### 3M Occupational Health and Environmental Safety Solutions

**Product Directory** 

### **MIDDLE EAST**





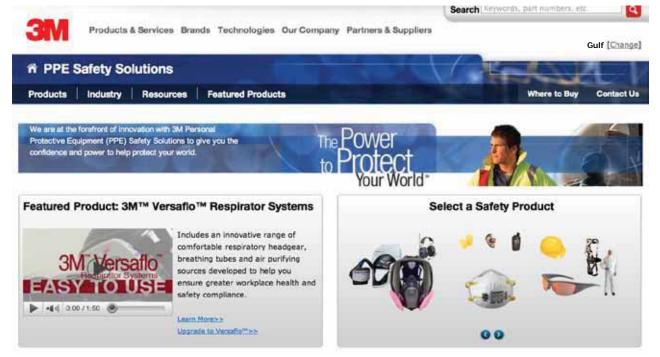
# The Power to Protect Your World

As one of the worlds's leading suppliers of safety and protective equipment our goal is to ensure that we satisfy your needs through the provision of exceptional leadership, expertise, quality and service excellence. If we can make your life and that of your workforce easier, healthier, safer and more productive we are moving in the right direction.

We believe that health and safety is first and foremost about safeguarding worker welfare. A secure, safe working environment is paramount in any business. But we also believe that improving worker protection, comfort, durability and productivity is a more ambitious goal; one we firmly believe in.

3M sales professionals work closely with you to help define your issues, identify problems, and provide options. With 3M, you can confidently choose the personal protection equipment that most effectively protects your workforce. When job requirements call for special problem solving expertise, you can rely on 3M to use its diverse industry knowledge and history of innovation to help you by offering quality products.

3M experts are available for on-site consultation, training, and customized options.3M products help provide protection and comfort to a range of applications and conditions.3M is at your side helping you protect your world.



To view our customer testimonials visit: www.youtube.com/user/3MHealthSafety

### **Training and Service**

3M's product training is based on many years of customer research, conducted in the field of occupational health and safety. Experts from throughout the safety world are invited to our customer events to discuss topical issues regarding health and safety in the workplace. This enables us to offer comprehensive support for safety inductions and provide easy-to-use training tools. Our training is designed to meet the individual needs of your company; your safety being at the heart of everything we do.

If you are interested in training and seminars, please contact your local 3M office where we will be more than happy to assist you in your health and safety needs.



### Pandemic Preparedness and 3M

Forward planning reduces the risk of significant disruption in case of a pandemic outbreak situation.

3M's experience and competence in supporting authorities, healthcare workers and general industry can help you in pandemic preparedness planning.

### Our service is built upon:

- Over 30 years of experience in developing and producing respiratory protective equipment
- In-depth expertise available through a global infrastructure
- · Competent consultancy, planning and training





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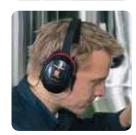
Speedglas<sup>™</sup> Welding Safety

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State of the art features set 3M apart from conventional respirators in the market. 3M<sup>TM</sup> filter material combines the benefits of mechanical filtration with advanced technology filtration to capture particles and the 3M<sup>TM</sup> Cool Flow<sup>TM</sup> Valve reduces heat build up.

Combined with ergonomic design for superior comfort, our wide range of proprietary technologies help to deliver easier breathing and comfortable protection against particle hazards. All products featured in this section are exempt from record keeping requirements.

Selecting and specifying the appropriate respiratory protective equipment may appear daunting with multiple factors to consider. The equipment needs not only to provide appropriate protection for the job, but should also be comfortable enough for the individual user to wear during the whole period of exposure.



### The Selection of Respiratory Protection Equipment follows a basic four-step method:

- 1 Identify the Hazards dust, metal fume, gas, vapour etc.
- 2 Assess the Risk assess the hazard levels against safety standards and consider other protection skin, eye and body
- 3 Select the Right Respirator disposable, reusable, half face mask, full face mask, powered, supplied air etc.
- 4 Train in Fitting and Use to optimise respiratory protection

## Disposable Respirators 3M Four-Step Method

### 1. Identify the Hazards

Application*		Performance level	Important information
	Rust, Metal Particles, Filler	P1	
Sanding,	Concrete, Stone	P1	P2 When quartz concentration is high
Cutting,	Cement, Wood, Steel	P2	
<b>5</b> .	Paints/Varnish/Anti-rust coating	P2	When Chromates are present
Drilling	Steel, Stainless Steel	P3	
	Anti-Fouling Varnish	P3	Speciality respirator maybe required
Low temp. oil spray		P2	
	Mild Steel, Zinc (Autogen, MIG/MIK)	P2	3M <sup>™</sup> 9928 or 3M <sup>™</sup> 9925 for Ozone protection
Welding	Stainless Steel (Electrodes)	P2	9928 or 9925 for Ozone protection
	Soldering	P2	
Work with Asbestos	Small amounts infrequent exposure	P2/N95/P95	P3/N100 for additional protection
Work with Glass and Mineral fibres		P2/N95/P95	
Waste Sorting		P3/N100/P100	May need gas & vapour respirator
Caravina	Paint spray	P2/N95/P95	May need gas & vapour respirator
Spraying	Pesticides (water based)	P2/N95/P95	
Utility maintenance (e.g. filter change)		P3/N100/P100	
Allergies	Pollen, Animal dander	P1/N95/P95	
Allergies	Grain dust	P2/N95/P95	
	Mold/Fungus	P2/N95/P95	
Contact with:	Bacteria	P2/N95/P95	P3/N100/P100 With Tuberculosis
	Diesel exhaust/Smoke	P2/N95/P95	

<sup>\*</sup> Warning: This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and user instructions. Before using any of these respirators, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. Please note that the applications shown highlight some of the hazards which may be considered. Selection of the most appropriate respiratory protective equipment (RPE) will depend on the particular situation and should be made only by a competent person knowledgable of the

### 2. Assess the Risk

	EN 149:2001+A1:2009 FFP1 Respirators	EN 149:2001+A1:2009 FFP2 Respirators	EN 149:2001+A1:2009 FFP3 Respirators	EN 149:2001+A1:2009 Welding Respirators
Nominal Protection Factor	NPF 4	NPF 12	NPF 50	NPF 12
Typical Applications	Low levels of fine dust (up to 4 x TLV) and oil or water based mist typically found during hand sand- ing, drilling and cutting	Moderate levels of fine dust (up to 12 x TLV) and oil or water based mist typically found during plastering, cement, sanding and wood dust	Higher levels of fine dust (up to 50 x TLV) and oil or water based mist typically found when handling hazardous powders found in the pharmaceutical industry or work with biological agents and fibres	Moderate levels of fine dust (up to 10 x TLV), oil and water based mist, metal fume and ozone (10 x TLV) and organic vapours below TLV typically found in welding and soldering

Nominal Protection Factor (NPF): The theoretical protection level of a respirator based on laboratory measured performance data.

### 3. Select the Right Respirator

Once you have selected the protection factor you require, you can then consider whether you need a cup-shaped respirator, or a foldable respirator, whether it has buckled straps and whether it is valved or not.



### 3M<sup>™</sup> Cup-Shaped Respirators

- + Convex shape, nose clip and twin strap design
- + Easy to fit
- + Durable, collapse resistant shell



### 3M™ Buckle Strap Respirators

- + Robust and durable design provides multishift capability and secure feel
- + Adjustable braided headbands
- + Soft inner face-seal improves comfort



### 3M<sup>™</sup> Foldable Respirators

- + Ultra soft, flexible and comfortable fit resulting from the multiple panel design
- Comfort Series Flat Fold only: Individually packed, foldable design prevents contamination before use and allows easy storage



### 3M™ Cool Flow™ Valve

- + Effective removal of heat build-up provides a cooler and more comfortable wear
- + Provides longer continuous wear time
- + Reduces risk of fogging of spectacles and eyewear

### 4. Train in Fitting and Use

### **Training Offered by 3M**

Correct use and appropriate maintenance of personal protective equipment (PPE) from 3M makes a major contribution towards ensuring that it provides effective protection. Our experienced sales and technical teams will help you make the most of your products.

In compact training units, they will show you and your employees how to recognize potential hazards, suggest what measures to take and help explain how to choose the appropriate protective equipment for each particular situation.

### EN 149:2001+A1:2009 Standard

3M Disposable Respirators meet the requirements of European Standard EN 149:2001 + A1:2009, filtering facepiece respirators for use against solid and non-volatile liquid particles only. Products are classified by filtering efficiency and maximum total inward leakage performance (FFP1, FFP2 and FFP3), also by usability and cloqqing resistance.

### Performance tests in this standard include:

- + filter penetration and extended exposure (loading) test evaluates the filtration performance when new and over time
- + breathing resistance evaluates the ease of breathing (inhalation and exhalation) through the respirator
- + total inward leakage evaluates the filter penetration, valve leakage (if fitted) and importantly the face seal leakage of the respirator when worn by a panel of different people whilst conducting simulated work exercises
- + clogging resistance evaluates the ability of the respirator to continue to function effectively and provide respiratory protection in very high dust environments

Reusable products are also subjected to a cleaning cycle (specified by the manufacturer) and 24 hour storage to confirm the product performance is not affected by re-use. Clogging resistance testing is a mandatory requirement for reusable products, but is optional for single shift use only (non reusable) products. A full copy of EN 149:2001+A1:2009 can be purchased from your national standards body.

Marking designations:

R = Reusable

NR = Non reusable (single shift use only)

D = Meets the clogging resistance requirements

### 3M™ EVM Environmental Monitoring Series

The 3M<sup>™</sup> EVM Series monitors both particulates and air quality in one compact instrument. From healthcare and manufacturing to construction and military applications, the EVM Series provides a lower cost of ownership by combining three instruments into one. Its user-friendly interface, patented dial-in rotary impactor, and advanced reporting and analysis features make it a particulate and IAQ area monitoring instrument of choice for industrial hygienists and safety professionals worldwide. This durable, easy to use model provides simultaneous worksite area monitoring of:

- + Particulate mass concentrations (0.1-10 µm)
- + Select volatile organic compounds
- + Temperature
- + Carbon dioxide



### 3 Models to choose from

### EVM-3

Specializes in real-time direct reading of particulate concentrations. This tri-sensor instrument utilizes the built-in sampling pump and dial-in impactors for real-time mass concentration readings.

### EVM-3 measures:

- + Particulate mass concentration (0.1-10 μm)
- + Temperature
- + Relative Humidity

### EVM-4

Multi-sensor instrument designed for indoor air quality investigations. Simultaneously track, log and monitor multiple indoor air quality parameters including room air exchange rates and dew point.

### EVM-4 measures:

- + Toxic Gas (choose from nine sensors)
- + Carbon Dioxide
- + Temperature
- + Relative Humidity

### EVM-7

The EVM-7 has the features needed for many air quality and particulate concentration assessments.

- + Particulate mass concentration (0.1-10 μm)
- + Toxic Gas (choose from nine sensors)
- + Carbon Dioxide
- + Temperature
- + Relative Humidity
- + Volatile Organic Compunds

## 3M<sup>™</sup> Disposable Particulate Respirators



### The importance of comfort

To make sure that the respirator protects you, it must be worn during all periods of exposure. Make sure that you choose a respirator that you can wear comfortably for your entire shift.

### Here's what to look for:





### Breathing ease

An efficient exhalation valve and high-efficiency, low breathing resistance filter material will help you to breathe comfortably.



### Coolness

An efficient exhalation valve minimises heat build up, particularly in hot and humid work conditions.



### Face and head comfort

The respirator's edge should be flexible and the shape and size should cover the nose, mouth and chin without causing excessive pressure. A headband material which provides a good, even tension across the head can ensure a comfortable, secure fit for a range of head sizes.



### Skin comfort

Skin comfort will be affected by the smoothness and softness of the inner material in contact with the skin - especially over a long period of time. A soft inner face seal and sweat absorbent nose foam will provide greater comfort. Rough or hard materials, coupled with a high temperature inside the respirator may be itchy and unpleasant.



### Lightweight

Take advantage of technological innovation and choose a lightweight respirator for optimal comfort.



### Compatibility with other PPE

Make sure that the respirator you select fits well with the other PPE required for your work such as eyewear and hearing protection to ensure maximum comfort.

### 3M<sup>™</sup> Disposable Particulate Respirators



### The importance of fit

Disposable respirators are most effective when there is a good seal between the edges of the respirator and your face. The instant this seal is broken, protection is compromised as contaminated air can leak in through any gaps.

### Here's what to look for:

- Upper strap should be positioned on the crown of the head. Strap should not be twisted
- + Noseclip should be moulded around nose and cheeks to give a good seal \_\_\_\_\_
- Respirator should be correctly positioned on your face and head
- + For flat fold respirators make sure the panels are fully unfolded \_\_\_\_\_
- + Lower strap should be positioned below the ears. Strap should not be twisted





The face should be clean shaven as beards or other facial hair can prevent a good seal.



Long hair should be tied back.



Using both hands, mould noseclip to the shape of the lower part of the nose to ensure a close fit and good seal. Do not pinch the noseclip with only one hand as this may not give a good fit.



### Fit Check

- + A pre-use fit check must be conducted every time you fit your respirator
- + Cover the front of the respirator with both hands, being careful not to disturb the fit of the respirator
- Unvalved respirator exhale sharply, Valved respirator – inhale sharply
  - + If air leaks around the nose, re-adjust the noseclip to eliminate leakage
  - + If air leaks at the respirator edges, work the straps back along the sides of the head or adjust the tension to eliminate leakage

Repeat the above fit check.

If you cannot achieve a proper fit do not enter the hazardous area - see your supervisor.



One model of respirator may not fit everyone. Users should be fit tested in accordance with national requirements. For information on fit testing procedures, contact your safety officer or 3M.



## **-ilterin** Facepiece Respirators

### 3M<sup>™</sup> Disposable Filtering Facepiece Respirators

### **Features of 3M Filtering Facepiece Respirators**

From foundries to wood working, workers in many industries require protection from airborne particles and mists. Sweeping, sanding, grinding, sawing, bagging, welding – each creates a unique set of conditions, especially given environmental considerations such as heat and humidity. 3M's wide selection of filtering facepiece respirators helps you match the respirator to your environment. 3M uses a variety of innovative technologies and features to help you meet your protection and comfort needs. They are all NIOSH 42 CFR 84 approved and include the following features:

- · lightweight and comfortable
- · adjustable noseclips
- variety of strap types
- · variety of strap attachments
- · some available with carbon filter material for nuisance level relief1
- soft inner materials
- compatible with most eye and hearing protection

### Important

All 3M Filtering Facepieces are NIOSH approved respirators. Before using, you must determine the following:

- 1. The types of contaminants for which the respirator is being selected and exposure time.
- 2. The concentration level of the contaminant(s). Do not use for particle concentrations that exceed 10 times the OSHA PEL or applicable occupational exposure limit, whichever is lower.
- 3. Whether the respirator can be properly fitted to the wearer's face. Do not use with beards, or other conditions that prevent a good seal between the face and the sealing surface of the respirator.
- 4. Before required use of filtering facepiece respirators, a written respiratory protection program must be implemented, meeting all the requirements of OSHA 29 CFR 1910.134 including medical evaluation, training, and fit testing.
- 1. 3M recommended for relief against nuisance level acid gas or organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.

### **Featured Technologies**

**Cool Flow**™ **Exhalation Valve.** Proprietary one-way valve for easy exhalation and cool comfort.



M-noseclip. Proprietary noseclip adjusts easily for fewer pressure points and greater comfort.



Faceseal. Soft and secure, conforms closely to face for additional comfort.



Advanced Electret Media. Proprietary filter media with electrostatically charged microfibers help make breathing easier and cooler.



Carbon filter material. Carbon Filter Media provides relief against odors, vapors and other gaseous contaminants for greater wearer comfort. For nuisance level relief only.1



Cake-resistant filter media. Proprietary filter media with specifically designed filter layers for welding applications provide longer respirator life and easier breathing.



Welding Web. Unique filter media incorporating protective layers designed to be flame resistant as demonstrated per ASTM D2859-96. (Not a substitute for a faceshield.)



Adjustable buckle straps. A single tug helps provide a comfortable, secure fit.



**P-series filter.** Proprietary Advanced Electret Media, appropriate for prolonged use in both oil and non-oil containing environments.



## isposable Particulate Respirators









3M™ 9010 Cup-shaped **Particulate Respirator** 

Classification: N95 US Standard Protection: Dust/Mist

Made in:







Unvalved

3M™ 8510 Cup-shaped **Premium Particulate Respirator** 

Classification: N95 US Standard

Protection: Dust/Mist







3M™ 8210 Cup-shaped **Particulate Respirator** 

Classification: N95 US Standard Protection: Dust/Mist









3M™ 9210 Particulate Respirator

Classification: N95 Protection: Dust/Mist





3M™ 9105 flat fold **Particulate Respirator** 

Classification: N95 US Standard

Protection: Dust/Mist

Made in:



### 3M™ Fit Test Kits for all 3M<sup>™</sup> Maintenance Free Particulate Respirators

3M offers two qualitative fit test kits FT-10 (sweet) and FT-30 (bitter); FT-10 uses a test solution of sodium saccharin that produces a sweet tasting aerosol and FT-30 uses denatonium benzoate to produce a very bitter taste. Each kit contains a hood and collar assembly, two nebulisers, sensitivity solution, test solution and detailed user instructions. The choice between the bitter and sweet test kit is a personal one, however a small percentage of the population are unable to detect saccharin in which case the bitter test must be used. Spare hoods, nebulisers and solutions are available for the fit test kits.



### 3M Part No./3M Description

FT-30 Fit Test Kit - Bitter (includes hood, collar, 2 nebulisers, sensitivity solution, fit test solution and laminated user instructions)

Spare Parts

FT-31 Sensitivity solution 55ml bottle (bitter)

FT-32 Fit Test solution 55ml bottle (bitter)

FT-13 Nebuliser (1/box)

FT-14 Hoods (2 hoods/box)

FT-15 Collar (1 collar/box)

### 3M<sup>™</sup> Disposable

### isposable Particulate Respirators





### Comfort Series: Flat Fold - 3M<sup>™</sup> Aura<sup>™</sup> 9300+ Series

The new 3M<sup>™</sup> Aura<sup>™</sup> 9300+ respirators are the result of 3M's continuous drive to improve comfort. They are packed with ground-breaking ideas, technologies and materials and have also retained many of the features that helped make the 9300 series hugely popular. New features include low breathing resistance filter technology for

easier breathing throughout your shift, an embossed top panel to reduce fogging of eyewear, a sculpted edge for improved compatibility with eyewear and an innovative chin tab to improve ease of fitting.

3M™ Aura™ 9322+ Particulate Respirator

### **Features and Benefits:**

### Foldable - Proprietary 3-Panel Design

- Ingenious 3-panel design fits a wide range of face shapes and sizes
- + Accommodates your facial movements
- Collapse resistant: ideal for work in hot humid environments

### **NEW! Sculpted Nose Panel**

- + Curved, low profile design
- + Conforms well to nose and eye contours
- + Helps provide a good field of vision and improves compatibility with eyewear

### NEW! Low Breathing Resistance Filter Technology \_\_\_\_\_

- Combines the benefits of 3M's electret particulate filter material with advanced low breathing resistance filter technology
- + Improved breathing ease and comfort

### **NEW! Embossed Top Panel**

+ Helps reduce fogging of eyewear

### 3M™ Cool Flow™ Valve

- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of fogging eyewear

### **NEW! Innovative Chin Tab**

+ Improves ease of donning and adjustment to help achieve a comfortable fit

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M

3M<sup>™</sup> Low Breathing Resistance Filter Technology

Foldable Three-Panel Design

3M™ Cool Flow™ Valve

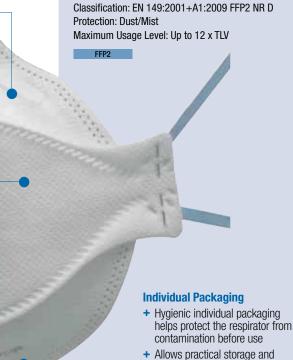






### Face and Head Comfort

 Large soft nose foam material and smooth inner cover web both feel incredibly soft on the skin and help to create a comfortable environment for the face





also available in handy packs of 5





dispensing in the workplace





## Disposable Particulate Respirators



**U.S. RANGE** 



3M™ 8210V Particulate Respirator



3M™ 8210V Particulate Respirator Classification: N95



3M™ 9211 Particulate Respirator Valved

Classification: N95 Protection: Dust/Mist

Protection: Dust/Mist



3M™ 8511 Cup-shaped **Premium Particulate Respirator** 

Classification: N95 US Standard Protection: Dust/Mist



### **EUROPEAN RANGE**



3M™ Aura™ 9312+ Particulate Respirator

3M™ Aura™ 9312+ Particulate Respirator

Classification: EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 4 x TLV



3M™ Aura™ 9322+ Particulate Respirator

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV



3M™ Aura™ 9332+ Particulate Respirator

Classification: EN 149:2001+A1:2009

FFP3 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 50 x TLV

### 3M<sup>™</sup> Disposable Particulate Respirators



### **Premium Series**

With this premium respirator series 3M offers ultimate safety, meeting the particular requirements of the clogging test for FFP (filtering face piece) respirators which may be used for more than one shift.

The 3M<sup>TM</sup> 8835 Respirator has exceptional comfort because of its lightweight, off-the-face design; a soft inner face-seal ring;

a large surface area providing maximum filtration and ease of breathing; an exhalation valve to reduce heat build up in certain work conditions; 4-point adjustable straps and an adjustable nose clip to ensure a comfortable fit.

> 3M<sup>™</sup> 8835 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP3 R D

Protection: Dust/Mist/Metal Fume

Maximum Usage Level: Up to 50 x TLV

### **Features and Benefits:**

### **Soft Inner Face-Seal Ring**

- + Improves seal to face
- + Increases wearer comfort
- + Can be cleaned for wearer hygiene if used for longer than one shift (3M™ 105 Face Seal Cleaner)

### **Robust Shell and Cup Design**

+ Robust and durable design provides multi-shift capability and a secure feel

### **3M<sup>™</sup> High Performance Filter Material**

- + Increased filter area helps extend the life of the respirator. Higher capacity against dust
- + Effective filtration with easy breathing
- + Consistent high quality performance

### **Colour Coded Valve Lettering**

+ Easy to recognise protection level (FFP3 for 3M 8835, FFP2 for 3M 8825 respirators) by colour coding

### 3M™ Cool Flow™ Valve

- + Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of misting eyewear

### **Adjustable Braided Headbands**

+ Help achieve a more secure feel and provide comfort to face, head and neck

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M

### 3M™ High

Performance Filter Material

Adjustment Buckle Straps 3M™ Cool

Flow™ Valve Face Seal









### **Typical Applications**

- + Construction
- + Ship Building/Repair
- + Pharmaceuticals
- + Welding and Soldering
- + Chemical Processing
- + Iron and Steel Foundries
- + Battery Manufacturing





### **Premium Series**

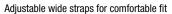




3M™ 8233 Particulate Respirator
Classification: N100 US NIOSH
Protection: Dust/Mist/Metal Fume
Maximum Usage Level: Up to 10 x OSHA PEL



3MTM 8293 Particulate Respirator
Is well suited for those who want
NIOSHs highest rated filtration
efficiency in a maintenance free
respirator. It provides a minimum filter
efficiency of 99.97% against oil base
particles.









