# Vital Signs a GE Healthcare Company



# Providing humidification for different applications in critical care and anesthesia

HMEs (Heat and Moisture Exchangers) are passive devices that conserve a patient's heat and moisture. This conservation takes place by capturing and retaining the heat and moisture from a patient's expired breath and then releasing it into the next inspired breath. HMEs thereby help create normal conditions in the patient's airways and lungs, reducing the risk of breathing complications. There are many advantages to using HMEs instead of active humidification and these include:

- Low operating cost
- No capital investment required
- No condensed water in the patient circuit
- Easy to use
- No cleaning required
- Simplified patient circuit

Vital Signs range of Edith HMEs meets the heat and moisture exchange requirements for adult and pediatric patients in the operating room, intensive care unit and other respiratory care environments. The Edith Trach has been specially designed to be used with trachestomized patients, allowing spontaneously breathing patients to benefit from heat and moisture conservation. Vital Signs Edith HMEs have the following features and associated benefits:

- Minimal and stable moisture loss over time helps ensure that patient is always conserving adequate heat and moisture
- Low breathing resistance reduces the work of breathing for the patient
- Low weight adds to patient comfort and safety
- Low dead space helps ensure adequate patient ventilation
- Latex-free materials offers safer use with all patients
- Transparent housing makes it easy to determine when to replace the HME
- Wide range of products to meet various requirements
- Designed according to ISO standards to provide standard-sized connectors



Technical data	Edith 500	Edith 1000	Edith 1500	Edith Flex	Edith Trach
Maximum tidal volume (ml)	500	1000	1500	1500	1000
Moisture output (mg H <sub>2</sub> O/I) • measured at V <sub>7</sub> (ml)	32 <sup>1</sup> /30 <sup>1</sup> 250/500	30 <sup>1</sup> /29 <sup>1</sup> 750/1000	31.5 <sup>1</sup> /30.5 <sup>1</sup> 750/1000	33.5 <sup>1</sup> /32.5 <sup>1</sup> 750/1000	24 <sup>2</sup> 500
Moisture loss (mg H <sub>2</sub> O/l) • measured at V <sub>7</sub> (ml)	5.5 <sup>1</sup> /7.5 <sup>1</sup> 250/500	7.5 <sup>1</sup> /8.5 <sup>1</sup> 750/1000	6.0 <sup>1</sup> /7.0 <sup>1</sup> 750/1000	4.0 <sup>1</sup> /5.0 <sup>1</sup> 750/1000	13.5 <sup>2</sup> 500
Pressure drop (kPa/cm H <sub>2</sub> O) • at 30 l/min • at 60 l/min	0.08/0.8 <sup>1</sup> 0.2/2.0 <sup>1</sup>	0.2/2.0 <sup>1</sup> 0.33/3.3 <sup>1</sup>	0.15/1.5 <sup>1</sup> 0.36/3.6 <sup>1</sup>	0.1/1.0 <sup>1</sup> 0.25/2.5 <sup>1</sup>	- 0.02/0.2
Dead space (ml)	17	28	38	90	16
Weight (g)	6	8	9	20	6
Connectors • patient side • machine side	22M/15F 15M	22M/15F 15M	22M/15F 15M	15F 22F	15F -

## **Changing Frequency**

After every patient or every 24 hours when used continuously on the same patient.

#### Contraindications

Edith HMEs are contraindicated in patients producing fulminating frothy secretions within their airways and lungs. Edith HMEs should not be used on patients with very small tidal volumes, for example neonates or very small children. Edith HMEs should not be used together with active humidifiers or nebulizers.

## Connections

Edith HMEs intended for artificially ventilated patients should be placed between the proximal end of the artificial airway and the Y-piece of the breathing circuit. Edith Trach should be placed on the tracheostomy tube.

#### **Instructions For Use**

Always refer to the Instructions For Use which accompany the device for detailed use information.

Vital Signs, Inc. a GE Healthcare Company 20 Campus Road Totowa, New Jersey 07512 USA



# **Suggested Applications**



1 Measured according to standard ISO 9360:2000. 2 Moisture loss is determined using dry gas (not room air). These products are in conformity with the relevant provisions of the Council Directive 93/42/EEC, concerning medical devices, Annex I - Essential Requirements.

© 2011 General Electric Company – All rights reserved.

General Electric Company reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your GE Representative for the most current

information.

GE, GE Monogram and Vital Signs are trademarks of General Electric Company.

Vital Signs, Inc., a General Electric Company, doing business as GE Healthcare.

L2973\_Edith HME\_v1\_Global\_August 2011