

# NOVA UP

ISTRUZIONI PER L'INSTALLAZIONE E LA MANUTENZIONE  
INSTRUCTIONS FOR INSTALLATION AND MAINTENANCE  
INSTRUCTIONS POUR L'INSTALLATION ET LA MAINTENANCE  
INSTALLATIONS - UND WARTUNGSANLEITUNGEN  
INSTRUCCIONES DE INSTALACIÓN Y MANTENIMIENTO  
GEBRUIKS - EN ONDERHOUDSAANWIJZINGEN  
INSTALLATIONS - OCH UNDERHÅLLSANVISNING  
INSTRUCȚIUNI PENTRU INSTALARE ȘI ÎNȚEȚINERE  
NÁVOD NA INŠTALÁCIU A ÚDRŽBU  
ĮRENGIMO IR PRIEŽIŪROS INSTRUKCIJOS  
ΟΔΗΓΙΕΣ ΓΙΑ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ ΚΑΙ ΣΥΝΤΗΡΗΣΗ  
РУКОВОДСТВО ПО МОНТАЖУ И ТЕХНИЧЕСКОМУ ОБСЛУЖИВАНИЮ  
KURMA VE BAKIM BİLGİLERİ  
إرشادات خاصة في عملية التركيب والصيانة  
INSTRUKCJA MONTAŻU I KONSERWACJI



NOVA UP 180MA - MNA
NOVA UP 300MA - MNA
NOVA UP 600MA - MNA
NOVA UP 300MNA "X"
NOVA UP 600MNA "X"

IT - ITALIANO  
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**KEY**

The following symbols have been used in the discussion:



Situation of general danger. Failure to respect the instructions that follow may cause harm to persons and property.

**WARNINGS**

Read this documentation carefully before installation. Installation and operation must comply with the local safety regulations in force in the country in which the product is installed. Everything must be done in a workmanlike manner.

Failure to respect the safety regulations not only causes risk to personal safety and damage to the equipment, but invalidates every right to assistance under guarantee.

**Skilled personnel**

It is advisable that installation be carried out by competent, skilled personnel in possession of the technical qualifications required by the specific legislation in force. The term skilled personnel means persons whose training, experience and instruction, as well as their knowledge of the respective standards and requirements for accident prevention and working conditions, have been approved by the person in charge of plant safety, authorizing them to perform all the necessary activities, during which they are able to recognize and avoid all dangers.

(Definition for technical personnel IEC 364)



The appliance is not intended to be used by persons (including children) with reduced physical, sensory or mental capacities, or who lack experience or knowledge, unless, through the mediation of a person responsible for their safety, they have had the benefit of supervision or of instructions on the use of the appliance. Children must be supervised to ensure that they do not play with the appliance.

**Safety**

Use is allowed only if the electric system is in possession of safety precautions in accordance with the regulations in force in the country where the product is installed. (for Italy CEI 64/2)



The power supply cable must never be used to carry or shift the pump.



Never pull on the cable to detach the plug from the socket.



If the power cable is damaged, it must be replaced by the manufacturer or by their authorised technical assistance service, so as to avoid any risk.

Failure to observe the warnings may create situations of risk for persons or property and will void the product guarantee.

## RESPONSIBILITY



The Manufacturer does not vouch for correct operation of the electropumps or answer for any damage that they may cause if they have been tampered with, modified and/or run outside the recommended work range or in contrast with other indications given in this manual.

The Manufacturer declines all responsibility for possible errors in this instructions manual, if due to misprints or errors in copying. The Manufacturer reserves the right to make any modifications to products that it may consider necessary or useful, without affecting their essential characteristics

## 1. APPLICATIONS

The pumps in the NOVA UP series are of the submersible type, designed and made for pumping cloudy water without fibres, prevalently for domestic uses of fixed applications, with manual or automatic operation, for drying basements and garages subject to flooding, for pumping drainage wells, pumping rainwater collecting traps or infiltrations from roof gutters, etc.

Thanks to their compact and handy shape, they are also used for particular applications as portable pumps for emergency situations such as for drawing water from tanks or rivers, draining swimming pools and fountains, excavations or underpasses. Also suitable for gardening and general hobby activity.



