Mass Casualty Ventilation Products





What Defines a Mass Casualty Ventilator?

To date, mass casualty and emergency planning departments have had limited options when it comes to procuring appropriate ventilators to meet medical surge. They have had to choose from critical care, pre-hospital transport, or homecare ventilators that are designed for other uses. Those ventilators are ideal for their intended use, but they pose significant challenges in ease of use, maintenance and affordability when allocated for mass casualty preparedness. The truth is that no ventilator has had the perfect blend of features, design, and ease of use at a cost that will effectively meet the needs that will arise during a medical surge ... until now.

Allied Healthcare Products is pleased to introduce our new line of ventilators designed to meet the unique circumstances of a mass casualty event such as a pandemic or natural disaster. These new ventilators -- the EPV100, the EPV200, the MCV100 and the MCV200 -- share design concepts that are based on the realities of such recent medical surge events as Hurricane Katrina and the September 11 attacks, as well as consensus by disaster planners on the sheer number of ventilators that will be needed to respond to a pandemic. These design concepts speak to the realities of a mass casualty event.

In a mass casualty situation, almost by definition patient loads will exceed the capacity for skilled doctors and respiratory therapists to treat them.

Therefore, a significant portion of the ventilators stockpiled should be able to be operated by relatively unskilled individuals after straightforward and just-in-time instruction. We have succeeded in designing these ventilators with intuitive controls that act as "force multipliers," enabling one respiratory therapist, doctor or nurse to supervise the efforts of a much larger number of less-skilled caregivers. As part of the force multiplier concept, our products incorporate a full array of patient safety alarms to alert supervising personnel to problems that may arise.

In a mass casualty situation, ventilators may have to be operated away from the controlled environment of an acute care facility.

That non-acute care environment may vary anywhere from a hospital cafeteria, to a high school gymnasium, to an open air or tented treatment site. Additionally, patients may have treatment initiated at one location and then be required to move to another location for definitive care. In some instances the electric power grid may be down. In other instances, such as during transport, battery power will be the only power source. Therefore, we designed a line of ventilators that are robust, lightweight, and can be powered for extended periods of time by internal batteries, external batteries, compressed gas, or, of course, AC power.

In order to provide viable stockpiles, mass casualty ventilators must be extremely cost-effective with respect to both acquisition and maintenance.

Our mass casualty ventilators are affordable by design, providing a balance of simplicity and features to effectively respond to a medical surge. Unlike other ventilators, the mass casualty ventilators from Allied Healthcare Products are made from materials that can be stockpiled for years with little required maintenance, or can be used daily. The result is an effective ventilator with a low cost of ownership, allowing for a greater level of preparedness on even the most limited budget.

Each of the ventilators in our mass casualty line provides a unique set of features to enhance surge response capability under various planning scenarios, but all of our ventilators are robust, affordable, and easily operated by less-skilled caregivers.

This is what defines them as mass casualty ventilators. This is what will make them effective in the hands of your staff and available responders when the time comes.

Product Summary



The MCV100

This mass casualty ventilator has an integrated internal battery pack and compressors that can provide extended ventilation with or without AC power or high pressure oxygen, resulting in an additional level of preparedness when planning for an unknown medical surge. User-adjustable alarms and additional ventilation controls provide enhanced treatment options. This combination of key features and a rugged, weatherproof low maintenance design make the MCV100 an ideal ventilator for mass casualty response in the hospital or for field deployment.



The MCV200

The MCV200 shares all of the features of the MCV100 but also incorporates a completely pneumatic ventilation option in addition to AC and DC operation. This additional operation mode provides the ability to operate indefinitely without any electrical power source, ensuring the greatest level of preparedness for mass casualty planners.



The EPV200 and EPV100

The EPV200 and EPV100 are easy to use affordable pneumatic ventilators with electronic controls and alarms. They are designed specifically to be operated by less-skilled responders, enhancing medical surge response capability following a mass casualty incident. Simple controls and electronic alarms make them effective for use by a broad range of caregivers. The EPV200 features Assist-Control ventilation mode, while the EPV100 operates in controlled mandatory volume mode. A 50 psi compressed gas source and two D cell batteries are required for both models.



Ventilator Accessories

Our unique and innovative accessories are designed to enhance the response capabilities of our ventilators by extending the duration of operation, multiplying capacity, and shortening deployment and set-up time.



