

# deffner & Johann

Supplies for RESTORATION | CONSERVATION | ART HANDLING – SINCE 1880

## INSTALLATION AND OPERATING INSTRUCTIONS

[info@deffner-johann.de](mailto:info@deffner-johann.de) | +49 9723 9350-0

Die in diesem Produktdatenblatt genannten Spezifikationen dienen nur zur Produktbeschreibung und beziehen sich auf den Zeitpunkt unmittelbar nach der Produktion bzw. Import des Produktes. Sie entsprechen den Angaben des Herstellers. Eine rechtsverbindliche Zusicherung bestimmter Eigenschaften oder der Eignung für einen bestimmten Einsatzzweck kann hieraus nicht abgeleitet werden. Durch unsachgemäßen Transport und / oder unsachgemäße Lagerung können sich Änderungen ergeben. Die Angaben in diesem Produktdatenblatt entbinden den Verarbeiter nicht von eigener Prüfung der Eigenschaften des Produktes und dessen Eignung für die vorgesehene Verwendung.

# Dräger X-plore® 8000

## Contents

<b>1</b>	<b>Safety-related information</b> .....	<b>3</b>	<b>9</b>	<b>Technical data</b> .....	<b>10</b>
1.1	Basic safety rules .....	3	9.1	Overall system .....	10
1.2	Use in explosion-hazard areas (only Dräger X-plore 8700) .....	3	9.2	Rechargeable batteries.....	10
1.3	Meaning of the warning notes .....	3	9.3	Standard battery charger .....	10
<b>2</b>	<b>Description</b> .....	<b>3</b>	<b>10</b>	<b>Component list</b> .....	<b>11</b>
2.1	System overview .....	3			
2.2	Components .....	3			
2.2.1	Fan unit.....	3			
2.2.2	Filter and facepieces .....	4			
2.2.3	Breathing hoses.....	4			
2.2.4	Carrying systems .....	4			
2.2.5	Rechargeable batteries .....	4			
2.2.6	Standard battery charger .....	4			
2.3	Feature description .....	5			
2.4	Limitations on use.....	5			
2.5	Intended use .....	5			
2.6	Approvals.....	5			
2.6.1	Respiratory protection .....	5			
2.6.2	ATEX and IECEx .....	5			
2.7	Explanation of type-identifying marking and symbols .....	5			
2.7.1	Name plates .....	5			
2.7.2	Packaging .....	6			
<b>3</b>	<b>Use</b> .....	<b>6</b>			
3.1	Preconditions for use .....	6			
3.2	Preparation for use .....	6			
3.3	During use .....	7			
3.3.1	Adjusting the flow rate .....	7			
3.3.2	Warnings and alarms.....	7			
3.4	After use .....	7			
<b>4</b>	<b>Troubleshooting</b> .....	<b>7</b>			
4.1	Warnings .....	7			
4.2	Alarms .....	7			
4.2.1	Fan unit.....	7			
4.2.2	Standard battery charger .....	8			
<b>5</b>	<b>Maintenance</b> .....	<b>8</b>			
5.1	Maintenance intervals.....	8			
5.2	Cleaning and disinfecting .....	8			
5.2.1	Clean and disinfect the device.....	8			
5.3	Maintenance work .....	8			
5.3.1	Visual inspection.....	8			
5.3.2	Replacing or charging the rechargeable battery..	8			
5.3.3	Replacing the filter .....	9			
5.3.4	Checking the flow rate and warning devices .....	9			
5.3.5	Replacing the O-ring at plug-in or bayonet-type hose connector .....	9			
<b>6</b>	<b>Transport</b> .....	<b>9</b>			
<b>7</b>	<b>Storage</b> .....	<b>10</b>			
<b>8</b>	<b>Disposal</b> .....	<b>10</b>			

# 1 Safety-related information

## 1.1 Basic safety rules



- 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.
- Follow the local and national guidelines pertaining to this product.
- Maintenance work, which is not described in these instructions for use, may only be carried out by Dräger or trained Dräger specialists.
- Use only genuine Dräger spare parts and accessories, or the proper functioning of the product may be impaired.
- Only use Dräger battery chargers.
- Do not use a faulty or incomplete product. Do not modify the product.
- Notify Dräger in the event of any component fault or failure.

## 1.2 Use in explosion-hazard areas (only Dräger X-plore 8700)

Devices or components that are used in explosion-hazard areas and which are certified and approved in accordance with national, European or international explosion protection guidelines may only be used under the conditions indicated in the approval and in compliance with the relevant legal provisions. Devices and components may not be modified. The use of defective or incomplete parts is prohibited. The applicable provisions must be complied with when performing repairs on these devices or components.

