# RESPIRATORY PROTECTION





- Technical Data Infomation
- Disposable Mask
- Filter Mask
- Sundstrom Respiratory Protective Equipment
- Chemical Protective Hood
- Respiratory Protection with Airline



### **Technical Data Information**

Breathing the fresh clean air supports good health. However, the air we breathe may contain very small particles of solids and liquids. These particles, small enough to be suspended in air, are called particulates. Particulates come in different sizes and are formed in different ways. Particulate contaminants may be found in the workplace, where they can harm workers. Particulate contaminants are





MIST consists of fine drops of liquid. General size 0.01-10 micron.

**FUMES** are gaseous residues of combustion. Apart from gases and vapours, fumes can solid additionally contain matter in a very fine form. General size 0.001-1 micron.



GAS is gaseous

substances,e.g. ammonia

DUST is the collective term for extremely fine solid or liquid particles. General size 0.1-25 micron\*

\*one stand of hair size 50 micron.



Vapour is gaseous substances, normally from solvent.

### Health problems

Industry Types	Тохіс	Effects to Health
Cement	<ul><li>Asbestos</li><li>Silica</li></ul>	<ul> <li>Lung Cancer, Mesothelioma or asbestosis</li> <li>Silicosis</li> <li>Irritation in nosily, throat, mouth</li> </ul>
Painting	<ul><li>Mist and vapour</li><li>Mercury</li></ul>	<ul><li>Headache, nauseous, dizzy, respiratory irritation</li><li>Lead Poisoning</li></ul>
Textile	<ul><li>Cotton dust</li><li>synthetic dust</li></ul>	<ul><li>Byssinosis</li><li>Irritation in nose, throat, mouth</li></ul>
Rubber	<ul><li>Carbon Black</li><li>Oxide from Zinc</li><li>TALC</li></ul>	<ul><li>Irritation in nose, throat, mouth</li><li>Flu like symptom</li></ul>





### **Technical Data Information**

### **Respiratory Protective Equipment Types**

Respiratory Protective equipment can be classified in many ways, however, the easy way is by grouping or category of air quality:

 Air-Purifying Respirator uses an air-purifying filter or cartridge to clean the air before you breathe it in or traps particles as you inhale. Respirators that use filters provide protection against particulate contaminants. Air-purifying Respirators consist of:









- **1.1 Particle Respirator** are used to remove particle in air example dust, fume, gas and vapour. Particle cartridges consists of:
- Mask: There are several sizes: ¼, ½ or full face mask
- **2** Filter: Organic vapour, inorganic vapour, amines or combinations of each
  - (2.1) Particulate filters: As a respirator filter traps particles, it becomes clogged, making it harder to inhale.
  - (2.2) Filter in the container and suitable for dust protection.
  - (2.3) The high-efficiency particulate air (HEPA) filter is folded in such a way as to increase the surface of protection and reduces breathing resistance.
  - (2.4) The standard filter: (see more information at filter page 70)
- 3 Head strap that can be adjustable to fit the face-shape

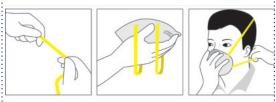
Moreover, there is another type of filter, disposable filter mask or filtering facepiece. This consists of filter material alone and is designed to protect against low toxic particulates and non-toxic nuisance odours

- **1.2 Gas/Vapour Respirator** are used to remove gases and vapours form the air you breathe. Gas/Vapour cartridge consists of:
  - (1) Mask and strap (As in 1)

(2) Filter or cartridge. The cartridges contain activated charcoal or other chemical compounds that trap or react with specific contaminants and remove them from the air. This kind of filter can only be used for gas and vapours.

#### Certified and Uncertified Disposable Mask

- Paper Facemask: is designed to protect against non toxic dusts, mists and bacteria etc. This kind of mask helps block large-particle droplets, splashes, sprays or splatter that may contain viruses and bacteria keeping it from reaching your mouth and nose. It must be pointed out that these type of masks only protect against large particles and are single use only
- Cotton Facemask: A facemask is meant to protect you from contact with liquids. Facemasks may also help reduce exposure of your saliva and respiratory secretions to others. However, for small particles like virus, this must not be used. Single use only.
- 3. FFP1, FFP2, FFP3 & N95 These type of respirators are respiratory protective devices designed to achieve a very close facial fit and efficient filtration of airborne particles. Depending on model chosen they will protect the wearer from varying levels of contamination in the atmosphere. However, again these are single use only and must be used correctly and in line with the manufacturers instructions.



How to put on respirators safely





### **Technical Data Information**

2. Supplied Air Respirators: supplies clean breathable quality air directly to the user from a source other than the air surrounding the user. Basically there are two variations as detailed below:

#### 2.1 Self Contained Breathing Apparatus or SCBA

Users will carry a wearable, clean-air supply pack that provides air for approximately 45 minutes. Consists of a bottle (tank or cylinder), carrying assembly, gauge, reducer, and a full facepiece.

(1) The closed-circuit type can provide air up to 4 hours. The closed-circuit type filters, supplements, and re-circulates exhaled gas.

(2) The open-circuit type only provides air for 30-60 minutes. Open-circuit sets are filled with breathable quality compressed air, rather than pure oxygen.

## 2.2 Air-Supplied Respirator or Supplied-air respirators (SARs)

 Masks or hoods are supplied clean, safe breathable air from a stationary source. They are also called airline respirators and normally used when there are extended work periods required in hazardous atmospheres or in a confined space.



#### How To Wear Mask

1. Air-Line respirators must be inspected before and after each use.

2. Compressed breathing air must meet the minimum requirements of breathable quality air.

**3.** Discontinue work, leave the area, and notify your supervisor immediately if experiencing signs or symptoms of exposure to the hazard.

4. If the airline supply hoses become tangled or compromised during operation stop work immediately.

5. The user must have been trained by a qualified and competent person in the proper use and maintenance of the respirator according to the manufacturers instructions.

6. Store equipment in a manner the will prevent the face piece from becoming damaged or misshapen and in a designated clean environment away from chemicals, dust, sunlight, and/or temperature extremes. Refer to the manufacturer's recommendations for additional storage considerations.

(SCBA)

(AIR-LINE)

Face Mask Types	Protection Factor
SCBA	>1000 or more than 1000
Full Face Helmet Hood	<=1000 or less than or equal to1000
Full face Mask with air-supplied respirator	<=10 or less than or equal to 10
Loose - Fitting Facepiece	<=25 or less than or equal to 25
Half Mask	<=10 or less than or equal to 10

#### European Filter Mask Standard (EN143)

Types	Job description	Separation level dry/liquid particles (Nacl, Paraffin, dust, fog, humidity)	
FFP1 R / NR	Solid (dry) particles	80%	
FFP2 R / NR	Solid (dry) particles and/ or liquid particles	94%	
FFP3 R / NR	Solid (dry) particles and/ or liquid particles	99%	

#### Notes:

R "Reusable" - the filter can be used more than once.