Ventilation Patient Circuit Configurations

Our patient circuits and circuit accessories are designed to provide compact storage, quick and easy assembly, and enhanced flexibility within your mass casualty stockpile. These circuit options allow you to stock your circuit cache with only the equipment you need.



Additional Ventilation and Resuscitation Products

These innovative resuscitation products will effectively supplement any medical surge stockpile with features that provide enhanced utility in a mass casualty environment. These products, which are designed for extended daily use in EMS or hospital facilities, have key advantages which make them ideal for stockpiling or for field deployment.

The MCV100 Portable Ventilator

- Can be operated on DC power or AC power, offering a greater level of preparedness.
- Efficient internal battery can power this unit independent of wall electricity or compressed gas for 7 hours on ambient air, or 21 hours if supplied with a compressed oxygen source.
- Simple control interface allows for just-in-time training and use by a wide range of responders.
- Assist-Control, external PEEP, and independent ventilation controls accommodate enhanced treatment options.
- Low maintenance and weatherproof design ensure a low cost of ownership in stockpile or in everyday use.

The MCV100 portable ventilator enables a rapid and effective response to any mass casualty event. This electronic ventilator features an internal battery and compressors that provide the flexibility of operation from AC power or extended operation on DC power using either ambient air, high-pressure oxygen, or an oxygen/air mix. Intuitive ventilation controls and an array of adjustable alarms enhance patient safety, making the MCV100 ideal for use across a wide range of responder skill levels. These unique operation capabilities combined with a rugged, weatherproof, and low maintenance design make the MCV100 an ideal ventilator for mass casualty response in the hospital or for field deployment.



Specifications - MCV100, MCV100-B

Setting Parameters

Ventilation Mode: Assist-Control

Assist-Control: Triggers at less than -2 cm H₂O

Flow Rate: 12-36 LPM

Breathing Rate: Adjustable. 0, 8-20 breaths per minute

Tidal Volume: Adjustable. 200-1200 ml

Inspiratory Time: Auto-Adjust. 1 second to 2 seconds (Auto-Adjust based on tidal volume setting)

PEEP: External. 0-20 cm H₂O (with PEEP adapter)

FiO₂: Selectable. 21%, 60%, 100%

Manometer Readout: Digital. 0-60 cm H_2O Airway Pressure Limit: Adjustable. 5-60 cm H_2O

Alarms

High Airway Pressure: Adjustable. 15-60 cm H₂O Low Airway Pressure/Disconnect: Adjustable. 0-30 cm H₂O Low Source Gas: Fixed. Activates at about 40 psi (275 kPa) Low Battery: Activates when approx. 1½ hours of run time remain

Alarm Volume: Approx. 60 dB at 1 meter

Alarm Silence: Yes. 110 Seconds

Power Characteristics

Power Source: 110V-240V 50-60 Hz AC, internal battery, external

12V DC battery

O₂ Supply Pressure: 40-87 psi Operating Time on Battery:

Based on average adult settings of 10 BPM, 600 ml tidal volume **Air Mode (using internal compressors):** Approx. 7 hours

100% O₂ or 60% O₂ Mode: Approx. 21 hours

Internal Battery: 12 Volt 5 Ah Rechargeable. Sealed lead acid type **Battery Recharge Time:** 5 hours (less than 24 hours when in use)

Battery Shelf Life: 3 years

Physical Characteristics

Dimensions: 3.5" x 10.3" x 11.5" (88.9 mm x 261.1 mm x 292.1 mm)

Weight: 14 lbs. (6.3 kg) Temperature Ranges:

Operating: -15 to 122°F (-9 to 50°C) **Storage:** -40 to 140°F (-40 to 60°C)

Enclosure: ABS plastic with seals to prevent water ingress

Shock Resistance: 30" drop **Vibration Resistance:** 100 G



The MCV200 Portable Ventilator

- Can be operated solely on compressed gas, DC power, or AC power, offering the greatest flexibility for mass casualty responders.
- Simple control interface allows for just-in-time training and use by a wide range of responders.
- Assist-Control, external PEEP, and independent ventilation controls accommodate enhanced treatment options.
- Low maintenance and weatherproof design ensure low cost of ownership in stockpile or in everyday use.