## 1.3 Meaning of the warning notes

The following alert icons are used in this document to provide and highlight areas of the associated text that require a greater awareness by the user. A definition of the meaning of each icon is as follows:

Alert icon	Signal word	Consequences in case of nonobservance
	WARNING	Indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury.
	CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in injury. It may also be used to alert against unsafe practices.
	NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in damage to the product or environment.

# 2 Description

## 2.1 System overview

The Dräger X-plore® 8000 powered air purifying respirator may be composed of different components depending on its field of application and the required protection class. Observe particularly the filter operating limits (see Instructions for Use of the filters).

Illustration of the system overview on the fold-out page (Figure A)

A complete device includes:

- 1 Breathing hose
- 2 Facepiece (example with hood)
- 3 Carrying system
- 4 Fan unit with filter and rechargeable battery

## 2.2 Components

### 2.2.1 Fan unit

Illustration on the front of fold-out page (Figure B)

- 1 Tube connection
- 2 Control panel
- 3 Suction inlet
- 4 Splash guard cover
- 5 Filter (not enclosed with fan unit)
- 6 Filter lock button


Illustration on back of the fold-out page (Figure C)



- 1 Carrying system socket
- 2 Name plate
- 3 Carrying system lock button
- 4 Battery lock button
- 5 Rechargeable battery (not enclosed with fan unit)

Illustration of the control panel on the fold-out page (Figure D)

- 1 Rechargeable battery status indicator
- 2 Residual particle filter capacity indicator
- 3 On/off button
- 4 Flow rate indicator
- 5 Reduce flow rate
- 6 Increase flow rate

### Display on control panel


Indicator	Meaning
 Segments light up in green.	Battery capacity depending on number of displayed segments: > 75 % (4 segments) > 50 % (3 segments) > 25 % (2 segments) < 25 % (1 segment)

Indicator	Meaning
 Segments light up in green.	Residual particle filter capacity <sup>1)</sup> depending on number of displayed segments: > 75 % (4 segments) > 50 % (3 segments) > 25 % (2 segments) < 25 % (1 segment)
 Segments light up in green.	Flow rate intensity depending on number of displayed segments: high flow rate (3 segments) medium flow rate (2 segments) low flow rate (1 segment)
Segments blink yellow or red.	Fault (see chapter 4 Troubleshooting)

1) The residual capacity of the gas filter or the gas filter components of the combination filter cannot be indicated.

**Warning devices**

The fan unit displays malfunctions with segments flashing red or yellow on the control panel. The fan unit will also trigger an sound and vibration alarm.

 Depending on the thickness and material of the clothing, the vibration alarm might not be perceived.

**2.2.2 Filter and facepieces**

Filter and facepieces are described in separate Instructions for Use.

The facepiece half/full mask types and hood/helmet/protective visor have varying flow ranges. The fan unit automatically detect the respiration connection type and automatically selects the appropriate flow range.

**2.2.3 Breathing hoses**

The following breathing hoses are available:

- standard hose
- flexible hose for increased comfort

Both breathing hoses are available for each of the following facepiece types:

- plug-in connector (hood)
- bayonet-type connector (helmet and protective visor)
- round-thread connector (half/full face mask)

**2.2.4 Carrying systems**

Illustration on the fold-out page (Figure E)

- 1 Connection plate
- 2 Webbing
- 3 Clips on ends of the belt
- 4 Buckle

The following carrying systems are available:

- Standard belt  
The standard belt consists of a textile webbing and press studs to attach comfortable padding.
- Decontaminable belt

The decontaminable belt has a smooth plastic webbing and is particularly recommended for decontamination.


- Welding belt  
For the welding belt, the webbing is made of leather. The welding belt is intended for use when welding.

**2.2.5 Rechargeable batteries**

Illustration on the fold-out page (Figure F)

- 1 Battery lock button
- 2 Battery status indicator
- 3 Button to display battery capacity
- 4 Docking Station
- 5 Name plate

The rechargeable lithium-ion batteries are specially designed for use with the powered air purifying respirator. A long-life rechargeable battery is also available in addition to the standard rechargeable battery.

 Rechargeable batteries for the different X-plore 8500 and X-plore 8700 device types cannot be interchanged.

The battery status indicator shows the battery capacity while you charge the unit with the standard charger or when you push the button. The segments of the battery status indicator are flashing while you charge the unit.

The battery status indicator is identical to the one on the fan unit control panel (see chapter 2.2.1 Fan unit).