3M<sup>TM</sup> 8835 Particulate Respirator Classification: EN 149:2001 FFP3 D Protection: Dust/Mist/Metal Fume Maximum Usage Level: Up to 50 x TLV

Large soft faceseal provides excellent wearer comfort and protection



## isposable Particulate Respirators

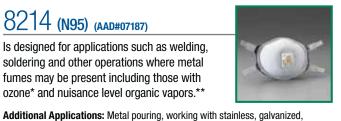
### **Welding Series**

Suggested Applications: Welding, torch cutting, brazing, soldering Welding respirators all feature the proprietary 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve.

### **Welding and Metal Pouring**

### 8214 (N95) (AAD#07187)

Is designed for applications such as welding, soldering and other operations where metal fumes may be present including those with ozone\* and nuisance level organic vapors.\*\*



8212 (N95)

Features the 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve, cake-resistant filter media, a comfortable foam faceseal and fully adjustable straps.



















### 8514 (N95)

Is designed for applications such as welding, soldering and other operations where metal fumes are present including those with ozone\* and nuisance level organic vapors.\*\*



Additional Applications: Metal pouring, working with stainless, galvanized, or aluminium















### 8512 (N95)

Features the 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve. cake-resistant filter media, nose foam, and fully adjustable noseclip and straps.















### 8515 (N95) (AAD#07189)

An economical option for welders featuring the 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve. adjustable M-noseclip, and braided headband to help provide a custom fit and secure seal.









<sup>\*3</sup>M recommended for ozone protection up to 10X OSHA PEL. Not NIOSH approved for ozone.

<sup>\*\*3</sup>M recommended for relief against nuisance level acid gas or organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.

### **Speciality Series**

Suggested Applications: Grinding, bagging, sanding, sweeping in oil and non-oil environments and other dusty operations

### Unvalved Specialty Respirators Valved Specialty Respirators

### 8247 (R95) (AAD#07186)

Is designed to help provide comfortable protection against certain oil and non-oil based particles including those present with nuisance levels of organic vapors\*, such as solvents, degreasers, and resins.



Additional Applications: Foundry operations, lab settings, agriculture, petrochemical manufacturing and undercoating where particles and nuisance levels\* of organic vapors may be present



### 8246 (R95)

Helps provide protection against certain oil and non-oil based particles including those present with nuisance levels of acid gases\* such as sulphur dioxide, hydrogen fluoride, and/or chlorine.



Additional Applications: Glass etching, chemical processing, paper processing, aluminum smelting and brewing operations where particles and nuisance levels of acid gases\* may be present



Is designed to help provide protection against certain oil and non-oil based particles. It features a collapse resistant shell for increased durability in most hot, humid conditions.



Additional Applications: Grinding, sanding, sweeping, machining and other dust producing/oily operations



### \*3M recommended for relief against nuisance level acid gas or organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits. whichever is lower

Features the proprietary 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve. Suggested for extended wear time, hot/humid conditions

### 85// (P95)

Is designed to help provide comfortable, reliable worker protection against certain oil and non-oil based particles including those present with nuisance levels of organic vapors\* such as solvents, degreasers and resins.



Additional Applications: Foundry operation, lab settings, agricultural, petrochemical, manufacturing











### 8576 (P95)

Is designed to provide comfortable, reliable worker protection against certain oil and non-oil based particles including those present with nuisance levels of acid gases\* such as sulphur dioxide, hydrogen fluoride, and/or chlorine.



Additional Applications: Glass etching, chemical processing, paper processing, aluminum smelting and brewing operations











Combines P-series versatility with exceptional comfort and fit. It is an excellent choice for those who have work environments that may contain oil aerosols.











Is designed for the aluminum industry. It helps provide protection against certain non-oil based particles including those present with nuisance levels of acid gases\* such as sulphur dioxide. hydrogen fluoride. and/or chlorine.









## 3M<sup>™</sup> Disposable Particulate Respirators



### **Healthcare Series**

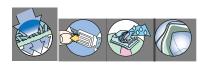
### Meeting particular requirements

The 3M speciality respirators have been developed for particular working environments.

They can be used for a wide variety of applications ranging from:

- Microbiology Labs
- Hospitals
- Sterile Areas

### Advantages of Speciality Respirators:



- Designed to offer relief from the irritation caused by specific gases and vapours, often present alongside particulate hazards.
- Reliable, effective protection against fine particles.
- · Durable collapse-resistant inner shell.
- Comfortable, lightweight off-the-face design.
- 3M High Performance Filter Media offers additional comfort through low breathing resistance.

### COMPATIBILITY

3M Maintenance Free Particulate Respirators are compatible with other 3M products:

### Eyewear



### Hearing Protection





without valve

### 1860 Healthcare Respirator

protection level N95

protection against fine dusts, oil and water-based mists,

Special Features

1-Fluid Resistant Outer Layer reduces exposure to the spray, spatter, or aersol of blood and body fluids.

2-Meets CDC Guideslines for TB exposure control.

### COMPATIBILITY

3M Welding Respirators are compatible with other 3M products:

### Welding Headton









### 3M™ Ultimate FX Full Facepiece Reusable Respirator FF-400 Series

Comfortable, durable protection for demanding, X-treme conditions

As 3M's latest advancement in respiratory protection, the lightweight Ultimate FX FF-400 was developed to provide maximum comfort and durability with unique features that make it the optimal choice for a variety of industrial applications:

### Large Lens Featuring Scotchgard™ Protector

- Paint and stain-resistant lens—3M's exclusive Scotchgard™ coating causes some paints and stains to bead up on the surface so they can be wiped off easily
- Helps lens stay clearer during some spray applications
- · Provides a wide field of view

### **Passive Speaking Diaphragm**

 Optimally positioned for clearer and easier communications

### **Bonded Silicone Gaskets**

 Eliminates loose gaskets that can be lost



### Easy to Use

 Respirator attachments twist on and off easily for quick assembly and disassembly

### **Durable, Long-lasting Head Harness**

- Features a six-strap configuration for a secure fit
- Harness straps pulled over one million times in development durability testing



 Positions the respirator more comfortably on the head

### Soft, Silicone Nose Cup and Faceseal

- Engineered for maximum durability, comfort and resilience
- Three sizes help the respirator fit a broad range of face shapes and sizes

### Patented 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve

- Allows for easier breathing
- Reduces heat and moisture buildup for cool, dry comfort





1977

3M offers the first reusable "Maintenance-Free" Half Facepiece Respirator 3M designs and develops the "bayonet-style" cartridge connection



1989

1991

3M develops first disc filters with loaded web filter media—the first non-woven, non-fiberglass filters



1992

3M manufactures a "swept-back" designed cartridge for its 5000 Series

for its 5000 Series Facepiece for better peripheral vision and weight distribution





3M develops and incorporates a new integral filter technology in its 4000 Series Facepiece, creating a lighter weight respirator

### 3M™ Full Facepiece Respirator 6000 Series

### Reliable, convenient, compatible protection



### **Features and Benefits:**

### **Full Face Piece**

- + Soft, non-allergenic elastomeric face piece
- + Extremely lightweight (400 grams) for high comfort

### **Full Face Lens**

- + Broad field of vision
- + Polycarbonate lens, scratch and impact resistant to EN166:2001 B

### **4 Strap Head Suspension**

- + Easy to put on and take off
- + Well balanced

### 3M™ Cool Flow™ **Exhalation Valve**

- + Less exhalation resistance
- + Easier breathing
- + Less heat and sweat build-up
- + Reduces valve vibration
- + Downwards flow of exhaled air
- + Minimised dirt-traps to stay clean
- + Sleek look and feel

### **Filter Connection**

- + Twin filter design provides lower breathing resistance
- + Better weight distribution and
- + Improved peripheral vision
- + Safe and secure fit
- + Optical marking of attachment point

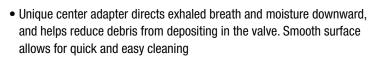




6900 - large

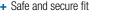
### **Compatible with**

+ Hearing Protection from 3M



- Large lens provides wide field of view and excellent visibility
- 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve helps provide cool, dry comfort
- Meets requirements of ANSI Z87.1-2003 for high impact (Z87+)
- Lightweight, well-balanced design with silicone faceseal for enhanced comfort and durability
- · Available in air purifying respirator (APR), supplied air and powered air purifying respirator (PAPR) modes

more balanced fit



- + Flexible System for gas, vapour, particulate filters
- + Optional supplied-air connection



the market



3M develops first Full Facepiece Respirator with Scotchgard<sup>™</sup> coating overmolded gaskets, and comfort head cradle



1996

2002

2009

2010

3M introduces Cool Flow™ Valve for reduced heat and moisture in the 7500 Half Facepiece Respirator

3M develops first

OV filter. Offers

resistance on

lowest breathing



3M develops easier breathing, longer lasting disc filters

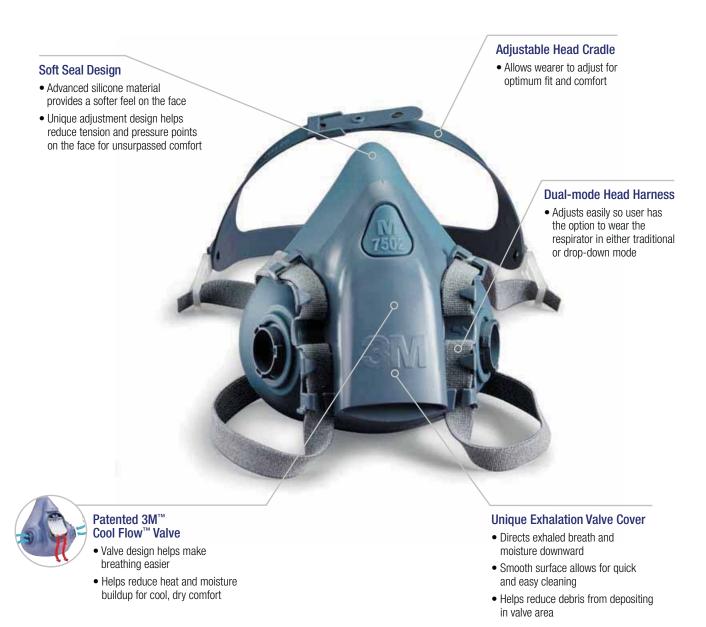


3M launches its 6000 Series Full Facepiece Respirator offering best-in-class field of view and lightweight characteristics



### 3M™ Half Facepiece Reusable Respirator 7500 Series

Easy breathing, comfort and durability





3M™ Gas & Vapour Respirators

### Series 7500

### Both robust and extremely comfortable

The durable, long-life respirators of the 7500 series have been designed for harsh working environments. These innovative respirators are made from eudermic silicone and feature a unique "drop-down" head harness. This head harness enables the user to lower the mask during short breaks without having to take it off completely. Moreover, these respirators efficiently prevent heat and moisture build-up in the face piece and are even more robust, comfortable and safer.

### Advantages overview:



- Twin filter design provides lower breathing resistance, a more balanced fit by avoiding heavy filter at the front, and also improves field of vision.
- 3M Bayonet filter attachment system for a safe, secure fit.
- Cost effective replacement filters to keep running cost at a minimum.
- Valve for easier breathing and reduced heat and moisture build-up.
- Soft silicone material provides more flexibility and lighter contact with the face and head.
- Utilises all of the existing 2000, 5000 and most of the 6000 Series filters.
- Head harness system & yoke with drop-down capability giving increased stability and less pressure on the nose.
- Easy to wear with other headgear.
- EN140:1998.



7500 Reusable Half Mask EN140:1998

Silicone Mask Size:

- 7501 (S)
- 7502 (M)
- 7503 (L)



Alf mask of the Serie 7500 with "Drop-Down capability"



All reusable half face masks of 6000 and 7500 series fulfil the standard EN140. The reusable full face masks of 6000 and 7500 series are all tested and approved according to EN136. All 3M masks are CE marked.

Note: The protection level of the masks depend on the filter attached.

## Reusable Respirators

### 3M™ Half Facepiece Reusable Respirator 6000 Series

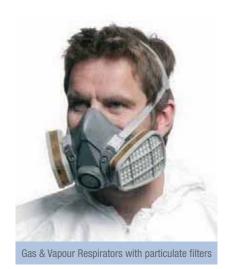
### Designed for low maintenance with maximum simplicity and comfort

The half and full face masks of the 6000 series are designed for low maintenance and maximum ease of use and wearer comfort. All respirators of this series incorporate the 3M™ Bayonet filter attachment system enabling a fast and easy exchange of filters.

### Advantages overview:



- · Twin filter design provides lower breathing resistance, a more balanced fit, by avoiding heavy filter at the front and also improves field of vision.
- · Cost effective replacement filters to keep running costs at a minimum.
- · 3M Bayonet filter attachment system for a safe and secure fit.
- Soft, lightweight elastomeric face piece.
- · Cradle head harness & easy to fasten neck
- · Low maintenance mask, reducing complexity and maintenance costs to a minimum.
- · Utilises all of the existing 2000, 5000 and most of the 6000 Series filters.
- · CE Marked.
- EN140:1998.



6000 Reusable Half Mask

EN140:1998

Size:

- 6100 (S)
- 6200 (M)
- 6300 (L)



Gas & Vapour Respirators with particulate filters



6000 Reusable Full Mask scratch-resistant, polycarbonate lens EN136

Class I Mask

- Size: - 6700S (S)
- 6800S (M)
- 6900S (L)



6000 Reusable Half Mask with S-200 Supplied Air Respirator System for further information please ask for our 3M Powered & Supplied Air Catalogue.



### 3M™ Half Facepiece Reusable Respirator 3000 Series

The new 3M 3000 Series Respirators are the perfect fit for a tight budget, securing high levels of working protection and comfort at a hard-working price. Compact and light, it moulds itself softly and securely to the contours of your face without blocking your view. You can quickly snapon the relevant gas or combination option and, with the benefit of 3M innovation and quality, keep both your breathing and your mind at ease.

### **Features and Benefits:**

### **User-friendly**

- low profile design allows a wide field of vision
- lightweight makes long period of wear bearable
- soft, elastomeric face piece secures a lasting comfort
- + available in two sizes (S/M and M/L)

### **Versatile**

- snap-on options suitable for a range of chores
- + filter options for organic vapours/gas
- + filter options for a combination of organic vapours and particulates

### **Great value**

- durable, designed to last without weighing you down
- + 3M quality at an affordable price
- + for optimal comfort, choose a respirator that fits well with the other PPE you need for the job

### **Filter Options**

Option 1: For organic vapour protection bp>65 degrees°C



Option 2: For organic gas, vapour and particulate protection

















3MTM 3391 A1P2 R
Organic Gas and Vapour
Filter with pre-attached
particulate filter



**3M<sup>™</sup> 3351 A1** Organic Gas and Vapour Filter



Prefilter
3M™ 774
Retainer

3M™ 7725 P2 R

### 3M<sup>™</sup> Reusable Respirators



### Reusable Respirator Care & Maintenance

3M™ reusable respiratory equipment requires regular checks and maintenance to ensure optimum performance and protection for the wearer. In addition to potentially reducing protection levels, poor maintenance can also reduce the effective lifetime of the equipment, resulting in the additional cost of replacement.

Guidance on the appropriate checks is provided in the instruction booklets with each new item.







### **Identify the Hazards**

Applications and Industries	Potential Hazards	Cartridge/Filter Options*
Spray Painting, Varnishing, Staining & Coating	Solvent-based	0V/P95
	Water-based Latex	Nuisance 0V*/P95
Sanding & Grinding	Particulate	N95
Welding	Weld Fume	N95
	Stainless Steel & Galvanized	Nuisance 0V**/P95
Abatement	Lead & Asbestos	P100
	Mold	N95 - P100/0V
Cement Work	Silica/Dust	N95
Cleaning & Janitorial	Bleach	AG/P95
	Ammonia	AM/MA/P95
	General Cleaning Products	0V/P95
Agriculture	Pesticides & Insecticides	OV/AG/P95
Construction	Particulate	N95
Manufacturing	Solvents	OV
	Particulate	N95
Pharmaceutical Manufacturing	Particulate	N95/P100
Chemical Manufacturing	Sulfur Dioxide, Chlorine	AG/P95
	Ammonia	AM/MA/P95

<sup>\*</sup>Respirator facepiece or system must be chosen based on the airborne concentration and the necessary assigned protection factor.

This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and *User Instructions* Before using any of these respirators, the wearer must read and understand the *User Instructions* for each product.

### **Select the Right Respirator**



\*6000DD Version.

<sup>\*\*</sup>Nuisance level refers to concentrations below the Occupational Exposure Limit (OEL) or other applicable government regulations, whichever is lower.

If you are uncertain of the concentration levels of contaminants or recommended levels of respiratory protection, contact the 3M Technical Service Helpline at 1-800-243-4630.



### 3M<sup>™</sup> Reusable Respirators

### Find a Combination that Works Best for You



Ultimate FX FF-400

### 3M<sup>™</sup> Particulate Filters and Gas/Vapor Cartridges

All 3M Particulate Filters and Gas/Vapor Cartridges can be used interchangeably with 3M™ Reusable Respirators 6000, 7000 and FF-400 Series.

### 3M™ Particulate Filters 2000 Series Part Number Description Lightweight and easy to 2071 Particulate Filter, P95 breathe through 2076HF Particulate Filter, Hydrogen Fluoride/P95, with Nuisance Level Acid Gas Relief\* Assortment of filters available for a wide range of applications 2078 Particulate Filter, P95, with Nuisance Level Organic Vapor/Acid Gas Relief\* Easier breathing through new 2091 Particulate Filter, P100 3-layer advanced Electret Filter Particulate Filter, P100, with Nuisance Level Acid Gas Relief\* 2096 Media in 2200 Series Filters Particulate Filter, P100, with Nuisance Level Organic Vapor Relief\* 2097 Advanced Particulate Filter, P100 2291 2296 Advanced Particulate Filter, P100, with Nuisance Level Acid Gas Relief\* 2297 Advanced Particulate Filter, P100, with Nuisance Level Organic Vapor Relief\* Particulate Filter 7093, P100 7093 Particulate Filter, P100 · Unique, spring-loaded filter cover design simplifies negative pressure user seal checks 7093B Particulate Filter, P100, Bulk · Swept-back design provides enhanced field of view and greater comfort 7093C offers a lightweight, low profile design 7093C Cartridge/Filter, Hydrogen Fluoride, P100 with Nuisance Level Organic that combines P100 filtration with carbon-loaded Vapor and Acid Gas Relief\* features found in heavier combination cartridge products Gas/Vapor Cartridges 6000 Series 6001 Cartridge, Organic Vapor · Low-profile design helps 6002 Cartridge, Acid Gas\*\* maintain good field of vision Full range of cartridges to meet 6003 Cartridge, Organic Vapor/Acid Gas\*\* 6004 Cartridge, Ammonia/Methylamine 6005 Cartridge, Formaldehyde/Organic Vapor 6006 Cartridge, Multi Gas/Vapor\*\* 6009 Cartridge, Mercury Vapor or Chlorine Combination Cartridges/P100 Particulate Filters 6000 Series 60921 Cartridge/Filter, Organic Vapor/P100 · Particulate filter is permanently 60922 Cartridge/Filter, Acid Gas/P100\*\* attached to cartridge for easy, one-step assembly 60923 Cartridge/Filter, Organic Vapor/Acid Gas/P100\*\* Unique design for enhanced 60924 Cartridge/Filter, Ammonia/Methylamine/P100 comfort and visibility 60925 Cartridge/Filter, Formaldehyde/Organic Vapor/P100 60926 Cartridge/Filter, Multi-Gas/Vapor/P100\*\* 60928 Cartridge/Filter, Organic Vapor/Acid Gas/P100\*\*† 60929 Cartridge/Filter, Mercury Vapor/Chlorine Gas/P100

- \* 3M recommended for relief against nuisance levels of organic vapors and acid gases. Nuisance level organic vapor and acid gas refers to concentrations not exceeding OSHA PEL or applicable government occupational exposure limits, whichever is lower. Do not use for respiratory protection against acid gases or organic vapors (except hydrogen fluoride).
- \*\* Reminder: These cartridges are approved for respiratory protection from hydrogen sulfide gas up to 10 times the permissible exposure limit (PEL) with half facepiece respirators and full facepiece respirators when qualitatively fit tested, or up to less than 300 parts per million (ppm) with full facepiece respirators when quantitatively fit tested or according to specific OSHA standards or applicable government regulations, whichever is lower. 300 ppm is the concentration considered Immediately Dangerous to Life or Health (IDLH) for hydrogen sulfide.
- <sup>†</sup>As recommended by the California Department of Pesticide Regulation No. 01-009-Methyl Bromide Field Fumigation. 3M recommended for use against radioiodine and methylbromide. Note: not NIOSH approved for methylbromide or radioiodine.

### 3M<sup>™</sup> Reusable Respirators



### 3M<sup>™</sup> 4000 Series Maintenance-Free Reusable Respirators

The 4000 Series Respirators by 3M are a range of ready-to-use, maintenance-free half masks with built in filters designed for effective and comfortable protection against a combination of many gases,

vapours and particulate hazards found throughout industry. Utilising unique filter technology enables a very low-profile design for undisturbed field of vision to make your worklife more comfortable.