NR "Non Reusable" - the filter can only be used for one shift.



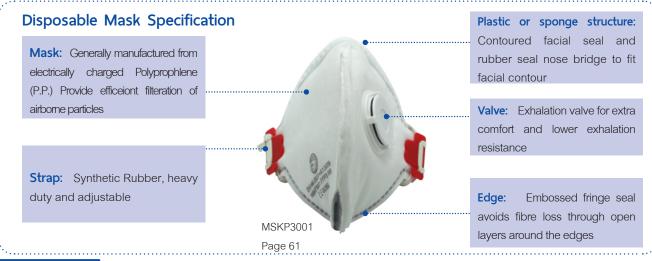


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Respiratory Protection

#### Disposable Mask

**FFP1/N95** 



#### Moulded Disposable Mask With Valve #HY8812 N95



#### Folded Disposable Mask #HY8310



• Rubber nose-bridge fit face-shape and prevent particles

- Manufactured from polypropylene
- NIOSH-N95 standard, 95% filtration
- Adjustable synthetic rubber headband
- Exhalation valve provides very low breathing resistance

Code	Description	UOM	Package	
MSKP4002	Mask with Valve #HY8812+	1 piece	10 pieces/box	

#### N95

- Plastic strap and soft nosepiece gives a secure and comfortable fit
- Manufactured from polypropylene
- NIOSH 42 CFR PART 84 -N95 standard, 95% filter
- Adjustable synthetic rubber headband
- Portable and easy to maintain
- Folded easy to ca in protect

Code	Description	UOM	Package
MSKP4003	Mask with Valve #HY8310+	1 piece	10 pieces/box

- Specialty disposable P1 respirator offering reliable, effective protection against dust, mist and dilute acid or alkaline vapors Ex Cl, SO2, HF
- Comfortable, lightweight off-the-face design
- 3m Cool Flow Technology with exhalation valve offers easier breathing resistance
- Plastic strap and soft nosepiece gives a secure and comfortable fit

Code	Description	UOM	Package
3M-MASK9916	Mask with Valve #3M-9916:	1 piece	10 pieces/box





### Disposable Mask

### FFP2





EN149:2001: FFP2

#### Disposable Respirator with Valve #HY9622

- Polypropylene (P.P.) inner layer and patented composite filter media provides very low breathing resistance.
- Embossed fringe seal avoids loose fibres
- FFP2 standard
- Exhalation valve offers easier breathing resistance
- Latex-free head straps offer a comfortable secure fit.
- Contoured facial seal and rubber seal nose bridge to fit face-shape

## Moulded Disposable Respirator with Valve and Activated Carbon #HY9626

- Polypropylene (P.P.) inner layer
- Embosses fringe seal avoids loose fibres
- Latex-free head straps offer a comfortable secure fit.
- FFP2 standard
- Rubber seal nose bridge to fit facial contour
- Carbon filter layer to protect against nuisance odours& organic vapours

Code	Description	UOM	Package	Code	Description	UOM	Package
MSKP2002	Mask with Valve #HY9622+	1 piece	10 pieces/box	MSKP2003	Mask with Valve and Activated Carbon HY9626+	1 piece	10 pieces/box
	S alle	EN	149:2001: FFP2	(			149:2001: FFP2
	le Mask With Valve #HY8	222		Dispesable	Mask With Valve and Activate	d Carbon	

- Polypropylene (P.P.) inner layer
- Embossed fringe seal avoids loose fibres
- Synthetic rubber headband
- FFP2 standard
- Flat pack design for portability.
- Exhalation value provides low breathing resistance and increases wearer comfort.
- Polypropylene (P.P.) inner layer
- Embossed fringe seal avoids loose fibres
- Latex-free head strap offers a comfortable secure fit.
- FFP2 standard of 94%
- Exhalation value provides low breathing resistance and increases wearer comfort.
- Activated carbon filter layer to protect against nuisance levels of organic vapour and odours
- Flat pack design

Code	Description	UOM	Package	Code	Description	UOM	Package
MSKP2005	Mask with Valve #HY8222+	1 piece	10 pieces/box	MSKP2006	Mask with Valve and Activated Carbon #HY8226+	1 piece	10 pieces/box





### Disposable Respirator



#### EN149:2001: FFP3

Disposable Respirator with Valve #HY8232

- Manufactured from polypropylene, statistic and particle • protection.
- Sealed edge to protect against filter separation •
- Portable and easy to maintenance
- Exhalation value provides low breathing resistance and • increases wearer comfort.
- FFP3 standard (99% filtration)
- Adjustable Synthetic Rubber headband



#### EN149:2001: FFP3 Moulded Disposable Respirator with Valve #HY9632

- Superior mask offering excellent facial fit and comfort •
- Manufactured from polypropylene
- Exhalation valve for lower breathing resistance
- FFP3 standard(99% filtration)
- Fully adjustable headstrap provides a secure and comfortable • fit

Code	Description	UOM	Package	Code	Description	UOM	Package
MSKP3001	Mask with Valve#HY8232+	1 piece	10 pieces/box	MSKP3002	Mask with Valve #HY9632+	1 piece	10 pieces/box

#### Disposable Mask



- Medical synthetic material
- Bacterial protection average 2.8 micron 99%
- Non-toxic dust, mist and particle protection average 0.1 micron 99%

#### Non-Woven Disposable Face Mask



#### Disposable Face Mask (Slim) #TG-01F1

- 3 layers of synthetic non-woven
- Elasticated cord for a comfortable fit •
- Protects against nuisance levels of non-toxic dust



#### Disposable Face Mask (Thick) #TG-01F2

- 5 layers of synthetic non-woven
- Elasticated cord for a comfortable fit
- Protects against nuisance levels of non-toxic dust

Code	Description	UOM	Package	Code	Description	UOM	Package
MASK0002	Face Mask (Slim) #TG-61F1+	1 piece	12 pieces/box	MASK0003	Face Mask (Thick) #TG-01F2+	1 piece	50 pieces/box
Your Safety DNA Contact 02 259 0320-3 www.pangolin.				bangolin.co.th			

### Disposable Mask (Activated Carbon Filter )



MASK0009

#### Disposable With Valve Face Mask (Changeable Filter) #TG-50 SV

Changeable carbon filter

•	Exhalation valve offers low breathing resistance					
	Code	Description	UOM	Package		

MASK0009	Changeable filter Face Mask #TG-50 SV+	1 piece	12 pieces/box
MASK0034	Filter #TG-50SV:	1 piece	1 piece
	â		



#### ISO9002

#### Disposable Face Mask With Activated Carbon 2 Valves #TG-20SV

- Protects against non-toxic dust, smoke & vapours.
- Twin exhalation valves for superior breathing resistance
- · Activated carbon filter
- Superior performance at low cost •

Code LIOM Pack; MASK0005 Activated Carbon Filter Face Mask #TG-20S+ 12 pieces/box 1 piece



#### Disposable Face Mask With Activated Carbon Filter #TG-30 S

- Activated carbon filter
- Superior performance at low cost.
- Protects against non-toxic dust, smoke&vapours.