The MCV200 provides an additional level of preparedness when planning for an unknown medical surge. In addition to its internal battery and compressors that provide the flexibility of operation on AC or extended operation on DC power, the MCV200 also incorporates a completely pneumatic ventilation mode ensuring operation even when electricity is unavailable and all DC power sources are drained. The MCV200 is capable of providing ventilation using ambient air, high-pressure oxygen, or an oxygen/air mix. Like the MCV100, the MCV200 features intuitive ventilation controls and an array of adjustable alarms to enhance patient safety. The unique power source flexibility of the MCV200 combined with a rugged, weather-resistant and low-maintenance design ensures the greatest level of preparedness for mass casualty planners.



Specifications - MCV200, MCV200-B

Setting Parameters

Ventilation Mode: Assist-Control

Assist-Control: Triggers at less than -2 cm H₂O

Flow Rate: 12-36 LPM

Breathing Rate: Adjustable. 0, 8-20 breaths per minute

Tidal Volume: Adjustable. 200-1200 ml **Inspiratory Time:** 1 or 2 seconds

PEEP: External. 0-20 cm H₂O (with PEEP adapter)

FiO₂: Selectable. 21%, 65%, 100%

Manometer Readout: Digital. 0-60 cm H₂O **Airway Pressure Limit:** Adjustable. 5-60 cm H₂O

Alarms

High Airway Pressure: Adjustable. 15-60 cm H₂O **Low Airway Pressure/Disconnect:** Adjustable. 0-30 cm H₂O **Low Source Gas:** Fixed. Activates at about 40 psi (275 kPa)

Low Battery: Activates when approx. 1½ hours of run time remain

Alarm Volume: Approx. 60 dB at 1 meter

Alarm Silence: Yes. 110 Seconds

Power Characteristics

Power Source: Compressed O₂, 110V-240V AC, internal battery,

external 12V DC battery O₂ Supply Pressure: 40-87 psi Operating Time on Battery:

Based on average adult settings of 10 BPM, 600 ml tidal volume,

2 second inspiratory time

Air Mode (using internal compressors): Approx. 7 hours

100% O₂ or 65% O₂ Mode: Approx. 21 hours

Internal Battery: 12 Volt 5 Ah Rechargeable. Sealed lead acid type **Battery Recharge Time:** 5 hours (less than 24 hours when in use)

Battery Shelf Life: 3 years

Physical Characteristics

Dimensions: 3.5" x 10.3" x 14.5" (88.9 mm x 261.1 mm x 368.3 mm)

Weight: 17.2 lbs. (7.8 kg) **Temperature Ranges:**

Operating: -15 to 122°F (-9 to 50°C) **Storage:** -40 to 140°F (-40 to 60°C)

Enclosure: ABS plastic with seals to prevent water ingress

Shock Resistance: 30" drop Vibration Resistance: 100 G



The EPV200 Portable Ventilator With Assist Control

- Assist-Control operation accommodates conscious or semi-conscious patients via invasive or non-invasive ventilation.
- Simple control interface enables treatment by a broad range of caregivers during medical surge or routine transport.
- Lightweight durable construction is ideal for use in transport ventilation or stockpiling.
- Low maintenance and accessory costs ensure a low cost of ownership.

Simple, lightweight, robust and affordable, the EPV200 with Assist-Control is a portable mechanical ventilator designed to provide effective ventilation for intubated or non-intubated patients, maximizing medical surge response during the initial stages of a mass casualty event.

This gas-powered electronically-controlled vent is extremely easy to use, and is equipped with independent inspiratory time, tidal volume and BPM controls. It also features a built-in digital manometer and a full array of pre-set visual and audible safety alarms. The Assist-Control function triggers at less than $-2 \text{ cm H}_2\text{O}$ to accommodate spontaneous breathing.

The weather-resistant EPV200 will run for up to 48 hours on two D cell batteries, and is ideal for stockpiling or everyday use.



