

# MULTI CYCLONE

## CENTRIFUGAL PRE-FILTRATION

### Owners Manual



#### OFFICES - AUSTRALIA

NSW - Sydney  
(HEAD OFFICE)  
Tel : +61 2 9898 8686

VIC/ TAS - Melbourne  
Tel : +61 3 9764 1211

WA - Perth  
Tel : +61 8 9273 1900

QLD - Brisbane  
Tel : +61 7 3299 9900

SA/ NT - Adelaide  
Tel : +61 8 8244 6000

ACT Distributor  
Tel : +61 2 6280 6476

#### OFFICES - OVERSEAS

Waterco USA  
Augusta, USA  
Tel : +1 706 793 7291

Waterco Canada  
Quebec, Canada  
Tel : +1 450 796 1421

Waterco (Europe) Limited  
Radfield, Kent, UK  
Tel : +44(0) 1795 521 733

Waterco (NZ) Limited  
Auckland, New Zealand  
Tel : +64 9 525 7570

Waterco (GZ) Limited  
Guangzhou, China  
Tel : +8620 3222 2180

Waterco (Far East) Sdn. Bhd.  
Selangor, Malaysia  
Tel : +60 3 6145 6000

PT Waterco Indonesia  
Jakarta, Indonesia  
Tel : +62 21 4585 1481

#### WARNING

This equipment must be installed and serviced by a qualified technician. Improper installation can create electrical hazards which could result in property damage, serious injury or death. Improper installation will void the warranty.



#### Notice to Installer

This manual contains important information about the installation, operation and safe use of this product. Once the product has been installed **this manual must be given to the owner/ operator of this equipment.**

## SAFETY INFORMATION

1. MultiCyclones are designed to work with water at a temperatures greater than 0° C and less than 45°C. The filter should never be operated outside of these temperatures or damage may occur.
2. The installation should be carried out in accordance to the safety instructions of swimming pools and the specific instructions for each facility.
3. Any modification of the filter requires the prior consent from Waterco. Original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. Waterco assumes no liability for the damage and injuries caused by unauthorised replacement parts and accessories.
4. The user should make sure that the installation is carried out by qualified authorised persons and that these persons have first carefully read the following instructions.
5. The operating safety of the filter is only guaranteed if the installation and operation instructions are correctly followed.
6. In the event of defective operation or fault, contact Waterco or its nearest authorised service agent.
7. To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
8. Incorrectly installed equipment may fail, causing severe injury or property damage.
9. Chemical spills and fumes can weaken Swimming Pool/ Spa. Corrosion can cause filters and other equipment to fail, resulting in severe injury or property damage. Do not store pool chemicals near your equipment.

## MULTICYCLONE

MultiCyclone is capable of saving water and reducing filter maintenance.

The MultiCyclone works on the basis of centrifugal water filtration. There are no moving parts to wear and tear, and no filter media to clean or replace.



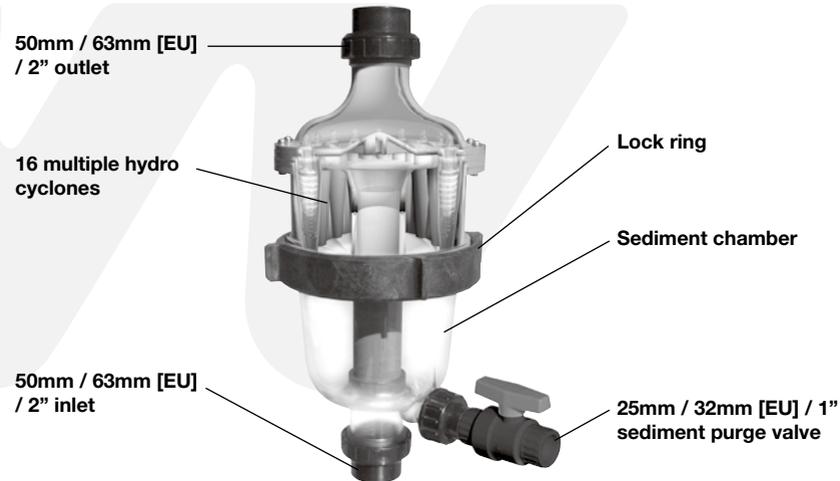
Incoming water is guided by a diverter plate so that it enters multiple hydro cyclones tangentially generating a strong centrifugal effect. This spins the sediment out to the hydro cyclone's wall and then spirals it down to the sediment chamber, while the cleansed water spirals upwards.

