ASTRALPOOL

CA , ECA,Series MEDIA Filters

INSTALLATION AND OPERATING INSTRUCTIONS

ECA SERIES FILTER

CA SERIES FILTER

www.astralpool.com.au
sales@astralpool.com.au

A division of FLUIDRA

CA SERIES MEDIA FILTERS

Model No.	Tank Diameter	Filter Area	Port Size	6 Hr. Turnover	8 Hr. Turnover	Sand Req'd.	VIRON ACTIVE COURSE	VIRON ACTIVE FINE
CA280	665 mm	0.30 Sq M	40 mm	100,800 ltrs	134,400 ltrs	120 kg	45 kg	75kg
CA300	665 mm	0.30 Sq M	50 mm	108,000 lts	144,000 lts	120 kg	45 kg	75 kg
CA340	742 mm	0.38 Sq M	50 mm	115,200 ltrs	153,600 trs	150 kg	60 kg	90kg
CA400	816 mm	0.46 sq M	50 mm	144,000 ltrs	192,000 ltrs	200 kg	75 kg	125kg

Dimensions With Valve Installed			
Model	Height	Width	Shipping Weight
CA280	106 cm	66.5cm	20 kg
CA300	107.6 cm	66.5cm	21 kg
CA 340	107.6 cm	74.2 cm	22 kg
CA400	123.3cm	81.6 cm	28 kg

ECA SERIES MEDIA FILTERS

Dimensions With Valve Installed			
Model	Height	Width	Shipping Weight
ECA 550	98 cm	58.6 cm	13 kg
ECA 650	105 cm	66.5cm	17 kg

Model No.	Tank Diameter	Filter Area	Port Size	6 Hr. Turnover	8 Hr. Turnover	VIRON ACTIVE COURSE	VIRON ACTIVE FINE	Sand Req'd
ECA550	586 mm	0.23 Sq M	40 mm	65,000 ltrs	85,000 ltrs	30 kg	50kg	80 kg
ECA650	665 mm	0.30 Sq M	40 mm	92,000 ltrs	120,000 ltrs	45kg	75kg	120 kg

INFORMATION AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

GENERAL NOTES

1. When unpacking the filter, be sure the unit is complete and no visible shipping damage has occurred.
2. Allow sufficient clearance around filter system for access and maintenance.
3. Provide adequate ventilation for pumping equipment, installed in conjunction with filter.
4. Provide solid mounting for filter and pump. If installed outdoors, install the system on a slab or solid concrete base to avoid risk of settlement. Filter systems once located with sand and water can exceed a weight of 250 kg. If installed indoors, ensure doorway allows sufficient clearance should filter tank require replacing.
5. Installation of filters and pumps should be located as close to the pool as possible to avoid excessive piping friction loss.
6. If system is installed below pool level it is important to install isolating valves to prevent risk of flooding from back up water, from the pool or spa.
7. The proper sand selection is critical to good filter performance. Ensure that the media is an approved form of Quartz Silica sand, glass or Zeolite.
8. The installation of filters requires no special tools.
9. Confirm that plumbing lines from pool are correctly identified. This will ensure proper connection to markings on filter valve (i.e. "Pump", "Waste", and "Return").

LOADING FILTER SAND

Once the filter system has been positioned, the installation of filter sand may be undertaken as follows:

1. Check filter size in order to determine necessary amount of sand required.
2. Double check that the internal system consisting of a lateral hub and stand pipe are intact inside the tank.
3. Fill tank half full with water.
4. Place the disposable loading disc into the upper tank opening and the plastic cover over stand pipe to stabilise the filter and stand pipe. It is important that the stand pipe remains centered through the sand loading procedure to ensure alignment with valve assembly opening.
5. Proceed to load correct volume of dry sand slowly (if sand is saturated loading can be difficult).
6. Once sand is loaded discard loading disc and check to determine if stand pipe is properly centered in tank opening.
7. Fill with sand, glass or other approved sand to the shoulder level of the filter.

INSTALLATION OF SELECTOR VALVE

1. Following the sand loading, clean any sand particles or debris from upper surface of tank opening.
2. Install six (6) position selector valve after placing **O-Ring** in cavity on tank body. Place valve into tank opening while ensuring that the **O-Ring** has remained in position.
3. Install selector valve into top tank opening and rotate valve to best suit plumbing lines.
    a. **CA Series:** once valve positioned, tighten the **lock ring firmly** by hand.
    b. **ECA Series:** once valve positioned, fit **clamp band** assembly around neck of filter and valve and tighten sufficiently for good engagement.
    c. **Note: It is not necessary to over tighten.**
4. Double check that incoming pool lines are connected to appropriate valve openings as marked on valve port (i.e. pump, return (pool) and waste).
5. The threaded openings on valve are 40mm or 50mm thread which all accommodate Astral Pool barrel unions supplied with the filter. O-rings are supplied to fit between the multiport valve and barrel union. It is only necessary to tighten by hand. **THE USE OF TEFLON TAPE IS NOT REQUIRED.**
6. Remove plug from side wall of valve and install threaded pressure gauge (if not already fitted) using Teflon tape wrap. **Do not over tighten**. Minimal hand tightening is adequate to provide a good seal.

NOTE:

How to correct a liquid filled gauge that has moved off of “0 psi” during shipping?