### **Features and Benefits:**

### Facepiece

- + Low profile design for better peripheral vision
- + Lightweight, well balanced design
- + Soft, non-allergenic material with textured face seal

### **Built In Filters**

- + Four versions available, each offering protection against differing hazards throughout industry
- + One piece, maintenance-free construction

### **Exhalation Valve**

 Central position for effective removal of heat and moisture build up within face piece

### **Adjustable Head Cradle and Neck Straps**

- + Helps to achieve a stable secure fit
- + Easy to fasten neck strap

### **Cost Effective**

 Use until damaged, particulate filters clog, gas filters become saturated

### Convenience

+ Resealable bag provides convenient and clean storage between uses

### **Accessories**

+ 3M<sup>™</sup> 400 Overspray Guard is available to help prolong the life of the main particulate filters

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M



3M<sup>™</sup> 4000 Series Maintenance Free Respirators available:

3M<sup>™</sup> 4251 Organic vapour\* + particulate respirator FFA1P2 R D 3M<sup>™</sup> 4255 Organic vapour\* + particulate respirator FFA2P3 R D

3MTM 4279
Organic vapour\* /
inorganic vapours +
acid gas / ammonia /
particulate respirator
FFABEK1P3 R D

3M™ 4277 Organic vapour\* / inorganic vapours + acid gas / particulate respirator FFABE1P3 R D

\*Organic vapours boiling point>65 degrees C

### 3M™ Accessories for 4000 Series

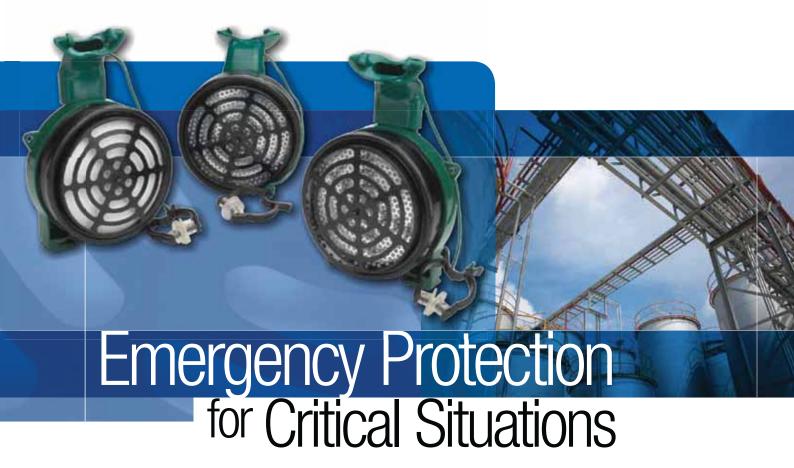


3M™ 400 Overspray Guard

### 3M<sup>™</sup> Escape Only Mouthpiece

### Respirators

3M<sup>™</sup> Reusable Escape Only Mouthpiece Respirator 5500 Series 3M<sup>™</sup> Disposable Escape Only Mouthpiece Respirator 5600 Series



Designed for emergency escape from industrial accidents involving known chemicals, the 3M<sup>™</sup> Escape Only Mouthpiece Respirators provide health and safety professionals a respiratory protection option for their organizations' emergency escape plans. With the incorporation of 3M technologies, these NIOSH-approved single cartridge escape, mouthpiece style respirators provide respiratory protection for emergency escape from atmospheres containing certain levels of acid gases and certain non-oil based particles. Ammonia/methylamine model also available. (5604 model only)

### **Benefits include:**

- Replacement cartridge design on reusable model can extend life of facepiece and potentially provide a cost savings.
- Disposable model provides economical option for temporary site personnel.
- In-service and storage shelf life markings help to determine respirator replacement schedule and manage on-site inventory.\*
- Clear, resealable bag provides flexibility in respirator inspection and helps protect respirators in dusty and dirty environments.
- Unique combination Acid Gas cartridge with N95 filter availability for certain industrial applications. (5512 model only)

<sup>\*</sup>One-year in-service use and five year storage shelf life based upon proper storage and maintenance per user instructions.

### Respirators

### 3M™ Reusable Escape Only Mouthpiece Respirator 5500 Series

Air purifying escape only mouthpiece respirator provides a versatile option with its replacement cartridge design and N95 filter\* capability for certain non-oil based particulates.



Part No.	Product Name	Description	Qty/Case
5502	3M™ Reusable Escape Only Mouthpiece Respirator, Acid Gas	NIOSH approved for protection against certain acid gases (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Chlorine Dioxide, or Hydrogen Sulfide)	20 ea/Case
5512	3M™ Reusable Escape Only Mouthpiece Respirator, Acid Gas/N95	NIOSH approved for protection against certain acid gases (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Chlorine Dioxide, or Hydrogen Sulfide) and certain non-oil based particles (N95 filter).	20 ea/Case

<sup>\*</sup>Only 5512 model includes N95 filter for non-oil based particles.



### **3M**<sup>™</sup> Replacement Cartridges and Parts

Part No.	Product Name	Description	Qty/Case
5002	3M™ Escape Only Cartridge, Acid Gas	Use with 3M™ Escape Only Mouthpiece Respirators 5500 Series. NIOSH approved against certain acid gases (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Chlorine Dioxide, or Hydrogen Sulfide).	10 boxes (3 cartridges per box)/Case
5012	3M™ Escape Only Cartridge/Filter, Acid Gas/N95	Use with 3M™ Escape Only Mouthpiece Respirators 5500 Series. NIOSH approved against certain acid gases (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Chlorine Dioxide, or Hydrogen Sulfide) and certain non-oil based particles.	10 boxes (3 cartridges per box)/Case
510E	3M™ Escape Only Mouthpiece and Nose Clip	Replacement mouthpiece and nose clip assembly. Use with 3M™ Escape Only Mouthpiece Respirator 5500 Series.	10 ea/Case
513E	3M™ Escape Only Respirator Storage Bag	Replacement clear resealable storage bag for use with the 3M™ Escape Only Mouthpiece Respirator 5500 and 5600 Series.	20 ea/Case

### 3M™ Disposable Escape Only Mouthpiece Respirator 5600 Series

Air purifying escape only mouthpiece respirator offers a maintenance-free option with its simple design.



Part No.	Product Name	Description	Qty/Case
5602	3M™ Disposable Escape Only Mouthpiece Respirator, Acid Gas	NIOSH approved for protection against certain acid gases (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Chlorine Dioxide, or Hydrogen Sulfide).	10 ea/Case
5604	3M™ Disposable Escape Only Mouthpiece Respirator, Ammonia/Methylamine	NIOSH approved for protection against ammonia and methylamine.	10 ea/Case



### Work in a World of Comfort

Providing clean breathing air is essential when working in areas subjected to extremely hazardous contaminants. 3M offers an extensive and flexible range of industrial powered and supplied air respirators, developed especially for the toughest environments.

These respiratory protective systems offer comfortable protection against multiple hazards and their ease-of-use enables improved productivity at the workplace.

3M is available to support the user in the correct selection, training and proper use of these products.

### The Selection of Respiratory

Protection Equipment follows a basic 3M 4-step method:

- **1.** Identify the Hazards dust, metal fume, gas, vapour etc.
- 2. Assess the Risk assess the hazard levels against safety standards and consider other protection skin, eye and body
- **3.** Select the right Respirator disposable, reusable, half mask, full face, powered, supplied-air
- **4.** Train in Fitting and Use to optimise respiratory protection



### Protection against multiple hazards

There are a wide variety of system configurations which can be used for many different hazards and applications.

Systems can be selected to offer combined protection from multiple hazards ranging from respiratory & eye through to respiratory, eye, face, head, hearing and neck and shoulder coverage.

### **Build your level of Protection**



Respiratory, Eye and Face Protection



Respiratory, Eye, Face and Hearing Protection



Respiratory, Eye, Face and Head Protection, with Neck/Shoulder Coverage



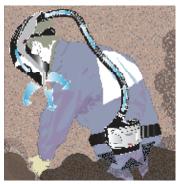
# 3M<sup>™</sup> Powered & Supplied Air Respirators

# **Powered Air System?**

- + Incorporates a battery powered motorised fan to draw air through a filter
- + Cannot be used to protect against substances with poor warning properties (taste/smell)
- + Must not be used in conditions that are Immediately Dangerous to Life or Health (IDLH)
- + Suitable for use over long shifts reduced breathing resistance
- + Can offer integrated head, eye and face protection

# **Supplied Air System?**

- + Air is supplied from a compressor (compressed air must be of breathable quality)
- + Can be used to protect against substances with poor warning properties (taste/smell)
- + Must not be used in conditions that are Immediately Dangerous to Life or Health (IDLH)
- + Suitable for use over long shifts reduced breathing resistance
- + Can offer integrated head, eye and face protection





# **High mobility** High mobility

Limited mobility





3M™ Versaflo™ TR-300 Powered Air Turbo



3M™ Jupiter™ Powered Air Turbo



3M™ Airstream™ **Powered Air** Respirator



3M™ Powerflow™ **Powered Air System** 

# **Supplied Air Respirators**



3M™ Versaflo™ **V-Series Regulators** 



**Filtration Unit ACU-01** /ACU-02



3M™ S-200 **Supplied Air Face** 



3M™ Visionair™ **Supplied Air Faceshield Respirator** 



# Powered & Supplied Air Respirators

# **Modular Systems**





The modular respirator system is a comprehensive approach to worker protection systems based on comfortable-to-wear modules. All modular headtops, air delivery units and breathing tubes are compatible with one another.

Users can mix and match parts as they move from one environment to another, or from one application to the next. It is the ultimate in flexibility for handling changing user environments.

# **Individual Systems**



The individual respirator systems can be used in a variety of workplace applications. They include powered air respirators with integrated head, eye, face and respiratory protection and supplied air regulators with half and full face masks.

# **Selection Process for Powered Air System**



<sup>\*</sup> Want an even easier way to select a system? Choose 3M's powered air starter kits, which include everything apart from the headtop.

# **Selection Process for Supplied Air System**



# 3M<sup>™</sup> Modular

# **Respirator Systems**

# 3M<sup>™</sup> Versaflo<sup>™</sup> Powered Air Turbo

The 3M<sup>™</sup> Versaflo<sup>™</sup> TR-300 Powered Air Respirator System combines performance, protection and functionality with modern, stylish design and comfort. It is the key to easy-to-use, versatile, respiratory protection systems for particulate environments.

## **Industries**

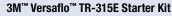
- + Pharmaceutical manufacturing
- + Woodworking
- + Surface preparation
- + Food & Beverage
- + Metal Working
- + Smelting



reddot design award honourable mention 2011

- + Electronic audible and visual alarm in case of low battery and/or low air flow \_\_\_\_\_
- High efficient filter captures hazardous dust, mist and fume plus options for nuisance level gases and vapours
- Light and small extremely slim, lightweight, balanced design for comfort
- Approved to EN 12941, class TH2 or TH3 dependent on headtop
- IP53 rating. Suitable for use in decontamination shower
- Intelligent lithium ion battery quickly charges and doesn't suffer from memory effect.
   Charge status is indicated by a useful LED display.





This Versaflo Starter Kit includes the TR-302E Turbo, particulate filter, pre-filter, standard belt, high capacity battery pack, battery charger kit, self-adjusting breathing tube and airflow indicator.

Now choose your headtop from pages 45-51.



## 3M™ Versaflo™ TR-302E Powered Air Turbo

This unit comes with an airflow indicator only. To adapt to your type of environment see options below.









TR-3600 Pre-filter (pack of 10)

TR-3710E Particulate Filter (P)

TR-3800E P + Nuisance Level Organic Vapour Filter

TR-3802E P + Nuisance Level Acid Gas Filter (Hydrogen Fluoride up to 10 x Threshold Limit Value)

\*Nuisance level" refers to concentrations below the threshold limit value (TLV)  $\,$ 

### **Batteries** (lithium ion)

TR-330 Standard Battery Pack

TR-332 High Capacity Battery Pack (longer life)

### Belts

TR-325 Standart Belt

TR-326 Leather Belt

TR-327 Easy-Clean Belt

TR-329 Braces

BPK-01 Backpack

### Chargers

TR-341E Single Station Battery Charger Kit

TR-344E 4-Station Battery Charger Kit





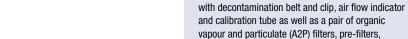
# **3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Turbo**

The 3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Turbo is a comfortable, easy-to-use unit that provides protection against particulates, gases or vapours, or against a combination of these depending on the types of filter used. An integrated acoustic and visual alarm indicates if airflow to the headtop is reduced or battery charge runs low. The Jupiter Powered Air Turbo is also available with an optional Intrinsically Safe (IS) kit.

# **Industries**

- + Pharmaceutical manufacturing
- + Painting
- + Chemical processing
- + Agriculture
- + Demolition
- + Pulp and Paper Processing
- + Medical & Healthcare
- + Foundries

- + Modern, ergonomic design
- IP53 Rating. Suitable for shower decontamination
- + High comfort decontamination belt
- Electronic audible and visual alarm in case of low battery and/or low air flow
- Approved to EN 12941 class TH2 or TH3 dependent on headtop
- "Intrinsically Safe" (IS) Kit available for use in potentially explosive atmospheres. Kit includes pouch and Intrinsically Safe battery.



and calibration tube as well as a pair of organic vapour and particulate (A2P) filters, pre-filters, self-adjusting breathing tube, 8 hour rechargeable battery (NiMH) and battery charger

This Starter Kit includes a standard Jupiter Turbo

3M™ Jupiter™ Powered Air Starter Kit

Now choose your headtop from pages 45-51.



3M™ Jupiter™ Turbo (085-00-10P) Includes decontamination belt, air flow indicator and calibration tube. To adapt to your type of environment see options below.



Filters	
P Filter (pack of 2)	(450-00-25P2)
A2P Filter (pack of 2)	(453-00-25P2)
ABE1P Filter (pack of 2)	(456-18-25P2)
A2BEK1P Filter (pack of 2)	(453-09-25P2)
K1P Filter (pack of 2)	(456-18-25P2)
Pre-filter Pack (pack of 24)	(461-00-02P24)

Batteries (NiMH)	
Battery Pack - 8 hour	(007-00-64P)
Battery Pack - 4 hour	(007-00-63P)
Battery Pack - 4 hour IS battery (provided as part of IS Kit with pouch).	(085-12-00P)
Chargers	
Intelligent Charger	003-00-58PEU
Jupiter 10 Station Intelligent Charger	003-00-59P





# **3M<sup>™</sup> Versaflo<sup>™</sup> Supplied Air Systems**

The modular range of supplied air respirators lets you choose how you want your system built, with the flexibility to change it in the future.

3M™ Versaflo™ V-Series Supplied Air Regulators offer protection against dust, mist, fumes, gases or vapours and combination hazards e.g. paint spray. Supplied Air Regulators do not offer protection in confined spaces, oxygen deficient atmospheres or for asbestos stripping.

- + Low-pressure warning whistle
- + Integrated silencer
- Individually-adjustable, consistently-controlled airflow.
- + Removable, integrated activated charcoal filter
- + Belt swivel mechanism
- + Spray gun or compressed air tool port
- + Supplied air connection
- Approved to EN 14594 Class 2A/3A or 2B/3B dependent on headtop
- + Air flow 170-305 I/min



## 3M<sup>™</sup> Versaflo<sup>™</sup> V-500E Supplied Air Regulator

Balanced regulator specifically designed for respirator use, the Versaflo V-500E Regulator ensures smooth airflow, safety and comfort.

Now choose your headtop from pages 45-51.

### **Filtration Units and Couplings**

The 3M™ Aircare™ Filtration Unit can be connected inline to clean the compressed air before it is fed to the regulator.

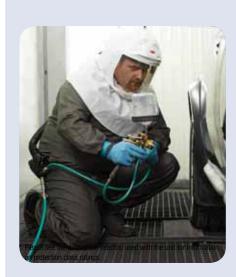
The various components of the Versaflo V-Series Regulators are connected using plug and socket hose couplings (Rectus 25 or CEJN 342 connectors available).

Further details on page 53-54.



# 3M<sup>™</sup> Versaflo<sup>™</sup> V-100E Air Cooling and V-200E Air Heating Regulators

3M™ Versaflo™ V-100E and V-200E Regulators allow users to either cool (V-100E) or heat (V-200E) the air by as much as 28°, making them a good choice for workers exposed to either uncomfortably hot or cold temperatures.





# 3M<sup>™</sup> Versaflo<sup>™</sup> S-Series Integrated Suspension Headcovers and Hoods

Based on a computer modeling of a worldwide sampling of head sizes, new 3M<sup>™</sup> Versaflo<sup>™</sup> S-Series Headcovers and Hoods, through their sizing and adjustment options, will comfortably fit many users. The integrated suspension headcovers and hoods can be suitable for applications that require frequent replacement of the entire headtop

assembly, such as pharmaceutical manufacturing, or in situations where there is less soiling of the outer fabric. For disposal, the suspension assembly and air inlet components can be quickly removed and separated for segregated waste streams, where facilities are available.

## **All-Day Comfort**

- + Slim design, that closely profile the user's head for improved appearance.
- + Lightweight and loose-fitting.
- + Excellent airflow distribution for improved comfort, lower noise and reduced fogging.

# **Integrated Suspension**

- + Ready to use straight out of the box.
- + Available in two adjustable sizes: S/M (50-58 cm) and M/L (54-64 cm).

## **Improved Visibility**

 Excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare

# **Added Protection**

- + Comfortably worn with prescription eyewear, safety glasses, and some limited facial hair
- Meet the highest respiratory performance requirements (TH3) for this type of product when used with 3M™ Air Delivery Unit
- + Eye and face protection to EN166 liquid splash and low energy impact
- + Coverage of head, hair, neck and shoulder



### 3M™ Versaflo™ S-133 Headcover

General purpose, costeffective fabric. Fabric material: 2-layer polypropylene spunbond/ laminated film. Visor material: PETG.



### 3M™ Versaflo™ S-333G Headcover

Soft, quiet, more durable low-linting fabric.
Fabric material:
Polyurethane coated knitted polyamide.
Visor material: Coated polycarbonate. for increased chemical and scratch resistance.



### 3M™ Versaflo™ S-433 Hood

Includes neck and shoulder coverage. Fabric material: 2-layer polypropylene spunbond/ laminated film. Visor material: PETG.



# 3M™ Versaflo™ S-533 Hood

Neck and shoulder coverage with soft, low-linting fabric that more readily drapes over user.

Fabric material: Polyurethane coated knitted polyamide.

Visor material: Coated polycarbonate for increased chemical and scratch resistance.

3M™ Air Delivery Unit	Standards with S-Series Headcovers and Hoods*	NPF**
3M <sup>™</sup> Versaflo <sup>™</sup> TR-300	EN12941 TH3, EN166 2:F:3	500
3M™ Jupiter™	EN12941 TH3, EN166 2:F:3	500
3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V-200E/V-100E	EN14594 3A, EN166 2:F:3	200

<sup>\*</sup>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.

<sup>\*\*</sup> Nominal Protection Factor - 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<sup>™</sup> Versaflo<sup>™</sup> S-Series **Premium Hoods with Reusable Suspensions**



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Based on a computer modeling of a worldwide sampling of head sizes, new 3M™ Versaflo™ S-Series Headcovers and Hoods, through their sizing and adjustment options, will comfortably fit many users Premium reusable suspension hoods can be a highly cost-effective choice for some high disposal rate environments: just the soiled hood fabric is replaced, while the suspension and air ducting can be reused.

It also has an externally-adjustable airflow control that allows wearers to modify the airflow distribution to suit personal comfort needs. With a simple turn of the external controller, wearers can shift the location of air flowing over the back of their head to over their temples, face and visor.

# **All-Day Comfort**

- + Slim design, that closely profile the user's head for improved appearance
- Lightweight and loose-fitting
- + Excellent airflow distribution for improved comfort, lower noise and reduced fogging

### **Reusable Suspension**

- + Cost effective choice for some high disposal rate environments
- + User control of airflow location and suspension adjustments for best comfort and custom fit
- + One Size: 50-64 cm

## **Improved Visibility**

+ Excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare

## **Added Protection**

- + Comfortably worn with prescription eyewear, safety glasses, and some limited facial hair
- + Meet the highest respiratory performance requirements (TH3) for this type of product when used with 3M™ Air Delivery Units
- Eye and face protection to EN166 liquid splash and low energy impact

# 3M™ Versaflo™ S-655 Hood

General purpose, with knitted inner collar that is shorter and thinner than previous models. Fabric material: 2-layer polypropylene spunbond/ laminated film.

Visor material: PETG

### 3M™ Versaflo™ S-657 Hood

Features a double-shroud design for its respiratory seal. The inner shroud can be tucked into a shirt or protective coverall, which allows excess air to be channeled over the body, providing additional comfort.

Fabric material: Fabric material: 2-layer polypropylene spunbond/ laminated film. Visor material: PETG.



## S-757 Painters Hood Fabric specifically intended to help capture paint overspray. Double shroud design. Fabric material: 3-layer polypropylene spunbond/ laminated film/spunbond. Visor material: Coated

# polycarbonate

# 3M™ Versaflo™ S-855E Hood

Sealed seam hood for liquid chemical splash environments. Knitted inner collar design. Fabric material: Zytron® 200. Visor material: Coated polycarbonate

Zytron® is a registered trademark of Kappler.



3M™ Air Delivery Unit	Standards with S-Series Headcovers and Hoods*	NPF**
3M™ Versaflo™ TR-300	EN12941 TH3, EN166 2:F:3	500
3M™ Jupiter™	EN12941 TH3, EN166 2:F:3	500
3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V-200E/V-100E	EN14594 3A, EN166 2:F:3	200

<sup>\*</sup> 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.



Nominal Protection Factor - 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<sup>™</sup> Versaflo<sup>™</sup> M-100 Series Faceshields

The 3M<sup>™</sup> Versaflo<sup>™</sup> M-100 Series Headtops feature lightweight, compact and well-balanced faceshields that can offer integrated protection from a range of respiratory, eye, face and hearing hazard

### **Applications**

- + Woodworking
- + Painting
- + Surface treatment
- + Agricultural applications
- + Grinding
- + Polishing



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# **Highly Versatile Rigid Headtops**

 Provides protection from specific respiratory, head and eye hazards

### **Modern, Well Balanced Design**

- + Lightweight with excellent balance
- + Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

# **Visor Design**

- Visor design combines excellent peripheral and downward vision with good optical clarity
- + Lenses provide chemical and scratch resistance

# **Easy To Maintain**

- Optional hearing protection 3M<sup>™</sup> Peltor<sup>™</sup> Helmet-Mounted Earmuff Assembly
- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- + Spare parts and accessories are quick, easy and intuitive to replace



# 3M™ Versaflo™ M-106 Faceshield

Features a general purpose faceseal for dusts, spraying and chemical processing.

Fabric material: Polyurethane coated polyamide.

### 3M™ Versaflo™ M-107 Faceshield

Features a flame resistant faceseal for applications with hot particles.

Fabric material: flame resistant polyester.

710000001100
M-928 Peel-Off Visor Covers (pack of 10)
M-935 Standard faceseal (white) (pack of 5)
M-936 Comfort faceseal (pack of 5)
M-937 Flame resistant faceeal (pack of 5)
M-958 Chin-strap
3M™ Peltor™ Hearing Protector Helmet Attachment H31P3AF 300
M-972 Flame Resistant Headtop Cover
M-976 Head, Neck and Shoulder Cover

# 3M™ Versaflo™ M-928 Peel-Off Visor Covers

Available accessory to protect the visor.



