

CAREvent[®] DRA Handheld Automatic Mine Rescue Resuscitator



History

The **CAREvent**[®] DRA Automatic Rescue Resuscitator was developed on the the request of Draeger Safety to meet the specific challenges of Underground Mine Rescue which included:

- Low oxygen atmosphere and/or potentially toxic environment
- Entrapment
- Long rescue times
- Distance to Fresh Air
- Artificial Resuscitation and/or CPR on downed Miner
- Multiple Miners requiring oxygen therapy or resuscitation
- Compromised Breathing Supply



What is **CAREvent**[®] DRA Automatic Rescue Resuscitator?

The **CAREvent**[®] DRA Automatic Rescue Resuscitator is a handheld pneumatically powered, time/volume cycled, intermittent positive pressure Resuscitator integrated with the Dräger BG4 Cylinder and Panorama Full Face Mask.

This configuration has been specifically designed for use in mining and potentially toxic atmosphere environments as a complete rescue solution for the non-breathing or oxygen compromised miner.

Choosing your Rescue Resuscitator

- ⌘ Can it be used in a Confined Mine Rescue Environment?
- ⌘ Can it provide Total Hands Free Operation - Automatic Resuscitation?
- ⌘ Can it be used on an Unattended Patient?
- ⌘ Can it be Securely Attached to the Patient's Head during Rescue?
- ⌘ Can it be used during Vertical Lifts Unattended?
- ⌘ Can it provide Oxygen Therapy to someone short of breath?
- ⌘ Can it Provide Demand Breathing to a Spontaneously Breathing Patient?



Choosing your Rescue Resuscitator

- ⌘ Can it be used for CPR meeting the latest Resuscitations Guidelines for Two Ventilations followed by 30 Chest Compressions?
- ⌘ Can it Automatically Adjust to a Breathing or Non Breathing Patient without intervention needed on the part of the Rescuer?
- ⌘ Can the Equipment be used for more than One Patient at the same time during a Breathing Emergency?
- ⌘ Can it be Used on the Rescuers Self-Contained Breathing Apparatus if Trapped or their Air Supply is Compromised?



The **CAREvent**[®] DRA Rescue Resuscitator supports the resuscitation, rescue and transportation under a wide range of emergency situations.

The **CAREvent**[®] DRA delivers a set tidal volume and respiratory rate to make the Rescuer's job easier.



The design of the micro-pneumatic circuitry maintains a consistent (Inspiration: Expiration) **I:E** ratio (set at 1:2) and uses virtually no drive gas.

The “**Demand Breathing**” feature allows spontaneously breathing patients to breathe oxygen through the resuscitator at their own rate and volume.

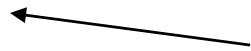


The **CAREvent**[®] DRA “**Automatic Circuit Shut Off**” feature will cause the automatic cycling of the resuscitator to stop when the patient takes an adequate spontaneous breath.

The automatic cycling will re-start automatically should the patient stop breathing or their demanded volume or respiratory rate drop below the pre-determined minimum.



Compliance with the latest 2005 Guidelines for Resuscitation is provide on the **CAREvent[®] DRA** Rescue Resuscitator by the incorporation of a “***Manual Override Button***”.



Manual Override Button

The **Manual Override Button** allows for the provision of ventilation during chest compressions in the patient.

The manual flow rate is equivalent to automatic flow rate.



The **CAREvent**® DRA is ergonomically designed with a **front located manual ventilation override button** allowing the operator to focus on the protecting the patients airway at all times.

The **Audible** high airway pressure alarm improves the level of patient safety by alerting the operator to any problems with the patient's airway and breathing.



Cylinder Duration

How long will a 3,000 Psi 420 Litre Oxygen Cylinder last during use During Rescue of the Non-breathing Patient?

Guidelines 2005 Version – 80 Minutes

- 10 Bpm / 500 ml Tidal Volume



Cylinder Duration

How long will a 3,000 Psi 420 Litre Oxygen
Cylinder last During Escape
Minimum 10 Minutes



SPECIFICATIONS

- Minute Volume Range: 5.0 Litres
- Frequency Range: 10 BPM
- I:E Ratio: Fixed at 1:2
- Input Pressure Range: 45 - 70 psi
- Automatic Flow Rate Range: 15.0 Lpm
- Manual Flow Rate Range: 15.0 Lpm
- Demand Valve Triggering Pressure: $> -5 \text{ cmH}_2\text{O}$ @100 L/min
- Demand Breathing Flow Rate: 120 Lpm
- Oxygen Concentration: 100%

SPECIFICATIONS

- Relief Valve pressure Range: 60 cm H₂O
- Operating Temperature Range:
-35°C to +60°C (-31°F to +140°F)
- Storage Temperature Range:
-35°C to +60°C (-31°F to +140°F)
- Dimensions:
5.5"x 2.5"x 2.9" 140mm x 63mm x 73mm
- Weight: 14.6 Ounces / .45 kg (approx)

