3M[™] Speedglas[™] Welding Safety Product Catalogue 2012





Passion for Welders



You're Our Director... and Your Thoughts Guide Us

You have strong opinions about tools that cover your face and eyes for hours at a time. Tools that can even feed you the air you breathe.

Well ... you're in charge.

Whether you're aware of it or not, you and scores of other welders guide us. You talk to us by Facebook, by email, through dealers, and by informal and formal surveys.

We listen. We watch. Then we ask, "what if...?"

We ask "what if...?"

troughout the day. What if ... we changed the

WhAt if ...?

geometry of our helmets to

increase their viewing area in every direction? What if ... our respirators could handle even harsher environments? What if ... what if...?



Just as hundreds of thousands of users rely on the 3M Speedglas brand for their best welding performance, 3M relies on welders' feedback for its future product innovations.



Speed Speed

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Ergonomics Are Our Passion, **And Your Lifeline**

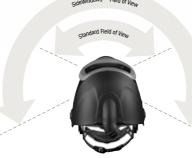
More than 35 years ago, we went to the shipyards of Sweden to observe welders. They blindly struck arcs as they continually nodded their helmets down. They got accidently flashed by other welders — or even themselves. We asked, "What if ... welders could always see, even with their helmets down?"

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





Unprecedented Vision: We started with being the first to introduce a popular auto-darkening welding filter. But we didn't stop there. Today, our welding filters are unsurpassed in their optical acuity and low angle dependence.



Peripherial vision: Eliminate "tunnel vision"...try a Speedglas welding helmet with SideWindows and see what you're missing!



"Breathable" Helmets: With aerodynamic vents that allow stale, exhaled air to freely exit the helmet.



Welding Helmet Design: Space-age helmets made for rough environments.



Lung Protection: Designed just for welders — and not merely carted over from some bulky industrial respirator design.



Ultimate comfort: The stability and balance of the Speedglas welding helmet series 9100 will change how you experience welding.

3M — Your Expert Supplier of Personal Protective Equipment

3M offers protection solutions for people in many challenging situations: military combat, first responders, shipbuilding, pharmaceutical laboratories, and industrial manufacturing.

We offer you one of the world's most comprehensive lines of safety equipment for eye, face, head, hearing and respiratory protection. For example: 3M developed the first disposable, lightweight, effective "dust mask" in 1961. Today, we're one of the worlds leading suppliers of safety and protective equipment.

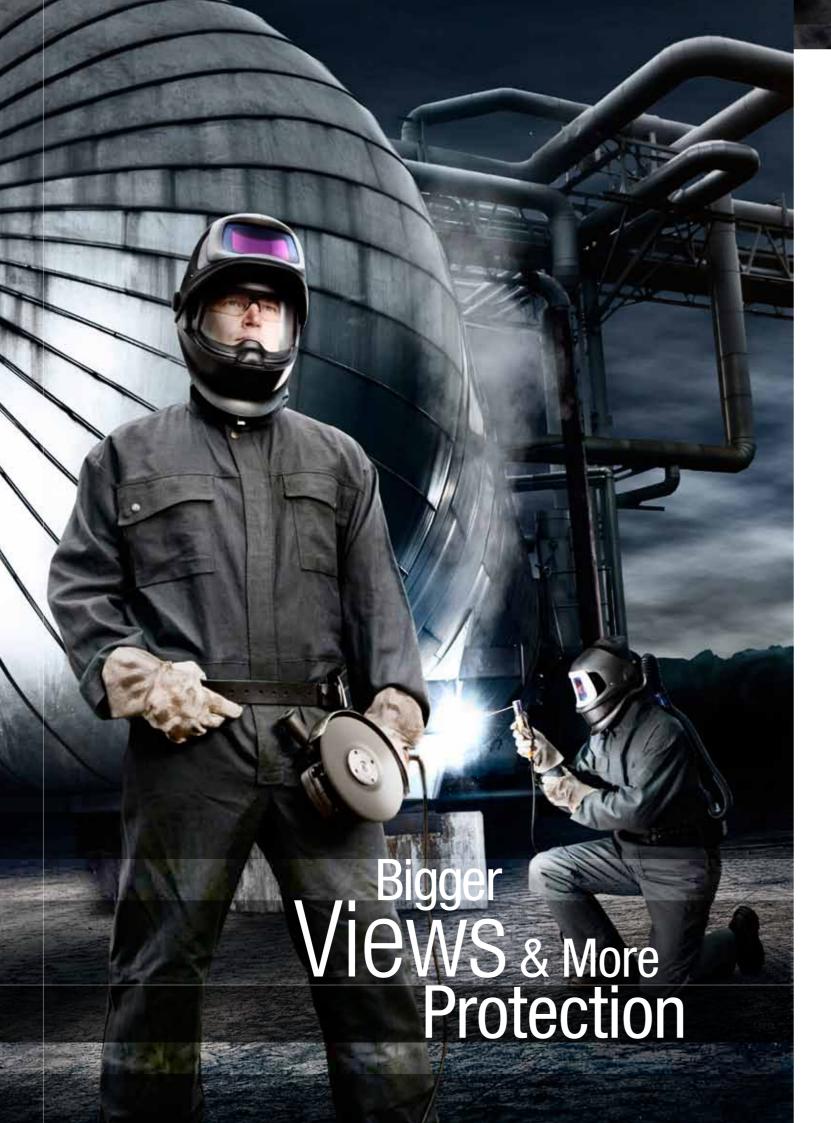
Our safety brands include: 3M[™] Peltor[™] Hearing Protection and Communication Headsets; 3M[™] E-A-R[™] Hearing Protection; 3M[™] SafeWaze[™] Fall Protection Equipment; and, of course, 3M[™] Speedglas[™] Welding Helmets.



experiences to the development of these products. We hope you relish the results!



Still working — just needs a new battery! An "old-timer" meets the new world of welding protection. If you still haven't experienced the new innovations from 3M, call your local dealer for a hands-on demonstration. Our sincere thanks to all professional welders who contributed their thoughts and



3M[™] Speedglas[™] Welding Helmet Series 9100 **The New Standard For Welding Protection!**

Our 4th generation of premium welding helmets is the result from years of collaboration with welders worldwide and consultation with international experts in ergonomics, acupuncture and anatomy. The result is our Speedglas



Take full advantage of our top-of-the-line products

- Superior comfort.
- · Increased balance and stability.
- · Excellent optics and bigger views.
- Increased coverage.
- · Flip-up welding helmets with clear protective visor.
- · Respiratory welding helmet options.
- New multi-protection system: 3M[™] Speedglas[™] Welding & Safety Helmet 9100 MP with respiratory protection.

If you have been waiting to upgrade from your old model, your wait is over. We now have helmets for virtually every welder's needs in our industry-leading Speedglas welding helmet series 9100.

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

auto-darkening welding helmet series 9100 - today offering options like flip-up function, safety helmet and/ or respiratory protection. Each model also has features like superior comfort, excellent optics and wide viewing area.

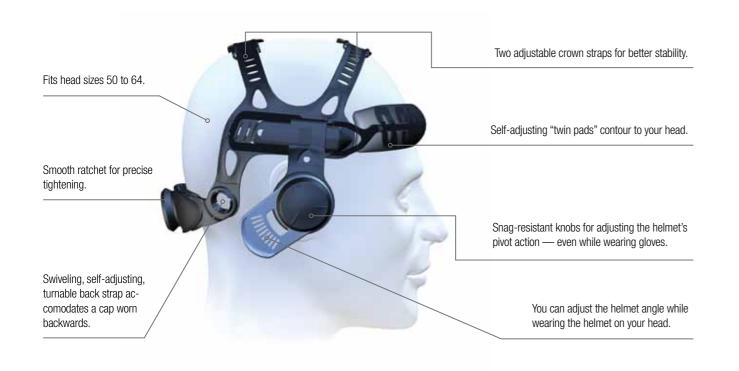


3M[™] Speedglas[™] Welding Helmet 9100 Series

The headband that shapes to your head

All welding helmets in the Speedglas 9100 series feature a
highly adjustable, comfortable headband. The outside of the
human head is lined with nerves, arteries, and acupressure
points; applying pressure to some of these spots actually
makes a person feel fatigued. The 9100 headband specificallyavoids these vulnerable are
adjustment combinations so
to fit your personal preferer
pressure — and a perfectly-
more comfort, all day long.

avoids these vulnerable areas. And it provides multiple adjustment combinations so you can "tailor" the helmet to fit your personal preferences and comfort settings. Less pressure — and a perfectly-adjusted, personal fit — means more comfort, all day long.



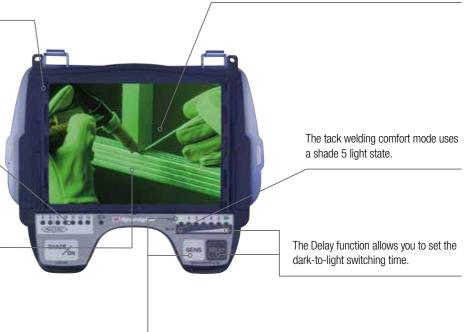
Excellent Optics, Bigger Views

The 3M[™] Speedglas[™] Welding Filter Series 9100 continue our tradition of outstanding optical quality, including uniform shading and minimal distortion across the entire filter viewing area. By selecting just the right setting for each task, you reduce eye strain and improve the quality of every weld.

- The Speedglas welding filter 9100XX is 30% larger than any other Speedglas welding filter.
- Seven dark shades, including 9–3 (variable), 5 for gas welding/cutting, and 8 for micro-plasma or low-amp TIG.
- Outstanding low-amp TIG performance, even on settings as low as 1 amp.
- Any shade can be "locked-in." For example, you can lock-in the light state shade 3 for grinding.
- Exclusive, innovative tack welding comfort mode which can help reduce eye strain.

Magnification made easy. The magnifying lens holder is built into the welding filter, making lens installation easier and more secure.

Seven user selectable dark shades for most types of arc welding.



Conforms to European Standard 379 for eye protection for welders, as well as other national standards (USA, Canadian, Australian — to name a few).

More comfortable when raised

Lifted into the raised position, the helmet's "high point" is lower than many other helmets. From a design standpoint that means keeping the helmet as close as possible to your head.

Because the helmet is more balanced, you do not need to tighten the headband as much, further increasing your wearing comfort.

"Parking" position

The smooth up-and-down pivot action can be "locked" in the up position — a light pull lowers the helmet back down again.





The helmet series 9100 include three auto-darkening filters: regular, large, and extra-large viewing area.

You can adjust the sensitivity of the arc detection for unsurpassed switching reliability.

3M[™] Speedglas[™] Welding Helmet 9100

Designed for Ultimate Protection

Protecting your eyes and face from radiation, heat and sparks — while providing a precise view of your work - makes your Speedglas welding helmet 9100 one of your most important welding tools.





3M[™] Speedglas[™] Welding Helmet 9100 Air

Respiratory Welding Helmet

All of the benefits of the 9100 welding helmets can now be used in combination with powered or supplied air respiratory protection. See further details of respirator compatibility on page 53

Speedglas welding filter series 9100 with superior optical performance for continuous viewing comfort.

Meets the requirements of mechanical resistance to high speed particles according to EN 175 class B.

The all-new face seal readily follows the contours of both the helmet and your face.



Airflow: The middle channel keeps the filter virtually fogfree, while two side channels provide smoothly distributed air to the area of your mouth and nose.



Exhaust vents: Readily directs your exhaled air out of the helmet and reduces the likelihood of a foggy welding filter.





Extended protection:

A flame-resistant headcover (used in this application) and an ear/neck protection are available as accessories.



SideWindows: Shade 5

High-comfort Speedglas

Exhaled air is channelled out via side exhaust vents.

headband 9100.

of vision.

filters that widen your field

3M[™] Speedglas[™] Welding Helmet 9100 FX

Wider Field of View with Flip-Up Front

Speedglas welding helmet 9100 FX, 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.

100% compatible with our top-of-the-line

series of Speedglas welding filter series 9100.

The big, 17 x 10 cm clear protective visor is

curved, increasing your peripherial vision.

Meets the requirements of mechanical

-5°C to +55°C, per EN 166:BT.

resistance to high speed particles according

to EN 175:B and at extremes of temperatures,

3M[™] Speedglas[™] Welding Helmet 9100 FX Air

Improved Respiratory Protection – TH3!

For constant TH3-rated respiratory protection and excellent vision in a flip-up model, meet the Speedglas welding helmet 9100 FX Air.

Meets the requirements of mechanical resistance to high speed particles according to EN 175:B and at extremes of temperatures, -5°C to +55°C, per EN 166:BT.

SideWindows: Shade 5 filters that widen your field of vision.

Improved respiratory protection — TH3. Reduced inward leakage means better breathing air quality.



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.



A spark- and spatter-resistant fabric head cover is standard on all 3M[™] Speedglas[™] Welding Helmets Series 9100 FX.

It readily connects both powered and supplied air respirator systems. See further details of respirator compatibility on page 54.





A guick 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.

Head Protection without Compromises

NEW

3M[™] Speedglas[™] Welding & Safety Helmet 9100 MP

The Most Advanced Feature Set Available

Introducing the Speedglas welding and safety helmet 9100 MP (Multi-Protection). We've seamlessly integrated five levels of welder protection: head, eye, face, respiratory and hearing into one extraordinarily comfortable and easy-

100% compatible with all Speedglas welding filter series 9100, including the top-of-the-line 9100XX filter.

A big (17x10 cm), curved, protective visor with excellent views up, down and peripherally. Meets EN 166:B for high speed particle protection*

* European Standards classify this visor as "B," with resistance to high speed particles at medium energy impact (120 m/s).



▶ Technical Specifications on page 64. Ordering information on page 55.

to-use system. The 9100 MP helmet: uncompromising, all-in-one, welding protection for highly demanding environments.



Look Around... **Really Look Around**

The clear protective visor is big (17x10 cm), curved and with great views up, down and side-to-side. It's perfect for prepping and inspecting welds...and just walking around your facility with full-time, TH3-class respiratory protection. Then, pull down your welding shield and appreciate the SideWindows views: you can have peripheral vision at all times, even when welding.

3M[™] Speedglas[™] Welding Helmet SL

When Your #1 Priority is Super Light

At a mere 360 grams — including its auto-darkening filter — the Speedglas welding helmet SL is 25% lighter than any other Speedglas model.

> Five adjustable dark shades 8–12 and a light shade of 3. Four sensitivity settings.

Grab & Go: A motion sensor automatically turns ON the welding filter when you pick up the helmet.

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Quick and light, perfect for fast tasks

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 helmet SL 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.

"I forget I'm Wearing it"







Our narrowest helmet: perfect for super tight spaces.

Dark shade can be increased to 13 or 14 using upgrade plates.

Appropriate for most arc welding processes — such as MMA, MIG/ MAG, TIG and plasma welding.





3M[™] Speedglas[™] Welding Helmet Series 100

High-End Features, Low-End Price

Speedglas welding helmet series 100 allow you to take advantage of excellent optical quality and reliable light-todark switching at a highly affordable price.

Appropriate for most arc welding processes, including MMA, MIG/ MAG and high amp TIG welding.

High impact rating according to the requirements of the European Standard EN 175:B.

