GIMA
PROFESSIONAL MEDICAL PRODUCTS

PALLONI AUTOCLAVABILI IN SILICONE
SILICONE AUTOCLAVABLE RESUSCITATORS
INSUFFLATEURS EN SILICONE AUTOCLAVABLES
BOLSAS AUTOCLAVABLES DE SILICONA
BALÕES DE SILICONE AUTOCLAVÁVEIS

Manuale d'uso - User manual
Manuel de l'utilisateur - Guía de uso
Guia para utilização

ATTENZIONE: *Gli operatori devono leggere e capire completamente questo manuale prima di utilizzare il prodotto.*
ATTENTION: *The operators must carefully read and completely understand the present manual before using the product.*
AVIS: *Les opérateurs doivent lire et bien comprendre ce manuel avant d'utiliser le produit.*
ATENCIÓN: *Los operadores tienen que leer y entender completamente este manual antes de utilizar el producto.*
ATENÇÃO: *Os operadores devem ler e entender completamente este manual antes de usar o produto.*

REF **RE-22135 (GIMA 34244)**
RE-22115 (GIMA 34245)
RE-22215 (GIMA 34246)
RE-22315 (GIMA 34247)

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PRODUCT DESCRIPTION AND INTENDED USE

Besmed Manual Resuscitator is designed for use as an adjunct to artificial respiration and cardiopulmonary resuscitation. The Resuscitator can be used to ventilate the apnoeic patient and to augment ventilation and/or oxygen delivery to the spontaneously breathing patient. The designs are also different according to Adult, Child or Infant by using different compressing frequency, they also come with different sizes to meet all patients' need for oxygen.
The adult size has a Pressure Relief Valve design (as an option). When the pressure inside the bag exceeds 60cmH20, and 40cmH20 for infant bag, the Pressure Relief Valve will automatically vent the delivered breath to the atmosphere to protect the lung from injuring by the high pressure.
This product is intended for use by qualified medical or emergency personnel trained in pulmonary ventilation and advanced cardiac life support techniques. This manual provides all section assembly drawings, numbers for all construction parts, some cautions, and cleaning methods. Please carefully read all cautions in this manual before use to accomplish the best effect, and pay attention to all safety warnings.

BESMED SILICONE RESUSCITATOR

It is manufactured by using supreme rated Silicone, with high flexibility, stable material, can resist high temperature (to a maximum of 134°C).

WARNINGS & CAUTIONS

WARNINGS

1. Do not use the Manual Resuscitator in toxic atmospheres.
2. Remove the oxygen reservoir and reservoir valve if supplemental oxygen is not being administered. Failure to do so will affect the refill rate and maximum frequency capabilities.
3. Do not administer supplemental oxygen in the presence of open flames.
4. Do not use oil, grease or other hydrocarbon-based substances on any part of the manual Resuscitator Supplemental oxygen, supplied under pressure, can combine with hydrocarbons and cause explosions.
5. This device is intended for use by qualified medical and emergency personnel trained in pulmonary ventilation and advanced cardiac life support techniques.
6. Proficiency in the assembly, disassembly and use of this device should be demonstrated before use on a patient.
7. Always test the device in accordance with this manual after cleaning and sterilization or replacement of parts.
8. Always monitor airway pressure with a manometer when ventilating a patient.
9. Only qualified personnel trained in the use of positive end expirato1y pressure (PEEP) should administer PEEP with this device.
10. Always verify PEEP level and the function of the resuscitator before use on a patient.
11. Monitor airway pressure with a manometer when ventilating a patient.

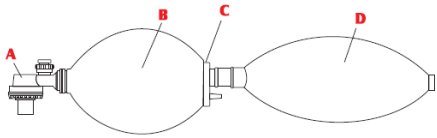
CAUTIONS

1. If overriding the pressure relief valve, great caution must be taken not to allow the pressure in the patients airways to become too high.
2. Do not attempt to disassemble the pressure relief valve assembly. Disassembly will damage the component.
3. Before use, clean and sterilize the entire Manual Resuscitator to your individual institution's validated procedure for cleaning and sterilizing such equipment. After the Manual Resuscitator has been cleaned and sterilized, test the Manual Resuscitator as directed in this manual.

