

3M Occupational Health & Environmental Safety
3M™ S-Series Headcovers and Hoods
for Powered and Supplied Air Respirators



Selection Guide





Table of Contents

How to select 3M™ S-Series Headtops and 3M™ Air Delivery Units for the following industries and applications.

- 3 How to select S-Series headtop and air delivery unit
- 4-5 Product Range: Headcovers and hoods

INDUSTRIES:

- 6 Woodworking
- 7 Surface Preparation and Coating
- 8 Agriculture
- 9 Pharmaceutical Manufacturing
- 10 Pulp and Paper Processing
- 11 Chemical Industry
- 12 Medical and Healthcare
- 13 Food and Beverage

- 14 Air delivery units



How to select a 3M™ S-Series Headtop and air delivery unit for your application

The 3M™ S-Series Headtops featured in this Selection Guide must be connected to the current modular range of 3M™ air delivery units via the BT-Series Breathing Tubes. This plug-and-play interchangeability simplifies the equipment selection process. It also more readily handles changing end-user applications, since headtops and air delivery units can be quickly swapped as appropriate.

The resulting respiratory systems

(headtop, air delivery unit and breathing tube) protect the user from specific respiratory hazards, as indicated on the following pages. Those hazards can include fine particles, solvent vapours, and paint mist, among others. In addition to respiratory protection, the S-Series headtops provide coverage of the head, or head, neck and shoulders, as well as providing eye and face protection to EN166:2:F:3.

Advantages of these systems

All-Day Comfort: pressure on face, breathing resistance and heat build-up are greatly reduced when compared to tight-fitting facepieces.

A Refreshing Stream of Breathable Air: making hot environments or strenuous labour more tolerable.

Higher User Acceptance: increased

comfort can mean that users will tend to wear the systems longer, increasing their protection time and potential productivity.

Simple Maintenance: Choose between ready-to-use integrated suspension headtops or premium reusable suspension hoods for quick, cost-effective replacement of outer fabrics.

How to use this Guide

1. Find your industry as listed in the Table of Contents on page 2.

2. Go to your industry's page and find the application that matches your job.

3. For each application, one or more combinations of headtop and air delivery unit are suggested. However, other headtops within the range may also be applicable based on user preference.

Use the previous page of headtop photos and product information to help you select the model that best suits your needs. Additional information on the air delivery units can be found on pages 14-15.

Please refer to your on-site safety specialist or industrial hygienist for advice on correct filter selection. Your local 3M dealer will then be able to provide further assistance.

4. If your industry or application is not listed, please contact your local 3M™ dealer for further assistance. 3M offers an extensive range of protective equipment and it is very likely that we have a solution for you.

Note: This Selection Guide only covers the most common industries, applications and products.

It is the responsibility of the employer to ensure correct respirator selection for the application. Final determination of respirator applicability and filter selection must be made by an on-site safety specialist or industrial hygienist. Do not use for respiratory protection against unknown atmospheric contaminants or when concentrations of contaminants are unknown or immediately dangerous to life or health (IDLH), or in atmospheres containing less than 19.5% oxygen. (This is 3M's definition; individual countries may apply their own limits on oxygen deficiency. Please seek advice if in doubt.)

In addition to the S-Series and 100 Series headtops found in this Selection Guide, 3M offers a wide selection of rigid headtops that readily connect to 3M™ air delivery units, including the 3M™ HT-400 Series Visors, 3M™ HT-600 Series Welding Visors and the 3M™ HT-700 and HT-800 Series Helmets.

For further details about all 3M respiratory systems, see our full Product Catalogue.

3M™ S-Series Headcovers and Hoods



Integrated Suspension Headcovers and Hoods



3M™ Headcover S-133

Head and face coverage, as well as providing eye and face protection to EN166 — liquid splash and low energy impact. General purpose, cost-effective fabric.



3M™ Headcover S-333G

Similar to S-133 but with a more durable, soft, quiet, low-linting fabric.



3M™ Hood S-433

Head, face, neck and shoulder coverage, as well as providing eye and face protection to EN166 — liquid splash and low energy impact. General purpose, cost-effective fabric.



