

# Evita Infinity® V500

## Option Low Flow PV Loop

Protective ventilation – The way respiratory therapy is carried out has a significant influence on the patient’s well being, the course of treatment, and the associated costs. Appropriately tailored ventilation can help to shorten the need for mechanical ventilation<sup>1)</sup> and reduce mortality<sup>2)</sup>.



### LUNG RECRUITMENT AND SETTINGS OPTIMIZATION

The Low Flow PV Loop in the Evita Infinity® V500 serves as an automatic lung recruitment maneuver and can be used to optimize ventilator settings<sup>7)</sup>. You can set start pressure, maximum pressure, flow rate down to 2 l/min and maximum volume to maintain complete control over the entire procedure.

### GOLD STANDARD EQUIVALENT

By slowly filling and emptying the lung with a constant flow, only the elastic properties of the respiratory system are recorded. The plotted quasi-static PV loop corresponds to the gold standard of a super syringe measurement<sup>3)4)</sup> – conveniently carried out with the same equipment at the bedside. Inflection points are plotted on the PV loop if it is sufficiently similar to a typical sigmoidal shape to avoid differences in clinician interpretation<sup>5)</sup>.

### GRAPHICAL IDENTIFICATION

Two cursors can be placed on the PV loop to individually measure pressure, volume and static compliance for both inspiratory and expiratory limb.

The analysis of the PV loop may be helpful to:

- select the right PEEP level to avoid cyclic recruitment and de-recruitment.
- adjust inspiratory pressure or tidal volume to avoid over-distention of alveoli.

While setting the parameters directly on the maneuver page, cursors and the displayed inflection points illustrate how the new setting fits to the lung properties recorded during the maneuver.



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**VOLUME HISTORY**

Up to ten loops can be stored as reference and individually measured with the cursors. As the ventilation settings prior to the start of the maneuver influence the

PV loop's shape<sup>6)</sup>, the major settings at the start of the maneuver are recorded to serve as indication of the "volume history" of the lung.

**TECHNICAL DATA**

**Low Flow PV Loop**

Low Flow Setting	2 to 15 l/min
Pstart	0 to PEEP
Vlimit	0 to 2.0 l
Plimit	0 to 80 mbar/cmH2O

**HEADQUARTERS**

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Dräger Medical GmbH  
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 The quality management system at Dräger Medical GmbH is certified according to ISO 13485, ISO 9001 and Annex II.3 of Directive 93/42/EEC (Medical devices).

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