PRINCIPLES OF OPERATION

Assembly View (A)

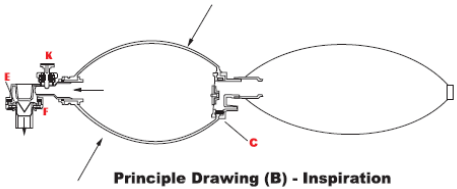
Besmed Resuscitator is composed in 4 components
(A) Non-rebreathing (duckbill) Valve (B) Silicone Bag (C) Reservoir Valve
(D) Oxygen Reservoir
The Reservoir Valve and the Oxygen Reservoir should be removed if supplemental oxygen is not to be supplied.



Assembly View (A)

Principle Drawing (B) - Inspiration

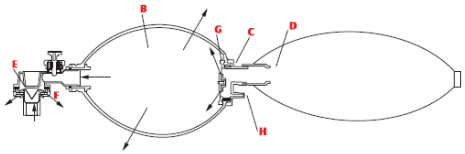
When compressing down the Resuscitator, it creates the positive pressure and close the Intake Valve (G), the air inside the bag pushes the Duckbill Valve (E) downward, and block the expiration port (F) and deliver the air into the Silicone Bag then to the patient through the center of the Duckbill Valve, if the Oxygen is in use, it should be connected by (H) part, then the Oxygen will fill up the Reservoir through the Reservoir Valve, and installs in the Silicone Bag through the recovery inhale motion, then send directly into the patient's body by compressing the silicone bag.



Principle Drawing (B) - Inspiration

Principle Drawing (C) - Exhalation

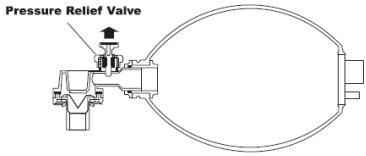
When releasing the Silicone Bag (B), push upward the Duckbill Valve and keep it in close position, so to release the exhale air through the Exhale Valve (F).



Principle Drawing (C) - Exhalation

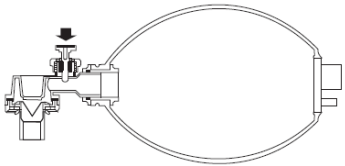
At the same time, the Inhale Valve (G) is opened by the expiratory pressure created by releasing the bag, and send the air into the bag through the top of the Reservoir Valve, and at the same time, send the Oxygen into the bag from the Oxygen Reservoir till the bag returns to the original shape before compressing.
To avoid excessive Oxygen flow rate and low compressing frequency causing too high pressure inside the bag and the Reservoir, the Reservoir
Valve (C) is specially designed to release the excessive air, to keep a low rate Oxygen supply and ensure the patient's safety.

Principle Drawing (D)
Besmed Infant and Child Resuscitator are both equipped with Pressure Relief Valves, automatically provide and adjust the pressure in the lung, and keep it within 40cmH2O+ /-5cmH 2O , any pressure exceed this standard will cause the Pressure Relief Valve to jump off and push the pressure out to ensure the patient's safety.