284™ Air Dolivery Unit	3M™ Versaflo M-100 Series Faceshields		
3M™ Air Delivery Unit	Standards	NPF**	
3M <sup>™</sup> Versaflo <sup>™</sup> TR-300	EN12941 TH2, EN166 1:B:3	50	
3M™ Jupiter™	EN12941 TH2, EN166 1:B:3	50	
3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V-200E/V-100E	EN14594 2B*, EN166 1:B:3	50	

<sup>\*</sup>The M-Series Faceshields and Helmets meet the higher strength (B) 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

compressed all supply dubes that infect bour one lower and righer strength (A and b) requirements

\*\* Nominal Protection Factor — 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™ Modular

# **Respirator Systems**



# 3M<sup>™</sup> Versaflo<sup>™</sup> M-300 Series Helmets

The 3M<sup>™</sup> Versaflo<sup>™</sup> M-300 Series Helmets feature lightweight, compact and well-balanced helmets that can offer integrated protection from a range of respiratory, head, eye, face and hearing hazards. Versaflo M-300 Series Helmets meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M Air Delivery Units.

### **Applications**

- + Smelting and Foundry applications
- + Grinding
- + Chemical processing and plant maintenance
- + Agricultural applications
- + Construction and Renovation
- + Demolition



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# **Highly Versatile Rigid Headtops**

- Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

# **Modern. Well Balanced Design**

- + Lightweight with excellent balance
- + Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort.

# **Visor Design**

- Visor design combines excellent peripheral and downward vision with good optical clarity
- + Lenses provide chemical and scratch resistance

# **Easy To Maintain**

- Optional hearing protection 3M<sup>™</sup> Peltor<sup>™</sup> Helmet-Mounted Earmuff Assembly
- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- + Spare parts and accessories are quick, easy and intuitive to replace



### 3M™ Versaflo™ M-306 Helmet

Features a general purpose faceseal for construction, chemical applications and heavy industry.

Fabric material: Polyurethane coated polyamide

### 3M™ Versaflo™ M-307 Helmet

Accessories

Features a flame resistant faceseal for applications with hot particles.

Fabric material: flame resistant polyester

M-928 Peel-Off Visor Covers (pack of 10)
M-935 Standard faceseal (white) (pack of 5)
M-936 Comfort faceseal (pack of 5)
M-937 Flame resistant faceeal (pack of 5)
M-958 Chin-strap
3M™ Peltor™ Hearing Protector Helmet Attachment H31P3AF 300
M-972 Flame Resistant Headtop Cover
M-976 Head, Neck and Shoulder Cover

28A™ Air Dolinom, Unit	3M™ Versaflo M-300 Series Helmets	
3M™ Air Delivery Unit	Standards	NPF**
3M <sup>™</sup> Versaflo <sup>™</sup> TR-300	EN12941 TH3, EN166 1:B:3, EN397	500
3M™ Jupiter™	EN12941 TH2, EN166 1:B:3, EN397	50
3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V-200E/V-100E	EN14594 3B*, EN166 1:B:3, EN397	200

<sup>\*</sup>The M-Series Faceshields and Helmets meet the higher strength (B) 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.

Nominal Protection Factor - 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<sup>™</sup> Versaflo<sup>™</sup> M-400 Series Helmets with Shrouds

The 3M<sup>™</sup> Versaflo<sup>™</sup> M-Series Helmets can offer integrated protection from a range of respiratory, head, eye, face and hearing hazards with additional neck and shoulder coverage. M-400 Series Helmets meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M Air Delivery Units.

## **Applications**

- + Smelting & Foundry applications
- + Grinding
- + Construction & renovation
- + Demolition



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# **Highly Versatile Rigid Headtops**

- + Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

# **Modern, Well Balanced Design**

- + Lightweight with excellent balance
- + Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort.

# **Visor Design**

- Visor design combines excellent peripheral and downward vision with good optical clarity
- + Lenses provide chemical and scratch resistance

# **Easy To Maintain**

- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- Spare parts and accessories are quick, easy and intuitive to replace

### 3M™ Versaflo™ M-406 Helmet

Features a highly durable shroud for construction applications and heavy industry.
Fabric material: Cordura® nylon

### 3M™ Versaflo™ M-407 Helmet

Features a flame resistant shroud for applications with hot particles.

Fabric material: flame resistant Nomex®

Nomex<sup>®</sup> is a registered trademark of Dupont. Cordura<sup>®</sup> is a registered trademark of Invista.

# Accessories M-928 Peel-Off Visor Covers (pack of 10) M-958 Chin-strap M-447 High-durability shroud M-448 Flame-resistant shroud M-972 Flame-resistant headtop cover



<sup>\*</sup> The M-Series Faceshields and Helmets meet the higher strength (B) 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

<sup>\*\*</sup> Nominal Protection Factor – 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<sup>™</sup> HT-600 Series Welding Shields

The HT-600 Series Welding Shields not only offer respiratory protection but also face, eye and impact protection in metal working and fabrication environments. The various flip-up shield and filter mechanisms allow you to inspect your work whilst the large coverage area gives protection from radiation and sparks. The range also offers choice of filter shades including auto-darkening and fixed shade.

Thanks to the comfortable head harness and knitted faceseal, the welder can wear the welding shield for long periods of time. The airflow through the visor ensures reduced sweat build up and can make the welder more comfortable and efficient;

For a more comprehensive guide to welding protection, please refer to the welding section

# 3M<sup>™</sup> HT-639 Welding Shield

- + A well-balanced shield
- + Superb coverage
- + Respiratory, eye, face and impact protection
- Conventional or autodarkening filters can be fitted
- + Supplied with a 90 x110mm filter holder able to hold fixed shade or auto-darkening filters
- + Weight: 696g





 Easy-to-fit comfortable, elasticated, knitted faceseal



- New comfortable \_ easy-adjust harness with double comfort band
- Harness/airduct in \_ one robust assembly



- + Super Coverage
- + Liftable welding lenses to allow clear view, while retaining respiratory protection
- New airduct system giving improved airflow to the face area

3M™ Air Delivery Unit	3M™ HT-600 Series Shields	NPF**
3M <sup>™</sup> Versaflo <sup>™</sup> TR-300	EN12941 TH2, EN175	50
3M™ Jupiter™	EN12941 TH2, EN175	50
3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V-200E/V-100E	EN14594 2A*, EN175	50

- \* The 600 Series headtops 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.
- supply tubes that meet both the lower and higher strength (A and B) requirements.

  \* Nominal Protection Factor a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices. The protection factor is assigned by local authorities in each European country and can therefore be different for different countries.



# 3M™ HT-622 Welding Shield

A super-light shield for welders. Wide range of filter shade combinations available. Headtop weight: 595g

- Supplied with shade 1.7 UV filter, also available in shades 3 & 5
- → Supplied with shade 8 welding filter, also available in shades 5 & 10
- + Total shade range available from 6.7 to 15



# 3M™ HT-629 Welding Visor

The solution for those welders needing a welding shield with a clear, wide view visor beneath. The 90 x 110mm filter holder hinges down for easy access. Headtop weight: 794g.

- Supplied without a welding filter, but with cover lenses
- + Conventional or auto-darkening filters can be fitted



# 3M<sup>™</sup> HT-700 Series Helmets

The  $3M^{\text{TM}}$  HT-700 Series Helmets offer not only respiratory protection, but also EN166 approved eye and face protection, as well as EN397 head protection. For especially hot work areas, the  $3M^{\text{TM}}$  HT-707 Helmet features a heat resistant shell and it is also available with an optional heat resistant cover. For welding application the  $3M^{\text{TM}}$  HT-748 and HT-749 Helmets can be equipped with either a fixed shade filter or an auto-darkening welding filter (90x110 mm for HT-748 and 3.25" x 4.25" for HT-749).

### **Applications**

- + Smelting
- + Foundries (grinding, polishing)
- + Welding

- The polycarbonate visor offers eye and face protection to EN166
- Helmet shells provide head protection to EN397
- Quick Release Swivel (QRS) Coupling for ease of use
- + Head and face seals
- + Constant airflow over wearer's face
- + Light, well balanced





3M<sup>™</sup> HT-707 Safety helmet, white, heat resistant shell Weight: 715 g



3M<sup>™</sup> HT-707 With additional radiant heat kit Weight: 850 g



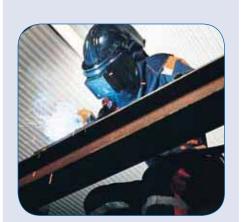
3M™ HT-748 / HT-749 Welding shield with safety helmet, black. Weight: 900 g

As an alternative to the fixed shade filter, the HT-748/HT-749 can be equipped with the optional Auto Darkening Filter in the standard format 90 x 110 mm.

3M™ Air Delivery Unit	3M™ HT-707 Safety Helmet	3M™ HT-748/749 Helmets	NPF**
3M™ Versaflo™ TR-300	EN12941 TH2, EN166 2:B:3:9, EN397	EN12941 TH2, EN166 2:B:3:9, BS1542 Class 4, EN397	50
3M™ Jupiter™	EN12941 TH2, EN166 2:B:3:9, EN397	EN12941 TH2, EN166 2:B:3:9, BS1542 Class 4, EN397	50
3M <sup>™</sup> Versaflo <sup>™</sup> V-Series	EN14594 2A*, EN166 2:B:3:9, EN397	EN14594 2A*, EN166 2:B:3:9, BS1542, Class 4. EN397	50

<sup>\*</sup>The 700 Series headtops 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.

<sup>\*\*</sup> Nominal Protection Factor - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices. The protection factor is assigned by local authorities in each European country and can therefore be different for different countries.





# 3M<sup>™</sup> Versaflo<sup>™</sup> BT-Series Breathing Tubes

A breathing tube connecting the air source with the headtop is required to ensure that clean air reaches the headtop reliably and with unrestricted airflow. The breathing tubes offered are compatible with all 3M<sup>™</sup> Versaflo<sup>™</sup> Headtops and Air Delivery Units.

- QRS (Quick Release Swivel) breathing tubes allow fast and easy connection.
- + All BT-Series Breathing Tubes meet the higher respiratory performance requirements with 3M headtops.
- A special flame-resistant sleeve lengthens the life of the breathing tube and protects it from flying sparks.
- A disposable breathing tube cover is available to help aid, cleaning and decontamination.





# **Accessories**

BT-922: Disposable breathing tube cover

BT-926: Flame resistant breathing tube cover



**3M**<sup>™</sup> **Versaflo**<sup>™</sup> **BT-20 S/L Breathing Tube** Lightweight breathing tube that comes in two lengths and is easy to wipe down.

Material: Polyurethane. Length: 735 mm (S), 965 mm (L).



**3M™ Versaflo™ BT-30 Breathing Tube**Self-adjusting length for improved fit for many wearers and reduce risk of catching and snagging.

Material: Polyurethane. Length: 525 - 850 mm.



**3M™ Versaflo™ BT-40 Breathing Tube** High durability breathing tube.

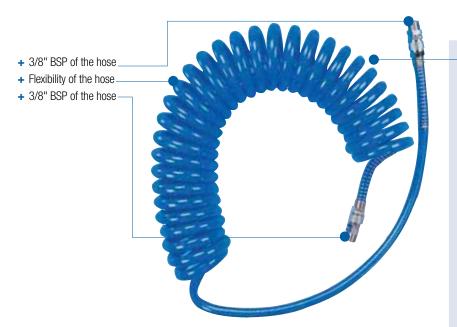
Material: Neoprene. Length: 840 mm.



# **3M<sup>™</sup> Compressed Air Supply Tubes and Couplings**

Various compressed air supply tubes are available to connect the 3M<sup>TM</sup> Air Regulator to the facility's compressed air system to meet different requirements.

The tubes are available in different lengths and they guarantee high quality connections to all components. The tubes have a 3/8" male pipe thread BSP at each end to allow flexibility in the choice of coupling systems.



# 7.5 m Coiled Air Hose Output 3/8" (both en

Output 3/8" (both ends) Part. No 308-00-40P



### 10 m Standard duty hose

Output 3/8" (both ends)
Part. No. 308-00-30P



## 10 m Standard duty

Antistatic, high temperature tube Output 3/8" (both ends) Part. No. 308-00-72P



## 30 m Standard duty hose

Output 3/8" (both ends) Part. No. 308-00-31P



# 2-Way Branch Set

3/8" female pipe thread BSP, incl. 3/8" BSP adapters Part. No. 312-03-01P3



# Coupling Set 3/8" BSP

Rectus 25, Part. No. 530-12-82P3 CEJN 342 Part. No. 530-12-81P3



### 3-Way Branch Set

3/8" BSP, incl. 3/8" BSP adapters Part. No. 312-03-00P3



# Coupling Plug 1/4" BSP,

Rectus 25

Part. No. 530-12-52P3 CEJN 342 Part. No. 530-12-53P3



# **3M<sup>™</sup> Aircare<sup>™</sup> Filtration Unit**

The 3M<sup>™</sup> Aircare<sup>™</sup> ACU-01/ACU-02 Filtration Unit can be combined with all 3M<sup>™</sup> Supplied Air Respirator Systems. The three-stage filtration system supplies highest quality air to the Supplied Air Respirator System and compressed air tools by removing water and oil aerosols, particles and odours from the facility-supplied compressed air.

The Filtration Unit is available as either a portable freestanding unit or wall-mounted unit



integrated pressure regulator. The Aircare  $^{\!\top\!\!\,M}$ 

Filtration Unit can be used with input

pressures up to 10 bar.

# 3M<sup>™</sup> Aircare<sup>™</sup> Filtration Unit ACU-02, Freestanding

Input: 1/2" or 3/8" female pipe thread BSP Output: 3/8" BSP



## 3M™ Aircare™ Filtration Unit ACU-01 Wall Mounted Input: 1/2" or 3/8"

Input: 1/2" or 3/8" female pipe thread BSP Output: 3/8" BSP



Wall mounted

# 3M™ Individual Systems



# 3M<sup>™</sup> S-200 Supplied Air System

The 3M<sup>™</sup> S-200 Supplied Air System is a comfortable and versatile supplied air system for all 3M<sup>™</sup> 6000 and 3M<sup>™</sup> 7000 Series Half and Full Face Masks. The S-200 system by 3M can be used as a standard airline respirator or in dual-mode with filter back-up when air supply is disconnected.

# **Applications**

+ Painting



- High respiratory protection
- + Comfort: Swirling air flows in from the sides
- + Comfort: lightweight, balanced system
- + Low maintenance

## 3M™ S-200 Supplied Air System Approval: EN139

NPF: Half facepiece:

50 x Threshold Limit Value

Full facepiece:

200 x Threshold Limit Value

Working pressure: 3-8 bar

Airflow to facepiece: 140-330 I/min

# **Accessories**

The 3M™ S-200 System can be optionally combined with all 2000, 5000 and 6000 Series Filters by 3M.



**Particulate Filter** 2000 Series



**Particulate Filter** Inserts 5000 Series



Gas/Vapor and Combination Filters 6000 Series



3M has been supplying products to the 0il and Gas industry for over 50 years. Today, nearly 10,000 3M products are available into every corner of the industry – from exploration and production to transportation, and refining. Now 3M has a new offering, 3M<sup>™</sup> Fall Protection.

3M offers you comprehensive fall protection safety equipment such as harnesses, lanyards, and retractable lifelines including the new 3M<sup>™</sup> Sealed ReLoad Retractable Lifeline. This new retractable lifeline uses new technology to help protect against corrosion making it a great solution for harsh marine environments.

# Fall Protection Solutions

# **Connecting Devices**

# **Self-Retracting Lifelines**



# Sealed ReLoad

New technology helps protect the 3M™ Sealed ReLoad™ Retractable Lifeline from corrosion, making it a great fall protection solution for harsh marine environments. The innovative, modular design helps ensure consistent performance and allows on-site inspection and servicing, greatly reducing downtime and maintenance costs.

Description	Product Code
30' Sealed ReLoad Retractable, Galv Cable	SREC-30
50' Sealed ReLoad Retractable, Galv Cable	SREC-50
85' Sealed ReLoad Retractable, Galv Cable	SREC-85
130' Sealed ReLoad Retractable, Galv Cable	SREC-130

30' Sealed ReLoad Retractable, Stainless Cable SREC-30-SS SREC-50-SS 50' Sealed ReLoad Retractable, Stainless Cable SREC-85-SS 85' Sealed ReLoad Retractable, Stainless Cable 130' Sealed ReLoad Retractable, Stainless Cable SREC-130-SS

### **ReLoad Retractable Lifeline**

The premium 3M™ ReLoad™ Retractable Lifeline is smart, safe and strong. Consistent performance and a durable design are delivered by a patented energy absorber.

Description	<b>Product Code</b>
7' ReLoad Retractable, Web	REW-7
12' ReLoad Retractable, Web	REW-12
23' ReLoad Retractable, Web	REW-23
23' ReLoad Retractable, Cable	REC-23
30' ReLoad Retractable, Cable	REC-30
40' ReLoad Retractable, Cable	REC-40
50' ReLoad Retractable, Cable	REC-50





# **General Purpose Retractable Lifeline**

The reliable 3M<sup>™</sup> Thor "M" Series Retractable Lifeline features an aluminum alloy housing, swivel top housing and cushioned cable guide for dependable performance.

Description	<b>Product Code</b>
15' Galvanized Cable Retractable, Metal Housing	M-15
20' Galvanized Cable Retractable, Metal Housing	M-20
30' Galvanized Cable Retractable, Metal Housing	M-30
50' Galvanized Cable Retractable, Metal Housing	M-50
75' Galvanized Cable Retractable, Metal Housing	M-75
100' Galvanized Cable Retractable, Metal Housing	M-100
130' Galvanized Cable Retractable, Metal Housing	M-130



# Lanyards



# Low-Profile

These low profile lanyards are compliant to ANSI Z359.1-2007 standards featuring 3600 lb. gate rated hardware.

Description	<b>Product Code</b>
6' Tubular Low Profile Shock Absorbing Lanyard	209712
Dual Leg 6' Tubular Shock Absorbing Lanyard, 100% Tie-Off	209750
6' Tubular Shock Absorbing Lanyard with 0241 Rebar Hook	209712-0241
Dual Leg 6' Tubular Shock Absorbing Lanyard with 0241 Rebar Hook, 100% Tie-Off	209750-0241



# Expandable

These expandable lanyards help reduce trip hazards and are compliant to ANSI Z359.1-2007 standards featuring 3600 lb. gate rated hardware.

Description	Product Code
Elastic Combination Shock Absorbing Lanyard, Expands From 4'-6'	4712-6
100% Tie-Off Elastic Combination Shock Lanyard, Expands From 4'-6'	4750
Elastic Combination Shock Absorbing Lanyard, Expands From 4'-6', with 2 3/	/4" Rebar Hook 4712-6/0241
100% Tie-Off Elastic Combination Shock Lanyard, Expands From 4'-6', with	2 3/4" Rebar Hooks 4750/0241



# Welding

The  $3M^{\text{\tiny MM}}$  Saturn Lanyards feature a special blend web that is resistant to char spatter up to 700°F. Also compliant to ANSI Z359.1-2007 standards with 3600 lb. gate rated hardware.

Description	Product Code
Saturn Safestop 6' Shock Absorbing Lanyard	3520
Dual Leg Saturn Safestop 6' Shock Absorbing Lanyard	3520-D
Saturn Powerstop 6' Shock Absorbing Lanyard for A 12' Fall	3531
Dual Leg Saturn Powerstop 6' Shock Absorbing Lanyard for A 12' Fall	3531-D

# all Protection Solutions

# **Anchors**

A wide assortment of anchor points for the Oil and Gas Industry. All designs are tested and rated to 5000 lbs.



D-Plate Anchor **Product Code** 4004



D-Bolt Anchor with 5/8" Hardware Included **Product Code** 

4005



Beamwalk Ii Fits I & H Beams 3-1/2" to 12", Beam Thickness Up to 1 1/4"

**Product Code** 4650-2



Vertical Beamklamp Anchorage Fits Beams 12" Wide and 1" Thick **Product Code** 4650-2V



6' of 1 3/4" Webbing Cross Arm Strap **Product Code** 4550



Cross-Arm Strap





4550 with 4-6' Adjustment Range **Product Code** 

4550-A



6' Cable Pass Thru Anchorage **Product Code** 4550-SCS-6



# Vertical Ladder Climb Systems

A guided fall arrest system designed for use in vertical, fixed ladder applications. The system includes a cable grab for worker tie-off.

Description	Product Cod
SafeWaze <sup>™</sup> Ladder Climb System - 30'	M400-30
SafeWaze™ Ladder Climb System - 40'	M400-40
SafeWaze <sup>™</sup> Ladder Climb System - 50'	M400-50
SafeWaze <sup>™</sup> Ladder Climb System - 75'	M400-75
SafeWaze <sup>™</sup> Ladder Climb System - 100'	M400-100
SafeWaze <sup>™</sup> Ladder Climb System - 150'	M400-150

# Grabs



Description Self Trailing Rope Grab, Includes Anti-Panic Lock Feature

**Product Code** 129



# Harnesses



### Coated Web Harness

Harness web is protected by a plastic coating, which helps resist grease, paint and other contaminants. Includes grommet leg attachments and a quick connect buckle at the chest.

### Description

Coated Web Harness, Single Back D-ring Coated Web Harness, Single Back D-ring

## **Product Code**

10955 10955-XXL



# **General Purpose Harness**

General purpose harness is designed for fall protection, confined space entry and egress, and ladder climb applications. Includes grommet leg attachments and a pass thru chest connection.

# **Hoisting/Riding Harness**

Harness design includes a bosun's chair for approved riding applications, an 18" D-ring extender for easier worker tie-off, and padded belt for work positioning. Includes grommet leg attachments and a pass thru chest connection.

### Description

Oil and Gas General Purpose Harness (S-M) Oil and Gas General Purpose Harness (L-XL) Oil and Gas General Purpose Harness (XXL) Oil and Gas General Purpose Harness (XXXL)

### **Product Code**

10855 (S-M) 10855 (L-XL) 10855 (XXL) 10855 (XXXL)

### Description

**Product Code** Hoisting/Riding Derrick Harness, Small 1055-S Hoisting/Riding Derrick Harness, Medium 1055-M Hoisting/Riding Derrick Harness, Large 1055-L Hoisting/Riding Derrick Harness, X Large 1055-XL Hoisting/Riding Derrick Harness, XX Large 1055-XXL Hoisting/Riding Derrick Harness, XXX Large 1055-XXXL



Description

Elavation Premium Derrick Harness (XXL)

Elavation Premium Derrick Harness (XXXL)

### **Premium Harness**

The ideal harness for threading pipe or other tasks that require front positioning. Harness includes hardware to attach optional front positioning pad (must be purchased seperately). Premium harness features include all 3M™ Quick-Connect hardware

7555 (XXL)

7555 (XXXL)

and premium padding. **Product Code** Elavation Premium Derrick Harness (S-M) 7555 (S-M) Elavation Premium Derrick Harness (L-XL) 7555 (L-XL)



# **Welding Harness**

The 3M™ Saturn Welding Harness features a special poly-nomex web that is resistant to char spatter up to 700°F.

escription			

Saturn Welding Harness (S-M) 1030 (S-M) Saturn Welding Harness (L-XL) 1030 (L-XL) Saturn Welding Harness, Positioning D-Rings, (S-M) 1031 (S-M) Saturn Welding Harness, Positioning D-Rings, (L-XL)) 1031 (L-XL) Saturn Welding Harness 1321-S Saturn Welding Harness 1321-M Saturn Welding Harness 1321-L Saturn Welding Harness 1321-XL

**Product Code** 

# Fall Protection Solutions

# **Horizontal Lifelines**



A complete two-man lifeline system in a handy, organized bag. Includes cable, tensioner, termination hardware, energy absorber and hardware.

Description	<b>Product Code</b>
2 Man Cable Lifeline - 20'	SWHC-20
2 Man Cable Lifeline - 30'	SWHC-30
2 Man Cable Lifeline - 40'	SWHC-40
2 Man Cable Lifeline - 50'	SWHC-50
2 Man Cable Lifeline - 60'	SWHC-60
2 Man Cable Lifeline - 70'	SWHC-70
2 Man Cable Lifeline - 80'	SWHC-80
2 Man Cable Lifeline - 90'	SWHC-90
2 Man Cable Lifeline - 100'	SWHC-100

# **Confined Space**



A complete confined space rescue and retrieval solution. Includes tripod, 50' three-way device with mounting hardware. Optional carrying bag available.

M10 Tripod, 205G-50 Three-Way Recovery System

**Product Code** M2050



The  $3M^{\scriptscriptstyle\mathsf{TM}}$  Kinetic  $^{\scriptscriptstyle\mathsf{TM}}$  Davit System is a versatile and lightweight confined space rescue and retrieval system.

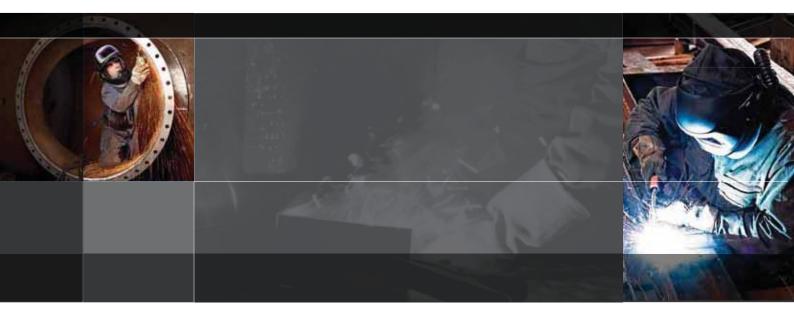
Description	Product Code
Kinetic Davit Arm	CON-2002
Kinetic Davit Arm Mast	CON-2003
50' Retrieval Unit with Kinetic Adaptor	CON-205G-50
65' Retrieval Winch with Kinetic Adaptor	CON-142G
Floor Adaptor - Stainless Steel	CON-2005
Mural Adaptor - Stainless Steel	CON-2013
Sleeve Adaptor - Stainless Steel	CON-2097
Floor Adaptor - Zinc Plated	CON-2106
Kinetic 50" H-Base	CON-2118
Barrel Wall Adaptor - Zinc Plated	CON-2129
14" Clearance Mural Adaptor - Stainless Steel	CON-2067
Mural Adaptor - Zinc Plated	CON-2107
Sleeve Adaptor - Zinc Plated	CON-2115
Angle 90 deg Wall Mounted Adaptor - Stainless Steel	CON-2117
Adjustable Swivel-Head Pole Hoist 45"-67"	CON-2120
Adjustable Swivel-Head Pole Hoist 67"-101"	CON-2121
Adjustable T-Bar Leg for Pole Hoist	CON-2127
Bracket Adaptor for SafeWaze SRL with Rescue Hoist	CON-2079
Davit Arm Bracket	CON-2148
Kinetic Winch Bracket Adaptor	CON-2157



# Ergonomics Are Our Passion, And Your Lifeline

More than 35 years ago, we went to the shipyards of Sweden to observe welders. They blindly struck arcs as they continually nodded their helmets down. They got accidently flashed by other welders - or even themselves. We asked, "What if ... welders could always see, even with their helmets down?"

Since then, we've been systematically addressing every welding ergonomic challenge you face.



# **Experience the Future of Welding Protection!**

Your patience has been rewarded with three new 3M<sup>™</sup> Speedglas<sup>™</sup> Welding Helmets, offering flip-up function and/or respiratory protection. Each model also has all of the features of the top-of-its-class 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Series Welding Helmets.

- Superior Comfort
- · Increased balance and stability.
- · Excellent optics and bigger views.
- Increased coverage of ears and sides of neck.
- · New flip-up welding helmet with clear protective visor.
- New respiratory welding helmet options.

To experience the difference, call your local 3M dealer for a hands-on demonstration.



3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Air Welding Helmet 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Welding Helmet

3M<sup>™</sup> Speedglas<sup>™</sup> 9100 FX Welding Helmet 3M™ Speedglas™ 9100 FX Air Welding Helmet

# Speedglas<sup>™</sup> Welding Safety



# How ADF's work



## Before:

With the shield in the safe down position, the welder has a clear view through the welding filter. Both hands are free and the electrode can be precisely positioned.



# **During:**

Within 0.1 milliseconds of the arc strike, the filter has switched to the dark state.

### After:

The filter automatically returns to the clear state after welding is complete, allowing for immediate and safe inspection of the weld pool, as well as preparation for the next weld.

# 3M<sup>™</sup> Speedglas<sup>™</sup> Welding Filter Guide

Optimized Suitable Not Recommended	9100XX	9100X	9100V	SL	9002X	9002V	9002D	100V	100S
Dark state	Shade 5, 8, 9-13 (variable)	Shade 5, 8, 9-13 (variable)	Shade 5, 8, 9-13 (variable)	Shade 8-12 (variable)	Shade 9-13 (variable)	Shade 9-13 (variable)	Shade 8/11 (dual)	Shade 8-12 (variable)	Shade 10 or 11 (single)
MMAW (Electrode)									
MIG/MAG									
TIG (>20A)									
TIG (1A-20A)									
Plasma (welding and cutting)									
Risk for hidden arc									
Tack welding									
Grinding									

Please note: There are a few parameters that affect the performance of an auto-darkening welding filter like type of welding machine, working environments etc. The table is a general guide to all our various models due to detector function based solely on welding applications.

This table is a quick guide to all our various models due to detector function based solely on welding applications.

Before you select a model, ask yourself:

- How will I use my ADF?
- Do I occasionally change welding process/shade no?
- · This is a long-term investment: A variable welding filter offers more flexible features for new working conditions.

# Speedglas<sup>™</sup> Welding Safety



# 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Welding Shield

Optimize your welding comfort, coverage and control. The new Speedglas 9100 Welding Shield features an all-new head suspension that profiles your unique head shape for a secure, stable fit.

More Coverage: we made the shield deeper and wider, providing greater coverage of ears, neck and sides of the head.

More Comfort: Professional welders marvel at the stability and balance of the shield - the result of its lower pivot point. The new head suspension also cradles your head better, giving a secure fit without the need to tighten the headband as much as you would on a conventional shield.

More control: Welders are delighted to see all the filter options: more versatility, greater optical control... and more user satisfaction.

3M™ Speedglas™ 9100 Welding Shield

### **Features and Benefits:**

# **Better Optics, Bigger Views**

- + Three models to pick from, including the Speedglas 9100XX filter with a 73x107 mm viewing area - 30% larger than any other Speedglas welding filter
- + Seven user selectable dark shades (5, 8 and 9 -13), including shades for gas welding, microplasma, and low-amp TIG
- + The new, patented tack welding comfort mode uses a shade 5 light state to help reduce eye fatigue from constantly-changing light levels. You have the ability to "lock-in" any shade, light or dark

### **Side-Windows:**

+ Exclusive, patented shade 5 filters that widen your field of vision



# **Suspension that Shapes to Your Head**

- + Two crown straps gently saddle the top of the head for increased shield stability and better weight distribution
- + The front of the headband also self-adjusts: pressure is evenly distributed to sets of twin-pads to fit the shape of your forehead
- + The back portion of the headband is self-adjusting and swivels to fit different head shapes



Classification 1/1/1/2 Conforms to EN 175 level B and EN 379 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Hard Hat Option

### with the 3M™ Peltor™ G3000 Hard Hat

The Peltor G3000 Hard Hat is produced in high quality UV-stabilised ABSplastic and it got top result for absorbing and distributing forces from fallen objects. This hat is one of the lightest hard hats on the market. Meets European standard EN 397 with approved extra requirements for low temperature (-30°C).

### 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Welding Filter Options

3M™ Speedglas™ 9100XX Filter Viewing area: 73 x 107 mm

3M™ Speedglas™ 9100X Filter Viewing area: 54 x 107 mm

3M™ Speedglas™ 9100V Filter Viewing area: 45 x 93 mm





reddot design award best of the best 2009



2009

award





# 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 FX Welding Shield

# Wider Field of View with Flip-Up Front

Introducing the Speedglas 9100 FX Welding Helmets, a flip-up combination of an auto-darkening welding helmet and a protective visor. Not only is the viewing area larger compared to previous models, we totally redesigned the geometry of the helmet for a wider field of view in all directions.

For constant TH3-rated respiratory protection and excellent vision in a flip-up model, meet the new 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 FX Air Welding Helmet. It readily connects both powered and supplied air respirator systems.

100% compatible with our top-of-the-line series SideWindows: of 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Shade 5 filters Welding Filters. that widen your field of vision. High-comfort The big, 17 x 10 cm clear Speedglas protective visor is curved, 9100 increasing your peripherial Headband. vision. Exhaled air is channelled out via side exhaust vents.

**3MTM SpeedglasTM 9100 FX Welding Helmet** Classification 1/1/1/2 Conforms to EN 175:B, EN 166:BT and EN 379



3M™ Speedglas™ 9100 FX Air Welding Helmet Improved respiratory protection — TH3. Reduced inward leakage means better breathing air quality. The breathing tube is attached to the headband instead of the helmet.

A quick lift of the silver front and you get a big, 17x10 cm, clear view — perfect for precision grinding in low light conditions, while maintaining respiratory protection.





To achieve its high level of respiratory protection, air is supplied directly to the breathing zone. A diffuser spreads out the airflow for your maximum comfort.

# Speedglas<sup>™</sup> Welding Safety



# 3M<sup>™</sup> Speedglas<sup>™</sup> SL Welding Helmet

# When Your #1 Priority is Super Light

At a mere 360 grams — including its auto-darkening filter the 3M<sup>™</sup> Speedglas<sup>™</sup> SL Welding Helmet is 25% lighter than any other Speedglas model. Using specialised manufacturing techniques, we greatly reduced the weight of the auto-darkening filter. And unlike other

lightweight helmets that can absorb moisture and become heavy, the Speedglas SL helmet is made from a strong, non-absorbent material. Designed specifically for quick welding tasks, a motion sensor automatically turns ON the welding filter when you pick up the helmet.



using upgrade plates.

3M™ Speedglas™ SL Welding Helmet Classification 1/1/1/2 Conforms to EN 175:F and EN 379



### with the 3M™ Peltor™ G3001 Hard Hat

The Peltor G3001 Hard Hat is produced in high quality UV-stabilised ABS plastic and it got top result for absorbing and distributing forces from fallen objects. This hat is one of the lightest hard hats on the market.

To fit with the Speedglas 100 welding shield the hard hat lining has been turned 180 degrees (and it is CE-approved in this position).

Meets European standard EN 397.











# 3M<sup>™</sup> Speedglas<sup>™</sup> 100 Welding Shield

The highly-affordable Speedglas 100 welding filter has excellent optical quality, reliable light-to-dark switching, and can be used with most arc welding processes, such as stick (MMA), MIG/MAG, and many TIG applications.

The easy-to-use Speedglas<sup>™</sup> 100 welding shield is the ideal "first" auto-darkening shield for hobby welders, farmers, DIY types, and maintenance or construction workers who weld infrequently but can benefit from the ability to always clearly see with their welding protection in place. Apart from the black/silver shield there are a number of graphic shields available – all with specific identity.

### **Features and Benefits:**

### **Constant Protection**

+ UV/IR protection shade 12 permanent

# Variable Shade Welding Filters (100V)

- Three selectable sensitivity settings: a normal setting used for most types of welding, a setting for other welders working nearby and a setting for low-current or stable arc welding
- Five user-selectable dark shades 8-12
- Selectable delay settings (100-250 ms)
- + Switching time light-dark 0,1 ms

# Single Shade Welding Filters (100S-10 and 100S-11)

- + Single dark shade 10 or 11
- + Selectable delay settings (100S-10/100S-11: 150 ms / 200ms)
- ◆ Switching time light-dark 0,1 ms



### 3M™ Speedglas™ 100 Hard Hat Option



### with the 3M™ Peltor™ G3000 Hard Hat

The Peltor G3000 Hard Hat is produced in high quality UV-stabilised ABSplastic and it got top result for absorbing and distributing forces from fallen objects. This hat is one of the lightest hard hats on the market.

To fit with the Speedglas 100 welding shield the hard hat lining has been turned 180 degrees (and it is CE-approved in this position).

Meets European standard EN 397 with approved extra requirements for low temperature (-30°C).

# $3M^{\mbox{\tiny TM}}$ Speedglas $^{\mbox{\tiny TM}}$ 100 Welding Shields – Graphic Edition











## 3M™ Speedglas™ 100 welding filter options

3M<sup>™</sup> Speedglas<sup>™</sup> 100V Welding Filter Viewing area: 44 x 93 mm

3M<sup>™</sup> Speedglas<sup>™</sup> 100S-10 Welding Filter Viewing area: 44 x 93 mm

3M<sup>™</sup> Speedglas<sup>™</sup> 100S-11 Welding Filter Viewing area: 44 x 93 mm





Trojan Warrior

# Speedglas<sup>™</sup> Welding Safety



# **3M<sup>™</sup> Adflo<sup>™</sup> Powered Air Respirator**

# Cooler, cleaner and more comfortable welding

With its smart, compact design, the award-winning 3M<sup>™</sup> Adflo<sup>™</sup> Powered Air Respirator is specially designed to meet your welding needs. Its continuous airflow provides filtered air that takes much of the heat and sweat out of welding. By using the Adflo respirator, you get both increased protection and comfort all day long.

For welding environments where supplied air respiratory protection is needed, 3M™ approved air regulators can be used.

With the right type of filter, the Adflo respirator effectively protects you against both particles and gases — all in one system.

You can selectively replace either the particle or the gas filter as needed: you don't need to change both filters at the same time.

The slim profile is perfect for use in tight spaces. Its ergonomics are based on your need for lightweight, adaptable and easyto-use respiratory protection.



The airflow is always a constant nominal rate of 170 litres per minute, regardless of the battery's charge or the particle loading of the filter. For hot, humid jobs, you can increase the airflow to 200 litres per minute by simply pushing the ON button a second time





## 3M™ Speedglas™ 9100 Air Welding Helmet with 3M™ Adflo™ Respirator

Welding helmet with auto-darkening filter. Ergonomic welder protection with optimal mobility and ease-of-use.

Conforms to EN 12941 (TH2). NPF\* 50.



### 3M™ Speedglas™ 9100 FX Air Welding Helmet with 3M™ Adflo™ Respirator

Welding helmet with auto-darkening welding filter and a 17 x 10 cm clear visor for weld preparations. Excellent for low-light conditions and continuous eye, face and respiratory protection. Conforms to EN 12941 (TH3). NPF\* 500.

\* The nominal protection factor based on laboratorymeasured performance data according to European

The protection factor is assigned by local authorities in each European country and can therefore be different for each country.

# 3M<sup>™</sup> PS100 Passive Welding Shield

Assured optics, reliable protection and enhanced comfort added to welding shields. The PS100 is ergonomically designed for long welding hours providing balance for improved comfort while welding



FEATURE	BENEFIT
Breathing Vents	<ul> <li>Reduces CO<sub>2</sub> , heat &amp; fog build up inside</li> </ul>
<ul><li>CE marked with EN175F</li><li>&amp; EN166 approvals</li></ul>	Reliability and Consistency in quality
Light Weight	Reduced neck pain and increased comfort
Heat reflecting silver front	<ul> <li>Reduces heating up of shield and therefore increases comfort</li> </ul>
<ul><li>Polycarbonate – Inner</li><li>&amp; Outer protection plates</li></ul>	Better impact resistance
Aesthetic and Ergonomic design	<ul><li>Increased comfort</li></ul>
Robust construction	<ul> <li>Durable and longer shield life</li> </ul>



WELDING
SHIELD THAT
BREATHES





# **Hearing Protection by 3M**

Service beyond the product, solutions beyond the obvious, understanding beyond the function and knowledge beyond safety. You can buy 3M confident in the knowledge that our products will do the job and you can also be rest assured that our product range is backed by first class support materials and specialist advice, so you'll always know where to turn.

Hearing protection must be right for you and your situation. For safety, productivity and comfort, it must reduce noise by the right amount, not too little and not too much. 3M can provide solutions for different individuals and applications, with products ranging from disposable ear plugs to high-tech electronic ear muffs.

# **Hearing Conservation**

3M brings together the leading brands in hearing conservation. E-A-R, Peltor and 3M brands provide you with the most complete Hearing conservation programme to ensure detection of noise, protection for your employees and validation of their hearing protectors. All this for a single purpose: your safety.

Detection, protection and validation - now you have easy, single source access to the most complete line of industry-leading hearing conservation products:









# 3M<sup>™</sup> Passive Hearing



# **Roll Down PU Foam Earplugs**

Our Roll Down Earplugs are made from expandable Polyurethane (PU) foam, which provides great comfort and good protection. The one size fits most ear canals. Once inserted in the ear, the foam plugs expand to provide a snug and secure custom fit. 3M provides a wide range of disposable roll down PU foam earplugs to choose from and to find the best solution for your individual needs.

### **Features and Benefits:**

### **Comfortable**

- + Soft hypoallergenic foam material for lower pressure inside the ear
- Smooth, dirt resistant surface for better hygiene, durability and comfort



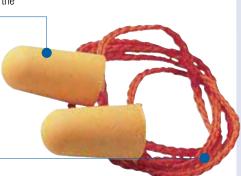
- + Tapered design fits most ear canals making the plugs easier to use \_\_\_\_\_
- + One size only
- + Dispenser available (1100)
- Polyester cord (1110) helps prevent hearing loss

## **Effective**

+ High SNR of 37dB

### **Compatible with**

+ Designed to be compatible with other PPE



# 3M<sup>™</sup> 1100/1110 Disposable Earplugs

Available corded, uncorded and with dispenser

# Other 3M™ Disposable Earplugs

# 3M™ Taperfit 2 Earplugs

Especially designed for smaller ear canals Available corded, uncorded and with dispenser SNR 32dB





# 1100/1110

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	30.0	33.1	36.3	38.4	38.7	39.7	48.3	44.4
Standard Deviation (dB)	3.9	5.0	7.4	6.2	5.6	4.3	4.5	4.4
Assumed Protection (dB)	26.1	28.1	28.9	32.2	33.1	35.4	43.8	40.0

SNR=37dB H=37dB. M=34dB. L=31dB

# E-A-Rsoft™ Metal Detectable Earplugs

The traceable disposable earplugs with cord. Compatible with E-A-Rfit™ validation system SNR: 36dB



# 3M™ 1100B and 3M 1120B Dispenser



Now 3M One-Touch dispenser also available to dispense 3M 1100 and 1120 ear plugs.

E-A-R™ One-Touch™ Dispenser



# 3M<sup>™</sup> Passive **Hearing**



# **E-A-R<sup>™</sup> Classic<sup>™</sup> PVC Earplugs**

Classic earplugs are made from a soft energy absorbing polymer foam which provides excellent hearing protection and all day comfort. The famous Classic earplugs are roll down plugs and are available in multiple options to accommodate different wearer needs.

### **Features and Benefits:**

### **Comfortable**

- Soft energy absorbing foam offers a low equilibrium pressure
- Sweat and humidity resistant, helps prevent moisture build up in the ear canal
- Design to fit majority ear canal sizes with optimum comfort and protection.



+ Exposed cell surface texture resists movement and helps maintaining an effective seal

# Convenient

- Packed in a handy and resealable Pillowpack
- + Compatible with E-A-Rfit™ validation system to check Personal Attenuation Rations

# Compatible with

 Designed to be compatible with other PPF

# Classic Earplugs (Uncorded version)

	Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
	Mean Attenuation (dB)	22.3	23.3	24.6	26.9	27.4	34.1	41.6	40.4
	Standard Deviation (dB)	5.4	5.3	3.6	5.4	4.8	3.1	3.5	6.4
	Assumed Protection (dB)	16.9	18.1	20.9	21.5	22.6	30.9	38.1	34.0

SNR=28dB H=30dB. M=24dB. L=22dB

## E-A-R™ One-Touch™ Dispenser



### E-A-R™ Classic™ Earplugs

Available corded, uncorded and with dispenser SNR: 28dB

### Other E-A-R™ Classic Products

# E-A-R™ Classic™ Soft Earplugs

Softer Classic earplugs for increased comfort Available corded, uncorded and with dispenser SNR: 36dB





# E-A-R™ Classic™ Small Earplugs

Reduced diameter for smaller ear canals Only available uncorded SNR: 28dB



## E-A-R™ Superfit™ 33

With exclusive fitting ring Available uncorded and with dispenser SNR: 33dB



# <sup>™</sup> Passive **Hearing**



# **Pod Earplugs**

Pod earplugs are very easy to insert since there is no roll down needed: just use the soft flexible grip to push the earplug into position and achieve excellent protection. Because you do not have to touch the foam during fitting it is one of the most hygienic types of earplug available.

### **Features and Benefits:**

### **Comfortable**

- + Unique pod design allowing the foam to compress easily
- + The plug slides gently into the ear and expands slowly
- + Patented E-A-Rform foam tip shaped and sized to mold comfortably fitting virtually every size ear canal



# **Convenient**

- + Available corded or uncorded
- + No roll down required
- + Washable and reusable
- + The insertion stem eliminates the need to touch the tip: no need to clean your hands



+ Designed to be compatible with other PPE



# E-A-R™ Push-Ins™ Earplugs

SNR: 38 dB

# E-A-R™ Push-Ins™ Earplugs

The disposable pod ear plugs with high attenuation Available corded and uncorded. Compatible with E-A-Rfit™ validation system

# **Other Pod Plugs**

# E-A-R™ Pro Seals™ Earplugs

The pod earplugs with flexible stem Available corded

SNR: 29dB



# 3M™ Torque™ Earplugs

The tough pod plugs Available corded

SNR: 32dB



# 3M™ No-Touch™ Earplugs

The colourful pod earplugs Available corded

SNR: 35dB





## 3M™ Pistonz™ Earplugs

The earplug designed for motorsport and automotive segments Extra comfortable foam SNR: 25dB

### 3M<sup>™</sup> Passive **Hearing**



### **Pre Moulded Earplugs**

Pre Moulded plugs are made from flexible materials that are preformed to fit the ear. They are generally available with a joining cord to prevent loss. These reusable earplugs are comfortable, hygienic and economical. No sizing is required for these patented, pre-moulded, triple flanged earplugs. Available in a variety of styles and protection levels.

