



Supplied Air Respirator
FAS Turbo Flow

USER MANUAL FOR THE FAS TURBO FLOW SUPPLIED AIR RESPIRATOR

Note!

This user manual presents the intended means of operating the device and helps prevent dangerous situations. The manual must be read and observed by all persons who will operate, maintain, clean, or control the product.

The product can only perform the functions for which it has been designed if it is operated, maintained, cleaned, and controlled in accordance with PRAES guidelines.

The warranty that PRAES gives for this product is void if it is not operated, maintained, cleaned, and controlled in accordance with PRAES guidelines.

An assessment must be made before choosing and utilising a product on whether it is suitable for the task on hand. PRAES has no influence on the choice and use of a product. For this reason, our warranty pertains exclusively to the long-lasting quality of the product. The above does not alter the provisions regarding liabilities and warranties included in the PRAES terms and conditions for sales and delivery.

The FAS Turbo Flow allows its operators to safely work in areas with the risk of potential oxygen deficiency and to normally breath air (negative pressure) from an uncontaminated source

1. Preparation for use

- * Attach one end of the airline hose of sufficient length (see: configuring the device for use) to the lap belt from below the belt (see figure). Make the connection in such a way as to position the valve properly (beneath the belt) and so that the hose is not twisted.
- * Connect the double breathing tube to the airline hose at the lap belt.
- * Put on the lap belt (see figure).
- * Put on the full-face mask and adjust it in accordance with the mask's user manual.
- * Check the negative pressure and airtightness before each use. Use your hand to seal the open end of the airline hose. Gently draw in air. The 3S mask will fit tightly to the face – hold your breath for 10 seconds. If the mask remains tightly fit to the face, the system is airtight.
- * Connect the 3S mask to the double breathing tube by use of the threaded connector.

1.1 Assembling the set

- Ensure that the inlet filter of the blower is not contaminated, and that the blower is positioned in "clean air". The definition of clean air is provided at the end of the manual.
- Connect the Turbo Flow blower to an appropriate energy source.
- Turn the device on in the minimum flow setting and wait for 5 minutes for the blower to reach its required air flow parameters.
- Connect the free end of the airline hose to the Turbo Flow blower. Seal the connection by screwing it in without using any tools.

- In case of using connected airline hoses, use the PRAES hose connector. Connect the two hoses without using tools. One person can work with a hose up to 30 meters in length. Two people can work with hoses up to 30 meters in length for each of the persons.

PLEASE NOTE: When used by a single person: ensure that the plastic cap is properly screwed onto the outlet of the Turbo FAS that is not being used.

- Ensure that the air flow control knob is set to “MIN” and that the on-switch is in the on position.

PLEASE NOTE: Additional air may be supplied with the use of the air flow control knob.



2. Protection and maintenance

- The construction of this apparatus is sturdy, however, in order to avoid accidental damage that may affect safety, the device should be utilised in accordance with its intended use.

2.1 Cleaning and disinfection

2.1.1 3S Full-face mask

Follow the guidelines provided in the full-face mask’s user manual.

2.1.2 Double breathing tube

- Remove visible soils with a soft brush.
- Clean the breathing tube in clean water with an appropriate cleaning/disinfecting agent.
- Rinse in warm water then leave the tube to dry outdoors.

2.1.3 Belt and airline hose

- Remove visible soils with a soft brush.
- Clean the air hose with a damp cloth.

2.1.4 Turbo Flow blower

- Ensure that the Turbo Flow blower is unplugged from any power sources.
- Wipe the outer surfaces of the device with a damp cloth.

2.2 Ventilator

- The device should be stored in a dry and clean room, protected from sunlight, in temperature of about 20°C and humidity <60%. The storage temperature should not exceed the temperature range between -10°C and +50°C.
- Check the condition of the filter. If it is contaminated, replace it or clean it in warm water (≤40°C). Rinse and dry it out before use.

3. Limitations for use

- Using the device in low temperatures requires preparing the apparatus by setting the air flow knob to minimum and leaving the device running for 5 minutes before use.
- Negative pressure can develop under the mask during strenuous work.
- It is essential that the air used with the device is of quality suitable for breathing. Definition of air suitable for breathing can be found in the EN 132 standard.
- FAS Turbo Flow is not an intrinsically safe device – it cannot be used in atmospheres where there is a risk of explosion.
- Before each use: check the patency of the air hoses, check airtightness of the airline hoses, check airtightness of the mask, check the power cable, visually inspect the device. In case of any irregularities please contact the PRAES service department.
- FAS Turbo Flow can operate within the temperature range between -10°C and +50°C.

4. Description/Specification

The supplied air system with a ventilator is intended to supply the user with fresh air. It can be operated safely when it is possible to draw fresh air that is suitable for breathing. The definition of air suitable for breathing can be found in the EN 132 standard. The device consists of a 3S mask, a double breathing tube, a lap belt, 10- or 20-metre-long airline hose, and a Turbo Flow blower.

The minimum airflow through the ventilator is 120 litres per minute for the variant with one or two users. The remote air supply system with a ventilator meets the requirements of the PN-EN 138 standard. The system should not be used outside in temperatures exceeding the temperature range defined in the standard.

5. Configuring the device for use

- FAS Turbo Flow supports setting the blower for 60-metre-long airline hose for 2 users (with maximum of 30-metre-long airline hoses for each of the users)
PLEASE NOTE: The device can be set up with 10- and 20-metre-long airline hoses. The hoses may be connected together with a hose connector to get the maximum allowed length specified above.

6. Information on noise emissions of the device

- Turbo Flow emits acoustic pressure with the average value of 77dB

7. Information on transporting the device and its components

Weight of the Turbo Flow blower without hoses – 7 kg

The device may be transported by hand by use of the transport handle.

8. Classification

The FAS Turbo Flow remote fresh air supply system for use with full-face mask meets the requirements of the EN 138:1994 Standard, Class 1.

Compliant with the provisions of the Regulation (EU) 2016/425. CE mark.

9. Markings on the device



WEEE (Pertains only the Turbo Flow blower)

THE BLOWER SHOULD NOT BE DISPOSED OF WITH MUNICIPAL WASTE

9.1 The symbol of a crossed-out trash bin with a bar below it, shown on this product, its packaging, or in its user manual, means that the product has been produced after 13.08.05 and is subject to the Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE).

9.2 WEEE waste cannot be disposed of as municipal waste and must be collected and disposed of separately by appropriate public or private waste collection systems specified in the national and local regulations.

9.3 The product may contain substances that may cause harm to environment or human health if disposed of incorrectly.

10. Accessories/Spare parts

Name	Code
Turbo Flow blower	9001
Double airline hose	9002
Belt with a connector	9003
10 m airline hose	9004
20 m airline hose	9005
Hose connector	9006
End filter	9007
Safety clip	9008
Transport case	9009
Non-flammable case for the double airline hose	9010
3S full-face mask	9011
Clip-in inserts for prescription lenses for mounting inside the mask	9012
Case for the full mask	9013
Welding adapter for the full mask	9014

PLEASE NOTE: Do not use any accessories or spare parts not authorised by PRAES

10. Certifying body

Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment: EU/EC type examination
Centralny Instytut Ochrony Pracy – Państwowy Instytut Badawczy, ul. Czerniakowska 16, 00-701 Warsaw.

Number of the notified body 1437

11. Producer

PRAES Sp. z o.o., ul. K. Szajnochy 18/20, 85-738 Bydgoszcz

Declaration of conformity available at the producer's website at:

www.praes.pl/turboflow