3M™ Hood S-533

Similar to S-433 but with a more durable, soft, quiet, low-linting fabric that more readily drapes comfortably over the wearer.

Air Delivery Unit	Standard for S-Series Headcovers and Hoods	Nominal Protection Factor (NPF)**
3M™ Jupiter™	EN12941 TH3	500
3M™ Dustmaster™	EN12941 TH1	10
3M™ Flowstream™	EN14594 3A*	200
3M™ Vortex™ 3M™ Vortemp™	EN14594 3A*	200

* The S-Series Headcovers and Hoods meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

** NPF - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

3M™ S-Series Hoods



Premium Reusable Suspension Hoods



3M™ Hood S-655

Head, face, neck and shoulder coverage, as well as providing eye and face protection to EN166 — liquid splash and low energy impact. Its respiratory seal is a comfortable, knitted inner collar that is shorter and thinner than previous models. General purpose, cost-effective fabric.

3M™ Hood S-657

Similar to S-655. S-657 uses a double-shroud design for its respiratory seal; wearers can select between seal designs based on their personal preference. The users wear the S-657 by tucking its inner shroud into a shirt or protective coverall, which allows excess air to be channeled over the body, providing additional comfort.

3M™ Hood S-757

Similar to S-657 but with a fabric specifically intended to help capture paint overspray, minimizing the potential for paint to flake off the wearer and onto the workpiece. The fabric also has an internal film barrier to help prevent paint contact with skin or clothes.

ADDITIONAL 3M™ 100-SERIES HOODS



3M™ HT-152 Hood

Transparent polyurethane hood with removable rigid inner visor that provides good field of vision. The hood sits on the user's shoulders for improved wearing comfort. Its design facilitates the decontamination process. For more information contact your distributor.

3M™ HT-121 and HT-125 Hoods

Lightweight, chemical hoods offering a choice between inner collar (HT-121) or double shroud (HT-125) respiratory seal. For more information contact your distributor.



Standards for 100 Series Hoods

Air Delivery Unit	3M™ HT-152		3M™ HT-121 and 3M™ HT-125	
		Nominal Protection Factor (NPF)*		Nominal Protection Factor (NPF)*
3M™ Jupiter™	EN12941 TH3	500	EN12941 TH2	50
3M™ Dustmaster™	EN12941 TH1	10	prEN146 (rev) TH2	50
3M™ Flowstream™ 3M™ Vortex™ 3M™ Vortemp™	EN1835 LDH3	200	EN1835 LDH2	50

* NPF - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

Woodworking



The air inside woodworking facilities is often filled with fine particles. Other respiratory hazards can include

vapours from formaldehyde, adhesives, paints, and solvents.

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121	HT-125	HT-152
Application	Respiratory Hazards										
SURFACE COATINGS (Paints, Varnishes, Stains, Thinners)											
Water based – brush/roller	Paint mist				● ●		● ●	● ●			
Water based – spraying	Paint mist				●* ●		●* ●	●* ●			
Solvent based – brush/roller/spraying	Solvent vapours and mist				● ●*		● ●*	● ●*			
PAINT REMOVAL											
Impact stripping	Fine particles				● ●		● ●	● ●			
Abrasive stripping	Fine particles				● ●		● ●	● ●			
Chemical stripping	Solvent vapours				●		●	●	●	●	
ADHESIVES											
Strong epoxy-resin system adhesive – isocyanate based	Solvent vapours	●	●	●							
TIMBER TREATMENT											
Solvent based, e.g. white spirit	Solvent vapours and mist					● ●	● ●				
Water based	Fine mist					● ●	● ●				
● JUPITER ● DUSTMASTER ● FLOWSTREAM											
This guide considers powered-air filter units as the primary source of air into the modular headtops. Alternatively, supplied air regulators may be used if a source of breathable quality compressed air is available. Please see 3M literature for further information. Note: Specific applications may require supplied-air regulators to be used.											
* If traces of organic solvent are present, 3M™ Jupiter™ Air Filter Unit must be used in combination with the appropriate filters. ** If paint contains isocyanate compounds, the 3M™ Flowstream™ regulator must be used due to poor warning properties of this compound.											



