Evita® V300
ICU Ventilation and Respiratory Monitoring

The Evita® V300 is a scalable and versatile device which offers high ventilation quality. To meet and master the changing conditions and challenges of your everyday hospital work you need flexible equipment with versatile opportunities.

D-43497-2012

Dräger. Technology for Life®

Benefits

Versatile and scalable

- Ventilation for adults, children and neonates: invasive, non-invasive and with O_2-therapy
- Volume- or pressure-controlled ventilation, spontaneous breathing
- Independence due to optional gas and power supply units: GS500 (compressed air), PS500 (power), TSU (gas)
- Flexible workstation integration by attaching to supply unit or trolley
- Individually adjustable configurations easily transferred via USB
- Context-sensitive help function facilitates setting the ventilation parameters and explains device functions

High ventilation quality I

- Automatic tube compensation (ATC) compensates for artificial airway resistance
- Automatic leak compensation with invasive and non-invasive ventilation
- AutoFlow® in volume-controlled ventilation provides the tidal volume at the lowest possible pressure
- PC-APRV with optional AutoRelease enables spontaneous breathing with continuous positive airway pressure and short-term pressure relief
- Breathing deeply and freely thanks to AutoFlow®, Volume Guarantee (VG) or SPN-CPAP

High ventilation quality II

- Various spontaneous breathing support, e.g.: VC-MMV, SPN-PPS, Volume Support (VS), Pressure Support (PS)
- Advanced analysis tools such as trends or CO_2 monitoring
- Automatic weaning with SmartCare®/PS
- Graphical representation of breathing resistance and elasticity with Smart Pulmonary View

The scope of functions offered by the Evita V300 is individually scalable with optional hardware and software components.

Related Products

MT-6073-2008

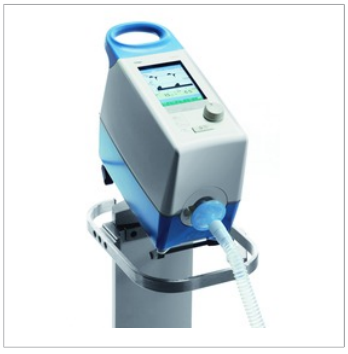
Dräger Evita® Infinity® V500 ventilator

Combine fully-featured, high-performance ventilation with Infinity® Acute Care System™ integration to meet the challenges of today's health care environment.

D-12306-2016

Dräger Savina® 300 Classic

The Dräger Savina® 300 Classic (in this configuration) combines the independence and power of a turbine-driven ventilation system with a wide range of ventilation modes. The large color touch screen and intuitive operating system that concentrates on essential features make configuration and operation very simple.



MT-0487-2007

Dräger Carina®

Designed for non-invasive ventilation: With its unique SyncPlus® technology and an extended NIV function, the user-friendly Dräger Carina® offers reliable and easy ventilation – and thanks to its compact design, this also applies when transporting patients.

D-25283-2009

Dräger PulmoVista® 500

Making ventilation visible. Put the power of Electrical Impedance Tomography (EIT) to work for you and your patients. With the PulmoVista® 500, you can visualise regional air distribution within the lungs - non-invasive, in real time and directly at bedside.

Technical Data

Patient type	Adults, pediatric patients, neonates
Ventilation settings	
Ventilation mode	Volume controlled ventilation – VC-CMV – VC-SIMV – VC-AC – VC-MMV
	Pressure controlled ventilation – PC-CMV – PC-BIPAP[1] / SIMV+ – PC-SIMV – PC-AC – PC-APRV – PC-PSV
	Support of spontaneous breathing – SPN-CPAP/PS – SPN-CPAP/VS – SPN-CPAP – SPN-PPS
Enhancements	– AutoFlow™ / Volume Guarantee (VC-AC) – Smart Pulmonary View – Automatic Tube Compensation® (ATC) – Mask Ventilation (NIV) – CO_2 monitoring – Monitoring Plus – additional Trends and Loops – SmartCare®/PS 2.0 – Automated clinical protocol in SPN-CPAP/PS – O_2-therapy
Special procedures	– Suction maneuver – Manual inspiration/hold – Medication nebulization – P0.1 – PEEPi – NIF
Therapy types	– Invasive ventilation (Tube) – Non-invasive ventilation (NIV) – O_2-therapy
Ventilation frequency (RR)	Adults 0.5 to 98/min Pediatric patients, Neonates 0.5 to 150/min
Inspiration time (Ti)	Adults 0.11 to 10 s Pediatric patients, Neonates 0.1 to 10 s
Tidal volume (VT)	Adults 0.1 to 3.0 L Pediatric patients 0.02 to 0.3 L Neonates 0.002 to 0.1 L
Inspiratory flow (Flow)	Adults 2 to 120 L/min Pediatric patients, Neonates 2 to 30 L/min
Inspiratory pressure (Pinsp)	1 to 95 mbar (or hPa or cmH_2O)
Inspiratory pressure limit (Pmax)	2 to 100 mbar (or hPa or cmH_2O)
PEEP / intermittent PEEP (ΔintPEEP)	0 to 50 mbar (or hPa or cmH_2O)
Pressure assist (Psupp)	0 to 95 mbar (or hPa or cmH_2O)

