

SAVER PP SERIES

POSITIVE PRESSURE ESCAPE EQUIPMENT

These instructions for Use apply to the
SAVER PP Series with Serial Number

Dräger safety

Approvals

The Saver PP Series of compressed air respiratory protection escape equipment conform to EN 402 and meet the requirement of EC Council Directive PPE (89/686/EEC), PED (97/23/EC) and MED (96/98/EC).

PPE - EC Type examiner: SGS United Kingdom Ltd, Unit 202b Worle Parkway, Weston-super-Mare, BS22 0WA, UK. Notified Body No. 0120. CE Mark Approved and issued with EC Type Examination Certificate.

EC Declaration of Conformity (PED) 97/23/EC – Notified Body; Lloyds Register (Notified Body No. 0038), Hiramford, Middlemarch, Office Village, Siskin Drive, Coventry, CV3 4FJ, England. Dräger Safety UK Ltd. declares that the Saver PP Series of emergency escape respiratory protection equipment is designed in accordance with the technical standard EN402:1993 and designed and manufactured to the requirements of Pressure Equipment Directive (PED) 97/23/EC. The following Conformity Assessment Modules Apply; Module B (Set) – COV0212045/005, Module B (Valved Cylinder) – COV0212045/012 and Module D – 0038/PED/20020032/A.

Signed on behalf of Dräger Safety UK Ltd
Name: A. Donaldson Position: Approvals Engineer
Signature

For Your Safety

- Use of this equipment requires knowledge and compliance with National Regulations, Laws and Standards governing the use of respiratory equipment in the country of use.
- Use of equipment requires wearer training and observance of these Instructions for Use.
- Use equipment for the purpose specified in this manual, or as confirmed in writing by Dräger.
- Only trained competent personnel should inspect and service equipment at regular intervals and a record kept of such inspections and service.
- Only trained and competent personnel should carry out the charging of the compressed air cylinders.
- Dräger recommends a Service Contract be obtained from your Dräger Branch or Agent.
- Contact Dräger for details of Service Contracts and Service Training Courses.
- Notify Dräger if there is component fault or failure.
- Use only original Dräger Spare Parts for service and maintenance.
- Use only Dräger Test Equipment for service and maintenance.

Liability Statement

Responsibility for reliable function of equipment transfers to the owner or operator when serviced or repaired by untrained personnel (not employed or authorised by Dräger) or when used in a manner not conforming to its intended use.

Description and Intended Use

The Saver PP Series of equipment are positive pressure two stage compressed air respiratory protection escape units that are available in either 10 minute or 15 minute nominal duration versions.

The available breathing air supply to the wearer is 'on demand' and the positive pressure lung demand valve provides a positive pressure to the facepiece.

When used in approved carrying system, cylinder valve with pressure reduction valve, lung demand valve, and facepiece combinations the Saver PP Series equipment provides the wearer with respiratory protection when escaping from contaminated or oxygen deficient life threatening environments. Effective duration of the selected equipment is dependent on the breathing rate of the wearer.

Safety Warning: Time required to allow wearer to escape to a safe area must be within the specified capacity of the equipment. When selecting type and duration of escape equipment it is essential to consider potential hazards, storage location and possible escape routes.

Saver PP Series equipment can be worn at the ready for immediate emergency use or strategically sited in an easily accessible wall box.

Details of equipment variants available from Dräger on request.

Technical Data

Charging Connection
G5/8 as per DIN 477: Part 6

Compressed Air Cylinders

The Saver PP Series is designed in accordance with the technical standard EN402:1993. Operating temperature range – 30°C to 60°C.

2L capacity cylinder available in aluminium.
3L capacity cylinder available in steel.

Cylinders supplied by Dräger are charged at an ambient temperature of 15°C and to the nominal cylinder pressure – i.e. gauge needle inside the 'green' segment of the gauge face.

Important Note: The 3L variant (steel cylinder) exceeds 5 kg. This is considered to be unsuitable (as defined in EN 402) to be carried by the wearer for a complete shift.

Full Technical Specification of the equipment is available from Dräger.

Facepiece Connection

Push-In – to suit Type A connector Positive Pressure Lung Demand Valves.

