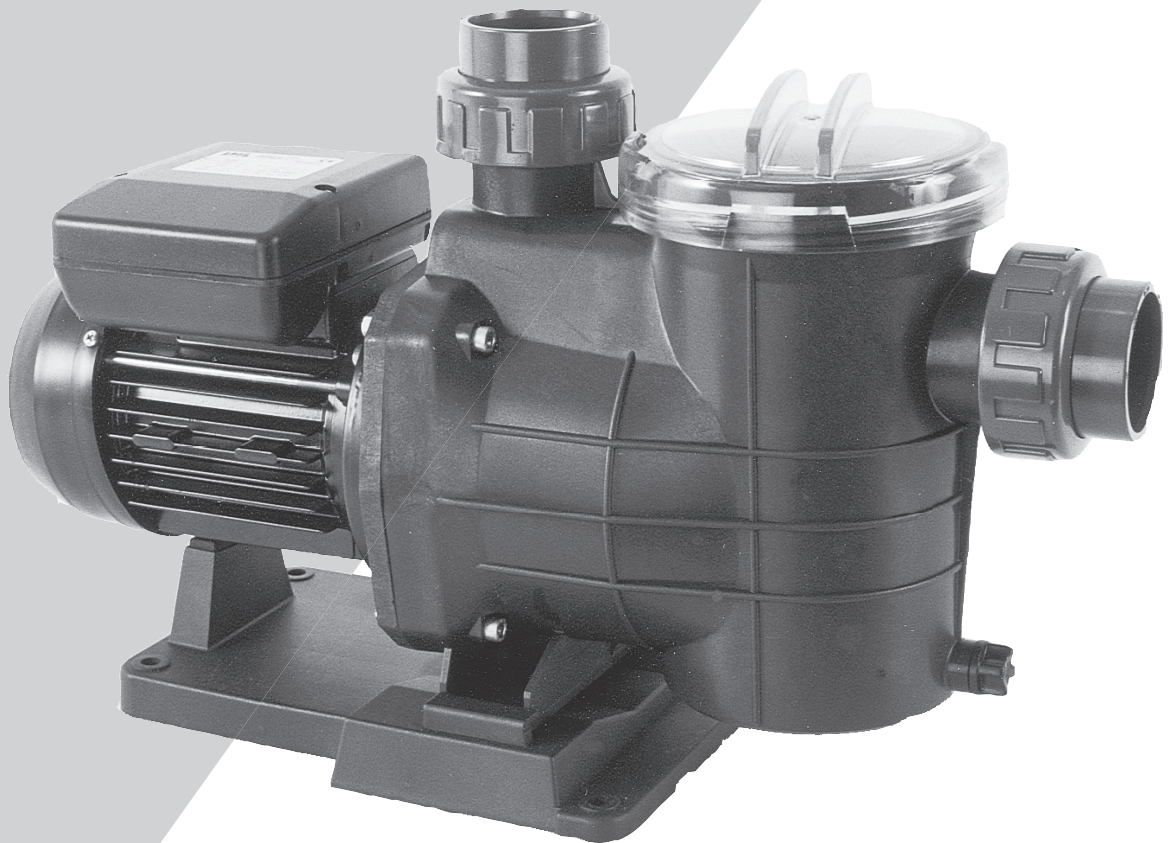


**BOMBAS AUTOASPIRANTES PARA PISCINA
SELF-PRIMING PUMPS FOR SWIMMING-POOLS
POMPES AUTOMORÇANTES POUR PISCINES
SELBSTANSAUGENDE PUMPEN FÜR SCHWIMMBECKEN**




NEW MINIPUMP



**MANUAL DE INSTALACIÓN Y MANTENIMIENTO
INSTALLATION AND MAINTENANCE MANUAL
MANUEL D'INSTALLATION ET D'ENTRETIEN
HINWEISE FÜR EINBAU UND WARTUNG**

IMPORTANT: The manual you are reading contains fundamental information regarding the safety measures to be adopted when installing and starting up. It is therefore of utmost importance that both the installer and the user read the instructions before assembling and starting up.

1. GENERAL SAFETY INSTRUCTIONS

These symbols (  ) represent the possibility of danger as a result of not following the corresponding instructions.



DANGER. Electrocution risk.

Non-compliance with this instruction involves a risk of electrocution.



DANGER. Non-compliance with this instruction involves a risk of danger to people or things.



ATTENTION. Non-compliance with this instruction involves a risk of damaging the pump or the unit.

2. GENERAL SAFETY RULES GENERAL OBSERVATIONS.



- The machines mentioned in this manual are especially designed to carry out the pre-filtration and the circulation of water in swimming pools.
- They are designed to work with clean water at a temperature that does not exceed 35°C.





- Installation should be carried out in accordance with the specific indications for each step.
- The regulations in force for the prevention of accidents should be heeded.




- Any modification that may be made to the pump requires the previous authorisation of the manufacturer. The original manufacturer-authorized spares and accessories guarantee greater safety. The pump manufacturer is exempt from all responsibility for damage caused by the use of unauthorised spares or accessories.
- During operation the electrical parts of the pump are live. Work can only be carried out on each machine or on connected-equipment after having disconnected them from the electrical supply network and having disconnected the starting mechanisms.
- The user must make sure that assembly and maintenance work is carried out by qualified and authorised people who have previously carefully read the installation and service instructions.
- The operating safety of the machine is only guaranteed with the compliance and respect for that mentioned in the installation and service instructions.
- The value limits stated in the table of technical specifications must under no circumstances be exceeded.
- In the case of defective operation or breakdown, contact the nearest manufacturer's agent or the manufacturer's Technical Customer Service.