The Speedglas welding helmets series 100 is compatible with most 3M[™] Disposable Particulate Respirators.

Performance made simple

The easy-to-use Speedglas welding helmet 100 is the ideal auto-darkening helmet for the occasional welder. Hobby welders, farmers, DIY types, and maintenance and construction workers can all benefit from the ability to always clearly see with their welding protection in place. In addition to the black/silver helmet, we offer a series of stunning graphic helmets — each with a unique personality. In addition to the black model, you can choose from several highly expressive graphic helmet designs.





Make a Visual Impact









Female Graphic Edition



Toughness and patinated grace.

Strong, fearless, and feminine at

the same time. Steel aesthetics

Designed by Ergonomidesign

Steel Rose

the helmet.



Wild-N-Pink Pretty in pink, but do not touch! A vivacious vine flourishes behind a protective overlay of barbed wire emphasize the protective qualities of and razor-sharp metal sculpture. Admire from a distance.

Image is Everything

3M[™] Speedglas[™] Graphic Welding Helmet Series 100

Speedglas welding helmets 100 deliver impressive protection and performance with distinctive graphic designs — all with a specific identity.



Inspired by women welders, 3M launched the first line of women specific designs. Our design team took direct inspiration from women welders to work with intricate patterns and graphics. The resulting designs are an avenue for personal expression.



Skull Jewels An elaborate floral grill motif emerges into a decorative skull and covers the entire helmet. The skull and flowers engage in visual interplay as one becomes the other, and vice-versa.

Steel Eyes Projecting inner strength, with focused eyes looking through a blaze of lilac flames.

Designed by Ergonomidesign

Designed by Ergonomidesign

3M[™] Speedglas[™] Welding Helmet 9000

Our Classic Welding Helmet



3M[™] Speedglas[™] Welding Helmet 9000 ProTop

For Overhead Hazards

The key to the Speedglas welding helmet 9000 ProTop is the innovative pivot mechanism that connects the welding helmet to its safety helmet. The mechanism keeps the helmet close to the helmet at all times, for excellent balance and reduced strain on your neck muscles.

- Available with Speedglas welding filter series 9002, variable shade 9-13 or dual shade 9/11.
- Speedglas SideWindows option.
- Exclusive helmet exhaust vents.



The Speedglas welding helmet 9000 is still available with 3M[™] Speedglas[™] Welding Filter 9002D (previous variable shade models 9002V and 9002X filters and Speedglas welding helmet 9000 FlexView are now replaced by the 3M[™] Speedglas[™] Welding Helmets 9100 Series. See page 6 for more details of our new 9100 product line.)

- Available as complete welding helmet with Speedglas welding filter 9002D, which has dual dark shades
 9 and 11. The Speedglas filters 9002V and 9002X can still be ordered as spare parts.
- Speedglas SideWindows option.
- Exclusive helmet exhaust vents.



3M[™] Speedglas[™] Welding Helmet 9000 ProTop with safety helmet has a special low profile design with minimal projections, so it is less likely to snag on surrounding obstacles. The flat front of the safety helmet features a short brim, so the welding helmet can be close-tothe-face for optimum viewing.

Safety Helmet Option for 3M[™] Speedglas[™] Welding Helmets

Welders working in areas with overhead hazards can now benefit from the new safety helmet options for 3M[™] Speedglas[™] 9100, 3M[™] Speedglas[™] 100 and 3M[™] Speedglas[™] SL Welding Helmets.

The 3M[™] Peltor[™] Safety Helmet G3001 is made of high quality UV-stabilised, ABS-plastic. One of the lightest safety helmets on the market, the Peltor G3001 Helmet has top ratings for absorbing and distributing the forces of falling objects.

Can also fit other types of safety helmets!

Using our new safety helmet adapter, you can easily fit the industry's most popular safety helmets with the Speedglas welding helmet 9100. See the safety helmet adapter compatibility list (at right).







 $3M^{\mathbb{M}}$ Speedglas^{\mathbb{M}} Welding Helmet 9100 with safety helmet adapter and $3M^{\mathbb{M}}$ Peltor^{\mathbb{M}} Safety Helmet G3001. A Uvicator is built into the G3001 helmet. When the helmet is new the Uvicator is red, as UV-radiation takes its toll on the plastic, the red Uvicator gradually fades out. When the red has faded away completely, it is time to replace the helmet.



Safety Helmet Adapter Compatibility for 3M[™] Speedglas[™] Welding Helmet 9100

3M[™] Peltor[™] Safety Helmet G22 3M[™] Peltor[™] Safety Helmet G3001 MSA Safety Helmet V-gard[®] *) 3M[™] Safety Helmet 1465 Balance *) Centurion[®] Vulcan[™] Safety Helmet *) Centurion[®] Vulcan[™] Safety Helmet *) Protector[®] HC 43 Tuffmaster[™]Safety Helmet *) Unisafe[®] TA560 UniLite[™] Safety Helmet ABS *) 3M[™] Safety Helmet 2000/2010

*) Not 3M manufactured safety helmets: Tests have been made to ensure that our safety helmet adapter for Speedglas welding helmet 9100 will fit the safety helmets listed in this table. 3M does not control future changes made to safety helmets not manufactured by 3M. All trademarks, service marks, product names, and company names cited here are the property of their respective owners.



3M[™] Adflo[™] Powered Air Respirator

Cooler, cleaner and more comfortable welding

With its smart, compact design, the award-winning Adflo 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.

Full mobility

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

An adaptable system that saves money

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

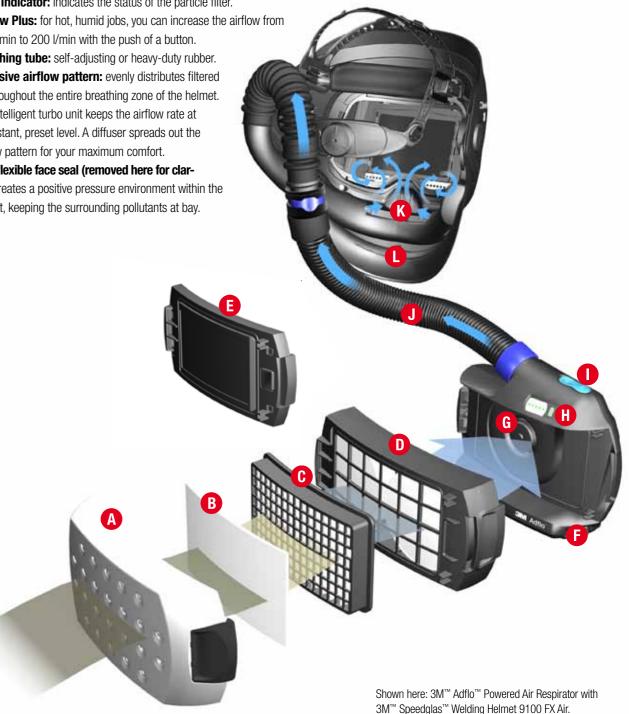


Constant flow of clean air

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.

- A Filter cover: holds the user-replaceable spark arrestor, which reduces the risk of filter fires.
- **B Prefilter:** increases the service life of the particle filter.
- **C** Particle filter: high efficiency particulate filtration.
- **D** Gas filter: (A1B1E1 or A2) captures organic, inorganic and acid gases and vapours. Gas filters sold separately.
- **E Odour filter:** removes unpleasant smells (not needed if a gas filter is installed); sold separately.
- **F** NiMH battery: fully charges in four hours. Expected operating time is 8 hours with new particle filter, new fully-charged battery and a standard airflow.
- G Brushless motor: with an average life three times longer than conventional motors.
- H Filter Indicator: indicates the status of the particle filter.
- I Airflow Plus: for hot, humid jobs, you can increase the airflow from 170 l/min to 200 l/min with the push of a button.
- J Breathing tube: self-adjusting or heavy-duty rubber.
- K Exclusive airflow pattern: evenly distributes filtered air throughout the entire breathing zone of the helmet. The intelligent turbo unit keeps the airflow rate at a constant, preset level. A diffuser spreads out the airflow pattern for your maximum comfort.
- L Soft, flexible face seal (removed here for clarity): creates a positive pressure environment within the helmet, keeping the surrounding pollutants at bay.





3M[™] Speedglas[™] Welding Helmet 9100 FX Air.





56 66 05 with Speedglas welding filter 9100V, variable shade 5,8, 9-13. 56 66 15 with Speedglas welding filter 9100X, variable shade 5, 8, 9–13. 56 66 25 with Speedglas welding filter 9100XX, variable shade 5, 8, 9-13.

3M[™] Speedglas[™] Welding Helmet 9100 FX Air with 3M[™] Adflo[™] Powered Air 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.

Part no*:

--- Speedglas welding helmet 9100 FX Air and Adflo respirator with particle filter:

54 66 05 with Speedglas welding filter 9100V, variable shade 5, 8, 9-13. 54 66 15 with Speedglas welding filter 9100X, variable shade 5, 8, 9–13. 54 66 25 with Speedglas welding filter 9100XX, variable shade 5, 8, 9–13.

3M[™] Speedglas[™] Welding & Safety Helmet 9100 MP with 3M[™] Adflo[™] Powered Air Respirator

Welding and safety helmet with auto-darkening welding filter and a 17 x 10 cm clear visor for weld preparations. Five levels of welder protection: head, eye, face, respiratory and hearing into one system.

Part no*

* For gas protection add any of these part numbers to your order: 83 72 42 for gas filter A1B1E1, or 83 75 42 for gas filter A2. These filters require a breathing tube with silencer (83 40 08) and the heavy-duty battery (83 76 21).

"It's Like My Own Private Oasis"





Complete Respirator Systems

3M[™] Speedglas[™] Welding Helmet 9100 Air with 3M[™] Adflo[™] Powered Air Respirator

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

- Speedglas welding helmet 9100 Air and Adflo respirator with particle filter:

- Speedglas welding and safety helmet 9100 MP and Adflo respirator with particle filter:

57 66 05 with Speedglas welding filter 9100V, variable shade 5, 8, 9-13. 57 66 15 with Speedglas welding filter 9100X, variable shade 5, 8, 9–13.

57 66 25 with Speedglas welding filter 9100XX, variable shade 5, 8, 9–13.

3M[™] Supplied Air Regulators

Light In Weight, With Higher Airflows

3M[™] Versaflo[™] Supplied Air Regulator V-500E is a balanced, belt-worn, easy-to-adjust regulator that consistently delivers the airflow level you set - from 170 1/m to 305 1/m. An integrated silencer keeps the noise level equivalent to a typical conversation. The regulator's warning whistle sounds if there is low airflow from the regulator. Air tools can be connected to a port on the regulator without reducing the airflow to your helmet.

The Versaflo regulator V-500E, combined with the 3M[™] Speedglas[™] Welding Helmets 9100 FX Air and 9100 MP unique air delivery system achieves a Nominal Protection Factor (NPF) of 200.

The 3M[™] Speedglas[™] Welding Helmet 9100 Air must be used with the 3M[™] Fresh-air[™] C Regulator to conform to the relevant standard EN 14594 for supplied air respirators*.



Quick Connections

The belt-mounted regulator connects to an approved air hose with a quick release connector system. The airline supply must be air of breathable quality meeting the requirement of EN 12021.

Oil mist, water vapour, or non-toxic, unpleasant odours in the air supply can be removed with an air cleaning station, such as the 3M[™] Filtration Systems ACU-1 and ACU-2.



regulator.

3M[™] Speedglas[™] Welding Helmet 9100 FX Air with 3M[™] Versaflo[™] Regulator V-500E

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.

3M[™] Speedglas[™] Welding & Safety Helmet 9100 MP with 3M[™] Versaflo[™] Regulator V-500E

Welding and safety helmet with auto-darkening welding filter and a 17 x 10 cm clear visor for weld preparations. Five levels of welder protection: head, eye, face, respiratory and hearing into one system.

* Some of our old welding helmets are approved to EN 270 (see technical specification on page 64-65)



Complete Respirator Systems

3M[™] Speedglas[™] Welding Helmet 9100 Air with 3M[™] Fresh-air[™] C Regulator

Welding Helmet with auto-darkening welding filter combined with a supplied air

Part no: Speedglas welding helmet 9100 Air with Fresh-air C regulator:

- 56 88 05 with Speedglas welding filter 9100V.
- 56 88 15 with Speedglas welding filter 9100X.
- 56 88 25 with Speedglas welding filter 9100XX.

Part no: Speedglas welding helmet 9100 FX Air with Versaflo regulator V-500E:

- 54 88 05 with Speedglas welding filter 9100V.
- 54 88 15 with Speedglas welding filter 9100X.
- 54 88 25 with Speedglas welding filter 9100XX.

Part no: Speedglas welding and safety helmet 9100 MP with Versaflo regulator V-500E:

- 57 88 05 with Speedglas welding filter 9100V.
- 58 88 15 with Speedglas welding filter 9100X.
- 57 88 25 with Speedglas welding filter 9100XX.

3M[™] Versaflo[™] Faceshield and Helmet M-Series

Highly Versatile Rigid Headtops

The Versaflo M-series headtops feature light-weight, compact and well-balanced faceshields and helmets that can offer integrated protection from a range of respiratory, head, eye and hearing hazards, with offerings for neck and shoulder coverage.

The Versaflo helmet M-307 meet the highest respirator performance requirements (TH3) for this type of product when used with the specific 3M[™]Air Delivery Units.

Fully-adjustable suspension that includes textile straps for optimal fit and weight distribution.

Accessories include ear-muffs, peel-off's, head covers and a chin strap. Spare parts and accessories are quick and easy to replace; for example, visors easily slide into place and are secured by quickly snapping two buttons.

A deflector allows users to direct the airflow inside the headtop for increased control and comfort.

The visor design combines excellent peripheral and downward vision with good optical clarity. Coated visors provide added chemical and scratch resistance.

> To suit a wide range of needs, industries and applications, Versaflo M-Series headtops offer faceseals and shrouds in various fabrics.





3M[™] Versaflo[™] Faceshield M-107

Lightweight, compact and well-balanced faceshield that can offer integrated protection from a range of eye, face and hearing hazard. Features a flame resistant faceseal for applications with hot particles.

Part no:

3M[™] Versaflo[™] Helmet M-307

Features a flame resistant faceseal for applications with hot particles. The Versaflo helmet M-307 meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M air delivery units.

Part no:

88 90 20 Versaflo faceshield M-307 with 3M[™] Adflo[™] Powered Air Respirator.* M-307 Versaflo faceshield M-307 only. (3M[™] Versaflo[™] Supplied Air Regulator V-500E must be ordered separately, see page 51)

Excellent Airflow

3M[™] Versaflo[™] M-Series Headtops direct a comfortable stream of flowing air to where workers need it most: the head and face. The moving airflow can make hot environments more tolerable while greatly reducing visor fogging





Part no:

* Particle filter included. For gas protection add any of these part numbers to your order: 83 72 42 for gas filter A1B1E1, or 83 75 42 for gas filter A2. These filters require a breathing tube with silencer (83 40 08) and the heavy-duty battery (83 76 21).

