

SAVER CF Series Constant-flow escape equipment

 Instructions for Use

Dräger

1 For your safety


1.1 General safety statements

- Before using this product, carefully read the Instructions for Use.
- Strictly follow the Instructions for Use. The user must fully understand and strictly observe the Instructions. Use the product only for the purposes specified in the Intended Use section of this document.
- Do not dispose of the Instructions for Use. Ensure that they are retained and appropriately used by the product user.
- Only fully trained and competent users are permitted to use this product.
- Comply with all local and national rules and regulations associated with this product.
- Only trained and competent personnel are permitted to inspect, repair and service the product. Dräger recommends a Dräger service contract for all maintenance activities and that all repairs are carried out by Dräger.
- Properly trained service personnel must inspect and service this product as detailed in the maintenance section of this document.
- Use only genuine Dräger spare parts and accessories, or the proper functioning of the product may be impaired.
- Do not use a faulty or incomplete product, and do not modify the product.
- Notify Dräger in the event of any component fault or failure.

1.2 Definitions of alert icons

Alert icons are used in this document to provide and highlight text that requires a greater awareness by the user. A definition of the meaning of each icon is as follows:

 **WARNING**
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION**
Indicates a potentially hazardous situation which, if not avoided, could result in physical injury or damage to the product or environment. It may also be used to alert against unsafe practices.

 **NOTICE**
Indicates additional information on how to use the product.

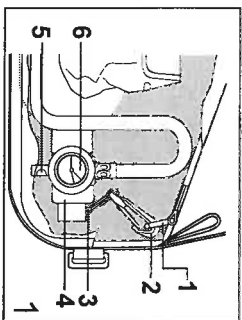
2 Description

2.1 Product overview

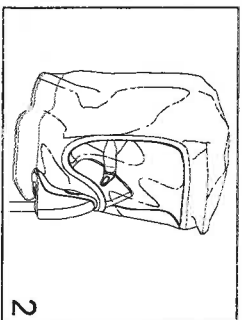
The Dräger SAVER CF (constant-flow) is an emergency escape breathing apparatus that provides respiratory protection to escape from a contaminated or oxygen-deficient environment to a safe breathing environment.

The main features of the product are:

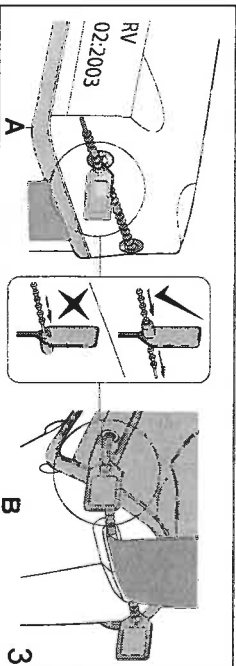
- The respiratory protection equipment is contained in a carrying bag that has a soft or hard case. If the bag is black it indicates that the bag material has anti-static properties. The bag has a neck strap to carry the product.



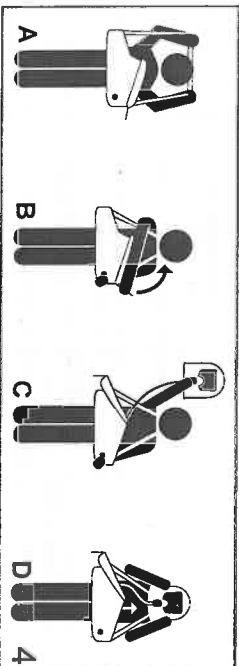
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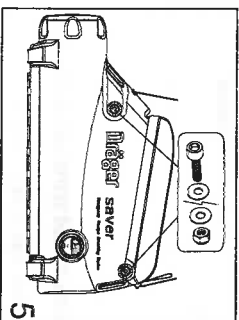
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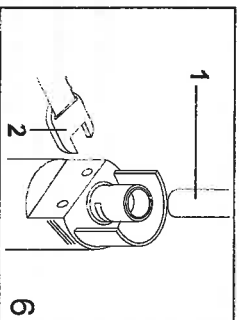
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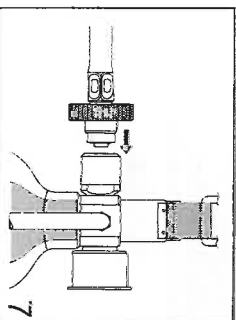
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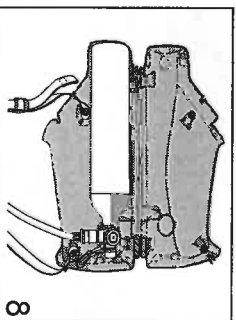
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2.5 Explanation of markings and symbols

