D-46451-2012

Focused on essentials

DRÄGER
SAVINA® 300

Dräger. Technology for Life®

How can a ventilator help to make your daily work easier?

The best possible patient care is your focus every day. In the challenging ICU environment or even in an acute care area, you need a ventilator you can rely on, in any situation. It is essential to have a reliable device that is versatile, easy to use and inherently safe by design. Paramount to acute medicine, utilization of staff and time constraints remain key factors. Devices which are intuitive can help increase your efficiency and allows for more direct care of the patient.

RELIABILITY MEETS FLEXIBILITY

Around the globe, Savina ventilators have provided more than 800 million hours of quality ventilation. The Savina 300 comes with an integrated safety concept that makes it a partner you can rely on. It is designed to meet the ventilation needs of even the most critically-ill patients, yet it is flexible enough to be used nearly anywhere in your hospital.

VENTILATION THAT'S GENTLE AND PROTECTIVE, YET POWERFUL AND EFFECTIVE.

Your team will be using the Savina 300 with confidence in just a short time. The large color touch screen and intuitive operating system that concentrates on essential features make configuration and operation very simple. Savina 300 provides sophisticated performance features that support protective ventilation strategies. Additionally, a turbine-driven ventilation system gives you the flexibility you need combined with the renowned Dräger ventilation quality.

The functionality you need in one device.

EASE-OF-USE

- Intuitive for simple operation and quick configuration
- Dräger-wide standardized user interface provides confidence in use and reduces training time
- Quick operational readiness with an automatic device check
- Intelligent alarm handling for a quick response to patient alarm situations
- Smooth and sealed surfaces for easy cleaning and disinfection

HIGH VENTILATION PERFORMANCE

- Full range of ventilation modes (e.g. PC-APRV, VC-MMV, AutoFlow)
- Stress-free spontaneous breathing with excellent trigger response time thanks to the turbine
- Free breathing with AutoFlow in volume constant ventilation at a minimum pressure level
- Advanced non-invasive ventilation (NIV)
- Extended graphic capabilities with loops, trends and logbook
- Pediatric ventilation with enhanced trigger detection and low tidal volumes down to 20 mL

INDEPENDENT FROM GAS AND POWER SUPPLY

- Built-in-turbine with rapid response time, continuous high flow delivery of up to 250 l/min
- Five hours of independent ventilation due to built-in and external batteries
- Transport Supply Unit (TSU) can be quickly attached for ergonomic handling of gas cylinders
- Bed coupling for quick connection between ventilator and patient bed
- Low Pressure Oxygen (LPO) inlet for ventilation without central gas supply


Dräger
14:01
VC-SIMV
PS
AutoFlow
5.35
22
13
0.426
51
VC-SIMV
50
420
1.9
13
5
1
Savina 300
max. 50 kg
max. 10 kg
max. 66 kg
max. 100 kg
max. 5°
Caution! Consult accompanying documents!

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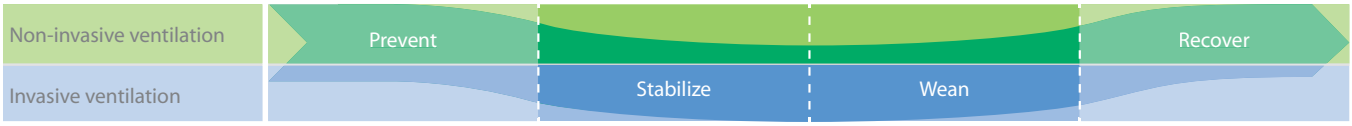
Operate with confidence in every phase.



A dependable companion along the respiration pathway: The Savina® 300 gives you invasive and non-invasive therapy in a single device, in acute and chronic care environments or even on the move.