Code	Description	UOM	Package
MASK0006	Activated Carbon Filter Face Mask #TG-30S+	1 piece	12 pieces/box

#### **Filter Face Mask**

#### Gas Filter Standard EN14387

Class	Tested in concentrations up to
1	0.1 percent by volume = 1,000 ppm
2	0.5 percent by volume = 5,000 ppm
3	1.0 percent by volume = 10,000 ppm

ppm = part per million

#### Disposable Face Mask With Valve & Activated Carbon #TG-40 SV

- Activated carbon filter for protection against nuisance odours
- Exhalation valve offers low breathing resistance

Code	Description	иом	Package
11.0.100000	Activated Carbon and valve Face Mask#TG-40 SV+	1 Piece	12 Pieces / box



ISO9002

### Disposable Face Mask With Activated Carbon

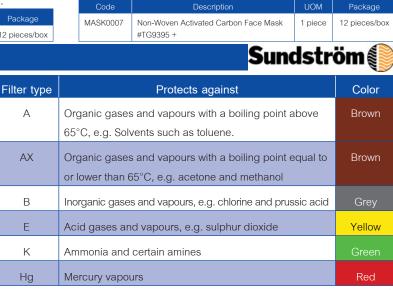
#TG-20S

- Activated carbon filter
- Protects against nuisance levels of non-toxic organic vapours and nuisance odours

Code	Description	UOM	Package
MASK0004	Face Mask with Activated Carbon #TG-20S	1 piece	12 pieces/box

#### Non-Woven Disposable Face Mask With Activated Carbon #TG-395

Protection against nuisance levels of non-toxic dust, mist and odours



### Mask Selection for Each Environment

Environment	Recommended Protection
Oxygen 21% (Dust and odours)	Half or full face mask, filters, PAPR or Airline
Oxygen 21% Chemical and Toxic Gases	Half or full face mask, filters, PAPR or Airline
Oxygen below 21%	SCBA, airline

### **Work Situations**

Work Situation	Type of Pollutant	Type of Protective Device	Type of Filter
<ul> <li>Painting/roller application of solvent-based point.</li> <li>Degreasing/washing. Work with adhesives and Jointing compounds.</li> </ul>	Solvent vapours	<ul> <li>Half mask or full face mask (if the eyes are irritated)</li> <li>Fan unit with chosen head top.</li> </ul>	<ul> <li>Gas filter SR217 A1/ SR 218 A2</li> <li>Gas filter SR 518 A2+ Particle Filter SR510 P3R*</li> </ul>
<ul> <li>Spray painting with water Based paint/ solvent Based point in open, Ventilated areas. Spraying with weed killers, Insecticides, etc.</li> <li>High- Pressure washing with Additives</li> </ul>	<ul> <li>Liquid aerosols(spray) and vapours/ solvent vapours.</li> <li>Liquid aerosols (spray), vapours from organic weed killers, insecticides, etc. and solvent vapours (degreasing).</li> </ul>	<ul> <li>Half mask or full face mask (if the eyes are irritated).</li> <li>Fan unit with chosen head top</li> </ul>	<ul> <li>Gas filter SR217 A1/SR218 A2 + Particle Filter SR510 P3R*</li> <li>Gas filter SR 518 A2 + Particle filler SR 510 P3R</li> </ul>
<ul> <li>Grinding work (if no gas Particles Is emitted)</li> <li>Rock drilling</li> <li>Chimney-sweeping</li> <li>Drill Of metals</li> <li>Turning</li> <li>Mould Spores and other micro Organisms.</li> </ul>	• Particles	<ul> <li>Half mask or full face mask (if the eyes are irritated)</li> <li>Fan unit with chosen head tops</li> </ul>	• Particle filter SR 510 P3R
Welding	Smoke and gas	<ul> <li>Half mask</li> <li>Full face mask with welding shield SR 84</li> </ul>	Gas Filter SR 315 ABE1 +     Particle filter SR510 P3 R+     Steel net disc SR 336
<ul> <li>Work in sewage treatment Plants, public baths, etc.</li> <li>Work on acids, such as in Etching, pickling, ensilage.</li> </ul>	<ul> <li>Inorganic gasses/vapours and acid gases (cholorine, sulphur dioxide, sulphuric acid, nitric acid, formic Acid)</li> </ul>	<ul> <li>Half mask or full face mask(if the eyes are irritated)</li> <li>Fan unit with chosen head Top</li> </ul>	<ul> <li>Gas filter SR 315 ABE 1+ Particle filter SR 510 P3 R</li> <li>Gas filter Sr 515 ABE1+ Particle filter SR 510 P3R</li> </ul>
Asbestos clearance.	Particles in the form of Fibres	<ul> <li>SR 200 Airline +compressed Air for high levels.</li> <li>SR 500 + SR 200 for lower levels</li> </ul>	Particle filter SR 510 P3 R
PCB clearance	Particles and gases	SR 500 together with SR 200	• Gas filter SR 518 A2 + Particle filter SR 510 P3 R

\*\* Each gas filter shall be combined with a particle filter SR 510 P3 R.



### Filter Suggestions

Sundström 🌔

Substance	CAS-no	Filter	Note
1, 2-Dichloroethane	107-06-2	А	
2-Nitropropane	79-46-9	А	4
2-Propanol	67-63-0	А	
Acetaldehyde	75-07-0	AX	4
Acetamide	60-35-5	A+P3	1, 4
Acetic acid	64-19-7	В	
Acetic anhydride	108-24-7	В	
Acetone	67-64-1	AX	
Acetylchloride	75-36-5	В	
Acetylene	74-86-2	Compr.air eq	
Acrolein	107-02-8	AX	3
Acrylamide	79-06-1	A+P3	1, 4, 5
Acrylic acid	79-10-7	В	
Acrylonitrile	107-13-1	А	4
Adipic acid	124-04-9	P3	
Aliphatic naphta	8052-41-3	А	
Allyl alcohol	107-18-6	А	3
Allyl chloride	107-05-1	AX	5
Allylamine	107-11-9	К	5
Aluminium chloride	7446-70-0	B+P3	1
Aluminium oxide	1344-28-1	P3	
Ammonia	7664-41-7	К	
Amyl acetate	628-63-7	А	
Aniline	62-53-3	К	4, 5
Antifouling paints		A+P3	1
Antimony	7440-36-0	P3	
Antimony hydride	7803-52-3	В	
Aromatic naphta		А	
Arsenic (not arsine)	7440-38-2	P3	
Arsine	7784-42-1	В	
Barium	7440-39-3	P3	
Benzaldehyde	100-52-7	А	
Benzene	71-43-2	А	4
Benzotriazole	95-14-7	A+P3	1
Benzoyl chloride	98-88-4	В	
Benzyl alcohol	100-51-6	A	
Benzyl chloride	100-44-7	В	3, 4
Beryllium	7440-41-7	Р3	4, 6
Biphenyl	92-52-4	A+P3	1
Bromine	7726-95-6	В	
Butyl acetate	123-86-4	А	
Butyl alcohol	71-36-3	А	
Butyr aldehyde	123-72-8	A	
Cadmium	7440-43-9	P3	4
Calcium oxide	1305-78-8	P3	
Carbon dioxide	124-38-9	Compr.air eq	
Carbon disulphide	75-15-0	AX	5
Carbon monoxide	630-08-0	Compr.air eq	
Carbontetrachloride	56-23-5	A	4

