NORIA

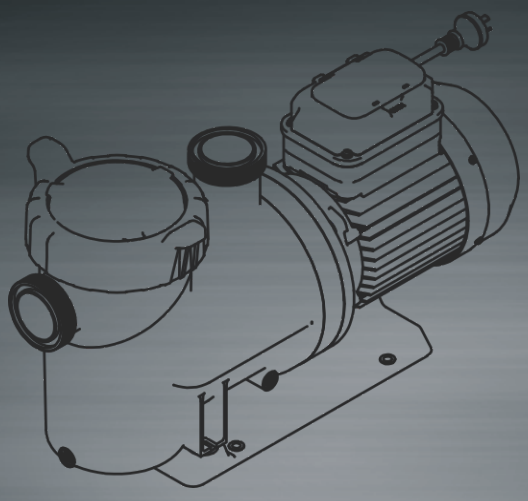
performance on demand

ECO

INSTALLATION & OPERATION

ECO:100

ECO:150



OVERVIEW

Noria ECO pumps are intelligently designed to easily meet demand when required and give optimum energy efficiency with greatly reduced noise levels. If run on a low speed setting the ECO pump will significantly reduce the overall pool operating costs of up to 80%.

Quality materials and workmanship, rigid construction and a single piece of super tough and highly stable reinforced thermoplastic makes the Noria ECO pumps outstandingly durable. The Noria ECO difference continues with the use of stainless steel shafts for strength; larger hair and lint pots reduce the need for frequent cleaning. The research invested in Noria ECO pumps is reflected in the user-friendly, easy to open inspection lids and barrel unions.

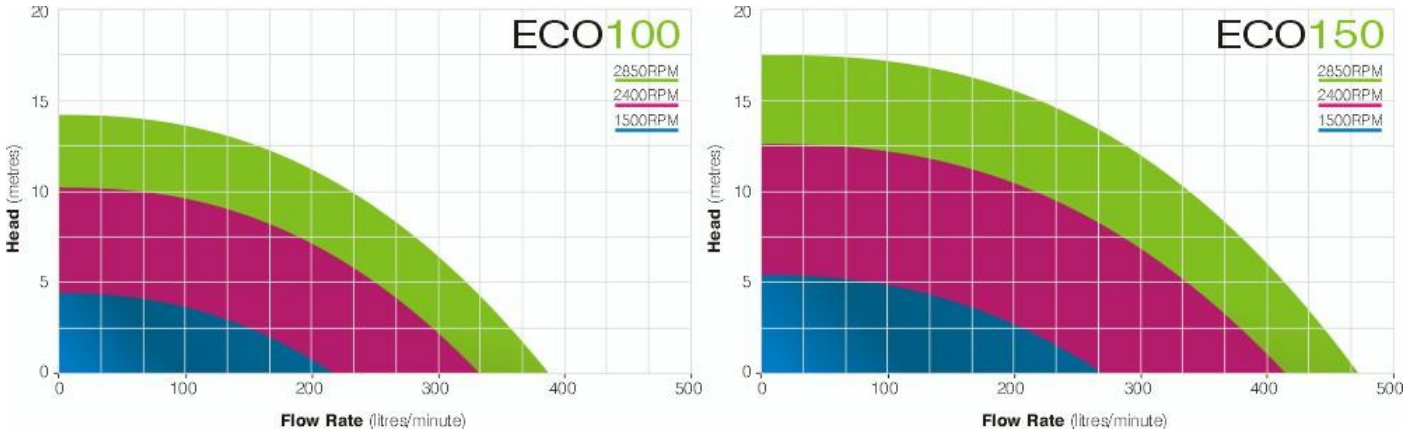
The Noria ECO pump is part of a range of intensively researched, high quality, connected products that work in harmony to ensure the pool is easy to maintain and ready for use at any time.

