**SV300 Ventilator**

### Technical Specifications

**Phisical Specifications**
- **Screen**
  - 12.1" Color active matrix TFT touch
  - 1280*800 pixels
- **Ventilation Specifications**
  - **Patient Type**
    - Adults, children, infants (body weight of at least 3 kg)
  - **Ventilation Mode**
    - V-A/C (Volume assist/control)
    - P-A/C (Pressure assist/control)
    - V-SIMV (Volume - Synchronized Intermittent Mandatory Ventilation)
    - P-SIMV (Pressure - Synchronized Intermittent Mandatory Ventilation)
    - DuoLevel (Duo Level Ventilation)
    - CPAP (Continuous Positive Airway Pressure)
    - PSV (Pressure Support Ventilation)
    - APRV (Airway Pressure Release Ventilation)
    - PRVC (Pressure Regulated Volume Control)
  - **TV (Tidal Volume)**
    - Adult: 100 - 2000 mL (increments of 10 mL)
    - Pediatric: 20 - 300 mL (increments of 1 mL)
  - **f (Ventilation frequency)**
    - 1 - 100 bpm (increments of 1 bpm)
  - **Tinsp (Inspiratory time)**
    - 1 - 60 bpm (increments of 1 bpm)
    - 4:1 - 1:10 (increments of 0.5)
  - **Tslope (Time of Pressure Rising)**
    - 0.20 - 10 s (increments of 0.05 s)
  - **Tlow (Time of Pressure Release)**
    - 0 - 2.00 s (increments of 0.05 s)
  - **Apnea Tinsp**
    - 0.2 - 30 s (increments of 0.1 s)
  - **∆Pinsp**
    - 5 % - 60 % (increments of 5 %), Off
  - **∆Psupp**
    - 5 - 80 cmH₂O (increments of 1 cmH₂O)
  - **Phigh**
    - 0 - 45 cmH₂O (increments of 1 cmH₂O)
  - **Plow**
    - 1 - 45 cmH₂O (increments of 1 cmH₂O), Off
  - **PEEP**
    - 0.5 - 15 L/min (increments of 0.1 L/min), Off
  - **Flow trigger**
    - -10 to - 0.5 cmH₂O (increments of 0.5 cmH₂O), Off
  - **Pressure trigger**
    - 10 - 85% (increments of 5%), Auto
  - **Exp % (Expiration termination level)**
    - 25% to 350%MV%

**Controlled Parameters**
- **Apnea Ventilation**
  - TV (Tidal Volume)
  - f (Ventilation frequency)
  - Tinsp (Inspiratory time)
  - Tslope (Time of Pressure Rising)
  - Tlow (Time of Pressure Release)
  - ∆Pinsp
  - ∆Psupp
  - Phigh
  - Plow
  - PEEP
  - Flow trigger
  - Pressure trigger
  - Exp % (Expiration termination level)

**O₂ Therapy**
- **Nebulizer**
- **Suction**
- **Manual breath**
- **Inspiratory hold**
- **Expiratory hold**
- **P0.1**
- **NIF**
- **PV - Tool**
- **PEEPi**

**Communication interface**
- Rs232, Ethernet, VGA, USB port, Nurse call

**O₂ Sensor**
- **Type**
  - Galvanic fuel cell
- **Response time**
  - < 15 s

**Environment specifications**
- **Temperature**
  - Ranges: 5 - 45 °C (operating); -20 to 60 °C (storage and transport)
- **Relative Humidity**
  - Ranges: 10 - 95 % (operating); 10 - 95 % (storage and transport)
- **Barometric Pressure**
  - Ranges: 62 - 106 kPa (operating); 50 - 106 kPa (storage and transport)

**Battery run time**
- **100% O₂**
  - Approximately 20 kg
- **Sigh**
  - 100% O₂
- **Suction**

**Power and Battery Backup**
- **External AC power supply**
  - Input voltage: 180 - 240 V
  - Input frequency: 50/60 Hz
  - Input current: 2.7 - 1.1 A
- **Internal battery**
  - Build-in Lithium-ion battery, 14.8 VDC, 5800 mAh