INSTALLATION AND ASSEMBLY WORK WARNINGS

-  • While connecting electrical cables to the machine's motor, take care of the mechanism inside the connection box, check that no pieces of cable remain inside after closure and that the earth contact is correctly connected. Connect the motor using the electrical diagram attached to the machine.
- Check that the electrical cable connections to the machine's terminal box are well set and firmly attached to the connection terminals.
- The pump electrical installation should have a differential the value of which is not greater than 30mA.
- Check that the terminal box joint is used correctly, thus preventing water from entering the terminal box of the electric motor. Likewise, check that the packing gland has been placed and pressed correctly inside the joint.
- The pumps must be installed on a flat and solid surface, at a distance of minimum 3,5 meters from the pool (according to regulation NF C 15-100 or analogue, valid in each region or country).
- They are equipped with a pre-filter therefore they must be fixed in a horizontal position. These pumps are self-priming and they should be installed below water level. In the case they need to be installed above water level, the geometric height should not exceed 2 meters. The suction pipe should be as short as possible in order to reduce the suction time. The place where the pump is installed should be dry and aired at all times.
-  • Special attention should be paid to ensure that under no circumstances water gets into the motor and the electric voltage parts.
- Should the envisaged use not be different from that mentioned, adaptations and supplementary technical regulations may be necessary in case the envisage use would be different.

STARTING-UP WARNINGS.

-  Before starting the pump for the first time, verify the calibration of the motor electric protection mechanisms and check that the protectors against electrical and mechanical contacts are correctly positioned and well fixed.
It is recommended not to use the pool during that first check of the pumping equipment installation.

ASSEMBLY AND MAINTENANCE WORK WARNINGS.

-  • National installation regulations should be taken into account when assembling and installing the pumps.
-  • Special attention should be paid to ensure that under no circumstances water gets into the motor and the electric voltage parts.
-  • Any contact, even accidental, with the machine's moving parts should be avoided while the machine is operating and/or before it completely stops.
- Wait until the machine has completely stopped in order to carry out any work on it.
-  • Before undertaking any electrical or mechanical maintenance make sure that the machine has been disconnected from the supply network and starting-up mechanisms are blocked.

- Before working on the machine it is advisable to follow the steps below:
 1. Cut the machine voltage.
 2. Block the starting-up mechanisms.
 3. Check that there is no voltage in the circuits, including the auxiliaries and supplementary services.
 4. Wait until the wheel has stopped completely.

The mentioned list should be considered indicative and not binding, since there may be specific safety rules within specific safety procedures.



- Periodically control:
 - The mechanical parts are firmly secured and the machine support screws are in good condition.
 - Correct positioning and fixing and the condition of the leading-in wires and isolation components.
 - Machine and electric motor temperature. In case of irregularity, stop the machine immediately and proceed with its repair.
 - Machine shake. In case of irregularity, stop the machine immediately and proceed with its repair.

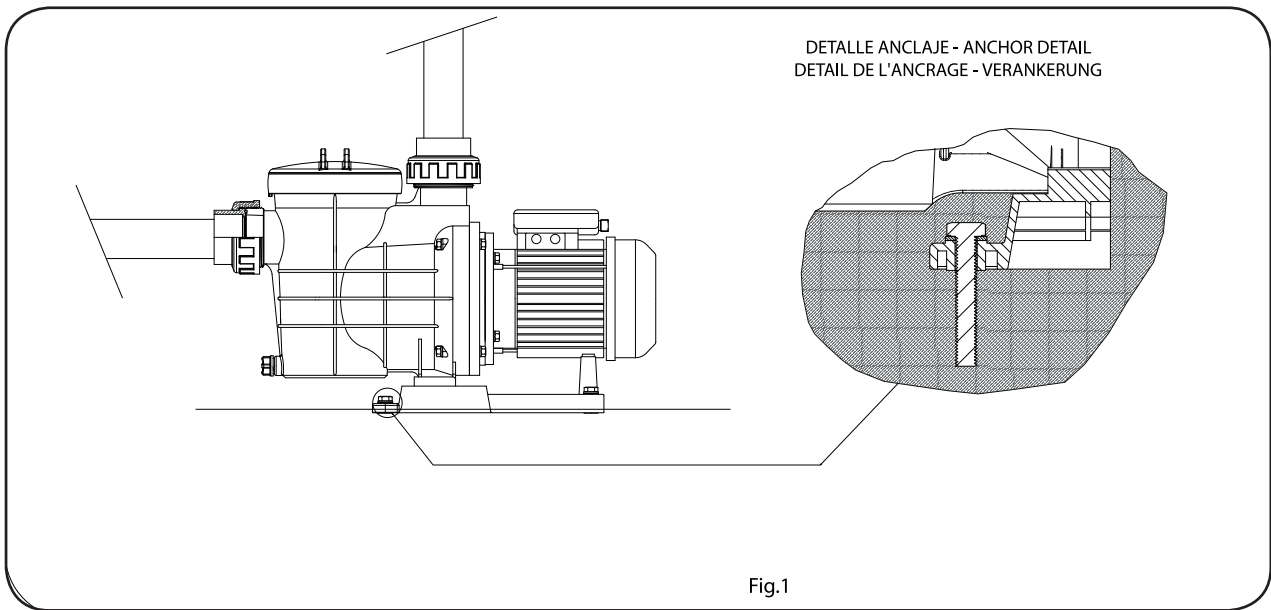
Because of the complexity of cases dealt with, the installation, use and maintenance instructions in this manual do not intend to examine and deal with all possible service and maintenance situations. If supplementary instructions are necessary or if specific problems arise, do not hesitate to contact the machine distributor or the manufacturer.

