

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 recommend 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 X-plore 9500 (Fig A) is a belt mounted manifold that is used to connect an external breathing air supply (an airline) to a mask. The manifold has an input connector (4) to connect the airline, and has an output at a mask adaptor (1) to connect the mask.

During use, a pressure reducer inside the manifold supplies a continuous flow of air from the airline to the mask. This air flow is within the safe limits required at the mask. An excess flow valve inside the mask adaptor releases excess air continuously during use to maintain the correct air pressure inside the mask. The pressure reducer has an adjustable flow control valve (2) which allows the wearer to adjust the air flow within preset limits.

The whistle (3) is a low input pressure warning device. The whistle sounds during use to alert the wearer if the breathing air supply falls below the pressure required to provide adequate breathing air.

The X-plore 9500 is used with a compatible Dräger face mask from the FPS 7000, X-plore 6000 or Panorama Nova series of masks (the Dräger X-plore 6300 mask is shown). The compatible Dräger masks are classified as Class 4B according to EN 14594:2018. For a full description of the mask see the Instructions for Use supplied with the product.

Radio-frequency identification (RFID) is an option available for this product to allow electronic asset management and tracking using a radio-frequency reader. When fitted, the passive RFID tag is positioned inside the manifold casing.

2.1.1 Breathing air supply

The breathing air supply (airline supply) is an external source of breathing air from an air cylinder or compressor arrangement capable of supplying the specified air quality, pressure and flow rates (see Section 3.1 for details).

2.2 Intended use

The X-plore 9500 is intended for use with approved Dräger compressed airline breathing equipment to provide respiratory protection against the effects of harmful substances. The equipment is intended to be used as an airline respirator at a work area.

The compressed airline breathing equipment and other accessories used with this product must be certified Dräger components, assembled in an approved configuration; otherwise the operation of the device may be impaired. Contact Dräger for further information.

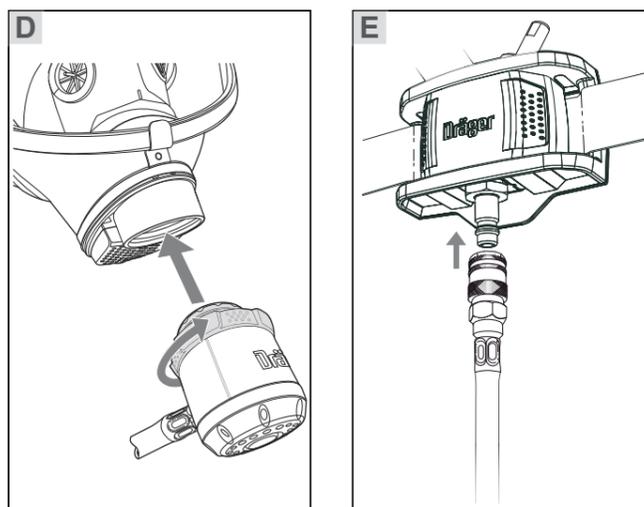
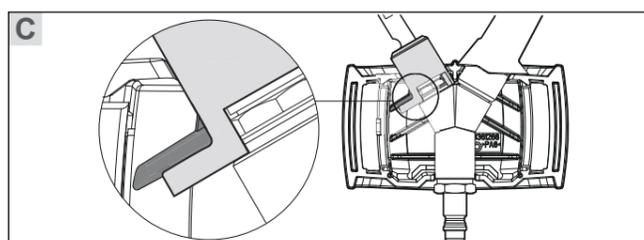
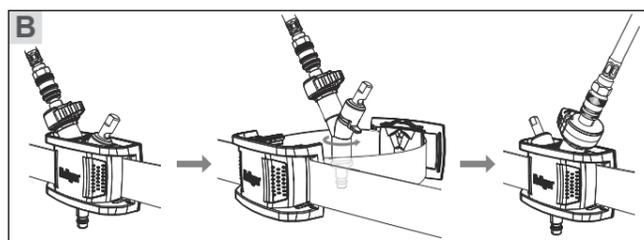
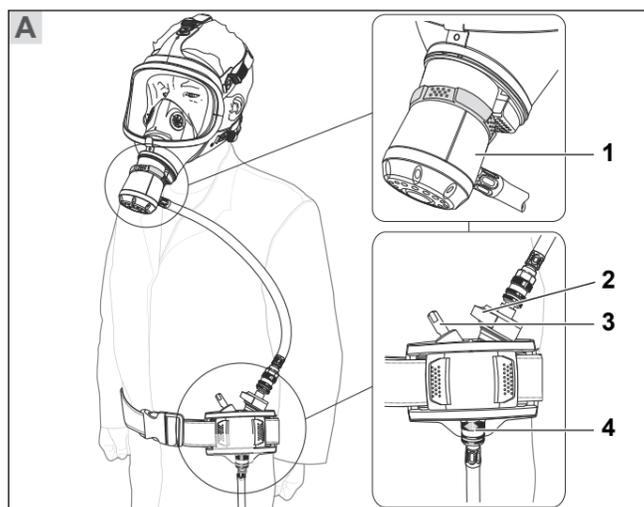
Use in potentially explosive atmospheres

