



HIGH PERFORMANCE POOL & SPA PUMPS

INSTALLATION AND OPERATION MANUAL

**PREMIUM 'PR' SERIES
PR50LF, PR50, PR75, PR100, PR125, PR150, PR200**



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Read these instructions before operating the pool and spa pump.

MODELS:- PR50LF, PR50, PR75P, PR100P, PR125P, PR150P, PR200P

DANGER - HAZARDOUS SUCTION.

- Do not block water entry into filtration system with any part of your body as the pressure can trap hair or body parts, causing severe injury or death. Do not block suction. Turn off pump immediately if someone becomes trapped.
- Do not use this pump for wading pools, shallow pools, or spas containing bottom drains, unless the pump is connected to a least two (2) functioning suction outlets. The suction outlets must be approved as per the AS1926.3 Australia Standard or its successor standard.

Careful Reminder

- This appliance is not intended for use by persons (including children) or person/s with reduced physical, sensory or mental incapability's, or lack of experience and knowledge, unless they have supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Please check your pump basket, skimmer and entire pool system regularly to maximize the life of your pool equipment & personal safety. Turn pump off first before checking baskets.
- Make sure that all pressure gauges installed are in working condition and the operating pressure is within limits as specified on the product.
- Make sure that each suction inlet, and main drain has a cover that is securely attached and in safe working condition to meet with all current legislation.
- Make sure that all skimmer covers (deck lids) are securely attached and in safe working condition. These should be replaced every 3 to 4 years.
- Remove any obstructions or debris from the main drain cover.
- Ensure the skimmer baskets and the pump hair and lint pots are free of leaves and debris at regularly.
- Remove obstructions and combustibles from around the pump motor.
- Make sure all wiring connections are clean and that all wiring and electrical equipment is in good condition. Damaged wiring must be repaired or replaced by a qualified electrician as soon as damage is discovered.
- Do not add chemicals directly to the pool skimmer. Adding undiluted chemicals may damage pump, heater, etc and void warranty.
- Check water balance and sanitizer levels at your local pool shop.

WARNING!

- **CHILDREN SHOULD BE SUPERVISED AT ALL TIMES TO ENSURE THAT DO NOT PLAY WITH THE PUMP OR ANY POOL ASSOCIATED ELECTRICAL DEVICE**
- Pump suction is hazardous and can cause entrapment, drowning or disembowel bathers.
- Do not block or cover any pool/spa suction.
- Do not use or operate swimming pools, spas or spa baths if a suction cover is broken, missing or loose.
- Suction covers and inlets must be installed as per Australian Standards guideline and provided for every pump to avoid suction entrapment.

CAUTION!

- In the interest of safety, we advise that all brands and types of pool pumps must be installed in accordance with AS3000 wiring rules or equivalent
- If the pump and filter are located below pool water level, it is necessary to fit isolating valves in the pipe between the pump and the skimmer box and in the return pipe from the filter to the pool.
- The fittings on this product are constructed of ABS. Some PVC jointing compounds are incompatible with ABS. Check compound suitability before use.
- RELTECH recommends that all installations are fitted with earth leakage or residual current protection devices.
- Ensure that an electrical isolation switch is located with easy access so that the pump can be switched off in an emergency.

High Performance Pool & Spa Pumps

Read these instructions before operating the pool and spa pump.

RELTECH pool and spa pumps are suitable for connection to a nominal 240-volt 50Hz power supply. The motor is equipped with a 2m flex and 3-pin plug.

- Pumps must be either supplied by an isolating transformer, or supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30mA.
- Extension cords are unsafe around pools and must be avoided.
- If the supply cord of this product is damaged the dealer or manufacturer must replace it, with genuine RELTECH pool and spa pump spares.

INSTALLATION & OPERATING INSTRUCTIONS

RELTECH'S POOL AND SPA PUMP

Congratulations on your purchase of a quality product from the RELTECH range of Pool and Spa Equipment. You will be pleased with the many years of reliable and efficient performance your RELTECH pool and spa pump will deliver.

RELTECH pool and spa pumps have been designed to circulate swimming pool and spa water in conditions set out in the Australian Standard for swimming pool water quality (AS 3633)

RELTECH designs its own electric motors specifically for its pumps. The matched motor and "pump wetend" are designed to provide quiet operation and energy efficiency.

RELTECH'S totally enclosed fan-cooled motor incorporates "thermal cut-out" overload protection designed to protect the motor from overheating.

Every RELTECH pool and spa pump is thoroughly water tested against flow, pressure, voltage, current and mechanical performance parameters. RELTECH'S advanced pump technology provides reliable and efficient performance that lasts.