3. INSTALLATION AND ASSEMBLY

GENERAL



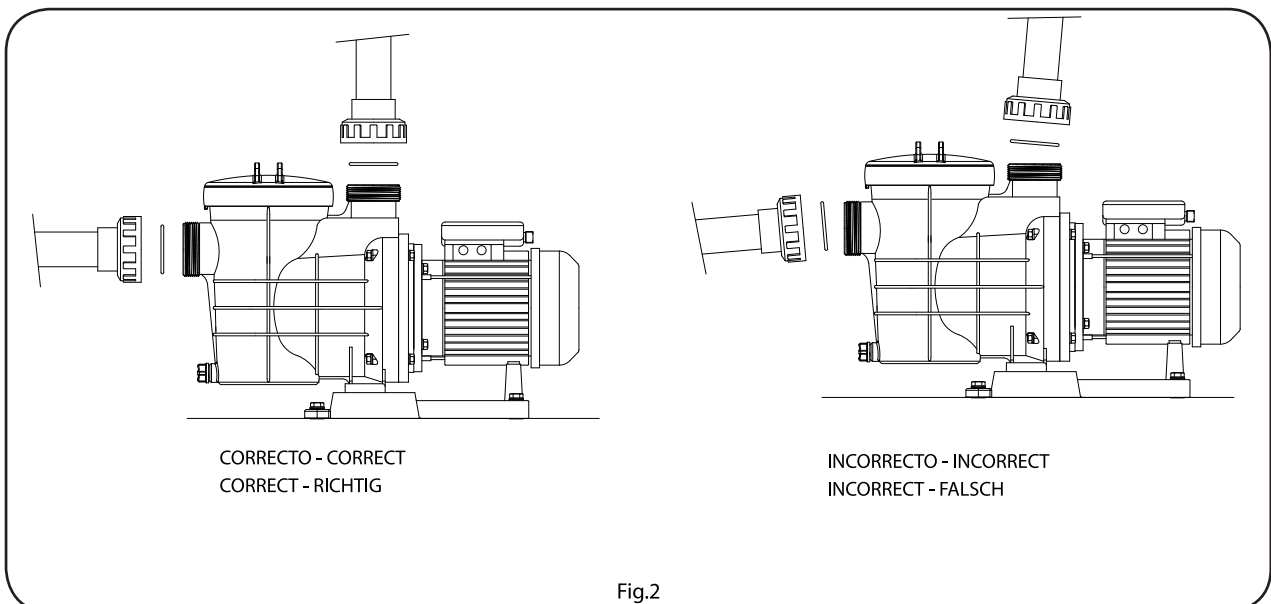
- Assembly and installation of our pumps is only permitted in swimming pools or tanks complying with regulation HD 384.7.702. In case of doubt please consult a specialist.
- The pumps come with a pre-filter with an interior basket to collect large particles since these may damage the interior hydraulic part of the pump. This pre-filter means that the pump assembly must be done in a horizontal position.
- All pumps come with a two-drill foot to allow for them to be fixed in the floor by means of an anchor. (Fig. 1).



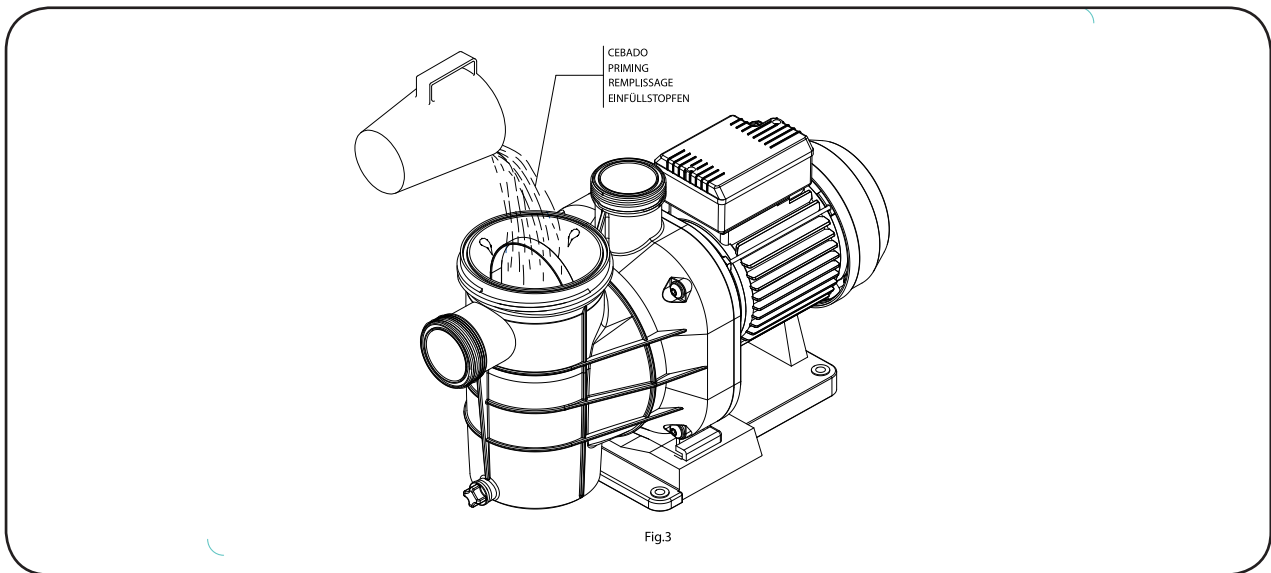
TUBING



- The tubing connection must be done stuck to the connecting pipe that is supplied along with the pump; joints from the connecting pipes with the suction and impulsion nozzles are of a screw-thread type and come with sealing joints to avoid water loss. (Fig. 2).
- Impulsion tube installation is done totally perpendicularly and is well centred with respect to the nozzle to be connected so as to avoid external pressure being exerted on the pump and the tube. Apart from making assembly more difficult, this pressure could even break them. (Fig. 2)
- Suction tube installation is done at a slight angle of 2 % towards the pump, thus avoided siphon formation. (Fig.2).



