Operation instruction

SR 200 Airline

Compressed air-line full face mask

General information

Instructions for use for SR 200 Airline should be read before use.

SR 200 can be used in three different configurations:

In application with filters from Sundström in accordance with EN 136:1998.

In application with fan unit SR 500 or SR 700 in accordance with EN 12942:1998 class TM3 and AS/NZS 1716:2012. SR 200 Airline is a compressed air full face mask with filter backup in accordance with EN 14594:2005 and AS/NZS 1716:2012. When selecting equipment for SR 200 Airline some of the factors that should be considered are as follows:

- Type of pollutant
- Concentrations
- Work intensity
- Protection requirements in addition to respiratory protective advice.

Risk analysis should be carried by a person who has suitable training and experience in the area.

Breathable air

Breathable air shall meet at least the following purity requirements:

• the pollutants shall be maintained at a minimum and must never exceed the hygienic limit value.

• the content of mineral oil in the air must be so low that the air will have no oil smell (the threshold of smell is around 0.3 mg/m3).

• the air shall have a sufficiently low dew point to avoid internal freezing of the equipment.

In the event of uncertainty as to whether the above demands have been met, a filter such as the Sundström type SR 99-1 compressed air filter should be connected.

Unpacking SR 200 Airline

Packing list:

- Facepiece with breathing hose
- Control valve
- Belt
- Sealing plug
- Sealing cover
- Pre-filter holder
- Flow meter
- Filter adapter
- User instructions

1. Check before use

1.1 Check that the mask is complete, correctly assembled, thoroughly cleaned and undamaged.

Check particularly carefully the inhalation and exhalation membranes and their seats. The membranes are consumables and must be replaced if there are any signs of damage or ageing.

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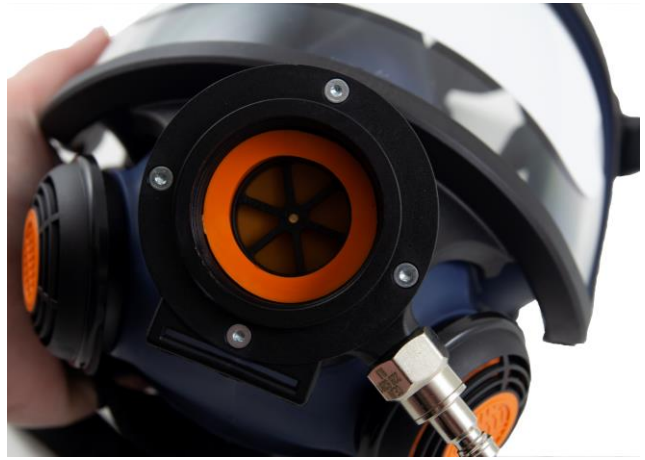


1.3 Check that the seal at the bottom of the filter connection is in good condition.

Check before use

1.4 Check that the air flow - measured through the mask - is at least 150 l/min.

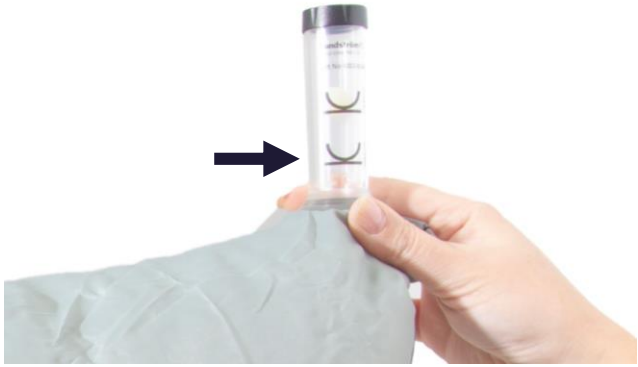
Connect the breathing hose of the mask to the control valve.

1.5 Connect the compressed air supply tube to the control valve.

1.6 Turn the control valve knob anti-clockwise as far as it will go, in order to throttle the air flow rate to a minimum.

2. Functional check

2.1 Place the facepiece in the bag and grip the opening of the bag so that it seals around the breathing hose. Grip the flow meter with the other hand and hold it so that it points vertically up from the bag.