SPECIFICATIONS

	ECO:100	**ECO:150**
Width	685mm	695mm
Height	365mm	365mm
Flow rate*	360	450
Hp	1	1.5
Watts *(Maximum)*	750 *(975)*	1100 *(1400)*

**Flow rate calculated at 6 meter head*

PRESSURE-FLOW PERFORMANCE



INSTALLATION

1. The pump should be installed on a hard surface such as a concrete slab or paver. The pump should be installed in a well ventilated enclosure that is resistant to flooding or other water damage.
2. Place the pump in the position required ensuring there is at least 100mm of spacing between the fan cowling and the wall of the enclosure. This ensures sufficient ventilation for cooling.
3. Fit the threaded nut and tail to the suction and the discharge ports of the pump ensuring the O-rings are attached (40mm and 50mm are supplied depending on the size of pipe).
4. Plumb the suction side of the pump to the skimmer (suction) pipe including any valves required.
5. Plumb the discharge side of the pump to the filter inlet including any valves required.
6. Plug the power lead into an approved power supply.

   DO NOT SWITCH ON
7. Allow a minimum of 2 hours for the glue to set (for best results wait 8 hours).

NOTE: Be sure to use primer to clean any pipe and fittings before gluing together with Type P pressure glue *(Type P is formulated as a high bond strength, PVC pipe cement in all pressure applications for bonding PVC pipe and fittings)*. **This ensures a quality join.**

START-UP PROCEDURE

Your ECO pump (variable speed pump) is designed for maximum energy efficiency whilst still keeping your pool crystal clear. To maximise the energy efficiency, the ECO pump should be run at the lowest speed setting possible to efficiently filter your pool water. It is recommended that the first speed setting *(Green Button)* should be set to this filtration speed and used for at least 6-8 hours per day, whilst the second speed setting *(Pink Button)* is set for use only with automatic suction cleaners and used once a week only. The third speed setting *(Blue Button)* should be set to maximum speed and only used for backwashing and manual vacuuming.

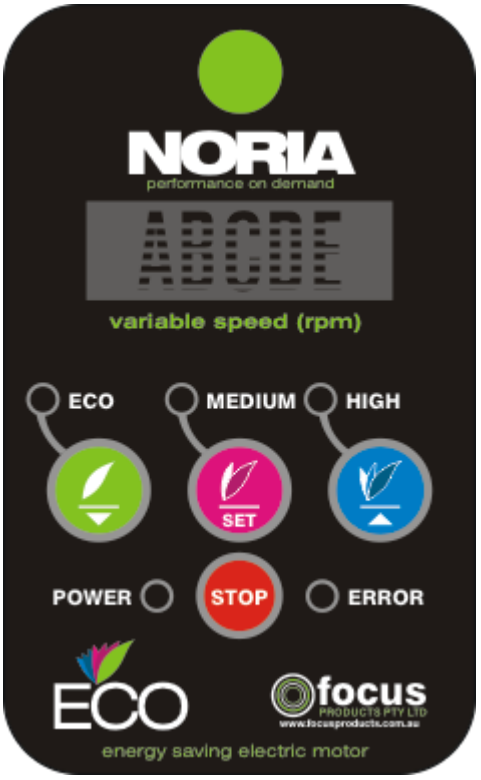
Once the pump has been plumbed in and the glue has cured, it is time to prime the pump.

Follow the instructions below:

1. Check all the connections are hand tight
2. Remove the lid from the pump by turning the lock ring anti-clockwise - put these aside for later use
3. Fill the hair and lint pot with water to the bottom of the inlet (around 4 litres)
4. Refit the lid and lock ring ensuring the O-ring is in place
5. Open any inline valves. Make sure the filter multiport valve is not in the closed position.
6. Switch on the power at the power supply and the ECO pump will automatically run the "priming" mode (full speed) for 3 minutes. The pump should automatically prime within this period but if it doesn't please follow steps 1 through to step 6 again. Once the pump has primed, select the first speed setting *(green)* and adjust the speed for best filtration flow ensuring the salt chlorinator cell (if fitted) has filled with water.