Complete Respirator Systems

87 90 20 Versaflo faceshield M-107 with 3M[™] Adflo[™] Powered Air Respirator.* M-107 Versaflo faceshield M-107 only. (3M[™] Versaflo[™] Supplied Air Regulator V-500E must be ordered separately, see page 51)

3M[™] Protective Visor Shade 5

Eye, face and respiratory protection for bright lighting conditions, for example gas or plasma cutting. Visor in polycarbonate, shade 5.

89 90 25 Protective visor shade 5 with 3M[™] Adflo[™] Powered Air Respirator.* 89 91 35 Protective visor shade 5 for 3M[™] Fresh-air[™] C Supplied Air Regulator. (Fresh-air C regulator must be ordered separately, see page 51)

Frequently Asked Questions about Welding Fumes

1) Which respirator do I need when welding stainless steel?

When welding stainless steel with MIG or MMAW, the welding fumes often contains particles of chromium and nickel, of which chromium is the more toxic. A powered air respirator with particle filter offers you excellent protection in this application. TIG welding does not usually emit much welding fume but creates large quantities of ozone gas: read more under point 6. Plasma cutting and plasma welding give rise to high temperatures, which can emit damaging oxides of nitrogen: read more under point 7.

2) Do I really need respiratory protection when welding ordinary steel?

Although welding fumes from normal steel is not one of the more hazardous types, it is far from good for your health. Among other things, it contains particles of iron oxide, which can cause siderosis (chronic inflammation of the lungs). When welding with MIG/MAG or stick, there are heavy fume emissions, meaning that both a respirator and good ventilation in the workplace are necessary. When welding ordinary steel, a powered air respirator with particle filter is recommended.

3) What sort of respirator is needed when welding surface-treated material?

When welding surface-treated material, a number of hazardous pollutants can be released. When welding galvanised steel, zinc oxide particles are released. These can cause zinc ague, also known as fume fever. If you weld painted material you should be especially careful, as many paints can give off very hazardous air pollutants. When welding galvanised steel or material painted with lead primer, it is recommended that you use a powered air respirator with a particle filter and an odour filter to minimise unpleasant smells. If the material is painted with two component paint or insulated with polyurethane, you should always contact a Safety Engineer. There is a large risk that you will be exposed to isocyanates, which are very hazardous to inhale and difficult to detect. In these cases it is recommended that a supplied air respirator is used.

4) What respiratory protection do I need in restricted areas?

If you are welding in restricted or semi-ventilated areas where there is a potential for build up of higher levels of contaminant and/or a reduction in oxygen levels - a supplied air respirator is suggested, regardless of welding method. With a supplied air respirator, providing breathable quality air, you can be confident of getting sufficient oxygen, as well as high levels of protection against gas and particulate contaminants. Powered or supplied air respirators are never to be used in atmospheres immediately dangerous to life or health (IDLH). Always ask a Safety Engineer if you are unsure!

5) Do shielding gases and alloyed electrodes affect my working environment?

When welding with MIG and TIG, the noble gases argon amount of ozone reaching the welder. This is achieved by and helium are used as shielding gases. Neither argon nor the fact that the particle filter (because of its large surface helium is considered hazardous, but they can displace area) and the breathing tube to the welding helmet help to oxygen in unventilated areas. In such cases, a supplied air respirator is required. When welding with MAG, carbon dioxide, or a mixture of carbon dioxide and a noble gas, an additional large surface of carbon granules on which a is used as a shielding gas. Since parts of the shielding further reduction of ozone takes place. gas can be converted into carbon monoxide when the gas reaches the air, large quantities of carbon monoxide can 7) What are nitrogen gases? form around the welding arc. Carbon monoxide cannot be Nitrogen dioxide and nitric oxide are examples of nitrogen filtered away. If the ventilation is bad, the oxygen level must gases that are formed when you weld with high amperage be monitored and a supplied air respirator used. Alloyed and high temperatures. Nitrous gases are formed by a electrodes are common when welding with MAG. The reaction in the air between nitrogen and oxygen and alloys often contain manganese or silicates. This means are hazardous to inhale in high concentrations, e.g. that large quantities of manganese oxide and silicates are when welding in confined, poorly ventilated areas. It is diffused into the surrounding air when you are welding. recommended that a supplied air respirator is used in such A powered air respirator with particle filter usually offers cases. sufficient protection against alloy particles.



6) When does ozone form?

When welding aluminium not only are particles of aluminium oxide produced but ozone gas is formed by the action of the UV radiation from the arc breaking down molecular oxygen. Ozone is also produced when welding stainless steel with TIG. Eventually ozone will be converted back to oxygen, a process that is speeded up when the ozone comes into contact with solid surfaces. Ozone cannot be filtered from the atmosphere but relies on being converted back to oxygen. At low ozone concentrations the use of a powered air respirator with particulate filter reduces the catalyse the conversion of ozone back to normal oxygen. At higher concentrations the inclusion of a gas filter would add

A General Guide to Respiratory Protection

3M offers a wide range of personal respiratory protection, providing unequalled comfort and protection in the toughest conditions.

Powered air respirator with particle filter, page 24.
ABE Powered air respirator with A1B1E1 gas filter, page 24.
Supplied air regulator, page 28.

How to use this guide:

Identify the material to be welded and the welding process to be used. The concentration levels of the pollutants are affected by the ventilation conditions in the workplace. Choose the appropriate description of the working environment to determine the most suitable type of respiratory protection.*

		Ventilation conditions of your working environment				
Material to be welded	Welding method	Good environment, with forced ventilation	Limited ventilation	Restricted space	Classified as IDLH	
	MIG /	Р	P / P + ABE	C	Powered and	
Aluminium	TIG 🖌 🖊 🗕	P	P / P + ABE	C	supplied air respirators must	
	STICK WELDING	P	$\mathbf{P} / \mathbf{P} + \mathbf{ABE}$	C	never be used	
	MIG /	P	P / P + ABE	C	in atmospheres Immediately	
Stainless steel	TIG 🖌 🗕	Ρ	P / P + ABE	C	Dangerous to Life or Health (IDLH).	
Stamless steel	STICK WELDING	P	P / P + ABE	C	Always consult your	
	PLASMA (Welding and Cutting)	Ρ	P + ABE / C	C	Safety Engineer.	
	MIG/MAG /	Ρ	Р	C		
Steel not coated or painted	STICK WELDING	Ρ	Р	C		
	PLASMA (Welding and Cutting)	P	P / C	C		
	MIG/MAG /	Ρ	Ρ	C		
Steel painted (lead based paints)	STICK WELDING		Р	C		
(ioud buood painto)	PLASMA (Welding and Cutting)	P	P / C	C		
	MIG/MAG /	P	Р	C		
Steel galvanised	STICK WELDING	P	Р	C		
941-411000	PLASMA (Welding and Cutting)	P	P / C	C		
Steel	MIG/MAG	C	C	C		
coated with 2-component paints or insulated with	STICK WELDING	C	C	C		
2-part polyurethanes (risk of isocyanates)	PLASMA (Welding and Cutting)	C	G	C		
	MIG /	C	C	C		
Material cleaned with	TIG 🖌 🖊 🗕	C	C	C		
trichloroethylene	STICK WELDING	C	C	C		
	PLASMA (Welding and Cutting)	C	C	C		

3M accepts no liability for the incorrect choice of respiratory protective equipment. This chart is only an outline. It is designed to help focus on the most appropriate respirators in the 3M range for particular applications. It should not be used as the only means of selecting a respirator. Details regarding performance and limitations are set out on the respirator packaging and user instructions.

Respiratory Filter Guide

Code Type of filter

E	Acid gases.
Α	Organic gases, boiling point >65 °C.
AX	Organic gases, boiling point <65 °C.
Р	Particle filter.
В	Inorganic gases.

Remarks

Η =	The chemical can be absorbed through the skin.
K =	The chemical can be cancer-inducing.
S =	The chemical can be a sensitizer.

- Argon and helium are inert gases which are not generally absorbed by canister type filters. These gases are not in themselves hazardous but can displace oxygen from the air when present in confined spaces.
- Ozone is not readily filtered by absorption type filters. However, ozone reverts back to normal oxygen upon contact with solid surfaces. The use of Speedglas Welding Helmet or Protective Visor with Adflo Respirator (particle filtration) will reduce ozone exposure. (For further information please contact 3M Technical Service at your local 3M office.)
- 3. Chemical constituents of a welding fume with very low Occupational Exposure Limits can pose special hazards and are sometimes best protected against by using a Supplied Air Regulator System. If in doubt, always seek professional advice from your Safety Engineer.

Occupational Exposure Limits (OELs) are given in each individual country's national safety requirements.

Get information for the UK on www.hse.gov.uk

	Suggest	ed Filt	er Type	
Chemical	Particle	Gas	Supplied Air	Remarks
Aluminium	Р			
Argon			Supplied Air	1
Beryllium	Р		Supplied Air	K, S 3
Bromine		В		
Cadmium	Р			К
Carbon Dioxide			Supplied Air	
Carbon Monoxide			Supplied Air	
Chlorine		В		Н
Chlorine Dioxide		В		
Chromium Hexavalent	Р			К
Chromium Trivalent	Р			
Copper	Р			
Fluorides	Р			
Fluorine			Supplied Air	
Helium			Supplied Air	1
Isocyanates			Supplied Air	S
Hydrogen Chloride		В	Supplied Air	3
Hydrogen Cyanide		В	Supplied Air	H3
Hydrogen Fluoride		В	Supplied Air	3
Hydrogen Sulphide		В		
Iron Oxide	Р			
Lead	Р			
Magnesium	Р			
Manganese	Р			
Nickel	Р			S
Nitrogen Dioxide			Supplied Air	
Nitric Oxide			Supplied Air	
Ozone	Р	ABE		2
Phosgene			Supplied Air	3
Phosphine			Supplied Air	
Silicon Dioxide	Р			
Sulphur Dioxide		E		
Trichloroethylene		А		К
Vanadium Oxide	Р			
White Spirit		А		
Zinc	Р			
Zinc Chloride	Р			
Zinc Oxide	Р			

How ADFs Work



Before:

With the helmet in the safe down position, you have a clear view through the welding filter. Both of your 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 your immediate and safe inspection of the weld pool, as well as preparation for the next weld.

Eye protection that increases your performance

The key to remember with 3M[™] Speedglas Auto Darkening Welding Filters (or ADFs) is consistency. They enable constant, comfortable vision. They provide constant protection from ultraviolet and infrared (UV/IR) radiation. And they consistently auto-switch from clear to dark, and back again, in just the way you want.

Awkward made easier

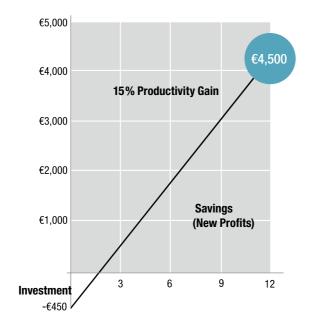
Speedglas Welding Filters also eliminate the neck-strain of "helmet flipping," while greatly increasing the accuracy of electrode placement. This, in turn, reduces the need for grinding and rework. In addition, you can get into tight, cramped spaces with your eye and face protection already in place. The filters' constant, clear views make even extremely awkward welds a lot easier.

How fast does a 3M[™] Speedglas[™] Welding Helmet pay for itself?

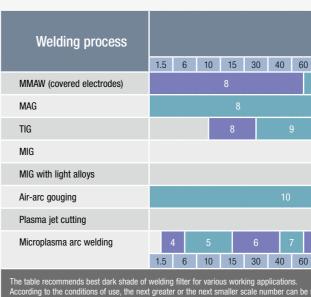
If profitability is defined in terms of protection, one day is enough. But while "protection" sometimes can be difficult to measure, efficiency and weld quality are much easier to gauge. Studies show that you can increase efficiency substantially when using Speedglas ADFs. Not only can you work faster when you can always see, but you move more efficiently, placing electrodes more precisely. Most "bad weld starts" can be eliminated. Fewer bad welds mean less grinding and higher overall quality levels.

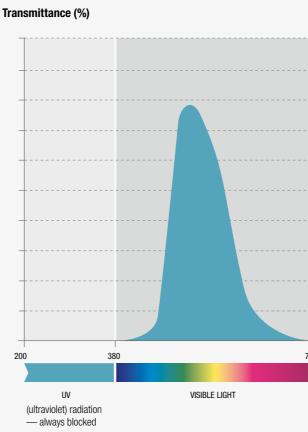
For example:

Productivity gains are, of course, dependent on the application. If you do lots of tack welds, you will have much greater productivity gains than a welder doing long seam welds. With that said, this example uses a conservative 15% gain in productivity. If cost for salary is \notin 20 per hour, the welding helmet will pay for itself in two months. In one year , the productivity gain will be \notin 4500 in savings (also known as new profits).



Recommended shade numbers according to EN 379:2003





		(Cur	ren		ı ar A	npe	eres										
	70	1	00	125	15	50	175	200	22	25	250	300	3	50	400	450	500	600
	9			10			11			1	2	13			3	14		
		9		10			1	1				12	12 13				13	
		1	10			11					2		13					
			9		1	0			11			12			13		14	
					1	0		11			12	13				14		
		11 12 13 14 15					5											
			g)	10	11			12				13					
	8		g)	1	0		11			12							
	70	1	00	125	15	50	175	200	22	25	250	300	3	50	400	450	500	600
us	sed.																	

	Light transmission curve		
	3M [™] Speedglas [™] Welding Filt protected from harmful UV and protection remains always, in d	d IR radiation. This	
	state. The curve also shows th the light state is dominated by	green light. Therefore	
	the "green" glass in the weldir	ıg filter.	
			1400
1	I	1	
780	1000	1200	1400
	IB		
	(infrored) rediction		

(infrared) radiation — always blocked

CE Approvals and European Standards

In Europe, all personal protective equipment (PPE) must be CE marked and in compliance with the PPE Directive 89/686/EEC before they can be placed on the market. The PPE must also be in compliance with applicable, national, harmonized standards that ensure that the basic safety requirements in the PPE Directive are met.

European classification of eye and face protection

Welding helmets incorporating protective filters are covered by the standards EN 175, EN 166 and EN 169 (passive filters) or EN 379 (auto-darkening filters). The protective visors are covered by EN 166. In EN 175 and EN 166, the PPE is classified according to its mechanical strength: increased robustness (S) or resistance to high speed particles (F or B).

In EN 166, it is optional to complement the classification for mechanical strength with the letter (T) for extremes of temperatures (-5° C and +55° C). In addition there are classifications regarding field of use: "9" for protection against splashes of molten metals and penetration of hot solids; "3" for protection against liquids (droplets or splashes); and "8" for protection from electric arcs due to a short circuit in electrical equipment. For the standards EN 166 and EN 379, optical quality of the welding filter or face helmet are classified from 1 to 3, where 1 is the best. For passive welding filters and visors, there is only one classification of optical class. For auto-darkening welding filters, there are four parts of the classification: optical class/ diffusion of light/variations in luminous transmittance/ angle dependence.

