

EEBD USER MANUAL



Emergency Escape Breathing Device

An Emergency Escape Breathing Device (EEBD) is a compact, portable apparatus. The EEBD is designed to provide a person with a short-term supply of breathable air. In emergency situations, the EEBD can save lives. Emergency Escape breathing devices are used in various industries and environments. In the maritime industry, they are used to escape from toxic or oxygen deficit in confined spaces onboard.

EEBD's are lightweight and compact, which makes them easy to use and carry. The device is self-contained, which means they don't require a separate air supply or connection to an external source. When the air supply is about to run out, an alarm will go off to warn you.

How to use the EEBD

- 1. Check the pressure on the pressure gauge. Observe the cylinder capacaty and pull apart the seal.
- 2. Put on the bag as shown in the image.
- 3. Take out the face mask rapidly and wear it form the head down. Make sure the transparent window is in the front and the shawl reaches the shoulders.
- 4. Quickly evacuate from the scene of the accident/emergency.

Technical data

Cylinder working pressure:	210 bar
Cylinder capacity:	3 liter
Weight:	6 kg
Duration:	15 minutes





Article number	Description	Dimensions	Weight
EEBD15	EEBD	530 x 250 x 150 mm	6 kg
EEBDC	EEBD cabinet	762x 282 x 211 mm	4 kg









Inspections and Maintenance

Regular maintenance of the escape breathing device is crucial for its optimal performance. It is recommended to conduct checks at least quarterly during spare time.

Daily Inspections

Thoroughly inspect all components of the emergency escape breathing device for any signs of damage. Monitor the pressure gauge readings to ensure that the air pressure inside the cylinder remains at or above 210 bar (at 20 degrees celcius). If the pressure falls below 210 bar, the cylinder needs recharging; however, it should not exceed the rated pressure value.

How to use the EEBD - images

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Note: Variations in air pressure due to thermal expansion and contraction are normal with changes in environmental temperature. Low or high temperatures may cause fluctuations in pressure. At a room temperature of 20 degrees celcius, the recommended air pressure inside the device is 210 bar. The corresponding relationship between temperature and pressure is outlined in Table 2.

Temperature	Pressure Inside the Cylinder (Bar)	Temperature	Pressure Inside the Cylinder (Bar)
-30 °C	160	20 °C	210
-20 °C	170	30 °C	220
-10 °C	180	40 °C	230
0 °C	190	50 °C	240
10 °C	200	60 °C	250

Cylinder

- a. Avoid collision, scratch and pound; avoid high-temperature baking, freezing, and sun exposure; repair peeling paint and prevent sidewall rust;
- b. Use it according to date marked; do pressure test once every three years and be qualified before use;
- c. Inflate timely after use for next use;

Decompression device

Do not disassembly during use. Once repairing, re-adjust the device.

Notes

- 1. The device should be placed in a dry, clear, easy-to-access place where there is no direct sunshine;
- 2. The device should not come close to any grease or other corrosive liquid;
- 3. The cylinder should do pressure test once every three years in manufacturer or government authority and be qualified before use;
- 4. The device should avoid heavy pressing, high-temperature baking, freezing and sun exposure;
- 5. Train relevant personnel before using the device;
- 6. Once there is failure or damaged parts, repair them in manufacturer or its authorized agencies;
- 7. No filling oxygen to the cylinder to avoid accidents;
- 8. Inflate the cylinder to 210 bar first and after cooling, re-inflate to 210 bar to ensure use time;
- Compressed air for breathing should be clean, free of odor and meet the following requirements: CO no more than 5.5 mg/m
 CO₂ no more than 900 mg/m
 - Oil no more than 0.5 mg/m
 - Water no more than 50 mg/m
- 10. The device should not be used for fire-fighting, into a hypoxia empty tank or liquid cargo, or for fire fighters;
- 11. No take off the hood before the cylinder valve pin is not pulled;
- 12. If need to take off the hood to check, please be sure to separate the connection hook from hood. After checking, please reconnect the hook with hood.

Fault diagnosis and solutions

Faults	Causes	Solutions
Air leakage at cylinder valve	Valve disc rupture, pressure cap screw loose, O-ring aging	Replace disc, tighten pressure cap, replace O-ring
No indication on pressure gauge	Pressure gauge damaged, leaking air hose block or air leaking	Replace gauge or air hose
Air leakage at connection parts	O-ring aging or damaged	Replace new O-ring
Damage on face mask and bag	Aging or damaged	Replace new face mask and bag

Complete set of Escape device

Complete sets include:

- 1. Escape device one set
- 2. Device bag one piece
- 3. Device packing carton one piece
- 3. Attachment papers one set

Transportation and Storage

No rain exposure, do not put in carriage with oil, flammable, corrosive media. Handle gently; Place the device in a dry, clean, and easy-to-access location where the relative humidity is less than 80%, away from the heat. Avoid sun exposure.

Warranty and maintenance

The escape device (EEBD) is within warranty of six months from leaving the factory; if exceeding six months, maintenance costs are responsible for the user; users should do the repair in the manufacturer or authority approved repair station;

The user should check the escape device (EEBD) periodically, to establish if any problems occur. If so, the user should solve them in time. When replacing pressure gauge, do the following:

- a. Open the EEBD cylinder valve pin, clear the air inside the cylinder;
- b. Use a wrench to remove the pressure gauge;
- c. Replace a new one, and tighten it;
- d. Use air compressor or charging unit, please be sure that the air compressor is up to 200bar, then open the valve hand wheel to charge, fill in the gas to 210bar (20 degrees celcius) first, and after cooling, re-filling the gas to 210;
- e. Put the cylinders into water to check the air tightness;
- f. Connected the qualified cylinders with medium-pressure air hose, connect the hood with cylinder valve pin, and then put the whole set EEBD into bag.

CONTACT INFORMATION

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