Medtronic

Accurate $EtCO_2$ monitoring with every breath

Microstream™ Advance filter lines have been proven in internal testing to deliver more accurate readings compared to Masimo NomoLine-O™*[1,†]

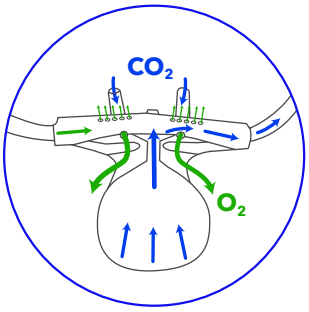
	Microstream™ Advance oral/nasal filter lines	Microstream™ Advance nasal filter lines	Masimo NomoLine-O™* nasal/oral CO_2 cannula with O_2	Masimo NomoLine-O™* adult nasal CO_2 cannulas with O_2
$EtCO_2$ accuracy with supplemental oxygen	✓	✓	✗	✗
$EtCO_2$ accuracy with varied respiratory rate	✓	✓	✓	✗

Microstream Advance™ filter lines are the only ones to **deliver $EtCO_2$ accuracy with both supplemental oxygen and varied respiratory rate**.[†,1]

Bench testing results showed Masimo NomoLine-O™* sampling lines had **several readings with an error >2 mmHg** as respiratory rate, supplemental oxygen flow, or both changed.[†,1]

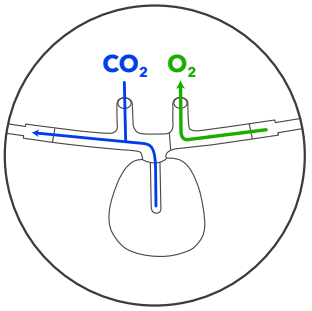
It's estimated that 80% of patients experience nasal cycling and closer to 86% of patients experience septal deviation.[2,3]

Microstream™ Advance filter lines are the ONLY sampling lines with Uni-Junction™ sampling technology.[5]



Uni-junction™ sampling captures every breath. This patented technology is designed for effective sampling from both nares and the mouth, even at low tidal volumes leading to accuracy and clear waveforms.[5]

Masimo NomoLine-O™* uses a split-flow design.[4]



Split-flow cannula designs like Masimo NomoLine-O™* may lead to an **increase in sample dropouts and false alarms**.[6]

Masimo NomoLine-O™* IFU states: "Do not use NomoLine-O™* cannulas on patients with obstructions in one or both nostrils."[7]

† Internal bench test data on file. Bench testing data may not be indicative of clinical performance.

Microstream™ Advance filter lines are the only sampling lines validated to work with the Microstream™ capnography-enabled systems.

Using unvalidated capnography sampling lines on Microstream™ capnography modules may cause improper module performance[8], result in inaccurate readings[8], can affect patient and operator safety[9] and may cause damage to the monitor or not meet claimed specifications.[10]

Masimo's NomoLine-O™* IFU states: "This [Nomoline-O] warranty does not extend to any product that has been used in violation of the operating instructions supplied with the product."[7,†]

Microstream™ capnography is an integrated system engineered for delivering accurate results.[11]

Accurate

The CO_2-specific technology called Molecular Correlation Spectroscopy™ (MCS) and 1.0mm ID microbore tubing from our Microstream™ Advance filter lines enable clear, **crisp waveforms and accurate measurements**.[12,13]

Reliable

Proprietary Smart Capnography™ algorithms are included on all Microstream™ capnography-enabled monitors and work in the background to deliver a **more reliable respiratory rate**.[14]

Plug & Play

All Microstream™ capnography enabled monitors have a CO_2-specific technology. Because of this technology, Microstream™ capnography **does not require individual patient calibration**.[15]

† Please refer to the product IFU for all relevant indications, warnings, and complete details on usage.

The Microstream™ capnography monitoring system should not be used as the sole basis for diagnosis or therapy and is intended only as an adjunct in patient assessment.

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4. Masimo NomoLine-O™ Sampling Lines product information brochure. Accessed 12.16.24
5. Medtronic internal verification data on file.
6. Restrepo RD, Karpenkop I, Liu KE. Evaluation of capnography sampling line compatibility and accuracy when used with a portable capnography monitor. J Vis Exp. 2020;(163):e61670.
7. Masimo NomoLine-O™ sampling line Instructions for Use accessed 5.17.24
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9. User manual-Connex™ Devices-Directions for Use-SW Version 2.4x-p. 16
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11. Maddox RR, Williams CK, Oglesby H et al. Clinical experience with patient-controlled analgesia using continuous respiratory monitoring and a smart infusion system. Am J Health Syst Pharm. 2006;63(2):157-164
12. MiniMediCO2:Q005745 MINIMEDICO2 V1 VERIFICATION REPORT. MicroMediCO2:RE00142204 MicroMediCO2 Carmel Verification Test Report. NanoMediCO2:RE00214658 NanoMediCO2 V2 System Verification 3rd cycle Test Report - Rise & Response Time
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