# **Ouick reference card**

This Quick reference card does not replace the Instructions for Use (IfU) of Evone.



### Introduction on Evone® (IfU chapter 1 and 3)

Evone is a mechanical small lumen ventilator intended to be used for less than 24 hours in patients >40 kg. Evone has two ventilation modes:

### **■ FCV® MODE**

FCV is a ventilation method where flow is continuously controlled in both inspiratory and expiratory phase. This is implemented with a constant inspiratory flow and a controlled expiratory flow (by suction) between a set minimum airway pressure (EEP) and a maximum airway pressure (peak). Used for patient ventilation in elective situations, with a cuffed airway.

### ■ 1FT MODE

High frequency jet ventilation 60 to 150 Breaths Per Minute. Used for breathing support (not triggered by patient), with an open airway.

### Evone and accessories (IfU section 1.6)

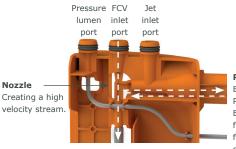
- Evone Control Unit
- Evone Breathing System:
  - Evone Cartridge
  - Evone Airway Adapter
  - · Humid-Vent filter Pedi straight
  - · Evone Breathing Tubing
  - Tritube (see on right hand side)
- Artificial lung

Total respiratory dead space: ~40 mL

### Tritube® Triple lumen tracheal tube; OD 4.4 mm, length 40 cm Intratracheal Intratracheal pressure pressure measurement opening measurement lumen Murphy eve Ventilation Cuff lumen Cuff lumen Cuff pilot balloon

### ■ Technology FCV mode (IfU chapter 3)

The Evone Cartridge (orange) contains the FCV technology, which actively induces and controls expiration.



(Exhaled) gas outlet

Closed: inspiration.

Opened: expiration

by gas entrainment.

# Patient outlet port

Bidirectional gas flow until Peak pressure, respectively FFP are reached. Inspiratory flow is constant. Expiratory flow rate targets a linear decline in intratracheal pressure.

### ■ Ventilation in FCV mode (IfU section 3.1)

- frequency and volumes cannot be set directly
- requires a closed airway (inflated cuff)

Adjustable parameters	Resulting parameters
Inspiratory Flow	Minute Volume + Frequency
I:E Ratio	
Peak Pressure (Peak)	Inspiratory Tidal Volume + Frequency
End Expiratory Pressure (EEP)	
FiO <sub>2</sub>	-

## Safety (IfU section 2.2)

Intratracheal pressure is monitored by two independent pressure measurements: continuously via the pressure measurement lumen and intermittently via the ventilation lumen

- In case independently measured intratracheal pressures differ, the pressure measurement lumen will be purged. In case the difference remains, an alarm will be generated.
- In case intratracheal pressures exceed the set limits, an alarm will be generated.

Volume is monitored during inspiration and expiration, by monitoring flow and time.

• In case volumes exceed the limits, an alarm will be generated.

Evone automatically switches to Safety state when safety cannot be guaranteed.

- No mechanical gas flows from or to the patient.
- Restart of system is required running a self check and a start-up check.

### Alternative ventilation (IfU section 2.4)

• subglottic high frequency jet ventilation

• requires an open airway (deflated cuff)

■ **Jet ventilation** (IfU section 3.2)

In case of device failure consider the following options:

### Conventional ventilation

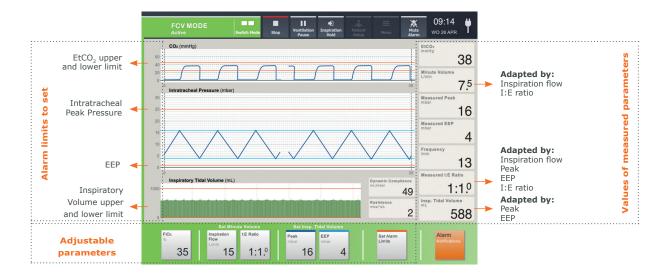
- Deflate the cuff of Tritube.
- Leave Tritube in place.
- Place (laryngeal) mask or large bore tube in parallel to Tritube.
- Apply alternative (balloon) ventilation.

### FCV ventilation by Ventrain®\*

- Inflate the cuff of Tritube.
- Connect Ventrain to a high pressure O<sub>2</sub> source (3.5-5.0 bar).
- Set appropriate O<sub>2</sub> flow.
- Connect Ventrain to Tritube.
- Connect a pressure measurement device to Tritube.
- Ventilate the patient.
- \* See Instructions for Use of Ventrain

# Quick steps (IfU chapter 4-6)

- Assemble the Evone properly, using a clean Tritube and an artificial lung. 1
- 2 Switch the Evone Control unit on and wait for the Self-check to be performed.
- 3 When prompted, start Start-up check: select tests to be performed and start test by tapping Perform Tests
- Enter patient characteristics. 4
- Disconnect Tritube from Evone. 5
- 6 Intubate the patient with a sterile Tritube.
- 7 Connect Evone to Tritube.
- Choose ventilation mode FCV MODE or JET MODE.
- Adjust the default ventilation settings and alarm limits if preferred.





- 10 Start ventilation.
- 11 Adjust parameters during ventilation if preferred/needed.
- 12 Switching between modes.

Caution! Always INFLATE cuff when starting ■ FCV MODE, DEFLATE cuff when starting ■ JET MODE.

**13** Liberate patient from ventilation using ■ **JET MODE**.

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