

VENTFLO™

EtCO₂/O₂ Sampling Cannulas



AirLife®

www.myAirLife.com | 800-433-2797 | info@myAirLife.com

What makes VentFLO™ EtCO₂/O₂ sampling cannulas the right choice in capnography sampling?

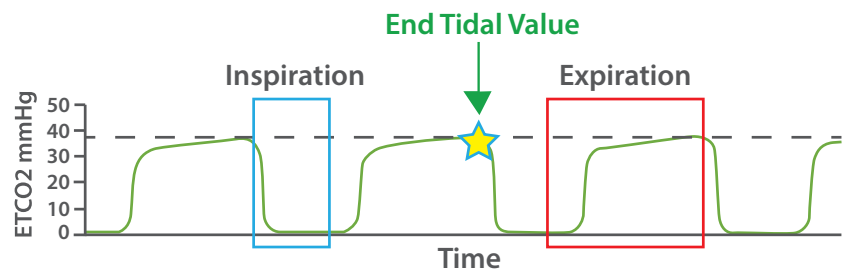
Sidestream capnography sampling with an O₂/EtCO₂ nasal cannula can be susceptible to blockage from water vapor or secretions - but risk can be reduced when a filter is introduced.

The AirLife VentFLO™ EtCO₂/O₂ cannulas feature a hydrophobic filter. The use of this filter helps minimize the potential that water vapor or secretions can have on the capnography waveform output. The result is a waveform that is as close to textbook standard as possible.

THE IMPORTANCE OF THE WAVEFORM IN CAPNOGRAPHY

End-tidal carbon dioxide (EtCO₂) monitoring provides valuable information about CO₂ production and ventilation. Also called capnography, this monitoring provides a breath-by-breath analysis and continuous reading of the ventilatory status including early signs of respiratory compromise, cardiac perfusion changes, proper placement of the endotracheal tube, and ventilator circuit integrity. Each of these is translated by the capnography waveform (see below).

The normal capnography should be a rectangle with rounded corners. Different waveform shapes can indicate different conditions. When a patient is exhaling CO₂, the graph inclines. When a patient inhales, the graph declines. The waveform should return to the baseline, and frequency should match the patient's respiratory rate. The height of the waveform should be between 35 mm Hg and 45 mm Hg, which is a normal EtCO₂ reading.

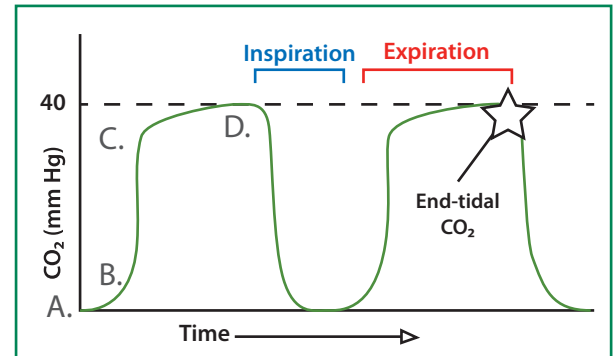


Normal and Abnormal ETCO₂ Waveform Patterns

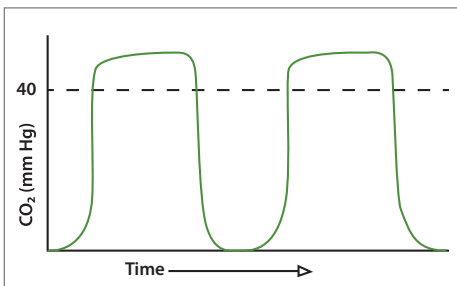
NORMAL

A normal capnograph consists of 4 phases. The baseline represents inspiration as the CO₂ levels are normally zero.

- A. Phase 1 - The start of exhalation and represents exhaled gas from the upper airways.
- B. Phase 2 - Displayed by a rapid rise as alveolar gas replaces anatomical deadspace.
- C. Phase 3 - The Alveolar Plateau, represents alveolar gas during the end of expiration. This causes the waveform to flatten. The end point of this phase is referred to as EtCO₂. This is the numerical value displayed on the capnography. A normal EtCO₂ value is between 35-45 mm Hg.
- D. Phase 4 - The beginning of inspiration and marked by a rapid downstroke to baseline.

