

Dr. Mathan

Distributor Guide

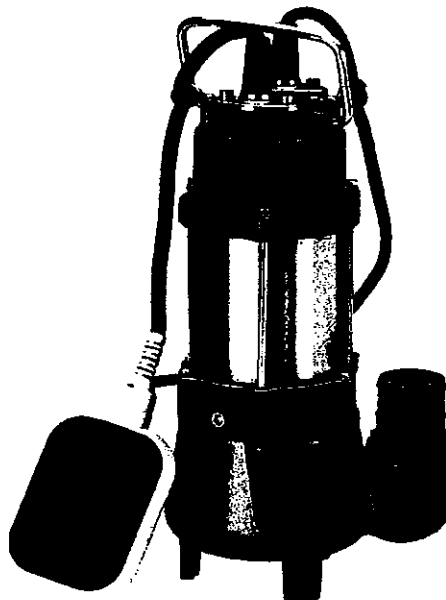
VF 150



onga
Pentair Water

VF 150 is a single phase drainage pump. They are a handy asset to plumbers, drainers and general house holders.

Applications include septic effluent disposal, water transfer, grey water and sump pumping liquid including grey water of neutral pH with soft solids up to 15mm O.D. at a 10% content or fine solids at 1% concentration.



Product Features

Customer Benefits

Cast Iron Construction

Strong and durable for longer pump life

Vortex Impeller

Capable of handling soft solids up to 15mm

Optimum Performance

4 Metres Head
80 Litres Per Minute

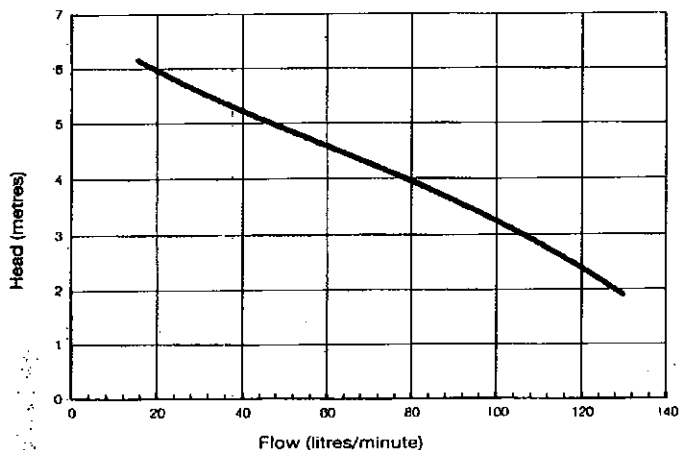
Automatic Float Switch Operation

Protection against pump running dry

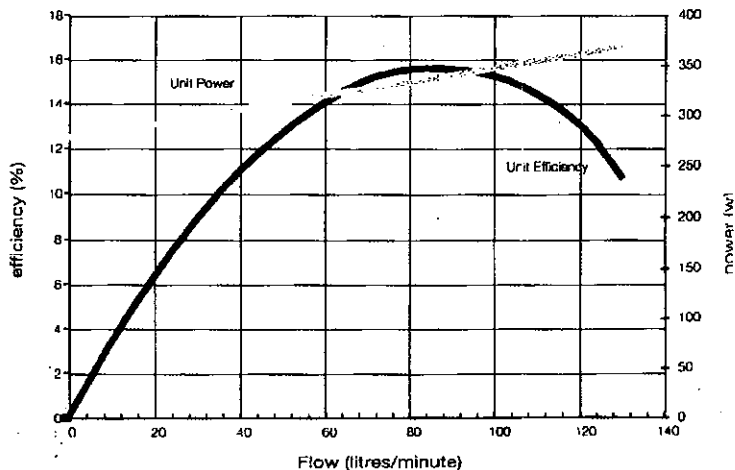
Lip Seal and Dual Mechanical Seal

Improved service life

Performance Chart



Efficiency Chart



Construction

Component	Material
Impeller	Polycarbonate
Pump housing	Cast Iron
Pump Shaft	Stainless - 304
Mechanical seal	Carbon ceramic (dual seal)
Oil seal	Nitrile
Power Cable	H07RN-F
Float cable	H07RN-F
Motor Shell	304 Stainless Steel

VF150 Part Number Nomenclature

V	F	150
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V - Vortex

F - Float Switch

Maximum Flow Rate at open discharge (litres per minute)

