		360	868				
2XDMVP 12-08-3 KW		028	020		398	906								
2XDMVP 12-09-4 KW		638	126	436	944	306	515	2 1	/2"					
2XDMVP 12-10-4 KW]	030		474	982									
2XDMVP 12-11-5,5 KW				512	1020									
2XDMVP 12-12-5,5 KW		660		550	1058									
2XDMVP 12-13-5,5 KW				588	1096									



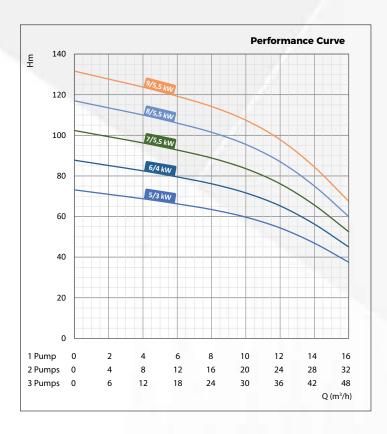


	Α	В	С	D	Н	Ε	F	G1	G2	
3XDMVP 12-05-2,2 KW		618		284	792					
3XDMVP 12-06-2,2 KW	950			322	830					
3XDMVP 12-07-3 KW			C20		360	868				
3XDMVP 12-08-3 KW				398	906					
3XDMVP 12-09-4 KW		638	126	436	944	306	515	2 1	L/2''	
3XDMVP 12-10-4 KW]	038		474	982					
3XDMVP 12-11-5,5 KW				512	1020					
3XDMVP 12-12-5,5 KW		660		550	1058					
3XDMVP 12-13-5,5 KW				588	1096					





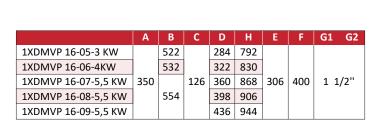
DMVP 16 SERIES

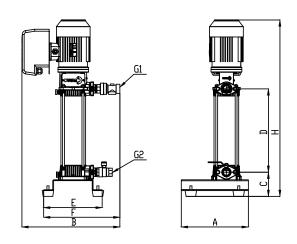


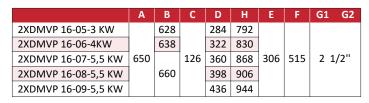


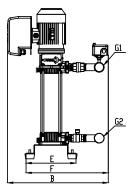
	Booster Type	Motor Power (kW)	Number of Floors	Number of Flats	Recommended Minimum Balance Tank to Use (It)	Collector Inlet / Outlet
	1xDMVP 16 -5	3	6-8			
	1xDMVP 16 -6	4	6-8			
SINGLE	1xDMVP 16 -7	5,5	9-12	40-75	500	1 1/2" - 1 1/2"
PUMP	1xDMVP 16 -8	5,5	13-18			
	1xDMVP 16 -9	5,5	13-18			
	2xDMVP 16 -5	3	6-8			
	2xDMVP 16 -6	4	6-8			
DUAL	2xDMVP 16 -7	5,5	9-12	80-150	750	2 1/2" - 2 1/2"
PUMP	2xDMVP 16 -8	5,5	13-18			
	2xDMVP 16 -9	5,5	13-18			
	3xDMVP 16 -5	3	6-8			
TRIBLE	3xDMVP 16 -6	4	6-8			
TRIPLE PUMP	3xDMVP 16 -7	5,5	9-12	120-225	750	2 1/2" - 2 1/2"
FOIVIE	3xDMVP 16 -8	5,5	13-18			
	3xDMVP 16 -9	5,5	13-18			

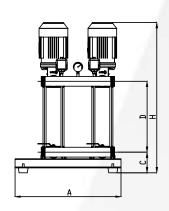
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."



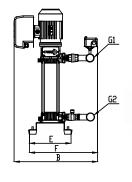


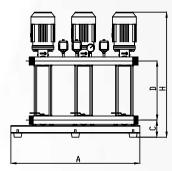




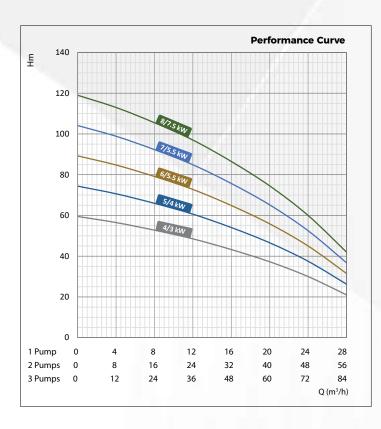


	Α	В	С	D	Н	E	F	G1	G2
3XDMVP 16-05-3 KW		628		284	792				
3XDMVP 16-06-4KW		638		322	830				
3XDMVP 16-07-5,5 KW	950	950	126	360	868	306	515	2 1	/2''
3XDMVP 16-08-5,5 KW		660		398	906				
3XDMVP 16-09-5,5 KW				436	944				





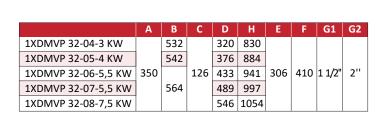
DMVP 32 SERIES

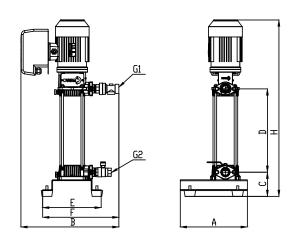


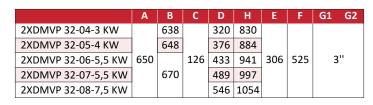


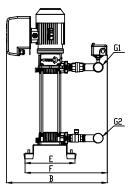
	Booster Type	Motor Power (kW)	Number of Floors	Number of Flats	Recommended Minimum Balance Tank to Use (It)	Collector Inlet / Outlet	
	1xDMVP 32 -04	3	1-4		500	2" - 1-1/2"	
	1xDMVP 32 -05	4	5-7				
SINGLE PUMP	1xDMVP 32 -06	5,5	8-9	80-120			
FOIVIF	1xDMVP 32 -07	5,5	9-11				
	1xDMVP 32 -08	7,5	10-12				
DUAL PUMP	2xDMVP 32 -04	3	1-4		750	3" - 3"	
	2xDMVP 32 -05	4	5-7				
	2xDMVP 32 -06	5,5	8-9	160-240			
	2xDMVP 32 -07	5,5	9-11				
	2xDMVP 32 -08	7,5	10-12				
	3xDMVP 32 -04	3	1-4		750	4" - 3"	
TRIPLE -	3xDMVP 32 -05	4	5-7				
	3xDMVP 32 -06	5,5	8-9	240-360			
	3xDMVP 32 -07	5,5	9-11				
	3xDMVP 32 -08	7,5	10-12				

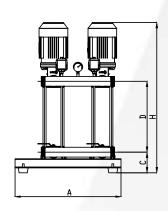
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."



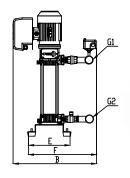


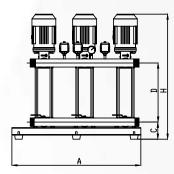




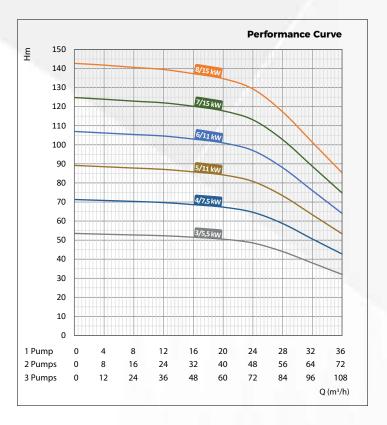


	Α	В	С	D	Н	E	F	G1	G2
3XDMVP 32-04-3 KW		658		320	830				
3XDMVP 32-05-4 KW		668		376	884				
3XDMVP 32-06-5,5 KW	950		126	433	941	306	545	3"	4''
3XDMVP 32-07-5,5 KW		690		489	997				
3XDMVP 32-08-7,5 KW				546	1054				





DMVP 36 SERIES

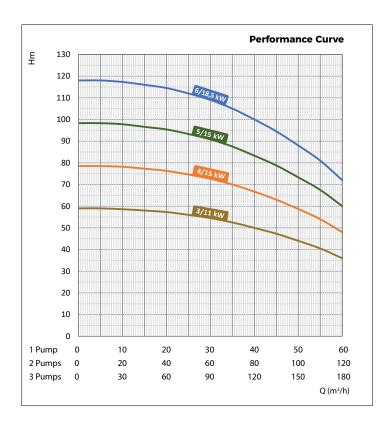




	Booster Type	Motor Power (kW)	Number of Floors	Number of Flats	Recommended Minimum Balance Tank to Use (lt)	Collector Inlet / Outlet
SINGLE	1xDMVP 36-03	5,5	1-4		750	2 1/2"-2"
	1xDMVP 36-04	7,5	5-7		750	2 1/2"-2"
	1xDMVP 36-05	11	8-10	120-240	750	2 1/2"-2"
PUMP	1xDMVP 36-06	11	11-12		1000	2 1/2"-2"
	1xDMVP 36-07	15	13-15		1000	2 1/2"-2"
	1xDMVP 36-08	15	16-17		1000	2 1/2"-2"
	2xDMVP 36-03	5,5	1-4		750	3"- 3"
	2xDMVP 36-04	7,5	5-7		750	3"- 3"
DUAL	2xDMVP 36-05	11	8-10	240-480	750	3"- 3"
PUMP	2xDMVP 36-06	11	11-12	240-480	1000	3"- 3"
	2xDMVP 36-07	15	13-15		1000	3"- 3"
	2xDMVP 36-08	15	16-17		1000	3"- 3"
	3xDMVP 36-03	5,5	1-4		750	4"- 3"
TRIPLE	3xDMVP 36-04	7,5	5-7		750	4"- 3"
	3xDMVP 36-05	11	8-10	480-720	750	4"- 3"
PUMP	3xDMVP 36-06	11	11-12	480-720	1000	4"- 3"
	3xDMVP 36-07	15	13-15	1	1000	4"- 3"
	3xDMVP 36-08	15	16-17	1	1000	4"- 3"

^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP 60 SERIES





	Booster Type	Motor Power (kW)	Number of Floors	Number of Flats	Recommended Minimum Balance Tank to Use (lt)	Collector Inlet / Outlet
	1xDMVP 60-03	11	1-5		1000	3"-2 1/2"
SINGLE	1xDMVP 60-04	15	6-8	200-400	1000	3"-2 1/2"
PUMP	1xDMVP 60-05	15	9-11	200-400	1000	3"-21/2"
	1xDMVP 60-06	18,5	12-14		1000	3"-2 1/2"
	2xDMVP 60-03	11	1-5		1000	DN100-3"
DUAL	2xDMVP 60-04	15	6-8	400-800	1000	DN100-3"
PUMP	2xDMVP 60-05	15	9-11	400 000	1000	DN100-3"
	2xDMVP 60-06	18,5	12-14		1000	DN100-3"
	3xDMVP 60-03	11	1-5		1000	DN125-DN100
TRIPLE PUMP	3xDMVP 60-04	15	6-8	800-1200	1000	DN125-DN100
	3xDMVP 60-05	15	9-11	500 1200	1000	DN125-DN100
	3xDMVP 60-06	18,5	12-14		1000	DN125-DN100

^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS SERIES VERTICAL SHAFT MULTISTAGE BOOSTERS



Material	Properties
Standard	EN-DIN
Pump Body	AISI 304 - Stainless Steel
Shaft	AISI 304 - Stainless Steel
Impeller/Diffuser	AISI 304 - Stainless
Suction - Discharge Body	GG25 - Cast Iron
Mechanical Seal	Carbon / Ceramic

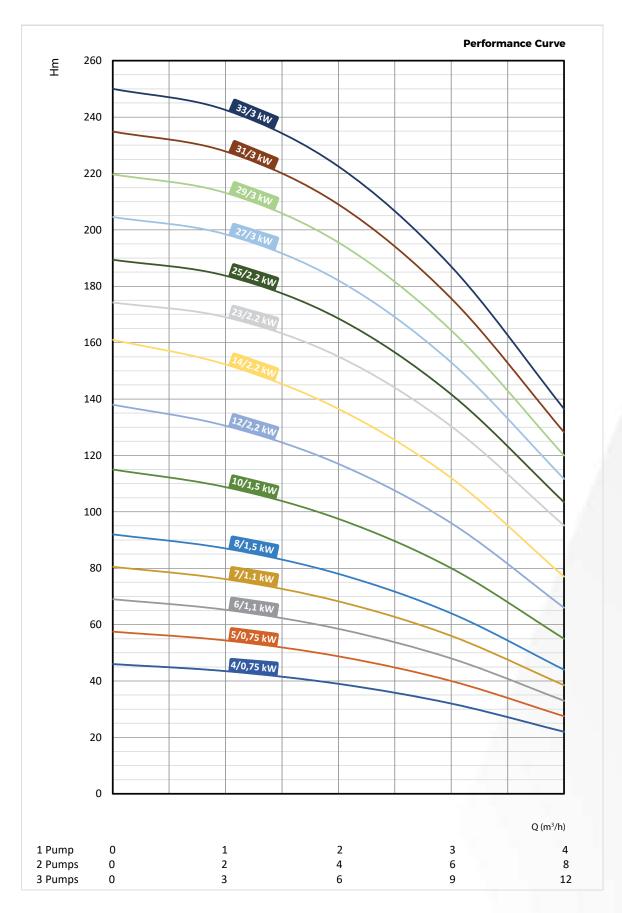
DOMESTIC WATER BOOSTER

Technicial S	pecifications
Flow	2 - 90 m3/h
Pump head	20 - 300 mSS
Operating pressure	40 Bar (Max.)
Temperature Range	0 - 50 °C
Speed	2900 rev/min
Strength	From 0,75 kW to 15 kW
Panel	Fully automatic, Co-aging, Optional: with Frequency Converter

System Equipment

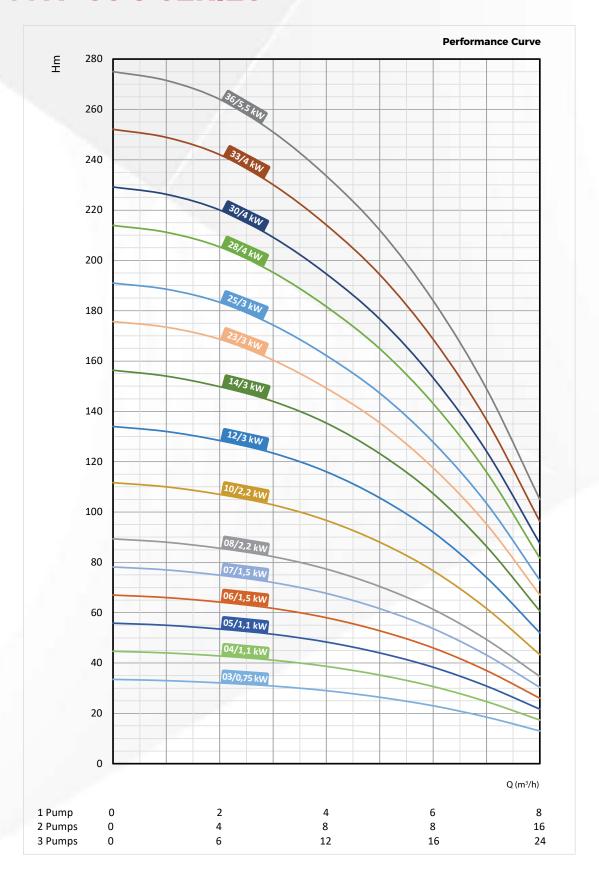
- Manometer
- Suction and discharge collectors
- Full bore ball valves
- · Check valves
- · Corded level floater to prevent running without water
- Fully automatic electrical control panel mounted on the chassis.
 (Direct start <0.75 kW <Star delta starting)
- Rotation (row control) system that distributes the operating time equally between the pumps.
- · Specially manufactured elastic wedges that prevent vibration

DMVP SS 3 SERIES



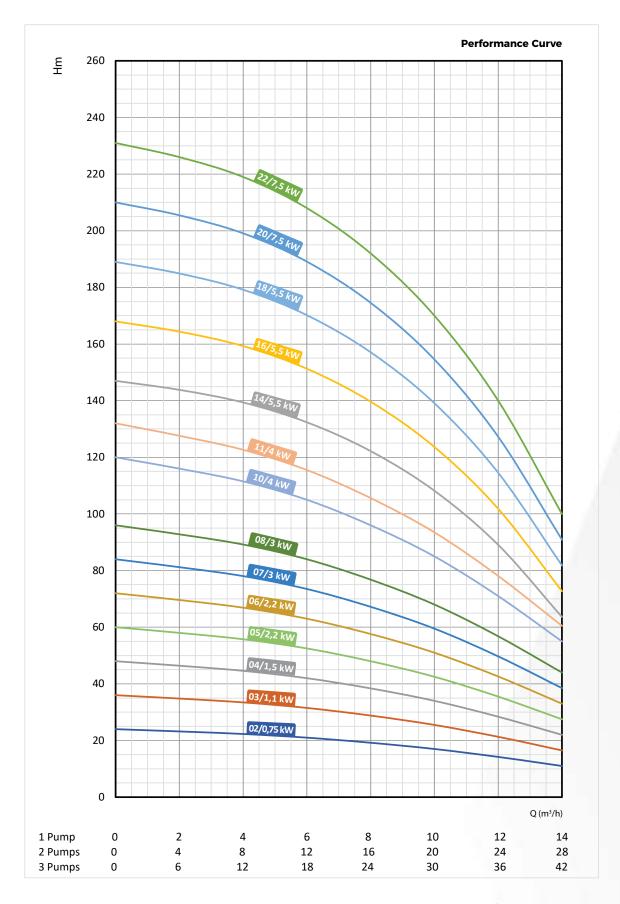
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS 5 SERIES



