

1 Safety-related information

- Before using this product, carefully read the Instructions for Use and those of the associated products.
- 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 authorized 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. The warranty may be void if repair, modification or alteration is made to the product by any individual or entity other than Dräger or its authorized representatives.
- Properly trained authorized 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.
- Before occupational use of this respirator a written respiratory protection program must be implemented meeting all the local government requirements. In the United States employers must comply with OSHA 29 CFR 1910.134 which includes medical evaluation, training, and fit testing.



These instructions for use can be downloaded in electronic form in other languages in the Technical Documentation database (www.draeger.com/ifu).

2 Conventions in this document

2.1 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.

2.2 Trademarks

Trademark	Trademark owner
X-plore®	Dräger

The following webpage lists the countries in which Dräger's trademarks are registered: www.draeger.com/trademarks.

3 Description

3.1 Product overview

The Dräger X-plore® 9300 (see Fig 1) is a continuous-flow supplied airline respirator (SAR). The product has a belt mounted manifold that is used to connect an external breathing air supply (an airline) to an item of headgear worn by the user. The manifold has an input connector (see Fig 1, item 5) to connect the airline and has an output connector (see Fig 1, item 4) to connect the headgear using a corrugated hose (see Fig 1, item 3) with a quick coupling on either end.

During use, a pressure reducer inside the manifold supplies a continuous flow of air from the airline to the headgear. This air flow is within the safe limits required at the headgear. The X-plore® 9300 is available with an adjustable flow control valve (see Fig 1, item 2). The flow control valve allows the wearer to adjust the air flow within preset limits.

The warning whistle (see Fig 1, item 1) is a low input pressure warning device which 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® 9300 is used with Dräger X-plore 8000 headgear including hoods and protective helmets. For a full description of the headgear 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 RFID tag is positioned inside the manifold casing.