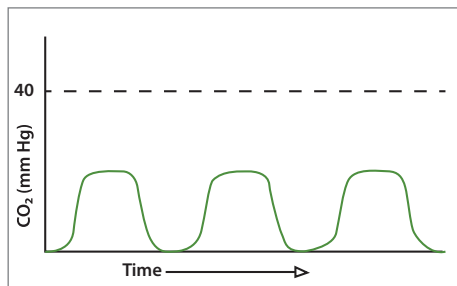


ABNORMAL



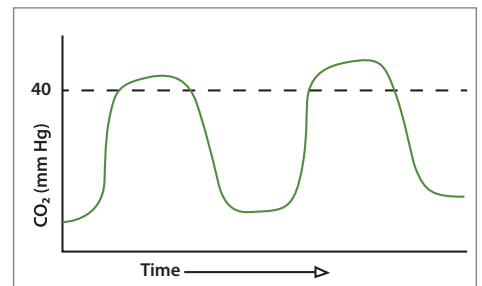
HYPOVENTILATION

The trademark sign for hypoventilation is an elevated CO₂ level above 45 mm Hg in the presence of normal circulation and metabolism.



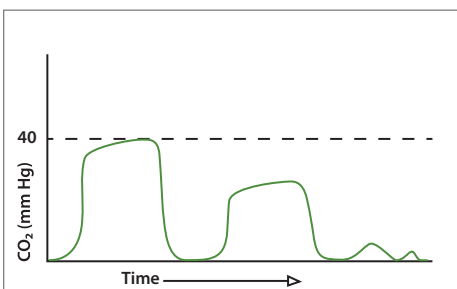
HYPERVENTILATION

The primary indicator of hyperventilation is a decreased CO₂ level below 35 mm Hg in the presence of normal circulation and metabolism.



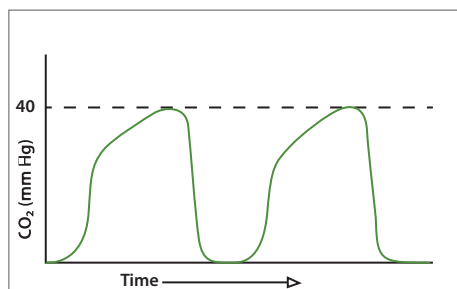
REBREATHING OF CO₂

The pattern for rebreathing CO₂ is a gradual rise in the baseline.



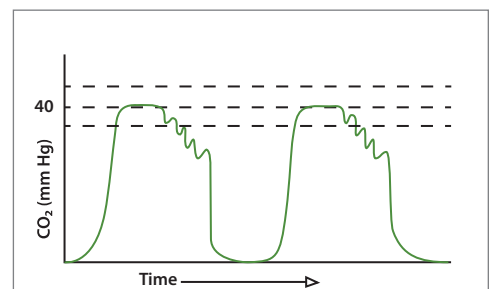
APNEA

Waveform quickly falls to baseline. No breath for 10 seconds or longer.



AIRWAY OBSTRUCTION

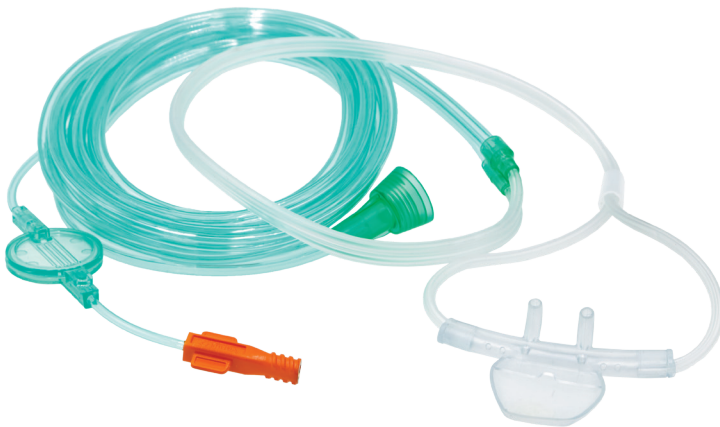
A common sign of airway obstruction is indicated by a shark fin shaped waveform while occurring normally once every three seconds or less.



CARDIOGENIC OSCILLATIONS

Downslope of waveform creates a ripple effect during low frequency ventilation.