Why it happens

Liquid filled pressure and vacuum gauges are tested for accuracy at the factory. However, during transport, changes in temperature and altitude may cause a shift in the gauge’s internal pressure. That, in turn, causes the gauge’s resting point to change. There are no long term side effects from these changes if the gauge is vented to equalize that pressure.

If the gauge is placed in a location where big temperature changes are common, you may want to vent it when major changes occur. When installing new gauges, it is a good practice to mount them with the stopper up so that they can be vented easily

How to fix it

On top of the gauge is a rubber stopper which secures the liquid filling. To calibrate a gauge that is not returning to zero, just lift one edge of the stopper to equalize the pressure inside. Try to position the gauge so that the stopper opening is pointed upward and any air bubble inside the pressure gauge is at the near it. After venting the gauge, you should see the pointer move back to 0 psi, remember to keep the gauge vertical (stopper on top), so that the oil doesn't leak out.

If a little of the liquid escapes, just wipe it away. Astralpool uses non-toxic food grade glycerin to fill its gauges. Wiping away the excess is important however, as left over glycerin will collect dust and debris if it is not cleaned off. Replace the stopper when finished. The gauge will work without stopper replacement, but it should be put back in place to maintain a clear dial. An open top will allow dust and debris into the casing, which could cloud the readout and might damage the gauge over time.

VALVE OPERATION

The operation and the positions of valve settings are as follows:

Valve Settings	Direction of flow through Valve
Filter (also during vacuuming)	From pump down through valve, through sand bed, up through stand pipe to valve and back through pool return.
Back Wash	From pump, through valve, down through stand pipe, up through sand bed, and through valve to waste.
Rinse	Flow from pump, through valve, down through sand bed, up through stand pipe, through valve to waste. (Position also used for initial start-up and levelling sand bed after Back-wash)
Waste	From pump, through valve to waste. Also position for lowering water level or assist in draining pool.
Closed	From pump to valve without further circulation. Prevents any flow to filter and pool.
Recirculate	From pump through valve to pool. This position bi-passes the filter and is used for circulation of pool water only.

NOTE: Always "STOP" pump when changing selector valve position.

INITIAL START - UP

1. Make sure the correct amount of sand is in the filter tank.
2. Prime pump.
3. Set valve handle in BACK WASH position.
4. Start pump and operate in BACK WASH cycle for three (3) minutes. This will purge the filter of excess fines in the sand.
5. Turn pump OFF and set valve handle to RINSE. Start pump and run for one (1) minute.
6. Stop pump and set valve handle to FILTER. Restart pump. System is now operating on a normal FILTER cycle.
7. Adjust the valves in the skimmer and main drain lines (if provided) to achieve balanced flow rates.
8. When a pool is filled initially, the filter may have to be BACK WASHED once a day until the water becomes sparkling clear. From that point on, BACK WASH when pressure gauge indicates 30 to 40 kPa higher than at starting pressure.

OPERATIONAL & INSTALLATION TIPS

1. Always turn pump **"OFF"** before changing valve positions.
2. Never run pump dry as it depends on water for lubrication.
3. Always maintain minimum water level to ½ way up the skimmer mouth.
4. Clean pump strainer regularly.
5. Maintain a proper chemical balance in the pool.
6. Maximum operating pressure is 250kPa on CA Series and 200 kPa on ECA Series.
7. Ensure pressure gauge on valve is positioned so that rain water cannot collect on glass face.
8. Back wash filter regularly for 3-5 minutes or until sight glass runs clean each time to ensure sand is completely cleaned.
9. Always rinse for 1 minute after each backwash and before returning valve position to filter.

Maintenance of your filter

Maintenance Schedule: You new product incorporates moving parts and withstands high velocity water with chemicals in it. Some of these parts will wear in the normal course of use and require regular checks and maintenance. Performing these checks and maintenance will identify parts that have worn and require repair/replacement before further serious damage is sustained. A small amount of regular care and attention to your pool equipment will help ensure long life and trouble free performance.

Timing	Maintenance Check	Service action (if required)
Fortnightly	**Check pressure gauge. If pressure increase is greater than 20kPa cleaning may be required**	Perform backwash according to instructions
Three Monthly	**Check inlet/outlet o'rings for leaks**	Isolate Pump, turn power off, clean and grease O rings or replace if necessary
Annually	**Compare operating pressure of backwashed filter to initial pressure (when new)** **If using Zeolite or M3, regenerate filter sand. This is important in commercial applications as it aids in the removal of ammonias.**	If pressure is more than 30 – 40 kPa different from new filter, a sand change may be required Add salt to filter sand per supplier. Allow to sit for 24 hours then backwash, rinse and return to filter.

Important note: Regular maintenance is important to ensure long life and trouble free performance of your pool equipment. If unable to perform the maintenance yourself, contact your local AstralPool office who will arrange a trained service technician to perform the maintenance for you.

Record your Equipment details here for quick reference:

Model No.: _____

Serial No.: _____

Initial Pressure (kPa): _____

AstralPool Australia Pty Ltd (ABN 97 007 284 504) ("AstralPool") provides the following warranty in relation to its CA, ECA Series Sand Filters. ("Product").

For full warranty terms and conditions and to register your warranty, simply visit **www.astralpool.com.au/warranty** and complete your details. Or scan the QR code and be taken directly to the registration page.

Record your equipment details here for quick reference:

Model No.: _____

Serial No.: _____

INST368

ASTRALPOOL

sales@astralpool.com.au
www.astralpool.com.au