Specifications - EPV200

Setting Parameters

Ventilation Mode: Assist-Control

Assist-Control: Triggers at less than -2 cm H₂O

Flow Rate: 12-36 LPM

Breathing Rate: Adjustable. 0, 5-30 breaths per minute

Tidal Volume: Adjustable. 200-1200 ml **Inspiratory Time:** Selectable. 1 or 2 seconds **PEEP:** External. 0-20 cm H₂O (with PEEP adapter)

FiO₂: 100%

Manometer Readout: Digital. 0-99 cm H₂O **Airway Pressure Limit:** Fixed. 60 cm H₂O

Alarms

High Airway Pressure: Fixed. 45 cm H₂O

Low Airway Pressure/Circuit Disconnect: Fixed. 9 cm H₂O **Low Source Gas:** Fixed. Activates at approx. 40 psi (275 kPa) **Low Battery:** Activates when approx. 2 hours run time remain

Alarm Volume: Approx. 60 dB at 1 meter Alarm Silence: Yes. 110 Seconds

Power Characteristics

Power Source: Pneumatic with electronic controls and alarms **Power Input:** Pneumatic. 40-87 psi O_2 and 2 D cell batteries

Internal Battery Type: D cell batteries

Operating Time:

Based on average adult settings of 10 BPM, 640 ml tidal volume, 2 second inspiratory time

Oxygen: Dependent on source capacity. Approx. 65 minutes

on D cylinder

Battery Life: 48 hours of continuous use

Physical Characteristics

Dimensions: 3.5" x 7.0" x 9.3" (88.9 mm x 177.8 mm x 236.2 mm)

Weight: 3.1 lbs. (1.4 kg) with batteries

Temperature Ranges:

Operating: -15 to 122°F (-9 to 50°C) **Storage:** -40 to 140°F (-40 to 60°C)

Enclosure: ABS plastic with seals to prevent water ingress

Shock Resistance: 30" drop Vibration Resistance: 100 G



The EPV100 Portable Ventilator

- The most cost-effective option for medical surge stockpiling or routine transport.
- Simple control interface enables treatment by a broad range of caregivers during medical surge or routine transport.
- Lightweight durable construction is ideal for use in transport ventilation or stockpiling.
- Very low maintenance and accessory costs ensure a low cost of ownership.

The EPV100 shares most of the features of the EPV200, but does not have the Assist-Control function, making it our most cost-effective ventilator for providing critical support during the initial stages of a mass casualty event.

Like the EPV200, the EPV100 is a gas-powered electronically-controlled vent that is extremely easy to use. It is equipped with independent inspiratory time, tidal volume, and BPM controls. It also features a built-in digital manometer and a full array of pre-set visual and audible safety alarms.

The weather-resistant EPV100 will run for up to 48 hours on two D cell batteries, and is ideal for stockpiling or everyday use.



Specifications - EPV100

Setting Parameters

Ventilation Mode: CMV (Controlled Mandatory Volume) **Assist-Control:** Triggers at less than -2 cm H₂O

Flow Rate: 12-36 LPM

Breathing Rate: Adjustable. 8-30 breaths per minute

Tidal Volume: Adjustable. 200-1200 ml **Inspiratory Time:** Selectable. 1 or 2 seconds **PEEP:** External. 0-20 cm H₂O (with PEEP adapter)

FiO₂: 100%

Manometer Readout: Digital. 0-60 cm H₂O **Airway Pressure Limit:** Fixed. 60 cm H₂O

Alarms

High Airway Pressure: Fixed. 45 cm H₂O

Low Airway Pressure/Circuit Disconnect: Fixed. 9 cm H_2O Low Source Gas: Fixed. Activates at approx. 40 psi (275 kPa) Low Battery: Activates when approx. 2 hours of run time remain

Alarm Volume: Approx. 60 dB at 1 meter **Alarm Silence:** Yes. 110 Seconds silence

Power Characteristics

Power Source: Pneumatic with electronic controls and alarms **Power Input:** Pneumatic. 40-87 psi O_2 and 2 D cell batteries

Internal Battery Type: 2 D cell batteries

Operating Time:

*Based on average adult settings of 10 BPM, 640 ml tidal volume, 2 second inspiratory time

Oxygen: Dependent on source capacity. Approx. 65 minutes

on D cylinder

Battery Life: 48 hours of continuous use

Physical Characteristics

Dimensions: 3.5" x 7.0" x 9.3" (88.9 mm x 177.8 mm x 236.2 mm)

Weight: 3.1 lbs. (1.4 kg) with batteries

Temperature Ranges:

Operating: -15 to 122°F (-9 to 50°C) **Storage:** -40 to 140°F (-40 to 60°C)