The date of manufacture of the product is shown on the carrying bag in the form MM/YYYY.

 is the MED mark of conformity.

3 Use

WARNING

The time required to allow the wearer to escape to a safe area must be within capacity of the equipment. When selecting the type and duration of escape equipment it is essential to consider potential hazards, storage location and escape routes.

3.1 Preparation for use

WARNING

On receipt of the SAVER CF from Dräger, the product is not configured for immediate operational use. The cylinder automatic activation device is not connected, and the air cylinder may be discharged. Carry out the following procedure to prepare the product for use.

Immediately following removal of the equipment from its packaging:

- If the air cylinder is supplied discharged, see Section 4.2.2 for cylinder charging instructions.
- If the air cylinder is supplied fully charged, carry out the following to connect the cylinder automatic activation device:
 - a. Grip the loop on the lid of the carrying bag and pull up to open the bag.
 - b. Seal the lid along the Velcro fastening strip leaving sufficient opening to insert a hand and, taking care not to detach the locking clip from the cylinder valve, connect the sprung-gate clip (Fig 1, Item 2) to the D-ring (Fig 1, Item 1).
 - c. Fit the anti-tamper tag(s) and close the lid (Fig 3).

3.2 Putting on the carrying bag (ready position)

1. Check that the pointer of the cylinder pressure gauge is inside the green area, and the anti-tamper device on the lid of the carrying bag is intact (Fig 3).
2. Place the neck strap over the head (Fig 4, A) and adjust the strap until the equipment sits in the centre of the chest.
3. If fitted with a waist belt (optional accessory), loop the waist belt around the waist and then fasten the buckle. Pull the free end of the belt until the equipment is secure and comfortable.

3.3 Putting on the hood and escape procedure

WARNING

The duration begins from the automatic activation of the cylinder valve and not from time of putting on the hood.


- The air cylinder is fitted inside the carrying bag but has a pressure gauge (Fig 1, Item 6) that is visible outside the bag. When the cylinder is full it provides a nominal duration of 10 or 15 minutes (see Section 2.1.1).
- The cylinder valve/reducer (Fig 1, Item 4) has an automatic activation device that is operated by removing a two-pronged locking clip (Fig 1, Item 3). The locking clip is connected by a strap to a spring-gate clip (Fig 1, Item 2) that is in turn connected to a D-ring (Fig 1, Item 1) on the inside of the lid. This arrangement automatically removes the locking clip as the carrying bag is opened. When the valve/reducer is activated, it reduces the cylinder pressure to a medium pressure, and a preset nozzle inside the valve/reducer provides a constant flow of breathing air to the escape hood.
- A whistle (Fig 1, Item 5) on the valve/reducer emits a warning when the cylinder pressure falls to 10 bar to indicate the end of the rated duration.
- The escape hood (Fig 2) has a rubber ring that seals around the neck, and an internal nose cup that fits over the nose and mouth to supply air to the wearer.
- There is an anti-tamper tag (or tags) (Fig 3) fitted on the lid of the carrying bag to allow an inspector to quickly identify that the bag has not been opened. The soft-case bag has a single anti-tamper tag (Fig 3, A), and the hard-case bag has two anti-tamper tags (Fig 3, B).