The rechargeable batteries reach their full capacity after 5 charge and discharge cycles. The standard charging time takes approx. 3 hours.

In cases where the rechargeable battery has been completely drained, charging may take up to 4 hours. During this time the battery status indicator is not supported.




To prevent damage to or explosion of the rechargeable battery, charging is limited to a temperature range of 0 to 50 °C. If this temperature range is transgressed, the charging process will stop automatically and continue once the temperature range is reached once again.



**2.2.6 Standard battery charger**

Illustration on the fold-out page (Figure G)

- 1 Status LED
- 2 Power supply unit
- 3 Battery compartment

**Explanation of the status LED**

Indicator	Meaning
 Status LED is green.	Rechargeable battery is inserted and fully charged (standby mode)
 Status LED is flashing green.	Rechargeable battery is inserted and being charged.
 Status LED is flashing yellow.	Temporary disruption of charging (e.g. from excessively high temperature)

Indicator	Meaning
 Status LED is red.	Rechargeable battery is not inserted.
 Status LED is flashing red.	Malfunction (see chapter 4 Troubleshooting)

When the rechargeable battery is fully charged, the charger switches automatically to standby. In standby mode, the rechargeable battery stays fully charged at all times. In this mode the rechargeable battery is neither overcharged nor damaged.

## 2.3 Feature description


The powered air purifying respirator is a respiratory protective device depending on circulating air. It filters the ambient air and makes it available as breathable air. The device continuously takes in ambient air through the filter. The filter absorbs harmful substances depending on the filter type. In this way, the ambient air is recycled and finally reaches the facepiece. There it is available as breathable air.

A continuous overpressure in the facepiece prevents ambient air from penetrating.

## 2.4 Limitations on use

The device is not suitable for use:


- when there is a suspicion of contaminants with low warning properties (smell, taste, irritation of eyes and airways)
- in unventilated tanks, pits, canals etc.
- when there is suspicion of contaminant concentrations that represent an immediate danger to life or health - IDLH concentrations

 In explosion-hazard areas, the X-plore 8700 fan unit may not be used with the welding protective visor (component list pos. 19), the standard hood, long (pos. 10 and 11) and the hose cover, disposable (pos. 41).

## 2.5 Intended use

Depending on the employed filter type, the device protects against particles, gases and vapours or combinations hereof.

Only powered air purifying respirator X-plore 8700 is intended for use in explosion-hazard areas.

 For an overview of the device combinations and the protection classes, refer to the Configuration Matrix at the end of these instructions for use.

The numbers in the first line of the Configuration Matrix correspond to the positions in the component list. The listed components are intended for use with the X-plore 8000 fan units (component list pos. 1 and 2) and the rechargeable batteries (pos. 3 and 6). Dräger would be happy to answer any questions you may have regarding device configuration.

## 2.6 Approvals

### 2.6.1 Respiratory protection

The powered air purifying respirator is approved according to

- EN 12941
- EN 12942
- AS/NZS 1716:2012
- (EU) 2016/425

Declaration of conformity see Dräger X-plore 8000 Notes on approval or [www.draeger.com/product-certificates](http://www.draeger.com/product-certificates)

### 2.6.2 ATEX and IECEx

The X-plore 8700 powered air purifying respirator is approved under designation APR 00\*\* according to

- EN/IEC 60079-0
- EN/IEC 60079-11

The device satisfies the ATEX Directive 2014/34/EU.

#### Name of device according to ATEX

II 2G Ex ib IIB T4 Gb

II 2D Ex ib IIIB T135 °C Db

TA: -10 °C < Ta < +50 °C

#### Name of device according to IECEx

Ex ib IIB T4 Gb

Ex ib IIIB T135 °C Db

TA: -10 °C < Ta < +50 °C

## 2.7 Explanation of type-identifying marking and symbols

### 2.7.1 Name plates




Illustration of the name plates, refer to fold-out page.

Fan unit	Figure H
Rechargeable battery	Figure I
Standard battery charger	Figure J
1	Product name
2	International Protection Code
3	Approval marking
4	Symbol "Follow instructions for use"
5	WEEE symbol "Separate collection of electrical and electronic equipment"
6	Country of production
7	Manufacturer
8	CE marking
9	DataMatrix code with part and serial number
10	Serial number
11	Part number
12	Only for indoor use, not for outdoor use
13	Maximum ambient temperature

- 14 Electrical data
- 15 Pin assignment
- 16 Recycling symbol
- 17 Warning notice

Year of manufacture by serial number <sup>1)</sup>

### 2.7.2 Packaging

Symbol	Explanation
	Follow the instructions for use
	Maximum storage area humidity ≤ 95 %
	Storage temperature range -20 °C to +60 °C