Enclosure: ABS plastic with seals to prevent water ingress

Shock Resistance: 30" drop **Vibration Resistance:** 100 G



Mass Casualty Ventilator







EPV100

EPV200

MCV100

	EPV 100	EPV200	MCV 100	
Operation	Pneumatic (Electronic Controls)	Pneumatic (Electronic Controls)	Electronic	
Ventilation Mode	CMV	ACV	ACV	_
Adjustable Controls	Vt, BPM, Ti, PEEP	Vt, BPM, Ti, PEEP	Vt, BPM, Ti (auto adjust),** APL, PEEP	
Air Mix Capability	No	No	No	
FiO ₂ Selections	100%	100%	21%, 100%	
Source Gas	Oxygen	Oxygen	Oxygen / Ambient Air	
Internal Compressor	No	No	Yes	
Power Source Type	40-80 psi O ₂ and 2 D Cell Batteries	40-80 psi O ₂ and 2 D Cell Batteries	AC, External 12V DC, or Internal Sealed Lead Acid Battery	
Battery Recharge Time	N/A	N/A	Less than 5 hours on standby / Less than 24 hours when in use	
Alarms	HAP, LAP, LB, LSG, AS	HAP, LAP, LB, LSG, AS	HAP, LAP, APL, LB, LSG, AS	
Adjustable Alarms			HAP, LAP, APL	
Run Time on Internal Battery	48 hours (requires O ₂ Source)	48 hours (requires O ₂ Source)	7 hours / 21 hours**	
Auxiliary Battery Capable	No	No	Yes (adds 14 hours / 42 hours)***	
Size (D x W x H)	3.5" x 7.0" x 9.3"	3.5" x 7.0" x 9.3"	3.5" x 10.3" x 11.5"	
Weight	3.1 lbs.	3.1 lbs.	14.0 lbs.	
Water Resistance	Spill and Rain Resistant	Spill and Rain Resistant	Spill and Rain Resistant	
Shock Resistance	30" drop	30" drop	30" drop	
Vibration Resistance	100 G	100 G	100 G	
Maintenance	1 Year Function Check, 5 Year Preventive Maintenance	1 Year Function Check, 5 Year Preventive Maintenance	4 Month Battery Check, 1 Year Calibration, 6 Year Preventive Maintenance	

^{*}With auto adjust feature, the inspiratory time is automatically set between 1 and 2 seconds based on the tidal volume selection. **DC run time calculated at 600 ml tidal volume, 10 breaths per minute. 7-hour run time without supplementary O_2 source, 21-hour run time when connected to a 40-87 psi O_2 source. ***Battery Pack adds 14 hours of run time without supporting O_2 source, 42 hours of run time when connected to a 40-87 psi O_2 source

Abbreviation Index

ACV	Assist-Control Ventilation (Breath Assist)	CMV	Controlled Mandatory Volume	LSG	Low Source Gas
APL	Airway Pressure Limit	HAP	High Airway Pressure	PM	Preventive Maintenance
AS	Alarm Silence	LAP	Low Airway Pressure	Ti	Inspiratory Time
BPM	Breaths Per Minute	LB	Low Battery	Vt	Tidal Volume

Specification Summary







MCV100-B

MCV200

MCV200-B

Electronic	Electronic / Pneumatic	Electronic / Pneumatic
ACV	ACV	ACV
Vt, BPM, TI (auto adjust),** APL, PEEP	Vt, BPM, Ti, APL, PEEP	Vt, BPM, Ti, APL, PEEP
Yes	No	Yes
21%, 60%, 100%	21%, 100%	21%, 65%, 100%
Oxygen / Ambient Air	Oxygen / Ambient Air	Oxygen / Ambient Air
Yes	Yes	Yes
AC, External 12V DC, or Internal Sealed Lead Acid Battery	40-80 psi O2 AC, External 12V DC, or Internal Sealed Lead Acid Battery	40-80 psi O2 AC, External 12V DC, or Internal Sealed Lead Acid Battery
Less than 5 hours on standby / Less than 24 hours when in use	Less than 5 hours on standby / Less than 24 hours when in use	Less than 5 hours on standby / Less than 24 hours when in use
HAP, LAP, APL, LB, LSG, AS	HAP, LAP, APL, LB, LSG, AS	HAP, LAP, APL, LB, LSG, AS
HAP, LAP, APL	HAP, LAP, APL	HAP, LAP, APL
7 hours / 21 hours**	7 hours / 21 hours**	7 hours / 21 hours**
Yes (adds 14 hours / 42 hours)***	Yes (adds 14 hours / 42 hours)***	Yes (adds 14 hours / 42 hours)***
3.5" x 10.3" x 11.5"	3.5" x 10.3" x 14.5"	3.5" x 10.3" x 14.5"
14.0 lbs.	17.2 lbs.	17.2 lbs.
Spill and Rain Resistant	Spill and Rain Resistant	Spill and Rain Resistant
30" drop	30" drop	30" drop
100 G	100 G	100 G
4 Month Battery Check, 1 Year Calibration, 6 Year Preventive Maintenance	4 Month Battery Check, 1 Year Calibration, 6 Year Preventive Maintenance	4 Month Battery Check, 1 Year Calibration, 6 Year Preventive Maintenance