- For the pump's good working, you must primed the pump pre-filter until water dips into the suction tube.(Fig.3)

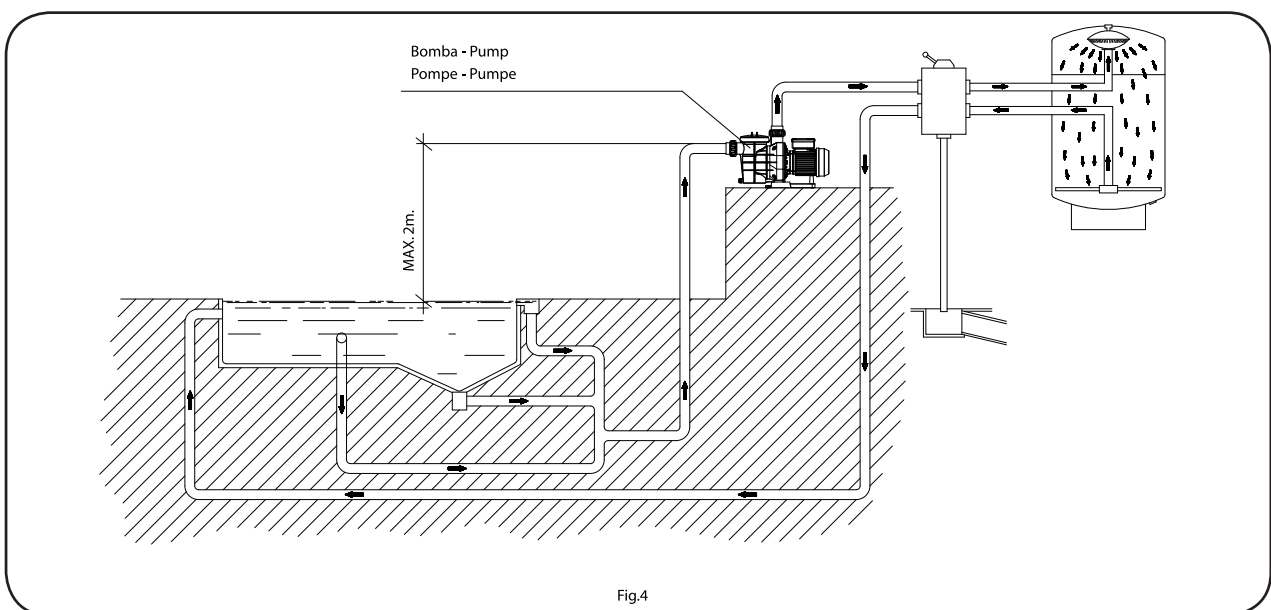


POSITIONING

- ! • The pumps are of a self-suction type even though assembly below the swimming pool or tank water level is advised to improve performance.
- Should it be necessary to install the pump above the water level, the difference in height should not be more than 2 metres (see Fig. 4). Ensure that the suction tube is as short as possible since a long tube increases suction time and facility load loss.
- ! • It should be ensured that the pump is free from possible flooding and it is given dry ventilation.

SAFETY INDICATIONS

ALL THE ELECTRICAL INSTALLATIONS MUST COMPLY WITH STANDARD: EN 60335-2-41. “All 230 v electrical units must be installed at a minimum distance of 3,5 meters from the edge of the pool. In the case of a modification on the filtration system, the manufacturer must be informed”.