The X-plore 9500 is type tested as suitable for use in potentially explosive atmospheres. Electronic sub-assemblies are ATEX certified. The combinations are suitable for use in hazardous areas up to and including zone 0 and zone 20. The product temperature class is T6 unless a passive RFID tag is fitted in which case the temperature class is T4. The combinations can be used in atmospheres containing gases of the gas explosion group IIB.

The air supply must be located:

- In zone 1 if flammable gasses of class IIA are present.
- In zone 2 if flammable gasses of classes IIA, IIB, or IIC are present.

There is no restriction for use in areas containing flammable dust.



2.3 Limitations on use

This product is not approved for use in CBRN (chemical, biological, radiological and nuclear) applications.

2.4 Approvals

The European standards, guidelines, and directives according to which this product is approved are specified in the declaration of conformity (see www.draeger.com/product-certificates).

PED important note: The X-plore 9500 is designed for use with airline breathing-air supply systems only and is classified as safe and suitable for use under the PED regulations – category SEP (Sound Engineering Practice). The equipment cannot be certified to PED regulations.

2.5 Marking and symbols

The product type is indicated on the label on the manifold casing, and the product serial number is marked on the body of the manifold.

Marking on the air supply hose indicates that the hose is heat resistant (H) and/or antistatic (S).

3 Use

3.1 Breathing air supply

WARNING

The quality of the air supply shall meet the requirements for breathing air according to EN 12021 in EU countries, or AS/NZS 1715:2009 in Australia and New Zealand. Do not use oxygen or oxygen-enriched air. The moisture content of breathing air should be controlled within the specified limits in the standard to avoid freezing the equipment.

Carry out a risk assessment of the workplace to ensure that it is not possible to connect to any air supply other than breathable air (e.g. Nitrox).

WARNING

Adequate protection may not be provided by the equipment in certain highly toxic atmospheres.

The user must ensure that the capacity of the air supply system is sufficient for every user connected to it. The user must also ensure that they can retreat safely if the supply from the airline fails.

Use a breathing air cylinder arrangement with a pressure reducer, or a fixed or mobile compressor with a suitable filtration and air heating or cooling system. Ensure that the air supply meets the air quality requirements, and complies with the following pressure and flow requirements:

- Input pressure 3.3 to 10 bar
- Input flow 350 to 1200 litres/minute

The equipment can be safely operated with an input pressure as low as 3.0 bar at the manifold input connector. If the pressure at the manifold falls below 3.3 bar there could be a small inaudible airflow from the whistle.

The maximum number of users that can be connected simultaneously to Dräger breathing air supply equipment is specified in the supply equipment Instructions for Use.

