

### THE RIGHT COMBINATION

HIGH FLOW OXYGEN THERAPY FOR PERIOPERATIVE CARE

# **THE RIGHT** COMBINATION

High Flow Oxygen Therapy (HFOT) is delivered simply and efficiently using AquaVENT® FD140i and an AquaVENT® HFOT circuit from Armstrong Medical, with flow rates up to 80L/min.

Delivering HFOT by this method creates the right combination for optimum results in your perioperative setting.

AquaVENT® FD140i, dual therapy gas flow driver (set to 'POINT®' mode), gives you single unit incremental control over oxygen concentration and flow rates.

- Quick and simple set up •
- Precise control of oxygen concentration and flow rates with single unit increments
- Potential to travel with the patient throughout their entire perioperative journey, with a 60 minute (minimum) battery life
- Easy to use 7" touch screen
- Quick escalation to CPAP if required

#### AquaVENT® FD140i CAN BE SET UP TO DELIVER HFOT FOR **PERIOPERATIVE APPLICATIONS IN 3 SIMPLE STEPS:**

1

Select POINT<sup>®</sup> mode

2

3 Set flow rate and FiO<sub>2</sub> Start therapy









#### **DESIGNED FOR EASE OF USE**

- 1 Improved head strap stability provides greater patient comfort.
- 2 Options available with left and right positioning of gas supply tubing.
- **3** For reuse of circuit, use our low-profile filter with cannula.
- 4 1.8m long heated breathing system designed for perioperative application protected by BioCote® antimicrobial technology.

- (5) Tube clip ensures optimal positioning.
- 6 AquaVENT<sup>®</sup> heater humidifier can display airway temperature.
- 7 Autofill humidification chamber maintains water level when using a bag of sterile water.
- 8 Variable oxygen concentration 21-100% for recovery, laser/ diathermy and patients with COPD.



## HIGH FLOW OXYGEN THERAPY FOR ALL YOUR PERIOPERATIVE CARE

### PREOXYGENATION FOR INTUBATION OR RAPID SEQUENCE INDUCTION

• HFOT improves preoxygenation before intubation and maximises apnoea time before desaturation (Mir et al, 2016)<sup>[1]</sup>.

• A major advantage of HFOT is that it can be continued while airway instrumentation takes place in contrast to face mask oxygen which must be removed following induction of general anaesthesia.

 HFOT preoxygenation may be particularly beneficial in patients with a reduced functional residual capacity or increased metabolic demand for oxygen, such as obstetric patients, bariatric patients, or patients with sepsis.

#### DIFFICULT AIRWAYS

THRIVE (Transnasal Humidified Rapid-Insufflation Ventilatory Exchange; Patel and Nouraei, 2015)<sup>[2]</sup> is a technique using HFOT to increase the apnoeic window in patients with difficult airways undergoing general anaesthetic.

#### FIBREOPTIC INTUBATION

The features of HFOT allow high FiO<sub>2</sub> under positive pressure to be delivered continuously throughout an oral or nasal awake fibreoptic intubation. A fibreoptic endoscope can be manoeuvred alongside the soft nasal cannula. The humidification of the gases leads to greater patient comfort and a higher tolerance compared to conventional methods.

### **EXTUBATION AND POST-SURGERY**

HFOT improves oxygenation following extubation and can potentially decrease the incidence of respiratory complications and reintubation.

#### **PROCEDURAL OXYGENATION**

HFOT can be used for bronchoscopy or dental extraction. For sedation, a jaw-thrust is usually required once airway reflexes are obtunded to allow for passive oxygenation.

#### ENT SURGERY

Short procedures such as microlaryngoscopy may be managed using HFOT. Provided the airway is patent throughout, apnoea times of more than 20 minutes can be achieved with maintenance of oxygenation and only relatively small increases in arterial carbon dioxide levels.

#### **DELIVERY OPTIONS**

High Flow Oxygen Therapy for perioperative care can be delivered via AquaVENT® FD140i or POINT® Blender.

Code	Description	
AMHO1509-042	AquaVENT® HFOT circuit for POINT®, with antimicrobial BioCOTE®, for adult patients >10kgs, heated, for use with FPH MR850, GGM 2600A and Wilamed Aircon series heater humidifiers. With a Humidification limb length 0.6m, auto-fill humidification chamber, heated inspiratory limb length 1.8m, without safety cap, with mini bacterial viral breathing filter, bedsheet clip, with bi-lateral nasal cannula (AMNS200*) and circuit change label.	
AMNS2005-002	AquaNASE <sup>®</sup> nasal high flow cannula MEDIUM (PURPLE)	
AMHH2600A-UK / AMHH2600A-EU	AquaVENT® Heater Humidifier, servo-controlled (power cord United Kingdom). *Heater clamp, Adapter cable, Temp. Probe, Dripstand & basket may also be required	

<sup>111</sup> Mir F, Patel A, Iqbal R, Cecconi M, Nouraei SAR. A randomised controlled trial comparing transnasal humidified rapid insufflation ventilatory exchange (THRIVE) pre-oxygenation with face mask pre- oxygenation in patients undergoing rapid sequence induction of anaesthesia. Anaesthesia. 2016. 72(4): 439–443.

<sup>[2]</sup> Patel A, Nouraei S. Transnasal humidified rapid insufflation ventilator exchange: a physiological method of increasing apnoea time in patients with difficult airways. Anaesthesia. 2015. 70:323–329

### Creating Support for Life

	AquaVENT <sup>®</sup> FD140i (POINT <sup>®</sup> Mode)	POINT <sup>®</sup> Blender
Product codes	AMFD140I-UK Gas Flow Driver with Pole Mount and Hoses (complete UK system) AMFD140I-EU Gas Flow Driver with Pole Mount and Hoses (complete EU system)	AMMMCS10 70L/min
Preoxygenation	✓	$\checkmark$
Sedation	✓	✓
Intubation	~	$\checkmark$
Laryngeal Surgery	✓	$\checkmark$
Post op HFOT	✓	✓
FiO₂ range Flow rate	21%-100% 10 - 80L/min	21%-100% Up to 70L/min
Post op CPAP	~	
Adjustment of therapy	Adjustable by 1% increments	Manual with blender dial





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