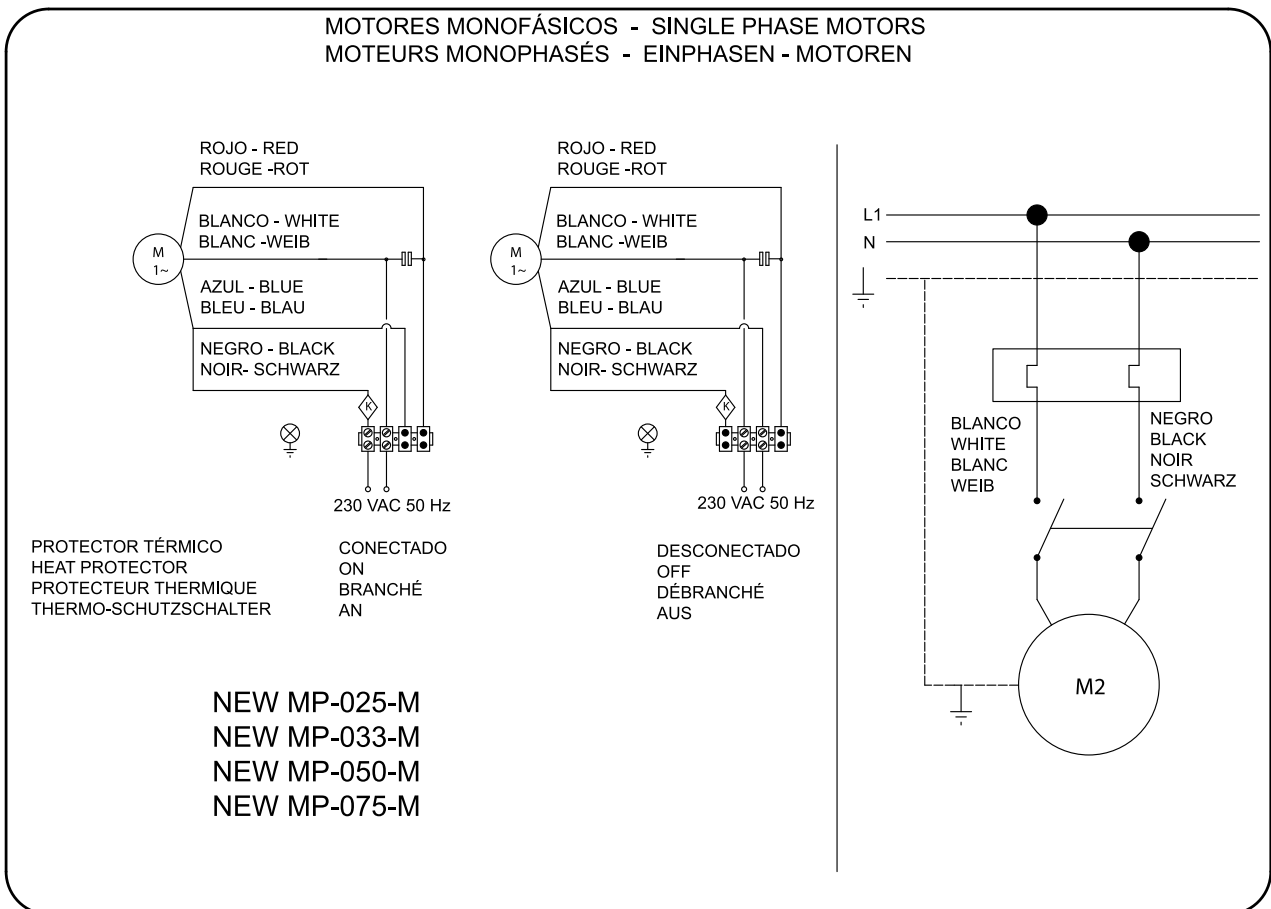


ELECTRICAL UNIT



- The electrical unit should have a multiple separation system with contact opening of at least 3 mm.
- Connection to the mains can only be done using a rigid cable. In the event that a flexible cable is used this should have terminals to connect it to the pump motor terminals.
- A heat protector is incorporated into single-phase pumps. In these, switch installation is sufficient as in the “Network connection” diagram
- A protection differential of 0.03 A is needed for any pump in order to protect from electrical escapes (shown in diagrams).
- The heat relay regulation data for the single-phase motor are merely illustrative since the motor comes with an incorporated protector.

CONEXIONES ELÉCTRICAS - ELECTRICAL CONNECTIONS BRANCHEMENTS ÉLECTRIQUES - ELEKTRISCHE ANSCHLÜSSE



HEAT PROTECTOR TABLE

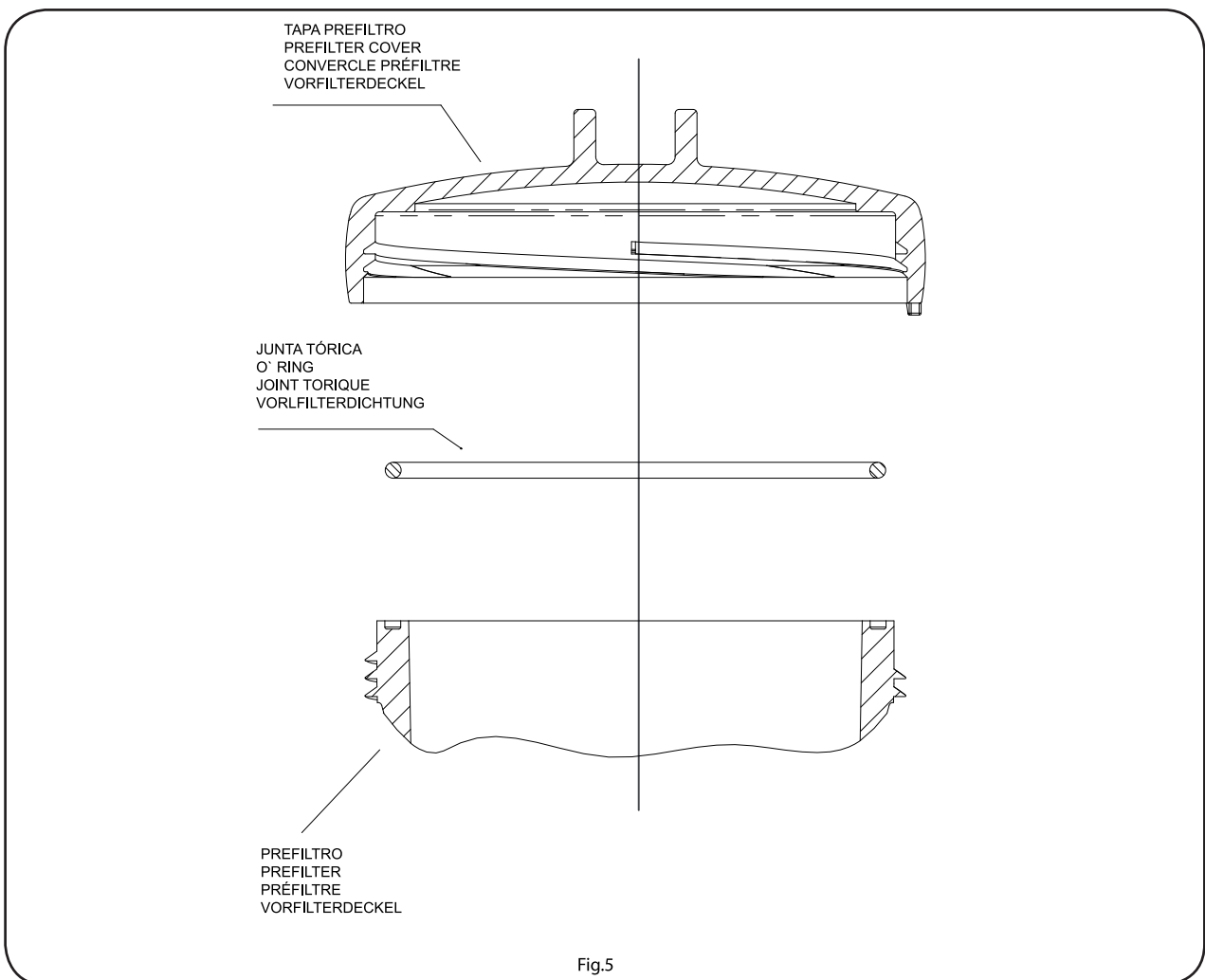
Mod.	Pump Code	V.	Intensity relay regulation (A)
1	New MP-025-M	230	2,4
2	New MP-033-M	230	2,6
3	New MP-050-M	230	3,6
4	New MP-075-M	230	4