It must be possible to move the air supply around a hazardous area if using a breathing air cylinder arrangement. Conductive floors are mandatory in zone 1 and zone 21 if flammable dusts with a minimum ignition energy of less than 10 mJ are present.

3.1.1 Compressed air supply hose

- Ensure that the airline coupling is compatible with the product input coupling. The standard input coupling is a Rectus 96 Series or CEJN-type male quick coupling (other couplings are available from Dräger).
- The maximum working pressure of the Dräger compressed air supply hose is 30 bar.
- Ensure that supply hoses with a total length greater than 50 m have an appropriate earth connection.

EU countries

When using Dräger approved hose: a maximum of 100 m of hose may be used, and no more than four individual hoses (a maximum of five hose connections) are permitted in the airline.

Australia and New Zealand

Approved hoses must be used for the AS/NZS approval standard to be valid. Hoses from 5 to 30 m or coupled to 90 m may be used.

3.1.2 Compressed air supply hose pressure drop

Using extension hoses causes a pressure drop between the breathing air supply and the manifold. The pressure from the breathing air supply must therefore be increased accordingly to compensate for any pressure drop due to the length of hose used. The table below shows the pressure required at the breathing air supply to ensure that the minimum pressure of 3.3 bar is available at the manifold input connector.

Hose length in metres	Pressure in bar	Hose length in metres	Pressure in bar
1–10	3.8	51–60	6.3
11–20	4.3	61–70	6.8
21–30	4.8	71–80	7.3
31–40	5.3	81–90	7.8
41–50	5.8	91–100	8.3

This table is only applicable when using Dräger approved hose. When using hose from any other manufacturer, the minimum input pressure of 3.3 bar must be supplied at the manifold input connector.

3.2 Preparation for use

3.2.1 Preparing the product

The manifold can be worn on the left or right side. To swap sides, loosen the belt, remove the backplate if fitted and rotate the manifold (Fig B). When reassembling, ensure that the lip of the whistle cover sits under the rib in the manifold bracket (Fig C). Ensure that the position of the manifold on the waist allows full head movement without pulling the hose, and that the hose will not present a snag hazard.

1. Carry out a visual inspection (see Section 5.2).
2. Put on the belt and adjust as necessary. Ensure that the X-plore 9500 is fitted tightly against the body.
3. Connect the mask adaptor to the mask (Fig D).

WARNING

Correct fit of a mask can only be achieved if the complete mask seal makes contact with skin. Head hair, facial hair (including beard stubble and sideburns), earrings, other facial piercings and normal spectacles will interfere with the mask seal and are not permitted in the sealing area. Additionally, head hair that could affect the face mask fit (buns, pony-tails, hairpieces, etc.) is not permitted.

4. Set the control knob to the minimum flow position (Fig F).
5. Connect the airline supply to the input coupling (Fig E). The whistle will sound briefly as the pressure increases.
6. Ensure that the pneumatic hoses are not kinked or compressed by clothing or equipment.
7. Put on the mask (see the Instructions for Use supplied with the mask).
8. Take several deep breaths to ensure that sufficient air is available and then breathe normally.

3.3 During use

NOTICE

The excess flow valve in the mask adaptor releases air continuously during use to maintain the correct air pressure inside the mask. This is normal operation for the X-plore 9500.

Where hearing protection or sound attenuation communications equipment is used, consider the reduction in audibility of the whistle.

Flow control valve: Set the control knob to the minimum flow position at the start of the task (Fig F). Use the knob to adjust the air flow as necessary to suit your work intensity.

Whistle: If the whistle sounds, immediately cease the work activity and leave the hazardous area by the shortest and safest route. Do not disconnect the airline supply from the manifold. Remove the mask as soon as it is safe to do so.

3.3.1 In potentially explosive atmospheres

WARNING

Do not use or store the equipment near processes that produce a charge.

Do not use the equipment unless conductive parts of the equipment have an appropriate earth connection via the wearer.