Substance	CAS-no	Filter	Note
Chlorate		P3	
Chlorine	7782-50-5	В	
Chlorine dioxide	10049-04-4	В	
Chloroform	67-66-3	AX	4
Chloroprene	126-99-8	AX	4
Chromic acid	1333-82-0	P3	4, 6
Cobalt (dust and smoke)	7440-48-4	P3	6
Cresol	1319-77-3	A+P3	1
Cumene	98-82-8	А	5
Cupper	7440-50-8	P3	
Cotton dust		P3	
Cyanide (as CN)	57-12-5	B+P3	1, 3
Cyclohexanol	108-93-0	A+P3	1
Cyclohexanone	108-94-1	А	
Diacetone alcohol	123-42-2	А	3
Diglycidyl ether	2238-07-5	А	3, 6
Dimethyl sulphate	77-78-1	А	3, 4, 5
Dimethylformamide	68-12-2	А	4, 5
Dioxane	123-91-1	А	4, 5
Dust, inert		P3	
EDTA	60-00-4	Р3	
Epichlorohydrin	106-89-8	А	4, 5, 6
Ethanol	64-17-5	А	
Ethyl acetate	141-78-6	А	
Ethyl acrylate	140-88-5	А	4, 5, 6
Ethyl bromide	74-96-4	AX	3
Ethyl chloride	75-00-3	AX	4
Ethyl ether	60-29-7	AX	
Ethylene glycol	107-21-1	А	
Ethylene oxide	75-21-8	AX	4, 5
Ethylenediamine	107-15-3	К	3, 6
Ferrous chloride		BE+P3	1
Ferrous oxide (smoke)	1309-37-1	P3	
Fluor	7782-41-4	В	
Fluoride (as F)		P3	
Fluorosilisic acid	16961-83-4	B+P3	1
Formaldehyde	50-00-0	В	4, 5, 6
Formic acid	64-18-6	E	, ,
Freon 113	76-13-1	Compr.air eq	
Furfural	98-01-1	A	
Glutaraldehyde	111-30-8	А	6
Glycolmonobutyl ether	111-76-2	А	5
Glycolmonomethyl ether	109-86-4	А	5
Hydrazine	302-01-2	К	3, 4, 5, 6
Hydrochloric acid	7647-01-0	В	
Hydrofluoric acid	7664-39-3	B+P3	1
Hydrogen cyanide	74-90-8	В	3, 5
Hydrogen peroxide	7722-84-1	Compr.air eq	
Hydrogen selenide	7783-07-5	В	3
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### Filter Suggestions

Substance	CAS-no	Filter	Note	Substance	CAS-no	Filter	Note
Hydrogen sulphide	7783-06-4	В		Phosgene	75-44-5	В	
Hydrogene	1333-74-0	Compr.air eq		Phosphine	7803-51-2	В	
Hydroquinone	123-31-9	P3	4, 6	Phosphoric acid (mist)	7664-38-2	BE+P3	1
lodine	7553-56-2	P3	3	Phthalic anhydride	85-44-9	P3	6
Isophorone	78-59-1	А		Piperazine	110-85-0	K+P3	1, 6
Isoprophyl alcohol	67-63-0	А		Piperidine	110-89-4	К	
Lead (smoke and dust)	7439-92-1	P3		Potassium hydroxide	1310-58-3	P3	
Maleic anhydride	108-31-6	B+P3	1, 6	Potassium permanganate	7722-64-7	P3	
Mangan	7439-96-5	P3		Propinoic acid	79-09-4	В	
MDI	101-68-8	B+P3	1, 6	Pyridine	110-86-1	А	
MEK	78-93-3	А	5	Selenium	7782-49-2	P3	
Melamine	108-78-1	Compr.air eq		Selenium sulphide	7782-49-2	P3	4
Mercury (vapour)	7439-97-6	Hg-P3	2, 5, 6	Silicon dioxide	14464-46-1	P3	4
Methyl acrylate	96-33-3	A	5, 6	Silver nitrate	7761-88-8	Р3	
Methyl alcohol	67-56-1	AX	5	Sodium carbonate	497-19-8	P3	
Methyl bromide	74-83-9	AX	3, 5	Sodium fluoride	7681-49-4	P3	
Methyl chloride	74-87-3	AX	4	Sodium hydroxide	1310-73-2	P3	
Methyl ethyl ketone (MEK)	78-93-3	AA	5	Sodium hypochlorite	7681-52-9	B+P3	1
	74-88-4	AX		Sodium perborate	10486-00-7	P3	1
Methyl iodide			4, 5	Sodium silicate	6834-92-0	P3	3
Methyl isobutylketone (MIBK)	108-10-1	A	3, 5				
Methyl methacrylate	80-62-6	A	5, 6	Styrene	100-42-5	A	5
Methylamine	74-89-5	K		Sulfamic acid	5329-14-6	B+P3	1
Methylchloroform	71-55-6	A		Sulfur dioxide	7446-09-5	E	
Methylene chloride	75-09-2	AX	4	Sulphuric acid (mist)	7664-93-9	E+P3	1
MIBK	108-10-1	A	3, 5	TDI	91-08-7	Compr.air eq	4,
Monomethylamine	74-89-5	K		Terpentine (oil)	8006-64-2	A	5,
Morpholine	110-91-8	А	5	Tetrachloroethylene	127-18-4	A	5,
Nickel carbonyl	13463-39-3	Compr.air eq	4, 5	Tetraethyl lead	78-00-2	A+P3	1, 1
Nickel, metal	7440-02-0	P3	4, 6	Tetrahydrofuran	109-99-9	А	
Nitric acid	7697-37-2	В		Tetramethyl lead	75-74-1	A+P3	1, 1
Nitrobenzene	98-95-3	А	5	Toluene	108-88-3	А	5
Nitrogen	7727-37-9	Compr.air eq		Tributyl phosphate	126-73-8	A	
Nitrogen dioxide	10102-44-0	Compr.air eq		Trichloroethane	71-55-6	А	
Nitrogen oxide	10102-43-9	Compr.air eq		Trichloroethylene	79-01-6	А	4
Nitroglycerine	55-63-0	А	5	Tridymite (silicon dioxide)	15468-32-3	P3	
Nitroglycol	628-96-6	А	5	Trimethylbenzene	526-73-8	А	
Nitrous gas		Compr.air eq		Trisodium phosphate	7601-54-9	P3	
Nitrous oxide	10024-97-2	Compr.air eq		Vanadium oxide (dust)	1314-62-1	P3	
Octane	111-65-9	А		Vinyl acetate	108-05-4	А	
Organic peroxides		A+P3	1	Vinyl chloride	75-01-4	AX	4,
Oxalic acid	144-62-7	P3		Vinyl toulene	25013-15-4	А	
Ozone	10028-15-6	В		Vinylidene chloride	75-35-4	AX	
o-Phenylenediamine	106-50-3	P3	3, 6	White spirit	8052-41-3	А	
PCB		A+P3	1, 4, 5	Xylene	1330-20-7	A	5
Pentachlorophenol	87-86-5	P3	4, 5	Zinc chloride (smoke)	7646-85-7	P3	5
Perchloric acid	7601-90-3	BE	<del>ч</del> , Ј	Zinc oxide (smoke)	1314-13-2	P3	
	127-18-4		4, 5			15	
Perchloroethylene		A	4, 5	Notes:	isod		
Petrol Phenol	86290-81-5 108-95-2	AX B+P3	1, 5	<ol> <li>Combinations of filters shall be u</li> <li>Combinations filter SR299-2 ABB Hg-maximum use time 50 hours</li> </ol>	EK1 Hg P3 R and	SR599 A1BE2K1 H	g P3 R. T

