



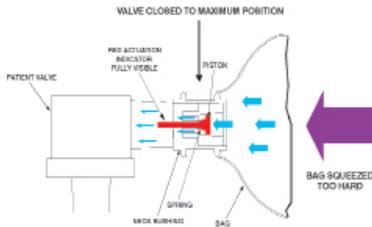
# SMART BAG<sup>®</sup> MO

Improving ventilation, one breath at a time

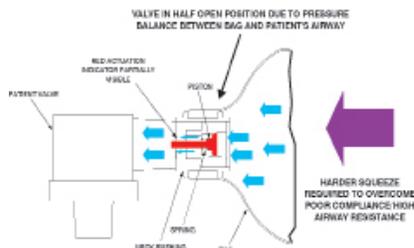
Since its introduction, the Bag-Valve-Mask (or BVM) has been the mainstay of emergency ventilation in both the pre-hospital and hospital environments. However, the use of these devices has been shown to have clinically detrimental effects on the patient. Decreased venous return to the heart, decreased coronary perfusion pressure, gastric insufflation and increased brain ischemia in the traumatic brain injured patient are all issues created by what is called “**Inadvertent Hyperventilation**” (the accidental delivery of an excessive minute volume).

**SMART BAG® MO** provides controlled ventilations while virtually eliminating the risks associated with conventional BVM ventilation and “inadvertent hyperventilation”. The patented actuating mechanism inside the neck bushing actively responds to the rescuer and the patient!

By responding to the rescuer’s squeeze and release of the BVM, the **SMART BAG® MO** limits the excessive flow of gas into the patient’s airway, lowering the airway pressure generated and significantly reducing the risks of “inadvertent hyperventilation”. If the bag is squeezed too hard the **Smart Valve** moves to lower the flowrate and the bag becomes stiff to squeeze. The airway pressure is kept to the minimum required to achieve adequate ventilation. The **SMART Valve** movement is visible through the patient valve body providing a visual, as well as the tactile and audible warning of improper technique. At no time is the flow of gas into the patient compromised.



If the patient’s airway is less compliant or more restrictive (as in patients with COPD or asthma), higher airway pressures may be required to provide adequate ventilation. In responding to this increased pressure requirement, the **SMART BAG® MO** will allow you to apply higher flowrates generating higher airway pressures to overcome the resistance/compliance problem but only when the patient’s airway condition requires them. By pressure balancing the **Smart Valve** to provide adequate ventilation you will “feel” this change in compliance and resistance as the **SMART BAG® MO** allows the higher flowrates to be generated.



## Specifications

Bag Volume: Adult 1700 ml  
 Child 470 ml  
 Reservoir Volume: Adult 2700 ml  
 Child 2700 ml  
 Inspiratory Resistance: 3.3 cmH<sub>2</sub>O  
 Expiratory Resistance: 2.2 cmH<sub>2</sub>O  
 Storage Temperature Range: -40 to 60°C (-40 to 140°F)  
 Operating Temperature (approx.): -18 to 50°C (0 to 122°F)  
 Patient Valve Dead Space: 8.0 ml

By “self-adjusting” to both the patient and the rescuer, the **SMART BAG® MO** optimizes the Ventilations, controlling the inspiratory time and keeping the delivered flowrate and subsequent airway pressure to the minimum required for adequate ventilation. This results in a significant reduction in the risks associated with “inadvertent Hyperventilation” and its associated complications.

Available in both single use and re-usable silicone versions the **SMART BAG® MO** provides the controlled ventilation necessary for improved outcomes for patients in respiratory and/or cardiac arrest.

## NOTES:

- [1] Because of the unique nature of the SMART BAG® MO, new users will require minimal orientation in the use of the device.
- [2] The resuscitator is not intended for use during spontaneous breathing. Due to the nature of these devices, they may only provide a restricted flow of air to the patient and little or no supplemental oxygen.
- [3] In the unprotected airway, as with any resuscitation device, the risk of gastric insufflation will increase if the delivered flowrate increases the airway pressure generated above the Lower Esophageal Sphincter opening pressure.
- [4] Current research indicates that, for all patient conditions the Manual Override control should NOT BE USED and the “SMART VALVE” should be left in the “ENABLED” position. This recommendation maintains operation of the SMART BAG® MO in strict compliance with the current Guidelines for CPR and ECC as published by the AHA and ERC.
- [5] Should the operator decide to use the manual override control to disable the “SMART VALVE”, it is important not to switch into the “DISABLED” mode while squeezing the bag. Using the SMART BAG® MO in the “DISABLED” mode may result in “Inadvertent hyperventilation” with all its associated risks.
- [6] To ensure correct operation of the manual override, do not switch into the disabled mode while squeezing the bag.

## Ventilation Timing Lights

To further assist the rescuer optional CPR Ventilation Timing Lights are available. They are calibrated to provide a respiratory rate of 10 breaths per minute for adults and 20 breaths per minute for infants in line with the resuscitation guidelines. The 1.5 second “on” time guides the rescuer to deliver the breath slowly with the correct inspiratory and expiratory timing.



## Ordering information:

- 01BM3200-MO-Cs Disposable SMART BAG® MO (Adult)** incl., Universal Facemask and Reservoir System (Case/12)
- 01BM3210-MO-Cs Disposable SMART BAG® MO (Child)** incl., Universal Facemask and Reservoir System (Case/12)
- 01BM3201-MO-Cs Disposable SMART BAG® MO (Adult)** incl., Cuffed Facemask and Reservoir System (Case/12)
- 01BM3211-MO-Cs Disposable SMART BAG® MO (Child)** incl., Cuffed Facemask and Reservoir System (Case/12)
- 01BM3100-MO Silicone SMART BAG® MO (Adult)** incl., Silicone Universal Resuscitation Mask and Oxygen Reservoir System in Cardboard Carton
- 01BM3110-MO Silicone SMART BAG® MO (Child)** incl., Silicone Universal Resuscitation Mask and Oxygen Reservoir System in Cardboard Carton



45A Armthorpe Road, Brampton, ON, Canada, L6T 5M4

Telephone: +1 905 792-OTWO (6896)

N.A. Toll Free: +1 800 387 3405 Facsimile: +1 905 799 1339

Web: [otwo.com](http://otwo.com) Email: [resuscitation@otwo.com](mailto:resuscitation@otwo.com)



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