Do not use materials in combination with the equipment that influence the properties of the product.

3.4 After use

WARNING

Do not remove the equipment until you are in a safe breathing environment.

1. Remove the mask (see the Instructions for Use supplied with the mask).
2. Disconnect the airline supply from the input coupling if connected.
3. Disconnect the mask adaptor from the mask.
4. Open the waist belt buckle and remove the equipment.
5. Carry out the after use maintenance tasks in the maintenance table (see Section 5.1).

4 Troubleshooting

The table shows fault diagnosis and repair information for product users. Further troubleshooting information is available in Instructions for Use supplied with associated equipment (e.g. the mask or air supply equipment).

Contact service personnel or Dräger if the symptom remains after the remedy actions have been attempted.

Symptom	Fault	Remedy
Air leak	Loose or dirty connector	Disconnect, clean and reconnect couplings and retest
	Faulty hose or component	Substitute user replaceable items and retest
	Leak from face mask (other than normal air release from the excess flow valve)	See the Instructions for Use supplied with the mask
Whistle sounding (insufficient air flow to the wearer)	Air supply restricted	Remove any kinks or restrictions from the hoses
	Faulty hose or component	Substitute user replaceable items and retest
	Input filter blocked	Contact service personnel or Dräger
Excessive leakage from the excess flow valve	Faulty valve	Contact service personnel or Dräger
Inoperative or poor sounding whistle	Dirty whistle or whistle cover	Clean the whistle flute and cover as necessary
	Faulty activation mechanism	Contact service personnel or Dräger
Mask visor fogs up	Blocked exhalation valve	See the mask Instructions for Use

5 Maintenance

5.1 Maintenance table

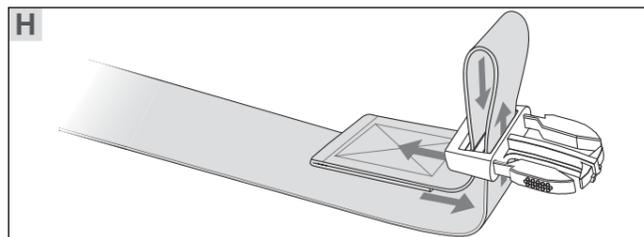
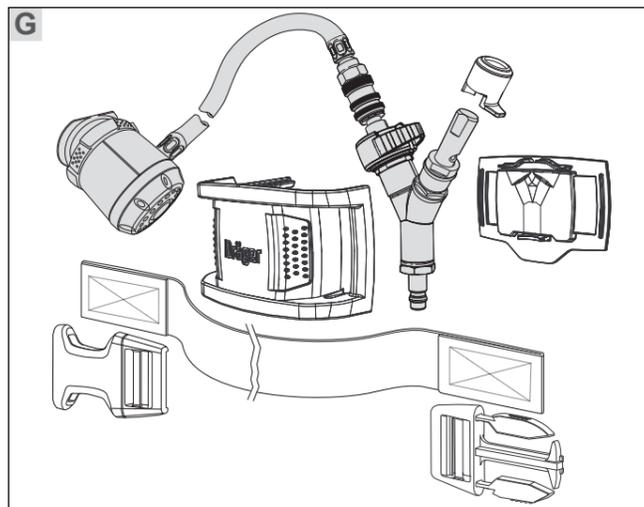
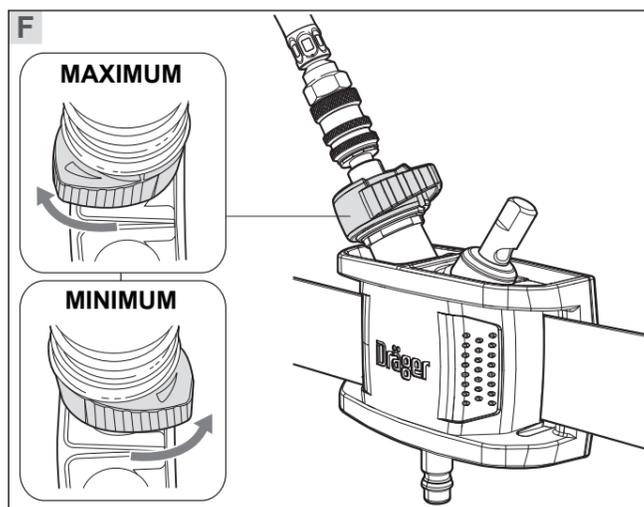
Dräger recommend that regular inspection, testing and servicing of the breathing equipment is carried out in accordance with the table below. The table applies also to out-of-use (stored) equipment. Record all maintenance in the equipment log book. See also the maintenance information for all equipment used (mask, etc.). Additional inspection and testing may be required in the country of use to ensure compliance with national regulations.