3. Full face mask should be used.

4. Carcinogenic

5. Skin adsorbing

6. Regarded as a sensitizer

### Sundström 🚺

Sundström ) Safety manufactures many types of Protective half mask for various different applications. Sundstrom's half facemask is designed for maximum comfort and the lowest breathing resistance. If a higher level of protection is required PANG 😋 LIN suggests the Full Face Mask fitted with the appropriate filter. All masks in Sundström () Safety's program use the same range of filters and can be combined efficiently and cost-effectively to suit each situation

Half Mask



#### SR100 HALF MASK (SILICONE)

EN 140:1998

- Manufactured from silicone offering extreme comfort
- Hypo-allergenic
- Front mounted filter gives very low inhalation resistance
- Twin exhalation valves offers superior exhalation resistance
- Fully adjustable elasticated head harness for ease of donning and a secure & comfortable fit
- FDA and BGA approved fo food contact

Code	Description	Size	Color	UOM	Package
MKH01-2112	SR100 Half Mask #SR100 S/M +	S/M	Blue	piece	10 pieces/box
MKH01-2012	SR100 Half Mask #SR100 M/L +	M/L	Dark Blue	piece	10 pieces/box





Used for all Sundstrom half masks

Code	Description	Color	UOM	Package
MKR01-2001	Head Harness+	Black	5 pieces	5 pieces/box



#### Membrane Kit For SR100/SR900

- Pack includes 1 inhalation valve membrane & 2 exhalation valve membranes
- Valves and harness straps should be changed annually.

Code	Description	UOM	Package
MKR01-2004	Membrane Kit for SR100/SR90-3 +	5 pieces	5 pieces/box





### **Respiratory Protection**

## SR 900 SYSTEM **Specitication**

TPE Soft/durable TPE with wide format face surfaces provides a high level of protection



Elasticated harness with large crown plate for a comfortable secure fit

service and kits available.

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filter holder allows you to expand your own system



EN 140:1998



#### SR900 HALF MASK (TPE)

- Manufactured from TPE offering extreme comfort
- Hypo-allergenic
  - Extremely low inhalation and exhalation resistance reduces wearer fatigue
- Valves and harness straps to prevent dust ٠
- Elasticated, easily adjustable head harness with large crown plate for a comfortable secure fit
- Can be used with filters from the Sundström Safety filter range for negative pressure masks (Page 68)

Code	Description	ขนาด	Color	UOM	Package
MKH01-3012	Half Mask #SR900, S+	S	Grey	piece	10 pieces/box
MKH01-3112	Half Mas #SR900, M+	М	Grey	piece	10 pieces/box
MKH01-3212	Half Mas #SR900, L+	L	Grey	piece	10 pieces/box





#### SR900 Half Mask

- 1 Half Mask
- 1 Filter
- 1 Harness straps
- 1 Name tag
- 1 Cleaning sheet
- 1 User manual
- 1 Zip lock bag

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#### SR 905 Remote Filter

- . Remote filter for connection to SR 900 using single hose SR 951 or twin hose SR 952.
- Hose selection based on work conditions.
- Extremely low inhalation and exhalation resistance reduces wearer fatigue.
- Can be used with filters from the **Sundström** Safety filter range for negative pressure masks.





Sundström



#### Single Hose SR 951 / Twin Hose SR 952

- Single hose SR 951 and twin hose SR 952 are very flexible and offer high durability.
- Hose selection based on site conditions.
- Can be used with a hose protector when welding and . grinding

<ul> <li>Suita</li> </ul>	ble for use for welders or grinders wher	e visors a	are used.	Code	Description	ООМ	Package
Code	Description	UOM	Package	MKT01-3003	Single Hos SR951 with use SR900	Piece	1 piece/box
MKH01-341	2 Remote filter SR905 +	Piece	1 piece/box	MKT01-3009	Single Hos SR952 with use SR900	Piece	1 piece/box

EN 12083



SR 951

### Suitable for dusty and chemical environments



#### SR 500 BATTERY POWERED FILTER FAN



SR 700 BATTERY POWERED PARTICLE FILTER FAN



SR 307 COMPRESSED AIR ATTACHMENT



#### SR 507 COMPRESSED AIR ATTACHMENT



### **Respiratory Protection**

#### Full Mask



Notes: \*Registration of armament is required \*\*Sholud replace valves and elastic head once a year



#### Head Harness Assembly SR200

Code	Description	Color	UOM	Package
MKR01-1203	Head Harness Assembly SR200+	Black	1 piece	1 piece / box

#### SR200 Full Face Mask PC-VISOR

EN136 : 1998

- The full face mask utilises with the same simple cartridge and filter system as our half masks
- The mask is FDA and BGA approved for food, and minimises the risk of contact allergies.
- Twin exhalation valves that minimum exhalation resistance
- Fully adjustable fabric head harness both comfortable and secure
- Lightweight
- Can also be fitted with a toughened glass visor for use in chemical and high heat environments

Code	Description	Color	UOM	Package
MKH01-1212	Full Mask SR200 S/M +	Blue	piece	1 pieces/box



#### Membrane Kit For SR200

- Kit includes 3 inhalation valve membranes and 2 exhalation valve membranes.
- Valves and harness straps should be changed annually.

