Our Response to Complicated SDB.

Mean operating noise level as per EN ISO 17510-1: 2007 at distance of one meter from device in patient position:
- about 28.5 dB(A) at 10 hPa

Mean operating noise level as per EN ISO 17510-1: 2002 at distance of one meter from device in patient position:
- about 26 dB(A) at 10 hPa

Operational pressure range:
- 4 to 20 hPa

Pressure accuracy:
- ± 0.4 hPa

max. CPAP pressure in case of device failure as per EN ISO 17510-1:
- < 36 hPa

Maximum flow at pressure of:
- 20 hPa:
  - without SOMNOclick 300: 125 l/min
  - with SOMNOclick 300: 150 l/min
- 16 hPa:
  - without SOMNOclick 300: 145 l/min
  - with SOMNOclick 300: 175 l/min
- 12 hPa:
  - without SOMNOclick 300: 165 l/min
  - with SOMNOclick 300: 190 l/min
- 8 hPa:
  - without SOMNOclick 300: 180 l/min
  - with SOMNOclick 300: 210 l/min
- 4 hPa:
  - without SOMNOclick 300: 195 l/min
  - with SOMNOclick 300: 210 l/min

Tolerance: ± 15 l/min

Warming of respiratory air:
- 2.5 °C

Short-term pressure constancy measured as per EN ISO 17510-1:
- without SOMNOClick 300:
  - 20 hPa: Δp = 0.6 hPa
  - 16 hPa: Δp = 0.5 hPa
  - 12 hPa: Δp = 0.4 hPa
  - 8 hPa: Δp = 0.4 hPa
  - 4 hPa: Δp = 0.3 hPa
- with SOMNOClick 300:
  - 20 hPa: Δp = 0.2 hPa
  - 16 hPa: Δp = 0.2 hPa
  - 12 hPa: Δp = 0.15 hPa
  - 8 hPa: Δp = 0.15 hPa
  - 4 hPa: Δp = 0.15 hPa

Long-term pressure constancy as per EN ISO 17510-1: 2002:
- without SOMNOClick 300:
  - 20 hPa: Δp ≤ 0.6 hPa
  - 16 hPa: Δp ≤ 0.5 hPa
  - 12 hPa: Δp ≤ 0.4 hPa
  - 8 hPa: Δp ≤ 0.4 hPa
  - 4 hPa: Δp ≤ 0.3 hPa
- with SOMNOClick 300:
  - 20 hPa: Δp ≤ 0.2 hPa
  - 16 hPa: Δp ≤ 0.2 hPa
  - 12 hPa: Δp ≤ 0.15 hPa
  - 8 hPa: Δp ≤ 0.15 hPa
  - 4 hPa: Δp ≤ 0.15 hPa

Fine filter service life:
- about 250 hours in normal ambient air
In cases of complicated breathing patterns, the setting options in many therapy systems offer little more than compromises. That is different with SOMNOvent auto-ST. Particularly for patients with complicated SDB (Sleep Disordered Breathing) which cannot be effectively treated with a CPAP device, SOMNOvent auto-ST is the answer.

**SOMNOvent auto-ST aims at high therapeutic efficiency**

With the help of the autoTrilevel principle, SOMNOvent auto-ST automatically adjusts the three pressure levels IPAP, EPAP and EEPAP to the needs of your patient (see info box autoTrilevel). That increases the efficiency of the therapy. Thanks to the automatic parameter adjustment to your therapy goals (see info box SCOPES), the difficult and time-consuming settings of separate parameters no longer have to be made for many patients. Two automatic backup frequencies effectively protect the patient from apnea and desaturation. The automatic trigger technology WWtrak ensures perfect synchronization between patient ventilation and SOMNOvent auto-ST.

**SOMNOvent auto-ST – Our response to complicated SDB.**

Automatically the best breathing sensation with Weinmann’s autoTrilevel principle

The autoTrilevel principle from Weinmann combines two proven types of therapy, autoBiLevel and autoCPAP. The three pressure levels continuously adjust automatically to the pressure needs of the patient: IPAP (upper pressure level during inspiration), EPAP (lower pressure level during expiration) and EEPAP (pressure level at end of expiration).

- The EEPAP is the pressure required to eliminate obstructions at the end of expiration when the risk of a collapse in the upper airways is highest. In the autoTrilevel mode the EEPAP automatically adjusts to impending obstructive events (autoCPAP principle).
- Needs-oriented ventilation is ensured through the setting of the difference between IPAP and EPAP (PDIFF). In the event of hypoventilation, PDIFF is correspondingly raised to maintain adequate ventilation (autoBiLevel principle).

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**Benchtest: TriLevel compared to BiLevel**

Compared to BiLevel, TriLevel achieves the same end-expiratory splinting of the airways at a mean lower therapy pressure (on average 2.5 hPa lower) and a lower maximum IPAP pressure (on average 2.3 hPa lower).

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**Automatic parameter adjustment to your therapy goals**

It takes just a few steps to therapeutic success with our operational concept featuring automatic parameter adjustment to your therapy goals. Among the therapy goals (SCOPES) available to you are SOFT, SUPP and CONT. Once the goal has been selected, SOMNOvent auto-ST automatically adjusts the pressure and therapy parameters to the goal and modifies the algorithm behavior. The automatic adjustments eliminate time-consuming and complicated settings of separate parameters. Of course you can still use the conventional BiLevel S/ST modes and set the parameters manually as usual.

**SCOPE SOFT**

- SOFT: needs-oriented ventilation/pressure support to prevent further desaturation

**SCOPE SUPP**

- SUPP: high additional need of ventilation/pressure support to unload respiratory muscles

**SCOPE CONT**

- CONT: high additional need of ventilation/pressure support to unload respiratory muscles

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**SCOPES**

- SOFT, SUPP, CONT

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**Device designation**

- SOMNOvent auto-ST
- SOMNOvent auto-ST with SOMNO click 300

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**Device designation**

- SOMNOvent auto-ST 29400
- SOMNOvent auto-ST with SOMNO click 300 29450

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**SOMNOvent auto-ST**

The solution for patients with complicated SDB.