A ventilator for every patient population

The Dräger Evita 4 was designed to meet the demanding requirements of the ICU environment by improving the interactions between patient, ventilator and clinician. The functional touch screen continually provides the clinician information on ventilator settings, patient measurements and advanced trending capabilities which enhances the operation of the device. Unique features and modalities such as AutoFlow™ and APRV are standard on all Evita 4 ventilators.

One ventilator for every patient population: Neonatal, pediatric, adult – Evita 4 can be used to ventilate any patient category, reducing the amount of staff training required and ensuring greater resource flexibility. The neonatal option, NeoFlow™, offers flow measurement at the Y-piece for precise volume and leak monitoring with accurate, responsive triggering to patient effort.

Intuitive user interface: Configurable trends, loops, measured values, curves and logbook are displayed on the full-color screen for a complete customized overview of the ventilation therapy. The user-friendly display shows only the active control elements to ensure immediate recognition of the required settings. The robust touch screen combines highly flexible operation with direct access to rotary knobs and keys.

Excellent weaning performance: PCV+/BIPAP™, the universal mode for ventilation and weaning, gives a patient the freedom to breathe spontaneously at any time, reducing the need for sedation and invasiveness of ventilation to optimize the patient’s ability to wean off the ventilator. Automatic Tube Compensation (ATC™) gives a patient the feeling of virtual extubation by eliminating the work involved in breathing through an endotracheal tube, improving the weaning process.

Conventional and mask ventilation: Mask ventilation can complement the weaning process by reducing the reintubation rate or even preventing intubation in the first place. The fact that Evita 4 offers the alternative of mask ventilation (NIV) means you only need one device for conventional and non-invasive ventilation.

Upgradeability: Evita 4 is based on a concept of innovative continuity. The device’s modular design ensures upgradeability and upward compatibility while the user interface and sensors, for example, are based on the continuity principle to guarantee a high degree of familiarity.

A record of innovation: The Evita 4 story has been marked by a series of advances in ventilation therapy, ATC was introduced in 1997 to achieve virtual extubation, NeoFlow in 1998 for neonatal ventilation, and NIV in 2001 to make mask and conventional ventilation possible from a single device.

Safe investment: Even the first Evita 4 machines can be upgraded to include all the features of the latest models — clear evidence that Evita 4 is a good investment.
Dräger Evita 4
Ventilator

Technical Specifications

VENTILATION SETTINGS
Ventilation Mode:
- IPPV, IPPVAssist (CMV, CMVAssist)
- SIMV, SIMVASB (SIMV, SIMV/Psupp)
- MMV, MMVASB (MMV, MMV/Psupp)
- BIPAP1, BIPAP1ASB, BIPAP1Assit
  Assist (PCV+, PCV+/Psupp, PCV+Assist)
- APRV
- CPAP, CPAPASB (CPAP, CPAP/Psupp)
- ILV
- PPS (optional)
Enhancements:
- AutoFlow™ – Automatic adaptation of inspiratory flow in volume controlled modes
- ATCTM – Automatic Tube Compensation (optional)
- NIV – Mask Ventilation (optional)
Ventilation frequency (f): 0 to 100 /min, 0 to 150 /min (Neonatal)
Inspiration time (Tinsp): 0.1 to 10 s
Tidal volume (VT) (BTPS):
- 0.1 to 2.0 L (Adult)
- 0.02 to 0.3 L (Pediatric)
- 0.003 to 0.1 L (Neonatal)
Inspiratory flow
- 6 to 120 L/min (Adult)
- 6 to 30 L/min (Pediatric and Neonatal)
Inspiratory pressure: 0 to 80 mbar (cmH₂O)
PEEP / Intermittent PEEP: 0 to 35 mbar (cmH₂O)
Pressure assist (PASB) (Psupp): 0 to 80 mbar (cmH₂O)
Rise time for inspiratory pressure: 0 to 2 s
O₂ concentration: 21 to 100 Vol.%
Trigger sensitivity: 0.3 to 15 L/min

MEASUREMENT VALUES DISPLAYED
Airway pressure: Peak pressure, plateau pressure, mean pressure, PEEP, min. pressure (0 to 999 mbar/cmH₂O)
Minute volume (MV), (BTPS): MV, MVspont, MVleak (0 to 99 L/min)
Tidal volume (VT), (BTPS): Inspired VT, expired VT, VTPS (0 to 3999 mL)
Breathing frequency (f): ftot, fspon, fmadv, (0 to150/bpm)
O₂ concentration (FiO₂): Inspired O₂ concentration (15 to 100 Vol. %)
Lung mechanics
- Resistance (0.0 to 600 mbar/L/s) (cmH₂O/L/s)
- Compliance (0.0 to 300 mL/mbar) (mL/cmH₂O)
Breathing gas temperature: 18° to 51°C
Waveforms: Airway pressure-time, flow-time, volume-time,
Trends (8 anyone configurable): FiO₂, MV, VT, f, PEEPi, R, C, ETCO₂
Loops: Paw-V, V-Flow, Flow-Paw
Capnography (ETCO₂) (optional): 0 to 100 mmHg

MEASUREMENT VALUES DISPLAYED continued
CO₂ production (VCO₂): 0 to 999 mL/min, STPD
Serial dead space Vds: 0 to 999 mL, BTPS
Dead space ventilation (Vds/VT): 0 to 99 %
O₂ saturation: SpO₂ pulse

ALARMS / MONITORING
Airway pressure: High / Low
Expired minute volume: High / Low
Tidal volume: High
Apnea alarm time: 5 to 60 s
Spontaneous breath frequency: High
Inspired O₂ concentration: High / Low
Breathing gas temperature: High
SpO₂ pulse (optional): High / Low
EtCO₂ (optional): High / Low

PERFORMANCE DATA
Max. flow for pressure support and spontaneous breathing:
180 L/min (adult), 60 L/min (pediatric)
Valve response time: T0...90 ≤ 5 ms
Control principle: Time cycled, volume constant, pressure-controlled
Safety relief valve: 100 mbar (cmH₂O)

LEAKAGE COMPENSATION
HOSE SYSTEM COMPENSATION

OUTLET FOR PNEUMATIC NEBULIZER

OPERATING DATA
Mains power connection: 110 to 240 V, 50/60 Hz,
10 to 30 V DC (optional)
Power consumption: Approx. 125 W
Gas supply operating pressure: O₂, air: 2.7 to 6 bar / 39 to 87 PSI

PHYSICAL SPECIFICATIONS
Dimensions ventilator (without trolley): 530W x 290H x 450D cm
(20.9 x 11.4 x 17.7 inches)
Weight basic unit: Approx. 29 kg (64 lbs.)

MACHINE OUTPUTS
Digital output: Output and reception via an RS 232 C interface
Digital output: Output for independant lung ventilation (ILV)
Digital output (optional): For output and reception via two RS 232 C interfaces
Analog output (optional): For analog output of two measured values