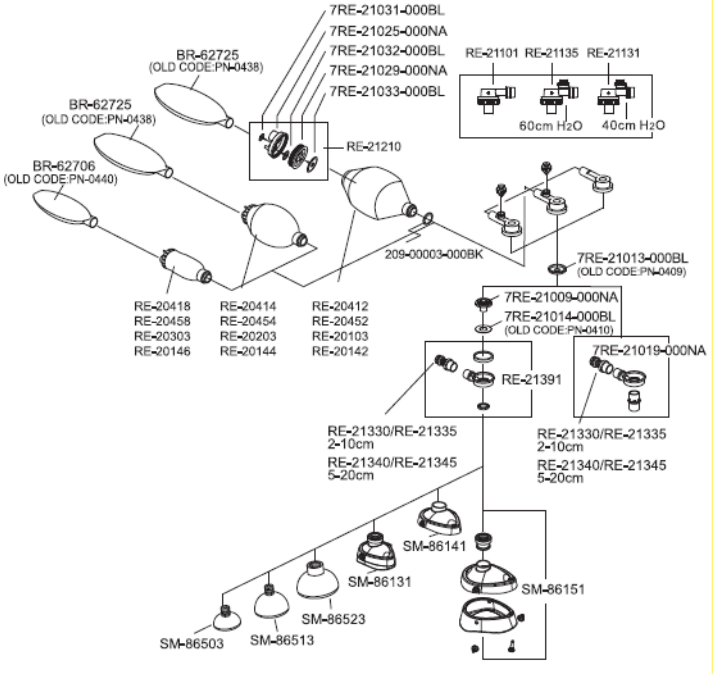
Pressure Relief Valve Motion

Should higher inspiratory pressure be required the pressure relief valve may be overridden by placing the thumb over the valve as show as follows.



Overriding the Pressure Relief Valve

ASSEMBLY VIEW

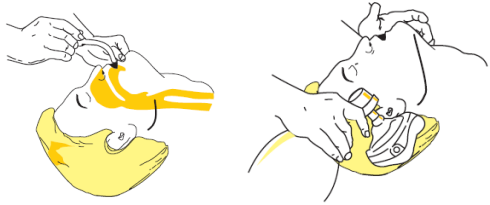


Replacement Parts

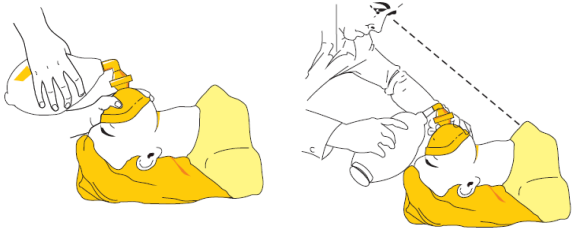
Name	Part number(old model)
1600ml Silicone Adult Resuscitator	RE-22120
1600ml Silicone Adult Resuscitator W/pop-off 60cmH2O	RE-22140
550ml Silicone Child Resuscitator W/pop-off 40cmH2O	RE-22220
280ml Silicone Infant Resuscitator W/pop-off 40cmH2O	RE-22320
1600ml Silicone Adult Resuscitator	RE-23120
1600ml Silicone Adult Resuscitator W/pop-off 60cm H2O	RE-23140

1000ml Silicone Adult Resuscitator W/pop-off 60cmH2O	RE-23122
550ml Silicone Child Resuscitator W/pop-off 40cmH2O	RE-23220
280ml Silicone Infant Resuscitator W/pop-off 40cmH2O	RE-23320
1600ml Silicone Adult Resuscitator	RE-24120
1600ml Silicone Adult Resuscitator W/pop-off 60cm H2O	RE-24140
550ml Silicone Child Resuscitator W/pop-off 40cmH2O	RE-24220
280ml Silicone Infant Resuscitator W/pop-off 40cmH2O	RE-24320
1500ml Silicone Adult Resuscitator	RE-27120
1500ml Silicone Adult Resuscitator W/pop-off 60cmH2O	RE-27140
550ml Silicone Child Resuscitator W/pop-off 40cmH2O	RE-27220
280ml Silicone Infant Resuscitator W/pop-off 40cmH2O	RE-27320
Non-rebreathing Valve	RE-21101 (PN-0401)
Non-rebreathing Valve 60cmH2O, W/peep valve adapter G1	RE-21135 (PN-0402)
Non-rebreathing Valve 40cmH2O , W/peep valve adapter G1	RE-21131 (PN-0403)
Non-rebreathing Valve	RE-21151
Non-rebreathing Valve 60cmH2O W/peep valve adapter G1	RE-21164
Non-rebreathing Valve 40cmH2O W/peep valve adapter G1	RE-21160
Duck Bill Valve Silicone	7RE-21013-000BL (PN-0409)
Exhalation Disc Membrane	7RE-21014-000BL (PN-0410)
Intake Valve complete (All in One)	RE-21210
Peep Valve 2-10 cmH2O(30mmID)	RE-21330 (PN-0042)
Peep Valve 2-10 cmH2O(15mmID)	RE-21335 (PN-0042-1)
Peep Valve 5-20 cmH2O(30mmID)	RE-21340 (PN-0044)
Peep Valve 5-20 cmH2O(15mmID)	RE-21345 (PN-0044-1)
Oxygen Reservoir 2500 ml	BR-62725 (PN-0438)
Oxygen Reservoir 600 ml	BR-62706 (PN-0440)
Oxygen Reservoir 2500 ml	BR-62625 (PN-0439)
Oxygen Reservoir 1000 ml	BR-62610 (PN0441)
Silicone mask #0	SM-86503 (PN-0000)
Silicone mask #1	SM-86513 (PN-0001)
Silicone mask #2	SM-86523 (PN-0002)
Silicone mask #3	SM-86131(PN-0003)
Silicone mask #4	SM-86141 (PN-0004)
Silicone mask #5	SM-86151 (PN-0005)