Technical Data

Rise time for pressure assist (Slope)	Adults, Pediatric patients 0 to 2 s Neonates 0 to 1.5 s
O_2 concentration (FiO_2)	21 to 100 Vol.%
Trigger sensitivity (Flow trigger)	0.2 to 15 L/min
Automatic Tube Compensation® (ATC)	Inside tube diameter (tube Ø) – Endotracheal tube (ET) Adults 5 to 12 mm (0.2 to 0.47 inch) Pediatric patients 2 to 8 mm (0.08 to 0.31 inch) Neonates 2 to 5 mm (0.08 to 0.2 inch) – Tracheostoma tube (Trach.) Adults 5 to 12 mm (0.2 to 0.47 inch) Pediatric patients 2.5 to 8 mm (0.1 to 0.31 inch) – Degree of compensation 0 to 100 %
Airway Pressure Release Ventilation (PC-APRV)	
Inspiratory time (Thigh)	0.1 to 30 s
Expiratory time (Tlow)	0.05 to 30 s
Maximum time of low pressure level in APRV/PEF (Tlow max)	0.05 to 30 s
Inspiratory pressure (Phigh)	1 to 95 mbar (or hPa or cmH_2O)
Expiratory pressure (Plow)	0 to 50 mbar (or hPa or cmH_2O)
Termination criterion (peak expiratory flow) Exp. term.	1 to 80 % (PEF)
Proportional Pressure Support (SPN-PPS)	
Flow Assist (Flow Assist)	Adults 0 to 30 mbar/L/s (or hPa/L/s or cmH_2O/L/s) Pediatric patients 0 to 100 mbar/L/s (or hPa/L/s or cmH_2O/L/s) Neonates 0 to 300 mbar/L/s (or hPa/L/s or cmH_2O/L/s)
Volume Assist (Vol. Assist)	Adults 0 to 100 mbar/L (or hPa/L or cmH_2O/L)
corresponds to compliance compensation	10,000 to 10 mL/mbar (or mL/hPa or mL/cmH_2O) Pediatric patients 0 to 1,000 mbar/L (or hPa/L or cmH_2O/L)
corresponds to compliance compensation	10,000 to 1 mL/mbar (or mL/hPa or mL/cmH_2O) Neonates 0 to 4,000 mbar/L (or hPa/L or cmH_2O/L)
corresponds to compliance compensation	1,000 to 0.3 mL/mbar (or mL/hPa or mL/cmH_2O)
O_2-therapy	Continuous Flow 2 to 50 L/min O_2 concentration FiO_2 21 to 100 Vol%
Leakage compensation	On/Off – On: full compensation active; Off: only trigger compensation active
Displayed measured values	
Airway pressure measurement	Plateau pressure (Pplat) Positive end-expiratory pressure (PEEP) Peak inspiratory pressure (PIP) Mean airway pressure (Pmean) Minimum airway pressure (Pmin) Range -60 to 120 mbar (or hPa or cmH_2O)
Flow Measurement	
Minute volume measurement	Expiratory minute volume (MVe) Inspiratory minute volume (MVi) Mandatory expiratory minute volume (MVemand) Spontaneous expiratory minute volume (MVespon) Minute volume, leakage-compensated (MV) Range 0 to 99 L/min BTPS

Technical Data

Tidal volume measurement	Tidal Volume (VT) Inspiratory tidal volume (not leakagecompensated) of mandatory breaths (VTimand) Expiratory tidal volume (not leakagecompensated) of mandatory breaths (VTemand) Inspiratory tidal volume (not leakagecompensated) of spontaneous breaths (VTispon) Range 0 to 5,500 mL BTPS
Respiratory rate measurement	Breathing frequency (RR) Mandatory respiratory rate (RRmand) Spontaneous breathing frequency (RRspon) Range 0/min to 300/min
O_2 measurement (inspiratory side)	Inspiratory O_2 concentration (FiO_2) Range 18 to 100 Vol%
CO_2 measurement in mainstream (adults and pediatric patients only)	End-expiratory CO_2 concentration ($etCO_2$) Range 0 to 100 mmHg