3.1.1 Breathing air supply

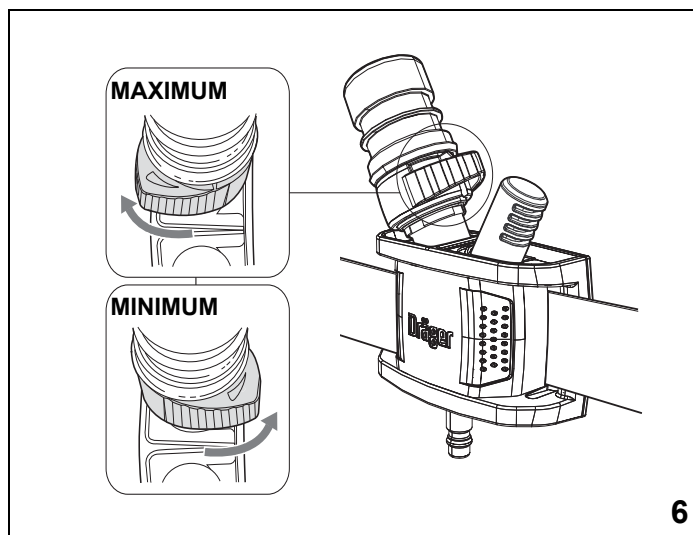
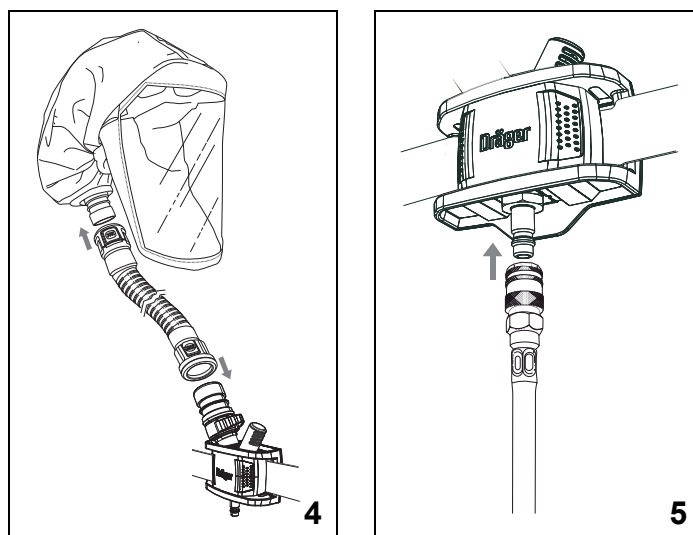
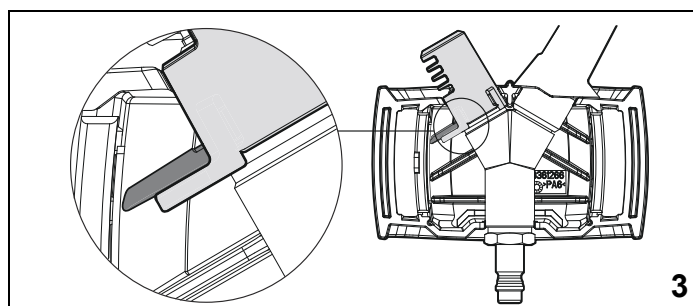
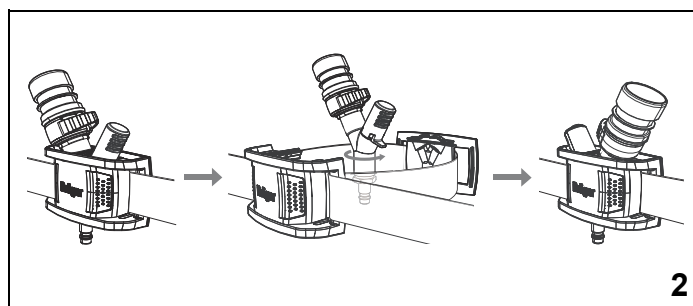
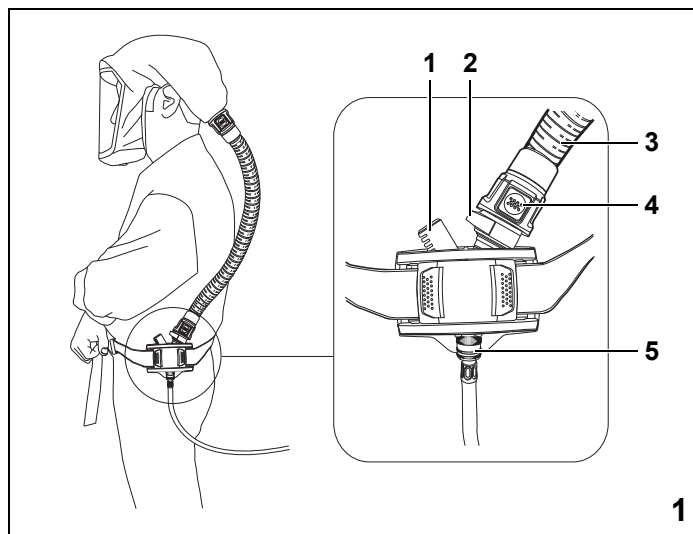
The breathing air supply (airline supply) is an external source of breathing air capable of supplying the specified air quality, pressure and flow rates (see Section 4.1 for details).

3.2 Intended use

The X-plore® 9300 is an approved Dräger supplied airline respirator which is intended to provide respiratory protection against the effects of harmful substances. The equipment is intended to be used only for airline applications.

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.

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



3.3 Limitations on use

This product is not suitable for use in IDLH (immediately dangerous to life and health) atmospheres, and is not approved for use in CBRN (chemical, biological, radiological and nuclear) applications.

3.4 Approvals

The Dräger X-plore® 9300 airline respiratory protection equipment conforms to the 19C requirements of NIOSH. The product is approved for use as a supplied airline respirator (SAR) system, and must only be used in the Dräger configurations approved by NIOSH.

For further information, see Notes on Approval (part number 9300778).

3.5 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).

4 Use

4.1 Breathing air supply



WARNING

The quality of the air supply shall meet the requirements for breathing air according to CGA G-7.1, Grade D or higher quality. 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).

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.