These pumps cannot be used in swimming pools, ponds or basins where people are present, or for pumping hydrocarbons (petrol, diesel fuel, combusti-

ble oils, solvents, etc.) in accordance with the accident-prevention regulations in force.

## 2. PUMPED LIQUIDS

	NOVA UP
Fresh water:	•
Rainwater:	•
Clear waste water:	•
Sewage:	
Foul waste water containing solid bodies with long fibres:	
Fountain water:	•
River or lake water:	•

## 3. TECHNICAL DATA AND LIMITATIONS OF USE

- **Supply voltage:** see electrical data plate
- **Delayed line fuses (220-240v version):** indicative values (Ampere)

Model	Line fuses 220-240V 50Hz
NOVA UP 600MA/MNA	4
NOVA UP 300MA/MNA	2

- **Grade of motor protection:** IP68
- **Protection rating:** F
- **Storage temperature:** -10°C +40°C
- **Range of temperature of the fluid:** from 0°C to 35°C

according to EN 60335-2-41 for domestic use

- **Max. granulometry:** 10 mm

Model	Hz	Volt (V)	P1 (W)	Amp (A)	Hmax (m)	Flow max (m3/h)	Max Immersion (m)
<b>180 MA-MNA</b>	50	220-240	260	1,2	5	7,5	7
<b>300 MA-MNA</b>	50	220-240	380	1,5	7	9,9	7
	60	115	380	2,8	7	8,7	5
	60	230	380	1,2	7	9	7
<b>600 MA-MNA</b>	50	220-240	770	3,5	9,5	13,8	7
	60	115	780	5,6	9,2	13,8	5
	60	230	700	2,5	9,2	13,8	7
<b>300 MNA "X"</b>	50	220-240	380	1,5	7	8,4	7
<b>600 MNA "X"</b>	50	220-240	770	3,5	9,5	11,7	7

Model	Minimum draught depth	Max. Granulometry
<b>NOVA UP 180MA - MNA</b>	60 mm	10 mm
<b>NOVA UP 300MA - MNA</b>	5 mm (without filter)	
<b>NOVA UP 600MA - MNA</b>	70 mm 5 mm (without filter)	
<b>NOVA UP 300MNA "X"</b>	70 mm	
<b>NOVA UP 600MNA "X"</b>	80 mm	



The pump which does not stand on a base cannot support the weight of the pipes, which must be supported in some other way.

## 4. MANAGEMENT

### 4.1 Storage

All the pumps must be stored in a dry covered place, with possible constant air humidity, free from vibrations and dust.

They are supplied in their original pack in which they must remain until the time of installation.

### 4.2 Transport

Avoid subjecting the products to needless impacts and collisions.

### 4.3 Weight

The adhesive plate on the packaging indicates the total weight of the pump

## 5. WARNINGS

- Use in cellars, basements, etc. is allowed only if the electric system is in possession of safety precautions in accordance with the regulations in force.
- The pump is provided with a carrying handle which can also be used to lower it into wells or deep excavations by means of a rope.