Code	Description	UOM	Package
MKR01-1204	Membrane Kit for SR200	5 pieces	5 pieces/box

#### Protective Film For Full Face Mask SR 200

Protects visor against paint spray and extends visor life

Code	Description	Color	UOM	Package
MKT01-1204	Protective film for SR200+	Clear	1 piece	10 pieces/box



### SR200 Full Face

- 1 Half Mask
- 1 Filter
- 1 Harness straps
- 1 Name tag
- 1 Cleaning sheet
- 1 User manual
- 1 Zip lock bag

## **Sundström**

### Type Of Filter



- Type A: Protects against organic vapours with a boiling point above 65°C
- 2 Models available

Code	Description	Color	UOM	Package
MKH02-2512	Filter A1 #SR217+		1 piece	5 pieces/box
MKH02-2012	Filter A2 #SR218-3+		1 piece	4 pieces/box



MKH02-3212

- ٠ Type ABE: Protects against organic vapours with a boiling point above 65°C, inorganic vapours & acid gases.
- 2 Models available

Code	Description	Color	UOM	Package
MKH02-3212	Filter ABE1 #SR315+		1 piece	5 pieces/box
MKH02-3312	Filter ABE2 #SR294+		1 piece	4 pieces/box



Type AX: Protects against organic vapours with a boiling point equal to or lower than 65°C eg. Acetone

Code Description Color	UOM	Package
MKH02-2412 Filter AX #SR298+	1 piece	3 pieces/box



- Mechanical filter with extremely low inhalation resistance. ٠ Protection against all types of particulates (dust, fume, fog, spray, asbestos), bacteria, viruses and radioactive pollution.
- Filter protects against 99.997% of particulates.

<ul> <li>Filter su</li> </ul>	rface area of 1,300 cm3	3 ensu	res longe	r useful life
Code	Description	Color	UOM	Package
MKH02-1312	Filter #SR510+	0	1 piece	5 pieces/box



- Type K: Protects against ammonia and certain amines
- 2 Models available

Code	Description	Color	UOM	Package
MKH02-4212	Filter K1 #SR316+		1 piece	5 pieces/box
MKH02-4312	Filter K2 #SR295+		1 piece	4 pieces/box



Type ABEK: Protects organic vapours with boiling point above 65°C, inorganic vapours, acid gases, ammonia & amines.

	I Package
MKH02-5312 Filter ABEK #SR297+ • • • • • 1 piec	e 4 pieces/box



Type ABEK1 HG P3R: Protects against organic vapours with a boiling point above 65°C, inorganic vapours, acid gases, ammonia, mercury vapours and particulates.

Code	Description	Color	UOM	Package
MKH02-6512	Filter ABEK 1-Hg-P3R #SR299-2+		1 ชิ้น	3 pieces/box



#### SR221 PRE-FILTER (16x5)

- Should always be used for particle, gas and combined ٠ filters.
- The pre-filter protects the main filter against premature • clogging by larger particles.

Code	Description	Color	UOM	Package
MKH02-0312	Pre-Filter #SR221+	White	1 piece	80 pieces/box



## Sundström 🌔

### Fan Unit / PAPR (Power Air Puriflying Respirator)



Code	Description	Color	UOM	Package
MKH06-0112	PAPR Fan Unit #SR500+	Blue	1 piece	1 piece/box

#### PAPR SR500 FAN UNIT WITH STANDARD BATTERY

#### EN 12941/12942:1998

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Respiratory Protection

- Powered Air Purifying Respirator (PAPR) with Standard Battery. (\* See Usage Table)
- Triple warning system audible, visual and sensory (vibration)
- Superior long lasting lithiumion battery technology (Up to 13 Hours)
- Fast charging time (1.5 Hours)
- Visual battery power signal
- Can be used with any Sundstrom headpiece and SR200 full face mask.
- Simple filter cartridge system.



Code	Description	Color	UOM	Package
MKH06-2012	PAPR Fan Unit #SR500 EX:	Orange	1 piece	1 piece/box

#### PAPR SR500 EX (intrinsically safe) FAN UNIT

EN 12941/12942:1998

EN 12941/12942:1998

- Exactly the same functionality as SR500
- Uses nickel metal hydride battery

PAPR SR700 FAN UNIT

face mask

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- Visual and audible low battery and particulate filter saturation warning
- Approved intrinsically safe PAPR, II 2 G Ex ib IIA T3 Gb

Lightweight & economic battery-powered PAPR

Audio/visual low battery & filter saturation warning Same performance characteristics as SR500.

Can be used with all Sundstrom headpieces and SR200 full

For protection against particulates only

Fast charging time. (1.5 Hours)

Suitable for petro-chemical, chemical, oil and gas industries



Code	Description	Color	UOM	Package
MKH06-7010	PAPR Fan Unit #SR700+	Blue	1 piece	1 piece/box



### Contact 02 259 0320-3 www.pangolin.co.th 53

#### Fan equipment

#### Table: SR500 usage

		Standard	Heavy Duty Battery	Filter	Supply Pressure	Expectative Time
	Serie a	х		SR510	175 ml : minute	8 Hours
	No.	х		SR510	240 ml : minute	5 Hours
			х	SR510	175 ml : minute	13 Hours
	24		Х	SR510	240 ml : minute	8 Hours
	20	х		SR599	175 ml : minute	5 Hours
5		х		SR599	240 ml : minute	3 Hours
			Х	SR599	175 ml : minute	8.5 Hours
PP	Carles Carles		Х	SR599	240 ml : minute	5 Hours

### Type of Filter for SR500 / SR500 EX



ABE filter. Protects against organic (boiling point above 65°C) & inorganic vapours and acid gases.