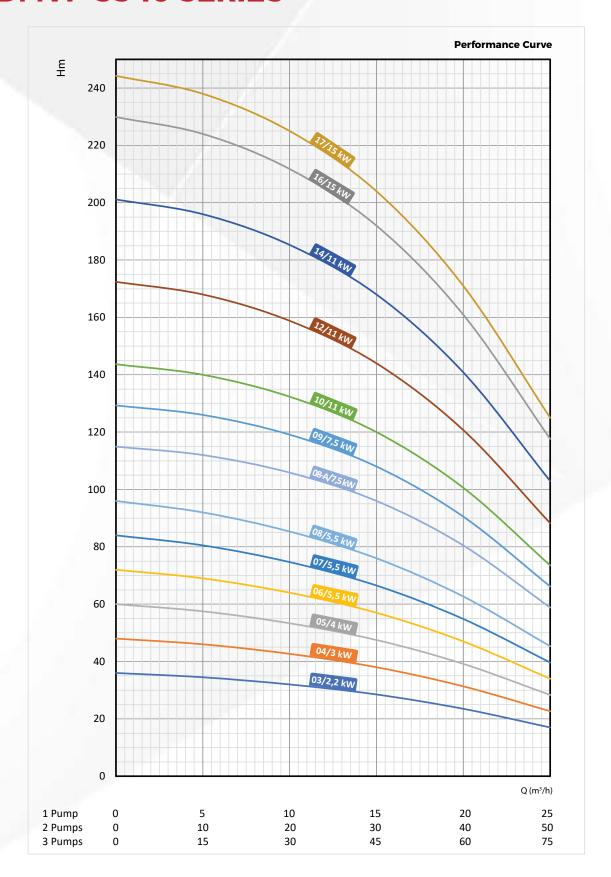
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS 9 SERIES



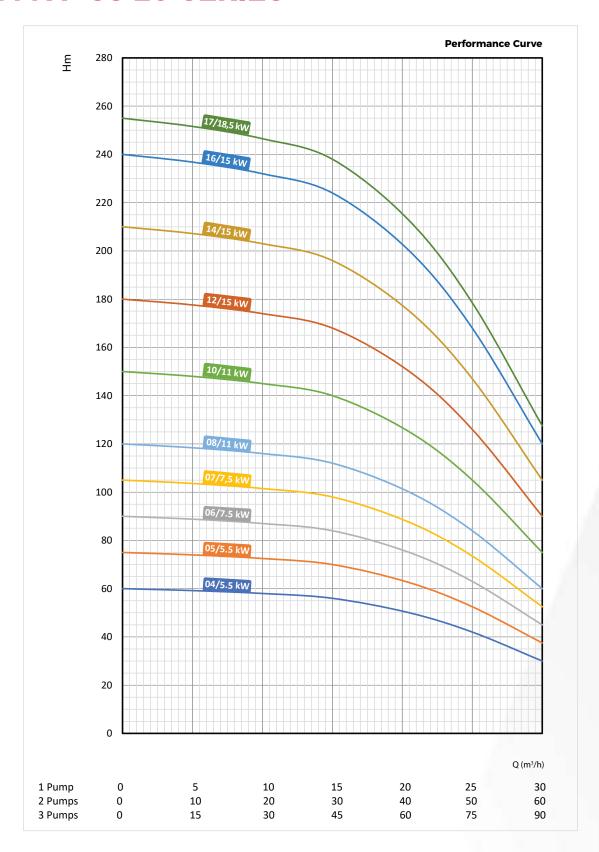
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS 16 SERIES



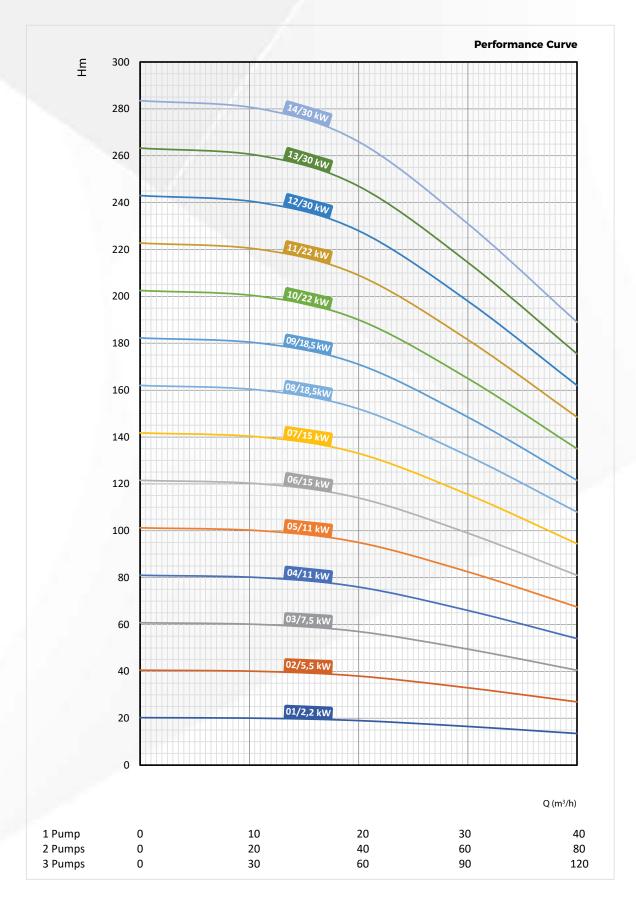
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS 20 SERIES



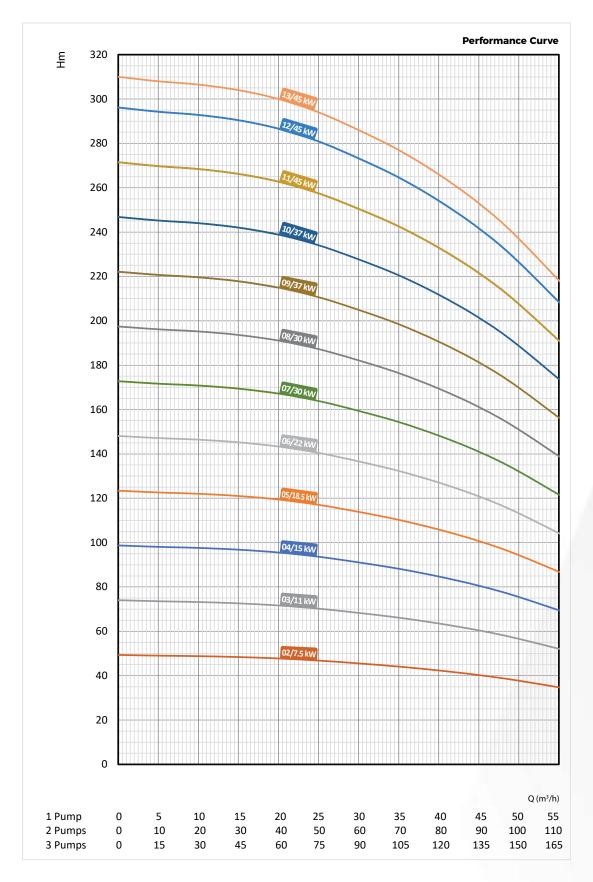
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS 32 SERIES



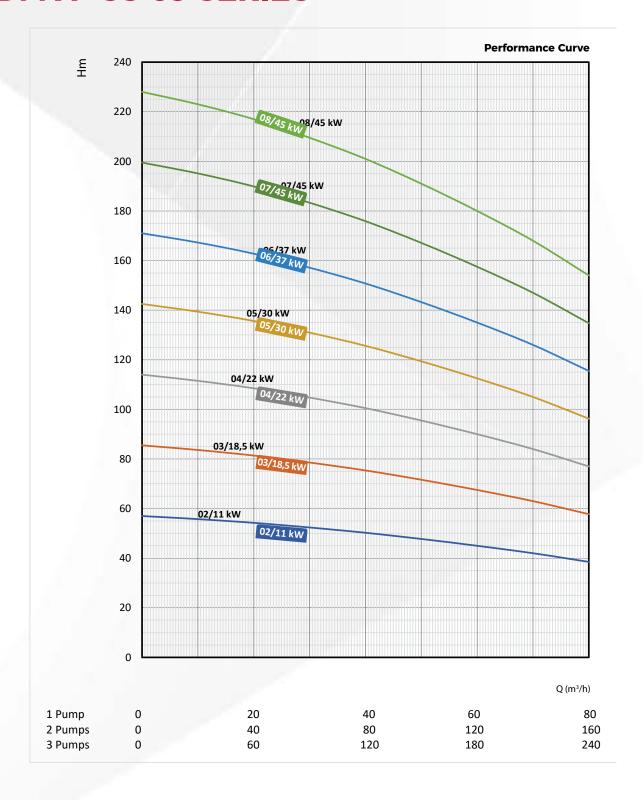
^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS 45 SERIES

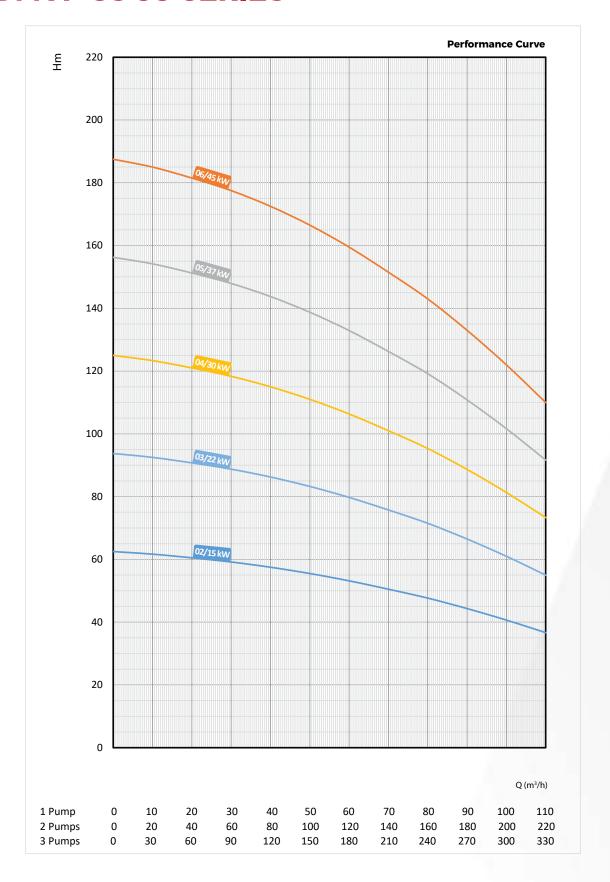


^{*&}quot;Frequency controlled panel on motor between 0.75 kW - 7.5 kW is used."

DMVP SS 65 SERIES



DMVP SS 95 SERIES







FIRE PUMP SYSTEMS



BOOSTER SETS



WASTEWATER PUMPS



IN-LINE PUMPS

www.duyarpompa.com









GENERAL INFORMATION

Pressure Flange	DN 32 – DN 250
Flow	500 m³/h
Pump head	100 m
Frequency	Three-phase 50 Hz - 60 Hz*
Fluid temperature	From -25 °C to+140 °C
Maximum Working Pressure	10 bar (16 bar)*

The pump material changes depending on the type of liquid, operating temperature and pressure. For detailed information, please contact our company.

LIQUIDS

• Clean or slightly contaminated, non-abrasive, low-viscosity liquids.

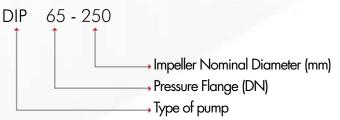
SHAFT SEALING

• Mechanical seal is used in standard production.

USAGE AREAS

- Water Treatment and Pressurization
- Heating, Ventilation and Sealing
- Agricultural Irrigation and Drainage
- Food and Beverage Industry
- Marine
- Building Systems

PUMP CODE



DESIGN FEATURES

- Monobloc centrifugal pumps with volute, single stage, closed impeller, which can be connected to a straight pipe (line type).
- Suction and pressure flanges comply with TS EN 1092 - 2 / PN 16.
- Flanges in pumps with steel or Stainless steel casing material comply with TS EN 1092 - 1 / PN 16.
 Optionally, it can be produced with ANSI/ASME flanges.
- Pumps are used with high efficiency class electric motors in accordance with IEC size.

- All impellers are dynamically or statically balanced according to ISO 1940 class 6.3.
- Axial force is balanced by the impeller balancing holes system.
- Optionally, the pumps can be manufactured with wear rings and/or shaft bushings.
- The direction of rotation is clockwise when viewed from the motor side.
- The pump shaft is connected to the motor shaft with a plug-in shaft or a rigid coupling and the axial and radial forces of the pump are covered by the motor bearings.

MATERIAL OPTIONS

Parts List	0.6025	0,7040	0.7043	1,0619	1,4308	1,4309	1,4408	1,4409	1,4500	1,4517	1,4469	1.4317	1.4008	2,1050	2,0975	2.1096	1.4021	1.4021	1,4301	1,4404	1,4460	1.4462
Casing	•	0	0	0	0	0	0	0	0	0	0	0	0	0								
Stuffing Bed Box	•	0	0	0	0	0	0	0	0	0	0	0	0	0								
Impeller	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
Shaft																	•	0	0	0		0
Bearing house	•	0	0	0	0	0	0	0														
Wear ring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Mechanical Seal Spacer Bushing																	•	0	0	0		0
Base	•	0																				
Mechanical Seal									El	N 12:	756 /	DIN	2425	0								

Depending on the buyer's request or working conditions, different types and brands of mechanical seals can be used.

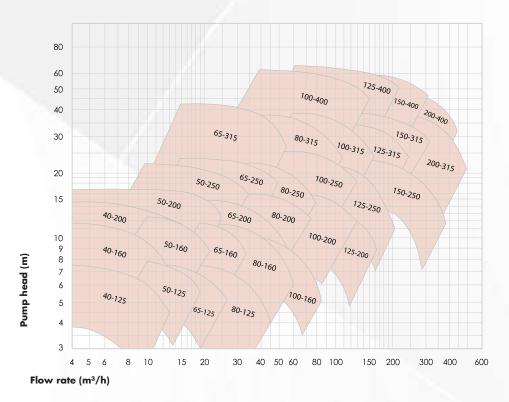
Standard Manufacturing

Optional

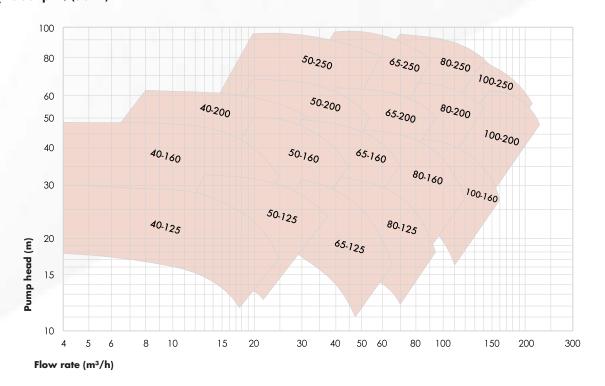
DEFINITION	C DIN	CEN	CAISI / SAE / ASTM
Care Iron	0.6025	EN-GJL-250 (GG25)	A48 CLASS 40B
Nodular Cast	0.7040	EN-GJS-400-15	A536 60-40-18
Nodular Cast	0.7043	EN-GJS-400-18-LT (GGG40.3)	A536 60-40-18
Steel Cast	1.0619	GP240GHGS-C25	A216 WCB
Chromium Nickel Steel Cast	1.4308	GX5CrNi19-10	A351 CF8
Chromium Nickel Steel Cast (D.K)	1.4309	GX2CrNi19-11	A351 CF3
Chromium Nickel Molybdenous Steel Cast	1.4408	GX5CrNiMo19-11-2	A351 CF8M
Chromium Nickel Molybdenous Steel Cast(D.K)	1.4409	GX2CrNiMo 19-11-2	A351 CF3M
Austenitic Steel Cast	1.4500	GX7NiCrMoCuNb 25-20	A351 CN7M
Austenitic ferritic Steel Cast (Duplex)	1.4517	GX2CrNiMoCuN 25-6-3-3	A890 CD4MCuN
Austenitic ferritic Steel Cast (S.D)	1.4469	GX2CrNiMoN 26-7-4	A890 CE3MN
Martensitic Stainless Steel Cast	1.4317	GX4CrNi 13-4	A352 CA6NM
Martensitic Stainless Steel Cast	1.4008	GX7CrNiMo 12-1	A217 CA15
Bronze Cast (Tinned)	2.1050.01	G-CuSn10	B427 C90700
Bronze Cast (Nickel alloyed)	2.0975.01	G-CuA10Ni	B148 C95500
Bronze Cast (Leaded)	2.1096.01	G-CuSn5ZnPb	B584 C83600
Chromium Steel	1.4021	X20Cr13	A276 Type 420
Chromium Steel (Heat treatment)	1.4021	X20Cr13	A276 Type 420+QT
Chromium Nickel Steel	1.4301	X5CrNi 18-10	A276 Type 304
Chromium Nickel Molybdenous Steel (D.K)	1.4404	X2CrNiMo 17-12-2	A276 Type 316L
Duplex (Austenitic-ferritic) Steel	1.4460	X3CrNiMoN 27-5-2	AISI 329
Duplex (Austenitic-ferritic) Steel	1.4462	X2CrNiMoN 22-5-3	UNS S32205

SELECTION CURVES

1450 rpm / (50Hz)

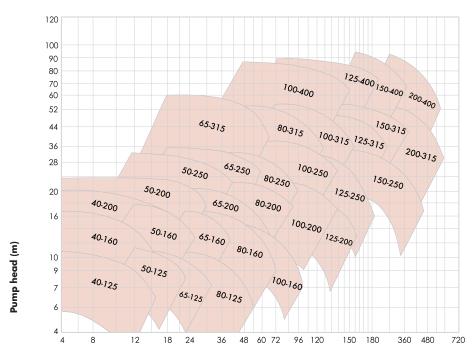


2900 rpm / (50Hz)



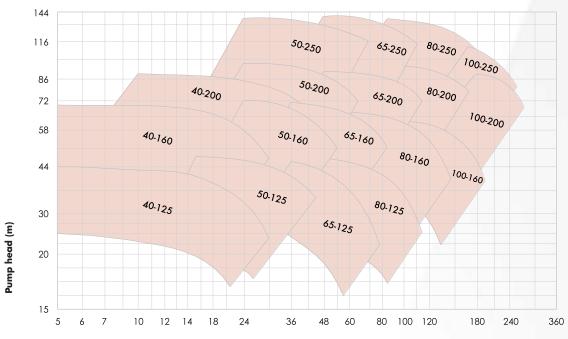
SELECTION CURVES

1750 rpm / (60Hz)