#### **Features and Benefits:**

#### **Comfortable**

+ Unique and patented tri-flange design for a perfect fit and comfort

+ Easy to fit in the ear for a continuous and comfortable protection

#### **Effective**

+ High attenuation (SNR: 29dB)

#### Convenient

- + Available with a cord to prevent loss
- + Washable and reusable
- + Compatible with E-A-Rfit™ validation system to check Personal Attenuation Ratings

### Versatile

 Different versions to various use: traceable, high and low attenuation versions

### **Compatible with**

Designed to be compatible with all types of PPE

### ULTRAFIT™

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	30.6	29.1	28.6	30.1	30.9	32.2	37.7	41.1
Standard Deviation (dB)	5.1	5.3	5.7	6.2	5.6	2.7	6.8	3.4
Assumed Protection (dB)	25.5	23.8	22.9	23.9	25.3	29.5	30.9	37.7

SNR = 29dB H = 30dB M = 26dB L = 24dB APVf = Mf - sf

### E-A-R™ Ultrafit™ Earplugs

SNR 29dB

#### Other pre-moulded ear plugs

#### E-A-R™ Ultrafit™ 14/20 Earplugs

The low attenuation E-A-R<sup>TM</sup> Ultrafit<sup>TM</sup> versions SNR: 14/20dB





### ClearE-A-R 20™ Earplugs

The "nearly" invisible earplugs SNR: 20dB



### 3M<sup>™</sup> 1261/1271 Earplugs

The pre-moulded earplug with convenient storage case Available corded and uncorded SNR: 25dB



### E-A-R™ Tracers™ and Tracers™ 20 Earplugs

Metal detectable version SNR: 32dB (20dB for Tracers™ 20)





# Passive Hearing



### **Banded Earplugs**

Banded hearing protectors are easy to use, convenient and extremely comfortable. They are quick to insert and remove and can be stored around the neck when not required, making them ideal for intermittent use. Banded hearing protectors offer simplicity to help improve the choice of hearing protection products that best suits the work place environment. Most models are available with replacement pods making them a more cost-effective option.

#### **Features and Benefits:**

#### **Comfortable**

- + Extremely light
- + Very low pressure into the ear
- + Pod plugs seal the entrance part of the ear canal with no deep insertion

#### Convenient

- + Can be worn in either Under-The-Chin (UTC) or Behind-The-Head (BTH)
- + Easy to use
- + Ideal for people moving in and out
- + Replacement pods available

### **Compatible with**

+ Designed to be compatible with other PPE

### E-A-RCAPS™ (In UTC mode)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	21.0	20.0	19.8	19.1	23.2	33.4	41.0	40.7
Standard Deviation (dB)	4.1	4.4	4.2	4.3	3.7	4.5	2.9	5.4
Assumed Protection (dB)	16.9	15.8	15.5	14.8	19.5	29.0	38.1	35.2

SNR=23dB H=27dB, M=19dB, L=17dB

### E-A-R™ Reflex™ Earplugs

The multi-position banded earplugs with conical tips Replacement pods available SNR: 26dB



### E-A-Rcaps™ Earplugs

Replacement pods available SNR 23dB

#### Other banded earplugs

### E-A-Rflex<sup>™</sup> 14/20 Earplugs

The low attenuation banded earplugs SNR: 14dB/20dB



### E-A-Rband™ Earplugs

The ergonomic banded earplugs Replacement pods available

SNR: 21dB



### E-A-R™ Caboflex™ Earplugs

The banded earplugs with durable conical shaped insert Replacement pods available SNR: 21dB



### E-A-R™ Flexicap™ Earplugs

The multi-position banded earplugs Replacement pods available

SNR: 21dB



### 3M™ Pulsar™ Earplugs

Design and ergonomy

SNR: 23dB



### E-A-R™ Swerve™ Earplugs

The high-end banded pear plugs with adjustable band Replacement pods available.

SNR: 26dB



### 3M<sup>™</sup> Passive **Hearing**



### Peltor™ Earmuffs

Peltor™ offers versatile protection and is very lightweight providing
high wearer comfort. It combines a low profile with generous inner
depth which makes it easy to combine with other equipment, allowing
it the ear to rest comfortably. Peltor™ Earmuffs is your choice for both short and
long duration tasks. The wide, comfortable sealing rings are filled with a
unique combination of fluid and foam, which gives optimum sealing and
low contact pressure at the same time. It is ideal for use in environments

with moderate industrial noise, such as workshops, sheet-metal shops and printing works, but also suitable outdoors, such as lawn mowing or in connection with hobby and leisure activities.

### **Features and Benefits:**

### Comfortable

- Extremely low profile and light (180g) to make it easy to team with other equipment
- + Generous inside depth to help the ears rest comfortably
- Soft and wide sealing rings filled with a unique combination of foam and liquid to offer optimum sealing and low pressure



### **Effective**

- High attenuation despite lightness and low profile: 21dB NRR
- Unique band design, stainless steel wire for constant pressure over long periods of use

### Versatile

 Various versions available to fit any situation : foldable, neckband, high visibility, helmet mounted versions

### Peltor™ Optime™ H6A Headband

NRR: 21dB

#### **Accessories**

Hygiene kits are available for each earmuff version

### Other Peltor™ Optime™ Ear Muffs



Peltor™ H9A Headband NRR : 25dB Complies with ANSI Standard





Peltor™ H7A Headband NRR: 27dB

Commiss with AN

Complies with ANSI Standard





Peltor™ H10A Headband

NRR: 30dB

Complies with ANSI Standard



### Peltor™ H10P3E Helmet attachment

Various versions for different safety helmets

NRR: 27dB



### Peltor™ H9P3E Helmet attachment

Various versions for different safety helmets

NRR: 23dB



### 3M<sup>™</sup> Passive Hearing



### **Noise Indicator**

3M has introduced a new personal noise indicator solution that lets you know when the sound level reaches 85dB(A) and the need to wear suitable hearing protection.

A new personal information tool dedicated to raise noise awareness with employees. This can also be a perfect solution for training and motivational purposes.







Flashing green at under 85dB(A)

### 3M E-A-Rfit<sup>™</sup> Validation System

Stop guessing what protection levels your Workers are really getting from their earplugs. Start knowing each worker's personal protection level and Validate that they are getting the protection they need.

Ear canal shapes are different.

Fitting methods are different.

That means protection levels may be different.

With the E-A-Rfit validation system, you can:

- · Validate protection levels achieved by each worker
- · Document data for future reference

### **Test Compatible With A Variety of 3M™ Hearing Protectors.**

Protection levels can be validated with many different 3M hearing protectors. This selection includes specially-probed versions of foam and premoulded earplugs.











# Entry Level Sound Detection



### 3M<sup>™</sup> Sound Detector SD-200 with **Optime**<sup>™</sup> **Alert System Linkage**

### **Easily Select hearing protection**

The Sound Detector SD-200 is a compact, lightweight sound level meter designed to accurately measure workplace noise levels. Green, yellow and red LEDs flash the colour that corresponds to the Optime

Alert System, making it easy to select the appropriate level of hearing protection.

#### **Features and Benefits:**

- + Integrating feature computes the average sound pressure level; allows for more accurate assessment of intermittent sound levels
- + User-friendly interface; easy to operate
- + Rechargeable lithium polymer battery helps lower Total Cost of Ownership compared to the use of replaceable batteries
- + Average sound pressure level delivers steadier reading where noise levels are variable



### **3M<sup>TM</sup> Noise Indicator NI-100**

The 3M™ Noise Indicator alerts users to potentially dangerous noise levels, helping to identify areas where hearing protection may need to be worn. Users simply clip the Noise Indicator to a shirt or jacket; its LED light delivers a clear indication when noise levels exceed a potentially hazardous threshold.

The Noise Indicator's small size and lightweight design make it ideal for workers in a variety of industries.

#### **Features and Benefits:**

- + Clips to wearer's shirt or can be worn on a
- + Small size and lightweight, durable design
- + Easy to use, with a single button on/off switch
- + Rechargeable battery, with up to 200 hours between charges
- Alerts users to potentially dangerous noise
- + Helps identify where hearing protection may be needed





### 3M™ Sound Examiner™ Sound Level Meter SE-400

The Sound Examiner SE-400 series of sound meters are engineered to accurately measure noise levels in highly variable environments.

These advanced instruments compute the average sound pressure level

(LEQ/LAVG) over the run time, helping you to more accurately assess occupational and environmental noise levels.

#### **Features and Benefits:**

- + Available in Class 1 Precision or Class 2 General Purpose models
- + Complies with IEC and ANSI Standards
- + Integrating-averaging measurements
- + All models ship ready-to-use, no setup necessary
- + Use 3M<sup>™</sup> Detection Management Software DMS for the analysis, management and measurement of data

### Integrating Measurements, Robust Capabilities

- + **Display Languages:** English, Spanish, German, French, Italian, Portuguese
- + Display SPL, LMAX, LMIN, Peak, Lavg/ Leq, Elapsed Time



### New DMS Software: Data Management Made Easy

For Environmental Monitoring, Heat Stress and Sound Level Measurements, and Dosimetry.

The new 3M<sup>™</sup> Detection Management Software (DMS) makes it easy to export, report, and share data from the SE-400 series sound meters, and other 3M Quest instruments. The software will help improve both efficiency and reporting of environmental data

- + Retrieve, download, share and save instrument data
- + Generate charts and reports
- + Export and share recorded data
- + Perform advanced calculations
- + Program, retrieve and view real-time data remotely via modem

### Detection Management Software: One System supporting all these applications:

- + Noise Dosimetry
- + Octave Band Sound
- + Analysis/Survey
- + Thermal Comfort Monitoring
- + Integrating Sound Level Meter
- + Industrial and Community Sound Surveys
- + Heat Stress Monitoring
- + Indoor Air Quality Assessment





### 3M<sup>™</sup> SoundPro<sup>™</sup> Sound Level Meters SE/DL

The 3M<sup>™</sup> SoundPro<sup>™</sup> SE/DL series provides advanced sound level monitoring and comprehensive data analysis. Available in Class 1 and Class 2 models, these instruments feature real-time frequency analysis, and data storing capabilities that make it easy to post-process and evaluate workplace noise levels.

#### **Features and Benefits:**

- + ANSI and IEC standards compliant
- Available in Class 1 Precision or Class 2 General Purpose models
- Concurrent A-weighted and C-weighted measurements
- + A, C, Z and F (Flat) frequency weighting
- + Fast, slow, and IEC impulse time response
- + Selectable thresholds 10 dB 140 dB
- + Optional downloads to 3M<sup>™</sup> Detection Management Software DMS offer analysis, management and measurement of data
- + Multilingual display in English, French, Spanish, German, Italian & Portuguese
- Display SPL, Dose, Lavg or Leq, TWA, Max, Min, Peak, Exposure, Run Time, and more
- + Large screen display enables real-time frequency analysis
- + Easy to read back-lit display
- + Menu driven, 4 soft keys



### Class 1 Precision and Class 2 General Purpose Models Available



SPL Display Quasi-Analogue and Numeric Screen



1/1 Octave
Band Bar Chart
Measurement Screen



1/3 Octave
Band Bar Chart
Measurement Screen

### SoundPro Outdoor Measuring System SP-OMS

The SoundPro Outdoor Measuring System helps protect the instrument from exposure to wind, rain, snow, chemicals, particulates, animals, vandalism and theft. It is also used for extended battery life with up to one week of continuous monitoring (two weeks with optional second battery).

### Other Options:

- Full (1/1) octave band real-time analysis
- Third (1/3) octave band real-time analysis
- · Acoustic spectral curves option
- Speech intelligibility option
- Audiometric calibration kit configurations
- · GPS data incorporation
- Optional microphones in 1/4", 1/2" & 1"
- Reverberation Time (RT-60)



### **3M<sup>™</sup> The Edge Cable Free Noise Dosimeters**

Now there's a new, more innovative family of personal noise dosimeters. Available in three models, The Edge offers advanced technology packaged in a cable-free, compact frame for a lighter, more ergonomic way to monitor noise levels.

With The Edge there's no cable to interfere with your employees' work, and no heavy instrument loading them down. This innovative dosimeter weighs a mere 3 ounces and features a thin, contoured shoulder mount. Users will barely notice it as they work; yet with easy downloading, simple.

#### **Features and Benefits:**

- + Convenient cable-free design eliminates the microphone cable and potential to get in the way
- + Thin, contoured mount hugs the shoulder
- + Compact frame offers superior comfort small size and lightweight, durable design
- Rechargeable lithium battery gives The Edge its long battery life
- + Downloads to 3M<sup>™</sup> Detection Management Software DMS offer analysis, management and measurement of data
- + Display SPL, Dose, Lavg or Leq, TWA, Max, Min, Peak, Exposure, Run Time and more
- The Edge eg5 has 3 independent dosimeters, is intrinsically safe and offers simultaneous C-weighted and A-weighted measurements.
- Displays SPL, Dose, Lavg or Leq, TWA, Max, Min, Peak, Exposure, Run Time and more
- + 1 or 5 bay docking stations offer quick, easy recharge and data download to a PC



#### Two Affordable models:

- The Edge eg5 has 3 independent dosimeters and data logging. It stands apart as an intrinsically safe dosimeter that offers simultaneous C-weighted and A-weighted measurements.
- The Edge eg4 advanced model has dual dosimeters and data logging/time history.



### 3M<sup>™</sup> Peltor<sup>™</sup> Head and Face Solutions

The Peltor brand offers a complete line of safety helmets, visors, combinations and accessories for anyone exposed to hazardous environments. Our goal is continuous improvement of our products to provide the optimal balance of comfort and safety.





### Experience Full Shift Comfort with the 3M Hard Hat H-700 Series

The 3M<sup>™</sup> Hard Hat H-700 Series is engineered to provide full-shift comfort, head protection, balance and stability. The lightweight H-700 Series features a unique top of hat design with a short brim and both a vented and nonvented version. This hard hat is made from high-density polyethylene and meets the requirements of the ANSI/ISEA Z89.1 – 2009 Type I, class C, G and E.



3M<sup>™</sup> Hard Hat H-700 Series are comfortable, tough and lightweight. Designed with a low profile for improved stability and balance, the H-700 Series provides ultimate comfort and protection from small falling objects striking the top of the hard hat. These hard hats feature accessory slots to accommodate 3M's cap-mounted ear muffs, headgear, faceshields and welding helmets. The 3M Hard Hat H-700 (Non-Vented) meets the requirements of ANSI/ISEA Z89.1-2009 Type I, Class C, G and E. The H-700 Vented Hard Hat meets the requirements of ANSI/ISEA Z89.1 Type I, Class C.

### The 3M Hard Hat H-700 offers:

- Comfortable, 4-point pinlock or ratchet suspension with height adjustment
- · Replaceable brow pad
- · Vented hard hat option
- · Customized logo options
- Compliant when worn in the forward and reverse donning positions
- · Short brim for better upward visibility
- · Slots for accessory attachment

### 3M Hard Hat H-700 Applications:

- Heavy and Light Industrial
  - rial Forestry
- Construction Work
- Mining

Road Construction

Oil and Gas

Part Number	<b>Description</b> (Ship Qty. – 20 ea/cs)	Color	4-Point Suspension
H-701P	3M™ Hard Hat H-701P	White	Pinlock
H-702P	3M™ Hard Hat H-702P	Yellow	Pinlock
H-703P	3M™ Hard Hat H-703P	Blue	Pinlock
H-704P	3M™ Hard Hat H-704P	Green	Pinlock
H-705P	3M™ Hard Hat H-705P	Red	Pinlock
H-706P	3M™ Hard Hat H-706P	Orange	Pinlock
H-707P	3M™ Hard Hat H-707P	Bright Orange	Pinlock
H-708P	3M™ Hard Hat H-708P	Gray	Pinlock
H-709P	3M™ Hard Hat H-709P	Bright Yellow	Pinlock
H-710P	3M™ Hard Hat H-710P	Navy Blue	Pinlock
H-701R	3M™ Hard Hat H-701R	White	Ratchet
H-702R	3M™ Hard Hat H-702R	Yellow	Ratchet
H-703R	3M™ Hard Hat H-703R	Blue	Ratchet
H-704R	3M™ Hard Hat H-704R	Green	Ratchet
H-705R	3M™ Hard Hat H-705R	Red	Ratchet
H-706R	3M™ Hard Hat H-706R	Orange	Ratchet
H-707R	3M™ Hard Hat H-707R	Bright Orange	Ratchet
H-708R	3M™ Hard Hat H-708R	Gray	Ratchet
H-709R	3M™ Hard Hat H-709R	Bright Yellow	Ratchet
H-710R	3M™ Hard Hat H-710R	Navy Blue	Ratchet
H-701V	3M <sup>™</sup> Vented Hard Hat H-701V	White	Ratchet
H-702V	3M <sup>™</sup> Vented Hard Hat H-702V	Yellow	Ratchet
H-703V	3M™ Vented Hard Hat H-703V	Blue	Ratchet
H-704V	3M <sup>™</sup> Vented Hard Hat H-704V	Green	Ratchet
H-700-RS4	3M <sup>™</sup> Hard Hat H-700 Series Suspension Replacement	<del>_</del>	Ratchet Standard
H-700-PS4	3M <sup>™</sup> Hard Hat H-700 Series Suspension Replacement	_	Pinlock Standard

# Colors Available: Red 186C Orange 173C Yellow 109C Gray 424C Blue 300C Bright Yellow 387C Green 3425C Navy Blue 2757C White Bright Orange

### **Accessories Available:**









### 3M<sup>™</sup> Peltor<sup>™</sup> Uvicator<sup>™</sup> Technology for safer working conditions

When a safety helmet is exposed to sun light the stability of the plastic shell may be adversely affected due to interaction between sunlight and plastic material which may weaken the helmet and compromise safety of the wearer. The adverse effect is dependent not only on the nature of the plastic material but also intensity of sun light. All too often damage to the helmet shell may not be visible to the naked eye.

### Red, the new sign of safety

The patented Uvicator technology is intended to easily and clearly help show the user when his/her helmet has been over-exposed to UV-radiation and thus when to replace it. This new technology is the result of many years of full scale and artificial ageing testing of different material combinations under various sunlight exposure conditions.

As the helmet is exposed to sunlight, the Uvicator indicator is calibrated to detect the amount of UV radiation received and gradually changes colour over time, clockwise, from red to white. When the Uvicator indicator turns completely white, it means that the helmet has received maximum tolerable radiation and therefore needs to be replaced. There can't be any easier solution!



Measures exposure to UV radiation



Technically calibrated and tested



Works globally in most environments



Tells you when to replace your helmet

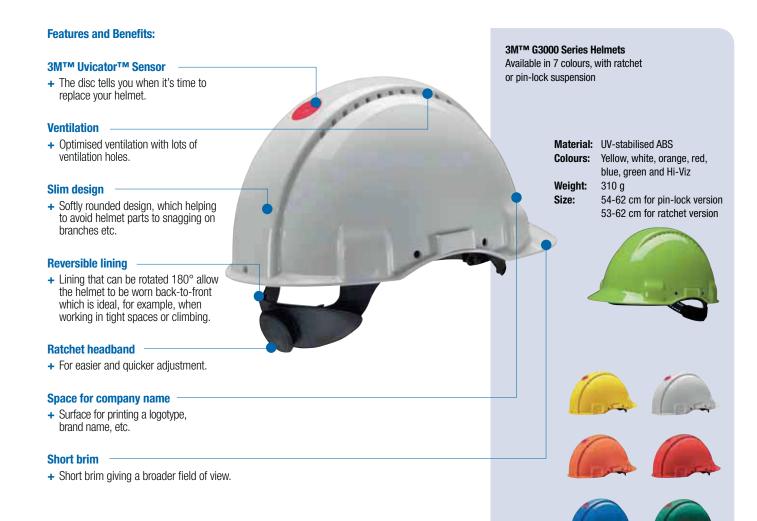


### 3M<sup>™</sup> G3000 Helmet

The G3000 helmet has been designed in close collaboration with forestry and industrial workers. It is intended for use in harsh environments with tough demands for effective protection, excellent ventilation and a maximum field of vision.

### 3M™ G3000 Hi-Viz Helmet

The G3000 Hi-Viz helmet is a safety helmet with the same properties as the G3000 but for users who want to be extra visible at work. The helmet has the same protectional properties as the standard-version G3000.



### The characteristics of the G3000 helmet are:

Offers excellent protection and approved against EN 397, with the following additional approvals:

- G3000\*
  - low temperature, -30°C, and molten metal, MM
- G3001<sup>3</sup>

(unventilated): low temperature, -30°C, molten metal, MM, and electrical insulation 440Vac,



(unventilated): same as G3001 with additional approval according to EN50365, a 1000 Vac electrical insulation test

• G3000\*-10\*

(with lamp and cord holder) low temperature, -30°C and molten metal, MM

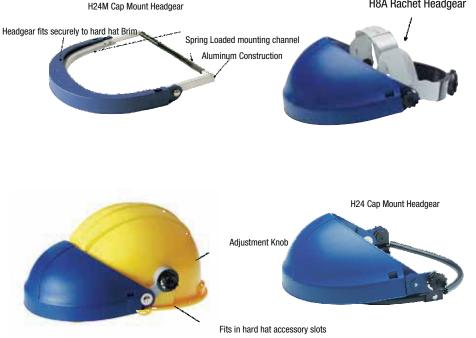
### **AOSafety<sup>™</sup> Tuffmaster Headgear**

A practical, convenient solution for face and hearing protection where no helmet is needed. The wide range of visors and hearing protectors allows for many combinations.

The system can be adapted as needed, boosting safety, enjoyment and comfort. The AOSafety Tuffmaster Headgear is perfect for the manufacturing industry, agriculture or park work. The visors are ANSI-approved.









Thermoplastic shell tested to 150°c Universal accessory slot Available in Yellow or white Rachet suspension Compliance with US Standards NFPA 70E & ANSI Z89.1



AOSafety <sup>™</sup> H18 High Heat

Aluminum-Infused materials Reflects heat whilst maintaining shape fits in to most hard hat accessory slots



**AO Tuffmaster Total Performance** 

Total performance shield with Anti-Fog coating inside
Hard coats on the outside
Molded with dimensions 9" x 14.5"
Thickness 0.075"
Complies with US Standard ANSI Z87.1



### **Eye Protection by 3M**

3M, a world leader in safety and protective equipment, is proud to have a complete range of eyewear as part of its product offering. This catalogue shows just a selection of our range.

The portfolio of  $3M^{TM}$  Eye Protection products promises quality eyewear that provides an optimal balance of comfort, protection and design.