- For 230 V single-phase pumps use a H07 RN-F3 1,0 mm²-type connection cable.
- Before connecting the motor, check the necessary fuse type.
- Check the correct arrangement and connection of the earth wire in the equipment installation.
- It is very important to keep to the installation and electrical connection conditions. Should they not be heeded, the pump manufacturer does not accept any responsibility and considers the guarantee void.
- The motors are subject to EEC regulations with IP-55 protection.
- Special installation regulations may exist.
- Incorrect mains connection could result in death.

4. START-UP INSTRUCTIONS

QUESTIONS PRIOR TO START-UP

- ⚠ • Before starting up the pump, carry out the following operations:
 1. Open the pre-filter cover (See Fig.5).
 2. Fill the pump with water through the pre-filter until it dips into the suction tube.
 3. If, during these operations the basket should have been taken out, do not forget to replace it inside the pre-filter so as to prevent large particles from entering the inside of the pump and thus blocking it
 4. Check that voltage and network power corresponds to those indicated on the pump specification board.
- Put the cover on the pre-filter and close it, without forgetting to place the joint in its housing. (Fig.5)
- Under no circumstances should pumps work without previously having filled the pre-filter with water. If this is not done, the mechanical joint could be damaged thus producing water loss through this.
- Check that the pump axle turns freely.



START-UP

- ! • Open all valves and connect the motor.
- Wait a suitable time for tubing auto-priming to take place.

5. MAINTENANCE.

- ! • Clean the pre-filter basket regularly in order to avoid drops in pressure. In order to avoid possible basket breakage it is recommended not to knock it during the cleaning process.
- ! • If the pump stops, check that the motor amp consumption during his working is the same or less than that indicated on the manufacturer's specification board, or failing him, contact the nearest Customer Technical Service.
- ! • If the amp rate is higher, consult the manufacturer.
- Empty the pump in cases where it must remain without use for some time, mainly in cold countries where there may be danger of freezing.
- To empty the pump, remove the draining plug from the pump body (see explosion drawing).
- Each time the pre-filter is opened, clean impurities from the joint seating and the joint itself, to ensure sealing on closure of the cover. (Fig.5).

6. DISMANTLING

- ! • The motor unit may be dismantled from the pump body without needing to disconnect the pump's suction and impulsion tubing.
- To disconnect the motor unit from the pump body, remove the screws that join them (see explosion drawing).

POSSIBLE BREAKDOWNS, CAUSES AND SOLUTIONS

PROBLEMS	CAUSES	SOLUTIONS
THE PUMP DOES NOT PRIME	Air entry in suction tube	Check pipe fittings and suction tube joints
	Bad filter cover sealing	Clean the pre-filter cover and check the condition of the joint
THE PUMP GIVES LOW FLOW-VOLUME	Blocked pre-filter	Clean the pre-filter
	Air entry in suction tube	Check pipe fittings and suction tube joints
	Load loss in suction	Prevent as much as possible, elements that produce load loss
	Wrong voltage	Check that the network voltage corresponds to that on the motor specification board
THE MOTOR STOPS	Increase in terminal box temperature because of voltage arch effect	Check terminal box connections
	Heat protector blows	Correctly connect cables with terminal box terminals
	Terminla boxes badly-connected	Fasten the cable to the terminal correctly Modify size of connection cable to terminal box terminals

