



# **VF150**

CAST IRON VORTEX SUBMERSIBLE DRAINAGE PUMP





An earth leakage or residual current protection device must be fitted to all installations.

Should the installer or owner be unfamiliar with the correct installation or operation of this type of equipment, contact the distributor or manufacturer for the correct advice before proceeding with the installation or operation of this product.

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## **TECHNICAL INFORMATION**



Model	VF150
Pump discharge connection	11/4" BSPF thread
Supplied fitting	1", 11/4" & 11/2" hose tail
Power supply	230V - 1Ph - 50Hz
Voltage limits	207V - 253V(230V ± 10%)
Maximum flow rate	150lpm
Maximum head	7m
Water temperature range	1°C
Power consumption P1	350W
Current	1.6A
Maximum submergence	6m
IP rating	1P68
Free passage	15mm diameter

## **APPLICATION**

VF150 is designed for clear or grey water containg some soft solids. Typical applications include dewatering pits, drainage, water features and low-lying areas prone to flooding. Do not use your VF150 for liquids other than clear or grey water. Using corrosive, abrasive or explosive fluids will damage the unit and may cause personal injury or death.

CONSTRUCTION MATERIALS			
Pump casing:	Cast iron		
Impeller:	Polycarbonate		
Motor shaft:	Stainless - 304		
Mechanical seal:	Carbon ceramic		
Oil seal:	NBR		
Power cable:	H07RN-F		
Float cable:	H07RN-F		



These instructions are a guide only. Users not familiar with pumping equipment should seek advice from people experienced in pump equipment and installation. The pump operator or owner must be provided with this owner's manual. This must be read before operation and followed during operation.



Freezing conditions will damage the unit because as water freezes, it expands. Ensure that VF150 is located so that it is not prone to freezing or ensure that the product is disconnected and dried of water during cold conditions.



VF150 is electrically connected. Ensure that it is isolated from electrical supply during installation and any subsequent service work.



VF150 is designed to be used with clear or grey water in a residential applications. Do not use it with alternative fluids specifically abrasive, corrosive or explosive fluids. Do not install or operate your VF150 in an explosive environment or near combustible matter.



Do not run the VF150 dry or with the motor exposed (i.e. out of the water) for long periods. This will harm the pump's seal and overheat the motor. Do not lift, move or carry this pump by the electrical cable or float switch cable.



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



Children should be supervised to ensure that they do not play with the appliance.

When used in a swimming pool, the following applies:

- the pump must not be used when people are in the water
- the pump must supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.

Read the following instructions in this owner's manual when installing and operating equipment.

#### Fittings and accessories

Ensure that you have all required fittings and accessories prior to installing your VF150:

- thread seal tape (rigid discharge pipe installations)
- hose clamps (flexible discharge pipe installations)
- cable ties

A larger diameter hose or pipe will offer less resistance to flow. This enables better performance.

#### Preparation for installation

Inspect your VF150 for shipping damage. Report any damage to your Pentair Water dealer.

Securely connect a stainless steel wire cable or a rope to the handle of the pump ensuring that the wire/cable exceeds the safe working load of 10kg.

If you are using a rigid discharge pipe, thread the fitting / pipework into the outlet of the pump housing. If you are using a flexible discharge hose, use hose clamps to secure this to the fitting provided.

Lower the pump into the tank using the rope or wire cable. Lower the pump onto a hard level surface that is elevated from the base of the pit. This is to keep the pump inlet above sediments in the bottom of the tank.

Ensure that the float switch can move freely within the tank – incorrect operation and pump failure may occur if the float switch becomes trapped.

The pump must only be connected to a socket that has been correctly installed in accordance with national wiring regulations and is protected with a residual current device (RCD) with a rated residual operating current not exceeding 30mA. The pump will operate when the float is above the cut in level, and stop operating when the float is below the cut out position.