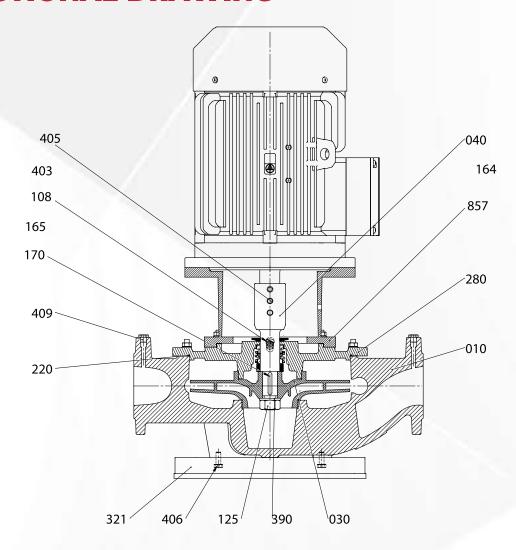
Flow rate (m³/h)

2 3500 rpm / (60Hz)



Flow rate (m³/h)

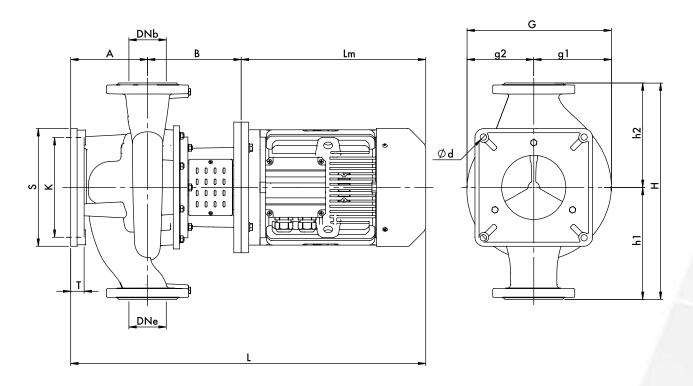
SECTIONAL DRAWING



LIST OF PARTS

Casing	010
Impeller	030
Shaft	040
Air purge valve	108
Nut	125
Mechanical Seal Spacer Bushing	164
Mechanical Seal	165
Wedge	170
O-Ring	220
Packing box	280
Plate	321
Burr	390
Splash Disc	403
Set screw	405
Screw	406
Drain stopper	409
Engine Carrier	857

1500 rpm



	Мо	tor								Dimen	sions	(mm)							
Pump Type	.,,0		Form						E:	xterna	Dime	nsions	5						Weight
Tullip Type	kW	IEC	101111	DNe DNb	А	В	Lm	L	Т	Н	h1	h2	G	gl	g2	S	К	Ød	(kg)
40-125	0,37	71M	TI	40	101	152	210	463	26	300	160	140	208	108	100	200	160	14	34
40-160	0,37	71M	T1	40	101	149	210	460	26	340	180	160	232	122	110	200	160	14	37
40-160	0,55	80M	Tl	40	101	183	234	518	26	340	180	160	232	122	110	200	160	14	42
40-160	0,75	80M	TI	40	101	183	234	518	26	340	180	160	232	122	110	200	160	14	43
40-200	0,55	80M	T2	40	103	183	234	520	28	380	200	180	275	140	135	255	219	14	52
40-200	0,75	80M	T2	40	103	183	234	520	28	380	200	180	275	140	135	255	219	14	53
40-200	1,1	908	T2	40	103	183	275	561	28	380	200	180	275	140	135	255	219	14	57
50-125	0,37	71M	T1	50	116	154	210	480	26	300	160	140	213	110	103	200	160	14	36
50-125	0,55	80M	TI	50	116	164	234	514	26	300	160	140	213	110	103	200	160	14	40
50-160	0,37	71M	TI	50	116	149	210	475	26	340	180	160	243	125	118	200	160	14	40
50-160	0,55	80M	T1	50	116	184	234	534	26	340	180	160	243	125	118	200	160	14	45
50-160	0,75	80M	Tl	50	116	184	234	534	26	340	180	160	243	125	118	200	160	14	47
50-160	1,1	90S	TI	50	116	184	275	575	26	340	180	160	243	125	118	200	160	14	50
50-200	0,75	80M	T2	50	118	183	234	535	28	425	225	200	281	145	136	255	219	14	56
50-200	1,1	90S	T2	50	118	183	275	576	28	425	225	200	281	145	136	255	219	14	60
50-200	1,5	90L	T2	50	118	183	275	576	28	425	225	200	281	145	136	255	219	14	62
50-200	2,2	100L	T2	50	118	184	310	612	28	425	225	200	281	145	136	255	219	14	68
50-250	1,5	90L	T2B	50	118	180	275	573	28	475	250	225	338	165	173	255	219	14	75
50-250	2,2	100L	T2B	50	118	180	310	608	28	475	250	225	338	165	173	255	219	14	82
50-250	3	100L	T2B	50	118	180	310	608	28	475	250	225	338	165	173	255	219	14	84

C 1500 rpm

										Dime	nsions	(mm)							
	Mo	otor	_						E	xterno	l Dime	ension	S						Weight
Pump Type	kW	IEC	Form	DNe DNb	Α	В	Lm	L	Т	Н	h1	h2	G	gl	g2	S	K	Ød	(kg)
65-125	0,37	71M	T2	65	138	156	210	504	28	340	180	160	225	120	105	255	219	14	43
65-125	0,55	80M	T2	65	138	166	234	538	28	340	180	160	225	120	105	255	219	14	47
65-125	0,75	80M	T2	65	138	166	234	538	28	340	180	160	225	120	105	255	219	14	48
65-160	0,75	80M	T2	65	138	185	234	557	28	380	200	180	254	134	120	255	219	14	54
65-160	1,1	90S	T2	65	138	185	275	598	28	380	200	180	254	134	120	255	219	14	58
65-160	1,5	90L	T2	65	138	185	275	598	28	380	200	180	254	134	120	255	219	14	61
65-200	1,1	90S	T2B	65	138	185	275	598	28	475	250	225	300	160	140	255	219	14	70
65-200	1,5	90L	T2B	65	138	185	275	598	28	475	250	225	300	160	140	255	219	14	73
65-200	2,2	100L	T2B	65	138	186	310	634	28	475	250	225	300	160	140	255	219	14	79
65-200	3	100L	T2B	65	138	186	310	634	28	475	250	225	300	160	140	255	219	14	81
65-250	2,2	100L	T2B	65	138	187	310	635	28	475	250	225	340	176	164	255	219	14	86
65-250	3	100L	T2B	65	138	187	310	635	28	475	250	225	340	176	164	255	219	14	88
65-250	4	112M	T2B	65	138	187	330	655	28	475	250	225	340	176	164	255	219	14	96
65-250	5,5	132S	T2B	65	138	197	415	750	28	475	250	225	340	176	164	255	219	14	113
65-315	3	100L	T4A	65	170	192	310	672	40	560	280	280	418	216	202	395	350	18	125
65-315	4	112M	T4A	65	170	192	330	692	40	560	280	280	418	216	202	395	350	18	133
65-315	5,5	1325	T4A	65	170	205	415	790	40	560	280	280	418	216	202	395	350	18	150
65-315	7,5	132M	T4A	65	170	205	415	790	40	560	280	280	418	216	202	395	350	18	157
65-315	11	160M	T4A	65	170	245	495	910	40	560	280	280	418	216	202	395	350	18	185
80-125	0,37	71M	T2	80	158	158	210	526	28	380	200	180	252	138	114	255	219	14	49
80-125	0,55	80M	T2	80	158	168	234	560	28	380	200	180	252	138	114	255	219	14	52
80-125	0,75	80M	T2	80	158	168	234	560	28	380	200	180	252	138	114	255	219	14	54
80-125	1,1	90S	T2	80	158	168	275	601	28	380	200	180	252	138	114	255	219	14	58
80-160	0,75	80M	T2	80	158	190	234	582	28	425	225	200	283	155	128	255	219	14	60
80-160	1,1	90S	T2	80	158	190	275	623	28	425	225	200	283	155	128	255	219	14	64
80-160	1,5	90L	T2	80	158	190	275	623	28	425	225	200	283	155	128	255	219	14	66
80-160	2,2	100L	T2	80	158	190	310	658	28	425	225	200	283	155	128	255	219	14	74
80-200	1,5	90L	T2A	80	159	185	275	619	28	475	250	225	312	168	144	255	220	14	74
80-200	2,2	100L	T2A	80	159	187	310	656	28	475	250	225	312	168	144	255	220	14	79
80-200	3	100L	T2A	80	159	187	310	656	28	475	250	225	312	168	144	255	220	14	81
80-200	4	112M	T2A	80	159	187	330	676	28	475	250	225	312	168	144	255	220	14	89
80-250	2,2	100L	T3	80	176	189	310	675	36	560	280	280	378	196	182	315	270	17	106
80-250	3	100L	T3	80	176	189	310	675	36	560	280	280	378	196	182	315	270	17	107
80-250	4	112M	T3	80	176	189	330	695	36	560	280	280	378	196	182	315	270	17	115
80-250	5,5	132S	T3	80	176	202	415	793	36	560	280	280	378	196	182	315	270	17	132
80-315	5,5	132S	T4A	80	190	204	415	809	40	595	315	280	423	218	205	395	350	18	161
80-315	7,5	132M	T4A	80	190	204	415	809	40	595	315	280	423	218	205	395	350	18	169
80-315	11	160M	T4A	80	190	244	495	929	40	595	315	280	423	218	205	395	350	18	197
80-315	15	160L	T4A	80	190	244	495	929	40	595	315	280	423	218	205	395	350	18	209
100-160	1,5	90L	T2B	100	159	186	275	620	28	475	250	225	292	162	130	255	219	14	74
100-160	2,2	100L	T2B	100	159	186	310	655	28	475	250	225	292	162	130	255	219	14	80
100-160	3	100L	T2B	100	159	186	310	655	28	475	250	225	292	162	130	255	219	14	82

(1500 rpm

										Dime	nsions	(mm)							
	Mo	otor							E	Externo	al Dim	ension	ıs						Weight
Pump Type	kW	IEC	Form	DNe DNb	Α	В	Lm	L	Т	Н	h1	h2	G	gl	g2	S	К	Ød	(kg)
100-200	3	100L	T2B	100	198	193	310	701	28	525	275	250	358	191	167	255	219	14	98
100-200	4	112M	T2B	100	198	193	330	721	28	525	275	250	358	191	167	255	219	14	105
100-200	5,5	132S	T2B	100	198	207	415	820	28	525	275	250	358	191	167	255	219	14	122
100-200	7,5	132M	T2B	100	198	207	415	820	28	525	275	250	358	191	167	255	219	14	128
100-250	4	112M	T3	100	206	198	330	734	36	580	300	280	388	208	180	315	270	17	130
100-250	5,5	132S	T3	100	206	211	415	832	36	580	300	280	388	208	180	315	270	17	146
100-250	7,5	132M	T3	100	206	211	415	832	36	580	300	280	388	208	180	315	270	17	153
100-250	11	160M	T3	100	206	251	495	952	36	580	300	280	388	208	180	315	270	17	181
100-315	7,5	132M	T4B	100	200	207	415	822	40	670	355	315	455	240	215	395	350	18	184
100-315	11	160M	T4B	100	200	247	495	942	40	670	355	315	455	240	215	395	350	18	212
100-315	15	160L	T4B	100	200	247	495	942	40	670	355	315	455	240	215	395	350	18	223
100-315	18,5	180M	T4B	100	200	247	576	1023	40	670	355	315	455	240	215	395	350	18	293
100-400	15	160L	T4B	100	190	257	495	942	40	800	400	400	563	290	273	395	350	18	270
100-400	18,5	180M	T4B	100	190	257	576	1023	40	800	400	400	563	290	273	395	350	18	340
100-400	22	180L	T4B	100	190	257	576	1023	40	800	400	400	563	290	273	395	350	18	357
100-400	30	200L	T4B	100	190	257	643	1090	40	800	400	400	563	290	273	395	350	18	426
100-400	37	225S	T4B	100	190	287	688	1165	40	800	400	400	563	290	273	395	350	18	488
125-200	3	100L	T4B	125	220	214	310	744	40	560	280	280	405	208	197	395	350	18	130
125-200	4	112M	T4B	125	220	215	330	765	40	560	280	280	405	208	197	395	350	18	140
125-200	5,5	132S	T4B	125	220	228	415	863	40	560	280	280	405	208	197	395	350	18	157
125-200	7,5	132M	T4B	125	220	228	415	863	40	560	280	280	405	208	197	395	350	18	165
125-250	5,5	132S	T4	125	220	232	415	867	40	630	315	315	410	215	195	395	350	18	170
125-250	7,5	132M	T4	125	220	232	415	867	40	630	315	315	410	215	195	395	350	18	175
125-250	11	160M	T4	125	220	272	495	987	40	630	315	315	410	215	195	395	350	18	203
125-250	15	160L	T4	125	220	272	495	987	40	630	315	315	410	215	195	395	350	18	215
125-315	11	160M	T4B	125	200	275	495	970	40	710	355	355	493	261	232	395	350	18	235
125-315	15	160L	T4B	125	200	275	495	970	40	710	355	355	493	261	232	395	350	18	245
125-315	18,5	180M	T4B	125	200	275	576	1051	40	710	355	355	493	261	232	395	350	18	316
125-315	22	180L	T4B	125	200	275	576	1051	40	710	355	355	493	261	232	395	350	18	333
125-315	30	200L	T4B	125	200	275	643	1118	40	710	355	355	493	261	232	395	350	18	405
125-400	22	180L	T4B	125	200	282	576	1058	40	800	400	400	566	292	274	395	350	18	360
125-400	30	200L	T4B	125	200	282	643	1125	40	800	400	400	566	292	274	395	350	18	430
125-400	37	225\$	T4B	125	200	312	688	1200	40	800	400	400	566	292	274	395	350	18	492
125-400	45	225M	T4B	125	200	312	688	1200	40	800	400	400	566	292	274	395	350	18	530
150-250	11	160M	T5	150	225	302	495	1022	45	710	355	355	482	258	224	446	380	23	250
150-250	15	160L	T5	150	225	302	495	1022	45	710	355	355	482	258	224	446	380	23	305
150-250	18,5	180M	T5	150	225	302	576	1103	45	710	355	355	482	258	224	446	380	23	330
150-250	22	180L	T5	150	225	302	576	1103	45	710	355	355	482	258	224	446	380	23	350
150-315	15	160L	T5A	150	222	317	495	1034	42	710	355	355	555	295	260	440	380	23	286
150-315	18,5	180M	T5A	150	222	317	576	1115	42	710	355	355	555	295	260	440	380	23	355
150-315	22	180L	T5A	150	222	317	576	1115	42	710	355	355	555	295	260	440	380	23	373
150-315	30	200L	T5A	150	222	317	643	1182	42	710	355	355	555	295	260	440	380	23	395
150-315	37	225S	T5A	150	222	347	688	1257	42	710	355	355	555	295	260	440	380	23	420

C 1500 rpm

	Mo	otor									nsions								
Pump Type			Form						ŀ	xterno	al Dime	ension	S						Weight
/	kW	IEC		DNe DNb	Α	В	Lm	L	Т	н	h1	h2	G	gl	g2	S	K	Ød	(kg)
150-400	37	225S	T5A	150	222	345	688	1255	42	800	400	400	618	320	298	440	380	23	524
150-400	45	225M	T5A	150	222	345	688	1255	42	800	400	400	618	320	298	440	380	23	560
150-400	55	250M	T5A	150	222	345	756	1323	42	800	400	400	618	320	298	440	380	23	660
150-400	75	280M	T5A	150	222	345	876	1323	42	800	400	400	618	320	298	440	380	23	850
200-315	18,5	180M	T5A	200	242	362	576	1180	42	800	350	450	554	300	254	440	380	23	364
200-315	22	180L	T5A	200	242	362	576	1180	42	800	350	450	554	300	254	440	380	23	380
200-315	30	200L	T5A	200	242	362	641	1245	42	800	350	450	554	300	254	440	380	23	404
200-315	37	225S	T5A	200	242	392	686	1320	42	800	350	450	554	300	254	440	380	23	428
200-315	45	225M	T5A	200	242	392	686	1320	42	800	350	450	554	300	254	440	380	23	547
200-400	37	225\$	T5A	200	242	388	688	1318	42	900	400	500	615	325	290	440	380	23	558
200-400	45	225M	T5A	200	242	388	688	1318	42	900	400	500	615	325	290	440	380	23	594
200-400	55	250M	T5A	200	242	388	756	1386	42	900	400	500	615	325	290	440	380	23	834
200-400	75	280M	T5A	200	242	388	876	1506	42	900	400	500	615	325	290	440	380	23	958
200-400	90	280M	T5A	200	242	388	876	1506	42	900	400	500	615	325	290	440	380	23	994

3000 rpm

р. т	Mo	otor	_						E	Dime xterno	nsions al Dim		S						Weight
Pump Type	kW	IEC	Form	DNe DNb	Α	В	Lm	L	Т	Н	h1	h2	G	gl	g2	S	К	Ød	(kg)
40-125	1,1	80M	Τl	40	101	162	234	497	26	300	160	140	208	108	100	200	160	14	39
40-125	1,5	90S	TI	40	101	162	275	538	26	300	160	140	208	108	100	200	160	14	44
40-125	2,2	90L	TI	40	101	162	275	538	26	300	160	140	208	108	100	200	160	14	45
40-125	3	100L	Tl	40	101	183	310	594	26	300	160	140	208	108	100	200	160	14	53
40-160	3	100L	TI	40	101	183	310	594	26	340	180	160	232	122	110	200	160	14	55
40-160	4	112M	T1	40	101	183	330	614	26	340	180	160	232	122	110	200	160	14	60
40-160	5,5	132S	TI	40	101	193	415	709	26	340	180	160	232	122	110	200	160	14	77
40-200	4	112M	T2	40	103	184	330	617	28	380	200	180	275	140	135	255	219	14	69
40-200	5,5	132S	T2	40	103	196	415	714	28	380	200	180	275	140	135	255	219	14	87
40-200	7,5	132S	T2	40	103	196	415	714	28	380	200	180	275	140	135	255	219	14	91
40-200	11	160M	T2	40	103	236	495	834	28	380	200	180	275	140	135	255	219	14	125
50-125	1,5	90S	T1	50	116	164	275	555	26	300	160	140	213	110	103	200	160	14	44
50-125	2,2	90L	TI	50	116	164	275	555	26	300	160	140	213	110	103	200	160	14	46
50-125	3	100L	T1	50	116	186	310	612	26	300	160	140	213	110	103	200	160	14	54
50-125	4	112M	TI	50	116	186	330	632	26	300	160	140	213	110	103	200	160	14	59
50-125	5,5	132S	Tl	50	116	198	415	729	26	300	160	140	213	110	103	200	160	14	77