PREVENT

- Comprehensive NIV to prevent or delay intubation and reduce the risks associated with intubation[1), 2)]
- Sensitive and accurate triggering reduces the work of breathing

STABILIZE

- AutoFlow® automatically adjusts the pressure level to the patient's changing lung mechanics in volume constant ventilation
- PC-APRV improves ventilation and CO_2 exhalation by allowing spontaneous breathing combined with short-term pressure relief from a higher pressure level
- Lung protecting assisted ventilation with PC-AC avoids harmful pressures
- Integrated Capnography for continuous monitoring of CO_2 gas exchange

WEAN

- PC-BIPAP/PC-SIMV+[3)] supports continuous weaning by allowing a smooth transition between mechanical ventilation and natural respiration
- Harmonized and automatic weaning with Mandatory Minute Ventilation (VC-MMV) in combination with AutoFlow®
- Sensitive triggering and rapid response to the patient's high flow demand support pressure controlled ventilation

RECOVER

- NIV can reduce re-intubation and infection rates and shorten ICU stays[4)]
- Spontaneous breathing thanks to CPAP/PS

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

[2)] Lightowler J, Wedzicha JA et al., BMJ 2003; 326; 18

[3)] BIPAP – Trademark used under licence

[4)] Ferrer M; Am J Respir Crit Med Vol 168. pp 1438-1444, 2003

Accessories

MT-0575-2007

NIV FULL-FACE MASK CLASSICSTAR®

Dräger offers a wide variety of dedicated accessories for the Savina 300. The ClassicStar NIV full-face mask is designed for non-invasive ventilation therapy. With its air-filled cushion, the mask can be adjusted individually to the patient's face and so provides effective therapy.

Transport

D-43492-2012

TRANSPORT SUPPLY UNIT, BED COUPLING, SET DC BATTERY

Flexible enough to be used nearly anywhere in your hospital with up to five hours of independent ventilation due to built-in battery and external power supply, a transport Supply Unit for two gas cylinders and a bed coupling for quick connection between ventilator and patient bed during transport.

Training

D-46355-2012

SAVINA 300 PRODUCT TRAINER

Dräger supports your everyday clinical work with online training offers. With our interactive product trainer you get useful information about the Savina 300 and you can easily practice the intuitive control concept and learn operating the device.

Service

D-32436-2011

DRÄGERSERVICE – BECAUSE QUALITY COUNTS

For any requirement you have, we have the service contract that fits: from inspection-only and preventive maintenance to complete service packages. We have the answer for your individual needs. Regardless of the service package Savina 300 comes with a manufacturer guarantee of 8 years for the turbine*.

* Limited Manufacturer Guarantee subject to conditions specified in the Instructions for Use. Applies only to devices purchased after 1/1/2015.

For further information and downloads please visit www.draeger.com

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Dräger Savina® 300

The Savina® 300 combines the independence and power of a turbine-driven ventilation system with state-of-the-art ventilation modes. The large color touch screen and intuitive operating system that concentrates on essential features make configuration and operation very simple.

TECHNICAL DATA

Ventilation modes	– VC-CMV / VC-AC – VC-SIMV – VC-MMV (optional) – PC-APRV (optional) – PC-BIPAP[1] / PC-SIMV+(optional) – PC-AC (optional) – SPN-CPAP
Optional Enhancements	– AutoFlow – Automatic adaption of the inspiratory flow in volume orientated ventilation modes. – NIV – Non Invasive Ventilation with optimized alarm systems and automatic leakage compensation. – Capnography - Mainstream CO_2 measurement – MonitoringPlus - Loops, Trends, user Logbook – LPO - Low Pressure Oxygen. Independant oxygen supply, e.g. with an O_2 concentrator – Nurse call - Connection for transmitting alarm signals to a central, alarm system
Patient type	Adult, pediatric
Respiratory rate	2/min to 80/min
Inspiration time	0.2 to 10 s
Tidal volume	0.05 to 2.0 L, BTPS[2] with option PediatricPlus 0.02 to 2.0 L
Inspiratory pressure	1 to 99 mbar (or hPa or cmH_2O)
PEEP/interm. PEEP	0 to 50 mbar (or hPa or cmH_2O)
Pressure support/ΔPsupp	0 to 50 mbar (or hPa or cmH_2O) (relative to PEEP)
Flow acceleration	5 to 200 mbar/s (or hPa/s or cmH_2O/s)
O_2-concentration	21 to 100 Vol. %
Trigger sensitivity (Flow trigger)	1 to 15 L/min
Inspiratory termination criterion	5 to 75 % PIF (peak inspiratory flow)
PC-APRV (optional)	Inspiratory time T_{high} 0.2 to 22.0 s Expiratory time T_{low} 0.1 to 22.0 s Inspiratory pressure P_{high} 1 to 95 mbar (or hPA or cmH_2O) Expiratory pressure P_{low} 0 to 50 mbar (or hPA or cmH_2O)