2.2 Read the position of the ball in the tube. It should float level with or just above the marking on the tube.

If the flow rate is below the minimum value, check that

- The flow meter is vertical.
- The float can move freely.
- The air supply is not restricted by kinks or other restrictions in the hoses.

3. Filter

3.1 During work in atmospheres containing both particulates and gases/vapors (such as spray painting) the particulate filter and chemical cartridge should be combined. Press the filter/cartridge together so that the arrows on the particulate filter point towards the chemical cartridge.

3.2 Fit the filter/combined filter in the face piece so that the arrows on the filter points towards the user's face. Carefully check that the edge of the filter is in the internal groove of the filter mounting all round.

3.3 Pre-filter prevents premature clogging of the main filter. The pre-filter holder prevents damage to the main filter. N.B. The pre-filter is a pre-filter only and cannot be used as a substitute for particulate filter.

3.4 Turn the filters into the face piece. Screw until the thread reaches the seal at the bottom of the filter connection, then another 45 degrees.

4. Putting the equipment on

4.1 Put the belt on and adjust the length.

4.2 Arrange the control valve in a way that allows easy adjustment of the flow rate and a strict watch over the breathing hose, i. e. it must not be placed on the back of the waist.

4.3 Filter

If the equipment is to be used with a back-up filter, mount the supplied adapter in the filter mounting and fit the filter

5. Mask – Tightness check

Check the fit of the mask if you intend to use a back-up filter.

If any leakage is detected, check the inhalation and exhalation valves or adjust the straps of head harness. Repeat the fit check until there is no leakage.

Leakage may occur in cases such as if you wear a beard or sideboards or if your face is unshaven or deeply wrinkled, if you wear glasses, or if the exhalation valves are defective or dirty.

5.1 Blank off the filter by using the sealing cover.

5.2 Draw a deep breath and hold your breath for ten seconds.

If the fit is good, the mask will be pressed against your face.

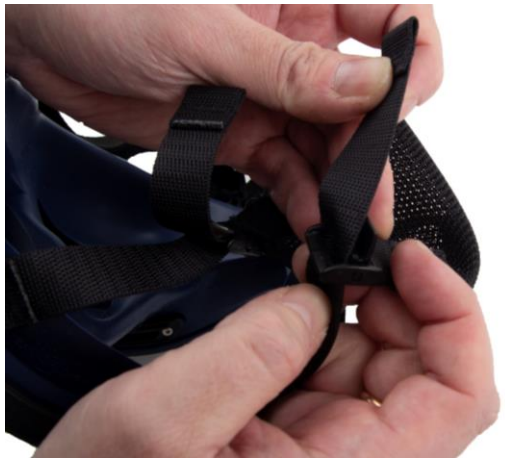
6. Breathing hose/compressed air hose.

6.1 Connect the breathing hose to the control valve outlet.

6.2 Unroll the compressed air hose and make sure that it is not twisted.

Connect the hose to the control valve inlet.

7. Mask - Fitting



7.1 Slacken the four elastic straps by moving the strap holders forward, at the same time pulling the straps.

Slacken the upper two inelastic straps by opening the buckles.

7.2 Move the head harness upwards, place your chin in the facepiece chin support, and pull the head harness over your head.

7.3 Tension the elastic straps in pairs by pulling the free strap ends towards the rear.

7.4 Adjust the fit of the mask on your face, so that it fits firmly but comfortably. • Adjust the lengths of the upper pair of straps and fix by means of the buckles.

8. Airflow rate

8.1 Use the control valve knob to set the air flow rate to suit your current work intensity. Fig. 3. In the fully closed position (turn the knob anti-clockwise), the flow is about 150 l/min. In the fully open position (turn the knob clockwise), the flow is about 320 l/min.

9. Taking the facepiece off - When using a back-up filter

9.1 Remove the sealing cover, if fitted.

9.2 Disconnect the compressed air hose from the control valve.

Leave the polluted work area and take the equipment off.

9.3 Slacken the four elastic straps in pairs by moving the strap holders forward. The two inelastic straps need not be released.