3000 rpm

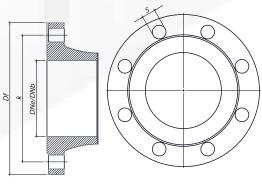
										Dime	nsions	(mm)							
	Mo	otor							E	xterno	ıl Dim	ension	s						Weight
Pump Type	kW	IEC	Form	DNe DNb	А	В	Lm	L	Т	Н	h1	h2	G	gl	g2	S	K	Ød	(kg)
50-160	3	100L	Tl	50	116	184	310	610	26	340	180	160	243	125	118	200	160	14	58
50-160	4	112M	Tl	50	116	184	330	630	26	340	180	160	243	125	118	200	160	14	63
50-160	5,5	132S	Tl	50	116	194	415	725	26	340	180	160	243	125	118	200	160	14	80
50-160	7,5	132S	Tl	50	116	194	415	725	26	340	180	160	243	125	118	200	160	14	85
50-160	11	160M	Tl	50	116	238	495	849	26	340	180	160	243	125	118	200	160	14	120
50-200	7,5	132S	T2	50	118	196	415	729	28	425	225	200	281	145	136	255	219	14	94
50-200	11	160M	T2	50	118	236	495	849	28	425	225	200	281	145	136	255	219	14	127
50-200	15	160M	T2	50	118	236	495	849	28	425	225	200	281	145	136	255	219	14	132
50-250	11	160M	T2B	50	118	234	495	847	28	475	250	225	338	165	173	255	220	14	141
50-250	15	160M	T2B	50	118	234	495	847	28	475	250	225	338	165	173	255	220	14	147
50-250	18,5	160L	T2B	50	118	234	495	847	28	475	250	225	338	165	173	255	220	14	159
50-250	22	180M	T2B	50	118	234	576	928	28	475	250	225	338	165	173	255	220	14	233
50-250	30	200L	T2B	50	118	234	643	995	28	475	250	225	338	165	173	255	220	14	305
65-125	3	100L	T2	65	138	188	310	636	28	340	180	160	225	120	105	255	219	14	61
65-125	4	112M	T2	65	138	188	330	656	28	340	180	160	225	120	105	255	219	14	66
65-125	5,5	132S	T2	65	138	200	415	753	28	340	180	160	225	120	105	255	219	14	84
65-125	7,5	132S	T2	65	138	200	415	753	28	340	180	160	225	120	105	255	219	14	88
65-160	5,5	132S	T2	65	138	195	415	748	28	380	200	180	254	134	120	255	219	14	88
65-160	7,5	132S	T2	65	138	195	415	748	28	380	200	180	254	134	120	255	219	14	92
65-160	11	160M	T2	65	138	238	495	871	28	380	200	180	254	134	120	255	219	14	127
65-200	11	160M	T2B	65	138	238	495	871	28	475	250	225	300	160	140	255	219	14	138
65-200	15	160M	T2B	65	138	238	495	871	28	475	250	225	300	160	140	255	219	14	143
65-200	18,5	160L	TB2	65	138	238	495	871	28	475	250	225	300	160	140	255	219	14	155
65-200	22	180M	T2B	65	138	238	576	952	28	475	250	225	300	160	140	255	219	14	230
65-250	15	160M	T2B	65	138	241	495	874	28	475	250	225	340	176	164	255	219	14	151
65-250	18,5	160L	T2B	65	138	241	495	874	28	475	250	225	340	176	164	255	219	14	163
65-250	22	180M	T2B	65	138	241	576	955	28	475	250	225	340	176	164	255	219	14	237
65-250	30	200L	T2B	65	138	241	643	1022	28	475	250	225	340	176	164	255	219	14	309
65-250	37	200L	T2B	65	138	241	643	1022	28	475	250	225	340	176	164	255	219	14	319
80-125	4	112M	T2	80	158	190	330	678	28	380	200	180	252	138	114	255	219	14	71
80-125	5,5	132S	T2	80	158	202	415	775	28	380	200	180	252	138	114	255	219	14	90
80-125	7,5	132S	T2	80	158	202	415	775	28	380	200	180	252	138	114	255	219	14	93
80-125	11	160M	T2	80	158	242	495	895	28	380	200	180	252	138	114	255	219	14	125
80-160	11	160M	T2	80	158	243	495	896	28	425	225	200	283	155	128	255	219	14	132
80-160	15	160M	T2	80	158	243	495	896	28	425	225	200	283	155	128	255	219	14	138
80-160	18,5	160L	T2	80	158	243	495	896	28	425	225	200	283	155	128	255	219	14	150
80-200	15	160M	T2A	80	159	239	495	893	28	475	250	225	312	168	144	255	220	14	143
80-200	18,5	160L	T2A	80	159	239	495	893	28	475	250	225	312	168	144	255	220	14	155
80-200	22	180M	T2A	80	159	239	576	974	28	475	250	225	312	168	144	255	220	14	230
80-200	30	200L	T2A	80	159	239	643	1041	28	475	250	225	312	168	144	255	220	14	299

2 3000 rpm

	Mo	otor							E	Dime	nsions Il Dime		s						\\/a:ab+
Pump Type	kW	IEC	Form	DNe DNb	Α	В	Lm	L	Т	Н	h1	h2	G	gl	g2	S	К	Ød	Weight (kg)
80-250	22	180M	T3	80	176	243	576	995	36	560	280	280	378	196	182	315	270	17	255
80-250	30	200L	T3	80	176	243	643	1062	36	560	280	280	378	196	182	315	270	17	325
80-250	37	200L	T3	80	176	243	643	1062	36	560	280	280	378	196	182	315	270	17	335
80-250	45	225M	T3	80	176	243	688	1107	36	560	280	280	378	196	182	315	270	17	410
80-250	55	250M	T3	80	176	273	756	1205	36	560	280	280	378	196	182	315	270	17	500
100-160	11	160M	T2B	100	159	240	495	894	28	475	250	225	292	162	130	255	219	14	140
100-160	15	160M	T2B	100	159	240	495	894	28	475	250	225	292	162	130	255	219	14	146
100-160	18,5	160L	T2B	100	159	240	495	894	28	475	250	225	292	162	130	255	219	14	157
100-160	22	180M	T2B	100	159	240	576	975	28	475	250	225	292	162	130	255	219	14	232
100-200	22	180M	T2B	100	198	247	576	1021	28	525	275	250	358	191	167	255	219	14	244
100-200	30	200L	T2B	100	198	247	643	1088	28	525	275	250	358	191	167	255	219	14	314
100-200	37	200L	T2B	100	198	247	643	1088	28	525	275	250	358	191	167	255	219	14	325
100-200	45	225M	T2B	100	198	247	688	1133	28	525	275	250	358	191	167	255	219	14	400
100-250	37	200L	T3	100	206	251	643	1100	36	580	300	280	388	208	180	315	270	17	346
100-250	45	225M	T3	100	206	251	688	1145	36	580	300	280	388	208	180	315	270	17	420
100-250	55	225M	T3	100	206	281	756	1273	36	580	300	280	388	208	180	315	270	17	511

FLANGE DIMENSIONS

Pump Tupo		Suction & Pressu	re (PN 16)	
Pump Type	Df	k	S	n
40	150	110	19	4
50	165	125	19	4
65	185	145	19	4
80	200	160	19	8
100	220	180	19	8
125	250	210	19	8
150	285	240	23	8
200	340	295	23	12



CTS EN 1092

C"n" NUMBER OF HOLE

SEAL SOLUTIONS

T	Seal Features				
Type of Seal	Temperature	Pressure			
MG1	t = -20 °C +85 °C t = +85 °C +100 °C (*)	p1 = 16 bar (230 PSI) p1 = 16 bar (230 PSI) (*)			

NOTE

It is determined according to BURGMANN brand mechanical seal. The seal brand can be changed according to the customer's request. Different packing options can be applied according to the fluid type and working conditions.







OPUS
VARIABLE SPEED
CIRCULATOR PUMPS

For the Future of Our Planet

We Develop Technologies That Use Energy and Water Resources Efficiently



OPUS

CIRCULATOR PUMP WITH FREQUENCY CONVENTOR

Circulator pump with wet rotor is manufactured with auto power regulated **ECM** technology with connector or flange connection options.

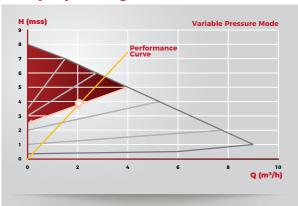
OPUS SERIES wet rotor circulation pumps have a wide range of uses in heating, cooling and air conditioning systems. The OPUS pump detects the need of the system and guarantees high efficiency and long-lasting use with minimum energy consumption in accordance with this need.

Although OPUS pumps provide maximum Q: 60 m3/h flow and maximum Hm: 15 mSS pressure values, dual (twin) pump usage options are also available.

Working Principle of Opus Pump with Frequency Converter

OPUS with frequency converter adjusts its speed according to the system needs thanks to the current value it receives from the system and the inverter on it. It increases or decreases the speed of the variable speed pump in order to fix the pressure difference to the set value. With decreasing pressure requirement, the power drawn from the network decreases thanks to the reduced pump speed. Energy savings are achieved by reducing the pump input power.

Pump Operating Modes



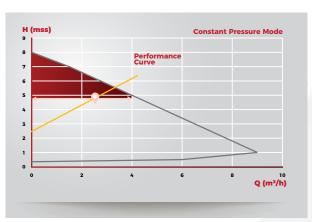
Variable pressure mode is used in circulation systems. Adjusts the pump performance according to the changing flow requirement.

Scope Of Application

- Heating, cooling and air conditioning systems
- Industrial cooling systems

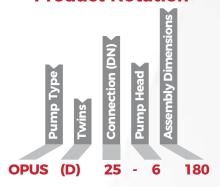
Product Benefits

OPUS is easily commissioned without the need for any additional operation with the factory setting. It provides lower energy consumption than traditional 3 speed circulators. OPUS are frequency-controlled **EEI** ≤ **0.23** circulation pumps in accordance with the Erp 2009/125/EC directive.



Constant pressure mode, is applied to variable flow systems with low pipe pressure loss and open systems where pipe pressure loss is less than static pressure.

Product Notation



Hardware / Function

Permanent magnet ECM technology, motor integrated protection



Features

- LED display indicators
- Easy to use and setup
- Communication between devices
- MODBUS



Operating Modes:

- Variable pressure
- Constant pressure
- Night mode



List of Materials:

- Bodv : Cast iron
- Shaft : Stainless steel
 - (AISI 420)
- Impeller : Composite (PPS)

OPUS 25-32 SERIESCIRCULATOR PUMP WITH FREQUENCY CONVERTER

Technical Information

Fluid temperature : -10/110 °C
 Mains Connection : 1~230 V, 50 Hz

Protection Class : IP 44
 Insulation Class : F
 Max. Working Pressure : 6 Bar

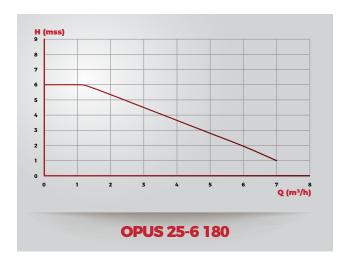


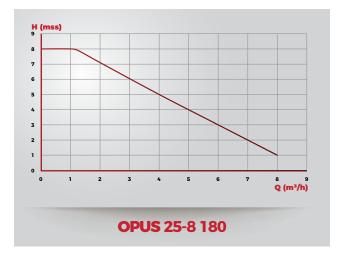
Stock Code	Model	Energy Efficiency Index (EEI)	Engine Power (W)	Nominal Connection Diameter	Distance Between Flange (mm)
153-0101	OPUS 25-6 180*	≤ 0,23	90	11/2"	180
153-0101	OPUS 25-8 180*	≤ 0,23	140	11/2"	180
153-0101	OPUS 25-12 180*	≤ 0,23	180	11/2"	180
153-0101	OPUS 32-6 180*	≤ 0,23	90	2"	180
153-0101	OPUS 32-8 180*	≤ 0,23	140	2"	180
153-0101	OPUS 32-12 180*	≤ 0,23	180	2"	180

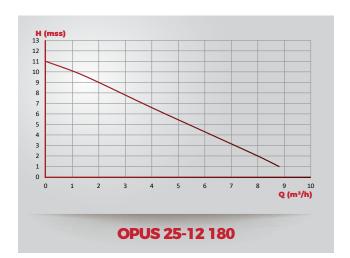
- * MODBUS ASCII MODULE must be added for the communication of pumps.
- Commissioning fee is included in the price.

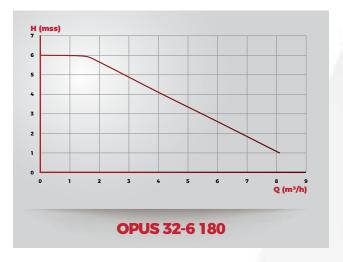
Additional Equipment

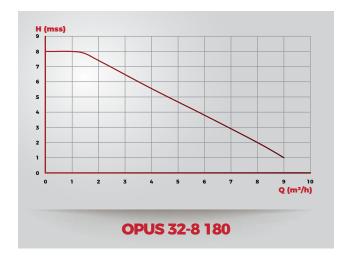
Stock Code	Model	Features
153-0200-MODBUS ASCII MODULE	MODBUS ASCII MODULE	RS 485
153-0300-01-THERMAL I. J.	THERMAL INSULATING JACKET	DN 25-32-40
153-0300-02-THERMAL I. J.	THERMAL INSULATING JACKET	DN 50-65-80 AND TWIN PUMPS
153-0413-01-1" 1-1/2"	CONNECTOR SET 25	1"-1 ½"
153-0413-01-1 1/4"-2"	CONNECTOR SET 32	1 1⁄4"-2"

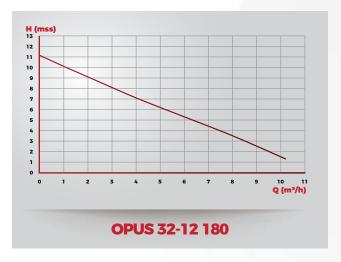












OPUS D 25-32 SERIES

CIRCULATOR PUMP WITH FREQUENCY CONVERTER

Technical Information

• Fluid temperature : -10/110 °C

• Mains Connection : 1~230 V, 50 Hz

Protection Class : IP 44Insulation Class : F

• Max. Working Pressure : 6 Bar

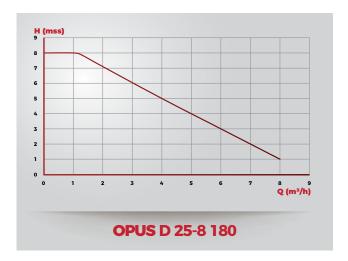


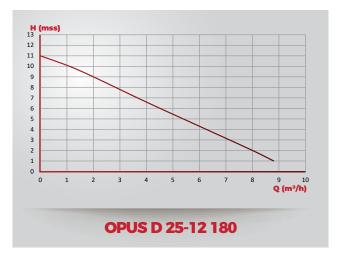
Stock Code	Model	Energy Efficiency Index (EEI)	Engine Power (W)	Nominal Connection Diameter	Distance Between Flange (mm)
153-0101	OPUS D 25-8 180*	≤ 0,23	140	1"	180
153-0101	OPUS D 25-12 180*	≤ 0,23	180	1 ^{1/4} "	180
153-0101	OPUS D 32-8 180*	≤ 0,23	140	1 ^{1/4} "	180
153-0101	OPUS D 32-12 180*	≤ 0,23	180	2"	180

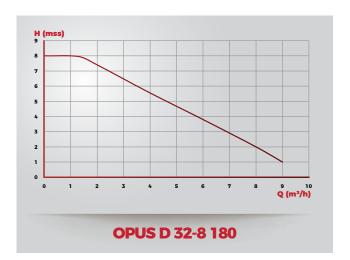
- * MODBUS ASCII MODULE must be added for the communication of pumps.
- Commissioning fee is included in the price.

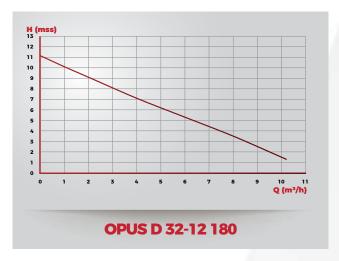
Additional Equipment

Stock Code	Model	Features
153-0200-MODBUS ASCII MODULE	MODBUS ASCII MODULE	RS 485
153-0300-01-THERMAL I. J.	THERMAL INSULATING JACKET	DN 25-32-40
153-0300-02-THERMAL I. J.	THERMAL INSULATING JACKET	DN 50-65-80 AND TWIN PUMPS
153-0413-01-1" 1-1/2"	CONNECTOR SET 25	1"-1 ½"
153-0413-01-1 1/4"-2"	CONNECTOR SET 32	1 ¼"-2"









• The twin pump curves show the capacity of a single pump.

OPUS C, OPUS V SERIES

CIRCULATOR PUMP WITH FREQUENCY CONVERTER

Technical Information

Fluid temperature : -10/110 °C
 Mains Connection : 1~230 V, 50 Hz

Protection Class : IP 44
 Insulation Class : F
 Max. Working Pressure : 10 Bar

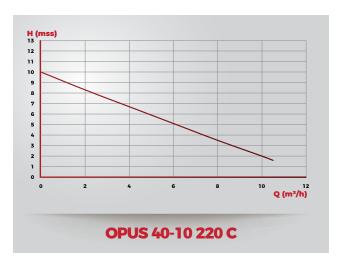


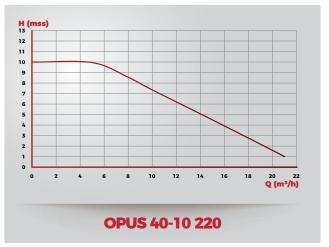
Stock Code	Model	Energy Efficiency Index (EEI)	Engine Power (W)	Nominal Connection Diameter	Distance Between Flange (mm)
153-0102	OPUS 40-10 220 C*	≤ 0,23	180	DN40	220
153-0102	OPUS 40-10 220*	≤ 0,23	400	DN40	220
153-0102	OPUS 40-12 250 V*	≤ 0,23	480	DN40	250
153-0102	OPUS 50-8 240 C*	≤ 0,23	180	DN50	240
153-0102	OPUS 50-8 240*	≤ 0,23	400	DN50	240
153-0102	OPUS 50-12 280 V*	≤ 0,23	560	DN50	280
153-0102	OPUS 65-10 340 V*	≤ 0,23	750	DN65	340
153-0102	OPUS 80-10 360 V*	≤ 0,23	850	DN80	360

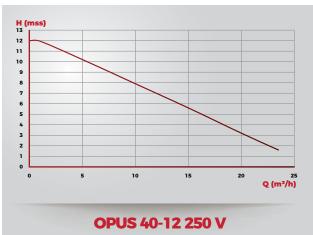
- * MODBUS ASCII MODULE must be added for the communication of pumps.
- Commissioning fee is included in the price.

