Evita *2 dura*

High-end ventilation – in your patient's best interests

A workhorse in everyday clinical routine

For more than a century, Dräger has been manufacturing innovative respiratory support systems such as the pioneering Pulmotor, legendary "iron lung" or the world's first microprocessor-controlled ventilator. Dräger's reputation as the market leader in ventilation therapy has been built on this tradition of innovation and the quality and reliability of its ventilators.

This century of innovation has also been a century of focusing on the patient's needs – which is why Dräger Medical places such emphasis on freedom to breathe in ventilation therapy. Our "Room to Breathe" concept encourages spontaneous breathing to create improved gas-exchange conditions and accelerate recovery.

As the name suggests, it is also the kind of reliable "workhorse" you need for everyday clinical routine. It is also an extremely flexible performer with a modular design so it can grow with your needs. However you upgrade an Evita 2 *dura*, it maintains its user-friendly performance with a degree of operating simplicity that comes as a breath of fresh air in a stressful ICU environment.

The Evita 2 *dura* critical-care ventilator maintains high standards of

reliability

ventilation therapy.

How you benefit:
- First-class ventilator performance
- Ease of operation
- Modular upgradeability
- Strong focus on your needs

Built for performance and ease of use

Spontaneous breathing strategy

One of Evita 2 *dura*'s strengths is its implementation of our "Room to Breathe" concept. Spontaneous breathing reduces the risk of atelectasis and improves the ventilation/perfusion ratio by maintaining a higher functional residual capacity. BIPAP™*/PCV+, the universal mode for ventilation and weaning, gives a patient the freedom to breathe spontaneously at any time. AutoFlow®, the next step in volume-oriented ventilation, encourages spontaneous breathing in all volume modes and another option, Automatic Tube Compensation (ATC), gives a patient the feeling of virtual extubation by eliminating the work involved in breathing with a tracheal tube.

The right mode for every patient

Since an Evita 2 *dura* can be used to ventilate neonatal, pediatric or adult patients, it is the ideal "workhorse" for everyday clinical routine. The wide range of patients covered also reduces the amount of staff training required and ensures a greater flexibility in the use of resources.

simplicity

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Two-in-one ventilation

Mask ventilation can assist the weaning process by reducing the reintubation rate or even preventing intubation in the first place. The option of mask ventilation (NIV) adds to an Evita 2 *dura*'s versatility so an ICU only requires one device for conventional and non-invasive ventilation.

Everything in view

The Evita 2 *dura* provides patient and ventilator-related monitoring with user interaction reduced to a minimum. The high-resolution full-color screen displays comprehensive information on a patient's status, always showing two ventilation curves and six monitored values, and the screen configuration can be customized to show the most important values for a particular ICU.

One knob, simplified settings

This ventilator has a clearly arranged front panel consisting of a monitoring screen and various setting soft keys. The rotary knob plays a key role. The active setting parameters are visible at a glance and changes can be made by the well-established "select-adjust-confirm" principle.

Ventilation at a glance

The principle of only showing the necessary parameters reduces the complexity of everyday monitoring. Additional functions are located in the various screen menus. The ventilator provides you with a full-text message in the event of alarms so you have a clear idea of the problem.

Simpler and speedier standard procedures

The Evita 2 *dura* contains numerous functions to speed up and simplify routine procedures. Start-up settings can be configured to specific ICU practices. Suction procedures are simplified with the touch of a button, the exhalation valve can be changed in seconds to minimize downtime and sensors are automatically calibrated daily. However, manual calibration is also possible without interruption to ventilation. All these functions assist in reducing time for standard procedures.

Designed to grow and meet your needs

Enhanced performance now and in the future
The modular design of the Evita 2 *dura* means you can upgrade your ventilator as case mix or needs change.
Although the standard version fulfills all the demands of everyday ICU routine, you may want to customize your Evita 2 *dura* to the specific requirements of your ICU.

upgradeability

Options such as additional modes of ventilation, AutoFlow, APRV and ILV upgrade your device to a Pulmonary Workstation. Extended monitoring packages offering diagnostic functions such as Intrinsic PEEP, Resistance and Compliance measurements, and Loops, also enable this upgrading process. The ATC option brings a greater degree of comfort to ventilation and weaning, and the NIV option enables you to provide conventional and mask ventilation from a single device. A software option provides weaning parameters like Rapid Shallow Breathing Index and Negative Inspiratory Force.

The Evita 2 *dura* can be customized and individualized to meet your needs.

Comprehensive support

After purchasing an Evita 2 *dura*, you can be sure of comprehensive service and support from Dräger Medical – so you and your staff can make the best possible use of your new ventilator. Our practical support takes the form of instruction manuals, training courses, downloadable training tools and PC-based training using the Dräger Academy program. The feedback we receive from our numerous academic partners, all at the forefront of medical science, is passed on at seminars or workshops. By focusing on your needs, we aim to improve the quality of care you and your hospital can provide.

Less training required

Although Dräger Medical offers every possible support in training terms, most hospitals find their staff require very little initial training to operate an Evita 2 *dura*. The continuity evident in the design of this ventilator interface means staff will be familiar with the user interface – partly as a result of the many features common to the Dräger Medical equipment family, e.g. the practical rotary knob.