Visit the Allied Healthcare Products web site at www.alliedhpi.com/masscasualty for more complete product information, including operation manuals, in-service training, and product updates.

Mass Casualty Ventilator Accessories

These unique accessories have been developed to maximize the effectiveness of our ventilators under the real world circumstances of a mass casualty event. From extended run time to rapid deployment of equipment, these accessories will enhance your capabilities when time is of the essence.

Auxiliary Battery Pack for the MCV100 and MCV200

Part # MCV-AUXBAT



This external auxiliary battery pack enhances the preparedness capabilities of the MCV100 and MCV200 ventilators by providing an additional 14 hours of DC operation from ambient air mode, or an additional 42 hours of operation if the ventilator is connected to a high-pressure oxygen source.

The battery pack contains an on-board battery meter for checking the charge while in storage. It connects easily to the MCV100 or MCV200 ventilators via a twist-lock-style keyed connector that prevents accidental disconnection. When connected to the ventilator, the battery level is shown on the ventilator LCD display panel.

A connected battery pack will automatically recharge when the ventilator is connected to AC power. It can also be charged off line via connection to AC power through the IEC-style connector. A depleted battery pack will fully recharge in less than 10 hours. The battery pack uses non-spillable sealed lead acid batteries that will retain their charge for four months to ensure that charge capacity is maintained while in stockpile.

3-Channel Oxygen Manifold

Part # MCM-001, MCH-001



MCM-001

This 3-Channel Oxygen Manifold is an essential accessory for any hospital or triage station to enhance medical oxygen delivery capabilities during a medical surge. The design consists of a hose and fitting system for quickly and safely attaching up to three ventilators to each hospital oxygen outlet or regulator check valve, safely and effectively multiplying the high pressure oxygen sources within an area. This system is suitable for use with any ventilator requiring a high pressure DISS oxygen inlet.

It also provides additional flexibility in patient placement. This system provides two high pressure DISS oxygen outlets connected by 30 feet of medical grade oxygen hose, with a third outlet at the connection point. The 3-Channel Oxygen Manifold comes fitted with a removable Chemetron® Quick Connect adapter for quick connection to hospital outlets.

A 10-foot extension hose (MCH-001) is also available, which replaces a standard a six-foot oxygen hose to provide additional reach for patients that may need be placed outside the patient room or at a further distance from the oxygen source.

Mass Casualty Ventilator Accessories

Grab-and-Go Soft Case for the MCV100 Portable Ventilator Part # MCV100-BAG



The grab-and-go soft case for the MCV100 and MCV100-B allows the user to store the ventilator and all necessary accessories in one compact bag for rapid deployment.

The rugged nylon bag is fully washable. It has access ports and a clear cover that opens to allow for operation of the unit while in the bag. It also has an access port for the 120V power cord to allow the unit to be charged or operated on AC power while in the bag. The 12" x 4" zippered pocket is large enough to hold a patient circuit, an oxygen hose, and the power cord. Two D-rings on the top of the bag allow for the bag and accessories to be hung from a bedrail or similar fixture. The 1.5" nylon webbing shoulder strap has a shoulder pad for added comfort.

Soft Case for the EPV100 & EPV200 Portable Ventilator



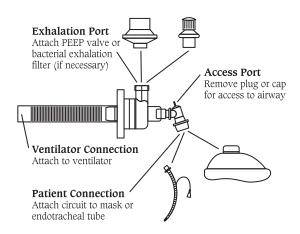


This compact case provides grab-and-go convenience by storing the EPV100 or EPV200 ventilator and ventilation accessories together for quick deployment.