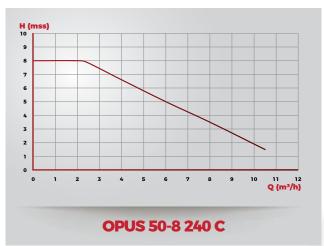
Additional Equipment

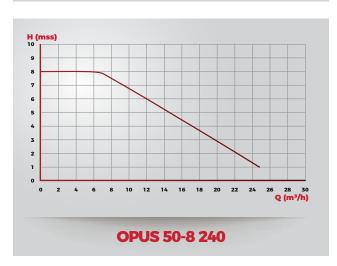
Stock Code	Model	Features
153-0200-MODBUS ASCII MODULE	MODBUS ASCII MODULE	RS 485
153-0300-01-THERMAL I. J.	THERMAL INSULATING JACKET	DN 25-32-40
153-0300-02-THERMAL I. J.	THERMAL INSULATING JACKET	DN 50-65-80 AND TWIN PUMPS

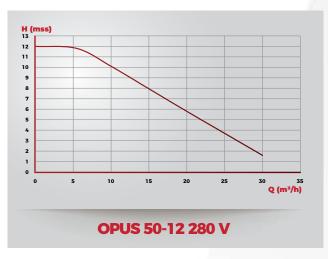


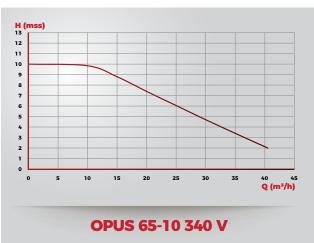


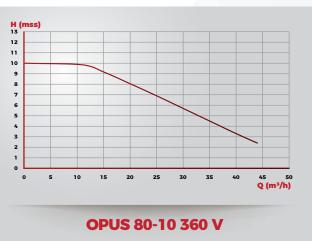












OPUS 40-50-65-80 SERIES

CIRCULATOR PUMP WITH FREQUENCY CONVERTER

Technical Information

Fluid temperature : -10/110 °C
 Mains Connection : 1~230 V, 50 Hz

Protection Class : IP 44
 Insulation Class : F



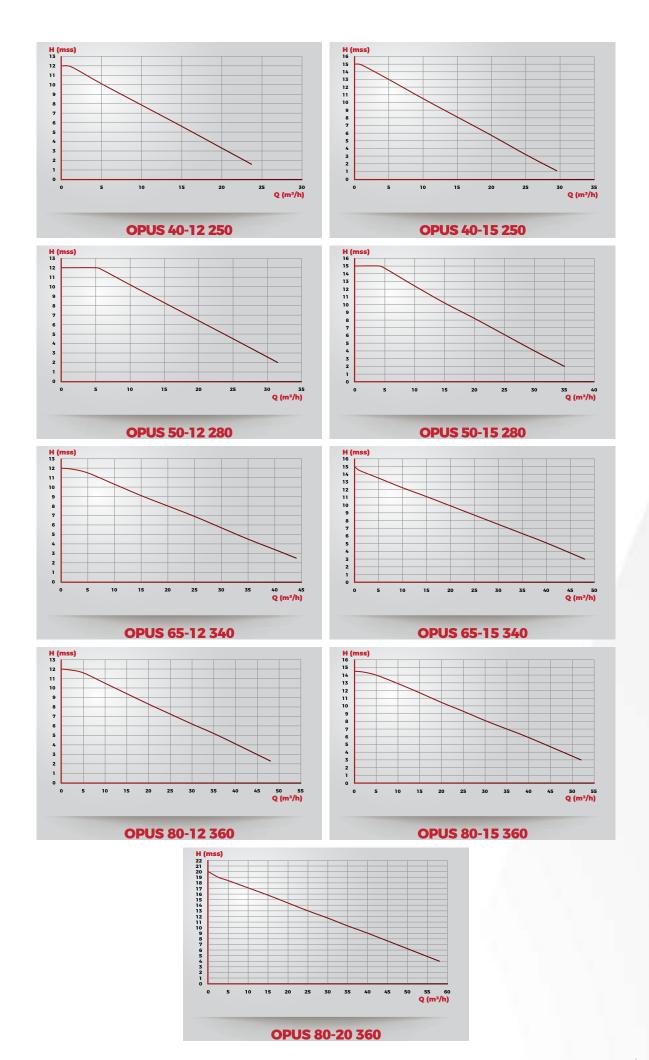


Stock Code	Model	Energy Efficiency Index (EEI)	Engine Power (W)	Nominal Connection Diameter	Distance Between Flange (mm)
153-0102	OPUS 40-12 250	≤ 0,23	460	DN40	250
153-0102	OPUS 40-15 250	≤ 0,23	630	DN40	250
153-0102	OPUS 50-12 280	≤ 0,23	540	DN50	280
153-0102	OPUS 50-15 280	≤ 0,23	640	DN50	280
153-0102	OPUS 65-12 340	≤ 0,23	780	DN65	340
153-0102	OPUS 65-15 340	≤ 0,23	1000	DN65	340
153-0102	OPUS 80-12 360	≤ 0,23	1000	DN80	360
153-0102	OPUS 80-15 360	≤ 0,23	1250	DN80	360
153-0102	OPUS 80-20 360	≤ 0,23	1750	DN80	360

[•] Commissioning fee is included in the price.

Additional Equipment

Stock Code	Model	Features	
153-0200-MODBUS ASCII MODULE	MODBUS ASCII MODULE	RS 485	
153-0300-01-THERMAL I. J.	THERMAL INSULATING JACKET	DN 25-32-40	
153-0300-02-THERMAL I. J.	THERMAL INSULATING JACKET	DN 50-65-80 AND TWIN PUMPS	



81 IL KESINTISIZ SERVIS

Türkiye'nin tamamını kapsayan servis organizasyonumuz ile koşulsuz memnuniyet sağlıyoruz.





Türkiye genelindeki tüm yetkili servislerimize internet sitemiz üzerinden ulaşabilirsiniz.









DWWPWASTEWATER PUMPS



DWWP SS C 15 - 1,5-1,1 kw M



DWWP D 13 - 1 Kw M



DWWP C 50 - 200-3 kw T



DWWP GR 18 - 2-1,35 kw M



MORE DETAILS



DWWP GR 50 - 160-2,2 Kw T



DWWP D SERIES

Plastic Casing Drainage Wastewater Pumps

Open Impeller Wastewater Pumps

Definition

- DWWP D SERIES pumps are manufactured at frequencies of 50 Hz and 60 Hz.
- DWWP D SERIES pumps are single-phase electric, easy to install, automatically operating, float submersible pumps.

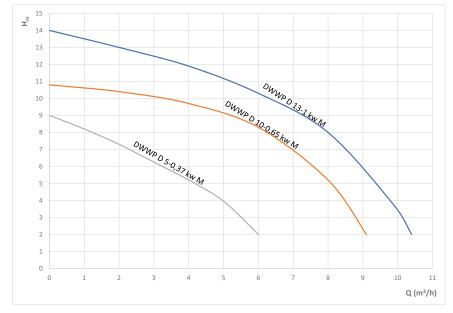
Usage Areas

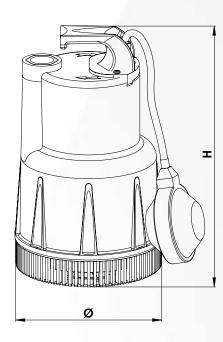
• These pumps, with open impeller made of Noryl material, are used in waterfalls, basements, ornamental pools, buildings, drainage pits and ponds up to a maximum height of 14 m, and they discharge particles not exceeding 3 mm without any problems.

			Pum	ıp Fe	eatures			
TYPE	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER	THERMAL PROTECTION
DWWP D 5- 0,37 kw M		✓					1	
DWWP D 10- 0,65 kw M		✓					1	✓
DWWP D 13- 1 kw M		✓					1	✓

	Pump Technical Specifications																	
TYPE			M	10	TOI	R			PUMP									
	KW	НР	V	Hz	A	rpm	CAPA uf		INPUT OUTPUT	Ø mm	H mm	KG	m³/h	1	3	5	7	10
DWWP D 5- 0,37 kw M	0.37	0.5	220	50	1.7	2900	10	450	1"	147	248	5.5	mss	8	6	4	-	-
DWWP D 10 0,65 kw M	0.65	0.85	220	50	4.3	2900	20	450	11/4	180	326	12	Ε	10.5	10	9	7	-
DWWP D 13 1 kw M	1	1.3	220	50	4.4	2900	25	450	11/4	180	326	13		13.5	12.5	11	9	4

Pump Material Properties						
Pump Body	PPH					
Impeller	Noryl					
Shaft	AISI 304 INOX					
Liquid Temperature	0 - 30 °C					
Protection Class	IP 68					
Insulation	CI.F					
Cable Length	10 m					
Sealing	Mechanical Sealing					





DWWP SS SERIES

Complete Stainless Wastewater Pumps

Closed Impeller Wastewater Pumps

Definition

- DWWP D SERIES pumps are manufactured at frequencies of 50 Hz and 60 Hz.
- DWWP SS SERIES pumps are single-phase electric, easy-to-install, stainless body, automatically operating, float submersible pumps.

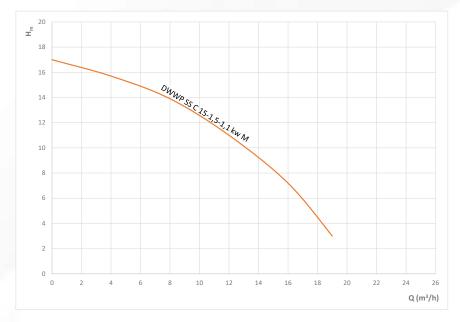
Usage Areas

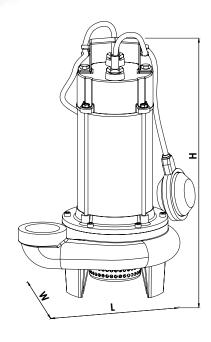
This type of pumps discharges particles not exceeding 6 mm without any problem. These
pumps, which have a closed impeller made of AISI 304 INOX Stainless Steel material, are
used in waterfalls, basements, ornamental pools, buildings, drainage pits and ponds up to
a maximum height of 20 m.

		Pum	p Fe	atu	res		
ТҮРЕ	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER
DWWP SS C 15- 1,5-1.1 kw M	✓		1		✓		

	Pump Technical Specifications																		
TYPE				M	10	TOF	2	PUMP											
	ĸw	HP	v	Hz	A	rpm	CAPA(CITOR Vc	OUTPUT	mm	mm	mm		m³/h					
DWWP SS C 15- 1,5-1.1 kw M	1.1	1.5	220	50	6.2	2900	25	450	11/2	185	260	350	20.5	mss	16.5	14	11	7.5	-

Pui Material F	mp Properties						
Pump Body	INOX						
Impeller	AISI 304 INOX						
Shaft	AISI 304 INOX						
Liquid Temperature	0 - 30 °C						
Protection Class	IP 68						
Insulation	CI.F						
Cable Length	10 m						
Sealing Mechanical Sealing							





DWWP D SERIES

Stainless Impeller Wastewater Pumps

Open Impeller Wastewater Pump

Definition

- DWWP D 15 1.1 kW M type pumps are manufactured at frequencies of 50 Hz and 60 Hz.
- This type of pumps are single-phase electric, automatic portable, submersible pumps operating in polluted waters.

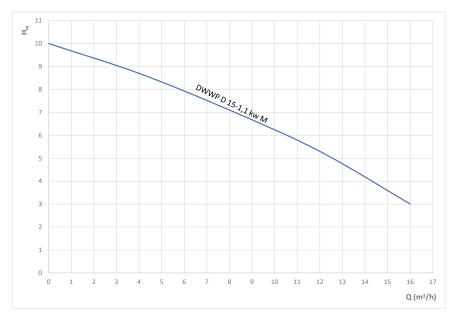
Usage Areas

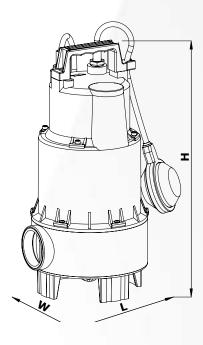
• This type of pumps are used in the discharge of sewage waters up to a maximum height of 12 m, sewage water with particles not exceeding 20 mm, industrial and domestic wastes, rainwater. It is also used in small diameter waterfalls for ornamental purposes..

			Pum	p Fe	atures			
TYPE	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER	THERMAL PROTECTION
DWWP D 15- 1,1 kw M		✓			✓			*

	Pump Technical Specifications																		
TYPE	MOTOR									PUMP									
	ĸw	HP	V	Hz	A	rpm	CAPA:	CITOR Vc	INPUT OUTPUT	W	L	H	KG	m³/h	3	6	9	11	16
DWWP D 15- 1,1 kw M	1.1	1.5	220	50	5.2	2900	25	450	2"	185	195	400	13.5	mss	9	8	7	6	3

Pump Material Properties							
Pump Body	PPH						
Impeller	AISI 304 INOX						
Shaft	AISI 304 INOX						
Liquid Temperature	0 - 30 °C						
Protection Class	IP 68						
Insulation	CI.F						
Cable Length	10 m						
Sealing Mechanical Sea							





DWWP D SERIES

DWWP D 18-2-Y-1,35 kw M Type Pumps

Open Impeller Wastewater Pump

Definition

- DWWP D 18-2-Y-1,35 kw M type pumps are manufactured at frequencies of 50 Hz and 60 Hz.
- This type of pumps are single-phase electric, easy to install, stainless body, automatic running, float submersible pumps.

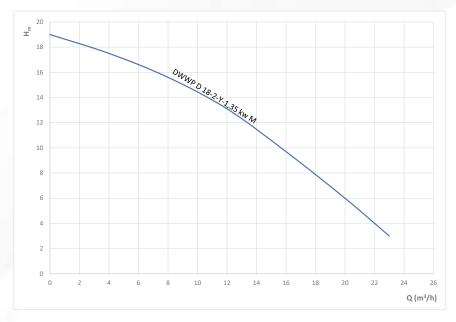
Usage Areas

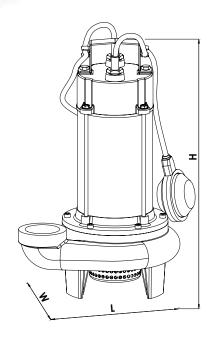
 These pumps, with open impeller made of cast iron material, are used in waterfalls, basements, ornamental pools, buildings, drainage pits and debris up to a maximum height of 20 m, and they discharge particles not exceeding 6 mm without any problems.

Pump Features								
ТҮРЕ	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER	
DWWP D 18-2-Y- 1,35 kw M	✓	✓				✓		

	Pump Technical Specifications																		
TYPE	MOTOR									PUMP									
	ĸw	HP	V	Hz	A	rpm	CAPA uf	CITOR Vc	INPUT OUTPUT	W	L	H		m³/h					
DWWP D 18-2-Y- 1,35 kw M	1.35	1.8	220	50	6.5	2900	30	450	2"	200	280	430	23	mss	18	16	13	10	6

Pump Material Properties								
Pump Body	PPH							
Impeller	GG 25							
Shaft	AISI 304 INOX							
Liquid Temperature	0 - 30 °C							
Protection Class	IP 68							
Insulation	CI.F							
Cable Length	10 m							
Sealing Mechanical Sealing								





DWWP GR SERIES

Stainless Body Pumps with Shredder Blades

Wastewater Pump with Shredder Blades

Definition

- Stainless body pump type is manufactured at frequencies of 50 Hz and 60 Hz.
- This type of pumps are single-phase electric, bladed, easy to install, automatic, submersible septic pumps in which a panel is not required.
- They are cast body, three-phase electric, bladed, septic submersible pumps.

Usage Areas

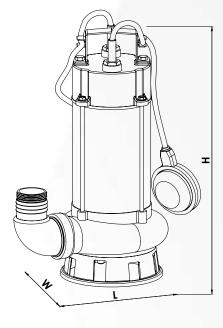
 This type of pumps can evacuate the fibrous and not very solid particles in the water without any problems by breaking up due to the blades they contain, up to a maximum height of 14 m. Due to its stainless body, it is used in industry, hotels, construction sector and in sewage systems and treatment plants of residential areas.

	Pump Features												
ТУРЕ	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER						
DWWP GR 15-2- 1,1 kw M	✓	✓		✓		✓							
DWWP GR 18-2- 1,35 kw M	1	1		1		✓							
DWWP GR 19-2- 1,35 kw M	1	1		1		✓							

	Pump Technical Specifications																		
TYPE		MOTOR PUMP																	
	KW HP V Hz A rpm CAPACITOR OUT								OUTPUT	W mm	L mm	H mm	KG	m³/h	6	9	12	18	24
DWWP GR 15-2- 1,1 kw M	1.1	1.5	220	50	5.8	2900	30	450	2"	200	280	380	22.5		9	8	7	-	-
DWWP GR 18-2- 1,35 kw M	1.35	1.8	220	50	6.3	2900	30	450	2"	200	280	380	23	mss	10	9	8	2	-
DWWP GR 19-2- 1,35 kw M	1.35	1.8	220	50	6.4	2900	30	450	2"	200	280	380	23		13.5	12.5	11	8.5	5

13						
12						
11		Dia.				
10		n.	^P GR 19-2-1,			
9	DV	WWP GR	3.2.1,	35 km		
		DWWP GR 1	8-2-1.35 km	111		
8		<:	LIKWM	M		
7						
6						
5						
4						
3						
2					\ \	
1					\ \	
0						

Pump Material Properties Pump Body AISI 304 INOX GG 25 **Impeller** Shaft **AISI 304 INOX** Liquid Temperature 0 - 30 °C **IP 68 Protection Class** Insulation CI.F 10 m **Cable Length** AISI 420 INOX **Blade** Sealing Mechanical Sealing



DWWP C SERIES

Cast Body Wastewater Pumps

Closed Impeller Wastewater Pumps

Definition

 These are three-phase centrifugal submersible wastewater pumps with cast body, 2900 RPM, outlet diameter DN 50, closed impeller. In this type of pumps, closed bearings with grease are used.