Ensure that the air supply meets the air quality requirements, and complies with the following pressure and flow requirements:

- Input pressure The minimum input pressure depends on the hose length and number of couplings in line. Insufficient pressure supply is indicated by the warning whistle (see Fig 1, item 1). Do not exceed an input pressure of 125 psi.
- Input flow 200 to 1200 liters/minute (to provide the full range of the flow control valve, a minimum of 350 liters/minute is required)

4.1.1 Compressed air supply hose

- Ensure that the airline coupling is compatible with the product input coupling. The coupling shown in the illustrations is the CEJN/Rectus type coupling. Other couplings (e.g. Hansen and Schrader) are available from Dräger.
- Airline hose requirements: 5 feet to 300 feet of Dräger approved hose. The airline hose must not be made up of more than 12 individual hoses.
- The maximum working pressure of Dräger compressed air supply hoses is 250 psi.
- Ensure that supply hoses with a total length greater than 150 feet have an appropriate earth connection.

4.1.2 Compressed air supply hose pressure drop



CAUTION

The use of extension hoses leads to a pressure drop between the breathing air supply and the distributor. ► To compensate for the pressure drop caused, increase the pressure of the breathing air supply (e.g. ring line, compressor, etc.) accordingly.

If the warning whistle sounds, it might be that there is a pressure drop due to the individual frame requirements of the breathing air supply. In this case, the pressure must be increased until the warning whistle does not sound anymore.

Observe the maximum allowed pressure of 125 psi.

4.2 Preparation for use

4.2.1 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 (see Fig 2). When reassembling, ensure that the lip of the whistle cover sits under the rib in the manifold bracket (see Fig 3). 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 6.2).
2. Put on the belt and adjust as necessary.
3. Connect the headgear hose to the output coupling and to the headgear (see Fig 4).
4. Connect the airline supply to the manifold input coupling (see Fig 5). The whistle will sound briefly as the pressure increases.
5. Put on the headgear.
6. Ensure that the pneumatic hoses are not kinked or compressed by clothing or equipment.
7. Take several deep breaths to ensure that sufficient air is available and then breathe normally.

4.3 During use



NOTICE

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 6 shows the minimum and maximum positions). Use the knob to adjust the air flow as necessary to suit your work intensity.



WARNING

Air supply failure: If the whistle sounds or the air supply fails, 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 headgear as soon as it is safe to do so.

4.4 After use



WARNING

Do not remove the equipment until you are in a non-hazardous and safe breathing environment.

1. Remove the headgear.
2. Disconnect the airline supply from the input coupling.

3. Disconnect the headgear hose from the output coupling and the headgear inlet.
4. Open the waist belt buckle and remove the equipment.
5. Carry out the after use maintenance tasks in the maintenance table (see Section 6.1).

5 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 headgear or air supply equipment).

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

Symptom	Fault	Remedy
Air leak (if necessary, use a soapy solution to locate the leak)	Loose or dirty connector	Disconnect, clean and reconnect couplings and retest
	Faulty hose or component	Substitute user replaceable items and retest
Whistle sounding or 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 authorized service personnel or Dräger
	Input pressure too low	Increase input pressure
Inoperative or poor sounding whistle	Dirty whistle or whistle cover	Clean the whistle flute and cover as necessary
	Faulty activation mechanism	Contact authorized service personnel or Dräger
Excessive air noise	Faulty or missing silencer in the manifold output coupling	Check that the silencer is fitted and undamaged. Contact authorized service personnel or Dräger if replacement is required
Hood over-inflates or the screen fogs up	Blocked exhalation strip	See the hood Instructions for Use

6 Maintenance

6.1 Maintenance table

Dräger recommends 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 (hood, headgear, 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 6.2)	○	○	
Clean and disinfect (see Section 6.3)		○	
Functional test (see Note 1)			○

Notes

○ Dräger recommendations

- 1 This maintenance task may only be carried out by Dräger or trained and authorized 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.

6.2 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 authorized service personnel and do not use the equipment until faults are rectified.