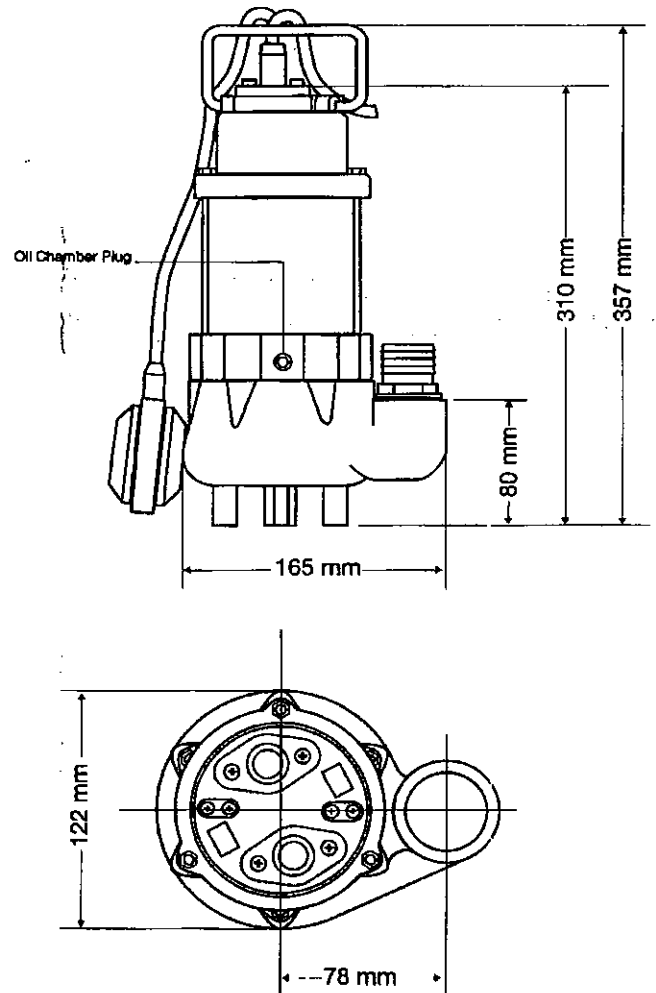
Operating Conditions

Maximum flow rate (lpm)	150
Maximum head (m)	7
Water temperature range	0°C - 40°C
Maximum submergence (m)	6

Technical Data

Pump Discharge connection	1 1/4" BSPF thread
Supplied fitting	1 1/4" Hose Barb
Power Supply	230V - 1Ph - 50Hz
Voltage limits	209V - 253V (230V ±10%)
Pump Weight (kg)	9
Packed Weight (kg)	10
Carton Dimensions (LxWxH)(mm)	180 x 180 x 160
Power consumption (W)	180
Full load current (Amps)	1.75
Starting current (Amps)	9.5
Electrical Cable Length (m)	6
Pump on Height (mm) (Factory Setting)	500
Pump off Setting (mm)	75

Dimension Drawings



Distributor Guide

Installation details

Fittings and Accessories

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

- Threadseal tape (hard discharge pipe installations)
- Hose clamps (flexible discharge hose installations)
- Cable ties

A larger diameter hose or pipe will offer less resistance to flow, and will result in better water pressure and better performance.

Installation

▲ IMPORTANT

Inspect your VF150 for shipping damage. Report any damage to your Onga dealer. Read the Owner's Manual that was shipped with the pump to ensure correct pump installation.

1. 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.
2. If you are using a hard discharge pipe, thread this 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.
3. Lower the pump into the pit 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 pit.
4. Ensure that the float switch can move freely within the pit - incorrect operation and pump failure may occur if the float switch becomes trapped.
5. Connect the power plug to a suitable outlet. The pump will operate when the float is higher than level, and stop operating when the pump float is in the low position.

To adjust the float to a shorter length (and higher shut off level), using a Phillips head screw driver loosen the small locking screws on the float cable clamp until the float cable can move freely within the clamp.

Shorten float cable to the required length and then tighten the screws until cable is firmly held within the clamp.

▲ IMPORTANT

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

▲ WARNING

This will alter the standing water level within the sump.

▲ WARNING

Should the pump stop working, turn the pump off at the switch and disconnect from the electrical source before attempting to remove or work on the pump.

The pump may have shut down due to thermal overload and may start without warning. The pump is fitted with a thermal overload automatic reset and has the potential to start without warning.

Operation

Operation Check

▲ IMPORTANT

1. Ensure that the pump is completely submerged. This may require that the tank has water fed into it from another source.
2. The float switch will rise to a height of 500mm and the pump will start, and empty the pit. As the pit empties the float switch will fall to a height of 75mm measured from the bottom of the pump and stop the pump.
3. 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 following page.

Electrical

Ground pump before connecting to electrical power supply. Failure to ground pump can cause severe or fatal electrical shock hazard.

Do not ground to a gas supply line.

To avoid dangerous or fatal electrical shock, turn OFF power to pump before working on electrical connections.

▲ IMPORTANT

Residual Current Device (RCD) tripping indicates an electrical problem. If RCD trips and will not reset have a qualified electrician inspect and repair electrical system. Pentair Water recommends that a RCD of 30mA trip current be installed and/or be in compliance with local regulations.

Exactly match supply voltage and frequency to pump nameplate voltage. Incorrect voltage can cause fire or seriously damage pump and voids warranty. If in doubt consult a licensed electrician.

If the power supply cord is damaged, it must be replaced by a Pentair Water authorised service agent or similarly qualified person in order to avoid hazard.

Voltage

▲ WARNING

Voltage at pump must not be more than 10% above or below motor nameplate rated voltage or pump may overheat, causing overload tripping and reduced component life. If voltage is less than 90% or more than 110% of rated voltage when pump is running at full load, consult your power supplier.

