



# Flow Sensor

preVent® flow sensor and DirectConnect™ metabolic flow sensor



preVent flow sensor enlarged to show detail

## PREVENT® FLOW SENSOR

The preVent flow sensor is small, durable and lightweight while providing simple and accurate testing results. The flow sensor's proprietary design saves time between patients and provides maximum infection control while meeting or exceeding ATS/ERS standards and specifications.

### FEATURES

- Eliminates warm-up or recalibration when changed between patients.
- Simple snap-in setup contains no moving parts or electronics for cost effective testing.
  - Options to use with a filter, sterilize or can be discarded.



## DIRECTCONNECT™ METABOLIC FLOW SENSOR

The DirectConnect metabolic flow sensor directly measures gas exchange without the need for correction factors, complicated connections, isolation valves or additional FIO<sub>2</sub> sample lines. The DirectConnect flow sensor is the first metabolic assessment interface to allow direct measurement of a patient's metabolism without compensating for, diverting or turning off (or down) bias flow.

### FEATURES

- Simple set-up allows for early and improved nutritional management of ventilator patients.
- Patient's minute ventilation is measured on a breath by breath basis close to the patient (instead of the exhalation port of the ventilator) and before the bias flow of the ventilator to eliminate the sample from being diluted so measurement accuracy is maximized.



BIDIRECTIONAL PITOT TUBE FLOW SENSORS



MGC Diagnostics' supplies are the only recommended supplies for use with MGC Diagnostics' equipment to achieve accurate, validated test results that meet ATS and ERS standards. MGC Diagnostics' flow sensors can be used alone or with a variety of other MGC Diagnostics' supplies including:

- preVent® and preVent II™ pulmonary function filters
- preVent® face mask
- Patient mouthpieces
- Complete testing circuit (mouthpiece, filter and flow sensor)



preVent flow sensor attached to umbilical



DirectConnect metabolic flow sensor attached to umbilical



Assess spontaneously breathing patients with the preVent® face mask



preVent flow sensor attached to preVent™ filter and patient mouthpiece



COMPARATIVE FEATURES	MGC	COMPETITOR 1	COMPETITOR 2
Easy cleaning	✓	✓	
Easy to sterilize	✓	✓	
No disassembly required	✓	✓	
Option to discard	✓		
<b>TESTING</b>			
Used for PFT tests	✓	✓	✓
Used for Exercise tests	✓	✓	
No recalibration if changed between tests	✓		
<b>REPLACEMENT</b>			
Cost	\$	\$\$\$\$	\$\$\$\$



## SPECIFICATIONS

	PREVENT FLOW SENSOR	DIRECTCONNECT METABOLIC FLOW SENSOR
DEVICE	Bidirectional Pitot Tube flow sensor	Bidirectional Pitot Tube flow sensor
SIZE	Length: 3" (7.26 cm) O.D.: 1.375" (3.5cm) Weight: 0.9 oz (26 gm)	Length: 3.35" (8.5 cm) O.D.: 0.7" (1.75cm) Weight: 0.3 oz (8.5 gm)
RANGE	±18 L/s	0-40 L/min
ACCURACY	± 3% or 50 mL, whichever is greater	± 3% or 10 mL, whichever is greater
RESISTANCE	< 1.5 cm H <sub>2</sub> O @ 14 L/s	
DEAD SPACE	39 mL	20 mL
APPLICATION RANGE		100-2000 mL
TIDAL VOLUME RANGE		100-2000 mL
RESOLUTION		2.4 mL/s

MGC DIAGNOSTICS CORPORATION, through its subsidiary Medical Graphics Corporation  
350 Oak Grove Parkway St. Paul, Minnesota USA 55127-8599

© 2016 MGC Diagnostics Corporation or one of its affiliates. All rights reserved.

All specifications subject to change without notice. Products may vary from those illustrated.

MGC Diagnostics and its affiliates are equal opportunity/affirmative action employers committed to cultural diversity in the workforce.

Part# 060112-001 Rev C