OPERATING INSTRUCTION



1. Place the patient on back, pull his chin upward as possible to keep the airway and the mouth cavity in alliance line, so the patient can breathe smoothly.
2. Clean all visible foreign material inside the mouth and the throat.
3. Insert the onopharyngeal tube, keep the patient's mouth open to prevent tongue from occluding the airway. (Can use a mouth opener to open his mouth) The onopharyngeal tube can be selected according to the patient's mouth cavity size.
4. The emergency personnel should stay behind the patient's head, extend the head back and pull his chin upwards and towards the emergency personnel.
Remark: If the patient already has an airway inner tube inserted, or has been through an airway excise resect operation, then please remove the mask, connect the Non-rebreathing Valve connector with the airway inner tube, then following the standard operating instruction.



5. Cover the patient's mouth and nose with the mask, and press palm against the mask to keep it close to the patient's face.
6. Use the other hand to press on the Resuscitator, regularly compress sending with sufficient inhale/exhale frequency. (Adult: 12 - 16 times, Child: 14 - 20 times, Infant: 35 - 40 times)
7. The emergency personnel should check to ensure that the patient is ventilating properly.
• Observe rise and fall of the patient's chest (accordingly with the pressing on the Resuscitator).
• Check the patient's lips and face color through the transparent part of the mask.
• Check that the patient valve is working properly through the transparent housing.
• During exhalation, check that the interior of the mask is being fogged.

CLEANING, STERILIZATION:

Notes for cleaning and sterilization process:

• For cleaning and sterilization process, the resuscitator must be disassembled as shown in page 6. See the assembly view and table for disassembling the resuscitator set. Do not disassemble the parts further as shown.
• When and parts for cleaning-sterilization: For parts exposed to expiratory gases (non-rebreathing valve) do cleaning-sterilization after each patient. For parts not exposed to patient expiratory gases (resuscitator body, oxygen valve, oxygen reservoir, mask) do cleaning-sterilization regularly as needed to remove dust etc. If the resuscitator was used for patients / environments with infectious diseases do the cleaningsterilization for the whole set of the resuscitator.

THE CLEANING-STERILIZATION PROCESS

The following steps are generally recommended. Select proper methods for the resuscitator parts in question according to the table.

Cleaning methods:

● Disassemble the resuscitator following the assembly view and order.
Do not disassemble the pressure relief valve spring, just rinse it directly.
● Hand wash the resuscitator adequately to remove adhering substances from each component while soaking in a commercially available, anionic detergent such as ANIOSYME DD1 for 10 mins. Use 1:200 ratio of dilution in tepid water for each resuscitator keeping the temperature 35 °C.
● Rinse the manual resuscitator with 5 liters of water and proceed to sterilization step.

ANIOSYME DD1 processing parameters:

Minimum concentration of chemical required	Minimum temperature of tepid water	Minimum Contact time	Rinsing techniques
Pour a 1:200 ratio of dilution in tepid water.	35℃	10 minutes * Clean the manual resuscitator manually while soaking.	Rinse thoroughly with 5 liters tap water.

