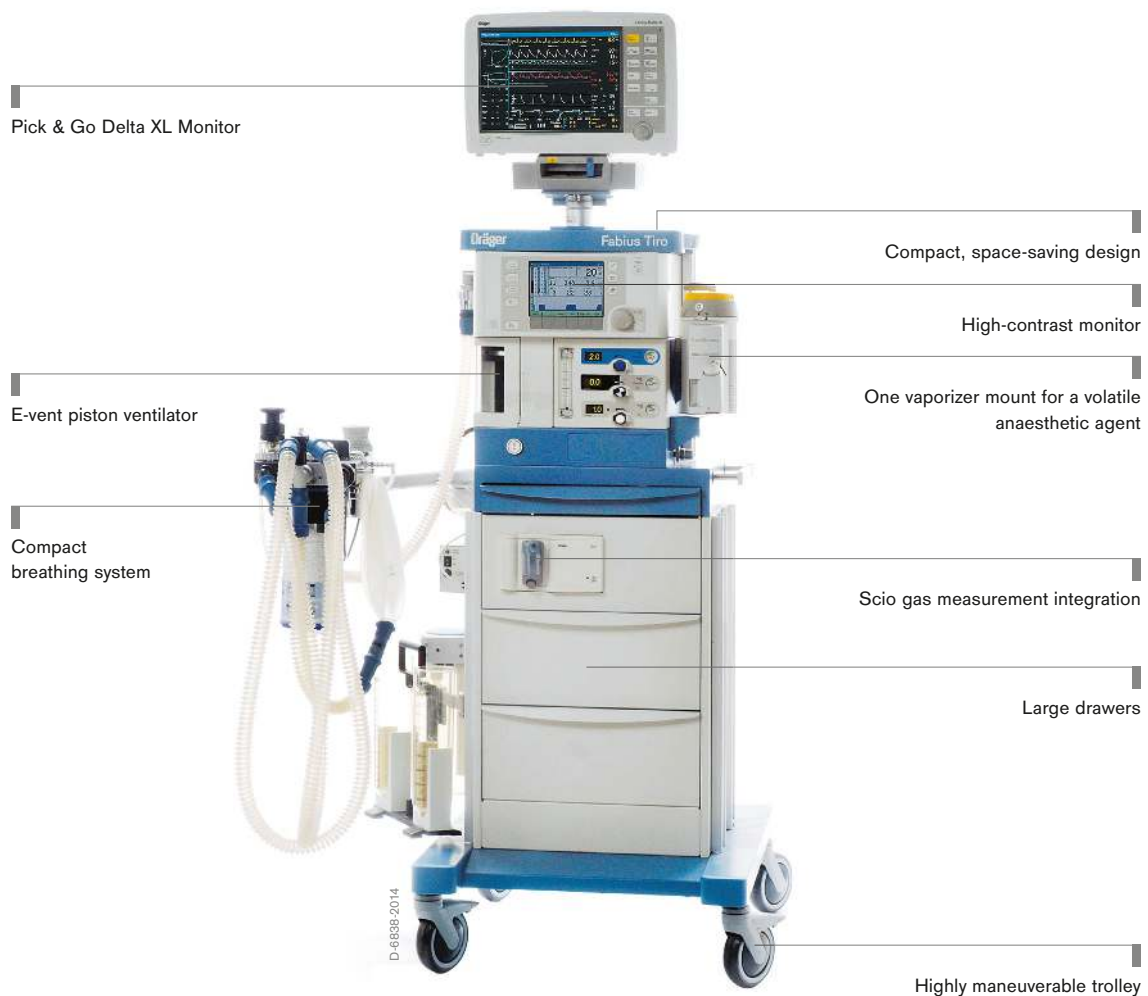


## Dräger Fabius® Tiro Anaesthesia Workstation

Get the most out of even the smallest spaces with a compact yet fully featured anaesthesia solution designed for use in a variety of specialised environments.