Product Overview:



VENTFLO™ ETCO₂ DEVICES

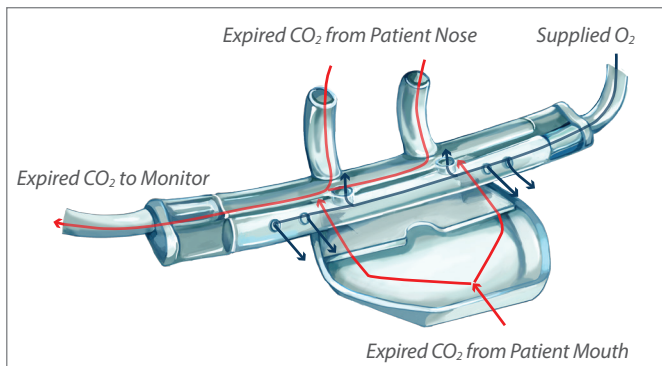
- Hydrophobic filter minimizes moisture ingress into monitor
- Facepiece simultaneously delivers oxygen while obtaining CO₂ sampling during spontaneous breathing
- Sample line compatible with capnography monitors that utilize Microstream™ technology, e.g. Medtronic Capnostream™ 35
- Soft-Ears™ material helps ensure superior patient comfort
- Nasal facepiece designed to prevent mixing of fresh oxygen with CO₂
- 3-Channel tubing prevents kinking
- Available in three tubing lengths, each with Fits-All O₂ connector
- Also available in 2 cannula styles: nasal or nasal-oral sampling

VENTFLO™ ETCO₂ EXTENDED DEVICES

VentFLO™ EtCO₂ Extended devices serve the same purpose as the standard VentFLO EtCO₂: to deliver oxygen and sample the patient's exhaled breath. This enables monitoring of the patient's EtCO₂ levels and respiratory rate. The VentFLO Extended devices include an additional section of Nafion tube that allows the cannula to function longer and in higher-humidity conditions than their standard counterparts.

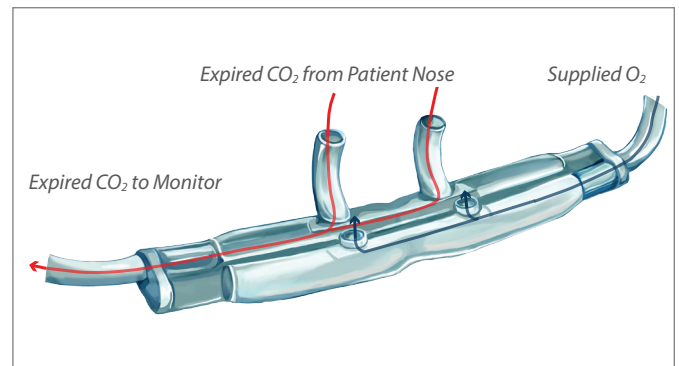


VENTFLO ETCO₂ DEVICE AIRFLOW



Innovative scoop design enables effective CO₂ capture from mouth-breathing patients

VENTFLO ETCO₂ EXTENDED DEVICE AIRFLOW

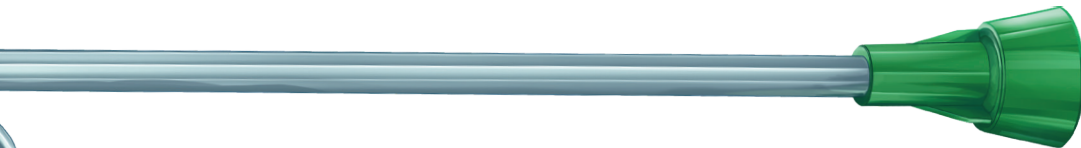


Curved nares made of ultra-soft material

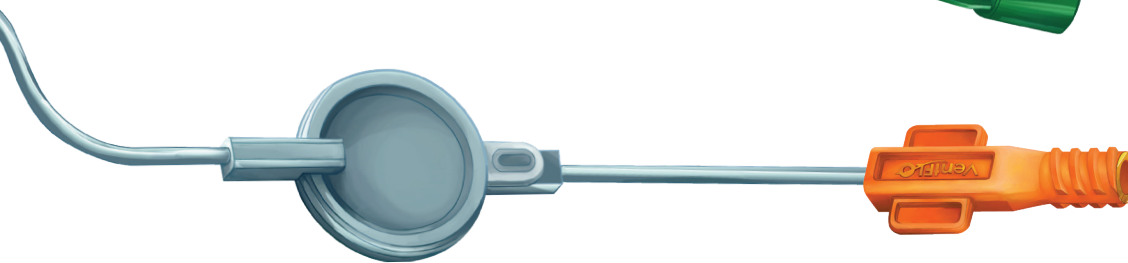
Product Breakdown:

VENTFLO™ EtCO₂/O₂ SAMPLING CANNULAS WITH INLINE FILTER

The AirLife VentFLO™ EtCO₂/O₂ sampling cannulas capture the exhaled CO₂ while simultaneously delivering oxygen. These EtCO₂/O₂ cannulas also feature a bright reflective style connector, compatible with Microstream™, Capnostream™ and Oridion™ capnography monitors.