Code	•	Description	Color	UOM	Package
MKH02-7	112	Filter ABE1 SR515+	•0•	1 piece	20 pieces/ box



- ABEK filter protects against organic vapours (boiling point above 65°C) & inorganic vapours, ammonia and acid gases
- Can be used with either SR500 or SR500EX

Code	Description	Color	UOM	Package
MKH02-7212	Filter A1BE2K1 #SR597+	$\bullet \bigcirc \bullet \bullet$	1 piece	20 pieces/ box



EN14387-2004

Sundström 🌔

- Protects against organic vapours with a boiling point above 65°C
- Filter Type A for PAPR SR500/SR500EX

Code	Description	Color	UOM	Package
MKH02-7012	Filter A2 #SR518:	•	1 piece	20 pieces/ box



- As ABEK filter but with additional protection against mercury vapour and particulates.
- Usable for fan units SR500 and SR500EX

Code	Description	Color	UOM	Package
MKH02-7312	Filter A1BE2K1HgP3		1 piece	10 pieces/
	#SR599:			box

### **Respiratory Protection**

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Respiratory

### Airline Equipment





#### SR507 Compressed Air Regulator

EN 14594:2005 class 3A

- Incorporates a flow regulator, low flow warning device and waist belt
- Designed for connection to visor SR540, hoods SR520, SR530, SR 561, SR 562, SR 580 helmet with visor, welding helmet SR 580/SR 584 and welding shield SR 590.

Code	Description	UOM	Package
MKH03-0612	Compressed Air Regulator #SR507+	1 piece	1 piece/box



#### SR307 AIRLINE

EN139 : 1994

- Easily fits to Sundstrom half masks and full face masks.
- Incorporates a waist belt mounted flow regulator, low flow warning device.
- The supply pressure to the regulating valve should be between 4-6 bar.
- Used as a protective device supplied with breathable compressed air

Code	Description	Color	UOM	Package
MKH03-1412	Airline #SR307	Blue	1 piece	1 piece/box







#### SR99-1 Compressed Air Filter

- Supplies clean breathing air works or mobile low pressure compressor.
- The unit consists of a pressure regulator, oil/water separator and HEPA main filter (SR292),all of which are mounted in an enclosed steel stand.
- Can be wall mounted or stand alone
- The maximum air volume is approximately 900 Litres/minute
- Automatic drainage

Maximum 3 users at any one time.				
Code	Description	UOM	Package	
MKH03-2612	Compressed Air Filter #SR99+	1 piece	1 piece/box	



## Sundström 🌔

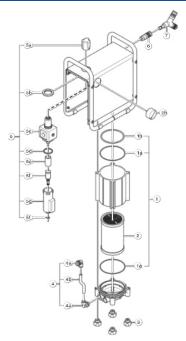


EN 14594:2005

- Made of polyester reinforced PVC
- The hoses are delivered complete with safety couplings and are intended for use together with compressed air filters or compressed air-fed mask/hoods etc.

Code	Description	Size	UOM	Package
MKH03-3010	Compressed Air Hose #SR358+	10 m	1 piece	1 piece/box
MKH03-3015	Compressed Air Hose #SR358:	15 m	1 piece	1 piece/box
MKH03-3020	Compressed Air Hose #SR358 +	20 m.	1 piece	1 piece/box

#### Spare Parts for SR99-1 Compressed Air





Filter Cartridge For AIRLINE SR99

• Replacement HEPA Filter for SR99.

Code	Description	UOM	Package
MKR03-2001	Cartridge Filter SR292+	1 piece	1 piece/box



#### SR359 Compressed Air Hose

EN 14594:2005

- Made of polyester reinforced EPDM
- Exceptionally strong for use in very hazardous environments
- The hoses are delivered complete with safety couplings and are intended for use together with compressed air filters or compressed air-fed mask/hoods etc.
- Antistatic, heat, oil and chemical resistant.

Code	Description	Size	UOM	Package
MKH03-3105	Compressed Air Hose #SR359 :	5 m	1 piece	1 piece/box
MKH03-3110	Compressed Air Hose #SR359 +	10 m	1 piece	1 piece/box
MKH03-3130	Compressed Air Hose #SR359 +	30 m	1 piece	1 piece/box



#### SR360 Spiral Coiled Tube

EN 14594:2005

- Lightweight plastic spiral coiled tube manufactured from polyurethane
- The hoses are delivered complete with safety couplings and are intended for use together with compressed air filters or compressed air-fed mask/hoods etc.
- The surface of the hose has a coating that provides good protection against sparks

Code	Description	Size	UOM	Package
MKH03-3408	Spiral coiled Tube #SR360+	8 m	1 piece	1 piece/box



#### Safety Coupling For AIRLINE SR99

To facilitate additional users



. To facilitate additional users

Code	Description	UOM	Package
MKR03-2127	Y Coupling	1 piece	1 piece/box

### **Respiratory Protection**

### PAPR AND AIRLINE HEADPIECES



#### **SR520 HOOD (TH3)** EN 12941:1998, EN 14594:2005

- Cellulose Acetate visor
- · Chemical resistant
- Lightweight, face and head protection, S/M and M/L sizes are available

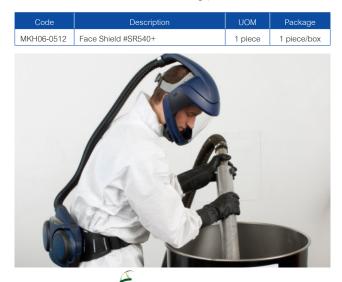
Code	Description	Size	UOM	Package
MKH06-0212	Hood #SR520 M/L:	M/L	1 piece	1 piece/box
MKH06-0312	Hood #SR520 S/M+	S/M	1 piece	1 piece/box





EN 12941:1998

- Bump cap for protection against impact of stationary objects and splashes of molten metal
- Well -Balanced and ergonamically designed
- · Air flow deflector for maximum comfort
- Fitted with attachment for hearing protectors





#### **SR530 HOOD (TH3)** EN 12941:1998, EN 14594:2005

EIT 12041.1000, EIT 14

- Cellulose Acetate material
- Chemical resistant
- Extended hood length offers additional protection for the neck and shoulders.

Code	Description	UOM	Package
MKH06-0412	Hood #SR530+	1 piece	1 piece/box



- Lightweight Tyvek hood fitted with PETG (Polyethylene Terephtalate Glycol) visor
- Adjustable head harness
- Replaceable hood







#### SR584 / SR580 Welding Mask Shade 10

EN 12941:1998

- Additional welding shield for fitting to SR580
- Can be fitted with static shade welding lenses or auto-darkening welding cartridge

	Code	Description	UOM	Package
1	MKH06-8310	Welding Mask #SR584: / SR580	1 piece	1 piece/box



#### SR594 Welding Shield (TH3)

EN 12941:1998

1 piece/box

1 piece

EN 12941:1998

- The welding shield is designed for easy use and equipped with a flip-up visor.
- To get the best and appropriate respiratory protection you can choose to use it with our powered fan unit SR 500 or SR 700 in the highest protection level (TH3).

Code	Description	UOM	Package
MKH06-4012	Welding Shield #SR590:	1 piece	1 piece/box



#### SR580 Protect Helmet With Visor

• Offers respiratory, head and face protection.