Preparation for Use

Important Safety Note: When removed from its packaging the equipment as supplied by Dräger is not configured for immediate operational use. To prepare the equipment for operational use the following procedure must be carried out.

Immediately following removal of the equipment from its packaging:

- Grip the loop on the lid of carrying bag and pull up to open the bag.
- Press the reset lever/button of the lung demand valve to ensure positive pressure is 'Off'.
- Check that the pressure reducer is secure in the valve port. Hand-tight – clockwise.

- Refer to Figure 1 - connect the clip (1) to the 'D' ring (2) taking care not to detach the locking clip from the valve.
- Check contents gauge - ensuring the cylinder is fully charged, e.g. 200bar. Gauge needle inside the 'green' segment of the gauge face.
- Finally close the lid and fit the anti-tamper tag.

Equipment is now available for emergency use.

Pre Operational Checks

- Check contents gauge - ensuring the cylinder is fully charged, e.g. 200bar. Gauge needle inside the 'green' segment of the gauge face.
- Check anti-tamper tag is intact.

Use

Putting on Equipment

- Refer to Fig. 2. Place the neck strap of the carrying bag over the head and adjust the strap until the equipment sits in the centre of the chest.
- If fitted with an optional waistbelt - loop the waistbelt around the waist and then fasten the buckle. Pull the free end of strap, tightening the waistbelt until the equipment is secure and comfortable.

IN AN EMERGENCY:

- Refer to Fig. 3. Grip the loop on the lid of the carrying bag and pull firmly upward to 'break' the anti-tamper tag, open the flap of the bag which then releases the locking clip from the valve - turning 'On' the air supply.
- Refer to Fig. 4. Lift the facepiece from the carrying bag and immediately put on the facepiece. See Donning Facepiece.

Donning the Facepiece

Safety Warning: Facial hair, beard stubble, side-whiskers, and the wearing of spectacles will adversely affect and interfere with facepiece seal. Correct fit of facepiece only ensured if facepiece seal makes close contact with skin.

- Refer to Fig. 5. Using one hand, hold the facepiece onto the face and with the other hand pull the elastic head harness over the back of the head, locating the harness centrally with back of the head.
- Refer to Fig. 6. Tighten both lower straps evenly towards back of the head.
- On achieving a face seal and on taking first breath inhalation, the lung demand valve will automatically switch to positive pressure starting air supply to the facepiece. Breathe normally and immediately leave the hazardous area by shortest and safest escape route.