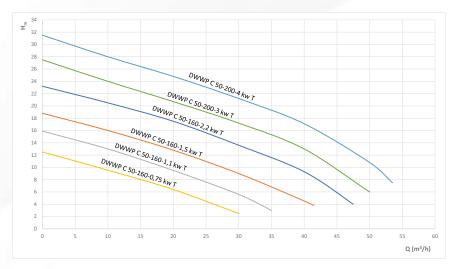
Usage Areas

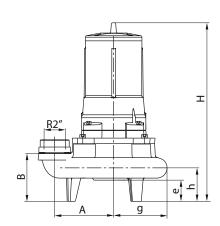
- It is used in processes with domestic and industrial raw wastewater and liquids containing solid and fibrous parts.
- Solid matter permeability is 25 mm.

	Pump Features												
TYPE	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER						
DWWP C 50-160- 0,75 kw T			1			✓							
DWWP C 50-160- 1,1 kw T			1			✓							
DWWP C 50-160- 1,5 kw T			1			✓							
DWWP C 50-160- 2,2 kw T			1			✓							
DWWP C 50-200- 3 kw T			1			✓							
DWWP C 50-200- 4 kw T			1			✓							

Pui Material F	mp Properties
Pump Body	GG 25
Impeller	GG 25
Shaft	Stainless Steel
Liquid Temperature	0 - 40 °C
Protection Class	IP 68
Sealing	Mechanical Sealing

	Pump Technical Specifications													
TYPE			MO'	TOR					PUMP					
1172	ĸw	HP	V	Hz		rpm	ОИТРИТ	W mm	L mm	H mm	KG			
DWWP C 50-160- 0,75 kw T	0,75	1	380	50		2900	2"	300	300	430	32			
DWWP C 50-160- 1,1 kw T	1,1	1,5	380	50		2900	2"	300	300	430	34			
DWWP C 50-160- 1,5 kw T	1,5	2	380	50		2900	2"	300	300	475	39			
DWWP C 50-160- 2,2 kw T	2,2	3	380	50		2900	2"	300	300	475	41			
DWWP C 50-200- 3 kw T	3	4	380	50		2900	2"	350	350	524				
DWWP C 50-200- 4 kw T	4	5,5	380	50		2900	2"	350	350	529				





DWWP C SERIES

Cast Body Wastewater Pumps

Closed Impeller Wastewater Pumps

Definition

• These are three-phase centrifugal submersible wastewater pumps with cast body, 2900 RPM, outlet diameter DN 80 and DN 100, closed impeller. In this type of pumps, closed bearings with grease are used.

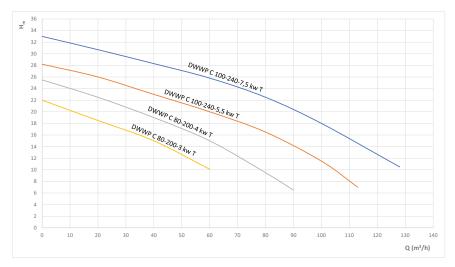
Usage Areas

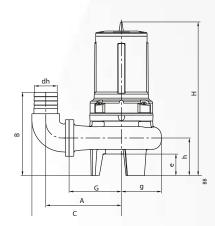
- It is used in processes with domestic and industrial raw wastewater and liquids containing solid and fibrous parts.
- Solid matter permeability is 35 mm.

	Pump Features													
ТҮРЕ	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER							
DWWP C 80-200- 3 kw T			✓			✓								
DWWP C 80-200- 4 kw T			✓			*								
DWWP C 100-240- 5,5 kw T			✓			✓								
DWWP C 100-240- 7,5 kw T			✓			✓								

Pui Material F	_
Pump Body	GG 25
Impeller	GG 25
Shaft	Stainless Steel
Liquid Temperature	0 - 40 °C
Protection Class	IP 68
Sealing	Mechanical Sealing

	Pump Technical Specifications													
TYPE			MO'	TOR			PUMP							
1175	KW	HP	V	Hz		rpm	OUTPUT	W mm	L mm	H mm	KG			
DWWP C 80-200- 3 kw T	3	4	380	50		2900	3"	350	315	573	59			
DWWP C 80-200- 4 kw T	4	5,5	380	50		2900	3"	350	325	578	65			
DWWP C 100-240- 5,5 kw T	5,5	7,5	380	50		2900	4"	395	375	657	94			
DWWP C 100-240- 7,5 kw T	7,5	10	380	50		2900	4"	395	375	657	103			





DWWP C1 SERIES

Cast Body Wastewater Pumps

Closed Impeller Wastewater Pumps

Definition

• These are three-phase centrifugal submersible wastewater pumps with cast body, 1450 RPM, outlet diameter DN 50 and DN 80, closed impeller. In this type of pumps, closed bearings with grease are used.

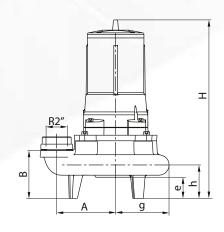
Usage Areas

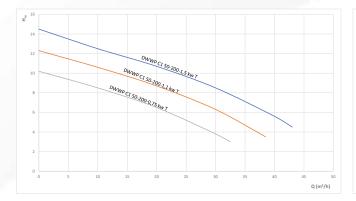
- It is used in processes with domestic and industrial raw wastewater and liquids containing solid and fibrous parts.
- Solid matter permeability is 25 mm.

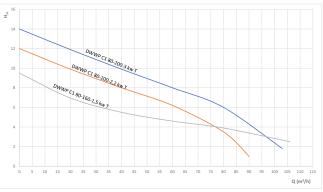
	Pump Features												
ТҮРЕ	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER						
DWWP C1 50-200- 0,75 kw T			*			✓							
DWWP C1 50-200- 1,1 kw T			*			1							
DWWP C1 50-200- 1,5 kw T			*			✓							
DWWP C1 80-160- 1,5 kw T			*			✓							
DWWP C1 80-200- 2,2 kw T			1			✓							
DWWP C1 80-200- 3 kw T			1			✓							

Pui Material F	mp Properties
Pump Body	GG 25
Impeller	GG 25
Shaft	Stainless Steel
Liquid Temperature	0 - 40 °C
Protection Class	IP 68
Sealing	Mechanical Sealing

Pu	Pump Technical Specifications												
TYPE			MO	TOR			PUMP						
1172	KW	HP	V	Hz	rpm	OUTPUT	W mm	L mm	H	KG			
DWWP C1 50-200- 0,75 kw T	0,75	1	380	50	1500	2"	350	280	438				
DWWP C1 50-200- 1,1 kw T	1,1	1,5	380	50	1500	2"	350	290	483				
DWWP C1 50-200- 1,5 kw T	1,5	2	380	50	1500	2"	350	290	483				
DWWP C1 80-160- 1,5 kw T	1,5	2	380	50	1500	3"	310	284	540	58			
DWWP C1 80-200- 2,2 kw T	2,2	3	380	50	1500	3"	350	316	573	60			
DWWP C1 80-200- 3 kw T	3	4	380	50	1500	3"	350	316	573	64			







DWWP C1 SERIES

Cast Body Wastewater Pumps

Closed Impeller Wastewater Pumps

Definition

• These are three-phase centrifugal submersible wastewater pumps with cast body, 1450 RPM, outlet diameter DN 100, closed impeller. In this type of pumps, closed bearings with grease are used.

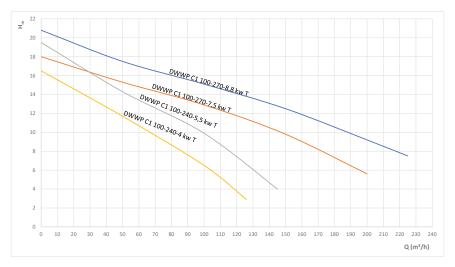
Usage Areas

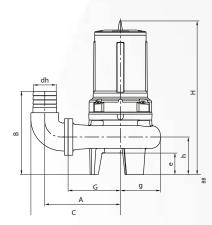
- It is used in processes with domestic and industrial raw wastewater and liquids containing solid and fibrous parts.
- Solid matter permeability is 55 mm.

	Pump Features												
ТҮРЕ	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER						
DWWP C1 100-240- 4 kw T			✓			✓							
DWWP C1 100-240- 5,5 kw T			•			*							
DWWP C1 100-270- 7,5 kw T			✓			✓							
DWWP C1 100-270- 8,8 kw T			✓			✓							

Pui Material F	
Pump Body	GG 25
Impeller	GG 25
Shaft	Stainless Steel
Liquid Temperature	0 - 40 °C
Protection Class	IP 68
Sealing	Mechanical Sealing

	Pump Technical Specifications													
TYPE									PUMP					
11172	ĸw	HP	V	Hz		rpm	ОИТРИТ	W mm	L mm	H mm	KG			
DWWP C1 100-240- 4 kw T	4	5	380	50		1500	4"	345	395	908	82			
DWWP C1 100-240- 5,5 kw T	5,5	7,5	380	50		1500	4"	376	395	657	104			
DWWP C1 100-270- 7,5 kw T	7,5	10	380	50		1500	4"	426	470	678	126			
DWWP C1 100-270- 8,8 kw T	8,8	12	380	50		1500	3"	426	470	678	126			





DWWP V SERIES

Cast Body Wastewater Pumps

Wastewater Pumps with Vortex Impeller

Definition

 These are three-phase centrifugal submersible wastewater pumps with cast body, 1450 RPM, outlet diameter DN 100 and DN 80, closed impeller. In this type of pumps, closed bearings with grease are used.

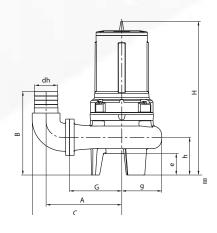
Usage Areas

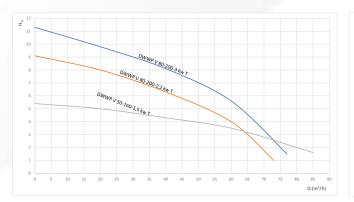
- It is used in processes with domestic and industrial raw wastewater and liquids containing solid and fibrous parts.
- Solid matter permeability is 60 mm.

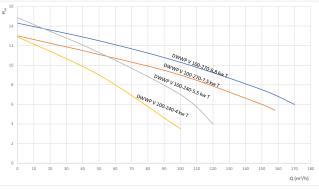
	Pump Features												
ТҮРЕ	PANEL	OPEN IMPELLER	VORTEX	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER					
DWWP V 80-160- 1,5 kw T			-				*						
DWWP V 80-200- 2,2 kw T			1				✓						
DWWP V 80-200- 3 kw T			1				✓						
DWWP V 100-240- 4 kw T			1				✓						
DWWP V 100-240- 5,5 kw T			*				✓						
DWWP V 100-270- 7,5 kw T			1				✓						
DWWP V 100-270- 8,8 kw T			1				*						

	Pump Material Properties									
Pump Body	GG 25									
Impeller	GG 25									
Shaft	Stainless Steel									
Liquid Temperature	0 - 40 °C									
Protection Class	IP 68									
Sealing	Mechanical Sealing									

Pu	Pump Technical Specifications												
ТҮРЕ			MO	TOR		PUMP							
	KW	HP	V	Hz		rpm	OUTPUT	W mm	L mm	H mm	KG		
DWWP V 80-160- 1,5 kw T	1,5	2	380	50		1500	3"	310	284	540	58		
DWWP V 80-200- 2,2 kw T	2,2	3	380	50		1500	3"	350	316	573	58		
DWWP V 80-200- 3 kw T	3	4	380	50		1500	3"	350	316	573	62		
DWWP V 100-240- 4 kw T	4	5	380	50		1500	4"	395	347	608	80		
DWWP V 100-240- 5,5 kw T	5,5	7,5	380	50		1500	4"	395	375	657	101		
DWWP V 100-270- 7,5 kw T	7,5	10	380	50		1500	4"	425	470	678	123		
DWWP V 100-270- 8,8 kw T	8,8	12	380	50		1500	4"	425	470	678	123		







DWWP V SERIES

Cast Body Wastewater Pumps

Wastewater Pumps with Vortex Impeller

• These are three-phase centrifugal submersible wastewater pumps with cast body, 1450 RPM, outlet diameter DN 50, closed impeller. In this type of pumps, closed bearings with grease are used.

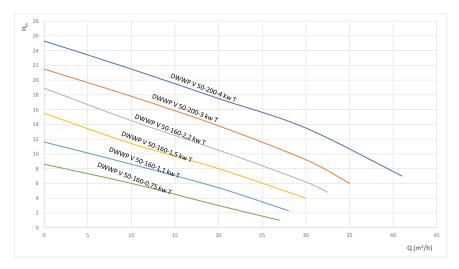
Usage Areas

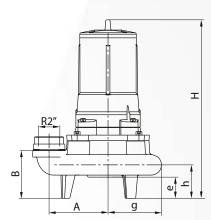
- It is used in processes with domestic and industrial raw wastewater and liquids containing solid and fibrous parts.
- Solid matter permeability is 35 mm.

	Pump Features												
ТҮРЕ	PANEL	OPEN IMPELLER	VORTEX	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER					
DWWP V 50-160- 0,75 kw T			*				✓						
DWWP V 50-160- 1,1 kw T			*				✓						
DWWP V 50-160- 1,5 kw T			*				✓						
DWWP V 50-160- 2,2 kw T			1				✓						
DWWP V 50-200- 3 kw T			*				✓						
DWWP V 50-200- 4 kw T			*				✓						

	Pump Material Properties							
Pump Body	GG 25							
Impeller	GG 25							
Shaft	Stainless Steel							
Liquid Temperature	0 - 40 °C							
Protection Class	IP 68							
Sealing	Mechanical Sealing							

	Pump Technical Specifications													
TYPE								PUMP						
ITPE	кw	HP	V	Hz		rpm	OUTPUT	W mm	L mm	H	KG			
DWWP V 50-160- 0,75 kw T	0,75	1	380	50		2900	2"	255	300	430	29			
DWWP V 50-160- 1.1 kw T	1,1	2	380	50		2900	2"	255	300	430	34			
DWWP V 50-160- 1,5 kw T	1,5	2	380	50		2900	2"	263	300	475	38			
DWWP V 50-160- 2,2 kw T	2,2	3	380	50		2900	2"	263	300	475	41			
DWWP V 50-200- 3 kw T	3	4	380	50		2900	2"	300	350	524	54			
DWWP V 50-200- 4 kw T	4	5	380	50		2900	2"	310	350	529	59			





DWWP GR SERIES

Cast Body Wastewater Pumps

Wastewater Pumps with Grinder

Definition

 These are three-phase centrifugal submersible wastewater pumps with cast body, 2900 RPM, outlet diameter DN 50, shredder blades. In this type of pumps, closed bearings with grease are used.

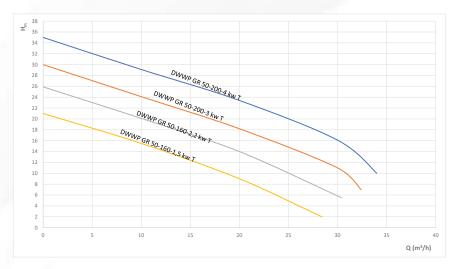
Usage Areas

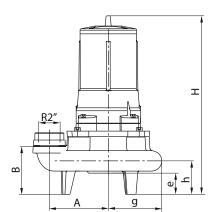
• It is used in processes with domestic and industrial raw wastewater and liquids containing solid and fibrous parts.