The accumulation of sediment can be visibly monitored through the Multicyclone's clear sediment chamber. The Multicyclone is cleaned by simply opening the purge valve. Only 15 litres of water is discharged to clean the Multicyclone of sediment

MultiCyclone is ideal as a pre-filter to extend the life of your existing filter. MultiCyclone will filter out up to 80% of the incoming sediment from your swimming pool.

- Save Water
- Reduce backwash frequency.
- Reduce filter cartridge maintenance.

*Please Note: The MultiCyclone is designed to filter sediment that is heavier than water, floating debris cannot be filtered out by centrifugal filtration.*



## INSTALLATION

Be sure to comply with the local plumbing codes. The filter may be plumbed into a drinking water system and would, therefore be subject to whichever local regulations that may apply.

Be sure that all provisions for wastewater disposal meet local, state or national codes. Do not discharge water where it will cause flooding or damage.

If the incoming water pressure is higher than the maximum operating pressure of 400kPa / 4Bar / 58psi, a Pressure Regulating Valve (PRV) must be installed upstream of the filter inlet.

The PRV should be set to 90% of the maximum operating pressure of the tank.

If the incoming water flow is less than the filter's minimum flow requirements, the filter's filtration efficiency will be affected, please consult Waterco.



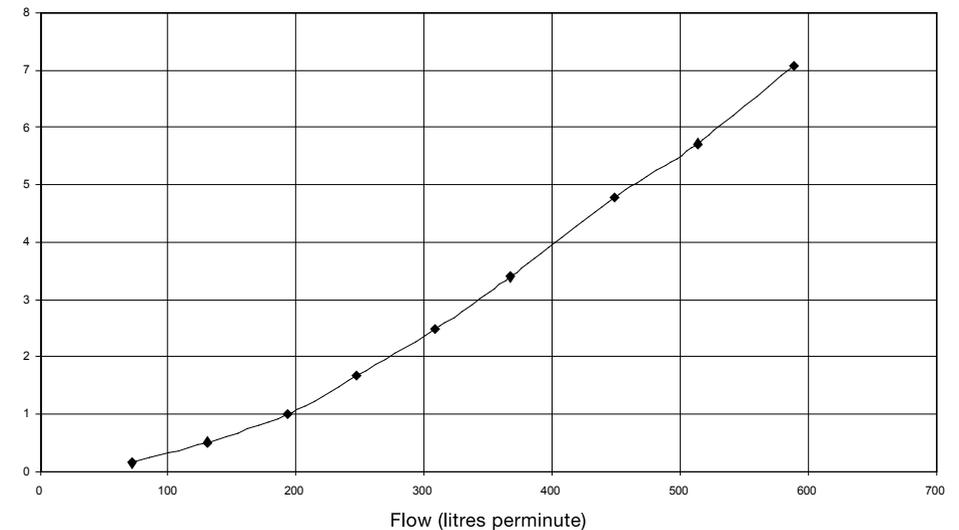
Typical installation with a sand filter



Typical installation with a cartridge filter

Multicyclone's minimum flow rate	50 lpm / 3 m <sup>3</sup> /hr / 13.2 gpm
Multicyclone's maximum flow rate	500 lpm / 30 m <sup>3</sup> /hr / 132 gpm

Head Loss Curves on MultiCyclone



## PLUMBING CONNECTION

### 1. Connect the outlet from your pool pump to the inlet of the MultiCyclone.

Glue the plumbing to the Barrel unions and Allow 24 hours for glue (solvent) to set. Ensure solvents are not excessively applied to fittings as this could run into o'rings and create sealing problems.