If the pump must be removed from the tank, use the lifting rope or lifting wire cable to lift it. Do not use the power cable or the float switch to lift the pump.

## **OPERATION**

Connect the pump to a suitable power outlet.

#### Operation check

- 1. Ensure that the pump is completely submerged.
- 2. This may require that the tank has a little water fed into it from another source.
- 3. The float switch will rise, and the pump will start and empty the pit. As the pit empties, the float switch will fall and then stop the pump.
- 4. Check that there is adequate pressure and flow from the discharge point.

If there are any variations to these outcomes, please see the Troubleshooting Section on the pages 6-7.



## **SERVICE & MAINTENANCE**

You should regularly inspect your Onga VF150 for any damage or deterioration due to either fair wear and tear or misuse.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid an electricution hazard.

It is recommended that you periodically check the pump's pressure and current draw. A decrease in pressure is a symptom of pump wear caused by grit or silt in the water. An increase in current draw is a symptom of abnormal mechanical friction in the pump or motor that is caused by solid material being lodged within the pump. In the event either of these symptoms occur, the pump must be serviced by the manufacturer, its service agent or similarly qualified person in order to avoid pump failure and/or a hazard.



Pumping water containing solids will reduce the life of the pump, and may affect warranty.



Pumping chemicals or agricultural products voids warranty.



Do not pump hydrocarbons with this pump.



If the pump is not going to be used for a long period of time, it should be a completely emptied, rinsed with clean fresh water, and stored in a dry place.



Always use original service parts as supplied and recommended by Pentair. Failure to do so may void warranty.

## **TROUBLESHOOTING**

SYMPTOM	Cause	Remedy	
Pump doesn't start.	Float switch isn't in the 'ON' position.	Wait until there is more water in the pit to start the pump.	
	Not enough water in the pit to get the float above level.		
	Float is caught on something and can't rise above level.	Ensure that the float can move freely.	
	No power supply.	Ensure that the pump is connected to a live outlet.	
		Check fuses and circuit breakers.	
	Pump is blocked.	Disconnect the pump from the power outlet. Check the pump housing and discharge for foreign matter.	
No water from pump.	Blockages in the pump or discharge.	Disconnect the pump from the power outlet. Check the pump housing and discharge for foreign matter.	
	Excessive lift.	Ensure that the height that you are trying to lift water is within the pump's capacity. A larger pump may be required.	
	Not enough water in the pit to pump.	Wait until there is more water in the pit. Ensure that float switch is operating freely.	

## **TROUBLESHOOTING**

SYMPTOM	Cause	Remedy	
Pump will not stop even though there is little water in the pit.	Float switch is trapped in the "UP" position.	Ensure that the float switch can operate freely.	
	Float switch is fused "ON".	Replace the float switch.	
Pump runs intermittently: Thermal protection inside the pump is tripping and resetting.	The pump is not completely submerged.	Ensure pump is covered with water.	
	Water temperature is too high.	Ensure that water temperature limits are observed.	
Pump runs intermittently.	When the pump shuts off, water in the discharge line is running back into the pit, lifting the float switch.	Fit a non-return valve at the pump discharge so that water cannot return to the pit.	

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Pentair Australia Pty Ltd ACN 004 856 204 and its related entities ("Pentair") warrants that, subject to the terms and conditions below, when it's products are used for the purpose for which they were designed, they will be free of material and manufacturing defects at the time of the original purchase. Any defects found in the products should be reported as soon as the fault is discovered.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## TERMS AND CONDITIONS APPLICABLE IN AUSTRALIA AND NEW ZEALAND YOU MUST CAREFULLY READ THE INSTRUCTIONS SUPPLIED PRIOR TO USING ANY PENTAIR PRODUCT.

All products are to be installed and operated in accordance with the instructions provided. This warranty will not apply if any product is used in a manner other than in accordance with the instructions.

#### 1. What does the warranty cover

Pentair warrants its products to be free of defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, then Pentair will, at its sole discretion repair or replace the product with a like product. Replacement products or parts may include remanufactured or refurbished parts or components.