## 3 Use

### 3.1 Preconditions for use

#### ⚠ WARNING

##### Fire hazard due to sparks or liquid metal splashes

- ▶ Always use powered air purifying respirators with a particle or combination filter with additional prefilter if sparks or liquid metal splashes may occur during use.
- ▶ Replace the prefilter at regular intervals; at least once per shift, but in case of visible contamination at the very latest.
- ▶ Replace particle and combination filters as soon as they are visibly contaminated with dust even if the residual capacity indicator of the powered air purifying respirator indicates that the residual capacity is still sufficient.
- ▶ Avoid direct contact of sparks and liquid metal splashes with the powered air purifying respirator: Contact of a heavily contaminated prefilter, particle or combination filter with sparks or liquid metal splashes can cause damage to the filter or ignite the collected particles.

- The ambient conditions (in particular type and concentration of the contaminants) must be known.
- The oxygen content of the ambient air must not drop below the following limit values:
  - at least 17 Vol% oxygen in all European countries except for the Netherlands, Belgium and Great Britain
  - At least 19 Vol% oxygen in the Netherlands, Belgium, the UK, Australia and New Zealand.
  - At least 19.5 Vol% oxygen in the USA
 Observe the national guidelines in other countries.

1) The year of manufacture results from the 3rd letter of the serial number: F = 2014, G = omitted, H = 2015, I = omitted, J = 2016, K = 2017 etc. Example: Serial number ARFH-0054: The third letter is F, the year of manufacture is therefore 2014.

### 3.2 Preparation for use

#### ⚠ WARNING


##### Ambient air penetration

Incorrect assembly of the components can impair the device function.

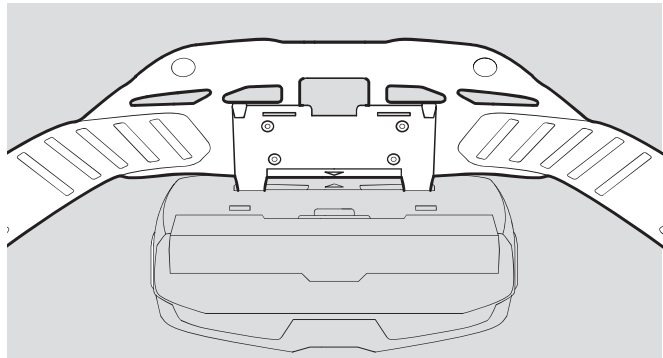
- ▶ For rechargeable battery, splash guard cover, and gas filter or combination filter ensure that:
  - Both connection points engage into the intended sockets when inserted
  - Do not jam the respective components when they are snapped into place

Perform the following activities outside the danger zone:


1. Select components of the powered air purifying respirator according to the required protection class and task (see Configuration Matrix at the end of these instructions for use).
2. Carry out a visual inspection (see chapter 5.3.1 Visual inspection).
3. Checking the rechargeable battery capacity:
  - a. Press the button to display the battery capacity on the rechargeable battery.
  - b. Read the battery status indicator.
  - c. If the battery capacity is insufficient for the planned period of service: Replace or charge the rechargeable battery (see chapter 5.3.2 Replacing or charging the rechargeable battery)

 It might be required to fully charge the rechargeable battery prior to the first commissioning of the device.

4. Insert filter (see chapter 5.3.3 Replacing the filter).
5. Assembling the carrying system:






- a. Position both connection points of the connection plate on the fan unit sockets. Ensure that the arrows on the belt and the rear of the fan unit go together.
  - b. Push down connection plate until it snaps audibly into place.
6. Attach accessories if applicable:
    - ▶ Attach comfortable padding to the standard belt with the press studs.
    - ▶ If needed, the belt extension is attached to the belt buckle.

 For any other accessories refer to the enclosed assembly instructions.

7. Donning the device:
  - a. Adjust the carrying system belt to approximately the correct circumference.





- b. Put on belt and close buckle. The device is located on the back of the user.
  - c. Tighten belt and fasten protruding ends with clips on ends of the belt.
8. Connecting the facepiece:
- a. Connect the plug-in connector of the breathing hose to the fan unit.
  - b. Connect the other end of the breathing hose to the facepiece.
9. Switch on the fan unit by pushing the  button on the control panel for approx. 2 seconds.
- ⇒ The device performs a self-test. If the device does not work properly or warning devices are triggered, eliminate the fault (see chapter 4 Troubleshooting).
10. Don the facepiece (see Instructions for Use of the corresponding facepiece).
11. Adjust the volume flow as desired using the  and  buttons.