After Use

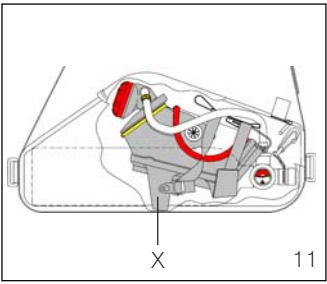
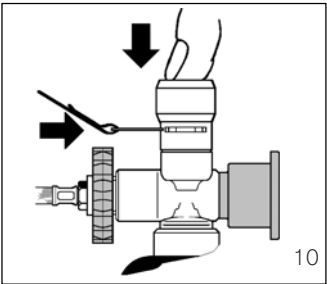
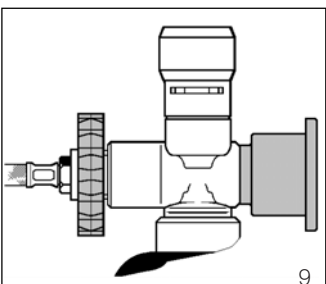
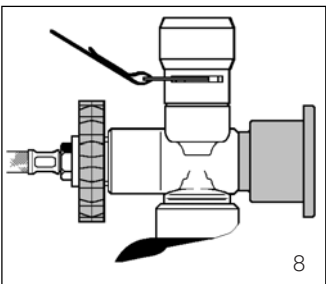
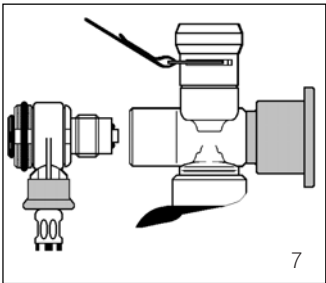
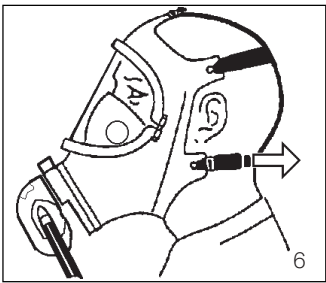
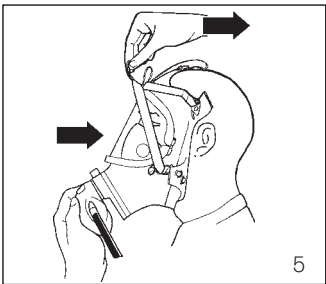
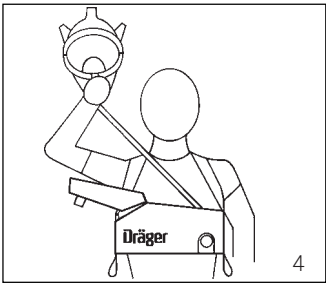
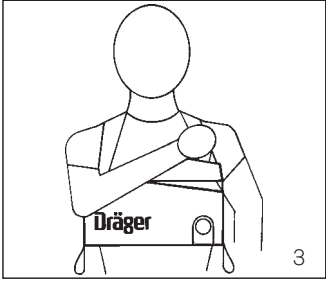
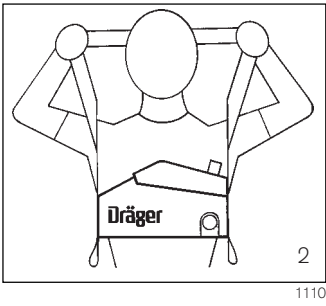
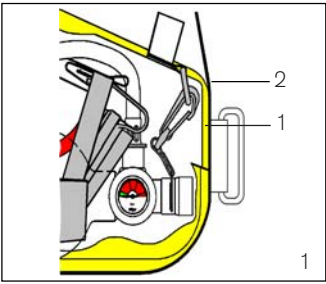
Safety Warning: Do Not remove the equipment until in a safe area and clear of the hazard.

Cleaning, Disinfecting, Drying

Carefully clean, disinfect, and thoroughly dry contaminated dirty components as necessary.

To ensure correct operational condition of equipment covered in this Instruction for Use, use only cleaning and disinfecting solutions recommended by Dräger. Use of other products invalidates the Dräger Warranty.

When using baths to contain cleaning and disinfecting solutions, immersed components and assemblies must only be agitated manually. Any form of mechanical agitation, e.g. ultrasonic, washing machines, dishwashers etc, must be approved and covered by a written agreement with Dräger.



Note: Cleaning solutions will eventually remove lubrication from moving parts. Following cleaning, disinfecting and drying carry out functional tests. Re-lubricate moving parts as required.

Safety Note: Refer to manufacturers' usage instructions when using cleaning and disinfecting agents. It is important that attention be paid to concentration and reaction times. Do Not use organic solvents, such as Acetone, Alcohol, White Spirit, Trichloroethylene or similar.

Dräger recommends only the following:

- Cleaning
 - Dräger Safety Wash.
 - Sekusept

These products must be used with cold water however never exceed temperature 30 degrees Celsius.

Note: Before disinfecting, rinse off cleaning solution in clean water.

- Disinfecting
 - Incidur

This product must be used with cold water however never exceed temperature 30 degrees Celsius.

Note: Before drying, rinse off disinfecting solution in clean water.

Details of cleaning and disinfecting agents are available from Dräger on request.

- Rinsing and Drying
 - Remove cleaning and disinfecting solutions by rinsing in clean water, followed by drying.

Do Not exceed a temperature of 60 degrees Celsius when drying components. Immediately remove from the drying cabinet when dry. Never exceed a period of 30 minutes.

Charging Procedure

Air Quality

Safety Note: Air quality for compressed air breathing systems should conform to requirements of EN12021. Only charge compressed air cylinders which:

- Conform to National Standards.
- Feature original manufactures test date and test mark.
- Have not exceeded test date stamped on cylinder by last testing station.

Refer to 'For Your Safety'

- Damaged cylinders must not be used.

Charging Procedure

Recharge to the rated pressure indicated on the label or stamped on the neck or shoulder of cylinder. Dräger recommend a charge rate of 27bar/minute. Rapid charging will induce an increase in temperature resulting in an incomplete charge - check pressure at ambient and if required 'Top Up' charge.

