



The **Vyaire Carefusion Avea** Ventilator can provide a wide range of ventilation modes with clinical tools and advanced monitoring. The Vyaire CareFusion Avea can offer critical care ventilation in both non-invasive and invasive ventilation modes for neonate, pediatric and adult patients. Some of the advanced tools include; BiCore Pulmonary monitoring, Heliox administration, and Volumetric Capnography. The Ventilator runs off of a Servo-controlled, software-driven ventilation system, as well as a user interface module that can maximize the flexibility of the ventilation to fit each patient's needs. The front panel has a larger LCD touch screen making it easy to see the parameters being monitored while still being able to easily make changes.

Features

- Precision gas delivery system supplies accurate volumes.
- Active exhalation valve on the AVEA ventilator promotes ventilator synchrony and comfort for your patients.
- Volumetric Capnography gives clinicians more accurate tools to aid in quicker reaction during critical situations.
- Accurate esophageal pressure measurements.



Specifications

Dimensions

Pneumatic Module: 10.5" h x 16.75" w x 16" d (26.7 cm x 43.2 cm x 40.6 cm)

User interface Module: 13.75" h x 16.25" w x 2.5" d (35 cm x 41.3 cm x 6.4 cm)

Viewable Size: 12.1" (diagonal)

Resolution: 800 x 600

Weight

Ventilator (includes user interface module): 83 lb (37.6 kg)

Ventilator and compressor (internal): 90 lb (40.8 kg)

Battery

1 hr of ventilator use on internal battery (standard) or 30 minutes ventilator and compressor

4 hr of ventilator use on external battery or 2 hr ventilator and compressor

Primary Settings

Rate: 1–150 bpm (neonatal, pediatric), 1–120 bpm (adult)

Tidal Volume: 2.0 mL–2.5 L

Inspiratory Pressure: 0–80 cmH₂O (neonatal), 0–90 cmH₂O (adult, pediatric)

Peak Flow: 0.4–150 L/min

Inspiratory Time: 0.15–5.0 sec

Pressure Support Ventilation (PSV): 0–80 cmH₂O (neonatal), 0–90 cmH₂O (adult, pediatric)

PEEP: 0–50 cmH₂O

Flow Trigger: 0.1–20 L/min

O₂: 21–100%

Pressure High (in APRV/BiPhasic mode): 0–90 cmH₂O

Time High (in APRV/BiPhasic mode): 0.2–30 sec

Time Low (in APRV/BiPhasic mode): 0.2–30 sec

Pressure Low (in APRV/BiPhasic mode): 0–45 cmH₂O

Advanced Gas Blending System

Air/oxygen Blending: 21–100%

Internal Heliox Blending System: All concentrations from 80/20 helium/oxygen to 0/100 helium/oxygen

Advanced Patient Monitoring

Proximal hot wire flow sensor

24-hour trending of monitored respiratory parameters

Volumetric capnography



Specifications Continued

Maneuvers

AutoPEEP Airway: 0–50 cmH₂O (*automated*)

MIP/P100: -60 to 120 cmH₂O (*automated*)

Slow Flow (Pflex): Automated

Advanced Settings

Bias Flow: 0.4–5.0 L/min

Volume Limit: 2.0 mL–2.5 L

Inspiratory Rise: 1–9

Flow Cycle: Off to 45%

PSV Rise: 1–9

PSV Cycle: 5–45%

PSV TMAX: 0.15–5.0 sec

Waveform: Square, decelerating

Sigh: On/Off*

Pressure Trigger: 0.1–20 cmH₂O

Demand Flow: On/Off

Volumetric Capnography: EtCO₂ averaging 1 or 8 breaths, VCO₂ averaging 3, 6, 9 or 12 minutes

Modes

Mode Type: A/C, SIMV, CPAP/PSV, NPPV, nCPAP/IMV

Breath Type: APRV/BiPhasic, Volume, Pressure, TCPL, PRVC, Volume Guarantee

Apnea Backup: Volume, Pressure, TCPL

Manual Controls

Manual Breath: One breath

Expiratory Hold: Max. 20 sec (*adult, pediatric*), 3 sec (*neonatal*)

Inspiratory Hold: Max. 3 sec

Increase O₂: Set percentage O₂ + 0–79% O₂

Synchronized Nebulizer: Available when delivered flow ≥ 15 L/min

Disconnect for Suction: Active