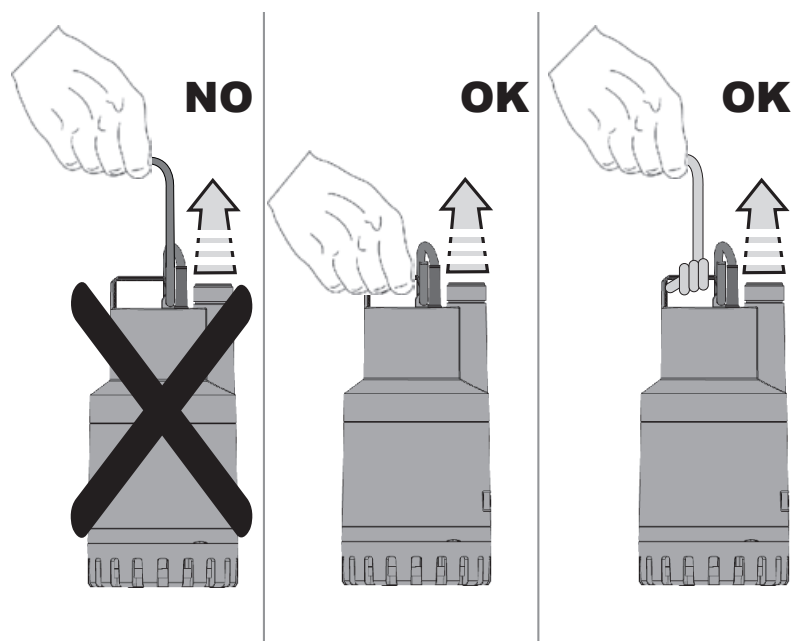


Figure 1



**The pumps must never be carried, lifted or allowed to operate suspended from the power cable.**

- If the power supply cable is damaged in any way it must be replaced and not repaired. Skilled personnel must therefore be employed, in possession of the technical qualifications required by the Regulations in force.
- Qualified personnel must be employed also for electrical repairs which, if badly carried out, could cause damage and accidents.
- The pump must never be allowed to run when dry.
- The Manufacturer does not vouch for the correct operation of the pump if it has been tampered with or modified.
- On the body there is a venting hole to avoid phenomena of cavitation when starting the pump. It is therefore normal for a small amount of water to come out of the pump during operation.

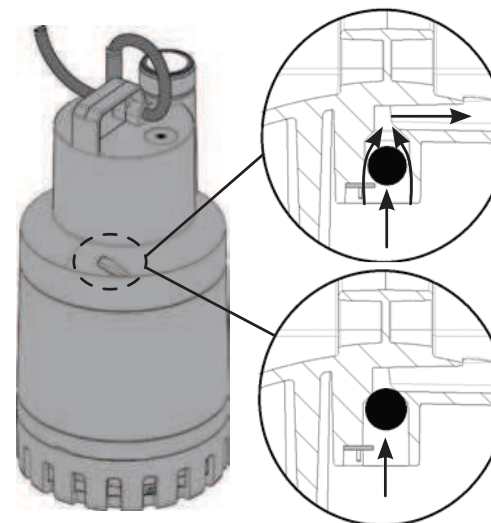


Figure 2

- The sealing device contains lubricant which is non-toxic but which may alter the characteristics of the water, in the case of pure water, if the pump were to have any leaks.

## 6. INSTALLATION

- If the bottom of the trap where the pump is to work is particularly dirty, a support should be provided on which to place the pump so as to avoid blocking of the suction grid.

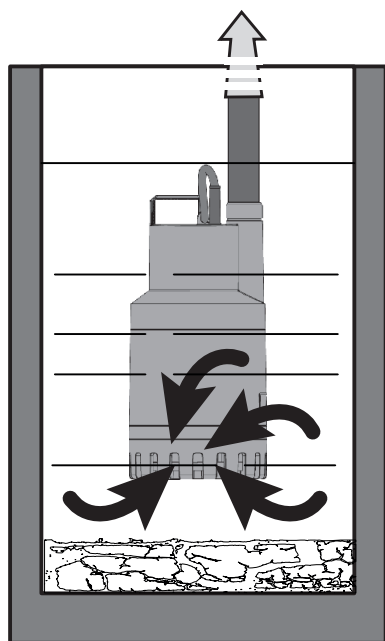


Figure 3

- It is advisable to use pipes having an internal diameter of 30 mm, to avoid the decrease of pump performance and the possibility of blocking.
- Totally immerse the pump in the water.
- Ensure that the minimum dimensions of the trap in which it is housed are as in the following table:

	Base dimensions (mm)	Height (mm)
<b>NOVA UP 180 - 300</b>	400x400	560
<b>NOVA UP 600</b>	400x400	600

- The dimensions of the trap must always be in relation to the quantity of water arriving and to the flow of the pump, so as not to subject the motor to excessive starts



**The pump must be installed in vertical position!**

### 6.1 "Zero" Suction

In models where it is allowed, it is possible to reduce the minimum suction level (see chap. 3), removing the filter as indicated in the figure.



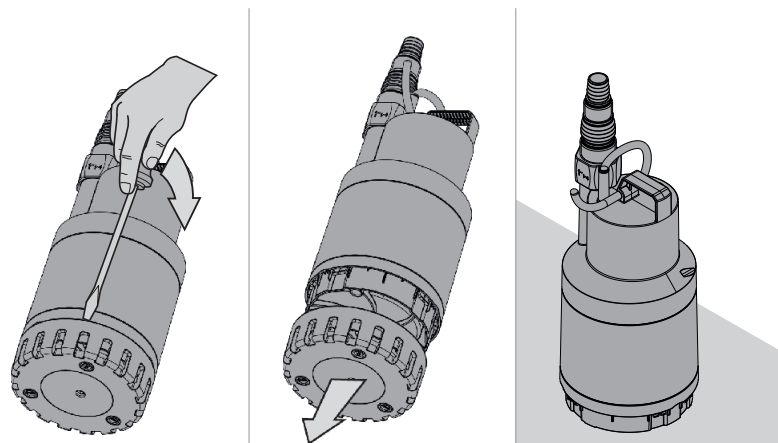


Figure 2

 The "Zero" suction function is allowed only in models where there is no fixing screw on the filter.

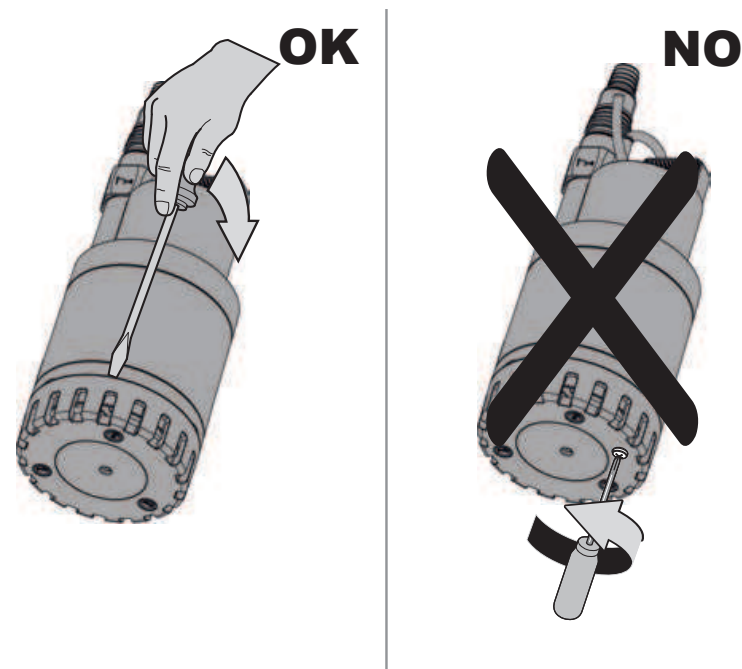



Figure 5

## 7. ELECTRICAL CONNECTION

 Always respect the safety regulations!  
Ensure that the mains voltage corresponds to the value indicated on the data plate and THAT IT IS POSSIBLE TO MAKE A GOOD EARTH CONNECTION.

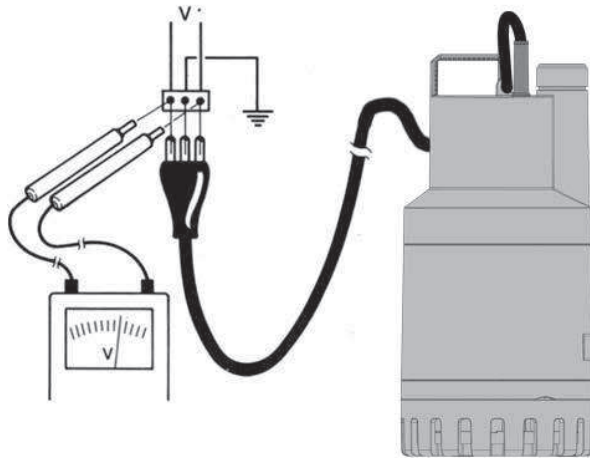


Figure 6



The length of the power cable on the pump limits the maximum depth of immersion in use of the pump.

## 8. START-UP

The models with a float switch are started automatically when the water level rises **(a)**.

Pumps without a float are started manually by a switch upstream from the socket (not supplied) **(b)**.