### 3.3 During use

**⚠ WARNING**  
Health hazard

- ▶ Leave the danger zone immediately in case of:
    - Decreasing or interrupted air supply (e.g. after fan failure). In the hood/helmet/protective visor facepiece type, carbon dioxide can quickly build up or lack of oxygen may occur. Noxious ambient air may also penetrate the hood.
    - Odour or taste developing in the facepiece (filter break). The residual capacity of the gas filter or the gas filter components of the combination filter are exhausted.
    - Drowsiness, dizziness, or other complaints
    - Damage to the equipment
    - Displayed alarms
- Breathing hoses or other components involve the risk of getting caught. This may damage the device and interrupt the air supply!  
Handle the device with care.  
Breathing in during heavy work while wearing the hood/helmet/protective visor facepiece type may result in negative pressure and the penetration of unfiltered ambient air!  
Increase the flow rate to prevent this from happening.

#### 3.3.1 Adjusting the flow rate

If necessary (e.g. during increased physical exertion), the flow rate must be adjusted during operation using the  and  buttons.

#### 3.3.2 Warnings and alarms

If a warning appears, leave the working area promptly in view of the potentially hazardous situation.


Lower the flow rate to increase the period of service if a warning appears. (Only possible if the lowest level has not already been chosen.) By lowering the flow rate, you can, for example, extend the battery runtime.

If an alarm is triggered, leave the working area immediately without any delay.

Check the function of the device after a warning or alarm has been triggered.




### 3.4 After use

Do the following:

1. Leave the hazardous area.
2. Remove the facepiece (see Instructions for Use of the corresponding facepiece).
3. Switch off the fan unit by pushing the  button on the control panel for approx. 2 seconds.
4. Open the carrying system belt and take off the device.
5. Clean and disinfect the device (see chapter 5.2 Cleaning and disinfecting).





## 4 Troubleshooting

### 4.1 Warnings


Fault	Cause	Remedy
 A segment of the battery status indicator is flashing yellow.	The residual run-time of the rechargeable battery is low (< 30 minutes).	Recharge the battery soon or replace with fully charged battery.
 A segment of the particle filter residual capacity indicator is flashing yellow.	The particle filter residual capacity is low (< 20 %).	Change particle or combination filter soon.
 A segment of the flow rate indicator is flashing yellow.	Malfunction during switch-on (e.g. caused by missing hose or filter).	Re-check the device function and prepare for use.

### 4.2 Alarms

#### 4.2.1 Fan unit

Fault	Cause	Remedy
 A segment of the battery status indicator is flashing red.	The residual run-time of the rechargeable battery is almost exhausted (< 10 minutes)	Recharge the battery or replace with fully charged battery.
 A segment of the particle filter residual capacity indicator is flashing red.	The particle filter residual capacity is almost exhausted (< 10 %)	Change particle or combination filter.
 A segment of the flow rate indicator is flashing red.	Faulty breathing air supply during operation (e.g. caused by missing hose, filter or kinked hose).	Re-check the device function and prepare for use.
 One segment at a time is flashing red.	General system error	Device must be checked by Dräger Service.

### 4.2.2 Standard battery charger

Fault	Cause	Remedy
 Status LED is flashing red.	General error or defect	Re-insert the rechargeable battery in the battery charger. If the error occurs repeatedly have Dräger Service check the battery charger and rechargeable battery.

## 5 Maintenance

### 5.1 Maintenance intervals

Work to do	Annually	Every 2 years
Clean and disinfect the device		X <sup>1)</sup>
Visual inspection		X <sup>1)</sup>
Replacing the O-ring at plug-in or bayonet-type hose connector	X	

1) for gas-tight packed devices, otherwise every 6 months

### 5.2 Cleaning and disinfecting

#### CAUTION

##### Health hazard

The undiluted agents are damaging to health if they come into direct contact with the eyes or skin.

- ▶ Wear safety goggles and protective gloves when working with these agents.

#### NOTICE

##### Potential damage to components

- ▶ Only use the prescribed processes and the cleaning and disinfection agents specified for cleaning and disinfecting. Other agents, methods, dosages and contact times may damage the components.