3M™ Headcover S-133



3M™ Headcover S-333G



3M™ Hood S-433



3M™ Hood S-533



3M™ Hood S-655



3M™ Hood S-657



3M™ Hood S-757



3M™ HT-121 Hood



3M™ HT-125 Hood

If medium or high energy eye impact protection or rigid head protection is required, visit www.3m.eu/poweredsuppliedair for information on 3M™ HT-400 Series Visors, HT-700 Series Helmet with Visor, or HT-800 Series Bump Caps and Helmets.

Surface Preparation, Painting and Coating



These activities can occur in a wide variety of industries including transportation, general manufacturing, autobody restoration and white goods manufacture. Preparing surfaces via chemical stripping typically releases solvent vapours over large surface areas. Painting and coating

these surfaces can expose workers to paint spray mists and solvent vapours.

Combined with the headtops listed below, 3M™ Supplied Air Units can be appropriate for surface preparation and coating processes and 3M™ Powered Air Units can offer more mobility to users.

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121	HT-125	HT-152
Application	Respiratory Hazards										
SURFACE CLEANING											
High Pressure Water	Sugar soap mist				● ●						
PAINT REMOVAL											
Chemical stripping	Solvent vapours					●	●		●	●	
PAINTING											
Water based – brush/roller	Paint mist		● ●		● ●		● ●	● ●			
Water based – spraying	Paint spray mist		●* ●		●* ●		●* ●	●* ●			
Solvent based – brush/roller/spray	Solvent vapours and mist		● ●**		● ●**		● ●**	● ●**			
● JUPITER ● DUSTMASTER ● FLOWSTREAM											
This guide considers powered-air filter units as the primary source of air into the modular headtops. Alternatively, supplied air regulators may be used if a source of breathable quality compressed air is available. Please see 3M literature for further information. Note: Specific applications may require supplied-air regulators to be used.											
* If traces of organic solvent are present, the 3M™ Jupiter™ Air Filter Unit must be used in combination with the appropriate filters. ** If paint contains isocyanate compounds, the 3M™ Flowstream™ regulator must be used due to poor warning properties of this compound.											



3M™ Headcover S-333G



3M™ Hood S-533



3M™ Hood S-655



3M™ Hood S-657



3M™ Hood S-757



3M™ HT-121 Hood



3M™ HT-125 Hood

Surface preparation using power sanding, abrasive sanding or impact stripping will require eye and face impact protection. Visit www.3M.eu/powered&suppliedair for information on the 3M™ HT-400 Series Visors, HT-700 Series or HT-800 Series Bump Caps and Helmets.



Farming can be incredibly dusty work. Airborne particles are released from haying, grain handling, and working with live-stock — just to name a few dusty farmyard jobs.

Mixing and applying agricultural chemicals can release hazardous particles, gases and vapours, and therefore requires both respiratory protection and protective clothing. For more

information on 3M™ protective clothing, visit: www.3m.eu/occsafety.

The following table lists some common attributes of pesticides and agricultural chemicals, their hazards, and the 3M™ modular respiratory system options for protection.

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121	HT-125	HT-152
Application	Respiratory Hazards										
GENERAL APPLICATIONS											
Pesticide application	Particulates		● ●			● ●	● ●		● ●	● ●	
Pesticide application	Water-based mists								● ●	● ●	
Pesticide application	Solvent-based mists								●	●	
Working with hay	Particulate		● ●		● ●	● ●	● ●				
Grain handling	Particulate		● ●		● ●	● ●	● ●				
Working with livestock	Particulate		● ●		● ●	● ●	● ●				
Mixing chemicals /fertilizers	Particulate, gases and vapours								●	●	
Spraying paints	Particulate and organic vapours				● ●		● ●	● ●			
● JUPITER ● DUSTMASTER ● FLOWSTREAM											
This guide considers powered-air filter units as the primary source of air into the modular headtops. Alternatively, supplied air regulators may be used if a source of breathable quality compressed air is available. Please see 3M literature for further information. Note: Specific applications may require supplied-air regulators to be used.											
** If paint contains isocyanate compounds, the 3M™ Flowstream™ regulator must be used due to poor warning properties of this compound.											