7. SPECIFICATIONS

7.1. PRODUCT AND ACCESSORY DESCRIPTION.

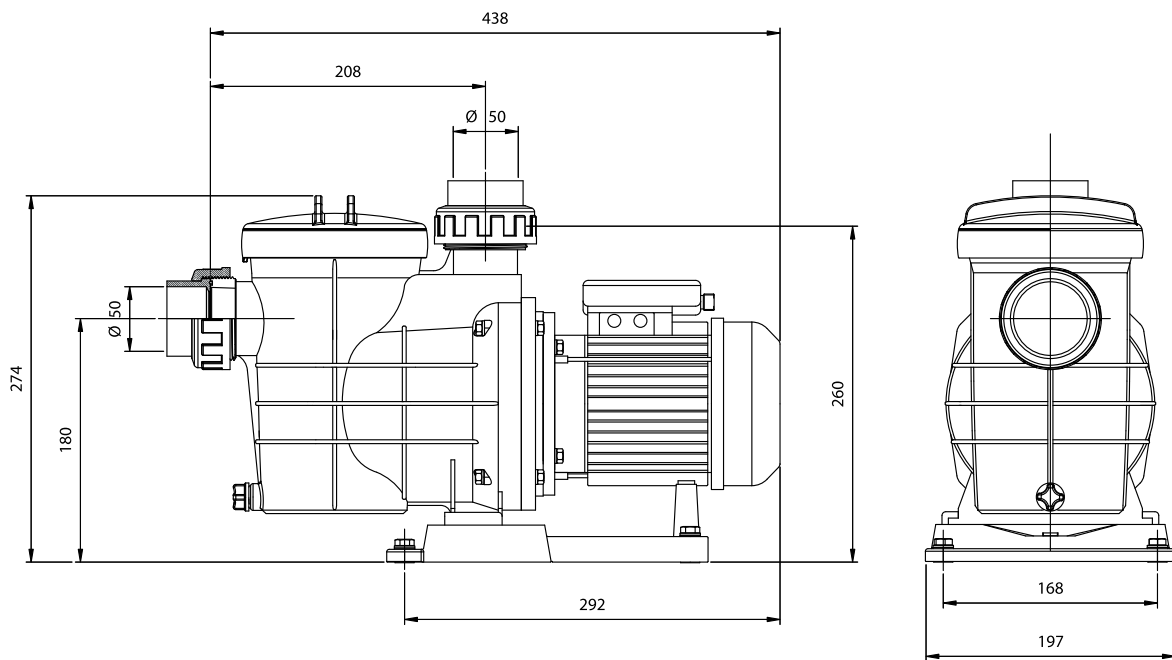
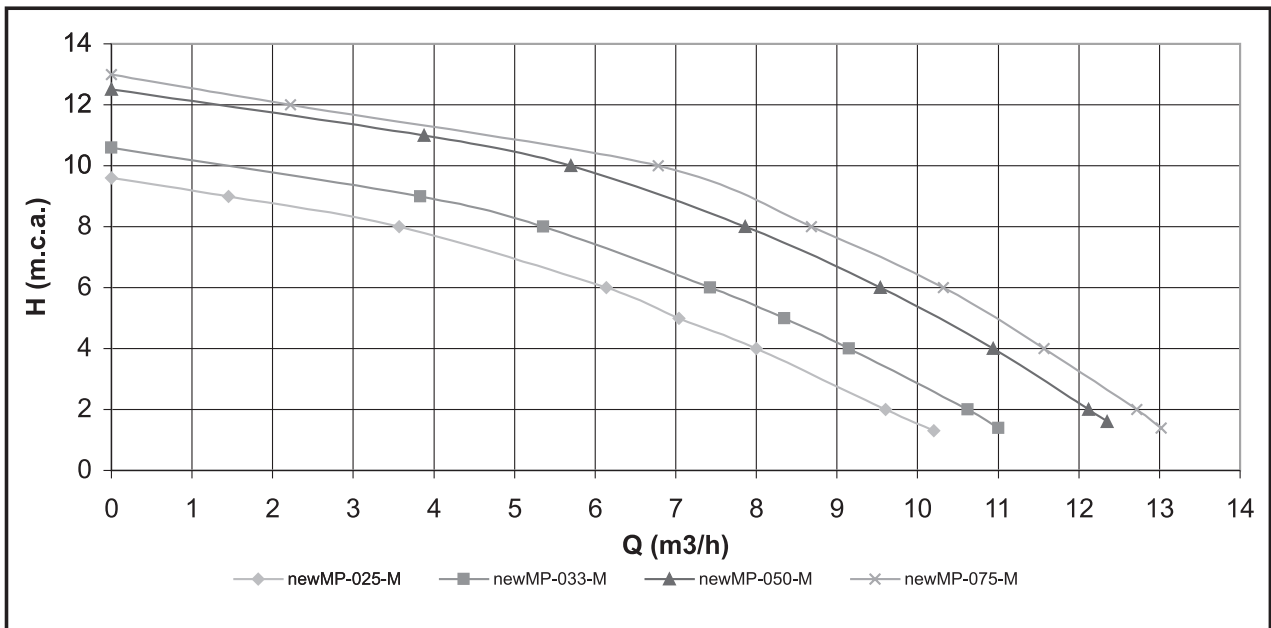
The pump body is built from state of the art thermoplastics. The pumps are of a self-suction type from newMP-025-M to newMP-075-M and are supplied with single-phase motors. A pre-filter has been incorporated into the pump body to prevent the foreign bodies entering and damaging the pump's hydraulic parts.

The motors supplied with the motor pump unit have been protected by IP-55 and are prepared to withstand hot atmospheres and high humidity levels. The motors are also provided with a heat protector that avoids damage to the pump due to excess current.