#### 5.2.1 Clean and disinfect the device

- Dismantling the device:
  - Separate breathing hose, facepiece and fan unit from each other.
  - Disconnect the carrying system from the fan unit.
  - If available, dismantle any accessories (e.g. hose and device sleeves).
  - Dismantle the splash guard cover and filter (see chapter 5.3.3 on page 12).
- Clean the facepiece according to the appropriate Instructions for Use.
- Cleaning the breathing hose and carrying system:

- Clean all parts with luke-warm water using Sekusept® Cleaner<sup>1)</sup> and a soft cloth (temperature: max. 30 °C, concentration depending on contamination: 0.5 - 1 %).
  - Rinse all parts thoroughly under running water.
  - Prepare a disinfectant bath of water and Incidin® Rapid<sup>2)</sup> (temperature: max. 30 °C, concentration: 1.5 %)
  - Place all parts to be disinfected into the disinfectant bath (duration: 15 minutes).
  - Rinse all parts thoroughly under running water.
  - Allow all parts to air-dry or dry them in the drying cabinet (temperature: max. 60 °C). Keep away from direct sunlight.
- Clean and disinfect fan unit and splash guard cover using Incides® N disinfectant cloths\*.

In cases of strong contamination, the fan unit can be rinsed under running water as follows.

- Make sure the rechargeable battery remains inserted. Water must not enter the battery compartment.
- Close suction inlet and tube connection with plug (available as accessories).

### 5.3 Maintenance work

#### 5.3.1 Visual inspection

Check all parts thoroughly and replace damaged parts if necessary. In particular, check the filter sealing surface and O-rings of the fan unit for damage (e.g. scratches) or contamination.

#### 5.3.2 Replacing or charging the rechargeable battery

#### WARNING

##### Explosion, fire or chemical hazard!

- ▶ Do not remove, insert or charge rechargeable batteries in potentially explosive or flammable environments.
- ▶ Keep rechargeable batteries away from sources of heat.
- ▶ Do not short-circuit the rechargeable battery contacts.
- ▶ Only use recommended rechargeable batteries.

Removing the rechargeable battery:

- Fold up carrying system if necessary.
- Push battery lock button. Ensure that the rechargeable battery does not fall down.
- Remove rechargeable battery.

Inserting the rechargeable battery:

- Fold up carrying system if necessary.
- Position the two lower connection points of the rechargeable battery at an angle in the battery compartment sockets.
- Fold the rechargeable battery in until it snaps audibly into place.

1) Sekusept® and Incides® are registered trademarks of Ecolab Deutschland GmbH.  
2) Incidin® is a registered trademark of Ecolab USA Inc.



**i** Always disconnect the charger from the power supply if not in use.

The standard rechargeable battery (EX) and the long-life rechargeable battery (EX) may only be charged using the Dräger X-plore 8000 standard charger (order no. R59780).

Charging the battery:

1. Check to make sure that voltage of mains supply is correct. The operational voltage of the power supply unit must match the mains supply voltage.
2. Connect charger to power supply unit.
3. Connect the power supply unit to the mains supply.
4. First position the rechargeable battery at an angle in the charger and then fold it in until it snaps audibly into place.
5. Wait for the end of the charging process.
6. When the rechargeable battery is fully charged, push the battery lock button and remove the battery.
7. Disconnect the power supply unit and charger from the mains supply.

### 5.3.3 Replacing the filter

#### ⚠ WARNING

**No protection without filter!**

- ▶ Do not use the device without filter.

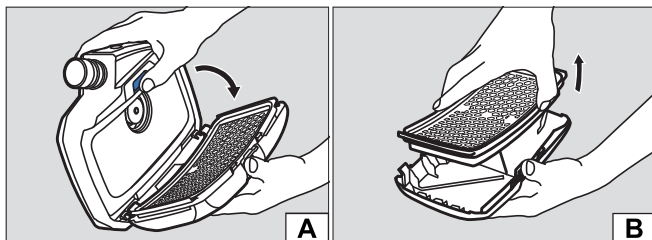
#### ⚠ CAUTION

**Damage to fan unit due to penetration of particles!**

- ▶ Make sure when you remove the filter that no particles enter the device through the suction inlet.

**i** The filter changing process may differ depending on the filter type used.

#### Particle filter



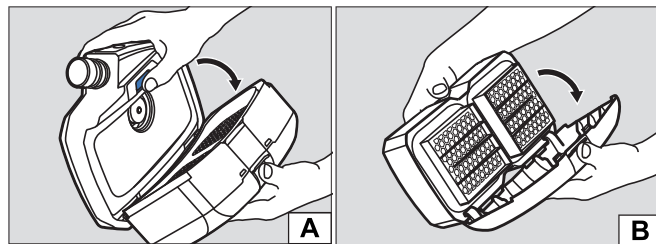
Removing the filter:

1. Push filter lock button.
2. Fold out splash guard cover with filter (Figure A).

Remove used filter (Figure B). Inserting the filter:

1. Check rubber seal on filter for damage.
2. Insert new filter into splash guard cover so that the filter is firmly seated in the splash guard cover.
3. Hook the two lower connection points of the splash guard cover at an angle into the fan unit sockets.
4. Fold splash guard cover in until it audibly snaps into place at the filter lock button.