9.4 Pull the head harness forward over your head and remove the mask.

10. Taking the facepiece off - When using the sealing plug

10.1 Disconnect the compressed air hose from the control valve.

Leave the polluted work area and then take the equipment off.

10.2 Slacken the four elastic straps in pairs by moving the strap holders forward. The two inelastic straps need not be released

10.3 Pull the head harness forward over your head and remove the mask.

11. Releasing the compressed air hose / breathing hose

11.1 Both couplings are of safety type and are released in two stages.

Push the coupling towards the nipple.

11.2 Pull the locking ring back.

11.3 Push the coupling towards the nipple.

11.4 Pull the locking ring back.

12. Change the visor

12.1 The visor is mounted in a groove running around the visor opening of the outer mask and is held in place by one upper and one lower frame half.
Use a 2.5 mm Allen key to remove the two screws holding the frame halves together.

12.2 Carefully remove the upper frame half.

Carefully prise the top part of the mask off the visor and remove the visor from the lower groove.

12.3 Take this opportunity to clean the groove, if necessary

Change a visor of glas, SR 365

Take great care to ensure that the visor is located accurately so that the centre markings on the visor, frame and mask are in line.

This will prevent subjecting the visor to stresses that could lead to its damage. To make assembly easier, it is important that the grooves in the mask and frame should be abundantly coated with a rich soap solution or with a similar liquid.

Change the visor

12.4 Markings are made to show the centres of the visor, frame halves and mask. Press the new visor into the groove, making sure that the centre markings are in line. To make assembly easier, coat the slot with a soap solution or similar liquid.

12.5 Carefully prise the top half of the face piece over the visor and make sure that the visor is in the groove in the mask.

12.6 Prise the upper frame half, making sure the centre markings are in line.

12.7 Fit the screws and tighten them alternately until the two halves of the frame are firmly in contact. Carry out leakage testing.

13. Change the inhalation membranes

13.1 One membrane is in the centre of the inner mask on a fixed dowel. Prise off the membrane and fit a new membrane.

13.3 The membrane should rest on the larger flange, i.e. thread the dowel with the membrane from the inside of the face piece through the valve seat, with the smaller flange first.

13.2 Two membranes are fitted, i.e. one on each inside of the inner mask. The dowels for these membranes are removable and should be changed whenever the membrane is changed. Prise off the membrane and dowels.

13.4 Prise the new membranes onto the new dowels.

14. Change the exhalation membranes

14.1 The exhalation membranes are mounted on a fixed dowel on the inside of the valve covers on each side of the outer mask. The covers should be changed whenever the membranes are changed. Snap the valve covers off the valve seats.

14.2 Prise off the membranes.

14.3 Press the new membranes onto the dowels. Carefully check that the membranes are in contact with the valve seats all round.

14.4 Press the valve covers into place. A clicking sound indicates that the cover has snapped into place. Carry out leakage testing.

15. Change the head harness

15.1 The head harness can be ordered as a spare part only as a complete harness. Snap the (six) strap holders of the head harness of the mask strap mountings.

15.2 Check that straps are not twisted and fit the new head harness.

16. Cleaning

Sundström cleaning tissues SR 5226 are recommended for daily care. If the mask is heavily soiled, use a warm (up to 40 °C), mild soap solution and a soft brush, followed by rinsing with clean water and drying in air at room temperature.

If necessary, spray the product with 70 % ethanol or isopropanol solution for disinfection.

NOTE! Never use solvent for cleaning.

16.1 Remove the adapter/filter. Remove the covers for the exhalation valves and remove the membranes (two). Remove the head harness.

16.2 Remove the inhalation membranes (three).

16.3 If necessary, remove the visor.

Cleaning

16.4 Critical areas are the exhalation membranes and the valve seats, which must have clean and undamaged contact surfaces.

Inspect all parts and replace with new parts, as necessary.

16.5 Leave the mask to dry, and then assemble it.

17. Maintenance schedule

	Before use	After use	Annually
Visual inspection	•		
Functional check	•		
Cleaning		•	
Membrane change			•
Head harness change			•

17.1 The schedule below represents the recommended minimum requirement for maintenance routines in order to ensure that the equipment will always be in functional condition.