WHAT IS AN ECLIPSE?

The ECLIPSE is a disposable, single use elastomeric drug infusion system with an integrated administration set, suitable for the continuous or intermittent infusion of drug therapies. The ECLIPSE product range, called the E and C Series, is available in a wide range of flow rates and volumes.

As the ECLIPSE pump is reliable, simple to use, portable and light weight it allows treatment flexibility and is suitable for patients in both hospital and homecare settings. The ECLIPSE is very robust having been tested to take an equivalent of 230kgs (506lbs) of weight.
WHAT ARE THE E AND C SERIES ECLIPSE PUMPS USED FOR?

The ECLIPSE E Series - 15 minutes to $5\frac{1}{4}$ hours
For the delivery of infusions ranging from 15 minutes to $5\frac{1}{4}$ hours depending on the ECLIPSE pump selected. It is particularly suitable for single dose and intermittent intravenous antibiotic therapies.

The ECLIPSE C Series - 12 hours to 12 days
For the delivery of infusions ranging from 12 hours to 12 days depending on the ECLIPSE pump selected. It is indicated for the continuous or intermittent infusions of medications for chemotherapy and pain management, through intravenous, subcutaneous or epidural routes.

How does the ECLIPSE work?
The ECLIPSE is comprised of a soft outer shell and elastomeric membranes, one of which acts as the drug reservoir. The ECLIPSE pump uses the pressure from the elastomeric membranes to administer the medication. Depending on the ECLIPSE model the flow rate is controlled either by a flow restrictor (C Series) or flow control tubing (E Series) (see Figure 1 - overleaf).
Figure 1 – ECLIPSE Pump components

- **Connects to patient’s access device**
- **Filter**
- **End Cap**
- **Fill Port Cap**
- **Elastomeric Membrane**
- **Fill Port**
- **Patented multi-layer membrane provides extra protection**
- **Flow Restrictor (C Series)/Flow Control Tubing (E Series)**
- **Tubing Clamp**

The diagram illustrates the components of the ECLIPSE pump, including the filter, end cap, elastomeric membrane, fill port, and tubing clamp, which are connected to the patient’s access device.
ECLIPSE Benefits

- **Portable, compact, lightweight and discreet**
  fits into a pocket or bag maximising patient compliance

- **Reduces in size**
  Comfortable to use, ensuring patient compliance

- **Easy to prime**
  Minimal delay and interruption to patient’s lifestyle

- **Pre-set flow rate**
  No batteries or programming required

- **Latex free fluid pathway**
  safe to use for patients with a latex allergy
Before using the ECLIPSE pump, the integrity of the tubing should be checked. If the ECLIPSE pump has been in storage for a long period, please ensure that any kinks left as result of the tubing clamp (point A in Figure 1), have been fully massaged out. All patient information and expiry of the reconstituted drug must be noted.

**ECLIPSE Storage**
The ECLIPSE pump may be refrigerated or frozen. A 100 ml ECLIPSE pump will take approximately 6 (six) hours to reach room temperature from the refrigerator and 12 (twelve) hours from the freezer. Large volume devices will take longer. Refer to Delivery and Filling Volume Tables for specific details of each ECLIPSE pump. Never put ECLIPSE pumps in the microwave or submerge in water.

If the patient uses multiple ECLIPSE pumps each day and they are stored in the refrigerator the patient will need to let each ECLIPSE pump warm to room temperature before they use it. An easy way to remember to take the ECLIPSE out of the refrigerator is to do so at the time of administrating the previous dose. This will ensure that each dose has had sufficient time to warm to room temperature.
PRIMING THE ECLIPSE PUMP

If the ECLIPSE tubing has not been primed this will need to be done to remove all air in the tubing before connection to the patients access device. In order to do this, loosen the end cap (point C in Figure 1) and open the ECLIPSE tubing clamp (point A in Figure 1). Allow the tubing to fill and dislodge any remaining air bubbles to the end of the tubing by loosening and tightening the end cap. Repeat as necessary. When all air has been expelled from the tubing set, close clamp and tighten the end cap.

HOW THE ECLIPSE SHOULD BE CARRIED

The ECLIPSE E Series is designed to be worn at room temperature (20°C/68°F) with the ECLIPSE pump and its tubing worn outside the patient’s clothing.

If the ECLIPSE E Series or its tubing is at 25°C/78°F the flow rate will increase by approximately 14% above its nominal flow rate; at 15°C/60°F, the flow rate will decrease approximately 12% below its nominal rate.
The **ECLIPSE C Series** is designed for the tubing to be worn under the patient’s clothing. The flow restrictor (point B in Figure 1) should be in direct contact or taped to the patient’s skin at a temperature of 31ºC/88ºF (skin temperature). If the **ECLIPSE C Series** is used with the flow restrictor at room temperature (20ºC/68ºF) the delivery time will increase by approximately 25%. The reservoir can be worn in the manner that is most comfortable to the patient. Carry bags and E clothing clips are available.

**WARNING**

Ask your local Fresenius Kabi Representative about how to order the carry bags and E clothing clips.

### DURING THE INFUSION

The ECLIPSE pump should be checked during the course of the infusion. The ECLIPSE pump is designed to reduce in size over time and this is a good way of checking that the ECLIPSE pump is working correctly.
AFTER THE INFUSION

The soft outer case allows the ECLIPSE pump to decrease in size over the length of the infusion. The infusion is complete when the elastomeric membranes are no longer expanded and when no fluid can be felt around the hard centre barrel of the pump. A very small amount of fluid will be retained in the line and on the inner pump walls. Close the tubing clamp on the ECLIPSE pump tubing; disconnect the ECLIPSE pump from the patient’s access device and dispose of as per your agreed protocol.
The infusion rate will not increase if pressure is put on the ECLIPSE pump, for example, by squeezing it or sitting on it. This is because the flow control tubing or flow restrictor determines the infusion rate.

The ECLIPSE pump can be worn in a manner most comfortable for the patient. The ECLIPSE pump can be placed in the carry bag, or if preferred, carrying E-clips are available. Fresenius Kabi provides both the carry bags and E-clips.

Occasionally there may be some holes in the outer case of the ECLIPSE pump, this is normal. The outer case is a PVC cover for the pump and not part of the inner membranes that contain the medication. It has no effect on the performance of the ECLIPSE pump.
Patients are able to undertake air travel whilst the ECLIPSE pump is infusing, although prior discussion with the Nurse Specialist or Pharmacist is recommended. As the ECLIPSE E and C Series do not contain any metallic or electronic parts it is possible to undergo an MRI Scan or X-Ray whilst the ECLIPSE pump is infusing.

The ECLIPSE pump should not be used whilst swimming. Care should be taken while bathing or showering by covering the air filter with a small plastic bag and ensuring that the ECLIPSE pump is kept out of water.