## Benefits

---

### Compact, flexible and effective

The Dräger Fabius Tiro provides everything you need for high quality anaesthesia care in small spaces. Its compact yet flexible design gives you excellent functionality and lets you make the most of the space available. The Fabius Tiro can be equipped with a wide range of options that will allow you to customize it to suit your particular needs.

---

### Powerful, accurate ventilation without drive gas

Because the Fabius Tiro features our electrically driven e-vent ventilator, it delivers ICU-like performance without the need for drive gas. This highly accurate piston ventilation means it is well suited to treat pediatric patients. The external compact breathing system (COSY) – especially designed for low-flow anaesthesia - consists of very few parts and can be quickly disassembled for cleaning. By the way, the Fabius Tiro is CLIC-Absorber compatible.

---

### Enhanced safety features

In spite of its compact size, the Dräger Fabius Tiro comes equipped with optional, advanced features for added safety and convenience, including fresh gas decoupling, dynamic compliance compensation and backup ventilation for Pressure Support modes. The quick-start feature allows manual ventilation even when the power is off, the ventilator is in standby mode or powering up. If the central gas supply should fail, the Fabius Tiro will even let you continue automatic ventilation temporarily.

---

### Comprehensive information management

With its integrated high visibility screen, digital fresh gas displays and an additional mechanical gas flow tube for total gas flow measurement, the Dräger Fabius Tiro provides you with clear, comprehensive status information on a wide range of relevant parameters. Data can also be exported to external monitors or for further analysis with Patient Data Management Systems (PDMS).

---

### Designed for confined spaces

The Fabius Tiro is a great choice for environments where space is limited – places like induction rooms, emergency wards, or minor procedure rooms. Flexible positioning solutions let you mount the Fabius Tiro on the wall, the ceiling or even on a highly maneuverable trolley which includes large drawers for consumables and instruments.

---

### Modular open architecture

A modular design concept lets you equip your Fabius Tiro with a wide range of extras and accessories. Whether its hemodynamic monitoring, gas monitoring or even spirometry, the Fabius Tiro gives you the option to expand your capabilities whenever the need arises. The Fabius Tiro is also ready for integration into your hospital information system.

## System Components

D-28736-2015



### Dräger Vapor® 2000 and D-Vapor®

Dräger vaporisers have been the benchmark for quality for over 50 years. Quality trusted by doctors and nurses around the world: to date, over 400,000 Vapor units have been sold to hospitals around the world.

D-15623-2014



### Vamos® / Vamos® plus

Targeted, safe anaesthesia requires efficient anaesthetic gas monitors. This is exactly what Vamos® and Vamos® plus compact anaesthetic gas monitors provide by reliably displaying carbon dioxide, nitrous oxide and volatile anaesthetic gas concentrations.

D-17396-2014



### Scio Four Family

O<sub>2</sub>, CO<sub>2</sub>, N<sub>2</sub>O and volatile anaesthetic agents at a glance: Scio Four Family can be used with an Infinity® monitor anywhere you need it.

MT-8850-2006



### Infinity® Delta

With the Delta multiparameter monitor, you can continuously monitor adult, pediatric and neonatal patients both at the bedside and on transport – eliminating the need for separate transport monitors. Supports all patient acuity levels hospital-wide.

## Accessories



### Drägersorb® Soda Lime

High safety and CO<sub>2</sub> absorption capacity. Soda lime is essential for CO<sub>2</sub> absorption in inhalation anaesthesia machines with rebreathing systems. Yet conventional soda lime can produce Compound A and carbon monoxide.



### WaterLock® 2

Perfect protection for precise gas measurement. Dräger WaterLock® 2 safely stops water and secretion from getting into the multi-gas sensor. The measurement system is optimally protected by Dräger's special membrane technology.



### Breathing Systems and Accessories

Bringing indispensable experience to disposable convenience.

## Related Products

D-9285-2009



### Dräger Fabius® GS premium

The Dräger Fabius® GS premium is an anaesthesia workstation that is simple to use, highly efficient and ready for the future. It features a solid design with modular architecture plus a wide range of ventilation capabilities. Your Fabius® GS premium can be customised to suit your exact needs.