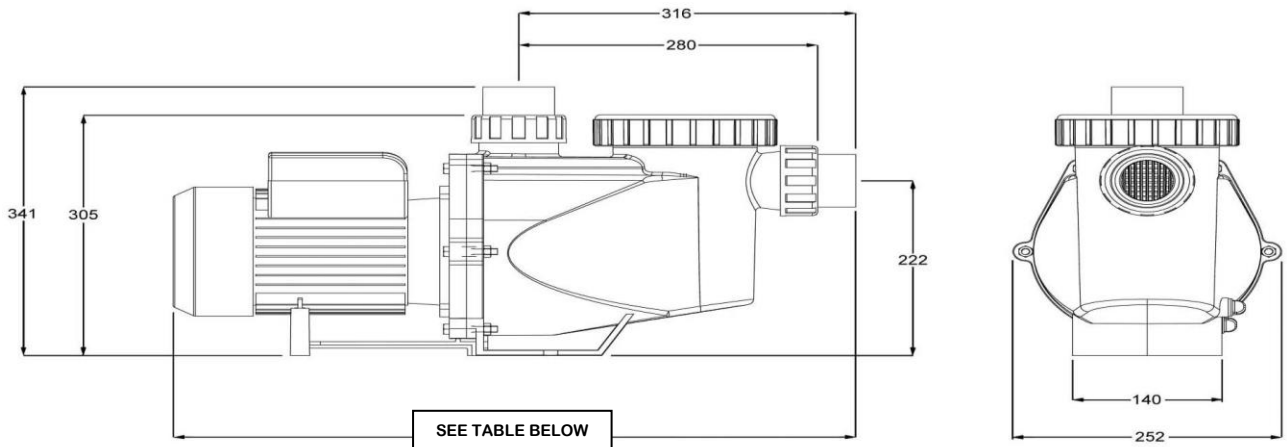
RELTECH pool and spa pump are designed with high flow and the head pressures are ideally suited for the modern pool or spa with extensive equipment.

RELTECH pool and spa pumps are designed to operate with most chlorinators, heaters and other pool equipment producing correct water flow and energy efficiency.

FEATURES & BENEFITS

- Powerful high performance pumping delivers optimum flow rates & rapid priming
- High flow at high pressure for rapid pool water turnover
- Computer-designed impeller and diffuser quickly corrects loss of water flow allowing a free flow of water offering whisper quiet, efficient performance
- Easy to remove, see through strainer lid for easy removal of leaves
- Extra large strainer basket allows long intervals between cleaning.
- Continuous duty rated motor with an enclosed fan cooled motor protects against dirt, dust and water for long life
- Built-in thermal overload protects the motor against damage from overheating
- Every unit is pressure and performance tested in factory ensuring quality and reliability
- High performance Silicon Carbide mechanical seal, fitted for long life in salt & fresh water
- 2m power lead with 10amp three-pin plug fitted
- Constructed of strong corrosion and U.V. resistant materials for long life
- On some models, built-in check valve reduces reverse flow of water through pump.
- Exceed electrical standards for installation in the specified pool zone
- A.B.S. quick connect couplings makes installation simple
- If required a drain plug enables pump casing to be drained for easy maintenance
- Limited 3 Year Warranty – See Warranty Information

Dimensions



Installation and Operating Instructions

Location

The pump should be located as close to the water as practicable and mounted on a firm base in a well drained position, high enough to prevent any flooding. It is the installer's/owners responsibility to locate the pump so that it can be accessed for service and maintenance. The rear fan shroud should be installed at a **minimum distance of 130 mm away from any walls or obstructions**. This is to allow adequate air flow from the fan to cool the motor. Overheating due to a lack of cooling voids warranty.

Weather Protection

It is recommended that the pump be protected from the weather. Enclosures should be ventilated to allow a free flow of air for the fan cooled motor.

Power Connection

RELTECH pool and spa pumps are suitable for connection to a nominal 240-volt 50Hz power supply. The motor is equipped with a flex and 3-pin plug. If a power outlet is not available within 2 meters of the pump, a 3-pin power point in a safe, dry place may need to be provided by an electrician.

Note:

- Pumps must be either
 - Supplied by an isolating transformer, or
 - Supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30mA.
- Extension cords are unsafe around pools and must be avoided.
- If the supply cord of this product is damaged the dealer or manufacturer must replace it, with genuine RELTECH pool and spa pump spares.
- Water temperature is not to exceed 40 degrees

Power Rating and Dimensions

	PR50LF	PR50	PR75	PR100	PR125	PR150	PR200
LENGTH	610	610	610	620	620	630	665
RPM	2850	2850	2850	2850	2850	2850	2850
FLOW	140	160	190	270	330	380	490
HEAD (m)	6	8	8	8	8	8	8
AMPS (A)	2.5	3.1	3.3	4	4.4	6.1	8.6
WATTS (W)	650	674	733	883	980	1205	1850
VOLTS (V)	230-240	230-240	230-240	230-240	230-240	230-240	230-240
HERTZ (Hz)	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz
IP RATING	X5	X5	X5	X5	X5	X5	X5

Pipe Connection

A barrel union is provided for connecting to the piping from the pool.