2.1.1 Air cylinders

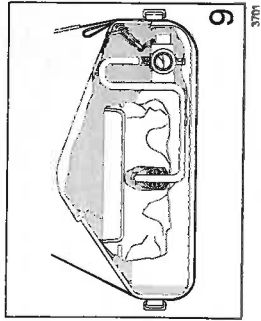
The **Saver** CF10 version has a 2 litre aluminium cylinder -- nominal duration of 10 minutes.
 The **Saver** CF15 version has a 3 litre steel cylinder -- nominal duration of 15 minutes.
 The **Saver** CF15 CC version has a 3 litre carbon-composite cylinder -- nominal duration of 15 minutes.

2.2 Intended use

When this product is used with an approved air cylinder it provides the wearer with respiratory protection for escaping from contaminated or oxygen-deficient conditions. The air cylinder used with this product must be a certified Dräger cylinder; otherwise the operation of the product may be impaired. Contact Dräger for further information.

The product version marked with the  symbol is recommended where the product is stored in, or regularly exposed to, atmospheres where airborne hydrocarbons or chemical, fuel or oil vapours may be present.

Operating temperature range: -15 °C to 60 °C.



2.3 Limitations on use

The **Saver** CF15 version (with 3 litre steel cylinder) exceeds 5 kg. This is considered to be unsuitable (as defined in EN 1146) to be carried by the wearer for more than 8 hours.

2.4 Approvals

The **Saver** CF Series of emergency escape breathing apparatus conforms to EN 1146:2005, ISO 23269-1:2008 and ISO 23269-4:2010, PED (97/23/EC) and MED (96/98/EC).

PPE – EC Type examiner: DEKRA EXAM GmbH, Dinnendahlstrasse 9, 44809 Bochum, Germany. Notified Body No. 0158.

PPE (99/686/EEC) – 11B examiner: Lloyd's Register Quality Assurance (LRQA), 1 Trinity Park, Bickenhill Lane, Birmingham, B37 7ES, United Kingdom. Notified Body No. 0088.

MED (96/98/EC)/PED (97/23/EC) – Lloyd's Register Verification (LRV), 71 Fenchurch Street, London EC3M 4BS, United Kingdom. Notified Body No. 0038.

Use in potentially explosive atmospheres

Do not charge the cylinder in a potentially explosive atmosphere.

Saver CF Series combinations that are supplied in a black soft-case bag or hard-case bag have anti-static properties and are type tested as suitable for use in potentially explosive atmospheres. The combinations are suitable for use in hazardous areas up to and including zone 0 and zone 20. The combinations can be used in atmospheres containing gases of the gas explosion group IIC.

Saver CF Series combinations that are supplied in an orange soft-case bag are not suitable for use in potentially explosive atmospheres.

NOTICE

The wearer must be able to reach the required area before the whistle sounds to indicate the end of the rated duration.

1. Grip the loop on the lid of the carrying bag and pull firmly upward to break the anti-tamper tag(s) and open the lid of the bag (Fig 4, B). This action removes the locking clip, automatically activating the cylinder valve and the air supply to the hood.
2. Remove the hood from the carrying bag (Fig 4, C).
3. Place both hands inside the neck seal and carefully stretch the hood over the head (Fig 4, D).
 - Wearers with spectacles – take care when stretching the neck seal over the spectacles.
 - Wearers with long hair – tuck the hair inside the hood.
4. Position the nose cup over the nose and mouth and breathe normally.
5. Immediately leave the hazardous area by the shortest and safest escape route.



WARNING

Do not remove the equipment until in a safe area and clear of the hazard.



CAUTION

Do not drop or throw down equipment as damage could occur.

6. Once in a safe breathing environment remove the hood. Place both hands inside the neck seal and carefully stretch the hood over the head.

3.4 After use

After any use, the product must be checked and then returned to the ready-for-use condition. The after use maintenance tasks (see Section 4.1.2) must be carried out by trained service personnel or Dräger to prepare the product for use.