Lower life cycle costs

With hospitals increasingly focusing on the life cycle costs of medical equipment, the Evita 2 *dura* has a lot to offer cost-conscious medical and administrative staff. Over a period of 7-10 years the longer service intervals and higher-quality, longer-lasting parts that characterize this tried-and-tested ICU ventilator result in lower life cycle costs.

Disposable or reusable

As hospitals have become increasingly aware of the possible risk of nosocomial infection, demand has grown for disposables to be used in critical care therapy. As an alternative to the traditional reusable parts, an Evita 2 *dura* can also be equipped with a disposable exhalation valve and disposable tubing, providing a system that allows you to choose what is best for your institution.

Technical data — Evita 2 *dura*

Patient type	Adults and children (body weight of at least 3 kg (6.6 lbs)) With NeoFlow option: infants and neonates (min. body weight of 0.5 kg (1.1 lbs))
Ventilation settings	
Ventilation mode	• IPPV, IPPVAssist (CMV, CMVAssist) • SIMV, SIMVASB (SIMV, SIMV/Psupp) • MMV, MMVASB (MMV, MMV/Psupp) • BIPAP[1], BIPAP[1]ASB, BIPAP[1]Assist (PCV+, PCV+/Psupp, PCV+Assist) • CPAP, CPAPASB (CPAP, CPAP/Psupp) • APRV (optional) • ILV (optional)
Enhancements	• AutoFlow™ – Automatic adaptation of inspiratory flow in volume controlled modes • ATC™ – Automatic Tube Compensation (optional) • NIV - Mask Ventilation (optional)
Ventilation frequency (f)	0 to 100 /min, 0 to150 /min (Neonatal)
Inspiration time (T_{insp})	0.1 to 10 s
Tidal volume (V_T) (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 (cmH_2O)
PEEP / intermittent PEEP	0 to 35 mbar (cmH_2O)
Pressureassist (P_{ASB}) (P_{supp})	0 to 80 mbar (cmH_2O)
Rise time for inspiratory pressure	0 to 2 s
O_2 concentration	21 to 100 Vol.%
Multi-sense Trigger Criteria	Internal automatic pressure trigger, Flow, Volume (Flow adjustable 0.3 to 15 L/min)
Measured values displayed	
Airway pressure	Peak pressure, plateau pressure, mean pressure, PEEP, min. pressure (0 to 99 mbar/cmH_2O)
Minute volume (MV), (BTPS*)	MV, MVspont, MVleak (0 to 99 L/min)
Tidal volume (V_T), (BTPS*)	Inspired V_T, expired V_T, V_{TASB} (V_{TPS}) (0 to 3999 mL)
Breathing frequency (f)	ftotal, fspon, fmand. (0 to 300/bpm)
O_2 concentration (FiO$_2$)	Inspired O_2 concentration (15 to 100 Vol.%)
Lung mechanics	• Resistance ((0.0 to 600 mbar/L/s)(cmH_2O/L/s)) • Compliance ((0.0 to 300 mL/mbar)(mL/cmH_2O))
Breathing gas temperature	18° to 51°C
Waveforms	Airway pressure-time, flow-time, volume-time, ...
Trends (optional)	FiO$_2$, MV, V_T, f, PEEPi, R, C, etCO$_2$, ...
Loops (optional)	Paw-V̇, V̇-Flow, Flow-Paw, ...
Capnography (etCO$_2$) (optional)	• 0 to 100 mmHg
CO_2 production (VCO$_2$)	• 0 to 999 mL/min, STPD*
Serial dead space Vds	• 0 to 999 mL, BTPS*
Dead space ventilation (Vds/V_T)	• 0 to 99%
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 O_2 concentration	High/Low
Breathing gas temperature	High
SpO$_2$ pulse (optional)	High/Low
etCO$_2$ (optional)	High/Low
Performance data	
Max. flow for pressure support and spontaneous breathing	180 L/min (adult), 60 L/min (pediatric)
Valve response time $T_{0...90}$	≤ 5 ms
Control principle	Time cycled, volume constant, pressure-controlled
Safety relief valve	100 mbar (cmH_2O)
Leakage compensation	
Hose system compensation	
Outlet for pneumatic nebulizer	
Operating data	
Mains power connection	100 to 240 V, 50/60 Hz, 10 to 30 V DC (optional)
Power consumption	Approx. 125 W
Gas supply operating pressure	O$_2$, air: 2.7 to 6 bar/39 to 87 PSI
Physical Specifications	
Dimensions ventilator (WxHxD)	530x290x450 cm (20.9x11.4x17.7 inches) (without trolley)
Weight basic unit	Approx. 27 kg (60 lbs.)
Diagonal screen size	6.5" TFT LCD color display
Machine outputs	
Digital output	Output and reception via an RS 232 C interface
Digital output (optional)	For output and reception via two RS 232 C interfaces
Analog output (optional)	For analog output of two measured values

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ATC™, Trademarked by Dräger
AutoFlow™, Trademarked by Dräger
BTPS*, Body Temperature Pressure Saturated
Measured values relating to the conditions of the patients lung, Body temperature 37°C, steam saturated gas, ambient pressure
STPD* Standard Temperature, Pressure, Dry.
Measured values based on normal physical conditions: 0°C, 1013 hPa, dry