NOTE: If pump has not primed after the second attempt, please contact your pool professional to prevent damage to the mechanical seal occurring from insufficient water flow.

SETTING THE SPEED



Normal Operation Mode at startup

Press Button:

For ECO Mode (LED will flash when selected)

For MEDIUM Mode (LED will flash when selected)

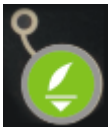
For HIGH Mode (LED will flash when selected)

Off Button (LED will flash when selected)

Adjustable Speed Mode:

(this feature is available following the 5 minute priming period)

Press Button:

Press and Hold:  ,  or 

for approximately 3 seconds (until the LED begins to flash) to switch to 'Adjustable Speed Mode'.

Holding all 3 buttons for 3 seconds will reset the speeds to default.

To decrease selected mode by 25 RPM increments

To save the current speed setting and return to normal operation mode

To increase selected mode by 25 RPM increments

Will cancel the change and revert back to the original speed and return to normal operation mode

NOTE

- If power is removed the motor will return to the last speed selected when power is restored
- Motor will remember the ON/OFF state
- If there is a fault, the LED screen will display an error code - note the error code and consult your local agent

PUMP CARE

CLEANING THE BASKET

1. Switch off the pump at the power supply
2. Close any valves on the pipe work
3. Unscrew the lid locking ring and remove the lid
4. Remove the pump basket
5. Empty debris
6. Refit the basket
7. Refit the lid and tighten lid locking ring
8. Open the valves on the pipe work
9. Switch on at the power supply

LEAKS

If the ground around the pump is wet or damp it indicates there is a leak. Trace the leak to the source and repair the problem.

1. Check to make sure all the barrel unions are tight and O-rings are fitted
2. If the pump lid leaks when the system is turned off ensure the O-ring is lubricated and fitted correctly
3. If no visible leaks are seen but water is still visible around the base of the pump, it indicates the mechanical seal has failed. Switch off the pump and contact your pool professional as soon as possible. A leaking mechanical seal will cause motor damage.

PUMP CARE

MOTOR

The motor should be in a well ventilated area free of debris. It is essential that the area is dry as water can cause damage to the electrics. The motor is fitted with a thermal overload switch and may cut out if the pump overheats. It will automatically reset itself when the motor cools. Water temperature is not to exceed 45°C.

SEALS

The pump has O-rings that require occasional lubrication. It is imperative that a **silicone based lubricant** is used. **DO NOT** use petroleum based products as these result in damage to the O-rings.

The mechanical seal consists of two parts. A spring loaded rotating seal with a polished carbon face and a stationary ceramic seat. When pressed together these surfaces create a seal between the wet end and the motor. Damage to this seal may occur when running the pump without water flowing through it. This type of damage is easily detected and **may not** be covered by your warranty. Monitor the water level in the pool regularly. Empty the skimmer and pump baskets and clean the filter on a regular basis.

DO NOT operate the pump with inline or filter multiport valves closed.

PRECAUTIONS

This appliance must be installed by a qualified service technician. When installing the appliance, ensure all parts are installed in the correct zone in accordance with the wiring rules. Refer to AS/NZS 3000.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Works must not be carried out whilst bathers are in the water.

The minimum operating head in metres for this appliance is 2m. The maximum total head in metres for this appliance is between 2-12m.

The pump is to be either supplied by an isolating transformer, or supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30mA.

Should the supply cord become damaged, it must only be replaced by Focus Products, or its service agent or a suitably qualified person, in order to avoid a hazard.

This appliance may be secured to the base on which it is located, by securing the appliance to the base with an appropriate fixing method utilising the mounting holes provided in the appliance feet.

Water temperature not to exceed 45°C.

WARRANTY

To obtain warranty, please contact our Service Department to be directed to the nearest Warranty Service Agent; or contact: https://www.focusproducts.com.au/