Displayed calculated values

Compliance (C)	Range 0 to 650 mL/mbar (or mL/cmH_2O)
Resistance (R)	Range 0 to 1,000 mbar/ (L/s) (or cmH_2O / (L/s))
Leakage minute volume (MVleak)	Range 0 to 99 L/min BTPS
Rapid Shallow Breathing (RSB)	Range 0 to 9,999 (/min/L)
Negative Inspiratory Force (NIF)	Range -80 mbar to 0 mbar (or hPa or cmH_2O)
Occlusion pressure P0.1	Range 0 to -25 mbar (or hPa or cmH_2O)
Curve displays	Airway pressure Paw (t) -30 to 100 mbar (or hPa or cmH_2O) Flow (t) -180 to 180 L/min Volume V (t) 2 to 3,000 mL Exp. CO_2 concentration ($etCO_2$) 0 to 100 mmHg

Alarms / Monitoring

Expiratory minute volume (MVe)	High / Low
Airway pressure (Paw)	High / Low
Insp. O_2 concentration (FiO_2)	High / Low
End-expiratory CO concentration ($etCO_2$)	High / Low
Tachypnoea monitoring (RR)	High
Volume monitoring (VT)	High / Low
Apnea alarm time (Tapn)	5 to 60 seconds
Disconnect alarm delay time (Tdisconnect)	0 to 60 seconds

Performance data

Control principle	time-cycled, volume-constant, pressure-controlled
Intermittent PEEP duration	1 to 20 expiratory cycles
Medicament nebulisation	for 5, 10, 15, 30 minutes
Inspiratory flow (BTPS)	max. 180 L/min
Base flow, adults	2 L/min
Base flow, pediatric patients	3 L/min
Base flow, neonates	6 L/min
Safety valve	Opens if medical compressed air supply fails (supply gas flow is not sufficient to provide the inspiratory flow required), enables spontaneous breathing with ambient air.

Technical Data

Endotracheal suction	
Disconnection detection	automatic
Reconnection detection	automatic
Initial Oxygen enrichment	max. 3 minutes
Active suction phase	max. 2 minutes
Final oxygen enrichment	max. 2 minutes
Factor for pediatric patients and neonates	1 to 2
Supply system for spontaneous breathing and Psupp	adaptive CPAP system with high initial flow
Operating data	
Mains power supply	
Mains power connection	100 V to 240 V, 50/60 Hz
Current consumption	
at 230 V	max. 1.4 A
at 100 V	max. 3.0 A
Inrush current	approx. 8 to 24 A peak approx. 6 to 17 A quasi RMS
Power consumption	
maximum	300 W
during ventilation, without charging the battery	approx. 100 W ventilation unit with Medical Cockpit approx. 180 W with GS500
Digital machine output	Digital output and input via an RS232 C interface Dräger MEDIBUS and MEDIBUS.X
Gas supply	
O_2 gauge pressure	2.7 to 6.0 bar (or 270 to 600 kPa or 39 to 87 psi)
Air gauge pressure	2.7 to 6.0 bar (or 270 to 600 kPa or 39 to 87 psi)
Physical Specifications	**Dimensions (W x H x D)**
Ventilation unit with lateral standard rail (without Infinity® C300)	361 mm x 320 mm x 410 mm (14.3 in x 12.6 in x 16.1 in)
Ventilation unit and Infinity® C300 on the trolley, carrier frame without bar	577 mm x 1,405 mm x 687 mm (22.7 in x 55.3 in x 27.1 in)
Ventilation unit and Infinity® C300 on the trolley, carrier frame with bar	577 mm x 1,405 mm x 700 mm (22.7 in x 55.3 in x 27.6 in)
Weight	
Evita® V300 and Infinity® C300	approx. 24 kg (52.9 lbs)
Evita® V300 and Infinity® C300 on trolley	approx. 58 kg (127.9 lbs)
PS500	approx. 27 kg (59.5 lbs)
GS500	approx. 10.5 kg (23 lbs)
Mounting: Supporting frame	1,65 kg (3.64 lbs)
Adapter for 38 mm pole	2,35 kg (5.18 lbs)
Infinity® C300	
Diagonal screen size Infinity® C300	15,4” TFT color touch screen
Input / Output ports (at Infinity® C300)	– 2 external RS232 (9-pin) connectors – 3 USB ports for data collection – 1 DVI for digital video output – 1 LAN port – RJ 45 Ethernet connectors (for service purpose only)