Protect Helmet #SR580:

- Can also be fitted with ear defenders for hearing protection
- Impact resistant polycarbonate visor





MKH06-8012

### **Respiratory Protection**



## SR522 Protective Film For SR520 / SR530 Page 75

- Protective films for use with SR520/SR530 headpieces
- · Protects visor against paint spray and lengthens service life of visor



#### SR5226 Cleaning Wipes 50 Pack

• Cleaning wipes for use with Sundstrom respiratory range. 50 piece/box

Code	Description	UOM	Package
MKH09-0401	Cleaning Wipes #SR5226+	1 piece	50 piece/box





SR540 Page 75

#### SR542 Protective Film For SR570

- · Protective films for use with SR540 headpiece
- · Protects visor against paint spray and lengthens service life

#### of visor



SR580 Page 76

#### SR582 Protective Film For SR580

- Protective films for use with SR580 headpiece
- Protects visor against paint spray and lengthens service life

of visor					
Code	Description	UOM	Package		
MKT06-0801	Protective Film #SR582+	1 piece	1 piece/box		

### **Escape Hood**



EN 403:2004 M/S, EN 14387:2004

- An air purifying escape respirator combined with a hood for emergency self-rescue in the event of fire or chemical emission accident.
- Very simple and easy to use
- The hood is based on a Sundstrom silicone half mask mounted in a hood.
- Hood is flame resistant.

- Equipped with ABEK1-CO P3R filter.
- Catalytic conversion gives protection against CO for up to 30 minutes.
- Shelf life of 10 years which can be extended by filter change
- No need to register for armament

Code	Description	UOM	Package
MKH15-3512	Escape Hood #SR77-3:	1 piece	1,000 pieces/box





# Dräger

## Respiratory Protective Equipment SCBA Model: PSS 3000 / PSS 5000

#### Full Face Mask

- The mask body is made from durable and skin-friendly EPDM (Ethylene-Prophlene-Diene-Ester Material) which provides protection against heat, chemicals and irritants.
- Double-layer face seal protect against toxic or chemical penetration.
- The scratch-proof and distortion free PMMA Plexiglas visor with 180° wide angle guaranteesa large field of vision with excellent panoramic view. Easy to clean and maintain.
- The comfortable five-point head harness not only ensures that the mask can be donned easily and quickly, but is wide enough to prevent any pressure points on the wearer's head.
- Communicate with others through Speech diaphragm.



Notes: \*Registration of armament is required \*\*Sholud replace valves and elastic head once a year

#### **Back Plate**

- Manufactured from: polyamide and carbon fibre, light weight, outstanding thermal, impact and chemical resistance.
- Harness is a polyester coated Chloroprene.
- Quick-Connect cylinder connection.
- Back plate suitable for 4 9 liters Carbon Cylinders
- Adjustable shoulder and waist belt.
- Anti-Static
- By utilizing the state-of-the-art pressure mapping technology, the contoured carrying harness provides maximum comfort at the back, but optimizes load distribution comfortable and securely, in line with the body's centre of gravity and therefore provides improved stability and reduces back strain, stress and fatigue.



#### **Pressure Reducer**

- Air pressure reducer operates at either 200 or 300 bar
- · Additional safety valve.
- Fitted with DIN G 5/8 connector

#### Cylinder

- Aluminum cylinder wrapped with carbonfibre
- Air release valve suitable for right or left-handed users

#### Lung Demand Valve (LDV)

- Quick-Connect face mask
- A silicone protective cover protects the LDV from knocks and ensures reliable operation under impact and chemical splash.
- Automatically adjusts the pressure inside the mask to be positive
   and ensures no ingress of hazard
- Emergency valve available.

#### Pressure Gauge

- Fluorescent gauge face, easily in dark environment.
- Rubber Chloroprene casing provides protection against impact and chemicals.

#### Whistle

• An alarm whistle sounds before the air supply is exhausted.



## Dräger

### **Respiratory Protection**



#### Dräger SCBA Drager PSS® 3000 EN14593:2005

- Light weight and impact resistant composite housing.
- By utilizing the state-of-the-art pressure mapping technology, the contoured carrying harness provides maximum comfort at back, but optimizes load distribution comfortably and securely, in line with body's centre of gravity and therefore provides improved stability and reduced back strain, stress and fatigue.
- 11 kg.- cylinder included
- Able to add more equipment such as radio communications or buddy breather.
- Maximum usage time: 45 minutes

#### Dräger SCBA Drager PSS® 5000

EN14593:2005

- Frame harness manufactured from Styrene Butadiene
  Rubber (SBR) coated with Polyester
- · Swivel Waist belt evenly distributes weight
- · Shoulder pad inner provides comfort
- Quick-connect (QC) cylinder connection and secondary supply connections for rescue, decontamination and/or airline use
- 7.2 kg cylinder included
- Able to add more equipment such as radio communications or buddy breather.
- Maximum operating time: 45 minutes

Code	Description	UOM	Package	Code	Description	UOM	Package
MSCB-PSS3000	Completeset/backplate/ FPS7000FullFace/6.8L/300bar	1 set	1 set/box	MSCB-PSS5000	Completeset/backplate/ShortHoseLDV/ FPS7000FullFace6.8L300bar	1 set	1 set/box



# Dräger

### **Respiratory Protective Equipment SCBA**



#### Dräger PAS AirPack1

EN14593:2005

- Robust welded durable steel frame coated, for corrosion protection, with a tough black anti-static polymeric powder coating.
- Can accommodate up to four compressed air cylinders of up to 12 litres in capacity.
- Pressure reducer suitable for connection to breathable quality air at an input pressure of either 200 or 300 bar.
- High Pressure (HP) gauge, indicating cylinder pressure.
- Medium Pressure (MP) gauge, indicating cascade system or ring main pressure.
- Outgoing hose distribution is also controlled with a breaking system in order to prevent unnecessary unwinding and potential entanglement. Length available: 3 m., 5m., 10m., 20m., 30m., and 50m.
- Hose Reel system and a safety pressure relief valve allows ease of use.
- Y-Piece for 2 user operation compatible with Euro Couplings: safe and comfortable.
- FLITE air release, Neoprene adjustable Full face mask and Demand Valve (on-off air release valve)

Code	Description	UOM	Package
DRG -AIRPACK1	Airpack 1 Complete set By 3352228	1 set	1 set/box



Notes: \*Registration of armament is required \*\*Sholud replace valves and elastic head once a year



#### Dräger Saver CF15

EN1146:2005

Your Safety DNA

- Breathing hood with air diffuser and input pressure of 200 bar
- An alarm whistle sounds before the air supply is exhausted.
- It can be equipped with cylinders which can hold either a 10 or 15 minute supply of air at pressure 35-37 L/min
- Minimum maintenance keeps downtime and costs down.
- Weight 5.2 kgs
- Ready hood with elastic at the neck for added security.

Code	Description	UOM	Package
DRG-3359735	Saver CF 15#3359735	1 set	1 set / box

Respiratory Protection