	Pump Features											
ТҮРЕ	PANEL	OPEN IMPELLER	CLOSED IMPELLER	BLADED	STAINLESS (AISI 304 INOX)	CAST IMPELLER (GG25)	NORYL IMPELLER					
DWWP GR 50-160- 1,5 kw T		✓		✓		✓						
DWWP GR 50-160- 2,2 kw T		✓		✓		✓						
DWWP GR 50-200- 3 kw T		✓		•		✓						
DWWP GR 50-200- 4 kw T		*		*		✓						

Pump Material Properties							
Pump Body	GG 25						
Impeller	GG 25						
Shaft	Stainless Steel						
Blade	Stainless Steel						
Liquid Temperature	0 - 40 °C						
Protection Class	IP 68						
Sealing	Mechanical Sealing						

	Pump Technical Specifications													
TYPE							PUMP							
1175	ĸw	HP	V	Hz		rpm	OUTPUT	W mm	L mm	H mm	KG			
DWWP GR 50-160- 1,5 kw T	1,5	2	380	50		2900	2"	300	263	457	38			
DWWP GR 50-160- 2,2 kw T	2,2	3	380	50		2900	2"	300	263	457	40			
DWWP GR 50-200- 3 kw T	3	4	380	50		2900	2"	350	287	496	52			
DWWP GR 50-200- 4 kw T	4	5	380	50		2900	2"	350	290	501	58			





DWWP D 5-0.37 kw M	WASTEWATER PUMPS			
DWWP D 10-0.65 KW M	MODEL	CONNECTION	Rpm	
DWWP D 13-1 kw M DN 32 DWWP D 15-1.1 kw M DN 50 DWWP D 16-2-Y-1.35 kw M DN 50 DWWP SC 15-1.5 -1.1 kw M DN 40 DWWP C 50-160-0.75 kw T DN 50 DWWP C 50-160-1.5 kw T DN 50 DWWP C 50-200 -4 kw T DN 50 DWWP C 50-200 -4 kw T DN 80 DWWP C 80-200-4 kw T DN 80 DWWP C 100-240 -5.5 kw T DN 100 DWWP C 100-240-7.5 kw T DN 50 DWWP C 150-200-1.1 kw T DN 50 DWWP C 150-200-1.1 kw T DN 50 DWWP C 180-200-1.5 kw T DN 80 DWWP C 180-200-2.2 kw T DN 80 DWWP C 180-200-2.5 kw T DN 100 DWWP C 180-200-1.5 kw T DN 80 1.450 DWWP C 180-200-2.5 kw T DN 80 1.450 DWWP C 180-200-2.5 kw T DN 80 1.450 DWWP C 180-200-3.5 kw T DN 100 DWWP C 1 100-240-5.5 kw T DN 100 DWWP C 1 100-270-7.5 kw T DN 100 DWWP C 1 100-270-8.8 kw T DN 100 DWWP C 1 100-270-8.8 kw T DN 100 DWWP V 50-160-1.5 kw T DN 50 DWWP V 50-160-3.5 kw T DN 50 DWWP V 50-160-3.5 kw T DN 50 DWWP V 50-160-3.5 kw T DN 80 DWWP V 50-160-3.5 kw T DN 90 DWWP C 100-20-3.8 kw T DN 90 DWWP C 100	DWWP D 5-0,37 kw M	DN 25	2.900	
DWWP D 18-1,1 kw M DWWP D 18-2-Y-1,35 kw M DWWP SC 15-1,5-1,1 kw M DWWP C 50-160-0,75 kw T DWWP C 50-160-1,5 kw T DWWP C 50-200-3 kw T DWWP C 80-200-3 kw T DWWP C 80-200-3 kw T DWWP C 100-240-7,5 kw T DWWP C 150-200-1,5 kw T DWWP C 150-200-2,5 kw T DWWP C 150-200-1,5 kw T DWWP C 150-200-1,5 kw T DWWP C 150-200-1,5 kw T DWWP C 150-200-3,5 kw T DWWP C 150-200-3,5 kw T DWWP C 150-200-3,5 kw T DWWP C 150-200-1,5 kw T DWWP C 150-200-1,5 kw T DWWP C 150-200-1,5 kw T DWWP C 150-200-3,5 kw T DWWP C 150-200-3,	DWWP D 10-0,65 Kw M	DN 32	2.900	
DWWP D 18-2-Y-1.35 kw M DWWP SS C 15-1.5-1.1 kw M DWWP SS C 15-1.5-1.1 kw M DWWP C 50-160-0.75 kw T DWWP C 50-160-1.5 kw T DWWP C 50-160-2.2 kw T DWWP C 50-200-3 kw T DWWP C 50-200-4 kw T DWWP C 50-200-4 kw T DWWP C 50-200-1 kw T DWWP C 100-240-5.5 kw T DWWP C 100-240-5.5 kw T DWWP C 150-200-1.5 kw T DWWP C 150-200-1.5 kw T DWWP C 180-100-1.5 kw T DWWP C 180-200-2 kw T DWWP C 180-200-2 kw T DWWP C 180-200-5.5 kw T DWWP C 100-240-5.5 kw T DWWP C 100-270-8.8 kw T DWWP C 100-270-8.8 kw T DWWP V 50-160-1.1 kw T DWWP V 50-160-1.5 kw T DWWP V 50-200-3 kw T DWWP V 50-200-4 kw T DWWP V 50-200-5 kw T DWWP C 50-200-5 kw T DW	DWWP D 13-1 kw M	DN 32	2.900	
DWWP SS C 15-1.5-1.1 kw M DWWP C 50-160-0.75 kw T DWWP C 50-160-1.1 kw T DWWP C 50-160-1.5 kw T DWWP C 50-22 kw T DWWP C 50-20-3 kw T DWWP C 50-200-4 kw T DWWP C 80-200-4 kw T DWWP C 80-200-4 kw T DWWP C 100-240-5.5 kw T DWWP C 100-240-5.5 kw T DWWP C 150-200-0.75 kw T DWWP C 150-200-1.5 kw T DWWP C 150-200-1.5 kw T DWWP C 150-200-1.5 kw T DWWP C 180-200-3 kw T DWWP C 1 100-240-4 kw T DWWP C 1 100-240-5.5 kw T DWWP C 1 100-270-7.5 kw T DWWP C 1 100-270-7.5 kw T DWWP C 1 100-270-8.8 kw T DWWP V 50-160-1.5 kw T DWWP V 50-200-3 kw T DWWP C 50-200-3 kw	DWWP D 15-1,1 kw M	DN 50	2.900	
DWWP C 50-160-0.75 kw T DWWP C 50-160-1.1 kw T DWWP C 50-160-1.5 kw T DWWP C 50-200-3 kw T DWWP C 50-200-4 kw T DWWP C 80-200-4 kw T DWWP C 80-200-4 kw T DWWP C 100-240-5.5 kw T DWWP C 100-240-5.5 kw T DWWP C 100-240-5.5 kw T DWWP C 150-200-1.1 kw T DWWP C 150-200-1.5 kw T DWWP C 150-200-3 kw T DWWP V 50-160-0.75 kw T DWWP V 50-160-1.5 kw T DWWP V 50-160-2.2 kw T DWWP V 50-160-3.5 kw T DWWP V 50-200-3 kw T DWWP V 100-270-3.8 kw T DWWP C 50-200-3 kw T DWWP C 50-200-3 kw	DWWP D 18-2-Y-1,35 kw M	DN 50	2.900	
DWWP C 50-160-1,1 kw T DWWP C 50-160-1,5 kw T DWWP C 50-160-2,2 kw T DWWP C 50-160-2,2 kw T DWWP C 50-200-3 kw T DWWP C 50-200-3 kw T DWWP C 50-200-4 kw T DWWP C 50-200-4 kw T DWWP C 80-200-4 kw T DWWP C 80-200-3 kw T DWWP C 80-200-4 kw T DWWP C 80-200-4 kw T DWWP C 100-240-5,5 kw T DWWP C 100-240-5,5 kw T DWWP C 100-240-5,5 kw T DWWP C 150-200-1,1 kw T DWWP C 150-200-1,1 kw T DWWP C 180-200-2,2 kw T DWWP C 180-200-3 kw T DWWP C 180-200-3,5 kw T DWWP C 180-200-3,5 kw T DWWP C 1 100-240-4,5 kw T DWWP C 1 100-240-6,5 kw T DWWP C 1 100-240-6,5 kw T DWWP C 1 80-200-3,5 kw T DWWP C 1 100-240-5,5 kw T DWWP C 1 100-270-8,8 kw T DWWP V 50-160-1,5 kw T DWWP V 50-160-1,5 kw T DWWP V 50-160-1,5 kw T DWWP V 50-200-3 kw T DWWP C 50-200-3 kw	DWWP SS C 15-1,5 -1,1 kw M	DN 40	2.900	
DWWP C 50-160-1.5 kw T DWWP C 50-160 - 2.2 kw T DWWP C 50-200 - 3 kw T DWWP C 50-200 - 3 kw T DWWP C 50-200 - 3 kw T DWWP C 80-200-3 kw T DWWP C 80-200-3 kw T DWWP C 80-200-4 kw T DWWP C 80-200-4 kw T DWWP C 100-240 - 5.5 kw T DWWP C 100-240 - 7.5 kw T DWWP C 150-200 - 1.1 kw T DWWP C 150-200 - 1.1 kw T DWWP C 150-200 - 1.5 kw T DWWP C 180-200-2.2 kw T DWWP C 180-200-3 kw T DWWP C 1 100-240-4 kw T DWWP C 1 100-240-5.5 kw T DWWP C 1 100-240-8.5 kw T DWWP C 1 100-270-8.8 kw T DWWP C 1 100-200-3 kw T DWWP C 1 100-200-3 kw T DWWP C 1 100-270-8.8 kw T DWWP C 1 50-160 - 1.5 kw T DWWP C 1 50-160 - 2.2 kw T DWWP C 1 50-200-3 kw T DWWP C 1 100-270-8.8 kw T DWWP C 1 100-270-8.8 kw T DWWP C 1 50-160 - 2.2 kw T DWWP C 1 50-200-4 kw T DWWP C 1 50-200-5 kw T DWWP C 1 50-	DWWP C 50-160-0,75 kw T	DN 50	2.900	
DWWP C 50-160 -2.2 kw T DWWP C 50-200 -3 kw T DWWP C 50-200 -4 kw T DN 50 2.900 DWWP C 80-200 -4 kw T DN 80 2.900 DWWP C 80-200 -4 kw T DN 80 2.900 DWWP C 80-200-3 kw T DN 80 2.900 DWWP C 100-240 -5.5 kw T DN 100 2.900 DWWP C 100-240 -7.5 kw T DN 100 DWWP C 150-200 -1.1 kw T DN 50 1.450 DWWP C1 50-200 -1.5 kw T DN 80 1.450 DWWP C1 80-200 -2.5 kw T DN 80 1.450 DWWP C1 80-200 -3.5 kw T DN 80 1.450 DWWP C1 80-200 -3.5 kw T DN 80 1.450 DWWP C1 100-240-4 kw T DN 80 1.450 DWWP C1 100-240-5.5 kw T DN 80 1.450 DWWP C1 100-240-5.5 kw T DN 100 1.450 DWWP C1 100-270-7.5 kw T DN 100 1.450 DWWP C1 100-270-8.8 kw T DN 100 DWWP V 50-160 -1.1 kw T DN 50 2.900 DWWP V 50-160 -2.2 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -4 kw T DN 50 2.900 DWWP V 50-200 -2 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 80-200-3 kw T DN 50 2.900 DWWP V 80-200-3 kw T DN 50 2.900 DWWP V 80-200-3 kw T DN 50 2.900 DWWP V 100-240-5.5 kw T DN 100 1.450 DWWP CR 15-2-1.1 kw M DN 50 2.900 DWWP CR 15-2-1.1 kw M DN 50 2.900 DWWP CR 50-160-1.5 kw T DN 100 1.450 DWWP CR 50-160-1.5 kw T DN 50 2.900 DWWP CR 50-160-1.5 kw T DN 50 2.900	DWWP C 50-160-1,1 kw T	DN 50	2.900	
DWWP C 50-200 -3 kw T DWWP C 50-200 -4 kw T DWWP C 80-200-4 kw T DWWP C 80-200-3 kw T DWWP C 80-200-3 kw T DWWP C 80-200-4 kw T DWWP C 100-240 -5.5 kw T DWWP C 100-240 -5.5 kw T DWWP C 100-240 -7.5 kw T DWWP C 100-240 -7.5 kw T DWWP C 100-240 -7.5 kw T DWWP C 150-200 - 0.75 kw T DWWP C 150-200 - 1.1 kw T DWWP C 150-200 - 1.5 kw T DWWP C 1 50-200 - 1.5 kw T DWWP C 1 50-200 - 1.5 kw T DWWP C 1 80-160 - 1.5 kw T DWWP C 1 80-200-2.2 kw T DWWP C 1 100-240 -4.5 kw T DWWP C 1 100-270 -8.8 kw T DWWP C 1 100-270 -8.8 kw T DWWP C 1 0-1.5 kw T DWWP C 1 100-270 -8.8 kw T DWWP C 1 100-270 -8.8 kw T DWWP C 1 0-1.5 kw T DWWP C 1 0-2.2 kw T D	DWWP C 50-160-1,5 kw T	DN 50	2.900	
DWWP C 50-200 - 4 kw T DN 50 DWWP C 80-200-3 kw T DN 80 DWWP C 80-200-4 kw T DN 80 DWWP C 100-240 - 5.5 kw T DN 100 DWWP C 100-240 - 5.5 kw T DN 100 DWWP C 100-240 - 7.5 kw T DN 50 DWWP C 150-200 - 0.75 kw T DN 50 DWWP C 150-200 - 1.1 kw T DN 50 DWWP C 150-200 - 1.5 kw T DN 50 DWWP C 1 80-160 - 1.5 kw T DN 80 1.450 DWWP C 1 80-200-3 kw T DN 80 DWWP C 1 80-200-3 kw T DN 80 DWWP C 1 80-200-3 kw T DN 80 DWWP C 1 100-240-4 kw T DN 100 DWWP C 1 100-240-8.5 kw T DN 100 DWWP C 1 100-270-7.5 kw T DN 100 DWWP C 1 80-60 - 1.5 kw T DN 100 DWWP C 1 80-60 - 1.5 kw T DN 100 DWWP C 1 80-60 - 1.5 kw T DN 100 DWWP C 1 80-200-3 kw T DN 100 DWWP C 1 80-60 - 1.5 kw T DN 100 DWWP C 1 80-200-3 kw T DN 100 DWWP C 1 80-60 - 1.5 kw T DN 100 DWWP C 1 80-60 - 1.5 kw T DN 100 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-200 - 4 kw T DN 50 DWWP V 50-200 - 3 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP CR 50-160-1.5 kw T DN 90 DWWP CR 50-160-1.5	DWWP C 50-160 -2,2 kw T	DN 50	2.900	
DWWP C 80-200-3 kw T DN 80 2.900 DWWP C 80-200-4 kw T DN 80 2.900 DWWP C 100-240 -5.5 kw T DN 100 DWWP C 100-240 -7.5 kw T DN 100 DWWP C 150-200-0.75 kw T DN 50 DWWP C 150-200-0.75 kw T DN 50 DWWP C 150-200-1.1 kw T DN 50 DWWP C 150-200-1.5 kw T DN 80 DWWP C 150-200-1.5 kw T DN 80 DWWP C 150-200-1.5 kw T DN 80 DWWP C 180-10-1.5 kw T DN 80 DWWP C 180-200-3 kw T DN 80 DWWP C 180-200-3 kw T DN 100 DWWP C 1 100-240-4 kw T DN 100 DWWP C 1 100-270-8.8 kw T DN 50 DWWP C 1 100-270-8.8 kw T DN 50 DWWP V 50-160-1.1 kw T DN 50 DWWP V 50-160-2.2 kw T DN 50 DWWP V 50-200-3 kw T DN 80 DWWP V 100-240-5.5 kw T DN 100 DWWP V 100-240-5.5 kw T DN 100 DWWP V 100-270-8.8 kw T DN 100 DWWP V 100-270-8.8 kw T DN 100 DWWP CR 15-2-1.1 kw M DN 50 DWWP CR 15-2-1.3 kw M DN 50 DWWP CR 50-160-1.5 kw T DN 50 DWWP CR 50-160-2.2 kw T DN 50 DWWP CR 50-160-3.5 kw T DN 50 DW	DWWP C 50-200 -3 kw T	DN 50	2.900	
DWWP C 80-200-4 kw T DN 80 2.900 DWWP C 100-240-5.5 kw T DN 100 2.900 DWWP C 100-240-7.5 kw T DN 100 2.900 DWWP C 150-200-0.75 kw T DN 50 1.450 DWWP C 150-200-1.1 kw T DN 50 1.450 DWWP C 150-200-1.5 kw T DN 80 1.450 DWWP C 1 80-160-1.5 kw T DN 80 1.450 DWWP C 1 80-200-2.2 kw T DN 80 1.450 DWWP C 1 80-200-3 kw T DN 80 1.450 DWWP C 1 100-240-4 kw T DN 100 DWWP C 1 100-270-7.5 kw T DN 100 DWWP C 1 100-270-8.8 kw T DN 50 DWWP S 50-160-1.5 kw T DN 50 DWWP V 50-160-1.5 kw T DN 50 DWWP V 50-160-1.5 kw T DN 50 DWWP V 50-200-3 kw T DN 50 DWWP V 80-200-3 kw T DN 80 1.450 DWWP V 100-240-5.5 kw T DN 100 DWWP CR 15-2-1.1 kw M DN 50 2.900 DWWP CR 15-2-1.1 kw M DN 50 2.900 DWWP CR 50-160-1.5 kw T DN 50 2.900 DWWP CR 50-160-1.5 kw T DN 50 2.900 DWWP CR 50-160-1.5 kw T DN 50 2.900 DWWP CR 50-160-2.2 kw T DN 50 2.900 DWWP CR 50-160-2.2 kw T DN 50 2.900	DWWP C 50-200 -4 kw T	DN 50	2.900	
DWWP C 100-240 -5.5 kw T DN 100 DWWP C 100-240 -7.5 kw T DN 100 DWWP C1 50-200- 0.75 kw T DN 50 DWWP C1 50-200- 1.1 kw T DN 50 DWWP C1 50-200- 1.5 kw T DN 50 DWWP C1 50-200 -1.5 kw T DN 80 DWWP C1 80-200- 2.2 kw T DN 80 DWWP C1 80-200- 2.2 kw T DN 80 DWWP C1 80-200- 3 kw T DN 100 DWWP C1 100-240- 4 kw T DN 100 DWWP C1 100-270- 8.8 kw T DN 100 DWWP C1 100-270- 8.8 kw T DN 50 DWWP V S0-160 -1.5 kw T DN 50 DWWP V S0-160 -2.2 kw T DN 50 DWWP V S0-200 -3 kw T DN 80 DWWP V S0-200 -3 kw T DN 100 DWWP V S0-200 -3 kw T DN 50 DWWP V S0-200- 3 kw T DN 50 DWWP V S0-200- 3 kw T DN 80 DWWP V S0-200- 8 kw T DN 80 DWWP V S0-200- 8 kw T DN 50 DWWP CR 18-2-1.1 kw M DN 50 DWWP CR 50-160-1.5 kw T DN 50 DWWP CR 50-160-1.5 kw T DN 50 DWWP CR 50-160-2.2	DWWP C 80-200-3 kw T	DN 80	2.900	
DWWP C 100-240 -7.5 kw T DN 100 DWWP C1 50-200 - 0.75 kw T DN 50 DWWP C1 50-200 - 1.1 kw T DN 50 DWWP C1 50-200 - 1.5 kw T DN 50 DWWP C1 80-160 - 1.5 kw T DN 80 DWWP C1 80-200-2 kw T DN 80 DWWP C1 80-200-3 kw T DN 100 DWWP C1 80-200-3 kw T DN 100 DWWP C1 100-240-4 kw T DN 100 DWWP C1 100-270-8.8 kw T DN 100 DWWP C1 100-270-8.8 kw T DN 50 DWWP S0-160 - 1.5 kw T DN 50 DWWP V 50-160 - 1.5 kw T DN 50 DWWP V 50-160-1.5 kw T DN 50 DWWP V 50-160-1.5 kw T DN 50 DWWP V 50-200-3 kw T DN 50 DWWP V 80-200-3 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 100-240-4 kw T DN 50 DWWP V 100-240-4 kw T DN 50 DWWP V 50-160-1.5 kw T DN 50 DWWP V 50-200-4 kw T DN 50 DWWP V 50-200-3 kw T DN 80 DWWP V 50-200-3 kw T DN 80 DWWP V 100-240-4 kw T DN 80 DWWP V 100-240-4.5 kw T DN 80 DWWP V 100-270-8.8 kw T DN 100 DWWP CR 15-2-1.1 kw M DN 50 DWWP CR 16-2-1.3 kw M DN 50 DWWP CR 20-2.1 kw T DN 50 DWWP CR 50-100-2.2 kw T DN 50 DWWP CR 50-100-2.2 kw T DN 50 DWWP CR 50-100-2.2 kw T DN 50 DWWP CR 50-100-2 kw T DN 50	DWWP C 80-200-4 kw T	DN 80	2.900	
DWWP C1 50-200- 0,75 kw T DN 50 1.450 DWWP C1 50-200- 1,1 kw T DN 50 DWWP C1 50-200- 1,5 kw T DN 50 DWWP C1 50-200- 1,5 kw T DN 50 DWWP C1 80-200- 2,2 kw T DN 80 DWWP C1 80-200- 2,2 kw T DN 80 DWWP C1 80-200- 3,5 kw T DN 80 DWWP C1 100-240- 4 kw T DN 100 DWWP C1 100-240- 4,5 kw T DN 100 DWWP C1 100-270- 7,5 kw T DN 100 DWWP C1 100-270- 8,8 kw T DN 50 DWWP V 50-160 - 1,5 kw T DN 50 DWWP V 50-160 - 1,5 kw T DN 50 DWWP V 50-200 - 3 kw T DN 50 DWWP V 80-160- 1,5 kw T DN 50 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240- 4 kw T DN 80 DWWP V 100-240- 5,5 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240- 5,5 kw T DN 100 DWWP V 100-240- 5,5 kw T DN 100 DWWP V 100-240- 5,5 kw T DN 100 DWWP V 100-270- 8,8 kw T DN 100 DWWP CR 15-2-1,1 kw M DN 50 DWWP CR 15-2-1,1 kw M DN 50 DWWP CR 50-160- 1,5 kw T DN 50 DWWP CR	DWWP C 100-240 -5,5 kw T	DN 100	2.900	
DWWP C1 50-200-1,1 kw T DN 50 1,450 DWWP C1 50-200-1,5 kw T DN 80 1,450 DWWP C1 80-160-1,5 kw T DN 80 1,450 DWWP C1 80-200-2,2 kw T DN 80 1,450 DWWP C1 80-200-3 kw T DN 80 1,450 DWWP C1 80-200-3 kw T DN 80 1,450 DWWP C1 100-240-4 kw T DN 100 1,450 DWWP C1 100-240-5,5 kw T DN 100 1,450 DWWP C1 100-270-8,8 kw T DN 100 DWWP V 50-160-1,1 kw T DN 50 DWWP V 50-160-1,5 kw T DN 50 DWWP V 50-200-4 kw T DN 50 DWWP V 50-200-3 kw T DN 80 1,450 DWWP V 80-200-2,2 kw T DN 80 1,450 DWWP V 80-200-3 kw T DN 80 1,450 DWWP V 100-240-4 kw T DN 100 1,450 DWWP V 100-270-7,5 kw T DN 100 1,450 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP CR 15-2-1,1kw M DN 50 2,900 DWWP GR 15-2-1,1kw M DN 50 2,900 DWWP GR 50-160-1,5 kw T DN 50 2,900 DWWP GR 50-160-2,2 kw T DN 50 2,900 DWWP GR 50-160-3 kw T DN 50 2,900	DWWP C 100-240 -7,5 kw T	DN 100	2.900	
DWWP C1 50-200 -1.5 kw T DN 50 1.450 DWWP C1 80-160 -1.5 kw T DN 80 1.450 DWWP C1 80-200-2.2 kw T DN 80 1.450 DWWP C1 80-200-3 kw T DN 80 1.450 DWWP C1 100-240-4 kw T DN 100 1.450 DWWP C1 100-240-5.5 kw T DN 100 1.450 DWWP C1 100-270-8.8 kw T DN 100 DWWP V 50-160 -0.75 kw T DN 50 DWWP V 50-160 -1.1 kw T DN 50 DWWP V 50-160 -1.2 kw T DN 50 DWWP V 50-200 -3 kw T DN 80 DWWP V 80-200-2.2 kw T DN 80 DWWP V 80-200-3 kw T DWWP V 80-200-5.5 kw T DN 100 DWWP V 100-240-4 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-270-8.8 kw T DN 100 DWWP V 100-270-8.8 kw T DN 50 DWWP V 100-240-5.5 kw T DN 100 DWWP V 100-270-8.8 kw T DN 100 DWWP CR 15-2-1.1 kw M DN 50 DWWP GR 15-2-1.35 kw M DN 50 DWWP GR 50-160-1.5 kw T	DWWP C1 50-200- 0,75 kw T	DN 50	1.450	
DWWP C1 80-160 -1,5 kw T DN 80 1,450 DWWP C1 80-200-2,2 kw T DN 80 1,450 DWWP C1 100-240-4 kw T DN 100 1,450 DWWP C1 100-240-5,5 kw T DN 100 1,450 DWWP C1 100-270-7,5 kw T DN 100 1,450 DWWP C1 100-270-8,8 kw T DN 100 DWWP V 50-160 -0,75 kw T DN 50 DWWP V 50-160 -1,1 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-200 -3 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 100 DWWP V 100-240-4 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP CR 15-2-1,1kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-200-3 kw T DN 50	DWWP C1 50-200- 1,1 kw T	DN 50	1.450	
DWWP C1 80-200-2,2 kw T DN 80 1.450 DWWP C1 80-200-3 kw T DN 80 1.450 DWWP C1 100-240-4 kw T DN 100 1.450 DWWP C1 100-240-5,5 kw T DN 100 DWWP C1 100-270-7,5 kw T DN 100 DWWP C1 100-270-8,8 kw T DN 100 DWWP V 50-160 -0,75 kw T DN 50 DWWP V 50-160 -1,1 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -2,2 kw T DN 50 DWWP V 50-200 -3 kw T DN 80 DWWP V 80-200-2,2 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP C100-270-8,8 kw T DN 100 DN 50	DWWP C1 50-200 -1,5 kw T	DN 50	1.450	
DWWP C1 80-200-3 kw T DN 80 1.450 DWWP C1 100-240-4 kw T DN 100 1.450 DWWP C1 100-240-5,5 kw T DN 100 DWWP C1 100-270-7,5 kw T DN 100 DWWP C1 100-270-7,5 kw T DN 100 DWWP C1 100-270-8,8 kw T DN 100 DWWP V 50-160 -0.75 kw T DN 50 DWWP V 50-160 -1.1 kw T DN 50 DWWP V 50-160 -1.5 kw T DN 50 DWWP V 50-160 -2.2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 80-200-2.2 kw T DN 80 DWWP V 80-200-2.2 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5.5 kw T DN 100 DWWP V 100-270-7.5 kw T DN 100 DWWP V 100-270-8.8 kw T DN 100 DWWP CR 15-2-1.1 kw M DN 50 DWWP GR 15-2-1.35 kw M DN 50 DWWP GR 50-160-1.5 kw T DN 50 DWWP GR 50-200-3 kw T DN 50	DWWP C1 80-160 -1,5 kw T	DN 80	1.450	
DWWP C1 100-240-4 kw T DN 100 DWWP C1 100-240-5,5 kw T DN 100 DWWP C1 100-270-7,5 kw T DN 100 DWWP C1 100-270-8,8 kw T DN 100 DWWP C1 100-270-8,8 kw T DN 100 DWWP V50-160 -0,75 kw T DN 50 DWWP V50-160 -1,1 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -2,2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3,2 kw T DN 80 DWWP V 80-200- 3,5 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP CR 15-2-1,1 kw M DN 50 DWWP GR 15-2-1,1 kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200 -3 kw T	DWWP C1 80-200-2,2 kw T	DN 80	1.450	
DWWP C1 100-240-5,5 kw T DN 100 DWWP C1 100-270-7,5 kw T DN 100 DWWP C1 100-270-8,8 kw T DN 100 DWWP V50-160-0,75 kw T DN 50 DWWP V 50-160-1,1 kw T DN 50 DWWP V 50-160-1,5 kw T DN 50 DWWP V 50-160-2,2 kw T DN 50 DWWP V 50-200-3 kw T DN 50 DWWP V 50-200-4 kw T DN 80 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200-2,2 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP CR 15-2-1,1 kw M DN 50 DWWP GR 15-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP C1 80-200-3 kw T	DN 80	1.450	
DWWP C1 100-270-7.5 kw T DN 100 1.450 DWWP C1 100-270-8.8 kw T DN 100 1.450 DWWP V 50-160 -0.75 kw T DN 50 DWWP V 50-160 -1.1 kw T DN 50 DWWP V 50-160 -1.5 kw T DN 50 DWWP V 50-160 -1.5 kw T DN 50 DWWP V 50-160 -2.2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1.5 kw T DN 80 DWWP V 80-200- 2.2 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5.5 kw T DN 100 DWWP V 100-270-7.5 kw T DN 100 DWWP V 100-270-8.8 kw T DN 100 DWWP CR 15-2-1.1kw M DN 50 DWWP GR 19-2-1.35 kw M DN 50 DWWP GR 50-160-1.5 kw T DN 50 DWWP GR 50-160-1.2 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP C1 100-240-4 kw T	DN 100	1.450	
DWWP C1 100-270-8.8 kw T DN 100 DWWP V 50-160 -0,75 kw T DN 50 DWWP V 50-160 -1,1 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -2,2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 15-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP C1 100-240-5,5 kw T	DN 100	1.450	
DWWP V 50-160 -0,75 kw T DN 50 DWWP V 50-160 -1,1 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -2,2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200-2,2 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 80-200-3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 50 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 15-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP C1 100-270-7,5 kw T	DN 100	1.450	
DWWP V 50-160 -1,1 kw T DN 50 2.900 DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -2,2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 100 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP C1 100-270-8,8 kw T	DN 100	1.450	
DWWP V 50-160 -1,5 kw T DN 50 DWWP V 50-160 -2,2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP V 50-160 -0,75 kw T	DN 50	2.900	
DWWP V 50-160 -2.2 kw T DN 50 DWWP V 50-200 -3 kw T DN 50 DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 50 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP V 50-160 -1,1 kw T	DN 50	2.900	
DWWP V 50-200 -3 kw T DN 50 2.900 DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP V 50-160 -1,5 kw T	DN 50	2.900	
DWWP V 50-200 -4 kw T DN 50 DWWP V 80-160-1,5 kw T DN 80 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50	DWWP V 50-160 -2,2 kw T	DN 50	2.900	
DWWP V 80-160-1,5 kw T DN 80 1.450 DWWP V 80-200- 2,2 kw T DN 80 DWWP V 80-200- 3 kw T DN 80 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 DN 50 DWWP GR 50-200-3 kw T DN 50	DWWP V 50-200 -3 kw T	DN 50	2.900	
DWWP V 80-200- 2,2 kw T DN 80 1.450 DWWP V 80-200- 3 kw T DN 80 1.450 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 DWWP GR 50-200-4 km T	DWWP V 50-200 -4 kw T	DN 50	2.900	
DWWP V 80-200- 3 kw T DN 80 1.450 DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 18-2-1,35 kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 DWWP GR 50-200-4 km T	DWWP V 80-160-1,5 kw T	DN 80	1.450	
DWWP V 100-240-4 kw T DN 100 DWWP V 100-240-5,5 kw T DN 100 DWWP V 100-270-7,5 kw T DN 100 DWWP V 100-270-8,8 kw T DN 100 DWWP GR 15-2-1,1 kw M DN 50 DWWP GR 18-2-1,35 kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50	DWWP V 80-200- 2,2 kw T	DN 80	1.450	
DWWP V 100-240-5,5 kw T DN 100 1.450 DWWP V 100-270-7,5 kw T DN 100 1.450 DWWP V 100-270-8,8 kw T DN 100 1.450 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 18-2-1,35 kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 DN	DWWP V 80-200- 3 kw T	DN 80	1.450	
DWWP V 100-270-7,5 kw T DN 100 1.450 DWWP V 100-270-8,8 kw T DN 100 1.450 DWWP GR 15-2-1,1kw M DN 50 DWWP GR 18-2-1,35 kw M DN 50 DWWP GR 19-2-1,35 kw M DN 50 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T	DWWP V 100-240-4 kw T	DN 100	1.450	
DWWP V 100-270-8,8 kw T DN 100 1.450 DWWP GR 15-2-1,1kw M DN 50 2.900 DWWP GR 18-2-1,35 kw M DN 50 2.900 DWWP GR 19-2-1,35 kw M DN 50 2.900 DWWP GR 50-160-1,5 kw T DN 50 2.900 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 2.900 DWWP GR 50-200-3 kw T DN 50 2.900	DWWP V 100-240-5,5 kw T	DN 100	1.450	
DWWP GR 15-2-1,1kw M DN 50 2.900 DWWP GR 18-2-1,35 kw M DN 50 2.900 DWWP GR 19-2-1,35 kw M DN 50 2.900 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 2.900 DWWP GR 50-200-3 kw T DN 50 2.900	DWWP V 100-270-7,5 kw T	DN 100	1.450	
DWWP GR 18-2-1,35 kw M DN 50 2.900 DWWP GR 19-2-1,35 kw M DN 50 2.900 DWWP GR 50-160-1,5 kw T DN 50 2.900 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 2.900 DWWP GR 50-200-3 kw T DN 50 2.900	DWWP V 100-270-8,8 kw T	DN 100	1.450	
DWWP GR 19-2-1,35 kw M DN 50 2.900 DWWP GR 50-160-1,5 kw T DN 50 DWWP GR 50-160-2,2 kw T DN 50 DWWP GR 50-200-3 kw T DN 50 2.900 DWWP GR 50-200-3 kw T DN 50 2.900	DWWP GR 15-2-1,1kw M	DN 50	2.900	
DWWP GR 50-160-1,5 kw T DN 50 2.900 DWWP GR 50-160-2,2 kw T DN 50 2.900 DWWP GR 50-200-3 kw T DN 50 2.900	DWWP GR 18-2-1,35 kw M	DN 50	2.900	
DWWP GR 50-160-2,2 kw T	DWWP GR 19-2-1,35 kw M	DN 50	2.900	
DWWP GR 50-200-3 kw T DN 50 2.900	DWWP GR 50-160-1,5 kw T	DN 50	2.900	
DIAME CD 50 200 / htt.T	DWWP GR 50-160-2,2 kw T	DN 50	2.900	
DWWP GR 50-200-4 kw T DN 50 2.900	DWWP GR 50-200-3 kw T	DN 50	2.900	
	DWWP GR 50-200-4 kw T	DN 50	2.900	

