

# Dräger Fabius<sup>®</sup> Plus Anaesthesia Workstations

Combine quality ventilation, easy operation and maintenance with open architecture expandability. The Dräger Fabius® Plus combines quality ventilation with enhanced flexibility and integration capabilities. It was designed to accommodate a wide range of options and accessories, allowing you to customize your Dräger Fabius® Plus to suit your particular needs.



# **Benefits**

#### Powerful, accurate ventilation without drive gas

Because the Fabius Plus 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 both adult and pediatric patients. The Fabius Plus gives you all the major ventilation modes and can be equipped with two vaporizers. Its 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 Plus is CLIC-Absorber compatible as well.

#### **Enhanced safety features**

The Dräger Fabius Plus 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, or the workstation is in standby mode or powering up. If the central gas supply should fail, the Fabius Plus will even let you continue automatic ventilation temporarily.

#### Comprehensive information management

With its integrated, 6.5 inch high visibility screen (color screen optional) and mechanical gas flow tubes for gas flow measurement, the Dräger Fabius Plus 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).

#### Modular open architecture and connectivity

A modular design concept lets you equip your Fabius Plus with a wide range of extras and accessories, including Dräger Infinity® monitors and even third party equipment. Whether it's hemodynamic monitoring, gas monitoring or spirometry, the Fabius Plus gives you the option to expand your capabilities whenever the need arises. The Fabius Plus features enhanced connectivity and is ready for integration into your hospital information system.

#### Designed around your workflow

Flexible positioning solutions let you mount the Fabius Plus on the wall, the ceiling or even on a highly maneuverable trolley which includes large drawers for consumables and instruments.

# System components



### 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.



## **Vamos Family**

The expandable Vamos Family lets you choose your gas monitoring solution today while keeping your options open for the future. In addition to  $\text{CO}_2$  and  $\text{SpO}_2$  your monitoring capabilities can be expanded to include all five common anaesthetic agents and  $\text{N}_2\text{O}$ .



# **Scio Four Family**

 $O_2$ ,  $CO_2$ ,  $N_2O$ , and volatile anaesthetic agents at a glance: Scio Four Family can be used with an Infinity monitor anywhere you need it.



# 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  $^{1,2}$  and  $CO_2$  absorption capacity. Soda lime is essential for  $CO_2$  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 from getting into the Multi-Gas Sensor. The membrane technology developed by Dräger for the WaterLock® 2 stops any bacteria or germs from getting into the gas measurement system. The WaterLock® 2 is also safe and simple to empty – with a further advantage in handling and hygiene.



# **Breathing Systems and Accessories**

Bringing indispensable experience to disposable convenience.

# Related Products



#### 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.



## **Dräger Fabius® Tiro**

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



### 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. Customize your Fabius® GS premium exactly the way you need it.



## **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.

# **Technical Data**

# BASE UNIT

Dimensions (W x H x D)  Trolley Version (Cart) with COSY with 2-Vaporizers	Approx. 35.8 x 55 x 30.3 in (91 x 140 x 77 cm)
Wall / Ceiling Version with COSY with 2-Vaporizers	Approx. 33.5 x 28.7 x 19.7 in (85 x 73 x 50 cm)
Wall 7 Celling Version With COOT With 2 Vaporizers	74pprox. 00.0 x 20.7 x 10.7 iii (00 x 70 x 00 0iii)
Weight and load	
Fabius® Plus Trolley (with COSY) without supplementary cylinders	242.5 lb (110 kg)
and vaporizers	
Wall and Ceiling Mount (with mounting bracket)	152.1 lb (69 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
O <sub>2</sub> flush	max. 75 L/min at 87 psi (6 kPa x 100):
Vapor mount	Up to two Dräger (Auto Exclusion/Interlock) or Selectatec® Vapor
	optional additional Dräger (Auto Exclusion/Interlock) or Selectate
	Vapor standby holder
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	4 to 60 hpm (1/min)
Breathing Frequency (rate)	4 to 60 bpm (1/min)
Positive End Expiratory Pressure (PEEP) Inspiration/expiration ratio (Ti:Te)	0 to 20 cmH <sub>2</sub> O (hPa) 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
ridai voidille (vt)	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 cmH₂O (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 minimul
integrated datety i unctions	O₂ concentration of 23% in an O₂ /N₂O mixture.
integrated dately i directors	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
integrated dately i directors	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 cas

# Technical Data

	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 -8 ± 2 cmH <sub>2</sub> O		
			(hPa).
		Ventilator monitoring	
		Monitoring	Continuous monitoring of inspiratory O <sub>2</sub> concentration (optional),
breathing frequency, tidal volume expiration, expiratory minute			
volume, peak airway pressure, PEEP, and selection of mean or			
plateau pressure.			
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.	1.7 L		
hoses, excl. bag			
Volume of CO <sub>2</sub> absorber	Standard: 1.5 L reusable canister, Option: 1.2 L prefilled		
	Drägersorb CLIC absorber		
Mounting	on swivel arm, left or right, hight adjustable		
GAS SUPPLY AND CONNECTION			
Gas Supply	O <sub>2</sub> , N <sub>2</sub> O, Air / O <sub>2</sub> , Air / O <sub>2</sub> , N <sub>2</sub> O		
Cylinder Yokes (optional)	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		
Protocols	Vitalink and MEDIBUS		
Data available for Export	All alarms, pressure, O2 and volume 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 outle		
	(A-Cone), low flow kit, power outlet strip		

# Notes

#### CORPORATE HEADQUARTERS

Drägerwerk AG & Co. KGaA Moislinger Allee 53–55 23558 Lübeck, Germany www.draeger.com

# Manufacturer:

Dräger Medical GmbH Moislinger Allee 53-55 23558 Lübeck, Germany

#### As of August 2015

Dräger Medical GmbH changes to Drägerwerk AG & Co. KGaA

Locate your Regional Sales Representative at: www.draeger.com/contact



# REGION EUROPE CENTRAL AND EUROPE NORTH

Dräger Medical GmbH Moislinger Allee 53-55 23558 Lübeck, Germany Tel +49 451 882 0 Fax +49 451 882 2080 info@draeger.com

#### REGION CENTRAL AND SOUTH AMERICA

Dräger Panama Comercial S. de R.L. Complejo Business Park, V tower, 10th floor Panama City Tel +507 377 9100 Fax +507 377 9130 contactcsa@draeger.com

#### REGION MIDDLE EAST, AFRICA

Dräger Medical GmbH
Branch Office
P.O. Box 505108
Dubai, United Arab Emirates
Tel +971 4 4294 600
Fax +971 4 4294 699
contactuae@draeger.com

#### REGION ASIA / PACIFIC

Draeger Medical
South East Asia Pte Ltd.
25 International Business Park
#04-27/29 German Centre
Singapore 609916, Singapore
Tel +65 6572 4388
Fax +65 6572 4399
asia.pacific@draeger.com

# REGION EUROPE SOUTH

Dräger Médical S.A.S.
Parc de Haute Technologie
d'Antony 2
25, rue Georges Besse
92182 Antony Cedex, France
Tel +33 1 46 11 56 00
Fax +33 1 40 96 97 20
dImfr-contact@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