3M™ Headcover S-333G



3M™ Hood S-533



3M™ Hood S-655



3M™ Hood S-657



3M™ Hood S-757



3M™ HT-121 Hood



3M™ HT-125 Hood

In addition to respiratory protection, farmers also needing eye and face impact protection can use 3M™ HT-400 Series Visors for many of these applications. Farmers who weld can benefit from the 3M™ HT-600 Series of Welding Shields. Visit www.3m.eu/powered&suppliedair for complete details.

Pharmaceutical Manufacturing



Fine particles, vapours, and cytotoxic drugs are all possible airborne hazards for drug manufacturers. 3M™ offers highly reliable respiratory protection combined with

coverage of head, or head, neck and shoulders, as well as providing limited eye and face splash and coverage to EN166:2:F:3.

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121*	HT-125*	HT-152*
Application	Respiratory Hazards										
MANUFACTURE OF MEDICINES											
Chemical handling and drying	Fine particles and combined chemicals, cytotoxic drugs								●	●	
Mixing chemicals	Fine particles and combined chemicals, cytotoxic drugs								●	●	
Pulverising powders	Fine particles	● ●		● ●	● ●	● ●	● ●				
Shaping	Fine particles, cytotoxic drugs	● ●		● ●	● ●	● ●	● ●				●
Size reduction	Fine particles, cytotoxic drugs	● ●		● ●	● ●	● ●	● ●				●
Transfer	Fine particles, cytotoxic drugs	● ●		● ●	● ●	● ●	● ●				●
MAINTENANCE											
Cleaning machines/equipment	Fine particles, vapours		●		●						
● JUPITER ● DUSTMASTER											
This guide considers powered-air filter units as the primary source of air into the modular headtops. Alternatively, supplied air regulators may be used if a source of breathable quality compressed air is available. Please see 3M literature for further information. Note: Specific applications may require supplied-air regulators to be used. * These headtops do not provide protection to EN166.											



3M™ Headcover S-133



3M™ Headcover S-333G



3M™ Hood S-433



3M™ Hood S-533



3M™ Hood S-655



3M™ Hood S-657



3M™ HT-121 Hood



3M™ HT-125 Hood



3M™ HT-152 Hood

In addition to respiratory protection, certain pharmaceutical machine/equipment cleaning processes may also require eye, face and head impact protection. Visit www.3M.eu/powered&suppliedair for details on the 3M™ HT-800 Series of Bump Caps and Helmets with Visors.

Pulp and Paper Processing



Pulp conversion and papermaking can expose workers to liquid splashes, gases, vapours, and fine wood pulp and paper particles. The 3M™ Jupiter™ Air Delivery Unit

provides respiratory protection with the full user mobility necessary for large pulp and paper facilities.

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121	HT-125	HT-152
Application	Respiratory Hazards										
PREPARATION											
Treating wood	Gases and vapours		●	●		●	●		●	●	
Dissolving lignin in cooking liquid	Gases and vapours		●	●		●	●		●	●	
Bleaching the pulp	Gases and vapours		●	●		●	●		●	●	
Black liquor recovery	Gases and vapours		●	●		●	●		●	●	
● JUPITER											



Chemical Industry



The chemical processing industry uses and produces a vast array of wet and dry compounds. Workers must be protected from respirable hazards that can range from gases, vapours and mists to particulates from raw materials and additives.

Hazard-producing processes can include weighing,

dispensing, refining and purifying, as well as cleaning procedures.

The 3M™ Jupiter Air Delivery Unit allows chemical workers full mobility — ideal for large processing facilities — while the 3M™ Supplied Air Units can also be used for a variety of applications.

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121*	HT-125*	HT-152*
Application	Respiratory Hazards										
PREPARATION											
Chemical handling - particulate raw materials	Fine particles	●	●								
Chemical handling - liquid raw materials	Gases and vapours								●	●	●
Chemical handling - solvents	Gases and vapours								●	●	●
CHEMICAL PROCESSES											
General chemical processes	Fine particles, gases and vapours			●	●	●	●				
Refining/Purifying e.g. distillation, precipitation, centrifuging and filtration	Fine particles, gases and vapours			●	●	●	●				
MAINTENANCE											
Cleaning machines/equipment	Fine particles, vapours			●	●	●	●				
● JUPITER ● DUSTMASTER											
This guide considers powered-air filter units as the primary source of air into the modular headtops. Alternatively, supplied air regulators may be used if a source of breathable quality compressed air is available. Please see 3M literature for further information. Note: Specific applications may require supplied-air regulators to be used.											



3M™ Headcover S-133



3M™ Headcover S-333G



3M™ Hood S-433



3M™ Hood S-533



3M™ Hood S-655



3M™ Hood S-657



3M™ HT-121 Hood



3M™ HT-125 Hood



3M™ HT-152 Hood

In addition to respiratory protection, certain chemical machine/equipment cleaning processes may also require additional eye, face and head impact protection. Visit www.3m.eu/poweredsuppliedair for details on the 3M™ HT-800 Series of Bump Caps and Helmets with Visors.

Medical and Healthcare



Many healthcare workers in hospitals and other medical facilities use powered air respirators for protection from potential exposures during medication treatments, nebulizer treatments, airway suctioning, and other procedures that may generate higher levels of aerosolized particles and respiratory

secretions. Sterilants and disinfectants used in these applications can also cause irritation of the respiratory system as well as the skin and eyes. When used with 3M™ air delivery units, 3M™ S-Series Headtops provide respiratory protection and coverage of the

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121	HT-125	HT-152
Application	Respiratory Hazards										
LABORATORY SERVICES											
Glutaraldehyde sterilisation	Gas and vapours	●	●		●	●	●				
● JUPITER											
This guide considers powered-air filter units as the primary source of air into the modular headtops. Alternatively, supplied air regulators may be used if a source of breathable quality compressed air is available. Please see 3M literature for further information. Note: Specific applications may require supplied-air regulators to be used.											



Food and Beverage



Airborne particles from grain, flour, enzymes, yeast, and additives are just some of respiratory hazards faced by food and beverage manufacturers. 3M offers a variety of comfortable,

loose-fitting headtops appropriate for food and beverage processing and general maintenance cleaning of processing equipment.

S-Series Headcovers and Hoods		S-133S/L	S-333SG/LG	S-433S/L	S-533S/L	S-655	S-657	S-757	HT-121	HT-125	HT-152
Application	Respiratory Hazards										
FLOUR PRODUCTION											
Grain handling	Grain dust	● ●	● ●		● ●	● ●	● ●				
Flour bagging	Flour dust	● ●	● ●		● ●	● ●	● ●				
BAKERIES – INGREDIENTS/DISPENSING											
Bag opening and tipping 'rip & tip'	Flour dust	● ●	● ●		● ●	● ●	● ●				
Filling vats/hoppers	Flour dust	● ●	● ●		● ●	● ●	● ●				
Sieving – mechanical	Flour dust	● ●	● ●		● ●	● ●	● ●				
Weighing and dispensing materials	Flour additives (enzyme improvers)	● ●	● ●		● ●	● ●	● ●				
Dough mixing	Flour dust	● ●	● ●		● ●	● ●	● ●				
Filling up flour dusters on production lines	Flour dust	● ●	● ●		● ●	● ●	● ●				
BAKERIES – HYGIENE DUTIES											
Silos	Flour dust	● ●	● ●		● ●	● ●	● ●				
Flour lofts/stores	Flour dust	● ●	● ●		● ●	● ●	● ●				
Ingredients dispensing	Flour dust	● ●	● ●		● ●	● ●	● ●				
Mixers/roll plants	Flour dust	● ●	● ●		● ●	● ●	● ●				
BREWING											
Dispensing/handling	Grain dust/yeast powder	● ●	● ●		● ●	● ●	● ●				
Filtration	Diatomaceous earth	● ●	● ●		● ●	● ●	● ●				
General	Alcohol vapour	●	●		●	●	●				
GENERAL FOOD PROCESSING											
Fish farms – Preparation of shellfish	Proteins	● ●	● ●		● ●	● ●	● ●				
Fish farms – Fish gutting & preparation	Proteins	● ●	● ●		● ●	● ●	● ●				
Food processing – Handling/weighting/mixing	Food additive dust	● ●	● ●		● ●	● ●	● ●				
General Maintenance – cleaning	Chemicals, organic vapours								●	●	
● JUPITER ● DUSTMASTER											
This guide considers powered-air filter units as the primary source of air into the modular headtops. Alternatively, supplied air regulators may be used if a source of breathable quality compressed air is available. Please see 3M literature for further information. Note: Specific applications may require supplied-air regulators to be used.											



3M™ Headcover S-133



3M™ Headcover S-333G



3M™ Hood S-533



3M™ Hood S-655



3M™ Hood S-657



3M™ HT-121 Hood



3M™ HT-125 Hood

Air Delivery Units



3M™ Jupiter™ Air Filter Unit

The Jupiter air filter unit provides respiratory protection against particulate and gaseous contaminants (particulate only and combined particulate/gas and vapour filters available). External air is drawn through the filters and delivered to the 3M™ S-Series headcovers and hoods via the BT-Series Breathing Tube.

The slim, compact Jupiter air filter unit is lightweight and features a small, powerful NiMH battery that sits unobtrusively inside the turbo. The turbo's low-profile design allows greater freedom of movement and the ability to work in tight spaces. Ergonomically designed to sit at the base of the user's back, the unit's low weight is carried mostly on the user's hips via the padded comfort belt. As a result, the Jupiter air filter unit is comfortable enough to wear for entire work shifts.



Technical Specifications			
Approvals Respiratory protection*	EN12941	Battery Pack Recharging time	NiMH approx. 6 hours (4 hour battery pack) approx. 8 hours (8 hour battery pack) approx. 6 hours (4 hour Intrinsically Safe (IS)** battery)
Filters Particle Filter Combined gas/particle filter	P A2P, ABE1P, K1P, A2BEK1P		
Manufacturer's Minimum Design Flow (MMDF)	150 l/min	Noise level dB (A)	max. 75 dB
		Belt	Decontaminable
Weight (including battery, belt and particle filter)	1 160 g	Temperature range Operating temperature Storage temperature	- 5 °C to + 40 °C - 10 °C to + 50 °C

* For further information, please refer to the headtop information or contact 3M.

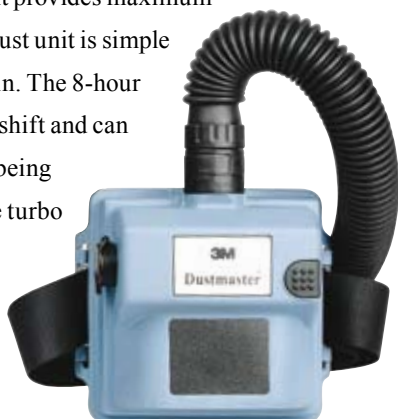
** Can be used in potentially explosive atmospheres when used with specific intrinsically safe accessories.

3M™ Dustmaster™ Air Filter Unit

The Dustmaster air filter unit is an easy-to-use, industry-proven air turbo filter unit for respiratory protection from dusts and nuisance odours. External air is drawn through the filters and delivered to the 3M™ S-Series headcovers and hoods via the BT-Series Breathing Tube.

Three types of particulate filters are available: particulate, particulate with nuisance odour, and high-efficiency particulate.

The Dustmaster unit provides maximum user mobility. The robust unit is simple to operate and maintain. The 8-hour battery lasts an entire shift and can be recharged without being disconnected from the turbo unit.



