



The Fabius® Tiro M is a compact anesthesia system that offers the full spectrum of anesthesia ventilation to military anesthesiologists/ CRNAs in the field of operations. This unit can be used in a variety of mobile and stationary military applications where general anesthesia is required. The modular design allows all standard system components to be stored in a single container so that assembly and disassembly of the unit is easily accomplished.

## Features

- Compact anesthesia system that offers the full spectrum of anesthesia ventilation to military anesthesiologists.
- Unit can be used in a variety of mobile and stationary military applications where general anesthesia is required.
- Modular design allows all standard system components to be stored in a single container so that assembly and disassembly of the unit is easily accomplished.
- Entire system packs and ships in one container, ensuring delivery of a complete anesthesia machine to the field.
- Simple, modular design allows for full set-up within 15 minutes, without the use of tools.
- Electronically controlled, piston-driven ventilator uses no drive gas, decreasing fresh gas usage overall.
- Easy-to-use interface reduces time required for clinicians to become familiar with the system.



## Specifications

### Dimensions

Container: (W) 30.11 in. x (H) 30.16 in. x (D) 30.11 in  
Fabius Tiro M setup on Container: (W) 49.8 in. x (H) 47.2 in. x (D) 31.9 in.  
Container basic empty weight: 75.4 lbs. /34.2 kg  
Container loaded or setup weight: 198 lbs. /91 kg

### Ambient Conditions

Operation temperature: 50 to 95 °F (10 to 35 °C)  
Storage temperature: 14 to 140 °F (-10 to 60 °C)  
Power supply (rating non-configurable): 100 to 240 VAC, 50/60 Hz, 70 VA  
Battery (supports ventilator and integrated monitor): > 45 min  
Operating modes: Standard: Manual / Spontaneous; Volume Control (VC); Pressure Control (PC); Pressure; Support (PS); Synchronized Volume Controlled; Ventilation w/PS (SIMV/PS)  
Breathing frequency: 4 to 60 bpm  
Positive end-expiratory pressure (PEEP): 0 - 20 cmH<sub>2</sub>O  
Inspiration/expiration ratio (Ti:Te): 4 : 1 to 1 : 4  
Pressure limiting (Pmax): 15 to 70 cmH<sub>2</sub>O  
Tidal Volume (VT): 20 to 1400 mL in Volume Control; 20 to 1100 mL in SIMV/PS  
Inspiratory pause (Tip:Ti): 0 to 50 %  
SIMV inspiratory time (T<sub>insp</sub>): 0.3 to 4.0 sec  
Inspiratory pressure (P<sub>insp</sub>): (PEEP + 5) to 65 cmH<sub>2</sub>O  
Inspiratory flow (InspFlow): 10 to 75 L/min in Volume; and Pressure Control; 10 to 85 L/min in Pressure Support  
Pressure Support Level (ΔPPS): PEEP +3 to 20 cmH<sub>2</sub>O  
Min. frequency for apnea-ventilation (Freq. Min.): 3 to 20 bpm and "OFF"  
Trigger: 2 to 15 L/min  
Integrated safety functions: Sensitive Oxygen Ratio Controller (S-ORC) guarantees a minimum O<sub>2</sub> concentration of 23% in an O<sub>2</sub> /N<sub>2</sub>O mixture. N<sub>2</sub>O cut-off if O<sub>2</sub> fresh gas valve is closed or if O<sub>2</sub> flow is less than 0.2 L/min. Audible and visual (flashing red LED) indication in case O<sub>2</sub> pressure drops below 20 psi (1.38 bar) ± 4 psi (0.27 bar). In case of electricity and battery failure, manual ventilation, gas delivery and agent delivery are possible. Positive pressure relief valve opens at 75 ± 5 cmH<sub>2</sub>O. Negative pressure relief valve opens at -7.5 to -9 cmH<sub>2</sub>O.  
Range of fresh gas flow indicators: 0.00 to 12.0 L/min  
Total fresh gas flow meter: 0 to 10 L/min, calibrated with a mixture of 50% O<sub>2</sub> and 50% N<sub>2</sub>O mixture  
O<sub>2</sub> flush (bypass): at 55 psi (3.8 kPa x 100): max. 50 L/min; at 50 psi (3.4 kPa x 100): max. 35 L/min  
Vaporizer Mount: 1 position Dräger mount  
Monitoring: Continuous monitoring of inspiratory O<sub>2</sub> concentration, breathing frequency, tidal volume, minute volume, mean or plateau pressure, peak airway pressure as well as PEEP. In addition, all fresh gas flow information is displayed as virtual flow tubes.  
Serial interface: 1 x RS 232 (standard)  
Protocols: Vitalink and Medibus  
Data available for export: All fresh gas flow, ventilation and O<sub>2</sub> data, flow curves and pressure curves  
Volume of CO<sub>2</sub> absorber: 1.5 Liter, Option: Dräger Medical's prefilled CLIC absorber  
Volume of entire compact breathing system: 2.8 Liter + bag