**Operation Data**
- **Screen**
  - **Display Size**
    - 5 - 80 cmH₂O (increments of 1 cmH₂O)
  - **Display Resolution (H) x (V)**
  - 1280*800 pixels
  - **Brightness**
    - Adjustable

**Operation Data**
- **Gas supply pressure**
  - Peak /f_low in case of single supply gas (air) ≥ 210 L/min

**Gas supply**
- **Gas type**
- **Pipe Connector**
- **Gas supply pressure**
  - Peak /f_low in case of single supply gas (air) ≥ 210 L/min

**Dimensions**
- 1039 mm*528 mm*544 mm
- **Weight**
  - Approximately 10 kg

**Operation Data**
- **Internal battery**
  - Build-in Lithium-ion battery, 14.8 VDC, 5800 mAh
- **Battery run time**
  - Approximately 20 kg

**Special Functions and procedures**
- **Sigh**
  - 100% O₂
- **Suction**
- **Manual breath**
- **Inspiratory hold**
- **Expiratory hold**
- **P0.1**
- **NIF**
- **PV - Tool**
- **PEEPi**

**Operation Data**
- **Screen**
  - **Display Size**
  - 1039 mm*528 mm*544 mm
### Ventilator Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airway pressure range</td>
<td>Adult: 10 - 120 cmH₂O, Pediatric: 6 - 80 cmH₂O (increments of 0.5 cmH₂O)</td>
</tr>
<tr>
<td>Tidal volume range</td>
<td>Adult: 0 - 9999 ml/min, Pediatric: 0 - 300 ml/min</td>
</tr>
<tr>
<td>Minute volume range</td>
<td>Adult: 110 - 4000 ml/min, Pediatric: 0 - 400 ml/min</td>
</tr>
<tr>
<td>Inspiratory time duration</td>
<td>Adult: 1 - 150 bpm, Pediatric: 0 - 30 bpm</td>
</tr>
<tr>
<td>Expiratory time duration</td>
<td>Adult: 1 - 150 bpm, Pediatric: 0 - 30 bpm</td>
</tr>
<tr>
<td>Rise time</td>
<td>Adult: 1 - 150 bpm, Pediatric: 0 - 30 bpm</td>
</tr>
<tr>
<td>Desaturation time duration</td>
<td>Adult: 7 - 15 minutes, Pediatric: 7 - 15 minutes</td>
</tr>
<tr>
<td>SpO₂ alarm limits</td>
<td>70 to 100 %: ±2 %, 41 to 70 mmHg: ±5% of reading, 0 to 40 mmHg: ±2 mmHg of reading</td>
</tr>
<tr>
<td>Airway pressure (PIP)</td>
<td>Adult: 110 - 4000 ml/min, Pediatric: 0 - 400 ml/min</td>
</tr>
<tr>
<td>Airway pressure (PEEP)</td>
<td>Adult: 0 - 148 mmHg, Pediatric: 0 - 20 mmHg</td>
</tr>
<tr>
<td>Airway pressure (PEEPi)</td>
<td>Adult: 0 - 100 mmHg, Pediatric: 0 - 20 mmHg</td>
</tr>
<tr>
<td>Minute volume (MV)</td>
<td>Adult: 0.2 - 100.0 L/min, Pediatric: 0.2 - 60.0 L/min</td>
</tr>
<tr>
<td>Tidal volume (TVi)</td>
<td>Adult: 5.0 - 12.0 mm, Pediatric: 2.5 - 8.0 mm (increments of 0.5 mm)</td>
</tr>
<tr>
<td>Inspiratory flow (finsp)</td>
<td>Adult: 0 - 50 ml/kg, Pediatric: 0 - 10 ml/kg</td>
</tr>
<tr>
<td>Expiratory flow (fexp)</td>
<td>Adult: 0 - 80 cmH₂O, Pediatric: 0 - 20 cmH₂O</td>
</tr>
<tr>
<td>Fraction of inspired oxygen (FiO₂)</td>
<td>0 - 100 % (increments of 1 %)</td>
</tr>
</tbody>
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