#### 2. How long the warranty is effective internationally

This Pentair product is warranted for 12 months for all parts from the date of the first consumer purchase. Should any parts fail as a result of a defect in material or workmanship within the specified period, the part will be replaced free of charge. [This does not include travel charges, removal and reinstallation charges.]

#### 3. How long the warranty is effective locally

- Please refer to the attached Warranty Schedule detailing the warranty period and coverage.
- ii) All Pentair products warranties commence from the date of first consumer purchase.
- iii) Where this Pentair product is sold for business purposes as defined in the relevant consumer protection law the warranty shall be for a period of six months from the date of purchase by the consumer.

#### 4. Who the warranty protects

This warranty is valid only for the consumer purchaser.

#### 5. How to claim the warranty

To claim under this warranty the consumer should immediately cease using the goods when an alleged product issue arises. For infield service, the consumer should promptly notify a Pentair local dealer, within thirty (30) days after discovery of an alleged product issue. Detailed warranty claim information will be requested at this time and must be supplied by the consumer. For a workshop warranty, the consumer should promptly return the product to a Pentair local dealer, within thirty (30) days after discovery of an alleged product issue. Detailed warranty claim information will be requested at this time and must be supplied by the consumer. Your Pentair Service Agent may be found here: http://www.onga.com.au/dealerlocator

#### 6. What the warranty does not cover

- Damage, deterioration or malfunction resulting from:
   a. Accident, misuse, negligence, fire, water, lightning,
  - Accident, misuse, negligence, fire, water, lightning, or other acts of nature, modification or failure to follow instructions supplied with the product;
- Repair or attempted repair by anyone not authorized by Pentair;
- c. Any damage to the product due to shipment;
- d. Removal or installation of the product;
  e. Causes external to the product such as electric power fluctuations or failure;
- f. Use of supplies or parts not meeting Pentair specifications;
- g. Normal wear and tear.
- h. Product consumables.
- Any unauthorized changes or tampering or partial disassembly of the product;
- j. Water ingression or exposure to abnormal corrosive conditions, abrasive chemicals or "run dry" condition
- k. Any other cause which does not relate to a product defect.
- Damage caused to the products arising from the use of another manufacturer's product.
- Ingress of insects or invertebrates into the unit causing electrical malfunction. Care should be taken to avoid this occurrence.
- iv. Products other than products supplied by Pentair.
- v. Products that are not installed in accordance with the owner's manual.
- Products that are not installed by a suitably qualified person trained in the installation and operation of such products.
- vii. General Service and Maintenance

#### 7. Limitation of Liability

To the extent permitted by law, Pentair's liability for breach of a guarantee implied by any law in relation to goods Pentair supplies that are not of a kind ordinarily acquired for personal, domestic or household use or consumption, except for implied guarantees as to title to goods supplied, a purchaser's right to undisturbed possession of goods supplied and undisclosed securities over goods supplied, is limited to the replacement of the goods, the payment of the cost of replacing the goods or the payment of the cost of acquiring equivalent goods.

#### 8. Exclusion of damages

To the extent permitted by law, Pentair liability is limited to the cost of the repair or replacement of the product.

#### Pentair will not be liable for:

- i. Damage to other property caused by any defects in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference of business relationships, or other commercial loss, even if advised of the possibility of such damage.
- Any other damage arising as a result of weather or natural disaster.
- iii. Any claim against the customer by any other party.

#### 9. Proof of purchase

Pentair reserves the right to reject any warranty if no proof of purchase is provided. A valid proof of purchase will be requested by the Service Agent prior to any works being carried out by the Pentair Service Agent.

#### A valid proof of purchase includes the following:

- i. Tax Invoice from place of purchase.
- ii. Tax Receipt from place of purchase.
- iii. Certificate of Occupancy.

