

## Instruction manual for Sundström filters

**For details regarding filters for the SEA Fan supplied Respirator SE400 see the user's manual for said equipment.**

The filters may be used with Sundström face masks, the SR 500 fan supplied respirator, and the SEA fan supplied respirator.

The filters are approved according to AS/NZS 1716:2003, SAI Global Lic No 766.

### Applications

#### Particle filters and combination filters.

SR 510 (P2, P3, PAPR-P3), SR 610 (P3), SR 710 (PAPR-P3).

Provide P3 protection with full face masks, fan supplied respirators with head-tops or full face masks, and P2 protection with half masks due to the limitation of the facepiece.

- A half mask with particle filter or combination filter is approved for use up to 10 times the TLV.
- A full face mask with particle filter or combination filter is approved for use up to 100 times the TLV.
- A fan supplied respirator with particle filter or combination filter is approved for use more than 100 times the TLV.

#### Gas filters and combination filters.

SR 217 (A1), SR 218 (A2), SR 315 (ABE1), SR 294 (ABE2), SR 316 (K1), SR 295 (K2), SR 297 (ABEK1), SR 298 (AX), SR 299-2 (ABEK1-Hg-P3), SR 518 (PAPR-A2), SR 515 (PAPR-ABE1), SR 597 (PAPR-A1BE2K1), SR 599 (PAPR A1BE2K1-Hg-P3).

**Type A** provides protection against organic gases and vapours, i.e. solvents, whose boiling point exceeds +65 °C.

**Type B** provides protection against inorganic gases and vapours, i.e. chlorine, hydrogen sulphide and hydrogen cyanide.

**Type E** provides protection against acid gases and vapours, sulphur dioxide and hydrogen fluoride.

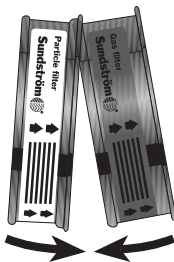
**Type K** provides protection against ammonia and some amines, i.e. ethylene diamine.

**Type Hg** provides protection against metallic mercury vapour. Warning. The period of use is limited to 50 hours.

**Type AX** provides protection against low boiling compounds (organic compounds with boiling point  $\leq 65$  °C). See substance list attached.

- A half mask with gas filter or combination filter is approved for use up to 10 times the TLV or 1,000 ppm, whichever is the lowest.
- A full face mask with a class 1 gas filter or combination filter is approved for use up to 50 times the TLV or 1,000 ppm, whichever is the lowest.
- A full face mask with a class 2 gas filter or combination filter is approved for use up to 100 times the TLV or 5,000 ppm, whichever is the lowest.
- A fan supplied respirator with combination filter SR 515+SR 510 or SR 597 + SR 510 with hood or shield is approved for use up to 10 times the TLV or 1,000 ppm whichever is the lowest.
- A fan supplied respirator with combination filter SR 518 + SR 510 with full face mask is approved for use up to 100 times the TLV or 5,000 ppm whichever is the lowest.

### Attachment



1. Check that you are using the correct filter/combination filter, and that the use by date has not expired.

2. Attach the filter so that the arrows on the filter(s) point towards your face.

3. Place the pre-filter in the pre-filter holder and press it onto the main filter. In situations requiring both gas and particle protection, combine the particle filter SR 510 with

a suitable gas filter. Just attach the particle filter to the gas filter. See fig. The arrows on the particle filter shall point towards the gas filter. Then proceed from p. 1. Particle filter SR 610 for full face mask SR 200 is fitted with a standard thread and is screwed into mask. Cannot be combined with a gas filter.

Regarding filter mounting in the fans SR 500 or SR 500 EX please refer to the user instructions for the fan.

## Changing the filter

Use of a respirator must be part of a respiratory protection program (see AS/NZS 1715:1994), which includes regular inspection and servicing of the respirators. All respirators and filters must be inspected before use to ensure they are serviceable and undamaged.

Filters are consumables with a limited service life. A filter with visible damage must immediately be scrapped. Every work place is unique and filter life must be assessed based on each users work and environment and the nature of the pollutant.

## Particle filters

The Sundström particle filters are mechanical filters that, unlike electrostatic filters, become more efficient the longer they are used, provided the filter is not damaged. Typically change the filter after 2-4 weeks or earlier if the breathing resistance becomes uncomfortable. Note filters require changing more often in harsher environments. Electrostatic particle filters are not marketed by Sundström. Fan units SR 500 and SR 500 EX provide a warning when the filter is clogged.

## Gas filters/combined filters

We recommend that the gas filter/combined filter should be changed in accordance with the results of measurements carried out at the worksite. If this is impossible, change the filter every week or earlier if you can smell or taste the pollutants or if you experience any other discomfort.

## Pre-filter

The useful life of the main filter can be appreciably increased if pre-filter SR 221 is changed frequently – at least once per working day.

N.B. The pre-filter cannot be used in place of the particle filter.

## Storage

- A filter in unopened packaging can be stored at a temperature between -20 and +40 °C at an ambient relative humidity below 90 %.
- The service temperature is between -10 and +55 °C at an ambient relative humidity below 90 %.
- An opened filter is best stored in a clean and dry place at room temperature, e.g. in a plastic bag.

## Warnings!

- Do not use filter protection where there may be a deficiency of oxygen.
- Do not use class 1 filters in highly toxic atmospheres. Refer to AS/NZS 1715:1994.
- Gas filters are effective against gases/vapours only. Particle filters are effective against particles only (such as dust, mist, smoke). If both types of contamination are present (i.e. while spray painting), a particle filter should be used in conjunction with the gas filter.
- Filter protection should not be used against unknown contaminants.
- Filter protection should not be used against contaminants that are Immediately Dangerous to Life and Health (IDLH).
- If you can smell or taste contaminants through the filter, or if you experience respiratory irritation, dizziness, nausea or similar discomfort, discontinue work and leave the area immediately. Inspect the respirator thoroughly together with your safety officer, ensuring perfect fit and proper performance. Replace any damaged parts. Further, check that the correct filter type is used, that the use by date has not expired, and that the protection factor of the equipment is adequate for the concentration and TLV of the contaminant.
- The pre-filter SR 221 is only a pre-filter and cannot be used as a substitute for the particle filter.
- Never tamper with respirators or filters.

## Key to symbols



See user instructions.



Temperature range during storage of an unopened filter.



End of storage life for an unopened filter.

**For further details about respirator selection and use, see AS/NZS 1715:1994.**



Max. ambient relative humidity during storage of an unopened filter.



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