Evita Infinity® V500*, Babylog® VN500** and Evita V300: The Smart Pulmonary View performs realtime visualization of pulmonary function data. By turning data into useful visual information, the Smart Pulmonary View helps reduce the cognitive work load of ICU staff.

– Visual representation of data in real time
– Intuitive anatomical analogy
– Reduction of cognitive load

The Smart Pulmonary View performs realtime visualization of pulmonary function data. By turning data into useful visual information, the Smart Pulmonary View helps reduce the cognitive workload of ICU staff.

THE DATA RACE
Modern ICU or NICU environments constantly generate large amounts of raw data. Before clinical decisions can be made, those data have to be interpreted. Taken together with all of the tasks involved in running an ICU or NICU, physicians, nurses, and respiratory therapists alike have a huge cognitive load to manage. So, why not use technology to turn those data into information that can be understood at a glance.

MAKING SENSE OF THE NUMBERS
In ventilated patients on an ICU or NICU, the analysis of pulmonary mechanics plays a vital role. Until now, parameters such as Compliance (C) and Resistance (R) were displayed as numeric data or in the form of a trend graph. The interpretation of the numbers was left entirely to the clinician.

THE VISUAL SOLUTION
Human beings are visually oriented. A picture truly is worth more than a thousand words. Smart Pulmonary View incorporates pulmonary function data into a visual representation of the respiratory system’s key elements. Working together with leading clinicians, Dräger found a way to open a new window on the patient’s respiratory status. The data have now become information which can be easily recognized and put to use almost instantly.

HOW SMART PULMONARY VIEW WORKS
The Smart Pulmonary View depicts changes in Compliance by constantly changing the width of the pulmonary outline; the lower the Compliance, the thicker the outline and vice versa. Correspondingly, changes in Resistance are shown by changing the width of the airways. Inspiratory efforts are also indicated by a moving depiction of a diaphragm.
Changes in Resistance are shown by changing the width of the airways; the higher the Resistance, the thicker the outline and vice versa.

Changes in Compliance are shown by changing the width of the pulmonary outline; the lower the Compliance, the thicker the outline and vice versa.

This anatomical analogy greatly facilitates the interpretation of the patient’s respiratory status. In addition to Compliance, Resistance and inspiratory efforts, the Smart Pulmonary View also shows the proportion of mandatory breath to spontaneous breathing. This provides essential information on the quality and efficacy of spontaneous respiration. Together, the parameters $f_{spont}$ and $V_{Tspont}$ depict spontaneous minute volumes as an area, while the parameters $f_{mand}$ and $V_{Tmand}$ show corresponding mandatory ventilation. Smart Pulmonary View’s comprehensive display supports the evaluation of the patient’s respiratory status by significantly reducing the cognitive load on the clinician.

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Measurement ranges</th>
<th>Compliance (C): 0-400 ml/mbar (or mL/cmH$_2$O)</th>
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<tr>
<td></td>
<td>Resistance (R): 0-300 mbar/l/sec (or cmH$_2$O/L/s)</td>
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### ORDER INFORMATION

| Option Smart Pulmonary View (factory installed) | 8416400 (for V500), 8417400 (for VN500), 8420400 (for V300) |
| Option Smart Pulmonary View (retrofit kit)     | 8416200 (for V500), 8419200 (for VN500), 8420420 (for V300) |