#### Gas or combination filter





Removing the filter:

1. Push filter lock button.
2. Fold filter with splash guard cover out (Figure A).
3. Dismantling the splash guard cover:
  - a. Press on the centre of the upper splash guard cover edge until it snaps out.
  - b. Fold out splash guard cover (Figure B).

Inserting the filter:

1. Check rubber seal on filter for damage.
2. Place splash guard cover with its lower edge at an angle on the filter.
3. Push on splash guard cover until it snaps audibly into place.
4. Hook the two lower connection points of the filter at an angle into the fan unit sockets.
5. Fold filter in until it audibly snaps into place at the filter lock button.

### 5.3.4 Checking the flow rate and warning devices

1. Make sure that a filter is inserted.
2. Connect the plug-in connector of the breathing hose to the fan unit.
3. Switch on the fan unit by pushing the  button on the control panel.
  - ⇒ After it is switched on, the device performs a self-test. If the device does not work properly or warning devices are triggered, eliminate the fault.
4. Cover the open end of the breathing hose with the palm of your hand.
  - ⇒ The fan unit starts operating more intensively after about 5 seconds. An alarm is triggered after about 20 seconds. Have the fan unit checked if the fan speed remains unchanged and no alarm is triggered.
5. If you wish, you can switch off the fan unit by pushing the  button on the control panel once again.

### 5.3.5 Replacing the O-ring at plug-in or bayonet-type hose connector

1. Use the O-ring removal tool to lift the old O-ring out of the groove.
2. Insert new O-ring in the provided groove.

## 6 Transport

Transport in the original packaging or in optionally available transport box.

## 7 Storage

Storing the whole system:

- Remove filter and rechargeable battery.
- Dry the components in a container or cabinet. Store them dry and clean and protect them from direct sunlight and thermal radiation.

Storing rechargeable batteries:

- Deeply discharged batteries may get damaged after prolonged storage. Charge the rechargeable batteries to 50 to 70 % prior to storage.
- If storage lasts for over 6 months, charge the rechargeable batteries intermittently.
- Do not store rechargeable batteries for prolonged periods outside the recommended temperature range. This might reduce the remaining capacity and number of potential charge cycles.

## 8 Disposal



This product must not be disposed of as municipal waste. It is therefore marked with the adjacent symbol. This product can be returned to Dräger free of charge. Please contact your national Dräger Sales Organisation or Dräger for more information.



Batteries and rechargeable batteries must not be disposed of as municipal waste. They are therefore marked with the symbol on the left. Collect batteries and rechargeable batteries according to local regulations and dispose of at battery collection centres.

## 9 Technical data

### 9.1 Overall system

Flow rate of respiratory protective device/helmet/visor:	170/190/210 L/min
Flow rate of half/full face mask:	115/130/145 L/min
Rated period of service:	4 hours with standard rechargeable battery 8 hours with long-life rechargeable battery
Operating temperature <sup>1)2)</sup>	-10 °C to +60 °C
Working and storage area humidity <sup>1)</sup>	≤ 95 % relative humidity
Storage temperature <sup>1)</sup>	-20 °C to +60 °C
Noise:	approx. 64 dB(A)
International Protection Code	IP 65

1) Battery charger and rechargeable batteries, see separate information in this chapter. Other components, see corresponding instructions for use.

2) For X-plore 8700 -10 °C to +50 °C.

#### RFID

Technology	Induction transfer
Frequency range	13553 to 13567 kHz

Broadcast transmission capacity	-2.30 dBμA/m (10 m)
---------------------------------	---------------------

#### Bluetooth

Technology	FHSS 2.4 GHz (BT 2.1 + EDR)
Frequency range	2402.0 to 2483.5 MHz
Broadcast transmission capacity	0.97 mW / -0.14 dBm EIRP

### 9.2 Rechargeable batteries

Operating temperature <sup>1)</sup>	-10 °C to +60 °C
Operating/storage area humidity:	≤ 95 % relative humidity
Storage temperature	-20 °C to +50 °C
Charging temperature:	0 °C to +50 °C

1) For rechargeable batteries for X-plore 8700 in explosion-hazard areas -10 °C to +50 °C.

