



TECHNICAL DATASHEET –

VELOX® / VELOX® Junior

NEW



VELOX®



VELOX® Junior

Mobile nebuliser device based on vibrating membrane technology. Suitable for treatment of acute or chronic diseases of the lower airways. The ergonomic design and small number of components makes it easy to use, and the extremely quiet operation guarantees discreet, relaxed treatment.

With optional mains or battery operation, small size and light weight, the VELOX is also the ideal device for travelling.

Devices:

- **VELOX:** VELOX membrane nebuliser, control unit, universal mouthpiece, AC power plug (EU), bag and VELOXcare (cleaning apparatus for membrane nebulisers)
- **VELOX Junior:** VELOX Junior membrane nebuliser, control unit, SMARTMASK Baby, universal mouthpiece, power plug, carrying case and VELOXcare (cleaning apparatus for membrane nebulisers)

Components:

- Control unit (with battery compartment cover)
- Nebuliser consisting of 4 parts: cap, aerosol chamber, Medication reservoir including aerosol head and mouthpiece

TECHNICAL DATA:

Inhalation time: 2–4 minutes (for 2.5 ml)

Power sources: Mains power: Multi-voltage power adapter (100–240V~/50-60Hz) for use all over the world

Battery power: 3 × 1.5 V Mignon AA LR6/alkaline batteries or 3 × 1.2 V NiMH rechargeable batteries

Note: The device does not have a battery charging function.

Operating time on battery power: With new, high-power batteries from a trusted brand, the operating time is approx. 4 hours. New rechargeable batteries (AA), each with 2000 mAh energy storage capacity, achieve comparable operating times.

Weight: 110g (without batteries)
140g (with batteries)

Warranty: 2 years for the control unit

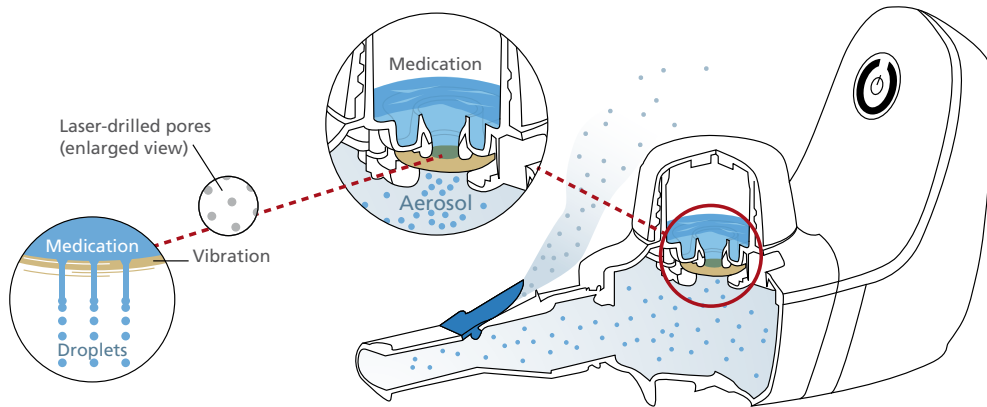
AEROSOL CHARACTERISTICS:

Total Output Rate: 497 mg/min

MMD: 3.8 µm

Mass fractions < 5 µm: 74 %

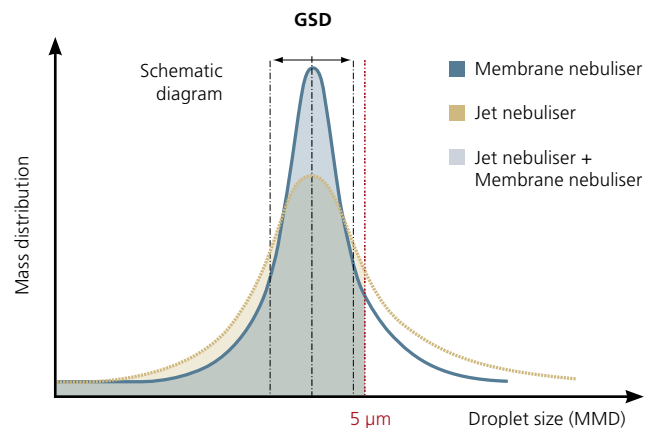
Measurement using laser diffraction (Helos SympaTec) at 23 °C and 50% relative humidity. Nebulised medium: 0.9% NaCl (2.5 ml). Inspiratory flow: 20 l/min.



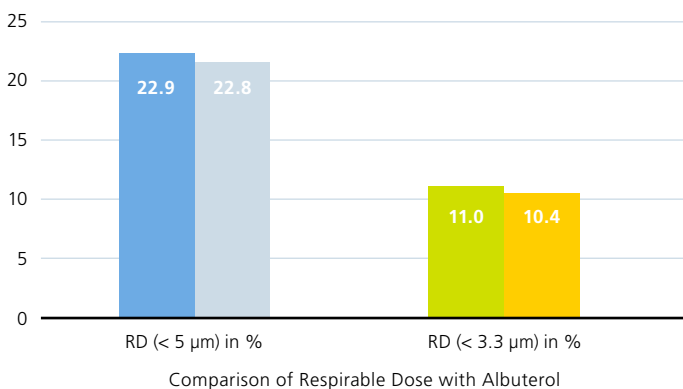
Technology of aerosol generation:

VELOX from PARI is an electronic nebuliser device based on vibrating membrane technology

- The nebuliser solution is forced through a perforated membrane that vibrates at high frequency and contains a large number of small pores
- This results in a considerably more homogeneous aerosol than with compressor-jet nebuliser systems (the GSD = Geometric Standard Distribution is smaller). VELOX therefore generates a higher proportion of fine droplets than a jet nebuliser with the same Mass Median Diameter (MMD).
- Consequently, if comparing the MMDs of different nebulisers, the same MMD does not necessarily equate to the same treatment efficiency, if different aerosol generation technologies are used.
- The therapy efficacy (Respirable Dose) for Velox and PARI BOY SX compressors is comparable (see graphics below). However, inhalation time is clearly reduced!



Treatment efficiency:



Inhalation times:

VELOX / VELOX Junior: **about 3 Min.**
 PARI JuniorBOY SX: **about 7 Min.**
 PARI BOY SX: **about 5 Min.**



- VELOX
- PARI BOY SX
- VELOX Junior
- PARI JuniorBOY SX



huisman medisch