It is recommended that a pressure limiting device is fitted to the charging compressor to prevent over charging of the selected cylinder.

Important Safety Note: If for any reason the pressure reducer is removed from the cylinder valve. Do Not release the locking clip from cylinders that have not been completely discharged.

If it is required to completely discharge the cylinder then ensure that the pressure reducer is fitted to the valve. Pull firmly on strap of locking clip to release locking clip from the valve – turning 'On' the air supply. Press centre of rubber cover of demand valve and allow cylinder to vent pressure from the lung demand valve. Do Not direct the venting air onto the eyes, face or skin.

- Check that the locking clip is inserted into valve then press the centre of the rubber cover of the demand valve to ensure the rubber hose is vented of pressure. Remove the cylinder assembly from the carrying bag.

- Refer to Fig. 7. Grip firmly the outer diameter of the pressure reducer and unscrew (anticlockwise) the pressure reducer from the valve.
- Refer to Fig. 8. Attach G5/8 charging adaptor of the charging hose to the port of the valve.
- View and 'Note' the indicated pressure on the gauge of the unit and commence charging procedure to bring charging line pressure to same pressure as indicated on the pressure gauge of unit.
- When the pressure is balanced then pull firmly on the strap of the locking clip to release the clip from the valve – opening valve. See Fig. 9.
- Continue to recharge the cylinder to the pressure indicated by stamp mark on the neck, or shoulder of the cylinder. During charging check contents gauge ensuring the cylinder is fully charged, e.g. 200bar. Gauge needle inside the 'green' segment of the gauge face.

Note: Charging can induce an increase in temperature resulting in an incomplete charge.

- At ambient temperature the gauge needle should be inside the 'green' segment of the gauge face. If required 'Boost' charge.
- Refer to Fig. 10. When cylinder is fully charged then press the button into the swivel housing of the valve and insert the locking clip into the slot as shown. Check the button remains in the locked (down) position – valve closed.
- Vent pressure from the charging hose then remove the charging adaptor from the valve.
- Reassemble the pressure reducer to the valve. Press the reset lever/button of the lung demand valve to switch 'Off' positive pressure then repack the unit into the bag. See Fig. 11.

Note: Ensure that both the lower lugs (X) of the facepiece are flat and wrapped around the cylinder as shown (Fig. 11) i.e. not folded over.

- Refer to Fig. 1. Connect the clip (1) to the 'D' ring (2) taking care not to detach the locking clip from the valve.

- Finally close the lid and fit the anti-tamper tag. The equipment is now available for use.

Testing Equipment and Test Intervals

In addition to work outlined in Routine Maintenance it is important to comply with the following test and test intervals. This instruction also applies to non-used in storage equipment. Refer also to the appropriate Service Training Manual. Contact Dräger for details of Service Training Courses or Service Contracts.

Regularly Check

It is essential that escape apparatus is ready for use at all times. Dräger recommends a daily check however if the customers on-site risk assessment concludes that less regular checks are acceptable then this can be extended to a maximum of one month. It is however the customers responsibility to ensure the equipment is ready for use at all times.

Maintenance and Test Intervals

Description	After Use	Every Year
Complete Equipment	Clean and Disinfect as necessary	○
	Visual Inspection	○
	Charge cylinder to correct pressure	○
	Pressure Leak Test	○
	Function Test as per Manufacturer's Instructions	○
Cylinder	Check test date on cylinder	
	Re-certification - Pressure Test According to National Standards	

○ Dräger Recommendation

Note: Additional tests may be required in line with National Regulations.

Contact Dräger for details of Service Contracts and Service Training Courses. Refer to For Your Safety.

Accessories

Description	Order Code
1 Litre Safety Wash and Dispenser	3380164
1 Litre Safety Wash Refill	3380165
5 Litre Safety Wash and Dispenser	3380166
5 Litre Safety Wash Refill	3380167
Sekusept (4 bottles @ 2 litres)	7904071
Wipex Cloths (Pack of 50)	3380375
Incidur Disinfectant (6 litres)	7904072
Incidur Disinfectant (30 litres)	7904073
Anti-Tamper Tags (Pack of 5)	3350388
Waistbelt	3350396