7.2. ELEMENTS SUPPLIED

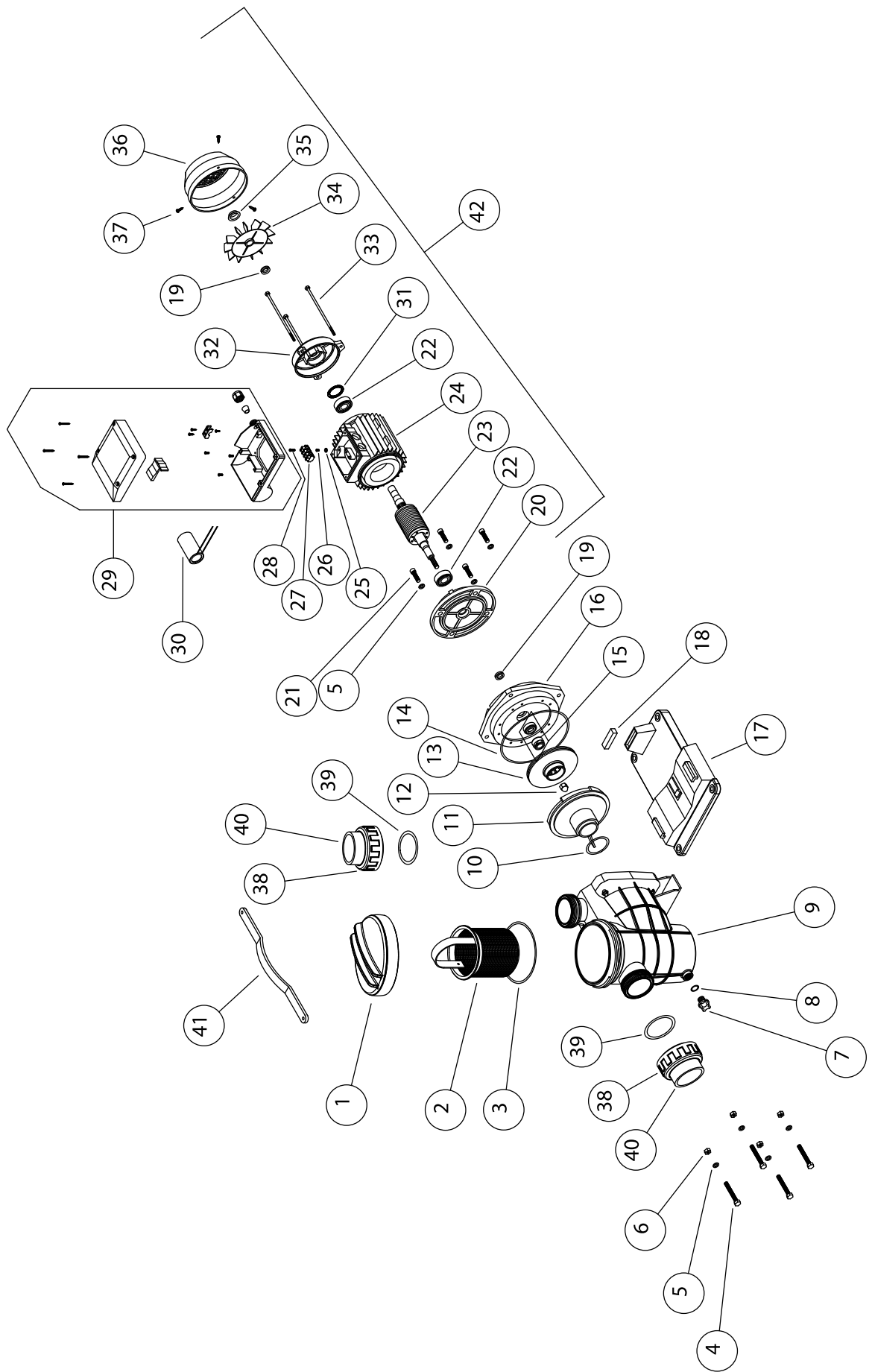
- Self-suction pump for water circulation in private swimming pools.
- Pre-filter incorporated in the pump body.
- Pre-filter basket.
- Handle for pre-filter basket open / close.
- Joints and linking hose unions for impulsion and suction tubing connections.
- Pump installation and maintenance manual.

The motor pump unit's functional features are given in the different characteristic curves.



8. REGULATION

Tests carried out on the New Minipump pump series have been done in accordance with the regulation “EN-ISO-9906:1999 “.



POSITION	DESCRIPTION	CODE
1	PRE-FILTER COVER	HD006000
2	PRE-FILTER BASKET WITH HANDLE	HD016010
3	PRE-FILTER JOINT COVER	HD021000
4	ALLEN SCREW M6x50 (4 PCS)	HD026020
5	WASHER M6 (8 PCS)	HD031005
6	NUT DIN 934 M6 (4 PCS)	HD031050
7	DRAIN PLUG 1/4"	HD036000
8	DRAIN PLUG O'RING Ø13x2,5	HD021100
9	PUMP BODY	HD041025
10	DIFFUSER JOINT Ø41x4	HD021050
11	DIFFUSER	HD046020
12	IMPELLER FIXING NUT M8	HD031070
13	IMPELLER NEWMP-025	HD051105
13	IMPELLER NEWMP-033	HD051110
13	IMPELLER NEWMP-050	HD051115
13	IMPELLER NEWMP-075	HD051125
14	PUMP BODY JOINT Ø143x4	HD021075
15	MECHANICAL SEAL Ø13	HD056000
16	PUMP BODY LID	HD061025
17	PUMP BASE	HD066000
18	SILENT-BLOCK 9x45x13	HD071000
19	V-RING JOINT VA-14 (2 PCS)	MT001000
20	MOTOR FLANGE	MT006010
21	ALLEN SCREW M6x25 (4 PCS)	HD026010
22	BALL-BEARING 6202 (2 PCS)	MT026000
23	ROTOR WITH SHAFT 0,33 HP	MT031075
23	ROTOR WITH SHAFT 0,50 HP	MT031080
24	HOUSING + STATOR 0,33 HP 1-PH	MT043000
24	HOUSING + STATOR 0,50 HP 1-PH	MT043005

POSITION	DESCRIPTION	CODE
25	GROUND CONN. TOOTHED WASHER M4	MT076000
26	GROUND CONN. SCREW M4x6 DIN 7985-5,6	MT076005
27	CABLE CONNECTOR SET 1-PH	MT081000
28	CABLE CONN.FIXING SCREW 1-PH M4x16	MT076010
29	COMPLETE CONNECTING BOX 1-PH	MT088000
30	CAPACITOR 12 μ F	MT091000
31	SPRING WASHER M35	MT096000
32	MOTOR COVER	MT016010
33	ROD M5x130 (3 PCS)	MT101000
34	MOTOR FAN	MT086040
35	MOTOR FAN RING	MT086050
36	MOTOR FAN COVER	MT086055
37	FAN COVER SCREW (3 PCS)	MT076035
38	ADAPTOR SOCKET NUT Ø50 (2 PCS)	HD076010
39	SOCKET O'RING Ø53x3 (2 PCS)	HD021115
40	ADAPTOR SOCKET Ø50 (2 PCS)	HD076005
41	PREFILTRE COVER HANDLE	HD076000
42	COMPLETE MOTOR 0,33 HP 1-PH	MT999140
42	COMPLETE MOTOR 0,50 HP 1-PH	MT999145