The pumps are designed to accept the following PVC Pipes:

- Inlet PVC Position 40mm pipe ID or 50mm fitting ID PVC pressure pipe fittings
- Outlet PVC Position 40mm pipe ID or 50mm fitting ID PVC pressure pipe fittings

The use of pipe with a smaller ID than those specified above is not recommended and may cause damage to the pump voiding warranty.

A straight length of pipe measuring no less than 300mm should be installed in front of the inlet of the pump allowing quieter and smoother operation.

Suction piping should be free from all air leaks and any humps and hollows, which may cause suction difficulties.

The outlet piping from the pump should be connected to the inlet connection on the swimming pool filter (at the filter valve).

For pump installations above water level, it generally requires a check valve in the suction line. A check valve should so be fitted to the PR200 (2HP) motor to prevent back pressure issue on most systems. A back spun impeller might be resulted and not covered under warranty.

Do not use type 'P' (green) plumber's glue on the barrel unions as this may cause damage to the material used. Use ABS to PVC glue or type 'N' glue. Do not use primer fluid on black ABS pump fittings

Always install pump for maintenance and service accessibility.

Always install pump for maintenance and service accessibility.

OPERATION

Starting the Pump

To operate efficiently and to prevent damage to the pump there must be a free flow of water to and from the pump. Before starting ensure that:

- All pipe work is correctly sealed.
 - The pool/spa water level is at the correct height.
 - That all appropriate valves are open and there is nothing preventing the flow of water through the system.
1. First prime the pump by removing the strainer basket lid and filling the strainer basket area with water. Replace the lid, ensuring that it seals on the large o-ring.
 2. Connect to the power supply and switch on.
 3. Allow the pump to run, so that any air trapped in the pipe work and pump may be expelled.
 4. If prime is not established within approximately two minutes, as evidenced by a strong flow of water from the outlet, switch off the pump and repeat the procedure. Continued evidence of air under the hair and lint pot lid indicates an air leak in the suction piping work, which should be rectified to avoid pump damage.

Pump operation

For optimum pump performance, the strainer basket housing should always be full of water and free from air bubbles. The water level of the pool should always be maintained to at least halfway up the skimmer box ensuring water is in the pump at all times. From time to time, it may be necessary to re-prime the pump. This should be carried out as described above.

Limits

Water temperature Max 40°C
Ambient Temperature Max 50°C
DBa @ 1 meter 64

Water Quality

Maintaining balanced water chemistry is important to the life of your pool pump.

This pump is designed to be used with Pool & Spa water, balanced in accordance with Langlier Saturation Index, with a pH level of between 7.2 and 7.8 and is regularly treated with a chlorine sanitizing agent with the level not exceeding 300PPM.

Please consult your local pool shop regularly to have your water tested.

Emptying the hair and lint pot

The hair and lint pot strainer basket should be inspected frequently through the transparent lid and emptied when a build up of rubbish is evident.

Follow the directions below.

1. Switch off pump.
2. Unscrew the hair and lint pot strainer basket lid anti-clockwise and remove.
3. Remove the hair and lint pot strainer basket by lifting upwards from its housing.
4. Empty the trapped refuse from the basket. Hose out with water if necessary.
5. Check the hair and lint pot strainer basket for cracks, replace the strainer basket in the pump if OK.
6. Replace the lid and ensure that it seals on the large rubber o-ring. **Firm hand tightness only is required.** The o-ring & thread can be lubricated with silicone grease.

If the pump does not operate, one of the following conditions may apply:

- a. The power is not connected. For 230-240 volt only.
- b. Check the power point by plugging in a portable appliance to ensure power is available.
- c. Check fuses and the main power supply switch
- d. Automatic overload is tripped. The pump has an in-built thermal overload, which will re-set automatically after the motor has cooled following an overheating period. Determine the cause of the overload tripping and rectify.
- e. Blockage is preventing the pump from rotating.
- f. The motor capacitor has been overloaded due to onsite current spikes and needs to be replaced. A humming noise might be heard.
- g. Motor is burnt out - burning smell is evident. Replacement is required.
- h. If you are unable to resolve any installation or operation difficulties with your **RELTECH** pool and spa pump, contact the supplier from whom the pump was purchased or you're nearest Authorised **RELTECH** pool and spa pump Pool Equipment Service Centre. If any further assistance is required, contact the **RELTECH** Customer Service Centre at the address indicated in this manual.

