



The **Drager Apollo** is an anesthesia Machine that offers a high-speed piston ventilator built in the machine. The E-vent Plus Servo ventilator helps the anesthesia machine maximize the peak flow of ventilation and gases. At the same time the Drager Apollo also offers an integrated boating system that reduces wires and tube as well as reducing any accidental disconnection of the patient for the machine during critical times.

The Drager Apollo offers unique low-flow ventilation which can reduce the cost of inhalation anesthesia agents. Along with reducing the fresh gases flow from 3l a minute to 1l per minute. Unlike a bellowed ventilator the Apollo does not require drive gas.

Features

- User-friendly ergonomics. All functional elements are within easy reach of being seated or standing.
- Unique breathing bag arm design provides the ultimate flexibility.
- Simple, straightforward startup makes it easier for the staff and provides complete information on device status. Integrated breathing system eliminates external hoses and clutter, reducing risk of mis-connection and disconnection.
- Fully automatic self-test lasts approximately three minutes, reflects the results to the user, and makes results available at any time.
- Advanced ventilation.
- E-Vent plus servo-controlled high-speed piston ventilator work with great precision to supply a maximum peak flow far in excess of any bellows ventilator, resulting in the kind of performance previously only seen in the ICU.
- The consistent use of low-flow anesthesia techniques can significantly reduce the cost of inhalation anesthetic agents. Reducing the fresh gas flow from 3L/min to 1L/min can result in anesthetic agent savings of up to 50%.



Specifications

Dimensions

Height: 59 in (150 cm)

Width: 33.5 in (85 cm)

Depth: 31.5 in (80 cm)

Weight: 365 lbs (165 kg) (Without vaporizer and gas cylinders)

Power

Power: 200 W

Operating Voltage: 100 to 127 VAC (- 15 % + 10 %) 45 – 65 Hz

Integrated Power Backup: At least 30 min, typically 90 min; Depending on ventilation parameters

Ventilator

E-Vent Plus: Electrically driven and electronically controlled, fresh gas decoupled

Ventilation Modes: Manual, spontaneous, Volume Mode, Pressure Mode Optional/
Synchronization: Pressure Support (PS), Volume Mode Autoflow

Pressure / Flow

Pressure Limitation P_{MAX} (in Volume Mode): (PEEP + 10) up to 70 cmH₂O

Pressure Limitation P_{INSP} (in Pressure Mode): (PEEP + 5) up to 70 cmH₂O

Trigger: 0.3 – 15 L/min

Tidal volume VT (Compliance Compensated) (in Volume Mode): 20 – 1400 mL; 5 – 1400 mL (with advanced ventilation option)

Breathing Frequency (freq.): 3 – 100 bpm

Inspiration Time (T_{INSP}): 0.2 – 6.7 s

Inspiration / Expiration Time Ratio (I:E): max. 5:1

Plateau Time (T_{IP}:T_{INSP}): 0 – 60 %

Inspiratory Flow (in Pressure Mode): max. 150 L/min

PEEP in Volume Mode: 0 – 20 cmH₂O (max. P_{MAX} – 10 cmH₂O)

PEEP in Pressure Mode: 0 – 20 cmH₂O (max. P_{insp} – 5 cmH₂O)

Fresh-gas Flow: 0 – 10 L/min for each gas (oxygen, air, nitrous oxide)

TSLOPE (in Pressure Mode and Pressure Support): 0 – 2 s

Total System Leakage: < 150 mL/min at 30 cmH₂O (automatic leak test)

O₂ Flow Control: Sensitive ORC function: at least 21 Vol.-% with N₂O as carrier gas

O₂ Flush: > 35 L/min

Gas Supply Connection

Gas Supply: O₂, N₂O, Air

Cylinder Supply: O₂, N₂O, Air