6.3 Cleaning and disinfecting

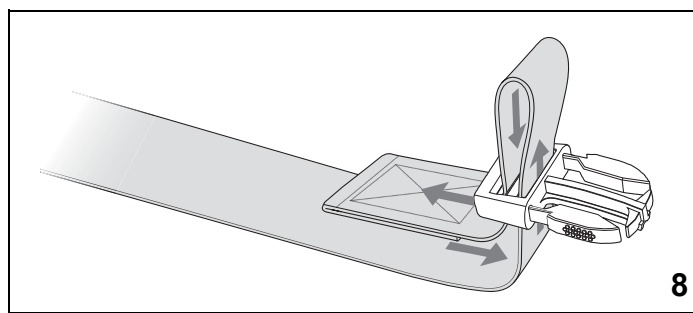
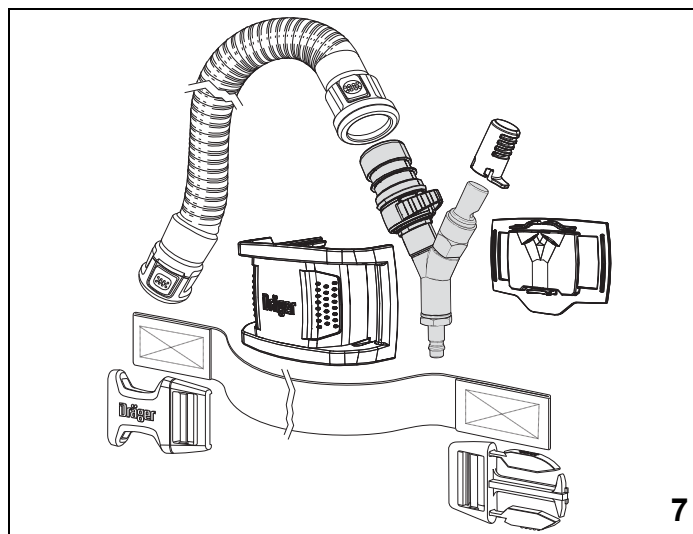


CAUTION

Do not exceed 86 °F (30 °C) for washing, disinfecting and rinsing solutions. Do not exceed 140 °F (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 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.



NOTICE

The X-plore 9300 has a leather belt when it is used with welding headgear. Do not wash the leather belt using the cleaning agents in this section – use a suitable leather cleaning product when required.



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

See also the Instructions for Use for the hood, protective helmet, and other associated equipment.

6.3.1 Manual cleaning of the breathing apparatus

1. Prepare cleaning solution as per manufacturer's instructions. 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 7 shows the parts disassembled and Fig 8 shows the belt routing through the buckle during re-assembly to ensure that the belt can be tightened.
2. Prepare disinfecting solution as per manufacturer's instructions. Apply to all internal and external surfaces, ensuring that all surfaces remain visibly wet for the time specified in 9100081.
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 authorized service personnel or Dräger if disassembly of pneumatic components is required.

7 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 9).

8 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.

9 Technical data

Weight (manifold and belt)	< 1.1 lb (0.5 kg)
Belt size (standard belt)	1 ½ in x 29 ½ -57 in (38 mm x 750-1450 mm)
Belt size (large belt)	1 ½ in x 29 ½ -76 ¾ in (38 mm x 750-1950 mm)
Whistle volume	> 90 dB(A)
Whistle activation	Commences in the range 51 to 36 psi, ceases in the range 25 to 0 psi
Input pressure	The minimum input pressure depends on the hose length and number of couplings in line. Insufficient pressure supply is indicated by the warning whistle (see Fig 1, item 1). Do not exceed an input pressure of 125 psi.
Input flow	200 to 1200 liters/minute (to provide the full range of the flow control valve, a minimum of 350 liters/minute is required)
Donning temperature	+5 °F to +140 °F (-15 °C to +60 °C)
Operating temperature	+15 °F to +140 °F (-9 °C to +60 °C)
Storage temperature	-5 °F to 105 °F (-20 °C to +40 °C)

10 S – Special or critical user's instructions



WARNING

If the whistle sounds or the air supply fails during use, 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 headgear as soon as it is safe to do so.

- The independent air supply must meet the following criteria:
 - Airline pressure and flow requirements: pressure 87 to 125 psi, airflow rate 200 to 1200 liters/minute.
 - Airline hose requirements: 5 feet to 300 feet of Dräger approved hose. The airline hose must not be made up of more than 12 individual hoses.
- The temperature range for donning is between +5 °F and +140 °F (-15 °C to +60 °C).
- The temperature range for use during operation is between +15 °F and +140 °F (-9 °C to +60 °C).
- Lower or higher temperatures are permitted when the exposure time is short.