Grinding and mechanical strength

The mechanical strength of all 3M[™] Speedglas[™] Welding Helmet Series 9100 are approved to EN 175 class "B," while 3M[™] Speedglas[™] Welding Helmet 9000 with SideWindows is approved to EN 175 class "F." Therefore, if you need the SideWindows option and you use your Speedglas helmet for grinding, 3M strongly recommends the choice



Classificat	tion of mechanical strength
Class S	Increased robustness (drop ball test 5,1 m/s).
Class F	Resistance to high speed particles at low energy impact (45 m/s).
Class B	Resistance to high speed particles at medium energy impact (120 m/s).
Class T	The letter "T" indicates that the test for resistance to high speed particle was conducted at extremes of temperature (-5°and +55°C) (optional).
	assified in class B are not made to give total protection under all possible .g. when using grinding wheels/grinding machines.

European standards for powered air respirators

The European standard for a complete powered air filtering device incorporating a face helmet or visor is EN 12941. There is no separate classification for particle filters (P) in the standard EN 12941 as the particle filter is part of the system classification. Standard EN 12941 defines three classes of performance (TH1, TH2 and TH3). The numbers define the level of performance (inward leakage) and the pull strength of the breathing tubes and couplings within the classification. Inward leakage for classification TH1 is maximum 10%, for TH2 maximum 2% and for TH3 maximum 0.2%.



of Speedglas 9100 or Speedglas 9100 FX welding helmets with SideWindows over the older Speedglas 9000 models with SideWindows. You can find the classification for our products in the technical data table on page 60. For more details on European Standards, or to purchase European Standards, contact your National Standards Institute Gas filters have letters and colour codes that indicate which gases the filter provides protection against, as defined by the standard EN 12941. For example: "A" for organic, "B" for inorganic, and "E" for acid gases. For powered air filtering respirators, the capacity of a gas filter is determined by testing the unit at its airflow rate. The gas filter's numbers indicate its capacity: "1" for low capacity, "2" for medium capacity, or "3" for high capacity. For example, one of the gas filters available for the 3M[™] Adflo[™] Respirator is classified as A1B1E1.

European standards for supplied air respirators

Respiratory protection devices with compressed air line breathing apparatus is in scope of EN 14594*. The apparatus is not self-contained and the airline supply must be air of breathable quality meeting the requirements in EN 12021.

* EN 270 has been replaced by EN 14594 and new systems will be approved to EN 14954.



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3M[™] Speedglas[™] Welding Helmets and Filters — Product Overview

The Speedglas auto-darkening welding filter was one of the first of its type on the market, bringing a new standard to eye protection and comfort for welders.

Speedglas Welding Helmets
P.53 P.53 F.53
P.43 P.54 P.55 Speedglas welding helmet 9100 FX Speedglas welding helmet 9100 FX Air Speedglas welding & safety helmet 9100 MP
P.46 Speedglas welding helmet SL
P45 P45 P45 P45 P45 P45 P45 P45
P46 P47 P48 Image: Constraint of the state of the sta

Today, there is a great family of Speedglas welding helmets, each model with its specific series of welding filters:



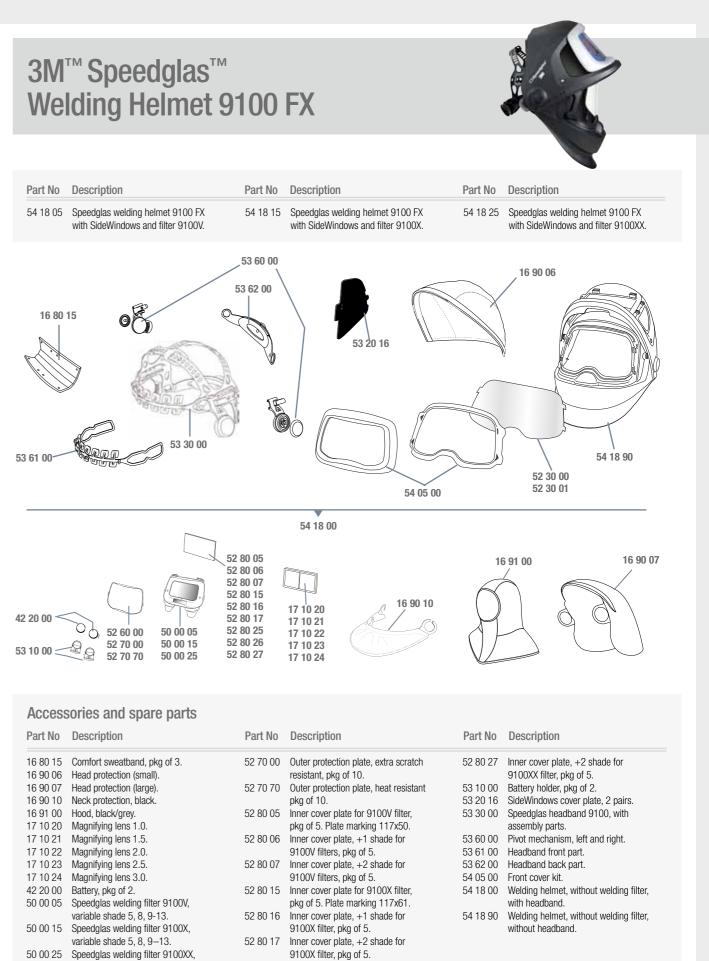
3M[™] Speedglas[™] Welding Helmet 9100



	Part No	Description	Part No	Description	Part No	Description
	50 11 05 50 11 15	Speedglas welding helmet 9100 without SideWindows, with filter 9100V. Speedglas welding helmet 9100 without SideWindows, with filter 9100X.	50 11 25 50 18 05	Speedglas welding helmet 9100 without SideWindows, with filter 9100XX. Speedglas welding helmet 9100 with SideWindows and filter 9100V.	50 18 15 50 18 25	Speedglas welding helmet 9100 with SideWindows and filter 9100X. Speedglas welding helmet 9100 with SideWindows and filter 9100XX.
۶ 5	16 80 15 				50 1 50 1	
				50 11 00 / 50 18 00		
	42 20 00 <i><</i> 53 10 00 <i><</i>	52 52 52 52 52 52 52 52 52 52 52 52 52 5	80 05 80 06 80 07 80 15 80 16 80 17 80 25 80 26 80 27	16 90 05 17 10 20 17 10 21 17 10 22 17 10 23 17 10 24	A Contraction of the second se	

Accessories and spare parts

Part No	Description	Part No	Description	Part No	Description
16 80 15 16 90 05	Comfort sweatband, pkg of 3. Head protection, black.	50 18 00	Welding helmet with SideWindows and headband.	52 80 17	Inner cover plate, +2 shade for 9100X filter, pkg of 5.
16 90 10 16 91 00	Neck protection, black. Hood, black/grey.	50 18 90*	Welding helmet with SideWindows, without headband.	52 80 25	Inner cover plate for 9100XX filter, pkg of 5. Plate marking 117x77.
17 10 20 17 10 21	Magnifying lens 1.0. Magnifying lens 1.5.	52 60 00	Outer protection plate standard, pkg of 10.	52 80 26	Inner cover plate, +1 shade for 9100XX filter, pkg of 5.
17 10 22 17 10 23	Magnifying lens 2.0. Magnifying lens 2.5.	52 70 00	Outer protection plate extra scratch resistant, pkg of 10.	52 80 27	Inner cover plate, +2 shade for 9100XX filter, pkg of 5.
17 10 24 42 20 00	Magnifying lens 3.0. Battery, pkg of 2.	52 70 70	Outer protection plate heat resistant, pkg of 10.	53 10 00 53 20 00	Battery holder, pkg of 2. Heat-reflecting silver front.
50 00 05	Speedglas welding filter 9100V, variable shade 5, 8, 9–13.	52 80 05	Inner cover plate for 9100V filter, pkg of 5. Plate marking 117x50.	53 20 15* 53 30 00	SideWindows cover plate, 2 pairs. Speedglas 9100 headband with
50 00 15	Speedglas welding filter 9100X, variable shade 5, 8, 9–13.	52 80 06	Inner cover plate, +1 shade for 9100V filters, pkg of 5.	53 60 00	assembly parts. Pivot mechanism, left and right.
50 00 25	Speedglas welding filter 9100XX, variable shade 5, 8, 9–13.	52 80 07	Inner cover plate, +2 shade for 9100V filters, pkg of 5.	53 61 00 53 62 00	Headband front part. Headband back part.
50 11 00	Welding helmet without SideWindows, with headband.	52 80 15	Inner cover plate for 9100X filter, pkg of 5. Plate marking 117x61.		
50 11 90	Welding helmet without SideWindows, without headband.	52 80 16	Inner cover plate, +1 shade for 9100X filter, pkg of 5.		



Part No	Description	Part No	Description
16 80 15 16 90 06	Comfort sweatband, pkg of 3. Head protection (small).	52 70 00	Outer protecti resistant, pkg
16 90 07 16 90 10	Head protection (large). Neck protection, black.	52 70 70	Outer protecti pkg of 10.
16 91 00 17 10 20	Hood, black/grey. Magnifying lens 1.0.	52 80 05	Inner cover pl pkg of 5. Plat
17 10 21 17 10 22	Magnifying lens 1.5. Magnifying lens 2.0.	52 80 06	Inner cover pl 9100V filters,
17 10 23 17 10 24	Magnifying lens 2.5. Magnifying lens 3.0.	52 80 07	Inner cover pl 9100V filters,
42 20 00 50 00 05	Battery, pkg of 2. Speedglas welding filter 9100V,	52 80 15	Inner cover pl pkg of 5. Plat
50 00 15	variable shade 5, 8, 9-13. Speedglas welding filter 9100X,	52 80 16	Inner cover pl 9100X filter, p
50 00 25	variable shade 5, 8, 9–13. Speedglas welding filter 9100XX,	52 80 17	Inner cover pl 9100X filter, p
52 30 00	variable shade 5, 8, 9–13. Visor plate standard, pkg of 5.	52 80 25	Inner cover pl pkg of 5. Plat
52 30 01 52 60 00	Visor plate anti-fog, pkg of 5. Outer protection plate, standard, pkg of 10.	52 80 26	Inner cover pl 9100XX filter,

* Please use Part No 50 18 90 when ordering replacement SideWindows.

- plate for 9100XX filter,
- ate marking 117x77.
- plate, +1 shade for
- er, pkg of 5.

Featured Accessories

Every welder is different, and each day your tasks can change. As the owner of a 3M[™] Speedglas[™] Welding Helmet, you have a variety of accessories available to maximize your protection and comfort.

Plus, we now offer a new generation of additional coverage products made in flame-retardant textiles for protection against molten metal, sparks and flames:



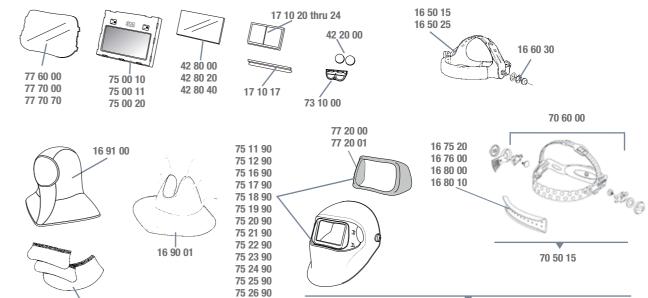


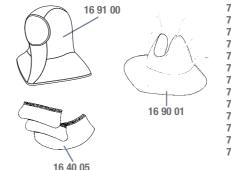


Ordering Information for Additional Coverage Products	3M [™] Speedglas [™] Welding Helmet Series 9000	3M [™] Speedglas™ Welding Helmet Series SL & Series 100	3M [™] Speedglas™ Welding Helmets 9100 & 9100 Air	3M [™] Speedglas™ Welding Helmets 9100 FX / 9100 FX Air		
Head protection Colour Approval	Part No 16 40 09 Black/Grey EN ISO 11611		Part No 16 90 05 Black EN ISO 11611	Part No 16 90 07 (large) Part No 16 90 06 (small) Black (covered by EN 175)		
Neck protection	Bla	o 16 90 01	Part No 16 90 10			
Colour		ck/Grey	Black			
Approval		i0 11611	EN ISO 11611			
Hood	Part No 16 91 00					
Colour	Black/grey					
Approval	EN ISO 11611					
Welding cap	Part No 95 44 10					
Colour	Black					
Material	Cotton					

3M[™] Speedglas[™] Welding Helmet Series 100

Part No	Description	Part No	Description	Part No	Description
75 11 10	Speedglas 100 welding helmet Black with 100S-10 filter.	75 17 20	Speedglas 100 welding helmet Aces High with 100V filter.	75 22 20	Speedglas 100 welding helmet Xterminator with 100V filter.
75 11 11	Speedglas 100 welding helmet Black with 100S-11 filter.	75 18 20	Speedglas 100 welding helmet Steel Rose with 100V filter.	75 23 20	Speedglas 100 welding helmet Boneyard with 100V filter.
75 11 20	Speedglas 100 welding helmet Black with 100V filter.	75 19 20	Speedglas 100 welding helmet Skull Jewels with 100V filter.	75 24 20	Speedglas 100 welding helmet Razor Dragon with 100V filter.
75 12 20	Speedglas 100 welding helmet Blaze, with 100V filter.	75 20 20	Speedglas 100 welding helmet Wild 'n' Pink with 100V filter.	75 25 20	Speedglas 100 welding helmet Ice Hot with 100V filter.
75 16 20	Speedglas 100 welding helmet Trojan Warrior with 100V filter.	75 21 20	Speedglas 100 welding helmet Steel Eyes with 100V filter.	75 26 20	Speedglas 100 welding helmet Raging Skull with 100V filter.





Accessories and spare parts

Part No	Description	Part No	Description	Part No	Description
16 40 05	Ear and neck protection in leather.	70 60 00	Assembly parts for headband.	75 20 90	Welding helmet Wild n' Pink, without
16 50 15	Headband with assembly parts.	73 10 00	Battery cover.		welding filter, without headband.
16 50 25	Headband 1 UL with assembly parts.	75 00 10	Speedglas welding filter 100S-10,	75 21 90	Welding helmet Steel Eyes, without
16 60 30	Assembly parts for headband.		single shade 10.		welding filter, without headband.
16 75 20	Sweatband, towelling purple, pkg of 2.	75 00 11	Speedglas welding filter 100S-11,	75 22 90	Welding helmet Xterminator, without
16 76 00	Sweatband, towelling purple, pkg of 20.		single shade 11.		welding filter, without headband.
16 80 00	Sweatband, leather.	75 00 20	Speedglas welding filter 100V, variable	75 23 90	Welding helmet Boneyard, without
16 80 10	Sweatband, fleecy cotton.		shade 8-12.		welding filter, without headband.
16 90 01	Neck protection, black/grey.	75 11 00	Welding helmet black, without welding	75 24 90	Welding helmet Razor Dragon, without
16 91 00	Hood black/grey		filter with headband.		welding filter, without headband.
17 10 17	Holder for magnifier.	75 11 90	Welding helmet black, without welding	75 25 90	Welding helmet Ice Hot, without welding
17 10 20	Magnifying lens 1.0.		filter, without headband.		filter, without headband.
17 10 21	Magnifying lens 1.5.	75 12 90	Welding helmet Blaze, without welding	75 26 90	Welding helmet Raging Skull, without
17 10 22	Magnifying lens 2.0.		filter, without headband.		welding filter, without headband.
17 10 23	Magnifying lens 2.5.	75 16 90	Welding helmet Trojan Warrior, without	77 20 00	Front frame, silver.
17 10 24	Magnifying lens 3.0.		welding filter, without headband.	77 20 01	Front frame, black.
42 20 00	Battery, pkg of 2.	75 17 90	Welding helmet Aces High, without	77 60 00	Outer protection plate, standard,
42 80 00	Inner cover plate, pkg of 5.		welding filter, without headband.		pkg of 10.
	Plate marking 42 02 00.	75 18 90	Welding helmet Steel Rose, without	77 70 00	Outer protection plate, scratch resistant
42 80 20	Inner cover plate, +1 shade, pkg of 5.		welding filter, without headband.		pkg of 10.
42 80 40	Inner cover plate, +2 shade, pkg of 5.	75 19 90	Welding helmet Skull Jewels, without	77 70 70	Outer protection plate, heat resistant,
70 50 15	Comfort Headband with assembly parts.		welding filter, without headband.		pkg of 10.