This zippered case will hold the EPV100 or EPV200 ventilator, one disposable patient circuit and one oxygen supply hose, keeping your stockpile organized and ensuring that each ventilator is deployed with the necessary connection accessories.

Mass Casualty Ventilator Patient Circuit Configurations

Allied's disposable circuit configurations are designed to provide effective invasive or non-invasive ventilation with all of our mass casualty ventilators. All of these affordable circuit configurations have a three-foot circuit with a built-in duckbill valve, airway access port, and swivel connector. Circuits can be ordered in packages that include a disposable adult mask and bacterial exhalation filter. All of these circuits can be fitted with a PEEP valve, mask restraint, or other size masks. All circuits and circuit accessories are Latex free.



Part #	L599-180	L599-190	L599-130	L599-140
Circuit Length	3'	3'	3'	3'
Adult Mask	No	No	Yes	Yes
Bacterial Exhalation Filter	No	Yes	No	Yes
Swivel Connector	Yes	Yes	Yes	Yes
Access Port	Yes	Yes	Yes	Yes
Count Per Case	10	10	10	10

Patient Circuit Accessories

Our patient circuit accessories offer greater flexibility for your mass casualty stockpile, enabling you to supplement your circuit cache with options that will enhance the treatment of patients during a mass casualty event. All of our circuit accessories are Latex free.



Mask Restraint System

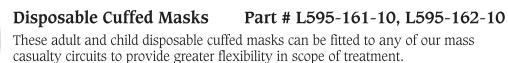
Part # 890113

This easy-to-use disposable mask restraint system enables the caregiver to quickly attach the cuffed mask firmly over the patient's mouth and nose, freeing both hands to provide care. In the event of an airway obstruction, a simple tug of the elastic band disengages the restraint system, giving immediate access to the patient airway.



PEEP Valve Part # LPEEP

This 0-20 cm H₂O disposable PEEP valve attaches to any of the mass casualty circuits.





Bacterial Exhalation Filter

Part # L599-200

The bacterial exhalation filter can be fitted to the exhalation port of any Allied mass casualty ventilator circuit to protect the caregiver from exposure to airborne pathogens. This filter will block 99.9% of pathogens without creating any noticeable resistance to exhalation.

Additional Ventilation and Resuscitation Products for Mass Casualty Support

L770 Disposable Bag Valve Mask with Stand-Off Circuit

Part # L770-040





The L770 Disposable Bag Valve Mask (BVM) offers accurate, dependable operation coupled with the ability to manually feel a patient's respiratory response from a safe distance.

By separating the bag from the patient valve, the forces created by squeezing the bag are not transferred to the mask or ET tube. This helps to keep a tight seal when using a mask, and prevents dislodging the ET tube when bagging intubated patients. The separation also allows the person bagging to walk alongside the patient during transport, ensuring more consistent delivery of tidal volumes to the patient and allowing the transporters to move quickly. In an emergency vehicle, the caregiver can remain safely seated and strapped in during transit. Using a remote bag creates more space around the patient's head, yet you can still see the chest rise and fall. The added tubing does not affect delivered tidal volume or oxygen concentration. All of our bag valve masks are Latex free.

ResusciTIMER®









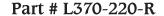
With the affordable ResusciTIMER®, anyone can learn proper manual ventilation technique in minutes with basic instruction. This easy to use device provides real-time monitoring and feedback of breaths per minute, inspiratory time and airway pressure to guide in resuscitation timing and technique.

With two modes of operation – CPR and Rescue Breathing – and two patient modes – adult and child, it monitors the pressure and flow from the BVM and provides visual and audible cues to guide CPR or rescue breathing to meet AHA guidelines. It can be attached to virtually any disposable or reusable bag valve mask

The ResusciTIMER is an effective tool for mass casualty preparedness, everyday transport, or training. This simple yet effective device provides an extra level of assurance that caregivers of every skill level will be able to provide manual ventilation with perfect technique.