Follow all instructions from the manufacturer of the pre-sterilization products. Any deviation from these instructions may impact the performance of the product. Review all applicable instructions for additional warnings and cautions before proceeding to any stage.

Autoclave processing parameters:

Method		Description	Reprocess limit	Note
Sterilization	Autoclave	121 °C for 20 mins	40 cycles max.	* Inspect the manual resuscitator after processing. If any components are damaged, replace the components immediately. * After processing, discoloration and a slight odor of manual resuscitator components is normal. * The device can be routinely cleaned and disinfected for safe use within reprocess limit.

Follow all instructions from the manufacturer of the autoclave process. Any deviation from the manufacturer's instructions than those listed in this guide may impact the performance

or durability of the product. Review all applicable instructions for additional warnings and cautions.

Sterilization methods:
Note for sterilizing timing: When first use of the new resuscitator and when user changed do sterilization for the resuscitator. Also when the resuscitator was used for more than 48 hours do sterilization for the resuscitator.

Notes:
• Use only brands that are compatible with the resuscitator materials to avoid reduction in the lifetime of the materials. See list of materials on page 13. Follow the instructions of the manufacturer of the detergent or chemical disinfectant for dilution and exposure time.
• Substances containing phenol should be avoided. Phenol will cause premature wear and degradation of the materials or reduce the time use of the product.
• Promptly remove all residue of cleaning materials from the resuscitator. Residues may cause premature wear or reduce the time use of the product.
• Because it is very difficult to thoroughly rinse it afterwards it is not recommended to immerse the oxygen reservoir in chemical disinfectants.
• Air dry out of direct sunlight for 25 min. Make sure the manual resuscitator is dry before use. If not air-dried, please extend the air-drying time.

Sterilizing methods:
•Autoclaved sterilization Max 134°C: Can be used on all parts of the resuscitator, except PVC material products. Follow the recommendations given by the steam autoclaving manufacturer. All steam autoclave cycles used for porous items are acceptable provided that the maximum temperature does not exceeded 134°C (or 273°C) . If plastic housing made by polycarbonate the maximum temperature does not exceed 121°C (or 244°C)

Applicable Methods	Cleaning (Washing)	Autoclaving
Parts	Manual washing	121˚C (244˚F) Polycarbonate
A:Non-rebreathing valve	●	Polycarbonate ●
B:Resuscitator body	●	●
C:Reservoir valve	●	Polycarbonate ●
D:Oxygen reservoir	Silicone rubber: ● PVC: ○	Silicone rubber: ● PVC: ○
E:2M Oxygen tubing	○	○
F:Mask	Silicone rubber: ● PVC: ○	Silicone rubber: ● PVC: ○

A: Non-rebreathing valve; B: Resuscitator body; C: Reservoir valve; D: Oxygen reservoir; E: Oxygen tubing; F: Mask
● : applicable
○ : not applicable

Visual inspection through package assembly:
1. After cleaning-inspection-sterilization process, let the resuscitator parts stay at room temperature to dry (air dry). Wait until all parts are dry. No drying agent is needed.
2. After cleaning-disinfection-sterilization carefully inspect all parts for damage or excessive

wear and replace them if necessary. Some methods may cause discolouration of rubber parts but will not affect their lifetime. In case of material deterioration, e.g. cracking, the parts should be replaced. Contact your distributor for part replacement.
3. Assemble the parts following the Assembly View.
4. After assembling the resuscitator, a label should be put on to indicate the handling date.

Storage
• For compact storage, e.g. in an emergency case, the inlet end can be pushed halfway into the bag.
• Never store the resuscitator in a compressed or folded state.
• Never excessively squeeze the bag during storage. When the resuscitator is ready for use it should not be kept in direct sunlight or in a heated environment.
• Storage temperature: -40°C to 60°C
• For long-term storage or transportation the resuscitator should be kept in closed packing in a cool place away from direct sunlight.