IMPELLER TYPES

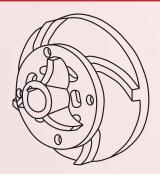
V Type Impeller (Vortex)

Semi-open type free vortex impellers are located at a certain distance from the scroll suction port. It creates a forced vortex motion inside the scroll, and in this way it can pass solid particles. They are generally used for fibrous liquids. It is suitable for low pump heads, but the overall pump efficiency is considerably lower than previous types. For some models, embedded type impeller application can be made. With this type of design, permeability of solid particles in the diameter of the pump mouth can be achieved.



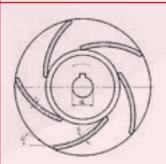
GR Type Impeller (With Grinder Blade)

It is a semi-open impeller type pump with shredder blades. Hard and Stainless material shredder blade system in front of the pump impeller reduces the size of the soft solid particles in the liquid to dimensions that do not clog the pipe. The impeller of the pump is of the semi-open type. It is suitable for small flow and high pressure systems, but pump efficiencies are generally low.



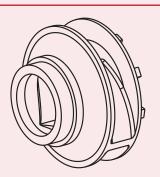
D Type Impeller (Open Impeller)

Open impeller water pumps are suitable for drip and flood irrigation up to a maximum height of 22 m and for lightly contaminated slab water removal.



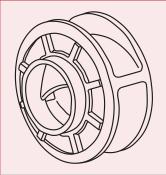
Type C Impeller (Closed Impeller)

They are closed type impellers and are suitable for use with 2900 rpm motor pumps. Solid particle sizes are smaller, pressures are higher and flow rates are relatively smaller.



C1 Type Impeller (Closed Impeller)

They are closed type impellers with large channels, large flow, small pressure, which can press large-sized solid particles without clogging. It is used in pumps with a motor speed of 1450 rpm.









BLACK BOX

BLACK BOX

Tanım

- Yüksek Yoğunluklu Polietilenden (HDPE) malzemeden imal edilmiş
- Farklı ebatlarda ve kapasitelerde (50 lt 1000 lt) kabin hacimleri,
- Pompa ömrünü ve verimliliğini artıran kompakt sistem tasarımı,
- Kullanım yerine göre mukavemet hesabı yapılmış gövde,
- Dalgıç pompalar için basınca dayanıklı hortum ve kamlok bağlantısı ile pano, flatör bağlantı yuvaları hazır,
- Entegre sepet filtre, (sadece ikiz gövdeli modellerde)
- Zemin üstü veya zemin alti kurulum imkanı,
- Betondan yapılan terfi merkezlerine göre kurulumu, bakımı ve işletimi en kolay ve en ekonomik tercih,
- Korozif maddelere karşı yüksek dayanımlı malzeme,
- Kabin hacmi ve pompa ebatına bağlı olarak tek ya da iki pompaya uygun,
- İsteğe özel farklı bağlantı çapları imkanı,

Kullanım Alanları

- Suyu bir yerden başka bir yere pompalamak için pompaları ve ekipmanlarını içeren bir sistemdir.
- Su temini, su ve atık su arıtma tesisleri ve kanalizasyon sistemleri gibi çeşitli sistemler için kullanılır.
- •Betonarme gövdeli sistemlerdeki kurulum, bakım, işletme maliyetinden tamamen kurtaran Paket Pompa İstasyonları, kompakt gövde tasarımı ile sahadaki inşaat işlerini minimize ederken, işletim maliyetini düşürmektedir.

Kullanım Yerleri

- Binaların otoparklarında, hijyen istenen restoran ve yemekhane v.b. gibi rögar kullanımı yerine tercih edilmektedir.
- Rögar kullanımı uygun olmayan projeler.



WE ARE **SENSITIVE** TO **LIFE**