D-47657-2012



### Dräger Fabius® plus XL

The Dräger Fabius plus XL combines proven German engineering you can count on with high performance ventilation therapy. Thanks to its scalable design concept, it allows you to choose the quality workstation you want now without losing sight of your future goals and needs.

D-10287-2011



### Dräger Fabius® MRI

Increase the diagnostic capability of your MRI unit with the help of state-of-the-art ventilation in the Dräger Fabius® MRI anaesthesia system specially designed for use in MRI environments.

D-412-2014



### Dräger Primus® Infinity® Empowered

Primus® Infinity® Empowered combines ICU-quality ventilation and optimal anaesthesia therapy in a state-of-the-art design. It offers care for patients of all ages and acuity levels. In combination with Infinity® Acute Care System patient monitoring it enables continually access to a wide set of patient data to facilitate fast and informed decision making in the operating room.

## 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)

### ANAESTHESIA 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):
Vapor mount	Dräger Interlock* or Selectatec® optional additional Dräger Interlock* or Selectatec Vapor standby holder.

\* Hosts Auto Exclusion and Interlock Vapor.

### VENTILATOR OPERATING SPECIFICATIONS

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

#### 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 (P <sub>insp</sub> )	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

## Technical Data

psi). In case of electricity and battery failure, manual ventilation, gas delivery and agent delivery are possible. High Pressure Safety Relief Valve opens at  $75 \pm 5$  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 Drägerisorb 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	Anaesthetic gas scavenging system (AGSS), endotracheal suction unit, integrated auxiliary oxygen flowmeter, auxiliary fresh-gas outlet (A-Cone), low flow kit, power outlet strip

## Notes

Not all products, features, or services are for sale in all countries.  
Mentioned Trademarks are only registered in certain countries and not necessarily in the country in which this material is released. Go to [www.draeger.com/trademarks](http://www.draeger.com/trademarks) to find the current status.

### CORPORATE HEADQUARTERS

Drägerwerk AG & Co. KGaA  
Moislinger Allee 53–55  
23558 Lübeck, Germany  
[www.draeger.com](http://www.draeger.com)

### Manufacturer:

Drägerwerk AG & Co. KGaA  
Moislinger Allee 53-55  
23542 Lübeck, Germany

### REGION EUROPE

Drägerwerk AG & Co. KGaA  
Moislinger Allee 53–55  
23558 Lübeck, Germany  
Tel +49 451 882 0  
Fax +49 451 882 2080  
[info@draeger.com](mailto:info@draeger.com)

### REGION MIDDLE EAST, AFRICA

Drägerwerk AG & Co. KGaA  
Branch Office  
P.O. Box 505108  
Dubai, United Arab Emirates  
Tel +971 4 4294 600  
Fax +971 4 4294 699  
[contactuae@draeger.com](mailto:contactuae@draeger.com)

### REGION ASIA PACIFIC

Draeger Singapore Pte. Ltd.  
61 Science Park Road  
The Galen #04-01  
Singapore 117525  
Tel: +65 6872 9288  
Fax: +65 6259 0398  
[asia.pacific@draeger.com](mailto:asia.pacific@draeger.com)

### REGION CENTRAL AND SOUTH AMERICA

Dräger Indústria e Comércio Ltda.  
Al. Pucurui - 51 - Tamboré  
06460-100 - Barueri - São Paulo  
Tel. +55 (11) 4689-4900  
[relacionamento@draeger.com](mailto:relacionamento@draeger.com)

### CANADA

Draeger Medical Canada Inc.  
2425 Skymark Avenue, Unit 1  
Mississauga, Ontario, L4W 4Y6  
Tel +1 905 212 6600  
Toll-free +1 866 343 2273  
Fax +1 905 212 6601  
[Canada.support@draeger.com](mailto:Canada.support@draeger.com)

Locate your Regional Sales  
Representative at:  
[www.draeger.com/contact](http://www.draeger.com/contact)