TESTING THE RESUSCITATOR

The Besmed Manual Resuscitator should be tested as follows:
• When first using the new Resuscitator
• After cleaning and sterilizing
• After any new parts have been fitted
• Monthly, if the Resuscitator is not frequently used.
Equipment required: Test lung, 0-100 cmH20 manometer (for Infant and
Child resuscitators only), flow meter, regulated gas supply, gas supply tubing.

Testing the silicone bag:
1. Remove the non-rebreathing valve and the oxygen reservoir and valve (if fitted).
2. Compress the silicone bag and occlude (block) the non-rebreathing valve outlet.
3. Release the bag. The bag should expand immediately and refill. If not, check that the intake valve at the base of the silicone bag is correctly assembled.
4. While keeping the non-rebreathing valve outlet blocked, compress the bag again. The bag should not compress easily. If this occurs, check that you are blocking the valve sufficiently, and that the intake valve at the base of the silicone bag is correctly assembled.

Testing non-rebreathing valve
1. Connect the non-rebreathing valve to the silicone bag. Connect the test lung to the outlet on the non-rebreathing valve.
2. Compress and hold the bag. The non-rebreathing (duckbill) valve inside the non-rebreathing valve should open and the test lung should fill. If not, check the connection between the Resuscitator and the test lung, and check that the non-rebreathing valve is correctly assembled.
3. Release the bag. The non-rebreathing (duckbill) valve should close and as the test lung deflates, gas should flow through the expiratory ports in the non-rebreathing valve. If not, check that the non-rebreathing valve is correctly assembled.
4. Ventilate the test lung for a minimum often cycles to ensure that the Resuscitator is functioning correctly. Inspiration must occur when the silicone bag is compressed and exhalation when the bag is released. If not, check that the non-rebreathing valve is correctly assembled.
To check the function of the pressure relief valve (Infant and Child Resuscitators)
Connect a 0-100cmH2Omanometer to the patient outlet of the non-rebreathing
Valve. Compress the bag. When the pressure relief valve activates, the manometer should

read35-45cmH2O. If not, check that the non-rebreathing valve is correctly assembled and does not leak. If the pressure relief valve fails a fu1ther test, it must be replaced. Do not attempt to repair the pressure relief valve.

Testing Oxygen Reservoir / Reservoir Valve

1. Attach the reservoir to the reservoir valve assembly. Attach the silicone bag.
2. Inflate the reservoir and block the rese1voir port.
3. Compress the rese1voir bag. Gas should escape through the safety outlet valve on the reservoir valve. If not, check that the reservoir valve is correctly assembled.
4. Connect the reservoir and reservoir valve assembly to a Resuscitator.
5. Cycle the Resuscitator through several ventilations. The safety inlet valve on the reservoir valve should open during each refill to allow room air to enter the silicone bag. If not, check that the reservoir valve is correctly assembled.

Note: If supplemental oxygen is not connected, the silicone bag will refill more slowly if the reservoir is still attached.

Overall Resuscitator function

1. Fully assemble the Resuscitator (non-rebreathing valve, silicone bag, reservoir valve and oxygen rese1voir). Connect the Resuscitator to a supplemental gas source and connect a test lung to the patient outlet on the non-rebreathing valve.
2. Set the supplemental gas flow to 15 liters per minute for the adult and child models; and to 10l/m for the infant model.
3. Cycle the Resuscitator through several ventilations. The test lung should inflate during inspiration and deflate during exhalation. Check for leakage at all joints and connections. Ensure that the Resuscitator refills promptly and properly and that all valves are operating correctly. If not, repeat the tests above to find where the problem lies.

