



The **Vyaire 3100a** is a High Frequency Oscillatory Ventilator. This kind of ventilation is intended to help treat respiratory failure in neonatal patients and acute respiratory distress in pediatric patients. With tools that can protect the lungs from damage, the Vyaire 3100A can expend pressure and volume to inflate the lungs and prevent a neonatal patient from going into respiratory failure. The 3100A can help insure the patient's care while providing the required ventilation.

Features

- Gently delivers 1 to 3 mL tidal volumes to ventilate the most premature infant and delivers up to 180 mL to support the ventilation of pediatric patients.
- Produces an active exhalation,⁴ which is essential at high frequency respiratory rates to prevent air trapping that may occur with passive exhalation.
- Offers patented technology and a highly reliable, electromagnetically driven piston that distinguishes it from other high frequency ventilators.
- Permits variable I:E ratios, which are desirable for managing ventilation and reducing the risk of air trapping.



Specifications

Dimensions

Height: 53.8 In (136.7 cm)

Width: 18.6 In (47.2 cm)

Depth: 11.4 In (29 cm)

Weight: 143 lbs (64.9 kg)

Bias Flow

0–40 liters per minute (LPM) Continuous, 15-turn control.

Resolution: 2.5 LPM.

Accuracy: ±10% of full scale at the following conditions: air or oxygen @ 70°F and 760 Torr.

Mean Pressure Adjust

Approximately 3–45 cmH₂O minimum range; Bias Flow dependent.

Resolution: 0.1 cmH₂O on airway pressure digital meter, 1-turn control.

Accuracy: Non-calibrated control knob.

Mean Pressure Limit

Approximately 10–45 cmH₂O mean proximal airway pressure.

Resolution: 0.1 cmH₂O on airway pressure digital meter, 1-turn control.

Accuracy: Non-calibrated control knob.

Power

At 100% power, $\Delta P > 90$ cmH₂O max amplitude of proximal airway pressure.

Resolution: Graduated 10-turn locking dial, not calibrated in % power.

Frequency-Hz

3–15 Hz oscillator frequency.

Resolution: 0.1 Hz on digital meter, 10-turn control.

Accuracy: ±5% of full scale.

% Inspiratory Time

30–50% of oscillatory cycle.

Resolution: +/- 1% as read on digital meter

Accuracy: ±5% of full scale.

Set Max Paw Alarm Thumbwheel

0–49 cmH₂O mean airway pressure.

Resolution: 1 cmH₂O

Accuracy: Within ±2 cmH₂O.

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