75 25 20

75 11 00

3M[™] Speedglas[™] Welding Helmet SL

70 11 20	

Part No	Description	Part No	Description	Part No	Description
16 40 05 16 75 20 16 76 00 16 80 00 16 80 10 16 90 01 16 91 00 17 10 20 17 10 21 17 10 22	(3 parts). Sweatband, towelling, purple, pkg of 2. Sweatband, towelling, pkg of 20. Sweatband, leather. Sweatband, fleecy cotton. Neck protection black/grey. Hood black/grey. Magnifying lens 1.0. Magnifying lens 1.5.	17 10 23 17 10 24 17 10 31 42 20 00 42 80 00 42 80 05 70 00 20 70 11 20 70 11 90	Magnifying lens 2.5. Magnifying lens 3.0. Holder for magnifier. Battery, pkg of 2. Inner cover plate (42 x 91 mm), pkg of 5. Plate marking 42 02 00. 42 80 00, pkg 0f 200. Speedglas welding filter SL, variable shade 8-12. Speedglas welding helmet SL. with welding filter, variable shade 8–12. Welding helmet, without headband.	70 50 15 70 60 00 70 62 02 72 60 00 72 70 00 73 10 00	Headband with assembly parts. Assembly parts for headband. Filter locking frame, pkg of 2. Outer protection plate, standard, pkg of 5. Plate marking 030226. Outer protection plate, scratch resistant, pkg of 5. Plate marking 030248. Battery cover.
16 75 20 16 76 00 16 80 00 16 80 10	70 60 00	72 60 00		P	16 91 00
17 10 20 17 10 21 17 10 22 17 10 23 17 10 24	70 50 15	70 00 20		16 90	ot

70 11 90

16 40 05

3M[™] Speedglas[™] Welding Helmet 9000 FlexView

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73 10 00

42 20 00

Spare parts**

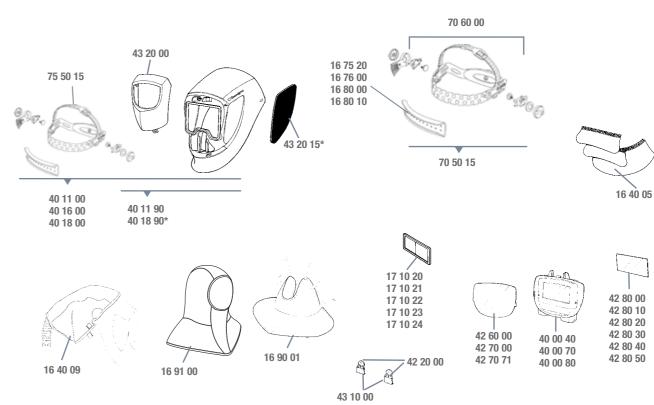
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Part No	Description	Part No	Description
19 71 41	Holder for welding filter. Locking wedge kit (holder welding filter). Speedglas welding helmet 9000 with SideWindows, without headband, without filter.	44 05 00 44 10 00	Protective visor plate, pkg of 10. Speedglas FlexView Conversion Kit. Middle helmet, black. Heatreflecting front, silver.

44 10 00 19 71 40 42 30 00
44 05 00

3M[™] Speedglas[™] Welding Helmets 9000 / Utility

Access	Accessories and spare parts**						
Part No	Description	Part No	Description	Part No	Description		
16 40 05	Ear and neck protection in leather.	40 11 90	Speedglas welding helmet 9000,	42 80 10	Inner cover plate (53x103 mm)		
16 40 09	Head protection, black/grey.		without SideWindows, without		for 9002X/9000XF filters, pkg of 5.		
16 75 20	Sweatband towelling, pkg of 2.		headband, without filter.		Plate marking 42 02 10.		
16 76 00	Sweatband towelling, pkg of 20.	40 18 40	Speedglas welding helmet with	42 80 20	Inner cover plate,+1 Shade for		
16 80 00	Sweatband, leather.		SideWindows, with filter 9002D, dual		9002D/9002V filters, pkg of 5.		
16 80 10	Sweatband, fleecy cotton, pkg of 2.		shade 9/11.	42 80 30	Inner cover plate, +1 Shade for		
16 90 01	Neck protection, black/grey.	40 18 90*	Speedglas welding helmet 9000 with		9002X/9000XF flters, pkg of 5.		
16 91 00	Hood black/grey.		SideWindows, without headband,	42 80 40	Inner cover plate, +2 Shade for		
17 10 15	Holder for magnifying lens		without filter.		9002D/9002V filters, pkg of 5.		
17 10 20	Magnifying lens 1.0.	42 20 00	Battery, pkg of 2.	42 80 50	Inner cover plate, +2 Shade for		
17 10 21	Magnifying lens 1.5.	42 60 00	Outer protection plate, standard,		9002X/9000XF filters, pkg of 5.		
17 10 22	Magnifying lens 2.0.		pkg of 10. Plate marking 42 01 50.	43 10 00	Battery cover, pkg of 2.		
17 10 23	Magnifying lens 2.5.	42 70 00	Outer protection plate, scratch	43 20 00	Heat-reflecting front, silver.		
17 10 24	Magnifying lens 3.0.		resistant, pkg of 10. Plate marking	43 20 15*	SideWindows cover plate (sticker),		
40 00 40	Speedglas welding filter 9002D		42 01 00.		5 pairs.		
40 00 70	Speedglas welding filter 9002V	42 70 71	Outer protection plate, heat resistant,	70 50 15	Headband with assembly parts.		
40 00 80	Speedglas welding filter 9002X		pkg of 10. Plate marking 42 01 71	70 60 00	Assembly parts for headband.		
40 11 40	Speedglas welding helmet 9000,		HEAT.				
	without SideWindows, with flter 9002D	42 80 00	Inner cover plate (42x91 mm)				
	and headband.		for 9002D/9002V filters, pkg of 5.				
			Plate marking 42 02 00.				



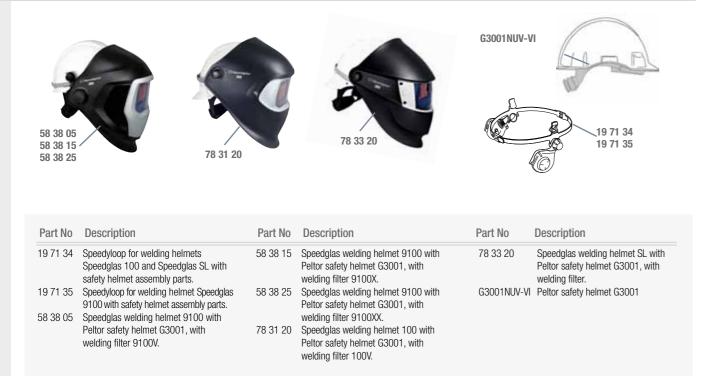
** Speedglas welding helmets 9100, 9100 Air, 9100 FX and 9100 FX Air replaces the welding helmets 9000 and 9000 FlexView. Accessories and spare parts will remain for 3-5 years.

40 11 40 40 18 40

* Please use Part No 40 18 90 when new SideWindows are required.

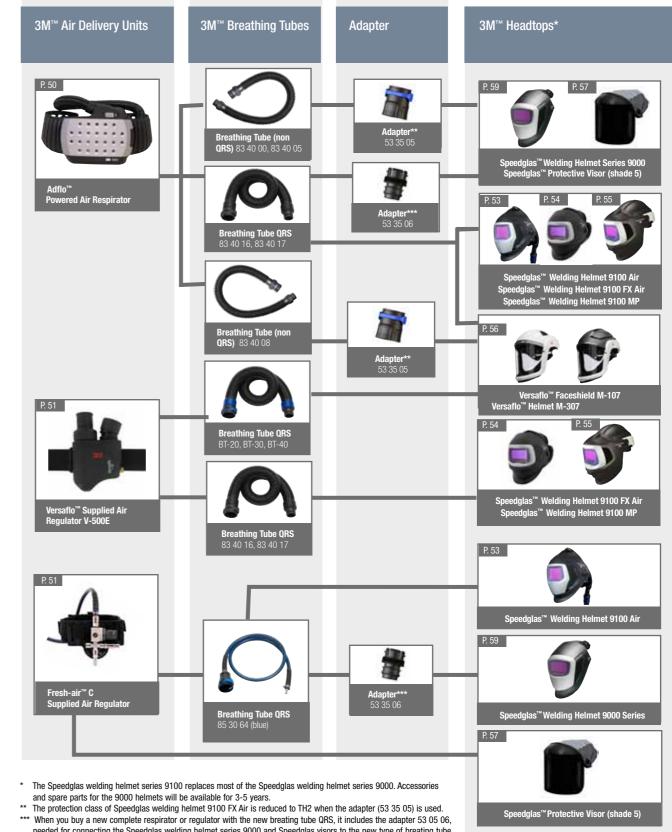


Safety Helmet Options for 3M[™] Speedglas[™] Welding Helmets 9100 / 100 / SL



Compatibility of 3M[™] Air Delivery Units and Headtops

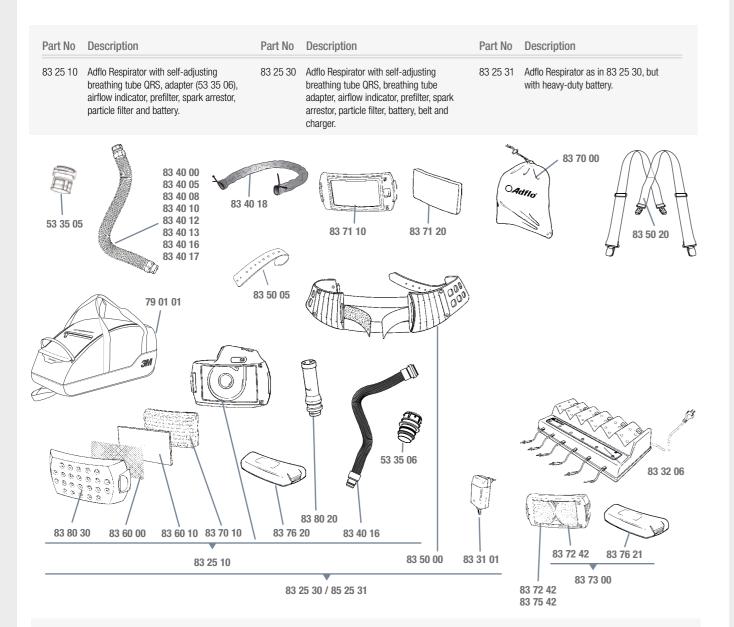
The new welding helmets and faceshields from 3M feature The new type of QRS breathing tubes are also approved for the QRS type of breathing tube (Quick Release Swivel), 3M[™] Speedglas[™] Welding Helmet Series 9000 and 3M[™] which enables one-handed connection and release. Old type of Speedglas[™] Protective Visors by adding a specific helmet breathing tubes (non QRS) can be used by adding the helmet breathing tubeadapter (part no 53 35 06). breathing tube adapter (part no 53 35 05).



- needed for connecting the Speedglas welding helmet series 9000 and Speedglas visors to the new type of breating tube.

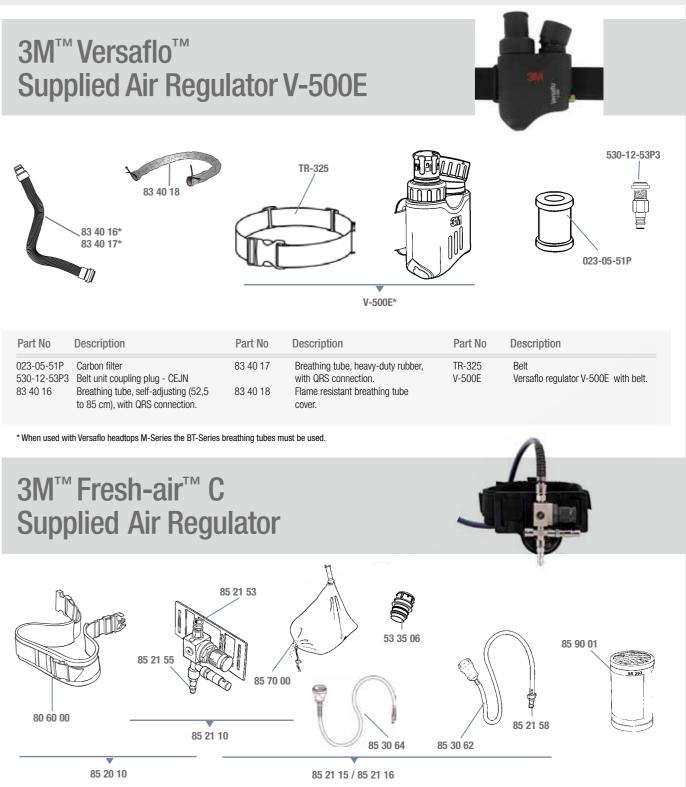
3M[™] Adflo[™] **Powered Air Respirator**

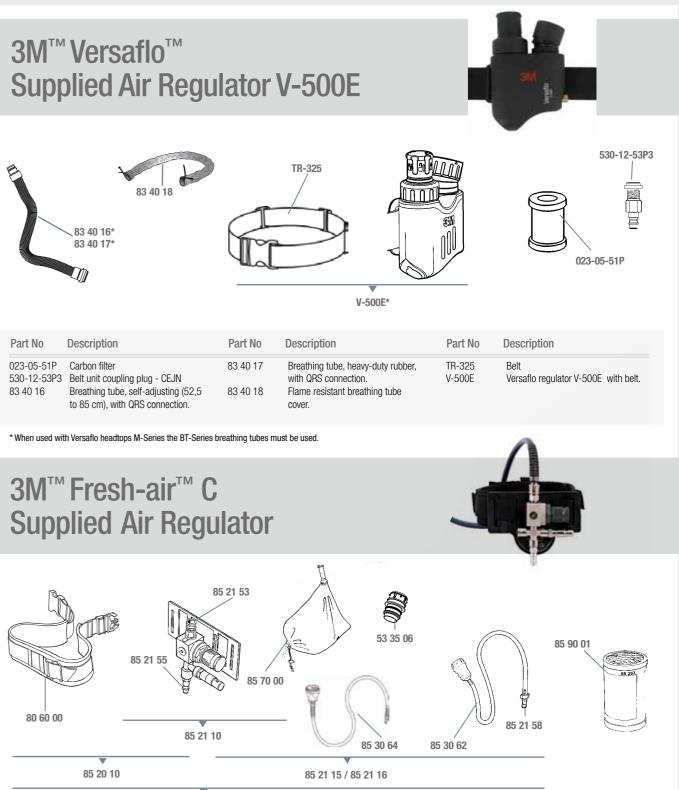




Accessories and spare parts

Part No	Description	Part No	Description	Part No	Description
53 35 05	Adapter for non-QRS breathing tubes	83 40 12	Breathing tube, double length, non-QRS.	83 60 80	Prefilter, pkg of 80.
	when using Speedglas welding helmet	83 40 13	Breathing tube, lightweight, triple length,	83 70 00	Storage bag.
	series 9100.		non-QRS.	83 70 10	Particle filter P SL.
53 35 06	Adapter for QRS breathing tubes when	83 40 16	Breathing tube, self-adjusting (52,5 to	83 70 20	Particle filter P SL, pkg of 20.
	using Speedglas welding helmet series		85 cm), with QRS connection.	83 70 80	Particle filter P SL, pkg of 80.
	9000.	83 40 17	Breathing tube, heavy-duty rubber, with	83 71 10	Odour filter.
79 01 01	Product carry bag		QRS connection.	83 71 20	Odour filter pad.
83 31 01	Battery charger.	83 40 18	Flame resistant breathing tube cover.	83 72 42	Gas filter A1B1E1.
83 32 06	6-station battery charger kit.	83 45 00	Gasket for non-QRS breathing tubes,	83 73 00	Gas filter kit: A1B1E1 filter
83 40 00	Breathing tube, lightweight, non-QRS.		not shown, pkg of 5.		and Heavy-Duty battery.
83 40 03	Replaced by 83 40 18.	83 50 00	Belt.	83 75 42	Gas filter A2.
83 40 05	Breathing tube, heavy-duty rubber,	83 50 05	Front part, belt.	83 76 20	Battery (standard).
	non-QRS.	83 50 10	Quick connection for belt (not shown).	83 76 21	Battery Heavy-Duty.
83 40 08	Breathing tube with silencer, non-QRS.	83 50 20	Braces.	83 80 20	Airflow indicator.
83 40 10	Breathing tube, lightweight, 25 cm	83 60 00	Spark arrestor.	83 80 30	Filter cover.
	longer, non-QRS.	83 60 10	Prefilter, pkg of 5.		





85 20 15 / 85 20 16

Part No	Description	Part No	Description	Part No	Description
53 35 06	Adapter for QRS breathing tubes when using Speedglas welding helmet series	85 21 10	Fresh-air C regulator with storage bag, without belt, without breathing tube.	85 30 62	220 1/4. Breathing tube (transparent) with nipple,
	9000.	85 21 15	Fresh-air C regulator with breathing		without QRS connection.
80 60 00	Comfort belt.		tube (85 30 62), and storage bag,	85 30 64	Breathing tube (blue) with nipple and QRS
85 20 10	Fresh-air C regulator, without belt,		without belt.		connection.
	without breathing tube.	85 21 16	Fresh-air C regulator with breathing	85 70 00	Storage bag.
85 20 15	Fresh-air C regulator with breathing tube (85 30 62), belt and storage bag.		tube QRS (85 30 64) and storage bag, without belt.	85 90 01	Filter element 292 SR49/SR79.
85 20 16	Fresh-air C regulator with breathing	85 21 53	Quick connection CEJN 220 1/4.		
	tube QRS (85 30 64), belt and storage	85 21 55	Nipple regulator CEJN 342.		
	bag.	85 21 58	Spare part nipple breathing tube CEJN		

3M[™] Filtration Units and Compressed Air Supply Tubes

Part No	Description	Part No	Description
308-00-31P 308-00-40P 308-00-72P	,	530-12-81P3 85 41 10 ACU-01 ACU-02	Socket and plug - CEJN Green air supply tube, 10 m. 3M [™] Aircare [™] Filtration System (wall mounted). 3M [™] Aircare [™] Filtration System (stand alone).

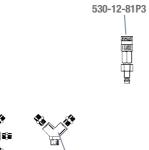




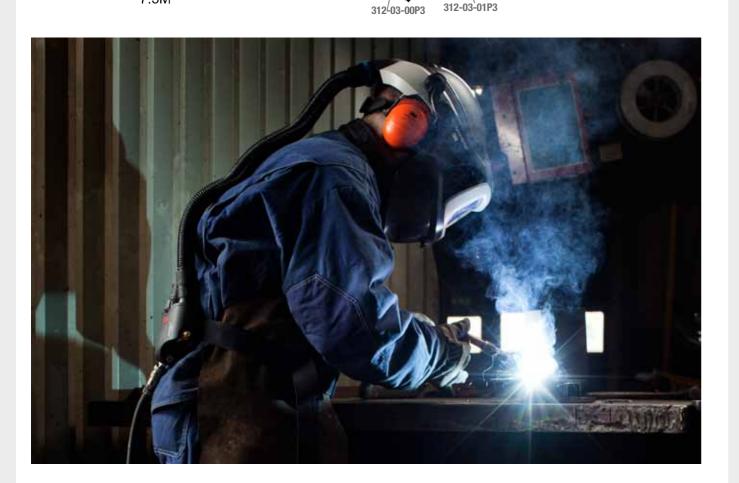
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308-00-40P



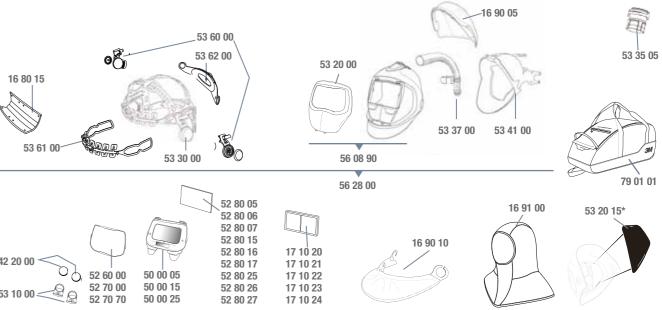


312-03-01P3



3M[™] Speedglas[™] Welding Helmet 9100 Air

Part No	Description	Part No	Description	Part No	Description
56 66 00	Speedglas welding helmet 9100 Air without welding filter, with Adflo powered air respirator.	56 66 26 56 88 00	Items as 56 66 25, with carry bag. Speedglas welding helmet 9100 Air without welding filter, with Fresh-air C	56 90 05*	Upgrade kit for Adflo respirator: welding helmet with 9100V filter, breathing tube (834016) and carry
56 66 05	Speedglas welding helmet 9100 Air with 9100V filter and Adflo powered air	56 88 05	supplied air regulator. Speedglas welding helmet 9100 Air	56 90 15*	bag. Upgrade kit for Adflo respirator:
56 66 06*	respirator. Items as 56 66 05, with carry bag.		with 9100V filter, with Fresh-air C supplied air regulator.		welding helmet with 9100X filter, breathing tube (834016) and carry
56 66 15	Speedglas welding helmet 9100 Air with 9100X filter, with Adflo powered air respirator.	56 88 15	Speedglas welding helmet 9100 Air with 9100X filter, with Fresh-air C supplied air regulator.	56 90 25*	bag. Upgrade kit for Adflo respirator: welding helmet with 9100XX filter.
56 66 16* 56 66 25	Items as 56 66 15, with carry bag. Speedglas welding helmet 9100 Air	56 88 25	Speedglas welding helmet 9100 Air with 9100XX filter, with Fresh-air C		breathing tube (834016) and carry bag.
	with 9100XX filter, with Adflo powered air respirator.		supplied air regulator.	* With bag (79	01 01)



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42 20 00			52 80 17	17
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53 10 00 < 🖉 🧕	52 70 70	50 00 25	52 80 27	17

Part No	Description	Part No	Description	Part No	Description
16 80 15	Comfort sweatband, pkg of 3.	52 80 05	Inner cover plate for 9100V filter,	53 10 00	Battery holder, pkg of 2.
16 90 05	Head protection, black.		pkg of 5. Plate marking 117x50.	53 20 00	Heat-reflecting silver front.
16 90 10	Neck protection, black.	52 80 06	Inner cover plate, +1 shade for	53 20 15*	SideWindows cover plate, 2 pairs.
16 91 00	Hood, black/grey.		9100V filters, pkg of 5.	53 30 00	Speedglas headband 9100 with
17 10 20	Magnifying lens 1.0.	52 80 07	Inner cover plate, +2 shade for		assembly parts.
17 10 21	Magnifying lens 1.5.		9100V filters, pkg of 5.	53 35 05	Welding helmet adapter when
17 10 22	Magnifying lens 2.0.	52 80 15	Inner cover plate for 9100X filter,		using old type of breathing tube
17 10 23	Magnifying lens 2.5.		pkg of 5. Plate marking 117x61.		(non-QRS).
17 10 24	Magnifying lens 3.0.	52 80 16	Inner cover plate, +1 shade for	53 37 00	Air duct.
42 20 00	Battery, pkg of 2.		9100X filter, pkg of 5.	53 41 00	Face seal.
50 00 05	Speedglas welding filter 9100V.	52 80 17	Inner cover plate, +2 shade for	53 60 00	Pivot mechanism, left and right.
50 00 15	Speedglas welding filter 9100X.		9100X filter, pkg of 5.	53 61 00	Headband front part.
50 00 25	Speedglas welding filter 9100XX.	52 80 25	Inner cover plate for 9100XX filter,	53 62 00	Headband back part.
52 60 00	Outer protection plate, standard,		pkg of 5. Plate marking 117x77.	56 08 90*	Speedglas welding helmet 9100 A
	pkg of 10.	52 80 26	Inner cover plate, +1 shade for		without headband, without air duct
52 70 00	Outer protection plate, extra scratch		9100XX filter, pkg of 5.		without face seal, without filter.
	resistant, pkg of 10.	52 80 27	Inner cover plate, +2 shade for	56 28 00	Speedglas welding helmet 9100 A
52 70 70	Outer protection plate, heat		9100XX filter, pkg of 5.		without welding filter.
	resistant pkg of 10.			79 01 01	Product carry bag

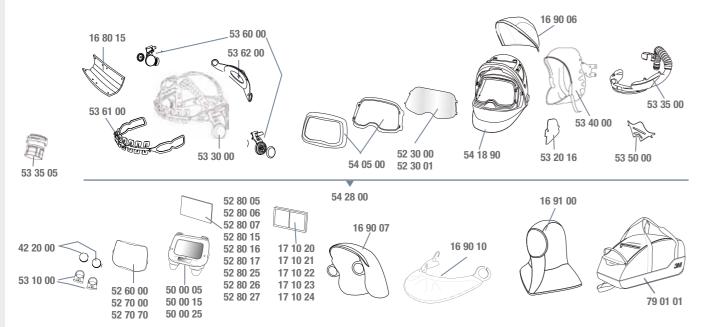
* Please use Part No 56 08 90 when new SideWindows are required.



3M[™] Speedglas[™] Welding Helmet 9100 FX Air

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Part No	Description	Part No	Description	Part No	Description
54 66 00	Speedglas welding helmet 9100 FX Air, without welding filter, with Adflo powered air respirator.	54 88 00	Speedglas welding helmet 9100 FX Air, without welding filter, with Versaflo supplied air regulator V-500E.	54 90 05*	Upgrade kit: welding helmet with 9100V filter, breathing tube (834016) and carry bag.
54 66 05*	Speedglas welding helmet 9100 FX Air with 9100V filter, with Adflo powered air respirator.	54 88 05	Speedglas welding helmet 9100 FX Air with 9100V filter, with Versaflo supplied air regulator V-500E.	54 90 15*	Upgrade kit: welding helmet with 9100X filter, breathing tube (834016) and carry bag.
54 66 15*	Speedglas welding helmet 9100 FX Air with 9100X filter, with Adflo powered air respirator.	54 88 15	Speedglas welding helmet 9100 FX Air with 9100X filter, with Versaflo supplied air regulator V-500E.	54 90 25*	Upgrade kit: welding helmet with 9100XX filter, breathing tube (834016) and carry bag.
54 66 25*	Speedglas welding helmet 9100 FX Air with 9100XX filter, with Adflo powered air respirator.	54 88 25	Speedglas welding helmet 9100 FX Air with 9100XX filter, with Versaflo supplied air regulator V-500E.	* With bag (79	(, , , , , , , , , , , , , , , , , , ,



Accessories and spare parts

Part No	Description	Part N
16 80 15	Comfort sweatband, pkg of 3.	52 70
16 90 06	Head protection, (small).	
16 90 07	Head protection, (large).	52 80 (
16 90 10	Neck protection, black.	
16 91 00	Hood, black/grey.	52 80 (
17 10 20	Magnifying lens 1.0.	
17 10 21	Magnifying lens 1.5.	52 80 (
17 10 22	Magnifying lens 2.0.	
17 10 23	Magnifying lens 2.5.	52 80
17 10 24	Magnifying lens 3.0.	
42 20 00	Battery, pkg of 2.	52 80
50 00 05	Speedglas welding filter 9100V.	
50 00 15	Speedglas welding filter 9100X.	52 80
50 00 25	Speedglas welding filter 9100XX.	
52 30 00	Visor plate, standard, pkg of 5.	52 80 2
52 30 01	Visor plate, anti-fog, pkg of 5.	
52 60 00	Outer protection plate, standard, pkg of 10.	52 80 2
52 70 00	Outer protection plate, extra scratch resistant, pkg of 10.	52 80 2

No	Description	Pa
70	Outer protection plate, heat resistant,	53
	pkg of 10.	53
05	Inner cover plate for 9100V filter,	53
	pkg of 5. Plate marking 117x50.	
06 (Inner cover plate, +1 shade for	53
	9100V filters, pkg of 5.	53
07	Inner cover plate, +2 shade for	
	9100V filters, pkg of 5.	
15	Inner cover plate for 9100X filter,	53
	pkg of 5. Plate marking 117x61.	53
16	Inner cover plate, +1 shade for	53
	9100X filter, pkg of 5.	53
17	Inner cover plate, +2 shade for	53
	9100X filter, pkg of 5.	54
25	Inner cover plate for 9100XX filter,	54
	pkg of 5. Plate marking 117x77.	
26	Inner cover plate, +1 shade for	
	9100XX filter, pkg of 5.	54
27 (Inner cover plate, +2 shade for	
	9100XX filter, pkg of 5.	79

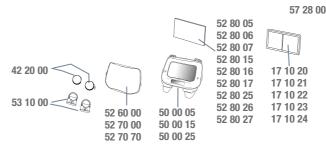
Part No	Description
53 10 00	Battery holder, pkg of 2.
53 20 16	SideWindows cover plate, 2 pairs.
53 30 00	Speedglas headband 9100, with
	assembly parts.
53 35 00	Air duct.
53 35 05	Adapter for non-QRS breathing tubes
	when using Speedglas welding helmet
	series 9100.
53 40 00	Face seal.
53 50 00	Air deflector.
53 60 00	Pivot mechanism, left and right.
53 61 00	Headband, front part.
53 62 00	Headband, back part.
54 05 00	Front cover kit.
54 18 90	Speedglas welding helmet 9100 FX Air,
	without filter, without face seal, without
	air duct, without headband.
54 28 00	Speedglas welding helmet 9100 FX Air,
	without welding filter, with headband.

	without weiding filter, with neadba
01 01	Product carry bag

3M[™] Speedglas[™] Welding & Safety Helmet 9100 MP

Part No	Description	Part No	Description	Part No	Description
57 66 00* 57 66 05*	Speedglas welding helmet 9100 MP without welding filter, with Adflo powered air respirator. Speedglas welding helmet 9100 MP with 9100V filter, with Adflo powered	57 88 00* 57 88 05*	Speedglas welding helmet 9100 MP without welding filter, with Versaflo supplied air regulator V-500E. Speedglas welding helmet 9100 MP with 9100V filter, with Versaflo	57 90 15* 57 90 25*	Speedglas welding helmet 9100 MP with 9100X filter and breathing tube Speedglas welding helmet 9100 MP with 9100XX filter and breathing tube
57 66 15* 57 66 25*	air respirator. Speedglas welding helmet 9100 MP with 9100X filter, with Adflo powered air respirator. Speedglas welding helmet 9100 MP	57 88 15* 57 88 25*	supplied air regulator V-500E. Speedglas welding helmet 9100 MP with 9100X filter, with Versaflo supplied air regulator V-500E. Speedglas welding helmet 9100 MP		
01 00 20	with 9100XX filter, with Adflo powered air respirator.	07 00 20	with 9100XX filter, with Versaflo supplied air regulator V-500E.	* With bag (79 0	1 01)
4 05 00	54 08 95 52 30 00 52 30 01 19 71	50 16 50	57 08 95 53 42 00 50 50 50 50 50 50 50 50 50 50 50 50 50 5	89 60	16 80 10 53 62 00 19 71 5 55
12 20 00 < 33 10 00 <		57 80 05 80 06 80 07 80 15 80 16 17 10 80 16 17 10 80 25 17 10 80 26 17 10 80 27 17 10	21 22 16 90 10 23 16 90 10	16 90 13	H31P3AF 300 H510P3AF-405-0 H520P3AF-410-0 H540P3AF-413-5 53 35 05
Accesso	ries and spare parts				





Part No	Description	Part No	Description	Part No	Description
16 80 10	Sweatband, fleecy cotton	52 70 00	Outer protection plate, extra scratch	57 08 95	Inner shield
16 90 10	Neck protection, black.		resistant, pkg of 10.	57 28 00	Speedglas welding and safety helmet
16 90 13	Safety helmet cover 9100 MP	52 70 70	Outer protection plate, heat resistant		9100 MP, without welding filter.
17 10 20	Magnifying lens 1.0.		pkg of 10.	89 60 55	Safety helmet incl pivot kit
17 10 21	Magnifying lens 1.5.	52 80 05	Inner cover plate for 9100V filter,	M-350	Versaflo head suspension M-300
17 10 22	Magnifying lens 2.0.		pkg of 5. Plate marking 117x50.		(not shown above)
17 10 23	Magnifying lens 2.5.	52 80 15	Inner cover plate for 9100X filter,	H31P3AF300	Peltor hearing protector H31,
17 10 24	Magnifying lens 3.0.		pkg of 5. Plate marking 117x61.		with helmet attachment
19 71 50	Flip-up mechanism	52 80 25	Inner cover plate for 9100XX filter,	H510P3AF-	Peltor hearing protector Optime I,
19 71 51	Pivot kit		pkg of 5. Plate marking 117x77.	-405-GU	with helmet attachment
42 20 00	Battery, pkg of 2.	53 10 00	Battery holder, pkg of 2.	H520P3AF-	Peltor hearing protector Optime II,
50 00 05	Speedglas welding filter 9100V.	53 20 16	SideWindow cover plates.	-410-GQ	with helmet attachment
50 00 15	Speedglas welding filter 9100X.	53 35 05	Welding helmet adapter when using	H540P3AF-	Peltor hearing protector Optime III,
50 00 25	Speedglas welding filter 9100XX.		old type of breathing tube (non-QRS).	-413-SV	with helmet attachment
52 30 00	Visor plate, standard, pkg of 5.	53 42 00	Face seal		
52 30 01	Visor plate, anti-fog, pkg of 5.	53 62 00	Headband ratchet		
52 60 00	Outer protection plate, standard,	54 05 00	Front cover kit.		
	pkg of 10.	57 04 95	Outer shield		

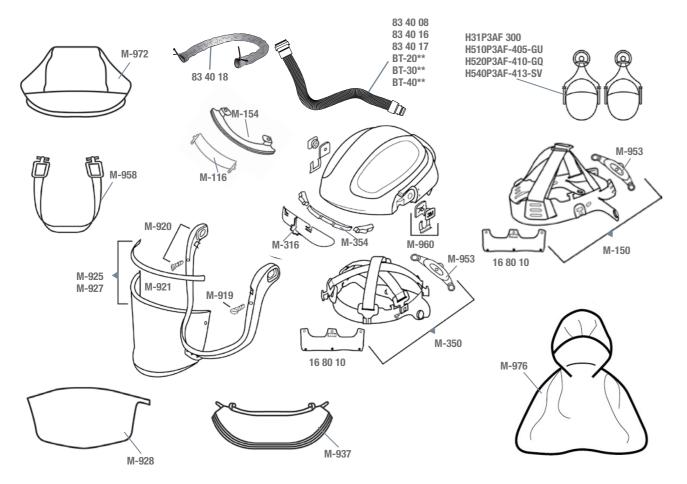


3M[™] Versaflo[™] **Headtops M-Series**



Part N	Description	Part No	Description	Part No	Description
87 90 2	0 Versaflo Faceshield M-107 with Adflo respirator	88 90 20	Versaflo Helmet M-307 with Adflo respirator	M-107* M-307*	Versaflo Faceshield M-107 Versaflo Helmet M-307

* For supplied air respirator system, please see page 51 to order regulator.



Accessories and spare parts

56

Part No	Description	Part No	Description	Part No	Description
16 80 10	Sweatband, fleecy cotton, pkg of 2	M-150	Head suspension (M-107)	M-960	Pivot kit
83 40 08	Breathing tube with silencer,	M-154	Forehead seal (M-107)	M-972	Flame resistant headtop cover
	non-QRS.	M-316	Airflow deflector (M-307)	M-976	Head, neck and shoulder cover
83 40 16	Breathing tube, self-adjusting (52,5	M-350	Head suspension (M-307)	H31P3AF300	Peltor H31 Hearing Protector,
	to 85 cm), with QRS connection.	M-354	Forehead seal (M-307)		with helmet attachment
83 40 17	Breathing tube, heavy-duty rubber,	M-919	Visor frame buttons	H510P3AF-	Peltor Optime I Hearing Protector,
	with QRS connection.	M-920	Visor frame	-405-GU	with helmet attachment
83 40 18	Flame resistant breathing tube	M-921	Visor gasket	H520P3AF-	Peltor Optime II Hearing Protector,
	cover.	M-925	Visor standard (uncoated), molten	-410-GQ	with helmet attachment
BT-20 S&L**	Breathing tube, polyurethane (in two		metal splash protection to EN166.	H540P3AF-	Peltor Optime III Hearing Protector,
	lengths), with QRS connection.	M-927	Visor coated	-413-SV	with helmet attachment
BT-30**	Breathing tube, self-adjusting (52,5	M-928	Peel-off visor cover		
	to 85 cm), with QRS connection.	M-937	Flame resistant faceseal		
BT-40**	Breathing tube, heavy-duty rubber,	M-953	Ratchet		
	with QRS connection.	M-956	Ratchet comfort pad		
M-116	Airflow deflector (M-107)	M-958	Chin strap		

** When used with 3M[™] Versaflo[™] Supplied Air Regulator V-500E, the 3M[™] Versaflo[™] Breathing Tubes BT-series must be used.

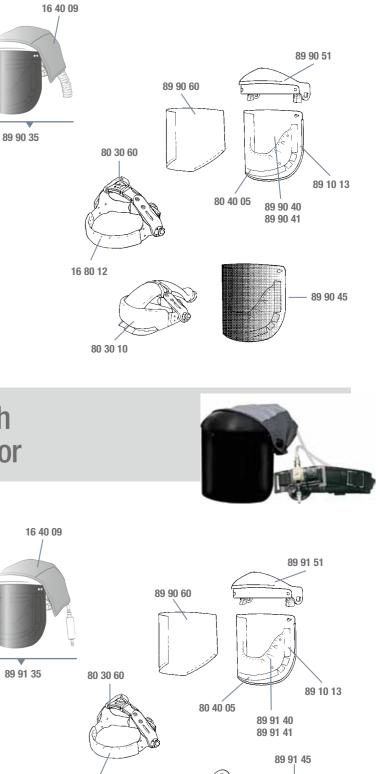
3M[™] Protective Visor with 3M[™] Adflo[™] Respirator

Part No	Description
16 40 09	Head protection flame-resistant.
16 80 12	Sweatband.
80 30 10	Headband, with air duct.
80 30 60	Headband, without air duct.
80 40 05	Face seal.
89 10 13	Velcro face seal, pkg of 2.
89 90 25	Protective Visor, DIN 5, polycarbonate, with Adflo Respirator.
89 90 35	Protective Visor, DIN 5, polycarbonate, with head protection.
89 90 40	Protective Visor, clear, polycarbonate, with face seal, without brow protection.
89 90 41	Protective Visor, clear, acetate, with face seal, without brow protection.
89 90 45	Protective Visor, DIN 5, polycarbonate, with face seal, without brow protection.
89 90 51	Brow protection.
89 90 60	Protection film, pkg of 5.

3M[™] Protective Visor with 3M[™] Fresh-air C Regulator

Part No	Description
16 40 09	Head protection, flame-resistant.
16 80 12	Sweatband.
80 30 60	Headband, without air duct.
80 40 05	Face seal.
85 30 56	Breathing tube, with nipple, silencer and
	fastening details.
89 10 13	Velcro face seal, pkg of 2.
89 90 60	Protection film, pkg of 5.
89 91 35	Protective Visor, DIN5, polycarbonate,
	with head protection.
89 91 40	Protective Visor, clear, polycarbonate,
	with face seal, without brow protection.
89 91 41	Protective Visor, clear, acetate, with face
	seal, without brow protection.
89 91 45	Protective Visor DIN 5, polycarbonate,
	with face seal, without brow protection.
89 91 51	Brow protection.





16 80 12

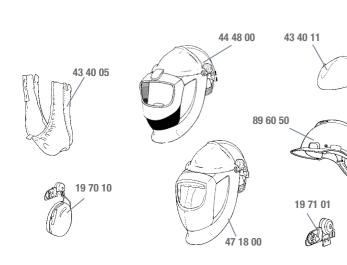
85 30 56



3M[™] Speedglas[™] Constant (passive) Welding Helmet



3M[™] Speedglas[™] 9000 Series Welding Helmets for Respiratory Protection with Safety Helmet





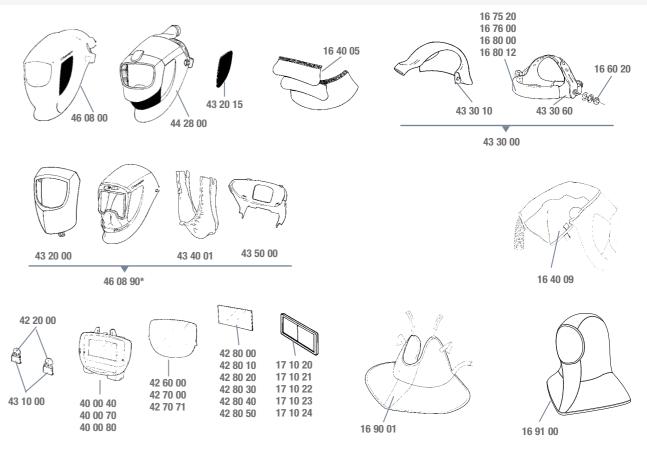
Part No	Description	Part No	Description	Part No	Description
19 70 10	Ear muffs for safety helmet with assembly parts.	44 48 00	Speedglas FlexView welding helmet for respiratory protection with safety	89 60 50 89 60 72	
19 71 01	Fastening details for safety helmet with assembly parts.	47 18 00	helmet, without welding filter. Speedglas 9000 Welding Helmet		shown)
43 40 05	Face seal		for respiratory protection with safety		
43 40 11	Helmet seal in leather for Speedglas welding helmet with safety helmet.		helmet, without welding filter.		

3M[™] Speedglas[™] Welding Helmets **9000 Series for Respiratory Protection**

Accessories and spare parts*

Part No	Description	Part No	Description	Part No	Description
16 40 05	Ear and neck protection in leather.	42 60 00	Outer protection plate, standard, pkg of	43 20 00	Heat-reflecting, front silver.
16 40 09	Head protection.		10. Plate marking 42 01 50.	43 20 15*	SideWindows cover plate (sticker),
16 60 20	Assembly parts for headband.	42 70 00	Outer protection plate, scratch resistant,		5 pairs.
16 75 20	Sweatband, towelling, pkg of 2.		pkg of 10. Plate marking 42 01 00.	43 30 00	Headband with air duct.
16 76 00	Sweatband, towelling, pkg of 20.	42 70 71	Outer protection plate, heat resistant, pkg	43 30 10	Air duct.
16 80 00	Sweatband, leather.		of 10. Plate marking 42 01 71.	43 30 60	Headband without air duct.
16 80 12	Sweatband, fleecy cotton, pkg of 2.	42 80 00	Inner cover plate (42 x 91 mm) for	43 40 01	Face seal.
16 90 01	Neck protection black/grey.		9002D/9002V Filters, pkg of 5. Plate	43 50 00	Air spreader.
16 91 00	Hood black/grey.		marking 42 02 00.	44 28 00	9000 FlexView Welding Helmet for
17 10 20	Magnifying lens 1.0.	42 80 10	Inner cover plate (53 x 103 mm) for		respiratory protection, without filter.
17 10 21	Magnifying lens 1.5.		9002X/9000XF Filters, pkg of 5. Plate	46 08 00	9000 Welding Helmet for respiratory
17 10 22	Magnifying lens 2.0.		marking 42 02 10.		protection, without welding filter.
17 10 23	Magnifying lens 2.5.	42 80 20	Inner cover plate, +1 Shade, for	46 08 90*	9000 Welding Helmet without headband
17 10 24	Magnifying lens 3.0.		9002D/9002V Filters, pkg of 5.		without airduct.
40 00 40	Speedglas 9002D Welding Filter, dual shade 9/11.	42 80 30	Inner cover plate, +1 Shade, for 9002X/9000XF Filters, pkg of 5.	80 31 10	Tightening kit for Speedglas 9000 Welding Helmet, not shown.
40 00 70	Speedglas 9002V Welding Filter, variable shade 9–13.	42 80 40	Inner cover plate, +2 Shade, for 9002D/9002V Filters, pkg of 5.		,
40 00 80	Speedglas 9002X Welding Filter, variable shade 9–13.	42 80 50	Inner cover plate, +2 Shade, for 9002X/9000XF Filters, pkg of 5.	* Disease	
42 20 00	Battery, pkg of 2.	43 10 00	Battery cover, pkg of 2.	" Please use	Part No 46 08 90 to replace the SideWindows





* Speedglas 9100, 9100 Air, 9100 FX and 9100 FX Air Welding Helmets replaces the Speedglas 9000 and 9000 FlexView Welding Helmets. Accessories and spare parts for 9000 series available for 3-5 years.