Trouble Shooting

If the pump runs but there is no water flow or water flow is reduced, the following condition may apply:

1. The filter requires backwashing or it is blocked.
2. The pump is not primed. (See 'Starting the pump')
3. There are air leaks in the suction piping. Check all piping and eliminate leaks, also check for a loose strainer basket lid. Air bubbles in the water flowing back to the pool would indicate a leak in the suction to the pump allowing air to infiltrate the pipe work.
4. The pump is not able to get water from the pool. Check that the valves to the pump are fully open and that the pool water level is up to the skimmer box.
5. A leaking pump seal may also prevent operating. Evidence of this would be water on the ground under the pump.
6. Blockage in the piping or pump. Remove the hair and lint pot strainer basket and check for any blockage around the entry of the housing. Check the skimmer box for blockage.
7. To check it impeller is rotating, please lodge a flat-head screwdriver in the back motor through the fan cowl and twist.

Removal of the Pump from Pipe work

To remove the pump, follow these instructions:

1. Switch off the power and remove the plug from the power source.
2. Close the water valves on the pool return and the pump inlet pipe work.
3. Remove the discharge & suction barrel unions taking care not to lose the o-rings.
4. Move the pipe work with the barrel unions attached until the pump can be moved clear.

NOTES:

- If the pump is hard wired, a qualified electrician should remove the wiring.
- On some models the pump is fitted with an internal check valve to reduce reverse flow of water through the pump.
- Barrel unions need to be hand tightened. No sealant, glues or silicones are required.
- When making any enquiries about your **RELTECH** pool and spa pump be certain to quote the model number from the nameplate located on motor.
- Never run pump dry. Running the pump with no water may damage the mechanical seals, causing leakage and flooding. Dry running damage and associated damage is not covered under warranty.
- Failure to undertake regular maintenance may cause damage not covered by warranty.
- The pump is not intended for use by young children or infirm persons without supervision. Ensure that young children are supervised at all times to ensure that they do not play with the pump.

RELTECH

High Performance Pool & Spa Pump Limited Warranty

Your Reltech Pool and spa pump Premium “PR” Series is covered by a limited three-year warranty. Please refer below for details as follows:

- 3 year limited warranty against defects in workmanship and materials excluding obvious neglect, misuse, improper installation or improper maintenance from date of purchase.
- 3 year on pump body.
- 2 year on motor, o-rings, lid, lid nut and impeller & diffuser.
- 12 month on Mechanical Seal.

This warranty is subject to the conditions and limitations herein after stated. You must notify Reltech of the failure of any component of your pool and spa pump and motor within 7 days of the recognised fault. Reltech will at its option, repair or replace any defective parts. Component failure must be due solely to a defect in materials or workmanship. This warranty does not apply if failure is due to any abuse, misuse, improper installation or accident or to any of the following:

- Improper chemical balance in the water,
- Incorrect power supply and/or connection
- Water damage from external sources,
- Cement, pebbles, render or other pool surface finish blocking the impeller,
- Use on non swimming pool or spa pool application, (salt water aquaculture).
- Running the pool and spa pump dry,
- Inadequate ventilation,
- Installed on uneven ground or in a sump area that collects significant water,
- Addition of salt, chlorine and/or any other pool chemicals through skimmer or pump basket.

To stand behind our commitment to provide warranty coverage, Reltech has established a network of authorised warranty agents throughout Australia. To obtain warranty service, contact our Service Department. If your request for warranty service is diagnosed to be non-warrantable, an infield service call and labour will be charged.

12 month in field labour warranty is applicable in some Capital City Metropolitan areas or within a 20 km radius of an Authorised Reltech Service Agent. A travel fee may be charged on all other areas.

Reltech shall have no liability for incidental or consequential damages. No person is authorised to make any representation or warranty on behalf of Reltech other than what is stated here.

Commercial Installations

On Commercial Installations, such as health clubs, motels/hotels and hydrotherapy, parts and in field labour warranty (within capital city metropolitan areas or 20km radius of authorised service agents) is 6 months from the date of purchase.

Reltech assumes no liability for consequential damages of any kind.

PLEASE NOTE:

- This literature is not a complete guide to product usage. Further information is available from your RELTECH dealer, RELTECH Customer Service Centre and from the relevant product Installation and Operating Instructions.
- This data sheet must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice.
- Warranties vary in different States and/or Territories.

COMMENTS / NOTES: