

EvitaXL



**Excellence throughout
the ventilation process**

EvitaXL is there



At the bedside and throughout the hospital

Ventilated patients are among the most vulnerable in the hospital. Caring for them takes focus, creativity and dedication – from you and your equipment. The EvitaXL ventilator brings together a wide range of performance capabilities and advanced features to support the treatment of virtually any patient, regardless of acuity or age.

At the patient bedside:

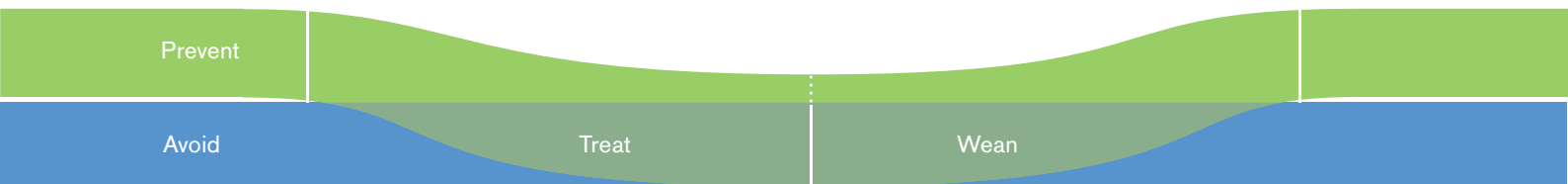
- Ease of use from the beginning – startup modes and settings configured to your practice
- Large 15" touchscreen display with intuitive, graphical user interface
- Direct settings access from the main screen

Throughout the hospital:

- Enables standardization for improved staff efficiency, while reducing training and support costs
- Comprehensive data access capabilities to view changing patient situations remotely at anytime, via patient monitoring or hospital networks
- IT system connectivity to support automated patient charting and reduce documentation time
- Transportable to maintain a high level of ventilation therapy, even on the move



... at any point of the ventilation process



Minimize patient risk

EvitaXL offers advantages that help protect patients every time ventilation support is needed:

- Comprehensive NIV – available in all modes, with intelligent monitoring and alarms adaptation - the use of NIV has been shown to reduce the need for intubation ⁽¹⁾
- Lung Protection Package (LPP) offers a low flow P/V maneuver to identify adequate PEEP and pressure settings for lung protective ventilation, special recruitment trends monitor the process
- Integrated CO₂ monitoring helps verify correct intubation and stability of metabolism



Easily tailor treatment

EvitaXL responds quickly to individual patient requirements and changing ventilation situations:

- Our open breathing system with AutoFlow® or BIPAP* allows spontaneous breathing in all ventilation modes
- A variety of workflow support functions – such as O₂ suction routine or automatic P0.1 measurement with trending – to make your clinical routine easier
- NeoFlow offers flow measurement at the Y-piece for fast response to patient triggering, leakage adaptation and precise volume delivery for neonates

* Trademark used under licenses



Wean efficiently and automatically

EvitaXL supports getting patients off the ventilator, safely and quickly:

- SmartCare/PS automated weaning system provides continuous vigilance for opportunities to reduce the level of ventilator support
- By reducing the work of breathing attributable to the endotracheal or tracheostomy tube, automatic tube compensation (ATC™) supports the transition to independence from the ventilator
- Our open breathing system with Mandatory Minute Ventilation (MMV) ensures that the patient – from neonatal to adult – always receives the set minute volume, regardless of the spontaneous breathing level

⁽¹⁾ Ram FSF et al, The Cochrane Library 2005, Issue 4

"The most significant realization comes from the fact that the weaning process is continuous and does not necessarily rely on the availability or constant presence of the practitioner to be at the bedside throughout the weaning session."

Phillip Thaut, RRT-NPS, RPFT, Provo, Utah, September 2007

Recover

Avoid

Noninvasive Ventilation

Invasive Ventilation



Support reliable recovery

EvitaXL goes beyond extubation to treat and monitor the patient:

- Availability from invasive and non-invasive ventilation to O₂ therapy in one device to support improved workflow and potentially reduce the risk of reintubation⁽²⁾
- Advanced leakage compensation provides adapted responsiveness and reliable tidal volume delivery even in the presence of high leakages, such as during NIV

⁽²⁾ Haddad, B.; Critical Care 2006, 10: 314



Address Ventilator Associated Pneumonia

Preventing Ventilator Associated Pneumonia (VAP) has been identified as one of 12 interventions that can save lives and reduce patient injuries, as part of Institute of Healthcare Improvement's "5 Million Lives" campaign. See more at: www.ihl.org

Naturally, one of the best ways to reduce the risk of VAP is to get patients off the ventilator as soon as possible. Weaning protocols have been shown to reduce the duration of mechanical ventilation⁽³⁾; but they can also be labor intensive. With the EvitaXL's SmartCare®/PS system the weaning protocol is automatically supported... so that you can achieve weaning protocol compliance more easily.

⁽³⁾ E.Wesley Ely, New England Journal of Medicine (1996), Vol. 335:1864-9

Over 100 years of innovation in ventilation

“Cutting-edge technology convinced us to purchase the Dräger product; but the excellent customer service and support solidified the relationship.”

Angela D. Hedgman, BS, RRT-NPS, Philadelphia, PA, December 1, 2006



Dräger is committed to providing Technology for Life®. We were there at the very beginning of modern ventilation, and we've been innovating ever since:

- 1907** – Pulmotor emergency resuscitator
- 1947** – “Iron Lung” long term breathing system
- 1959** – Pressure Controlled Ventilation
- 1978** – Oxylog transportable emergency ventilator
- 1989** – BIPAP¹⁾ /PCV+ and APRV free breathing in PCV
- 1995** – AutoFlow® free breathing in VCV
- 1997** – ATC™ automatic tube compensation
- 2000** – Non-Invasive Ventilation (NIV) for ICU ventilators
- 2004** – Disposable expiration valve
- 2005** – SmartCare/PS® automated weaning protocol for pediatric patients

Our reputation for quality and reliability is built on legendary German engineering – but that is only part of Dräger's commitment to ongoing support:

- Comprehensive on-line training for effective system utilization
- DrägerService® programs help maximize uptime and minimize lifetime operating costs
- Continuous development program provides a safe investment

¹⁾ Trademark used under licenses

Technical Data

EvitaXL

Patient type	<ul style="list-style-type: none"> Adults, children, infants (body weight of at least 3 kg) Premature infants with NeoFlow option
Ventilation settings	
Ventilation mode	<ul style="list-style-type: none"> IPPV, IPPV_{Assist} SIMV, SIMV_{ASB} MMV, MMV_{PSupp} BIPAP*¹, BIPAP*¹_{ASB}, BIPAP*¹_{Assist} APRV CPAP, CPAP_{ASB} ILV PPS (optional)*²
Enhancements	<ul style="list-style-type: none"> AutoFlow® – Automatic adaptation of inspiratory flow in volume controlled modes ATC™*¹ – Automatic Tube Compensation NIV – Mask Ventilation (optional) SmartCare/PS – Automated clinical protocol in CPAP/ASB (optional) Lung Protection Package – Recruitment manoeuvre and Low Flow manoeuvre (optional)
Ventilation frequency (f)	0 to 100/min, 0 to 150/min (Neonatal)
Inspiration time (T _{insp})	0.1 to 10 s
Tidal volume V _t (BTPS*)	<ul style="list-style-type: none"> 0.1 to 2.0L (Adult) 0.02 to 0.3L (Pediatric) 0.003 to 0.1L (Neonatal)
Inspiratory flow	<ul style="list-style-type: none"> 6 to 120L/min (Adult) 6 to 30L/min (Pediatric and Neonatal)
Inspiratory pressure	0 to 95 cmH ₂ O
PEEP / intermittent PEEP	0 to 50 cmH ₂ O
Pressure assist (ASB)	0 to 95 cmH ₂ O
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 (–45 to 110 mbar)
Minute volume (MV), (BTPS*)	MV, MV _{spont} (0 to 120 L/min, MV _{leak} (0 to 99 L/min)
Tidal volume (V _t), (BTPS*)	Inspired V _t , expired V _t (0-3999ml), V _t _{asb} (0 - 10 l)
Breathing frequency (f)	f _{total} , f _{spont} , f _{mand.} (0 to 300 bpm)
O ₂ concentration (FiO ₂)	Inspired O ₂ concentration (15 to 100 Vol.%)
Lung mechanics	<ul style="list-style-type: none"> Resistance (0 to 600 mbar L/s) Compliance (0 to 300 mL/cmH₂O)
Breathing gas temperature	18 °C to 51 °C
Capnography (etCO ₂) (optional)	0 to 100 mmHg
CO ₂ production (VCO ₂)	0 to 999 mL/min, STPD*
Serial dead space V _{ds}	0 to 999 mL, BTPS*
Dead space ventilation (V _{ds} /V _t)	0 to 99%
Weaning parameters	<ul style="list-style-type: none"> RSB (0 to 9999 (min x L)) NIF (– 45 to 0 mbar)
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	
Valve response time T _{0...90}	≤ 5 ms
Control principle	Time cycled, volume constant, pressure-controlled
Safety relief valve	100 mbar
Leakage and hose system compensation compliance	automatic
Max. flow for pressure support and spontaneous breathing	180 L/min
Outlet for pneumatic nebulizer	
Operating data	
Mains power connection	100 to 240 V, 50/60 Hz, 10 to 30 V DC
Power consumption	Approx. 125 W
Gas supply operating pressure	O ₂ , air: 2.7 to 6 bar
Physical Specifications	
Dimensions ventilator (W x H x D)	530 x 315 x 450 mm (without trolley)
Diagonal screen size	15" TFT color touch screen
Weight basic unit	Approx. 29 kg (without trolley)
Machine outputs	
Digital output	Output and reception via an RS 232 C interface
Digital output	Output for independent 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

*¹ ATC™ used under license, 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)

*² PPS is not available in the USA

Europe, Middle East, Africa, Latin America, Asia, Pacific:

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The quality management system at Dräger Medical AG & Co. KG is certified according to ISO 13485, ISO 9001 and Annex II.3 of Directive 93/42/EEC (Medical devices).