#### Standard rechargeable battery

Charging time:	< 4 hours
Operational life time after a full charge	approx. 4 hours <sup>1)</sup>
Rated voltage	10.8 V
Rated capacity:	3.35 Ah
Stored energy	36 Wh

1) Varies depending on the preset flow rate and the employed filter and facepiece type

#### Long-life rechargeable battery

Charging time:	< 4 hours
Operational life time after a full charge	approx. 8 hours <sup>1)</sup>
Rated voltage	10.8 V
Rated capacity:	6.70 Ah
Stored energy	72 Wh

1) Varies depending on the preset flow rate and the employed filter and facepiece type

### 9.3 Standard battery charger

Input voltage	16 V
Input current:	3,75 A
Output voltage:	9 - 12.6 V
Output current:	4 A
International Protection Code	IP 30
Operating temperature	0 °C to 50 °C
Operating/storage area humidity:	≤ 95 % relative humidity
Storage temperature	-20 °C to 50 °C

## 10 Component list

The positions in the component list correspond to the figures in the top row of the configuration matrix at the end of these instructions for use.

### Components

Position	Name	Order no.
1	Dräger X-plore 8500 fan unit	<b>4810000</b>
2	Dräger X-plore 8700 (EX) fan unit	R59550
3	Dräger X-plore 8000 standard rechargeable battery	<b>4810012</b>
4	Dräger X-plore 8000 standard rechargeable battery (EX)	R59575
5	Dräger X-plore 8000 long-life rechargeable battery	R59585
6	Dräger X-plore 8000 long-life rechargeable battery (EX)	R59595
7	Dräger X-plore 8000 standard charger	<b>4810014</b>
8	Dräger X-plore 8000 standard hood, short (S/M)	<b>4810034</b>
9	Dräger X-plore 8000 standard hood, short (L/XL)	R59810
10	Dräger X-plore 8000 standard hood, long (S/M)	<b>4810036</b>
11	Dräger X-plore 8000 standard hood, long (L/XL)	R59830
12	Dräger X-plore 8000 premium hood, short (S/M)	<b>4810039</b>
13	Dräger X-plore 8000 premium hood, short (L/XL)	R59850
14	Dräger X-plore 8000 premium hood, long (S/M)	<b>4810038</b>
15	Dräger X-plore 8000 premium hood, long (L/XL)	R59870
16	Dräger X-plore 8000 helmet with visor, black	R58325
17	Dräger X-plore 8000 helmet with visor, white	R59910
18	Dräger X-plore 8000 protective visor	R59900
19	Dräger X-plore 8000 welding protective visor with ADF 5 - 13	R59940
20	Dräger X-plore 6300 EPDM/PMMA	R55800
21	Dräger X-plore 6530 EPDM/PC	R55795
22	Dräger X-plore 6570 SI/PC	R55790
23	Dräger X-plore 4740 SI S/M	R55875
24	Dräger X-plore 4740 SI M/L	R55874
25	Dräger FPS 7000 EPDM-S1-PC-CR	R56502
26	Dräger FPS 7000 EPDM-M2-PC-CR	R56310
27	Dräger FPS 7000 EPDM-L2-PC-CR	R56503
28	Dräger X-plore 8000 standard hose (for half/full face masks)	R59630

Position	Name	Order no.
29	Dräger X-plore 8000 standard hose (for hoods)	<b>4810028</b>
30	Dräger X-plore 8000 standard hose (for helmets and visors)	R59640
31	Dräger X-plore 8000 flexible hose (for half/full face masks)	R59610
32	Dräger X-plore 8000 flexible hose (for hoods)	<b>4810029</b>
33	Dräger X-plore 8000 flexible hose (for helmets and protective visors)	R59650
34	Dräger X-plore 8000 standard belt	<b>4810016</b>
35	Dräger X-plore 8000 belt, decontaminable	R59710
36	Dräger X-plore 8000 Welding belt	R59720

### Accessories

Position	Name	Order no.
37	Dräger X-plore 8000 comfortable padding	R59730
38	Belt extension for X-plore 8000 standard belt, 35 cm	R59750
39	Belt extension for X-plore 8000 belt, decontaminable, 35 cm	R59760
40	Dräger X-plore 8000 Neck strap system, all belts	<b>4810018</b>
41	Dräger X-plore 8000 Hose cover, disposable	R59670
42	Dräger X-plore 8000 Hose cover, spark protection	R59660
43	Dräger X-plore Tyvek <sup>®</sup> protective hood <sup>1)</sup>	R55354
44	Dräger X-plore 8000 Prefilter	<b>4810020</b>
45	Dräger X-plore 8000 Odour filter	6739605

1) Tyvek<sup>®</sup> is a registered trademark of E.I. Du Pont de Nemours and Co.