

DEPEND ON  
**DAVEY**

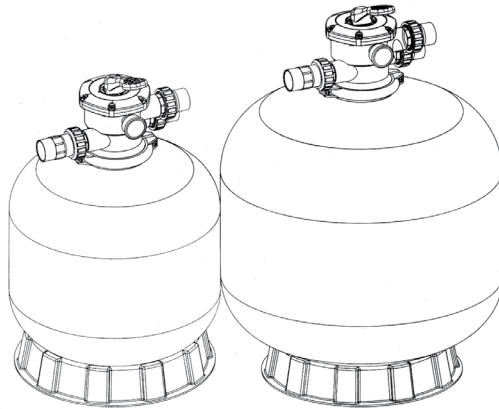
WATER PRODUCTS

**DAVEY®**

# EcoPure®

## Fibreglass Media Filters

Models: F14, F16, F18, F21, F25 & F28



## Installation and Operating Instructions



**WARNING:** Failure to follow these instructions and comply with all applicable codes may cause serious bodily injury and/or property damage.

The installation of this product should be carried out by a person knowledgeable in swimming pool plumbing requirements following the installation instructions provided in this manual.

Please pass these instructions on to the operator of this equipment.

## Function

The filter uses special filter sand to remove dirt particles from pool water. The filter sand is loaded into the filter tank and functions as the permanent dirt removing media.

When the control valve is in the FILTER position, the pool water which contains suspended dirt particles, is pumped through your piping system and is automatically directed by the patented filter control valve to the top of the filter tank.

As the pool water is pumped through the filter, dirt particles are trapped by the sand bed, and filtered out. The cleaned pool water is returned from the bottom of the filter tank, through the control valve and back to the pool through the piping system.

This entire sequence is continuous and automatic and provides for total recirculation of pool water through your filter and piping system.

After a period of time, the accumulated dirt in the filter causes a resistance to flow, so the flow diminishes. This means it is time to clean your filter. With the control valve in the BACKWASH position, the water flow is automatically reversed through the filter so that it is directed to the bottom of the tank, up through the sand, flushing the previously trapped dirt and debris out the waste line. Once the filter is back-washed of dirt, set control valve to RINSE position and run pump for about 30 seconds to 1 minute, and then to FILTER to resume normal filtering.

<b>IMPORTANT: Turn pump off before changing valve position.</b>
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## Installation

Only simple tools (screwdriver and wrenches), plus pipe sealant for plastic adapters, are required to install and service the filter.

1. The filter should be placed on a level concrete slab, very firm ground, or equivalent. Position the filter so that the piping connections, control valve are convenient and accessible for operation and service.
2. Loading the sand media. Filter sand media is loaded through the top opening of the filter.
  - a. Loosen flange clamp and remove filter control valve (if previously installed).
  - b. Cap internal pipe with plastic cap to prevent sand from entering it.

- c. We recommend filling tank approximately 1/2 way with water to provide a cushion effect when the filter sand is poured in. This helps protect the under-drain laterals from excessive shock.
  - d. Carefully pour in correct amount and grade of filter sand. (Be sure centre pipe remains centred in opening). Sand surface should be leveled and should come to about the middle of the filter tank. Remove plastic cap from internal pipe.
3. Assemble filter control valve to filter tank.
    - a. Insert filter control valve (with Oring in place) into the tank neck, taking care that the centre pipe slips into the hole in the bottom of the valve.
    - b. Place two plastic clamps around valve flange and tighten just enough so that the valve may be rotated on tank for final positioning.
    - c. Carefully screw pressure gauge (with Oring in place) into tapped hole in valve body. Do not over-tighten.  
**IMPORTANT!** Nipple must be pierced for correct operation of gauge. Ensure gauge is mounted with nipple at TOP. Failure to comply will VOID WARRANTY.
    - d. Connect pump to control valve opening marked PUMP. After connections are made, tighten valve flange clamps with screwdriver, tapping around clamp with screwdriver handle to help seat valve flange clamp.
  4. Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump, waste etc.
  5. Make electrical connections to pump per pump instructions.
  6. To prevent water leakage, be sure all pipe connections are tight.



#### **WARNING**

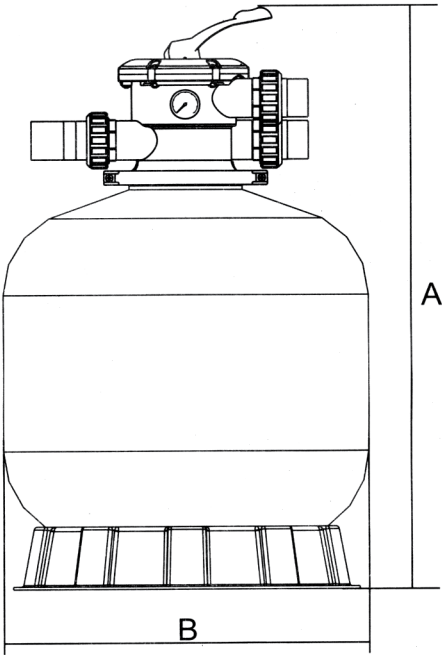
This filter operates under high pressure. When any part of the circulating system (eg. clamp, pump, filter, valves etc.) is serviced, air can enter the system and become pressurised. Pressurised air can cause the lid or valve to be blown off which can result in severe injury, death or property damage.

