

# CircuitGuard<sup>®</sup> Filter and ThermoFlo<sup>®</sup> Heat and Moisture Exchanger (HME)

## Instructions for Use

### Description

Single-patient-use hygroscopic condensing humidifier and filter for anesthesia and intensive care use.

### Indications

- Protection of patients from excessive heat and moisture loss
- Protection of patients and equipment from contamination
- Device may either be used on the patient side or on the device side of the ventilator/anesthetic device

The device is a filter and Heat and Moisture Exchanger (HME) used for breathing systems. The combination of a filter and HME offers the benefit of both product features. HMEs are used as a conditioning system for mechanically ventilated patients whose upper airways are bypassed. They are a fully valid alternative to heated humidifiers for almost all cases of mechanical ventilation. The products are the only conditioning opportunity of breathing gases in cases of emergency ventilation or during transport, as heated humidifiers are almost impossible to use.

### Contraindications

1. Do not use in conjunction with conventional heated water humidifiers.
2. Patients on this device should be closely monitored. If complications are observed, the device should be removed or replaced.
3. Device must be changed every 24 hours or more frequently if secretions accumulate.
4. The additional dead space for this device must be taken into consideration when used.
5. Do not use in patients whose expiratory volume is 8% less than inspiratory volume.

### Warnings

- Device is intended for single-patient-use and should not be cleaned or reused. Do not sterilize.
- Check for clear airflow prior to use.
- Use appropriate alarms and visually monitor patients on life support equipment.

### Precautions

The device provides for “self-humidification” by the patient. Patients must be evaluated accordingly.

**Note:** The use of this product is not intended to modify the breathing circuit manufacturer’s recommended instructions for use, e.g., disposal or cleaning and disinfection after use.

### Instructions for Use

Connect device securely to breathing system between mask and Y-piece of the circuit. Check for secure connections.


Product Code	Description	Tidal Volume Range	Dead Space	Moisture Loss	Resistance
6001	CircuitGuard® Filter, ThermoFlo® Heat and Moisture Exchanger (Large)	300–1500 mL	90 mL (with connectors)	8.3 mg/L @ 500 mL Vt	< 0.4 cm H <sub>2</sub> O @ 30 L/min
6126	CircuitGuard® Filter, ThermoFlo® Heat and Moisture Exchanger, Elbow	100–1000 mL	32 mL	18.16 mg/L @ 500mL Vt	0.18-2.22cm H <sub>2</sub> O @ 60 L/min
6131	CircuitGuard® Filter, ThermoFlo® Heat and Moisture Exchanger, Integrated Elbow	100–1000 mL	32 mL	18.16 mg/L @ 500mL Vt	0.18-2.22cm H <sub>2</sub> O @ 60 L/min

**Filtration Efficiency:** > 99.9%

### Closed Suction Systems

We recommend following the manufacturer’s suggested procedure for lavaging the patient. This will prevent any excess lavaging solution from entering the filter system. If excess lavaging solution does enter the device and resistance is increased, the device must be replaced.

**Caution:** Federal law restricts this device to sale by or on the order of a physician.


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