#### 10. Service Calls

- All infield service calls will require the consumer to provide the service agent with either a deposit which is fully refundable upon acceptance of the warranty claim or credit card details as a form of security.
- ii. The consumer will only be charged for services where the Pentair Service Agent determines the product failure is a result of, or directly relating to, any of the items listed in section 5 of these terms & conditions.
- Refusal to provide either a deposit that is fully refundable upon assessment or Credit Card details for security may result in the Pentair Service Agent refusing to attend the Service Call.
- Any warranty application submitted that does not contain the consumers details may result in the Pentair Service Agent refusing to attend the Service Call.
- v. Any product warranty application that involves mains or gas lines the Service Agent will require a Certificate of Compliance for the original installation
- vi. In-field service will not be provided to consumers who purchased their product via the internet. The consumer shall return the product to the place of purchase, a Pentair Service Agent or shall accept the charges related to in-field service in order to receive warranty service on the product.

#### 11. Spare Parts

Spare parts are stocked for a reasonable period of time following last production.

Pentair does not warrant that spare parts will be made available for the whole of the reasonable period and reserves its right to cease supplying spare parts, or providing facilities for repair of spare parts in circumstances which are beyond its control including the requirement to remove spare parts from sales as a consequence of changes in the law or otherwise at its absolute discretion.

#### 12. General Maintenance

It is the responsibility of the consumer to ensure the product is free: from general debris; any foreign matter; and weather exposure. For general service & maintenance please refer to your nearest Dealer and or Service Agent.

#### 13. Definitions

#### 13.1 Infield warranty

 As per the attached warranty schedule any Pentair product that carries an infield warranty means that the service agent is required to attend the site of the faulty product, subject to clause 13.1[iii].

- ii. Any infield issues determined not to be covered by this warranty will result in all associated costs for the infield service provided to be invoiced to the consumer and those costs will not be covered by the Pentair product warranty.
- iii. Any travel associated to the Pentair Warranty Claim will be covered up to 100km round-trip from place of purchase. Any kilometres outside this range will be payable by the consumer.
- iv. Infield warranty is not provided for online purchases.

#### 13.2 Workshop warranty

Any Pentair product that carries a work shop only warranty means; the faulty product must be taken or freighted at consumer cost; to the nearest Pentair Service Agent. The consumer is able to request an infield service / repair; however this would be at the consumer's own cost.

Any workshop issues determined to be no fault / cause of the Pentair product; will result in all associated costs to the service provided; being invoiced to the consumer and will not be covered under the Pentair product warranty.

#### 13.3 Replacement warranty

As per the attached warranty schedule any Pentair product that carries a replacement warranty means; that the service agent will fully replace the faulty Pentair product at no cost to the consumer if determined warrantable.

The faulty product must be taken to the closest Pentair Service Agent for replacement warranty otherwise all costs associated will be at the consumers cost and is not covered under the Pentair product warranty.

#### 14. Effective law

This warranty gives you specific legal rights, and you may also have other rights which vary depending on where the product was purchased and the consumer protection or other law that applies in that place. Nothing in this warranty limits or restricts, or is intended to derogate from, any right or remedy which the purchaser or ultimate user of the product may have pursuant to Australian federal or Consumer Guarantees Act, Fair Trading Act or any other relevant and applicable New Zealand legislation or authority and where necessary shall so be read and construed in light of the applicable legislation.

The terms of this warranty policy maybe inconsistent with the warranty statement in the products owner's manual. To the extent of any inconsistency the terms of this warranty shall prevail.

These terms and conditions must be read in conjunction with the relevant product identified in the Warranty Schedule. A copy of the warranty schedule is available online at: https://www.onga.com.au/terms-of-use/

VF150 Limited Warranty				
APPLICATION GROUP	PRODUCT	WARRANTY PERIOD	LABOUR COVER	WARRANTY TYPE
SUMP & DRAINAGE	VF150	1 YEAR	Nil	Replacement



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