Turn pump off before changing valve position.

To prevent damage to the pump and for proper operation of the system, clean pump strainer and skimmer baskets regularly.

**DO NOT** unscrew screws of flange clamp while pump is running.

**Main Dimension**



Model	Height A (mm)	Diametre B (mm)	Valve Port Size (inches)	Sand (kg)
F14	726	350	1.5"	25
F16	757	400	1.5"	40
F18	814	450	1.5"	60
F21	845	533	1.5"	90
F25	950	635	1.5"	160
F28	1020	710	1.5"	200

## Filter and Control Valve functions

Valve Position	Function
FILTER	Normal filtration and vacuuming.
BACKWASH	Cleaning filter by reversing the flow.
RINSE	Used after backwash to flush dirt from valve.
WASTE	By-passes filter, used for vacuuming to waste or lowering water level.
RECIRCULATE	By-passes filter for circulating water to pool.
CLOSED	Shuts off all flow to filter or pool.

### Installation / Start-up of Filter

1. Be sure correct amount of filter media sand is in tank and that all connections have been made and are secure.
2. With pump off depress control valve handle and rotate to BACKWASH position. (To prevent damage to control valve seal, always depress handle before turning.)
3. Prime and start pump according to pump instructions (be sure all suction and return lines are open), allowing the filter tank to fill with water. Once water is flowing out of the waste line, run the pump for at least 1 minute. The initial back-washing of the filter is recommended to remove any impurities or fine sand particles in the sand media.
4. Turn pump off and set valve to RINSE position. Start pump and operate until water in sight glass is clear, about 1/2 to 1 minute. Turn pump off and set valve to FILTER position and restart pump. The filter is now operating in the normal filter mode, filtering dirt particles from the pool water.
5. Adjust pool suction and return valves to achieve desired flow. Check system and filter for water leaks and tighten connections, bolts and nuts as required.
6. Note the initial pressure gauge reading when the filter is clean. (It will vary from pool to pool depending upon the pump and general piping system.) As the filter removes dirt and impurities from the pool water, the accumulation in the filter will cause the pressure to rise and flow to diminish. When the pressure gauge increases between 30kPa and 50kPa above your 'clean' filter gauge reading, it is time to backwash the filter (see BACKWASH under filter and control valve functions table above).

**NOTE:** During initial clean-up of the pool water it may be necessary to backwash frequently due to the unusually heavy initial dirt load in the water.

## Davey® Repair or Replacement Guarantee

In the unlikely event in Australia or New Zealand that this Davey product develops any malfunction within the prescribed and advertised warranty period for the product part from the date of original purchase due to faulty materials or manufacture, Davey will at our option repair or replace it for you free of charge, subject to the conditions below.

### Davey EcoPure® Guarantee Period

5 Year Full + 5 Year Pro-rata for filter body  
Multiport Valve - 2 Years      Other Components - One Year

Should you experience any difficulties with your Davey product, we suggest in the first instance that you contact the Davey Dealer from which you purchased the Davey product. Alternatively you can phone our Customer Service line on 1300 367 866 in Australia, or 0800 654 333 in New Zealand, or send a written letter to Davey at the address listed below. On receipt of your claim, Davey will seek to resolve your difficulties or, if the product is faulty or defective, advise you on how to have your Davey product repaired, obtain a replacement or a refund.

Your Davey Guarantee naturally does not cover normal wear or tear, replacement of product consumables (i.e. mechanical seals, bearings or capacitors), loss or damage resulting from misuse or negligent handling, improper use for which the product was not designed or advertised, failure to properly follow the provided installation and operating instructions, failure to carry out maintenance, corrosive or abrasive water or other liquid, lightning or high voltage spikes, or unauthorized persons attempting repairs. Where applicable, your Davey product must only be connected to the voltage shown on the nameplate.

Your Davey Guarantee does not cover freight or any other costs incurred in making a claim. Please retain your receipt as proof of purchase; you **MUST** provide evidence of the date of original purchase when claiming under the Davey Guarantee.

Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Davey products. This limitation does not apply to any liability of Davey for failure to comply with a consumer guarantee applicable to your Davey product under the Australian or New Zealand legislation and does not affect any rights or remedies that may be available to you under the Australian or New Zealand Consumer Legislation.

In Australia, 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.

Should your Davey product require repair or service after the guarantee period; contact your nearest Davey Dealer or phone the Davey Customer Service Centre on the number listed below.

For a complete list of Davey Dealers visit our website ([davey.com.au](http://davey.com.au)) or call:



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