Specification & Performance

Storage Temperature: -40°C (- 40°F) to 60°C (140°F)
Operating Temperature: - 18°C (0°F) to 50 °C (122°F)

Material List:

Silicone Rubber	Polycarbonate/Poly sulfone
Silicone bag	Non-rebreathing valve
Duckbill valve	Bag intake valve housing
Flapper valves	Reservoir valve housing
Relief valve seal	Pressure relief valve housing and stem
Adult mask bladder	Adult mask shell
Child /Infant mask	
Mask grommet/ Mask retainers	Polycarbonate
O-ring	Reservoir bag connector
Stainless Steel	Polyvinylchioride
Pressure relief valve spring	Oxygen tubing, Reservoir bag

Connectors:	
Patient port	ID: 15mm ; OD: 22mm
Silicone bag inlet	ID: 23 mm
Reservoir valve	ID: 25 mm
Intake valve port	OD: 25mm
Supplemental gas inlet	OD: 6mm

Dead Space:

nonrebreathing valve	<5.5ml
adult mask	150ml
child mask	95ml
infant mask	28ml

Pressure Relief Valve:

Child and infant	40±5cmH2O
Adult	60± 10cmH2O

	Bag volume	Stroke volume	Reservoir volume	Suitable body weight
Adult model	1600 mL	700 mL	2500 mL	>30 kg
Child model	500 mL	300 mL	2500 mL	7-30 kg
Infant model	280 mL	150 mL	500 mL	<7 kg

Stroke volume of 1350mLcan be achieved using two hands

Minimum Cycle Rate

Adult - 20 breaths/min

Child - 20 breaths/min

Infant - 40 breaths/min

Oxygen Concentration:

with reservoir 99%

without reservoir 45%(adult and child models)

90%(infant model)

The performance characteristics for Manual Resuscitators will vary from user to user depending on a variety of factors: ambient temperature, patient lung compliance, ventilatory frequency, size of operator's hands.

Maximum Ventilatory Rates

	Temperature -18℃(℉) Cycle Rate	22℃(72℉) Cycle Rate	50℃(122℉) Cycle Rate
Adult	20	20	20
Child A	30	30	30
Child B	20	20	20
Infant A	60	60	60
Infant B	40	40	40

The results were obtained under the following conditions:

Adult: VT-600mL, Compliance 0.02L/cmH2O , Resistance 20cm H2O /L/s

Child A: VT -70mL, Compliance 0.01L/cmH2O , Resistance 20cm H2O /L/s

Child B: VT -300mL, Compliance 0.01L/cmH2O , Resistance 20cm H2O /L/s

Infant A: VT -20mL, Compliance 0.001L/cmH2O , Resistance 400cm H2O / L / s Infant B: VT-70mL , Compliance 0.01L/cmH2O , Resistance 20cm H2O / L /s
The correct ventilation frequency may vary, please follow current ventilation frequencies as recommended by AHA.

Range of delivery pressure
Adult: 60±10cmH2O maximum(can be overridden by operator)
Child and Infant: 40± 5 cmH2O maximum(can be overridden by operator)

Stroke Volume Range

	Using one hand	Using two hand
Adult	770 ml	900 ml
Child	300 ml	350 ml
Infant	160 ml	190 ml

Oxygen concentration for Adult model:
Values in brackets are without an oxygen reservoir.
Tidal Volume (ml) x Ventilation Rate with Reservoir [without Reservoir]

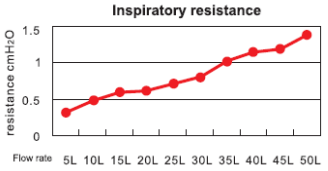
Oxygen Flow(LPM)	800x12	800x20	850x12	850x20	900x12	900x20
5	47【31】	58【29】	50【30】	63【29】	56【29】	66【30】
10	71【35】	89【35】	68【35】	87【35】	91【36】	90【36】
15	71【35】	91【37】	95【36】	95【36】	94【36】	94【36】

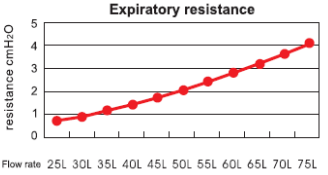
Oxygen concentration for Child model:
Values in brackets are without an oxygen reservoir.
Tidal Volume (ml) x Ventilation Rate with Reservoir [without Reservoir]