Fits-All O₂ Connector



Reflective connector with ergonomic grip for short term use cannulas

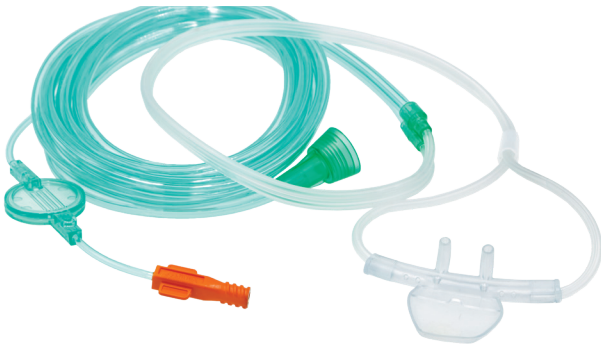
Hydrophobic filter helps minimize moisture from being pulled into the monitor at the sampling port



Yellow reflective connector with ergonomic grip indicates VentFLO extended use with Nafion tubing

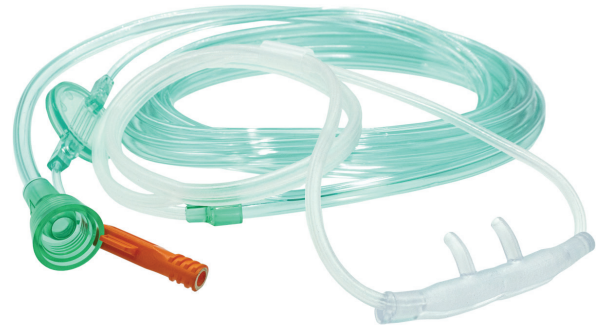


VentFLO™ EtCO₂/O₂ Sampling Cannulas



ETCO₂/O₂ ORAL-NASAL SAMPLING CANNULA

ITEM	DESCRIPTION	LENGTH	PK
5707F-SE	Adult EtCO ₂ /O ₂ Oral/Nasal Cannula	7'	25
5714F-SE	Adult EtCO ₂ /O ₂ Oral/Nasal Cannula	14'	25



ETCO₂/O₂ NASAL SAMPLING CANNULA

ITEM	DESCRIPTION	LENGTH	PK
5107F-SE	Adult EtCO ₂ /O ₂ Nasal Cannula	7'	25
5114F-SE	Adult EtCO ₂ /O ₂ Nasal Cannula	14'	25
5207F-SE	Pediatric EtCO ₂ /O ₂ Nasal Cannula	7'	25
5214F-SE	Pediatric EtCO ₂ /O ₂ Nasal Cannula	14'	25



EXTENDED ETCO₂/O₂ NASAL SAMPLING CANNULA

ITEM	DESCRIPTION	LENGTH	PK
5707F-SE-E	Adult Extended EtCO ₂ /O ₂ Oral/Nasal Cannula	7'	25
5714F-SE-E	Adult Extended EtCO ₂ /O ₂ Oral/Nasal Cannula	14'	25



EXTENDED ETCO₂/O₂ ORAL-NASAL SAMPLING CANNULA

ITEM	DESCRIPTION	LENGTH	PK
5107GS-E	Extended EtCO ₂ /O ₂ Gas Sampling Line	7'	25
5107ET-E	Extended EtCO ₂ /O ₂ Gas Sampling Line with ET Tube Adapter	7'	25
5107-SE-E	Adult Extended EtCO ₂ /O ₂ Nasal Cannula	7'	25
5114F-SE-E	Adult Extended EtCO ₂ /O ₂ Nasal Cannula	14'	25
5207F-SE-E	Pediatric Extended EtCO ₂ /O ₂ Nasal Cannula	7'	25
5214F-SE-E	Pediatric Extended EtCO ₂ /O ₂ Nasal Cannula	14'	25