

50mm pipe must be used with the FG28 P/N 32936 or if the length of piping is over 15m. 40/50mm barrel unions are provided at the multiport valve for connection of PVC pipe to “pump”, “pool return” and “waste”.



NOTE:
Ensure pipework is connected to appropriately labelled multiport valve connections.

Commissioning Filter

Refer to “operating instructions” below for **safety warning** and **multiport valve control** prior to the filter start-up. The pool should be slightly overfilled and the filter backwashed and then run on RINSE to prevent dust and fine particles in the media bed returning to the pool.

1.

Backwash the filter.
2.

Position the valve handle to “RINSE”.
3.


Start the pump and run until water in the valve sight glass becomes clear.
4.

Stop the pump and position the valve handle to “FILTER”.
5.

Start the pump. The CC Filter is now in filtration mode.
6.

To determine the correct operating conditions, check the pressure gauge reading is 80kPa or below. Record the clean operating pressure of your filter.

Operating Instructions



WARNING - FILTER OPERATES UNDER HIGH PRESSURE

- Ensure all lids / closures / clamps are correctly secured before operating system.
- Never adjust clamps or change valve settings with the system under pressure.
- Relieve all pressure from system before working on filter.

Multiport Valve Control

The flow of water through the filter is controlled by the multiport valve on the top of the filter tank. The handle on top of the valve can be moved to any one of six positions, which have the following functions:

Valve Position	Function
FILTER	Normal filtration and vacuuming through filter.
BACKWASH	Clean the filter.
RINSE	Used on initial filter start-up and after backwash to prevent dirt in the sand returning to the pool.
WASTE	By-passes the filter; used for vacuuming to waste, or draining the pool.
RECIRCULATE	By-passes the filter to circulating water to the pool or to boost spa jets.
CLOSED	Shuts off all flow to the filter. Do not run pump.

Technical Data

Size (inches)	Size (mm)	Name	Model No.	Sand Req. (kg)	Zeolite Req. (kg)	Max. Flow (lpm)	Min. Backwash (lpm)	Filter Area (m²)	Max. Pressure (kPa)	Max. Temp. (°C)	Label Part Number
18	450	Crystal Clear 18	FG18	60	45	120	85	0.14	280	50	13769
21	533	Crystal Clear 21	FG21	90	60	190	120	0.2	280	50	13770
25	635	Crystal Clear 25	FG25	160	105	240	180	0.3	280	50	13771
28	710	Crystal Clear 28	FG28	200	150	350	230	0.38	280	50	13772
32	800	Crystal Clear 32	FG32	250	180	420	240	0.4	280	50	13773
36	900	Crystal Clear 36	FG36	300	225	500	400	0.65	280	50	13774

Filter Care

The Davey Sand Filter is the heart of the pool equipment installation. Proper care and maintenance will add many years of service and enjoyment to your pool. Keep the exterior of the filter clean, using a mild detergent and water.

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 6.8 and is regularly treated with a chlorine sanitising agent with the level not exceeding 3PPM.

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

Trouble Shooting

Reduced flow of water into the pool generally indicates the filter is ready to be backwashed. Check the filter pressure gauge (see section on Normal Filter Cycle). If backwashing is required, perform the steps described earlier in the section of “Backwashing the Filter”. If there is still reduced flow after backwashing, check for blocked or plugged lines which could restrict the volume of water entering the pool.


Large quantities of sand returning to the pool during the filter cycle may indicate that one of the lower laterals is damaged. Correcting this condition requires removal of sand from the filter so that damaged laterals may be replaced.

If the pump operates noisily, investigate for a possible air leak in the suction line, blocked piping or rubbish in the pump strainer basket. Refer to the Trouble Shooting section in your Pump Manual for further assistance.

In the event of installation or operation difficulties with your product, contact the supplier from whom the equipment was purchased or your nearest authorised Davey Pool Equipment Service Centre. For assistance in locating your nearest dealer contact the Davey Customer Service Centre.



CAUTION:
Never shift the valve handle position while the pump is running.



This filter tank must not be operated under vacuum. Should leaf baskets or suction lines become clogged, blocked or closed, filter damage not covered by guarantee may occur (particularly if an auxiliary pump is installed in line down stream of the filter).

Normal Filter Cycle

1.

Set the valve to FILTER and start the pump.
2.

With a clean filter, record the pressure gauge reading or mark the needle position on the pressure gauge.
3.

Operate the filter each day for a sufficient time to turn over the water in the pool once every day. the filter should also be operated at all times the pool is in use and for about one hour afterwards. During the winter, the running time may be reduced.
4.

When the pressure gauge reading is 40 - 50kPa higher than the clean filter gauge reading as in (2) above, it will be necessary to clean or backwash the filter (see section on Backwashing the Filter).

Backwashing the Filter

When the filter gauge reading is 40 - 50kPa above the clean filter gauge reading, cleaning or backwashing is required. To perform the backwash operation:

1.

Shut off the pump. Be sure to disconnect any automatic Vacuum Cleaner.
2.

Shift the valve handle to BACKWASH.
3.

Start the pump and run until the water appears clean through the sight glass (this will take two or three minutes).
4.

Shut off the pump and turn the valve handle to RINSE.
5.

Start the pump and run for approximately one minute.
6.

Shut off the pump and turn the valve handle to FILTER.
7.

Start the pump; a new filter cycle has now begun.
8.

If a backwash cycle does **not** reduce the operating pressure of the filter, the media will need to be changed. Contact your local pool shop. Your media should last between 5 to 8 years.




CAUTION: Most filter media contains dust and fine particles that must be backwashed from media before filter is set to ‘Filter’.



CAUTION:
Never vacuum while backwashing.

Removal of Filter



WARNING:
Always relieve pressure from system before performing any service work.

Should it be necessary to remove the filter, the following procedure should be adopted:-


1.

Switch off the pump and remove the plug from the power point.
2.


Open all air bleeds in system.
3.

Close isolating valves where fitted.
4.


Remove: piping connection to the pump
 piping connection to the pool return
 piping connection to waste



NOTE: When making any enquiries about your Davey Filter, be certain to quote the Model Number from the nameplate on the equipment.




To avoid explosion and possible severe or fatal injury, filter pressure must not exceed 280kPa. Do not test filter with compressed air. Check that all clamps and fasteners are in good condition and are firmly secured before pressurising system. Never adjust clamps or fasteners while filter is pressurised.




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.



Caution! Do not add chemicals directly to the pool skimmer. Adding undiluted chemicals may damage pump and filter and void warranty.



Small children using the pool or spa must ALWAYS have close adult supervision.



Routine Maintenance tasks – to maximise the life of your pool equipment & personal safety, use this checklist once a week. Turn pump off first.

a.

Make sure that any pressure gauges are in working condition and the operating pressure is within limits as specified on the product.

b.

Make sure that each suction inlet, and main drain has a cover that is securely attached and in safe working condition.

c.

Make sure that all skimmer covers are securely attached and in safe working condition. These should be replaced every 3 to 4 years.

d.

Remove any obstructions or debris from the main drain cover.

e.

Ensure the skimmer baskets and the pump hair and lint pots are free of leaves and debris at least once a week.

f.


Remove obstructions and combustibles from around the pump motor.

g.

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.

h.

Check water balance and sanitiser levels at your local pool shop.



WARNING! Pump suction is hazardous and can trap and drown or disembowel bathers. Do not block suction. Do not use or operate swimming pools, spas or spa baths if a suction cover is broken, missing or loose. Two suction covers and inlets must be provided into every pump to avoid suction entrapment.