

Technical Datasheet

ELSA Escape Set

Emergency Life Saving Apparatus

ELSA-V15 Item # 110355601

Including CC cylinder 3L, Air pipe, protective hood, carry bag, cylinder valve, Silicon half mask

ELSA-V15 Item # 110350201

Including aluminum cylinder 3L, Air pipe, protective hood, carry bag, cylinder valve, Silicon half mask



Technical Specifications

- **Cylinder Volume:** 3 liters.
- **Inflation Pressure:** 210 bar +/- 10 bars.
- **Duration:** Approximately 15 minutes.
- **Amount of Air Released:** ~600 liters.
- **Weight (Equipment + Gas):** Less than 5.5 kg.



Features of ELSA Escape Set

1. **Clear View:** The visor is made of a specially fabricated material that resists fogging and offers a broad field of vision.
2. **Inner Mask:** The inner mask is designed to prevent mist formation inside the hood and minimize the buildup of carbon dioxide.
3. **Elastomeric Neck Seal:** Constructed with PVC-coated, ozone-resistant materials, the neck seal is durable and uniquely shaped for a secure fit.
4. **Whistle:** An integrated whistle mechanism alerts the user when the air supply is depleting.
5. **Carbon Composite Cylinder:** A lightweight cylinder designed to store compressed air efficiently, with a capacity of 3 liters at 300 bar pressure.
6. **Demand Valve:** This valve automatically adjusts the pressure of the air being delivered to the user, ensuring optimal flow for breathing.
7. **Quick Release Pin:** A strategically placed mechanism for quick and easy activation of the escape set.
8. **Hood with Demand Valve:** The hood is designed for full head coverage, integrating with the demand valve to ensure secure breathing. It is fabricated for durability and comfort.
9. **Lightweight Design:** The apparatus uses lightweight materials, including the cylinder and hood, without compromising durability or performance.

Benefits of ELSA Escape Set

1. **Clear View:** This ensures the user can see clearly in emergencies, improving situational awareness and navigation in hazardous environments.
2. **Inner Mask:** By reducing CO2 dead space, it provides a fresh and breathable air supply, ensuring the user remains comfortable and alert.
3. **Elastomeric Neck Seal:** Prevents air leakage around the neck and provides a comfortable yet airtight seal, ensuring the user's safety and reducing exposure to hazardous substances.
4. **Whistle:** This provides an audible warning to evacuate immediately, ensuring the user does not overstay in a hazardous environment.
5. **Carbon Composite Cylinder:** The reduced weight allows for easy portability, enabling quick and unhindered movement during emergency situations.
6. **Demand Valve:** Prevents visor fogging, providing clear visibility while delivering a consistent and safe air supply tailored to human respiratory needs.
7. **Quick Release Pin:** Saves crucial time during emergencies, allowing users to activate the apparatus swiftly and focus on evacuating safely.
8. **Hood with Demand Valve:** Protects the user's entire head and respiratory system from exposure to harmful substances, offering a comprehensive safety solution.
9. **Lightweight Design:** Makes it easier for the user to carry and wear the device for extended periods, minimizing fatigue during emergencies.

Cautions and Limitations:

1. Use only in environments for emergency escape situations.
2. Not designed for prolonged exposure or fire-fighting.
3. Ensure equipment is regularly checked and maintained.
4. Inspect the cylinder pressure and ensure it is adequate before use.

User Instructions:

1. Ensure the hood is securely worn with the elastomeric neck seal properly in place.
2. Connect the demand valve to regulate air pressure.
3. Use the whistle to alert when air is running out.
4. Handle the quick-release pin for smooth operation.

Applications:

1. **Chemical/First Responders:** Protects from harmful gases during spills or leaks.
2. **Law Enforcement Agencies:** Provides safety during riot control or toxic gas exposure.
3. **High-Rise Buildings:** Ensures safe evacuation during fires or gas leaks.
4. **Hospitals:** Shields staff and patients from biohazards or smoke in emergencies.
5. **Oil & Gas Industries:** Offers protection during gas leaks or explosions.
6. **Marine Operations:** Safeguards crew during fires, gas leaks, or flooding.
7. **Airports:** Ensures respiratory safety for ground staff during fuel or chemical exposure.