Additional Ventilation and Resuscitation Products for Mass Casualty Support

Rhino™ Regulator with 2 Check Valves





The Rhino oxygen regulator is virtually unbreakable. This oxygen pressure regulator features an all-brass uni-body construction designed to strengthen the regulator, prevent yoke damage and regulator leakage, and protect the flow selector knob from accidental adjustment. The Rhino regulator also has a unique integrated aluminum shroud and lens cover that shelters the gauge from breakage and contamination, and is available in a choice of 5 colors. A 20 micron sintered bronze gas inlet filter provides gas filtration and additional protection against contamination. Rhino regulators are available with up to two male DISS oxygen check valves and different flow ranges delivered through a hose barb outlet. The Rhino regulator has a 10-year warranty.

OptiVac® Portable Suction Unit Advantage® Portable Suction Unit

Part # G180 Part # L190-GR



The Advantage® and OptiVac® Portable Suction Units feature long run times, durable construction, and unique capabilities to provide suction when and where you need it, under even the most demanding circumstances.

The Advantage provides maximum suction and power source flexibility. It can be charged or run continuously from a 120-240V AC or 12V DC power source, and features an internal battery with 75 minutes of

continuous run time at maximum suction, an integrated battery meter, and continuously variable suction to 550 mm Hg, all in a lightweight and durable case. The quick-charge feature provides 60 minutes of run time at maximum suction after only two hours of charging. In addition, the Advantage will run when connected to AC or DC even if the battery is drained. An available 12V quick release docking station provides continuous charging and convenient wall or cart storage capability.

The OptiVac® Portable Suction Unit is an endurance champ. It can be charged or run continuously from a 120-240V AC power source, and its internal battery provides three hours of continuous run time at full suction. Like the Advantage, the OptiVac features an integrated battery meter, continuously variable suction to 550 mmHg, and quick-charge capability. The OptiVac will run when connected to AC power even if the battery is drained.

OptiVac® G180



Ordering Information

Ventilators

EPV100	Pneumatic Ventilator with electronic controls and alarms
EPV200	Pneumatic Ventilator with electronic controls, alarms and assist-control
MCV100	Electrically Powered Ventilator with 7-hour battery run time, assist-control, and user-adjustable alarms
MCV100-B	Electrically Powered Ventilator with air mix capability, 7-hour battery run time, assist-control, and user-adjustable alarms
MCV200	Electrically or Pneumatically Powered Ventilator, 7-hour battery run time, assist-control, and user-adjustable alarms
MCV200-B	Electrically or Pneumatically Powered Ventilator with air mix capability, 7-hour battery run time, assist-control, and user-adjustable alarms

Ventilator Accessories

L770-040	Bag Valve Mask with stand-off circuit, adult (6/case)
L770-100	Bag Valve Mask with stand-off circuit, bag reservoir and pop-off, child (6/case)
L770-200	Bag Valve Mask with stand-off circuit, bag reservoir and pop-off, infant (6/case)
L770-CPR	ResusciTIMER®
L370-220-R	Rhino™ Regulator with 2 check valves (additional configurations available)
L190-GR	Advantage® Emergency Portable Suction Unit
G180	OptiVac® Portable Suction Unit

Ventilator Circuits & Circuit Accessories

L599-180	3' Ventilator Circuit, with swivel (without mask or exhalation filter) (10/case)
L599-190	3' Ventilator Circuit, with swivel, exhalation filter (without mask) (10/case)
L599-130	3' Ventilator Circuit, with swivel, adult disposable cuffed mask (10/case)
L599-140	3' Ventilator Circuit, with swivel, adult disposable cuffed mask, exhalation filter (10/case)
LPEEP	Disposable PEEP Valve with adapter (12/case)
L599-200	Bacterial Exhalation Filter (10/case)
L595161-10	Disposable Cuffed Oxygen Mask, adult (10/case)
L595162-10	Disposable Cuffed Oxygen Mask, child (10/case)
890113	Disposable Mask Restraint System (12/case)

Additional Ventilation and Resuscitation Products

MCV-AUXBAT	External Battery Pack for the MCV100 and MCV200
MCM-001	3-Channel Oxygen Manifold
MCH-001	10' Extension Hose for 3-Channel Oxygen Manifold
MCV100-BAG	Grab-and-Go Soft Case for the MCV100
S3000-BAG	Soft Case for the EPV100 and EPV200

Visit the Allied Healthcare Products web site at www.alliedhpi.com/masscasualty for more complete product information, including operation manuals, in-service training, and product updates.



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All specifications are nominal and subject to change without notice.

Form 95-00-0006 August 2009