Technical Specifications			
Approvals Respiratory protection*	EN12941 prEN146	Weight (including battery, belt and particle filter)	1 130 g
Filter Particle Filter Particle plus nuisance odour filter High efficiency particle filter	P	Battery Pack Recharging time	NiMH 14 hours
		Noise level dB (A)	max. 75 dB
		Belt	75–127 cm
Manufacturer's Minimum Design Flow (MMDF)	150 l/min	Temperature range Operating temperature Storage temperature	-6 °C to + 40 °C -20 °C to + 50 °C
<p>* For further information, please refer to the headtop information or contact 3M.</p>			

Air Delivery Units



3M™ Flowstream™ Regulator

The Flowstream regulator ensures an individually-adjustable, consistently-controlled airflow. Using the BT-Series Breathing Tube, the Flowstream can be combined with 3M™ S-Series headcovers and hoods. The regulator requires a working pressure of 3.5-8 bar and is extremely quiet due to the integrated silencer (< 65 dBA). Five different compressed air supply tubes are available to connect the regulator to the compressed air source. The 3M™ AirCare™ Filtration Unit can be connected to help remove certain contaminants from the compressed air before it reaches the regulator. The integrated activated charcoal filter removes odours from the supplied air.

The various components of the supplied air system are connected using plug-and-socket couplings (Rectus 25, CEJN, '342' or Broomwade 'Instantair' connectors available).

An auxiliary port allows a spray gun or other air tool to be connected to regulator without causing variations in headtop airflow. An integrated warning whistle warns the user of low airflow into the headtop.



Technical Specifications

Approvals Respiratory protection*	EN14594 EN1835	Temperature range Operating temperature Storage temperature	-5 °C to + 40 °C -10 °C to + 50 °C
Inlet Pressure	Pressure range 3.5-8 bar Max Pressure: 10 bar	Compressed air supply tubes	Select from: - 10m /30m standard duty - 5m light duty - 7.5 m coiled - 10m antistatic, high temp
Outlet Flow Nominal flow	150 l/min		
Weight	514 g	Inlet and auxiliary port	¼" BSP thread
Noise level dB (A)	<65 dB(A)	Couplings and connectors	Available from 3M: - CEJN '342' - Rectus '25' - Broomwade 'Instantair'
Belt	75 - 127 cm		

* For further information, please refer to the headtop information or contact 3M.

3M™ Vortemp™/Vortex Heating/Cooling Regulators

The Vortemp™/Vortex regulators can be used as an alternative to the 3M™ Flowstream regulator to either heat or cool the air by as much as 28°C. These are ideally suited for environments with uncomfortably low or high temperatures in addition to high concentrations of hazardous contaminants.



Technical Specifications

Approvals Respiratory protection*	EN14594 EN1835	Compressed air supply tubes	Select from: - 10m /30m standard duty - 5m light duty - 7.5 m coiled - 10m antistatic, high temp
Inlet Pressure	Pressure range 4-8 bar Max Pressure: 10 bar		
Outlet Flow Nominal flow	150 l/min	Inlet port	¼" BSP thread
Weight (including comfort pad and belt)	Vortex 579g Vortemp 649g	Couplings and connectors	Available from 3M: - CEJN '342' - Rectus '25' - Broomwade 'Instantair'
Temperature range Operating temperature Storage temperature	-5 °C to + 40 °C -10 °C to + 50 °C		
Noise level dB (A)	<65 dB(A)	Heating/Cooling Effect	Maximum of 28°C
Belt	75 - 127 cm		

* For further information, please refer to the headtop information or contact 3M.

About 3M

A recognized leader in research and development, 3M produces thousands of innovative products for dozens of diverse markets. The core strength of 3M is applying its more than 40 distinct technology platforms – often in combination – to a wide array of customer needs. With \$25 billion in sales, 3M employs 75,000 people worldwide and has operations in more than 60 countries.



Division Name 3M Operating Unit

Address
City, State, Postal Code
Country
Phone
Fax
Email
Web site address

Please recycle. Printed in (Country).
© 3M 2009. All rights reserved.
70-0000-0000-0