Dräger Savina® 300

Displayed measured values

Airway pressure measurements	Max. airway pressure, plateau pressure, mean airway pressure, PEEP 0 to 99 mbar (or hPa or cmH_2O)
Minute volume (MV)	Total MV, spontaneous MV 0 to 99 L/min, BTPS
Tidal volume	Inspiratory VT, expiratory VTe, VT_{spon} 0 to 3999 mL, BTPS
Total respiratory rate	Total and spontaneous respiratory rate, 0 to 150/min
Inspiratory O_2-concentration	21 to 100 % Vol.
End-tidal CO_2 concentration $EtCO_2$	0 to 100 mmHg (or 0 to 13.2 Vol% or 0 to 13.3 kPa)
Breathing gas temperature	18 to 48 °C (64.4 to 118.4 °F)
Curve displays	Paw(t), Flow (t), Tidal volume (t), CO_2 (t)
Ventilation ratio (I:E)	1:150 to 150:1
Compliance C	0.5 to 200 mL/mbar (or mL/hPa or mL/cmH_2O)
Resistance R	3 to 300 mbar/L/s (or hPa/L/s or cmH_2O/L/s)
Leakage minute volume MVleak	0 to 100 %
Rapid shallow breathing RSB	0 to 9999 (1/min/L)
Special Maneuvers (optional)	– Intrinsic PEEP PEEPi 0 to 100 mbar (or hPa or cmH_2O) – Exp. Hold

Alarms

Airway pressures	high / low
Expiratory minute volume	high / low
Tidal volume	high / low
Apnea-alarm time	15 to 60 sec
Spontaneous breathing frequency	high
Inspiratory O_2-concentration	high / low
Inspiratory breathing gas temperature	high
$EtCO_2$	high / low

Performance data

Maximum (continuous) inspiratory flow	250 L/min
Valve response time T0...90	≤ 5 ms
Control principle	time-cycled, volume-controlled, pressure limited
Safety valve opening pressure	120 mbar (or hPa or cmH_2O)
Emergency valve	automatically enables spontaneous breathing with filtered ambient air if air and O_2 supply should fail.
Automatic gas switch-over function if O_2 supply fails	
Output for pneumatic medication nebuliser	synchronized with inspiration
Leak compensation	optimized patient-ventilator synchrony adjusts the flow trigger and the inspiratory termination criteria for leaks. – tube application: up to 10L/min – NIV VC-modes: up to 25 L/min – NIV PC-modes: unlimited

Operating data	
Mains power connection	100 V to 240 V, 50/60 Hz
Current consumption	max. 1.3 A at 240 V, max. 3.4 A at 100 V
Battery	internal typically 45 min (optional extension up to 5 h)
Turbine exchange interval	8 years, with no limit in operating hours during this interval

Digital machine outputs
Digital output and input via an RS 232 C interface
Dräger MEDIBUS and MEDIBUS.X

Gas supply	
Air	Turbine technology
O_2 gas supply	3 bar (43.5 psi) - 10 % up to 6 bar (87 psi)

Dimensions and weights	
Dimensions W x H x D (without trolley)	460 x 383 x 364 ±2 mm (18.11 x 15.08 x 14.33 ±0.08 inch)
Weight (basic device)	approx. 26 kg (57.3 lbs) without trolley
Diagonal screen size	12" TFT color touch screen

[1] BIPAP – Trademark used under licence

[2] BTPS – Body Temperature Pressure Saturated.
Measured values relating to the conditions of the patient lung (98.6 °F), steam-saturated gas, ambient pressure.

[3] 1 mbar = 100 Pa,
AutoFlow® – Trademark by Dräger

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As of August 2015:
Dräger Medical GmbH changes to Drägerwerk AG & Co. KGaA.

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