Screw the barrel union on to the inlet of your MultiCyclone and hand tighten.

### 2. Connect from the outlet of the MultiCyclone to the inlet of your filter.

Glue the plumbing to the Barrel unions and Allow 24 hours for glue (solvent) to set. Ensure solvents are not excessively applied to fittings as this could run into o'rings and create sealing problems.

Screw the barrel union on to the outlet of your MultiCyclone and hand tighten.

*(Waterco recommends that a shut off valve be installed after the MultiCyclone to assist with flushing out the collected debris. Please refer to "Insufficient Water Pressure")*

### 3. Connect to Waste Line.

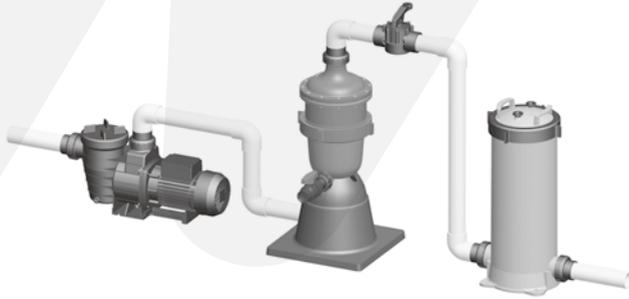
Glue the plumbing from the Sediment Purge Valve to your waste line.

### 4. Turn on pool pump.

Be sure to check that there are no leaks from the connectors. If required, tighten by hand

## OPTIONAL MOUNTING STAND [200373]

An optional Mounting Stand is also available for situations where the MultiCyclone cannot be installed directly above your pool pump.



Installation with optional Mounting Stand

## FILTER MAINTENANCE

Filter maintenance determined by the following conditions:

1. The flow rate through the MultiCyclone is insufficient to meet the demand.
2. The sediment chamber is half filled with sediment.

The accumulation of sediment can be visibly monitored through the MultiCyclone's clear sediment chamber. The MultiCyclone is cleaned by simply opening the purge valve. Only 15 litres [4 gallons] of water is discharged to clean the MultiCyclone of sediment.

## FLUSHING OUT THE SEDIMENT CHAMBER

Whilst the water pump is running simply open the sediment purge valve until the sediment has been flushed out. This is visible through the clear sediment chamber.

Once the sediment has been flushed out, close the sediment purge valve.

## INSUFFICIENT WATER PRESSURE

In situations where your water pump is not powerful enough to force the sediment out of the sediment chamber. Waterco recommends fitting a 2 way shut off valve between the MultiCyclone and the filter. The shut off valve is closed off whilst you are purging the sediment chamber.

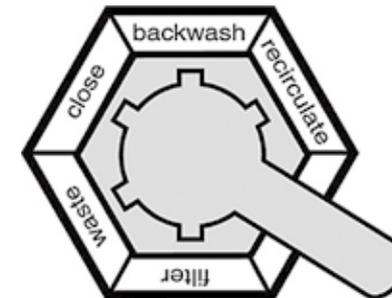
The closed valve increases the flow of water through the sediment chamber, improving the purging action of the MultiCyclone.

Whilst the pump is not operating close the 2 way shut off valve and open the purge valve. Switch on the pump to purge the sediment chamber of its sediment. Once the sediment chamber is purged, switch off the pump and open the 2 way shut off valve and close the purge valve.



Installation with 2 way shut off valve

If the MultiCyclone is installed as a pre-filter to a sand filter, water flow to the sand filter can be closed via the sand filter's multiport valve.\*



*\*NOTE: This position is not available on 4-Way Multiport Valves.*

## WARRANTY

MultiCyclone is covered by a 2 warranty.

For more information please refer to the Waterco "Warranty Terms & Conditions" booklet.

With our on going commitment to quality products and service Waterco Limited reserves the right to alter the product in any manner and at any time without prior warning.

This information is to the best of our knowledge, accurate at the time of printing. Any recommendations or suggestions are made without warranty and without prejudice, since the use of our product is beyond our control.