Oxygen Flow(LPM)	250x20	250x30	300x20	300x30	350x20	350x30
2	64【34】	70【34】	65【34】	62【33】	67【33】	68【32】
6	98【45】	97【44】	96【43】	96【41】	95【39】	95【41】
10	98【46】	98【45】	96【43】	97【44】	95【44】	95【46】

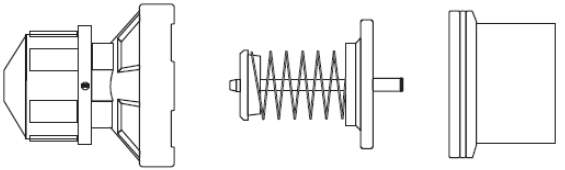
Oxygen concentration for Infant model:
Values in brackets are without an oxygen reservoir.
Tidal Volume (ml) x Ventilation Rate with Reservoir [without Reservoir]

Oxygen Flow(LPM)	160x30	160x40	175x30	175x40	190x30	190x40
2	84【36】	82【42】	82【36】	78【40】	82【40】	72【40】
6	85【40】	82【42】	82【36】	82【41】	85【49】	74【44】
10	87【49】	83【51】	85【36】	82【46】	85【48】	77【52】





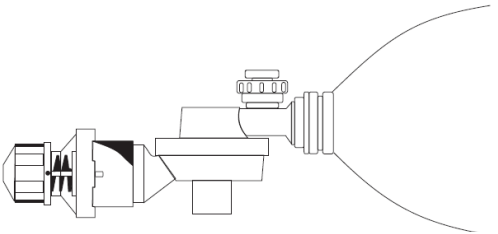
Terminal Positive Pressure Adjustment Valve (for one patient use)
1. 2-10cmH2O Terminal Positive Pressure Adjustment Valve for one patient use
2. 5-20cmH2O Terminal Positive Pressure Adjustment Valve for one patient use
3. Terminal Positive Pressure Adjustment Valve Adaptor



Terminal Positive Pressure Adjustment Valve
(article name, number and specification)
2-10cmH2O Adjustable Terminal Positive Pressure Adjustment Valve
(Orange Silicone)
5-20cmH2O Adjustable Terminal Positive Pressure Adjustment Valve
(Blue Silicone)
(PN-0050) Terminal Positive Pressure Valve Adaptor

Specification
Adjustable range: 2- 10cmH2O and 5-20cmH2O
(+/-2cmH2O) Flowing Capacity Adjustment 3Lpm
Adaptor: 30mm 22/15mm outer dimension 22mm and 30mm

Materials: PC, Silicone, Stainless Steel



The Besmed Peep Valve (Accessory Series)

The Peep Valve (User's manual)

1. Attach the Diverter to the patient's outlet as showed in the drawing.
2. Turn the Diverter toward the direction away from the patient or the Emergency Personnel's position.
3. Compress the Resuscitator a few times to make sure all functions are normal after assembly.
4. Choose the proper Peep Valve within the specification range.
(2-10cmH2O or 5-20cmH2O)
5. Turn the knob of the Peep Valve to the needed manometer indicated on the valve base.
6. As showed in the drawing, attach the Peep Valve to the Diverter, connect the Resuscitator patient's outlet to the manometer and the breathing bag, press on the Resuscitator for the air exchange motion of the breathing bag, and adjust for the proper Peep Valve pressure needed on the Peep Valve.
7. Regularly clean and sterilize before and after use.

LEGEND OF SYMBOLS

CE	Medical Device compliant with Directive 93/42/EEC	REF	Product code
	Importated by		Manufacturer
	Please read instructions carefully		Date of manufacture
LOT	Lot number		Disposable device, do not re-use
	Expiration date (see box / package)		Keep in a cool, dry place
	Keep away from sunlight	EC REP	Authorized representative in the European community
LATEX	Not made with natural rubber latex	PHT DEHP	No-DEHP formulation
	Temperature limit	NON STERILE	Non-sterile
MD	Medical Device		

GIMA WARRANTY TERMS

The Gima 12-month standard B2B warranty applies.