

## Dräger Fabius® Tiro

The specialist for every environment



### TECHNICAL DATA

#### BASE UNIT

##### Dimensions (W x H x D)

Trolley Version (Cart) with COSY	Approx. 30.4 x 53.6 x 33.0 in (77.2 x 136.1 x 83.8 cm)
Wall / Ceiling Version with COSY	Approx. 28.4 x 21.9 x 30.5 in (72.1 x 55.6 x 77.5 cm)

##### Weight and load

Fabius Tiro Trolley (with COSY) without supplementary cylinders and vaporizers	256.0 lb (116.0 kg)
Wall and Ceiling Mount (with mounting bracket)	107.4 lb (48.7 kg)

##### Power and battery backup

Power Input	100 to 240 VAC, 50/60 Hz, 70 VA
Operation time with fully charged batteries	45 minutes minimum (up to 120 minutes)

#### ANESTHESIA GAS SUPPLY MODULE

Range of fresh gas flow indicators	0.0 to 12.0 L/min
Total fresh gas flowmeter	0 to 10 L/min. calibrated with 50% O <sub>2</sub> / 50% N <sub>2</sub> O gas mixture
O <sub>2</sub> flush	max. 75 L/min at 87 psi (6 kPa x 100):
Vaporizer	Single Dräger or Selectatec®, optional vaporizer standby holder Dräger or Selectatec

#### VENTILATOR OPERATING SPECIFICATIONS

Ventilator E-vent®	Electronically controlled, electrically driven
Operating modes	Volume Controlled Ventilation Pressure Controlled Ventilation Pressure Support (Optional) SIMV/PS (Optional) Manual Ventilation Spontaneous Breathing



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**Control input ranges**

Breathing Frequency (rate)	4 to 60 bpm (1/min)
Positive End Expiratory Pressure (PEEP)	0 to 20 cmH <sub>2</sub> O (hPa)
Inspiration/expiration ratio (Ti:Te)	4:1 to 1:4
Pressure limiting (Pmax)	15 to 70 cmH <sub>2</sub> O (hPa)
Tidal Volume (Vt)	20 to 1400 mL in Volume Control 20 to 1100 mL in SIMV/PS
Inspiration pause (Tip:Ti)	0 to 50 %
SIMV Inspiratory time	0.3 - 4.0 sec
Inspiratory pressure (Pinsp)	PEEP + 5 to 65 cm H <sub>2</sub> O (hPa)
Inspiratory Flow (InspFlow)	10 to 75 L/min in Volume and Pressure Control modes 10 to 85 L/min in Pressure Support and SIMV/PS modes
Pressure Support Level (PPS)	PEEP + 3 to 20 cmH <sub>2</sub> O (hPa)
Min. frequency for apnoe-ventilation (Freq. Min.)	3 to 20 bpm and "OFF"
Trigger level	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 1.38 bar (20 psi) ± 0.27 bar (4 psi). In case of electricity and battery failure, manual ventilation, gas delivery and agent delivery are possible. High Pressure Safety Relief Valve opens at 75 ± 5 cmH <sub>2</sub> O (hPa). Negative Pressure Safety Relief Valve opens at -7.5 to -9 cmH <sub>2</sub> O (hPa).

**Ventilator monitoring**

Monitoring	Continuous monitoring of inspiratory O <sub>2</sub> concentration (optional), breathing frequency, tidal volume expiratory, expiration, minute volume, peak airway pressure, PEEP, and selection of mean or plateau pressure. In addition, all fresh gas flow information is displayed as virtual flow tubes.
Expiratory Minute Volume range	0 to 99 L/min
Control Screen	6.5 in (16.5 cm); black/amber (color mode option)

**BREATHING SYSTEM**

Optional breathing system heater	yes
Volume of entire compact breathing system, with absorber, excl. hoses, excl. bag	1.7 L
Volume of CO <sub>2</sub> absorber	Standard: 1.5 L reusable canister, Option: 1.2 L prefilled Drägerorb CLIC absorber
Mounting	on swivel arm, left or right, height adjustable

**GAS SUPPLY AND CONNECTION**

Gas Supply	O <sub>2</sub> , N <sub>2</sub> O, Air / O <sub>2</sub> , Air
Cylinder Yokes (optional)	O <sub>2</sub> , O <sub>2</sub> Air / O <sub>2</sub> , N <sub>2</sub> O - pin-index hanger yokes

**OTHER**

Communication Interface	1 RS-232 standard, additional RS-232 optional
Protocols	Vitalink and MEDIBUS
Data available for Export	All alarms, pressure, O <sub>2</sub> , volume and fresh gas flow data, ventilation settings, flow curve, and pressure curve
Writing surfaces	Pull-out tray (standard), Flip-up tray (optional)
Additional accessories	Anesthetic gas scavenging system (AGSS), endotracheal suction unit, integrated auxiliary oxygen flowmeter, auxiliary fresh-gas outlet (A-Cone), low flow kit, power outlet strip

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The quality management system at Dräger Medical GmbH is certified according to ISO 13485, ISO 9001 and Annex II.3 of Directive 93/42/EEC (Medical devices).