- It is recommended to equip fixed pumping stations with a device with a differential trip current lower than 30 mA (for the version 220-240V version).
- The single-phase motors are equipped with built-in thermal overload protection and can be connected directly to the mains. NB: if the motor is overloaded it stops automatically. Once it has cooled it starts again automatically without requiring any manual intervention.
- Do not damage or cut the power supply cable. If this should occur, have the repair or replacement carried out by specialised, qualified personnel

a) MA

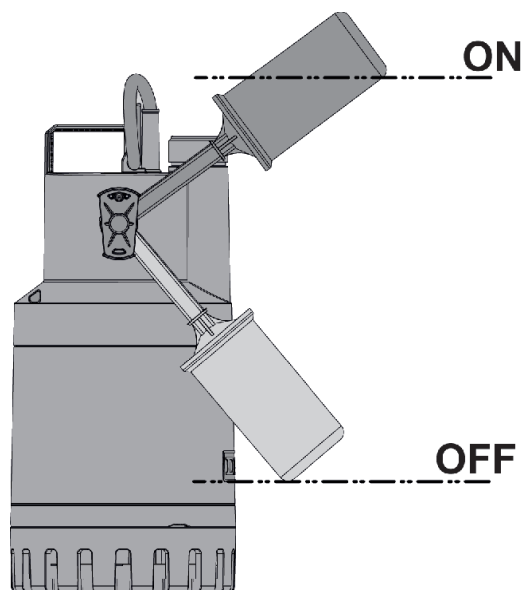


Figure 7

	Level On (cm)	Level Off (cm)	Difference ON-OFF (cm)
<b>NOVA UP MA 300-180</b>	29	12	17
<b>NOVA UP MA 600</b>	33	16	17

b) MNA - MNA-X

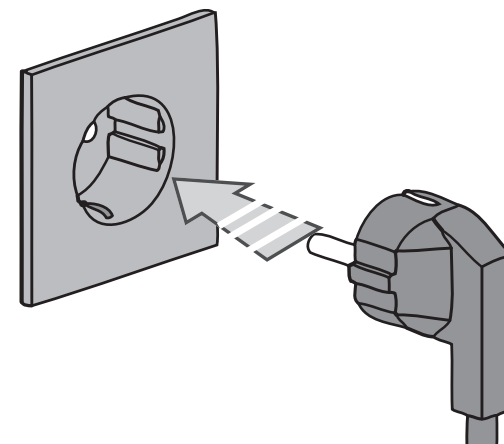


Figure 8

## 9. PRECAUTIONS

- **RISK OF FROST:** when the pump remains inactive at a temperature lower than 0°C, it is necessary to ensure that there is no water residue which could freeze, causing cracks in the plastic parts.
- If the pump has been used with substances that tend to form a deposit, rinse it after use with a powerful jet of water in order to avoid the formation of deposits or encrustations which would reduce the characteristics of the pump.
- Ensure that the float switch does not touch the walls of the trap during operation.
- Ensure that the OFF level is not too close to the suction grid, minimum height below the filter 60/70mm.

## 10. MAINTENANCE AND CLEANING

In normal operation the pump does not require any type of maintenance. The pump may not be dismantled except by skilled and qualified personnel, in possession of the qualifications required by the specific regulations on the subject. In any case, all repair and maintenance work must be carried out only after having disconnected the pump from the supply mains.

When restarting the pump, ensure that the suction filter is always fitted so as not to create the risk or possibility of accidental contact with moving parts.

If the pump has been used with substances that tend to form a deposit, rinse it after use with a powerful jet of water.

### 10.1 Cleaning the suction grid

- Switch off the electric power supply to the pump.
- Drain the pump.
- On the models where it is present, unscrew the fixing screw on the filter (Fig.9).
- Loosen the suction grid by inserting a screwdriver between the pump jacket and the suction grid and turning it (Fig.10).
- Remove the suction grid (Fig.11)
- Clean and reassemble the suction grid.