It is our goal is to ensure that we satisfy your needs through the provision of exceptional leadership, expertise, quality and service excellence. With our global technology, manufacturing and knowledge network we do more than simply develop products that help your workforce to operate in safety and comfort. Advanced engineering and technology paired with the high standard of quality and innovation of a continuously evolving range of product solutions that you, our customers, come to expect from 3M.

### 3M™ Eye

### **Protection**



### **Style**

Style is a critical factor when it comes to raising the acceptance of the user to wear personal protective equipment (PPE). 3M's range of eyewear gives you a variety of modern and stylish products to choose from.

### **Protection**

The premium range of safety spectacles offers the highest optical class.

A broad range of eyewear products include durable anti-scratch and convenient anti-fog coatings. Most of the safety spectacles and goggles by 3M offer reliable UV protection and are all approved to EN166:2001 and are CF marked.

#### Comfort

Many of our products come with adjustable features and soft materials in points of contact in order to improve fit and comfort to accommodate different face sizes and shapes.

### Compatibility

Eye protection often needs to be worn in conjunction with other protective equipment and it is essential that comfort and fit with other PPE is maintained. Most of the eyewear range can be used in combination with respiratory and hearing protection by 3M. Compatibility with other PPE will be subject to a number of variable factors which requires employer and end user to conduct an appropriate selection depending on individual needs.

### **ICON KEY**



#### **ASPHERICAL LENS**

Most lenses are constructed using spherical curves (sections from a ball shape) which are of constant curvature. The human face has irregular curves which are better followed by an aspheric (non spherical) curve.



#### LIQUID SPLASH OR DROPLETS

The ventilation and coverage features give protection to the user in the event of accidental splashes or spray of hazardous liquids.



#### DUST

Careful design of ventilation features resists the penetration of large dust particles to provide protection for the user.



### **MOLTEN METAL**

The design provides resistance to penetration and adhesion of molten metal



#### **ROTATING TIPS**

New soft material rotating tips to hold the eyewear in place in all situations.

### **COATING DESCRIPTIONS**

3M's capabilities also include premium coating technology, which is evident in our patented DX coating. In the range of products are various options available;

### Anti-Scratch (AS)

Super multi-layered coating providing extreme protection from abrasion.

### Anti-Fog (AF)

This coating provides the lenses from misting

### Anti-Scratch- Anti-Fog (AS-AF)

This coating combination provides an extreme protection against scratching and fogging

#### DX

A state of the art coating provides an extreme protection against mist, scratches, static and chemical attack

### Mirror

Specific sun glare coating providing protection against scratches, UV, sunlight and glare by reflecting harmful light.

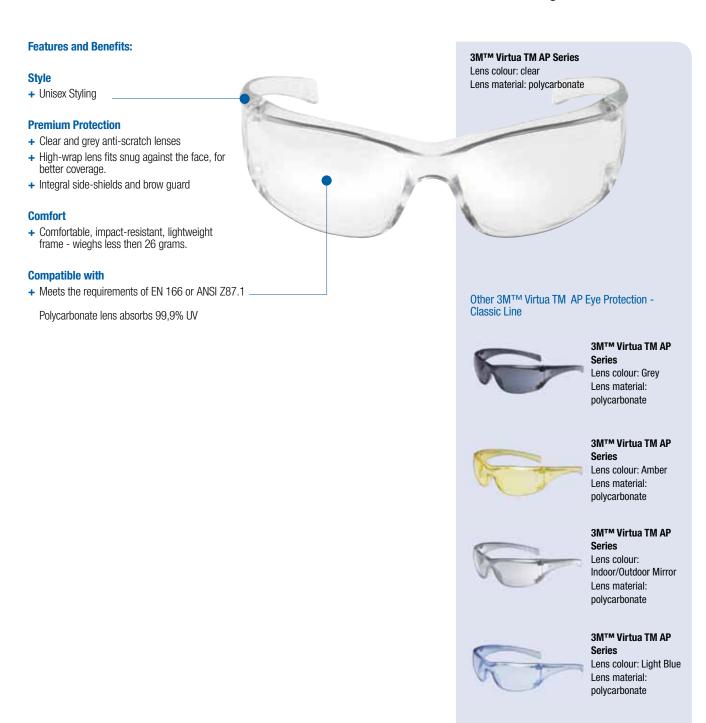
### 3M<sup>™</sup> Eye **Protection**



### **3M<sup>™</sup> Virtua<sup>™</sup> AP Series Classic Line Spectacles**

The new 3M<sup>™</sup> Virtua<sup>™</sup> AP features a graceful, unisex styling and lightweight comfort to help promote compliance.





### 3M<sup>™</sup> Eye

### **Protection**



### **3M<sup>™</sup> 2720 Classic Line Spectacles**

Cost-effective protection and comfort. 3M 2720 Classic Line Spectacles are lightweight and offer the wearer high levels of comfort together with reliable protection.

### **Features and Benefits:** 3M™ 2720 Classic Line Spectacles Lens colour: clear Lens material: polycarbonate + Stylish and modern design, eye protection is more likely to be worn if it looks good **Premium Protection** + Optical Class 1 to allow prolonged, comfortable wear + Good impact resistance with Anti-Scratch coating for improved durability + Special Anti-Fog coating which reduces fogging and ensures clearer vision + Lightweight and comfortable **Compatible with** + Slim nose bridge and flat temples for improved compatibility with other PPE + Combines well with 3M<sup>™</sup> 9300 Series Respirators Other 3M™ 2720 Classic Line spectacles 3M™ 2721 **Classic Line Spectacles** Lens colour: smoke for additional sun glare protection Lens material: polycarbonate 3M™ 2722 **Classic Line Spectacles** Lens colour: yellow for contrast enhancement requirements Lens material: polycarbonate

### 3M<sup>™</sup> Eye **Protection**



### **3M<sup>™</sup> 2820 Classic Line Spectacles**

Very lightweight, the 3M 2820 Spectacles are a sleek, modern design offering excellent coverage and field of vision.

### **Features and Benefits:**

#### Style

+ Stylish and modern design, eye protection is more likely to be worn if it looks good

### **Premium Protection**

- Optical Class 1 for high optical clarity and extended wear time
- Polycarbonate lens offers good impact resistance
- Wrap-around design for increased lateral protection

### **Comfort**

- + Very lightweight 21 g.
- + Temple pivots for adjustable the lens angles
- + Soft, flexible temples for improved comfort

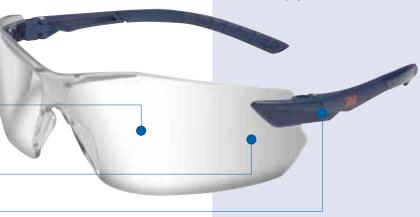
### **Compatible with**

+ Fits well with 3M<sup>™</sup> 9300 series respirators for the majority of users.



### 3M<sup>™</sup> 2820 Classic Line Spectacles

Lens colour: clear Lens material: polycarbonate





### 3M<sup>™</sup> 2821 Classic Line Spectacles

Lens colour: grey Lens material: polycarbonate



### 3M™ 2822 Classic Line Spectacles

Lens colour: amber Lens material: polycarbonate

### 3M<sup>™</sup> Eye **Protection**



### 3M<sup>™</sup> 2840 Comfort Line Spectacles

Protection, comfort and adjustability. With a new, unique style, the 3M 2840 spectacles have been designed with user comfort and convenience in mind. The temples are fully inclinable and adjustable in length for optimal fit. The soft inner padding offers increased comfort. The 3M 2840 spectacles also feature an integrated browguard for

increased protection incorporating a strong polycarbonate lens with anti-scratch and anti-fog coating (except 3M<sup>TM</sup> 2844 spectacles), they are available in 6 lens options.

### **Features and Benefits:** 3M™ 2840 Comfort Line Spectacles Lens colour: clear **Style** Lens material: polycarbonate + Stylish and modern design, eye protection is more likely to be worn if it looks good **Premium Protection** + Optical Class 1 for high optical clarity to allow prolonged, comfortable wear + Integrated browguard for increased protection + Strong polycarbonate lens with anti-scratch and anti-fog coating + Polycarbonate lens for good impact protection **Comfort** + Adjustable temple Other 3M<sup>™</sup> 2840 Comfort Line Spectacles length (3 positions) for comfort and optimal fit + Soft inner padding on temple for increased comfort and stability when worn + Inclinable lens enabling individual adjustment 3M™ 2841 and optimal personal fit **Comfort Line Spectacles** + Lightweight (26g) Lens colour: Grey Lens material: polycarbonate **Compatible with** + Ideal combination with 3M™ 9300 Series and 3M™ 4000 Series Respirators and the 3M<sup>™</sup> 7500 Series Half Masks. 3M™ 2842 **Comfort Line Spectacles** Lens colour: yellow Lens material: polycarbonate 3M™ 2844 **Comfort Line Spectacles** Lens colour: amber Lens material: polycarbonate 3M™ 2846 3M™ 2845 **Comfort Line Spectacles Comfort Line Spectacles** Lens colour: red-orange Lens colour: IR shade 5 Lens material: polycarbonate Lens material: polycarbonate

### 3M<sup>™</sup> Eye

### **Protection**

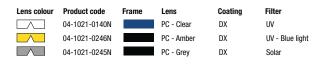


### 3M<sup>™</sup> QX1000 Spectacles



04-1021-0140N

The economical version of the QX Series, offers exceptional protection with a revolutionary sports design. But the real surprise is its unparalleled comfort with impact protection. "Beyond the standard"



### 3M<sup>™</sup> QX2000 Spectacles





The protection design and extraordinary comfort offered by QX 1000 plus two unique innovations: rotating temple tips and reversible nosepiece (2 Sizes)

 Lens colour
 Product code
 Temple
 Lens type
 Coating
 Filter

 04-1022-0140N
 PC - Clear
 DX
 UV

 04-1022-0146N
 PC - Amber
 DX
 UV - Blue Light

 04-1022-0245N
 PC - Grev
 DX
 Solar

### **3M<sup>™</sup> QX<sup>™</sup> Tactical Protective Eyewear Prescription Lens Insert**





This insert can be used for people in need of prescription insert for their safety eyewear. The QX Prescription Lens Insert works with QX2000 only.

### 3M<sup>™</sup> Eye **Protection**



### **3M<sup>™</sup> BX<sup>™</sup> Premium Line Spectacles**

The sleek, contoured and fully adjustable BX model is designed for today's flexible work force.

### **Features and Benefits:**

#### **Style**

+ Stylish and modern design

#### **Premium Protection**

- Special Anti-Fog coating reduces fogging and ensures clearer vision
- + Excellent protection against flying particles

### **Comfort**

- ◆ Soft tip temples to improve comfort
- + Soft, universal-fit nose bridge
- + Adjustable length temples with pantoscopic system (3 angles for custom fit)

### Compatible with

+ Special design for improved compatibility with other PPE



### Other 3M™ BX Premium Spectacles



### 3M<sup>TM</sup> BX<sup>TM</sup> Premium Line Spectacles Lens colour: grey Lens material:



3MTM BXTM Readers
Premium Line Spectacles
Lens colour: clear
Lens material:
polycarbonate

### 3M™ Eve

### **Protection**



### 3M<sup>™</sup> Maxim<sup>™</sup> Comfort Line Spectacles

Protection, comfort, and adjustability, Maxim comfort line spectacles, all have a unique patented aspherical lens which provides excellent coverage and a wide angle of vision. The temples are fully inclinable and adjustable in length for optimal fit. They are available in more than 15 different lens and frame options.

The unique minimizer option for welding assistance protects against Infra-red without blocking visible light.

Lens colour: clear

Lens material: polycarbonate

### **Features and Benefits:**

#### Style

+ Stylish and modern design

### **Premium Protection**

- Patented aspherical lens for 180° of Pure Vision and superior eye coverage
- Ventilation channel across the lens to minimise misting
- DX Coating provides anti-fog and anti-scratch properties

### Comfort

- + Soft, universal-fit nosebridge
- Dual-injected cushion browguard for extra comfort and shock absorbsion
- Adjustable length temples with pantoscopic system –

### **Compatible with**

 Specially designed for improved compatibility with other PPE i.e. Maxim Ballistic version specially designed to be worn with earmuffs -



Other 3M™ Maxim™ Premium Line Spectacles

3M™ Maxim™ Premium Line Spectacles



3M™ Maxim™ Welding Premium Line Spectacles Lens colour: shade 5.0 Lens material: polycarbonate



3M™ Maxim™ Utility Pack Lens colour: clear, bronze and amber Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles Lens colour: clear Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles Lens colour: amber Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles Lens colour: bronze Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles Band Lens colour: bronze

Lens material: polycarbonate

### 3M™ Fve

### Protection



### 3M<sup>™</sup> MAXIM<sup>™</sup> Hybrid Goggles

The Maxim Hybrid goggle is a very lightweight, low profile form of eyewear protection that provides the same protection as a goggle. It provides high comfort and unsurpassed protection against liquid droplets and mechanical hazards. The slim design offers improved comfort and wearer acceptance.

### **Features and Benefits:**

#### Style

+ Modern and slim design

### **Premium Protection**

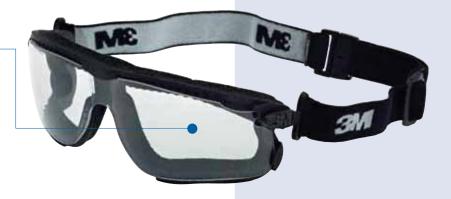
- Patented aspherical lens for excellent field of view and superior eye coverage
- + DX Coating to resist fogging, scratching, chemicals, and to make it more anti static
- + High performance ventilation system

### Compatiblity

+ Special design for improved compatibility with other PPE

### 3M™ Maxim™ Hybrid Goggles

Lens colour: clear Lens material: polycarbonate





### 3M<sup>™</sup> Eye

### **Protection**



### 3M<sup>™</sup> 2890 Comfort Safety Goggles

The 3M 2890 comfort safety goggles features a modern, slim design and are available with four different options using either an acetate or polycarbonate lens with either sealed or indirect ventilation. They are suitable for a number of different applications where a versatile, comfortable goggle is required.

#### **Features and Benefits:**

#### **Style**

 Modern, slim-line and lightweight design for an excellent fit

#### **Premium Protection**

- Optical clarity Class 1 to allow prolonged, comfortable wear
- Sealed design (3M<sup>™</sup> 2890S & 3M<sup>™</sup> 2890SA) helps provide protection against liquids, dust, gases and vapours
- Indirect ventilation design (3M™2890 & 3M™ 2890A) for improved air circulation, comfort and reduced fogging in hot/humid conditions
- Acetate lens option (2890A & 2890SA) for excellent chemical resistance and protection against high speed particles at low energy EN166 1 FT
- Polycarbonate lens option (2890 & 2890S) protects against high speed particles at medium energy EN166 1 BT and molten metal
- Anti-Scratch features an extremely scratch resistant coating ensuring improved durability (2890 & 2890S only)
- Special Anti-Fog coating reduces fogging and ensures clearer vision
- + UV Protection gives reliable protection against specified levels of hazardous UV radiation
- + Additional protection against gas & Fine particles (2890S/2890SA/2895S)
  All except 2895S feature a clear lens for protection against UV light. The 2895S features a shade 5 lens for gas welding and cutting.
- The 2895S lenses are assessed against EN169:2002 for transmittance requirement for welding filters. This product protects against high speed impact at medium energy at room temperature only.

#### Comfort

- Easy-to-adjust strap for stable and comfortable wear
- Pivoting ratchet for convenient personal adjustment
- Replacement lens options for 2890/2890S 2890A/2890SA

### **Compatible with**

 + Ideal combination with 3M<sup>™</sup> 9300 Series and 3M<sup>™</sup> 4000 Series Respirators and the 3M<sup>™</sup> 7500 Series Half Masks

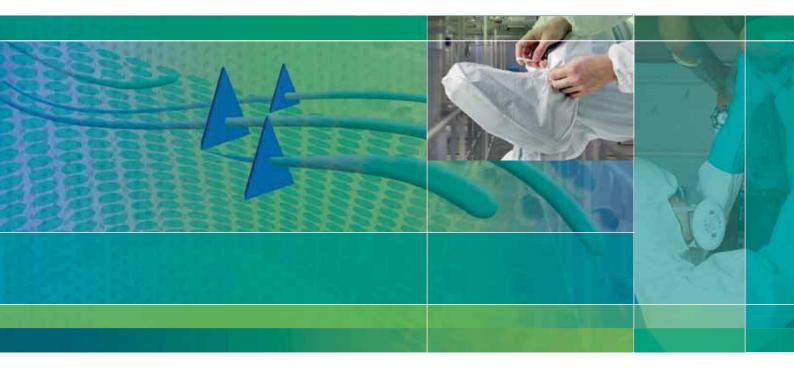


#### 20056



The 2895S features a shade 5 lens for gas welding and cutting.





### Built for protection. Designed for comfort

3M has a select range of high quality stylish protective coveralls offering breathable comfort and protection you can rely on.

The range provides peace of mind for effective use and protection against many industrial hazards.

### Select Features

- + 3-piece elasticated hood, waist and ankles for a comfortable fit and freedom of movement (select models only)
- + Two-way zip for convenience with storm flap for extra protection from contaminants
- Additional treatments for example, to improve flame spread resistance or improve repellency to oil and alcohol based liquids (select models only)
- + Knitted cuffs for increased wearer comfort (select models only)
- + Anti-static treatment (select models only)
- + Coveralls by 3M contain no components made from natural rubber latex or silicone
- + Sizes: from S to 4XL (available on most models)

#### **Table of Symbols**

Table of Symbols						
Symbol	Title/Aspect	Standard number				
	Protective clothing – chemical					
	Type 6 – protective performance against liquid chemicals (whole suit, reduced spray)	EN 13034 + A1				
	Type 5 – protective performance against solid airbome particulates	EN ISO 13982-1				
	Type 4 – protective performance against liquid chemicals (spray tight)	EN 14605 + A1				
	Type 3 - protective performance against liquid chemicals (jet spray)	EN 14605 + A1				
<b>**</b>	Protective Performance – Infective agents	EN 14126				
	Protective performance against radioactive particulate contamination	EN 1073-2				
4	Protective Clothing — Electrostatic properties — surface resistivity	EN 1149-5				
EN 533 ISO 14116 Index 1	Protective Clothing - Resistance to flame spread	EN 533 / ISO 14116 (Index 1)				



# 3M<sup>™</sup> Protective Coveralls



### 3M<sup>™</sup> Protective Coveralls 4500 and 4505

The 4500 and 4505 are presented to the market as CE Category 1 protective coveralls suitable for non-hazardous applications.

Whether it is for domestic DIY use, light duty industrial cleaning and maintenance applications or environments where hygiene and cleanliness are important, the 4500 and 4505 are excellent economic solutions to keep the wearer clean or dry

### 4500

### **Key Features:**

- + Breathable and light duty protection
- + Strong, durable 45gsm polypropylene fabric
- + Storm flap over zip
- + Elasticated hood, cuffs, ankles and waist
- + Available in blue and white



3M™ Protective Coverall 4500 Colour: White, Blue CE Category I Sizes: S-4XL

### **Typical Applications:**

### **Popular Choice**

- + Light duty cleaning
- + Warehousing
- + Janitorial
- + Domestic DIY

### 4505

### **Key Features:**

- + Light duty non-hazardous liquid protection
- + Thick, laminated material for extra robustness
- + Repels water and some non-hazardous oils
- + Elasticated hood, cuffs, ankles and waist
- + 2-way zip with storm flap



3M<sup>™</sup> Protective Coverall 4505 Colour: White CE Category I

### **Typical Applications:**

### Popular Choice

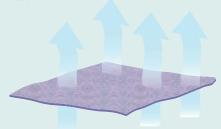
Sizes: S-4XL

- + Light duty cleaning
- + Warehousing
- + Janitorial
- + Domestic DIY
- + Water-based applications

#### Fabric material

The 4500 is made from a 45gsm single layer of spun bond polypropylene ensuring it is soft and breathable, but sufficiently robust and protective for general purpose use.

4500



The 4505 is made from a thick, robust 67gsm polyethylene laminate material comprising a soft, base layer of spunbond fibres with a high quality polyethylene laminate film making it highly suitable for low-hazard wet applications

4505



# 3M™ Protective Coveralls





### 3M<sup>™</sup> Protective Coverall 4510

The 4510 is an economic solution to protect from limited chemical splashes such as those from paint spraying and is certified to the PPE Directive Category III, Type 5/6 protection standard. The material is microporous, allowing air to escape from within the suit, while helping to protect from the hazard on the outside.

### **Typical Applications\*:**

### Popular Choice

- + Light industrial cleaning
- + Machine maintenance
- + Paint spraying & powder coating
- + Coating & resin applications
- + Crime scene investigation

### Suitable for consideration

- + Asbestos inspection and removal
- + Site preparation, insulation.
- + Cement manufacturing
- + Grinding & polishing
- Pharmaceutical processing and handling toxic powders
- + Cleanrooms



# Protective Coveralls





### 3M<sup>™</sup> Protective Coverall 4530 and 4530+

The 4530 and 4530+ are PPE Directive, CE Category III, Type 5/6 protective garments with breathable SMMMS material technology, a host of comfort features and additional special protective treatments. The 4530 has the added benefit of a "limited flame spread resistance" (FSR) treatment, while the 4530+ treatment helps to give it an improved repellence to some alcohols and oils.

### **Typical Applications\*:**

### Popular Choice

- + Cement manufacturing
- + Metal grinding and polishing
- + Oil & Gas industry
- + Machine maintenance
- + Light industrial cleaning

### Suitable for consideration

- + Asbestos inspection
- + Site preparation and insulation
- + Asbestos removal
- + Pharmaceutical processing
- + Handling toxic powders
- + Painting and coating
- + Resin applications



+ Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)

+ Limited flame spread resistance to ISO 14116 / EN 533 Index 1/0 (4530 only)

- + Alcohol and oil repellency treatment (4530+ only)
- + Highly breathable SMMMS material.
- + 2-way zipper with sealable storm flap for added on-off convenience and extra protection
- + Knitted cuffs and elastic waist and ankles for a better fit and freedom of movement
- + Low-linting
- + Anti-static treatment
- + Available in blue (with white triangle) and white

### 3M™ Protective Coverall 4530+Type 5/6

Colour: blue with white back panel, and plain white **CE Category III** 

Sizes: S-4XL

### 3M™ Protective Coverall 4530 Type 5/6

Colour: blue with white back panel **CE Category III** Sizes: M, L, XL, XXL









(4530 material only)

### Fabric Material





4530+



With 3 layers of meltblown polypropylene in between 2 layers of spun bond polypropylene (SMMMS), the 4530 and 4530+ fabrics allow airflow, increasing breathability, reducing heat stress and improving comfort. The three melt blown layers are inserted with hot air and act as a barrier while the two outer spun

bond layers make the coverall soft and breathable.

For the 4530, the additional flame spread resistance treatment enables the product to give limited flame spread protection (ISO1146 / EN 533 Index 1) when worn over an Index 2 or 3 garment. This may extend the life of the more expensive thermal protective garments.