Task	Before use	After use	Every year
Visual inspection (see Section 5.2)	○	○	
Clean and disinfect (see Section 5.3)		○	
Functional test (see Note 1)			○

Notes

○ Dräger recommendations

- 1 This maintenance task may only be carried out by Dräger or trained service personnel. Details of the test are contained in the technical manual which is issued to service personnel that have attended a relevant Dräger maintenance course.



5.2 Visual inspection

Carry out a visual inspection, checking the full breathing equipment including all component parts and accessories. Check that the equipment is clean and undamaged, paying particular attention to pneumatic components, hoses and connectors. Typical signs of damage that may affect the operation of the breathing equipment include impact, abrasion, cutting, corrosion and discoloration. Report damage to service personnel and do not use the equipment until faults are rectified.

5.3 Cleaning and disinfecting

CAUTION

Do not exceed 60 °C for drying, and remove components from the drying facility immediately when dry. Drying time in a heated dryer must not exceed 30 minutes.

Do not immerse pneumatic or electronic components in cleaning solutions or water. Contact Dräger for information about additional cleaning methods for heavily soiled parts if required.

If water is trapped and then freezes inside the pneumatic system of the breathing equipment, operation will be impaired. Prevent any liquid from entering, and thoroughly dry the breathing equipment after cleaning to prevent this from occurring.

Always clean Dräger X-plore equipment in a well ventilated room or outdoors. There may be deposits of harmful substances in parts of the equipment.

For information about suitable cleaning and disinfecting agents and their specifications refer to document 9100081 on www.draeger.com/IFU.

Refer also to the instructions for use for the mask and other associated equipment.

- Use only clean lint-free cloths

1. Clean the breathing apparatus manually using a cloth moistened with cleaning solution to remove excess dirt.
 - Disassemble and clean the parts separately if required. Fig G shows the parts disassembled and Fig H shows the belt routing through the buckle during re-assembly to ensure that the belt can be tightened.
2. Apply disinfecting solution to all internal and external surfaces.
3. Rinse all components thoroughly with clean water to remove all cleaning and disinfecting agents.
4. Dry all components using a dry cloth, in a heated dryer or in air.
5. Contact service personnel or Dräger if disassembly of pneumatic or electronic components is required.

6 Storage

Ensure that the storage environment is dry, free from dust and dirt, and does not subject the equipment to wear or damage due to abrasion. Do not store the equipment in direct sunlight. Route hoses in such a way that the bend radius is not too acute and the hose is not stretched, compressed or twisted.

See the storage temperature ranges in the technical data (Section 8).

7 Disposal

The product life is 10 years from the first use. When required, dispose of the product in accordance with national or local regulations for waste disposal.

8 Technical data

Weight (manifold and belt)	< 0.5 kg
Belt size (standard belt)	38 mm x 750–1450 mm
Belt size (large belt)	38 mm x 750–1950 mm
Mask adaptor	Rd 40 thread
Whistle volume	>90 dB(A)
Input pressure	2.8 to 10 bar
Input flow	350 to 1200 litres/minute
Operating temperature	-10 to +60 °C
Storage temperature	-15 to +40 °C