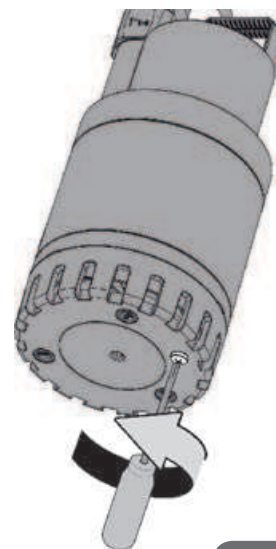


Figure 9

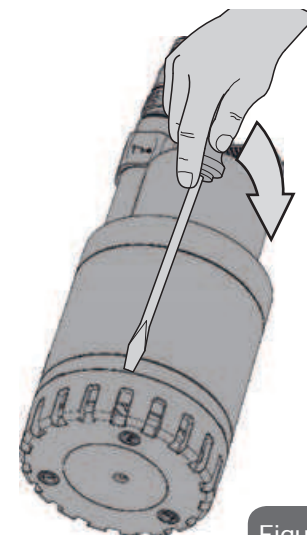


Figure 10

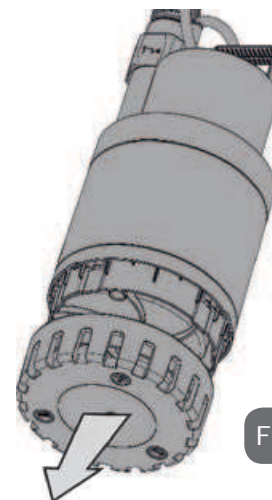


Figure 11

## 10.2.Cleaning the impeller

- Switch off the electric power supply to the pump.
- On the models where it is present, unscrew the fixing screw on the filter (Fig.9).
- Loosen the suction grid by inserting a screwdriver between the pump jacket and the suction grid and turning it (Fig.10).
- Remove the bottom (Fig.11).
- Remove and clean the diaphragm.
- Wash the pump with clean water to remove possible impurities between the motor and the pump jacket.
- Clean the impeller.
- Check that the impeller can turn freely.
- Assemble the parts, proceeding in inverse order to disassembly.

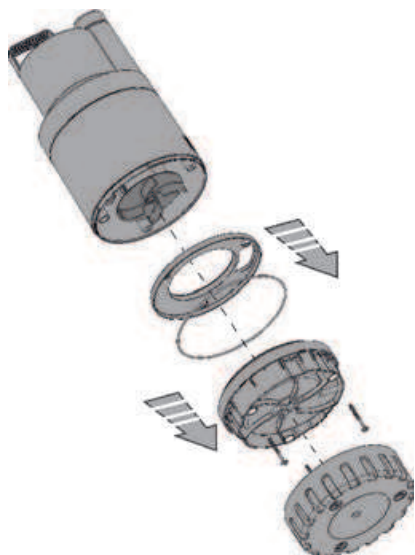


Figure 12

## 11. MODIFICATIONS AND SPARE PARTS



Any modification made without prior authorisation relieves the manufacturer of all responsibility. All the spare parts used in repairs must be authentic and all accessories must be authorised by the manufacturer, in order to ensure maximum safety of the machines and of the systems in which they may be installed.



If the power supply cable of this appliance is damaged, the repair must be carried out by specialised personnel to prevent all risks.

## 12. TROUBLESHOOTING

FAULTS		CHECKS (possible causes)	REMEDIES
1	The motor does not start and does not make any noise.	A. Check that voltage is reaching the motor. B. Check the protection fuses. C. The switch is not activated by the float	B. If burnt out, change them. C. - Check that the float can move freely. - Increase the depth of the trap
2	The pump does not deliver	A. The suction grid or the pipes are blocked B. The impeller is worn or blocked. C. The head required is higher than the pump's characteristics	A. Remove the obstructions. B. Replace the impeller or remove the obstruction.
3	The pump does not stop.	A. The switch is not deactivated by the float	A. Check that the float can move freely.

FAULTS		CHECKS (possible causes)	REMEDIES
4	The flow rate is insufficient	A- Check that the suction grid is not partially blocked Check that the impeller or the delivery pipe are not partly blocked or encrusted. C. Ensure that the check valve (if contemplated) is not partially blocked	A. Remove any obstructions. B. Remove any obstructions. c. Accurately clean the check valve
5	The pump stops after having run for a short time	A. The thermal overload protection device stops the pump.	A. Check that the fluid to be pumped is not too dense as it would cause overheating of the motor. Check that the water temperature is not too high.

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