With the 4530+ the addition of the alcohol and oil repellence treatment, encourages the oil to sit up on the

surface rather than immediately soaking through.



# 3M™ Protective Coveralls





### 3M<sup>™</sup> Protective Coverall 4535

If you're looking for a balance of protection, durability and additional comfort, look no further than the 4535 coverall. Certified to PPE Directive Category III, Type 5/6 protection, it utilises a dual material design with added comfort features to optimise wearer acceptance.

### **Typical Applications\*:**

### Popular Choice

- + Coating & resin applications
- + Light industrial cleaning
- + Machine maintenance
- + Paint spraying & powder coating

#### Suitable for consideration

- + Asbestos inspection and removal
- + Site preparation, insulation.
- + Cement manufacturing
- + Grinding & polishing
- Pharmaceutical processing and handling toxic powders

### **Key Features:**

+ Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)

+ Robust, very low-linting laminated microporous material

+ Extra large breathable back panel for improved air circulation and reduced heat stress

 2-way zipper with storm flap for added on-off convenience and extra protection

 Knitted cuffs with elasticated waist and ankles for increased comfort and freedom of movement

- + Low-linting
- + Anti-static treatment

### 3M™ Protective Coverall 4535 Type 5/6

Colour: blue with white CE Category III Sizes: S-3XL









### Fabric Material

The 4535 front combines a high quality polyethylene laminate providing an excellent barrier, on top of a layer of soft, spunbond polypropylene fibres creating a robust, yet comfortable 55gsm protective fabric

The large blue back panel is made from 5 layers of spunbond and meltblown polypropylene giving excellent breathability, whilst maintaining the Type 5/6 level of protection.



SMMMS back-panel.



Microporous laminate fabric.

# Protective Coveralls





### 3M<sup>™</sup> Protective Coverall 4540+

With dual material technology and offering CE Category III, Type 5/6 protection, the 4540+ is ideal for applications where both high levels of protective performance and comfort are desired.

### **Typical Applications\*:**

### Popular Choice

- + Paint spraying & powder coating
- + Coating & resin applications
- + Light industrial cleaning
- + Machine maintenance

### Suitable for consideration

- + Asbestos inspection and removal
- + Site preparation, insulation.
- + Cement manufacturing
- + Grinding & polishing
- + Pharmaceutical processing and handling toxic powders

### **Key Features:**

- + Excellent barrier against dry particles and certain liquid chemical splash (CE Type 5/6)
- + Soft and light, ultra low-linting laminated microporous material that drapes and hangs well over the body facilitating ease of movement
- + Back panel made of breathable SMMMS material for improved air circulation and reduced heat stress
- + 2-way zipper with fully sealable storm flap for added on-off convenience and extra protection
- + 3-panel hood design for enhanced compatability with complimentary PPE
- + Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- + Anti-static
- + Low linting



Microporous laminate fabric.

# Protective Coveralls





### 3M<sup>™</sup> Protective Coverall 4565

Offering CE Category III, Type 4/5/6 protection, the 4565 has an impressive level of liquid barrier protection whilst maintaing its unique soft feel and well-fitting drape.

### **Typical Applications\*:**

### Popular Choice

- + Asbestos removal
- + Pharmaceutical processing
- + Handling toxic powders
- + Cleanrooms
- + Pesticide Spraying

### Suitable for consideration

- + Asbestos inspection
- + Site preparation, insulation
- + Cement manufacturing
- + Grinding & polishing
- + Industrial cleaning and maintenance
- + Painting & coating, resins

#### **Features and Benefits:**

- + Excellent barrier against dry particles, liquid certain chemical splash and spray (CE Type 4/5/6)
- + Taped seams across the suit for better protection and increased durability
- + Biological protection tested to EN 14126
- + 2-way zipper with fully sealable storm flap for added on-off convenience and extra protection
- + 3-panel hood design for enhanced compatability with complimentary PPE
- + Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- + Anti-static
- + Ultra-Low linting

## 3M™ Protective Coverall 4565 Type 4-B/5-B/6-B Colour: white with red seams **CE Category III** Sizes: S-4XL

### Fabric Material

20% lighter than previous 3M polyethylene laminate materials, the 4565 combines a composite base of nonwoven fibres and a polyethylene film giving good barrier efficiency against many hazardous liquids. The laminate is also ultra-low linting and anti-static treated making it suitable for a wide variety of potentially hazardous applications.



# √I<sup>™</sup> Protective Coveralls





### 3M<sup>™</sup> Protective Coverall 4570

The 4570 is a high performance chemical protective suit, certified to PPE Directive Category III, Type 3/4/5/6 levels of protection, making it suitable to protect against a range of chemical jets and sprays. With additional design features including an enlarged zip and finger loops, a double-closing storm flap system and chin flap, convenience of use can be offered without compromising the high level of protection offered.

### **Typical Applications\*:**

### Popular Choice

- + Chemical mixing and handling
- + Chemical / oil spills and clean up
- + Hazardous waste remediation
- + Decontamination
- + Tank cleaning

### Suitable for consideration

- + Pesticide spraying
- + Emergency Response

### **Key Features:**

- + Excellent barrier for jet spray and liquid tight chemical protection (CE Type 3/4)
- + Biological / infective agent protection (EN 14126)
- + Double front closing system with internal stormflaps for extra protection
- + Large zip for ease of use
- + Elasticated cuffs with thumb loops for secure fit during overhead work
- + Elasticated waist and ankles for increased comfort and freedom of movement
- + Adhesive chin flap
- + Very low-linting
- + Anti-static

### 3M™ Protective Coverall 4570 Type 3-B/4-B/ 5-B/6-B

Colour: grey **CE Category III** Sizes: S-4XL



















### Fabric Material

The 4570 uses a heavy-duty material blending a soft inner layer of spun bond fibres with multiple outer layers of a high performance anti-static treated polyethylene laminate, to offer a high level of liquid protection.



# Protective Coveralls

### Accessories

### **Lab Coats**

### 3M<sup>™</sup> Lab Coat 4440

- . Made of the same laminated material as the Type 5/6 coveralls (3M 4535) for dust and splash protection
- Knitted cuffs
- · Zip fastener



### 3M<sup>™</sup> Lab Coat 4430

- . Made of the same SMMMS material as the Type 5/6 coveralls (3M 4530+) for dust and splash protection
- · Breathable material with treatment to improve repellency to oil and alcohol based liquids
- Zip fastener



### 3M™ Lab Coat 4400

- Made of 100% polypropylene
- · Breathable and lightweight
- Zip fastener
- · Available in blue and white



### **Overboots**

### 3M™ Overboot Cover 450



Slip Resistant Sole

3M™ Overboot Cover 440



Standard Sole

- · Elastic at the calf
- Universal size with ties to help provide a good fit
- Made of the same laminated material as the Type 5/6 coveralls (3M 4535)
- Sole designed to reduce risk of slipping (450 only)

### **Overshoes**

3M™ Overshoe 442



- Made of the same laminated material as the Type 5/6 coveralls (3M 4535)
- Elastic at ankle

3M<sup>™</sup> Overshoe 402



- General non-hazardous substance protection
- · Print on base to reduce risk of slippina
- · Elastic at ankle

### **Oversleeves**

3M<sup>™</sup> Oversleeve 444



3M<sup>™</sup> Oversleeve 445



- Made of the same laminated material as the Type 5/6 coveralls (3M 4510)
- 16 inch length covering wrist to top of arm
- · Elastic finish on top end
- Knitted cuffs (445 only)

### **Head Wear**

### 3M<sup>™</sup> Overhood 446



- · Made of the same laminated material as the Type 5/6 coveralls
- Anti-static treated
- · Drapes over the shoulders offering excellent coverage

3M<sup>™</sup> Mob Cap 407



- Hygiene protection preventing contamination from hair in the working environment
- · Universal size

# 3M<sup>™</sup> Protective Coveralls



### **Product Selector\***

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		d.	de.		A.			1		d.		Adda
3M	4500	4505	4510	4515	4520	4530	4530+	4535	4540+	4545	4565	4570
CE Certification**	CATEGORY 1	CATEGORY 1	CATEGORY 3  TYPE 6 EN 10034 EN 150 13982-1  EN 1149-5 EN 1073-2**  Type 6 EN 1073-2**	CATEGORY 3	CATEGORY 3  TYPE 5 EN 13034 EN 150 13982-1  EN 1149-5 EN 1073-2**	CATEGORY 3  TYPE 6 EN 10054 EN 150 15982-1  EN 1149-5 EN 1072-2**	CATEGORY 3  TYPE 6 BY 13034 EN 13034 EN 13073-2**  EN 11149-5 EN 1073-2**	CATEGORY 3  TYPE 6 EN 10504 EN ISO 13802-1  EN 1149-5** EN 1073-2**	CATEGORY 3  TYPE 6 BY 19094 ENISO 13982-1  EN 1149-5" EN 1073-2"	CATEGORY 3  TYPE 6 EN 10034 EN 150 13982-1  EN 1149-5 EN 1073-2**	CATEGORY 3  TYPE 6 EN 19034 EN 19034 EN 19034 EN 1903-2** EN 1903-	CATEGORY 3  TYPE S EN 13004 EN 50 13982-1  TYPE 3 EN 14005 EN 5073-2  EN 14105 EN 1470-2
						EN533/ISO 14116 Index 1***				EN 14126**		EN 14126
Material Weight	45gsm	67gsm	47gsm	50gsm	43gsm	55gsm	47gsm	55gsm	49gsm	49gsm	49gsm	92gsm
Sizes	S-4XL	S-4XL	S-4XL	S-4XL	S-4XL	M-XXL	S-4XL	S-3XL	S-4XL	S-4XL	S-4XL	S-4XL
Colours		Â	Â		Â	*	ÂÂ	Å	Â	Â	Å	Å
Light-duty cleaning, warehousing, janitorial	•	•		•								
Asbestos Inspection, site preparation, insulation			•	•	•	•	•	•	•	•	•	
Asbestos removal			•	•	•	•	•	•	•	•	•	
Cement manufacturing, metal grinding & polishing			•	•	•	•	•	•	•	•	•	
Light industrial cleaning, machine maintenance			•	•	•	•	•	•	•	•	•	
Pharmaceutical processing, handling toxic powders			•		•	•	•	•	•	•	•	
Painting & coating, resins			•				•	•	•	•	•	
Cleanrooms			•							•	•	
Pesticide spraying											•	•
Chemical mixing and handling											•	•
Chemical spills, emergency response, decontamination, tank cleaning												•

Popular choice

Suitable for consideration

<sup>\*</sup>In all cases, product selection should be based on a full risk assessment. Always read product user information. Use limitations and performance data should be considered to ascertain the protection required. If in doubt, contact a safety professional. This guide is only an outline. It should not be used as the only means for selecting protective clothing. Details regarding performance and limitations are set out on the packaging and user instructions. Before using any protective clothing, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. If in doubt, contact a safety professional or 3M – www.3M.eu/safety. Always check the compatibility of the suit material before selection. Please note that the personal protective equipment (PPE) shown highlight some of the products which may be considered. Sections of the most appropriate PPE will depend on the particular situation and should be made only by a competent person knowledgable of the actual working conditions and the limitations of PPE.

<sup>\*\*</sup>See user instructions or technical datasheets for full details.

<sup>\*\*\*</sup>Material meets standard requirements.

# 3M<sup>™</sup> Emergency Response Solutions



# 3M<sup>™</sup> JS-330 Series Chemical and Respiratory Protective Suits (CRPS)

The 3M<sup>™</sup> JS-330 Series of Type 3 Suits are designed to provide Emergency Response workers with a high level of personal protection against a broad range of industrial chemicals and other agents found in Civil Emergency situations.

These systems combine robust highly comfortable Type 3 suits with respiratory protection from the industry proven  $3M^{TM}$  Jupiter<sup>TM</sup> JP-ER-03 Powered Air Purifying Turbo.

### **Features, Advantages and Benefits**

- + Approved to EN12941 TH3, with a Nominal Protection Factor (NPF) of 500
- Additional testing to EN1073-1 gives and NPF of 2000 meaning that these suits can be used to provide respiratory protection up to 2000 times the Threshold Limit Value (TLV)\*
- New comfort back harness allows for easier driving of vehicles and ensures ideal weight distribution of x turbo and filters.
- Type 3 Protective Suit with taped seams for protection against liquid chemical hazards (tested under jet pressure)
- Factory calibrated turbo to allow you to just get on with the job and not worry about air flow calibration
- + Integrated Nitrile gloves welded to the suit so you don't have to spend time worrying about getting an effective seal.
- + 3M's unique air exhaust positioning means air must pass over the whole body to exit the suit through an active elastomeric exhaust valve. This provides a cool airstream which improves comfort, reduces heat stress, allows for better focus on tasks and for longer wearing times.
- Integrated sock (same material as suit) to allow wearer choice in footwear and added security of boot flap to help prevent contamination of the footwear.



### **Key Applications**

- + Mass decontamination exercises evacuations
- + Hospital first receivers
- + Emergency Medical Service (Ambulance)
- + Casualty transport
- + Triage
- + Hazardous waste remediation
- + Asbestos abatement
- + Petrochemical applications
- + Liquid chemical and solvent handling
- + Wide viewing visor.
- + Comfortable, elasticated knitted neck seal.



+ 'Head-Up-Display'.

<sup>\*</sup> Additional testing, to EN 1073-1:1998 demonstrated that a Total Inward Leakage (Respiratory Zone of less than 0.05% was achieved, relating to a Nominal Respiratory protection factor of 2000 for all suits. Inward leakage of whole suit design meets the requirement of the suit Type 5 Test, with Ljmn 82/90 =30% and Ls, 8/10

# 3M<sup>™</sup> Emergency Response Solutions



### 3M<sup>™</sup> JS-Series Chemical and Respiratory Protective Suits (CRPS)

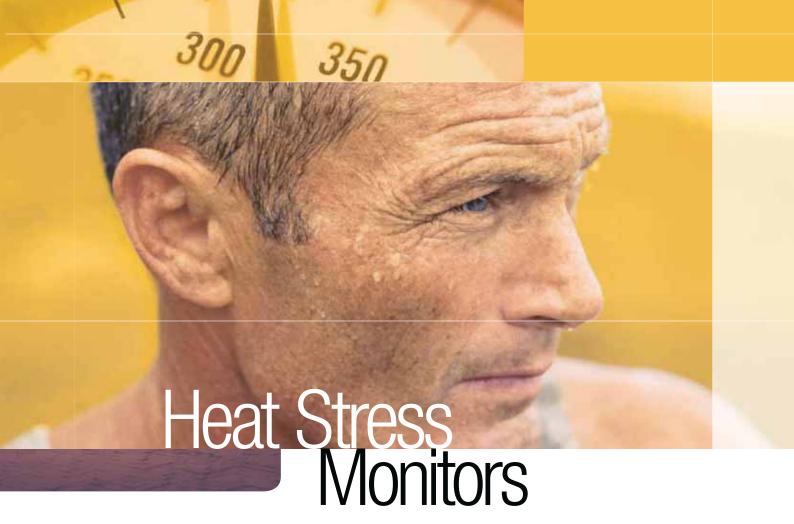
### 3M™ Filters and Accessories

Item	Description	Pack Qty
Suits		
JS-330 SUIT	Type 3 broad range chemical protection suit	1
JS-470 SUIT	Type 4/5 Lightweight suit, without integrated gloves	4
JS-470G SUIT	Type 4/5 Lightweight Suit with integrated gloves	4
Turbo		
JP-ER-03 Turbo Kit	Turbo, Backpack, Head-Up Filter Retainers Display and Breathing Tube	1
Batteries		
BAT-22	Single Use 4-Hr Battery	1
007-00-63P	Rechargeable 4-Hr Battery	1
007-00-64P	Rechargeable 8-Hr Battery	1
Filters		
450-00-25P2	Particulate P R Filters (Pairs)	12
453-00-25P2	A2P R Filters (Pairs)	6
453-09-25P2	A2BEK1P R Filters (Pairs)	6
453-16-25P2	K1P R Filters (Pairs)	6
456-18-25P2	ABE1P R Filters (Pairs)	6
JFR-85	ABEK2P R (Pairs)	6
Spares & Accessories		
BPK-01	Back Pack	1
008-00-42P3 / BT-20L	Breathing Tube	3
003-00-58P	Intelligent Battery Charger	1
003-00-59P	Intelligent 10-Station Battery Charger	1

#### Disclaimer

There are uses, environments and chemicals for which these garments and/ or fabrics are unsuitable. It is the responsibility of the user to review available data and verify that the garment and/or fabric is appropriate for the intended use and meets all specified government industry standards.





# **Durable and Accurate Heat Stress Analysis**

### **Industry-Leading Technology and Design**

Heat Stress prevention begins with the accurate measurement and analysis of heat stress in the workplace and performance training environments.  $3M^{TM}$  Heat Stress Monitors provide safety professionals with the durable, easy-to-use instrumentation needed to identify, measure, analyze and monitor heat stress related exposure levels – primary activities in the four-step process of protecting employees, athletes, and others at risk of heat stress:

- + 1. Identify
- + 2. Monitor
- + 3. Control
- + 4. Protect

3M™ QUESTemp° series covers a broad range of heat stress monitors, making it easy to select an instrument that meets the needs of different users and environments. From manufacturing to hazardous duty to performance training and military applications, there is a QUESTemp° monitor suited to your application.



### 3M<sup>™</sup> QUESTemp° Series Heat Stress Monitors

The QUESTemp<sup>o</sup> Series area heat stress monitors are designed to quickly and accurately evaluate potential heat stress environments. These rugged instruments deliver high performance monitoring through WBGT (Wet Bulb Globe Temperature) sensing technology and the calculation of a WBGT Index value. An optional air probe enables

the calculation of PMV/PPD thermal comfort indices. These innovative instruments are designed for the rigors of the workplace, with easyto-use features, intrinsic safety certification and advanced reporting capabilities.

#### **Features and Benefits:**

- + Models with intrinsic safety certification
- + Long battery life and robust construction
- + Data logging capabilities for enhanced reporting and measurement
- + Multilingual display (English, French, German, Italian, Španish)
- + Real-time clock provides accurate reporting with time stamping
- + Convenient stay time display per multiple
- + Optional remote sensor bar allows for simultaneous monitoring of up to three areas
- + Optional air probe accessory for calculation of PMV/PPD thermal comfort indices
- + Download data to NEW! Detection Management Software DMS or existing QuestSuite™ Professional II for analysis and data management

#### **Reduced Maintenance with Innovative Waterless Wet Bulb Sensing Technology**

The QUESTemp° 44/46/48N utilizes a Waterless Wet Bulb sensor designed for working environments where daily instrument upkeep is difficult. A high-quality humidity sensor and a proprietary algorithm perform the calculation of the WBGT values eliminating the hassle of daily wet bulb maintenance.



### **Six Models to Choose From**

#### **QUESTemp° Natural Wet Bulb Models**

- + QT-32
- + QT-34
- + QT-36

#### QUESTemp° Waterless Wet Bulb Models

- + QT-44
- + QT-46
- + QT-48N

+ QUESTemp<sup>o</sup> 44 with Waterless Wet Bulb technology



optional air probe





### GB (E) ZA

### 3M™ Reflective Safety Vest

#### **Product Features**

This high visibility safety vest is intended to reduce the risk of accidents by enhancing the visibility of the wearer in day-time and night-time conditions.

night-time conditions.

Made with 3M Reflective Material 2925, a quality retro-reflective material that meets the minimum requirements of international high visibility standards (ANSI 107:2004 and EN471:2003) up to at least 25 home wash cycles (according to ISO6330:2A).

Two horizontal reflective bands plus two shoulder bands for improved night-time visibility in all work environments.

Fluorescent lime-yellow or fluorescent red-orange 100% polyester fabric.

#### **Garment Sizes**

Available in four different sizes – medium (M), large (L) and two extra large sizes (XL and XXL), corresponding to the following chest sizes:

SIZE	CHEST
M	94 - 102cm
L	102 - 110cm
XL	110 - 120cm
XXL	120 - 130cm

### User Instructions

This garment is intended to enhance the conspicuity of the wearer in both day-time and night-time conditions, so reducing the risk of accident with a moving vehicle. However, no high visibility warning garment can guarantee absolute visibility and the wearer is ultimately responsible for his/her own safety.

It is the wearer's responsibility to verify that this garment is suitable for the intended use and to ensure that the garment is maintained according to the appropriate care conditions.

To ensure maximum visibility, the garment should be worn fully fastened at all times and should be regularly inspected to ensure that the garment is kept, clean and undamaged.

High-visibility warning clothing should be maintained in good condition and inspected regularly for signs of damage or deterioration. The garment should be replaced if it is damaged, worn or the fluorescent fabric is faded.

### Max 25 Washes









### Storage And Care

Always store and transport the garment in clean and dry conditions and out of direct sunlight. Prolonged exposure to sunlight may result in fading of the coloured fluorescent fabric or other deterioration of the garment or its components.

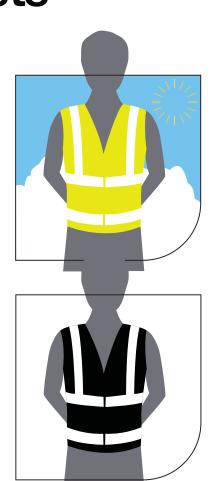
Please follow the washing care instructions that are shown on the label attached to the garment. The manufacturer of this garment will accept no liability for garments which have not been stored or maintained in an appropriate manner.

#### Recycling

Dispose of the garment according to local environmental and recycling guidelines.









### **Workwear Reflective Solutions**

Visibility by day and night is an important aspect for workers who are exposed to dangers during their daily work.

3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material can be used in many different occupational fields, such as fire-fighting, rescue services, road construction and garbage collection. It improves visibility and safety in low light situations and at night. The superior quality and performance of Scotchlite reflective materials ensure lasting functionality for many years; even under harsh conditions, our products will not let you down.

### **Application Examples**

- + Fire-fighting
- + Emergency & Rescue Services
- + Road Construction
- + Utilities
- + Garbage Collection
- + Forestry

The wide range of different Scotchlite reflective materials is designed to provide enhanced visibility, improving the safety of the wearer, without compromising on the functionality or performance of the garment on which they are used. As end-users demand additional properties

or wash durability from their high-visibility garments, such as flame resistance, industrial laundrability or chemical resistance, they can be confident that there's a Scotchlite reflective material solution for their application.



3M has demonstrated its commitment to worker safety and comfort with the introduction of  $3M^{TM}$  Scotchlite $^{TM}$  Reflective Material - 5500 Series Comfort Trim. The unique design of the segmented trim provides improved moisture vapour transmission, compared to solid trims, so that workers can stay dryer and cooler, while the increased flexibility makes garments more comfortable to move in.



Further information on 3M safety products can be found at

www.3mgulf.com/ppesafety





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