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3M[™] 600 Series Welding Helmets for **3M[™] Jupiter[™] Powered Air Respirator**

HT-622		HT-62		ł	Г-639
	WLD-08 WLD-10	2		5-14	WLN-14 WLN-15 WLN-17
(J	WLD-110	WLD-13	U WLN-13 WLD-	15	VIS-21 VIS-22 VIS-23 VIS-24
	FSL-22 FSL-23	75 00 10 75 00 11 75 00 20	42 80 00 42 80 20 42 80 40	\	
Part No	Description	Part No	Description	Part No	Description
42 20 00 42 80 00	Battery, pkg of 2. Inner cover plate, pkg of 5. Plate marking 42 02 00.	HT-629	Welding helmet, with clear visor plate and 90 x 110 mm welding filter holder, without welding filter.	WLD-13 WLD-15	Filter retainer for HT-639 Helmet. Leather head cover for HT-622/629 Helmets.
42 80 20	Inner cover plate, +1 shade, pkg of 5.	HT-639	Welding helmet, with clear visor plate and 90 x 110 mm flip-up welding filter	WLN-13	Outer protection plate (90x110 mm) for HT-629/639 Helmets.
42 80 40 73 10 00	Inner cover plate, +2 shade, pkg of 5. Battery cover.	HNS-14	holder, without welding filter. Headharness with air duct for HT- 622/629/639 Helmets.	WLN-14 WLN-15	Shade 8, passive welding filter for HT-622 Helmet. Shade 10, passive welding filter for
75 00 10	Speedglas 100S-10 Auto-darkening Welding Filter, single shade 10.	HTS-19 VIS-21	Spares pack for headharness. Clear visor plate for HT-629 Helmet.	WLN-17	HT-622 Helmet. Shade 5, passive welding filter for
75 00 11	Speedglas 100S-11 Auto-darkening Welding Filter, single shade 11.	VIS-22	Shade 1.7 visor plate for HT-622 Helmet.	WLN-20	HT-622. Inner cover plate (90 x 110 mm) for
75 00 20	Speedglas 100V Auto-darkening Welding Filter, variable shade 8–12	VIS-23 VIS-24	Shade 3 visor plae for HT-622 Helmet. Shade 5 visor for HT-622 Helmet.		HT-639.
CMF-09 FSL-22 FSL-23	Comfort pads for headharness. Faceseal for HT-622/629 Helmets. Faceseal for HT-639 Helmet.	WLD-08 WLD-10 WLD-11	Over visor for HT-629 helmet. Welding filter holder for HT-622 Helmet Leather neck protector for		
HT-622	Welding helmet with shade 1.7 visor plate and shade 8, passive welding filter.	WLD-12	HT-622/629 Helmets. Welding cape.		



Part No	Description	Part No	Description	Part No	Description
40 00 70 40 00 80 43 30 00 43 30 10	Speedglas 9002D Welding Filter. Speedglas 9002V Welding Filter Speedglas 9002X Welding Filte. Headband with air duct. Air duct. Headband without air duct.	43 50 00	Face seal. Air spreader 9000 Welding Helmet (for 3M Jupiter Respirator), without welding filter, with breathing tube, without respirator.	43 20 00 83 40 00	9000 Welding Helmet without headband, without airduct. Front cover. Breathing tube, lightweight. Breathing tube, cover.



Care and Maintenance

Every day welding sparks, heat, fumes, and normal wear-and-tear grind away at your protection equipment. Therefore, we designed all 3M[™] Speedglas[™] Personal Protective Equipment with ease of maintenance in mind. All replacement parts can be installed by hand, without tools. For maximum safety and comfort, make it a regular habit to check and change the following items at the intervals recommended below.

System	Component	Typically replaced	Notes
Welding Filters	Outer Protection Plate	Once a week	Replace anytime the plate becomes deeply pitted, scratched or too dirty to clean with soft cloth or lens paper.
Welding Filters	Inner Cover Plate	Once a month	Regularly clean with a soft cloth and replace if any pits or scratches occur.
Welding Helmets	Visor Plate	Every two weeks	Replace more often if visibility is reduced.
Welding Helmets	Sweatband	Once a month	Replace more often if sweatband becomes unhygienic.
Respirators	Prefilter	Once a week	Regular replacement of the prefilter extends the life of the particle filter, saving money while also increasing the battery run-time.
Respirators	Particle Filter	At least every month	For Adflo, replace when particle fillter indicator becomes red. Otherwise, replace whenever the battery operating time becomes too short, or when "fully loaded" filter triggers low airflow alarm.
Respirators	Gas Filter	At least every 3 or 4 weeks	Immediately replace the gas filter any time you can smell odours while wearing the respirator.
Respirators	Odour filter	Any time you smell unpleasant odours	Odour filter is not required if gas filter is used.
Respirators	Spark arrestor	As needed	Replace if deformed and no longer fitting well.
Respirators	Breathing Tube	If damaged, deformed or leaking any air	To extend the life of breathing tube, use a tube cover or a heavy-duty rubber breathing tube.
Welding Helmets with Respirators	Face Seal	At least every 2 months	Replace earlier in really dirty environments or whenever the seal becomes unhygienic.

n. Note that higher-than-normal levels of pollutants, heat, and sparks will require more frequent replacement of components. Chart assumes minimum 4 hours usage per day. n for each series of welding helmet can be found in the Parts Directory.

Technical Specifications of 3M[™] Air Delivery Units for Welding Safety

Technical Specifications	3M [™] Adflo [™] Powered Air Respirator	3M [™] Versaflo [™] Supplied Air Regulator V-500E	3M [™] Fresh-air [™] C Supplied Air Regulator			
Filters	Particle filter Gas Filter (A1B1E1 or A2) Odour filter	N/A	N/A			
Airflow	170 I/min (Nominal) 200 I/min (Airflow Plus Mode)	170 - 305 l/min	160-270 I /min (Nominal)			
Air Pressure Air Quality	N/A N/A	3,5–8 bar Breathable supplied air conforming to EN12021	4–8 bar Breathable supplied air conforming to EN12021			
Weight Respirator / Regulator	1 160 g	514 g	365 g			
Battery Charging time Operating hours*	NiMH Less than 4 hours 8 hours (Standard), 12 hours (Heavy Duty)	N/A	N/A			
Belt Optional extension	Leather, 75–127 cm + 25 cm	Polyester, 75–127 cm	Polypropylene, 76–133 cm			
Temperature range Operation Storage	-5°C to + 55°C -20°C to + 55°C	-5°C to + 40°C -10°C to + 50°C	-5°C to + 55°C -20°C to + 55°C			
* Run times are with new, fully-charged batteries and new filters.						

Technical Specifications of 3M[™] Protective Visors

Technical Specifications	3M [™] Versaflo [™] Faceshield M-107			
Material Visor Faceseal	Clear coated polycarbonate Flame resistant polyester			
Approval Eye and Face protection Protective Visor (M-927) Protective Visor (M-925) Protective Visor shade 5	EN 166 1:BT:3 EN 166 1:BT:3:9 N/A			
Approval Head protection Helmet	N/A			
Approval Respiratory Protection / NPF* Adflo powered air respirator Versaflo supplied air regulator V-500E Fresh-air C supplied air regulator	en 12941 (TH2) / NPF 50 en 14594 2B / NPF 50 N/A			
* The nominal protection factor based on laboratory-measured performance data accorr				

3M [™] Versaflo™ Helmet M-307	3M [™] Speedglas [™] Protective Visor (shade 5)				
Clear coated polycarbonate Flame resistant polyester	Shade 5 polycarbonate Flame resistant cotton				
EN 166 1:BT:3 EN 166 1:BT:3:9 N/A	N/A N/A EN 166 1:BT:3:9				
EN 397	N/A				
EN 12941 (TH2) / NPF 50 EN 14594 3B / NPF 200 N/A	EN 12941 (TH2) / NPF 50 N/A EN 270 / NPF 200				
to European Standards.					

3M[™] Speedglas[™] Welding Helmets and Welding Filters

Best Better Good Not Recommended	C					J.					9		P		Ð
	3M [™] Spe 9100	edglas [™] Weldi 0 FX and 9100	ing Helmets) FX Air	3M [™] Spee 91	edglas [™] Weldi 100 and 9100	ng Helmets Air	3M [™] Spee	dglas [™] Weld 9100 MP	ling Helmet	3M [™] Speedglas [™] Welding Helmet	3M™ Sp	eedglas [™] Welc Series 9000	ling Helmet)	3M [™] Speedg Helmet S	ylas [™] Welding Series 100
Welding Filter Options	9100XX Filter	9100X Filter	9100V Filter	9100XX Filter	9100X Filter	9100V Filter	9100XX Filter	9100X Filter	9100V Filter	SL Filter	9002X Filter	9002V Filter	9002D Filter	100V Filter	100S Filters
MMAW (Electrode)															
MIG/MAG															
TIG (>20A)															
TIG (1A-20A)															
Plasma (welding and cutting)															
Risk for hidden arc															
Tack welding															
Grinding (welding filer)															
Grinding (clear visor)				N/A	N/A	N/A				N/A	Sp	eedglas 9000 Flex	View	N/A	N/A
Viewing area (welding filter)	73 x 107 mm	54 x 107 mm	45 x 93 mm	73 x 107 mm	54 x 107 mm	45 x 93 mm	73 x 107 mm	54 x 107 mm	45 x 93 mm	42 x 93 mm	55 x 107 mm	42 >	(93 mm	44 x 9	3 mm
Battery lifetime	2 000 hours	2 500 hours	2 800 hours	2 000 hours	2 500 hours	2 800 hours	2 000 hours	2 500 hours	2 800 hours	1 500 hours	3 000 hours	1 5	00 hours	1 500	hours
Solar cell	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes		No	Ν	0
Safety Helmet options		No		Yes	(non air version)			Yes		No		Yes		Ye	'S
Classification		1/1/1/2			1/1/1/2			1/1/1/2		1/1/1/2	1/1/2/2	1/1/1/2	1/2/2/3	1/2/	2/2
Dark state		Shade 5, 8, 9–13		St	nade 5, 8, 9–13			Shade 5, 8, 9-13		Shade 8–12	Shade	9–13	Shade 9/11	Shade 8–12	Shade 10 or 11
Light state		Shade 3			Shade 3			Shade 3		Shade 3		Shade 3		Shao	de 3
UV/IR Protection		Shade 13 (permanen	it)	Shao	de 13 (permanent)		S	Shade 13 (permanen	0	Shade 12 (permanent)		Shade 13 (permanen	t)	Shade 12 (permanent)
Auto ON		No			No			No		Yes		No		Ν	0
Switching time, light -dark		0,1 ms (+23° C)		0,	,1 ms (+23° C)			0,1 ms (+23° C)		0,1 ms (+23° C)	0,1 ms ((+23° C)	0,4 ms (+23° C)	0,1 ms (+23° C)
Delay (switching time, dark-light)		40–1 300 ms			40–1 300 ms			40-1 300 ms		60–250 ms	60–50		100 and 200 ms	100–250 ms	100 or 200 ms
SideWindows option		Yes			Yes		Yes			No		Yes		Ν	
Exhaust vents		Yes (non air version))	Yes (non air version)		Yes (non air version)			No	Yes (non air version)			No		
	Number of sensors (arc detection) 3			3		3			2	2			2	2	
Approvals Eye and Face protection Welding helmet Welding filter Protection plates Visor plate	Alding helmet EN175:B, EN 166:B EN175:B alding filter EN 379 EN 379 otection plates EN166:BT* EN166:BT*		EN175:B, EN 166 B EN 379 EN166:BT* EN166:BT*			EN 175:F EN 379 EN166:FT N/A		SideWindows), EN 175 EN 379, EN 166:BT* 6:BT (Speedglas 9000	5:F (with SideWindows) FlexView)	EN 1 EN EN 16 N	379 66:BT*				
Approval Head protection Safety helmet	pproval Head protection N/A N/A			EN	397 44Vac, LD		N/A	with Spee	edglas welding helmet EN 397	9000 ProTop					
Approval Respiratory Protection / NPF** Adflo Respirator Versaflo V-500 Regulator Fresh-air C Regulator	E	edglas welding helmet N 12941 (TH3) / NPF EN 14594 (3B)/ NPF 2 N/A	500	EN 12	as welding helmet 91(941 (TH2) / NPF 50 N/A 4594 (2B)/ NPF 50	00 Air		41 (TH3) / NPF 500 594 (3B)/ NPF 200 N/A		N⁄A		Speedglas welding helr EN12941 (TH2) / NPF N/A EN 270 / NPF 200	50	Ν	Ά

* According to the European Standards the mechanical strength (for this product) is classified as B; resistance to high speed particles at medium energy impact (120 m/s). The letter T indicates that the test for resistance to high speed particle was conducted at extremes of temperatures (-5° to +55°C). ** The nominal protection factor based on laboratory-measured performance data according to European Standards. The protection factor is assigned by local authorities in each European country and can therefore be different for each country.







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Notes

Featured accesori welding helmets f	
3M [™] 4000 Series Half Mask Respirators	The 4000 Series Respirators maintenance-free half masks comfortable protection again and particulates. For welding approved to protect against of
 3M [™] 7500 Series Half Mask Respirators	The 7500 Series Half Mask S comfort to for half mask resp Filters, the 7500 Half Mask F Speedglas [™] 9100 Series We
3M [™] 2128 and 2138 Series Particle Filters	The 2128 and 2138 Series f additional nuisance level prot gases.* Both filters are comp Respirators.
3M [™] 9900 Series Particle Respirator	Maintenance-Free Particulate dust,oil, water-based mists a reduces heat buildup to offer and humid environments.
 3M [™] 2890 Series Goggles	Scratch-resistant lens with a prescription glasses.
3M [™] 2800 Series Over-Spectacles	The latest addition of over-sp protection for industrial appli as over-spectacles with man
3M [™] 2840 Series Safety Spectacles	Combining performance, de safety spectacles feature ve reliable protection against lo
3M [™] 1310 E-A-R [™] Cap Banded Ear Plugs	One of the lightest semi-aur Cap provide day-long protect ideal as disposable protecto are available.
3M [™] E-A-R [™] Ultrafit [™] X Ear Plugs	E-A-R UltraFit X Ear Plugs fe easier, better fit and maximu advanced patented material flange design to a much hig
3M [™] E-A-R [™] Classic Ear Plugs	Classic earplugs are made for This allows you to roll the plucanal, where it expands slow
3M [™] Peltor [™] G3001 Safety helmet	The Peltor G3001 Safety He UV-stabilised ABS-plastic. W combined with 3M [™] Speedg 3M [™] Speedglas [™] 100 Weld 21 ard 46 The Aehrent linit
3M [™] Peltor™ Welding Earmuff	21 and 46. The helmet lining CE-approved in this position Low-profile shells for easy a PPE devices. Beam-mounted recompose and direction for
	resonance and distortion for noise environments. Fits wel Welding Helmets.
for a complete list: www.3 you select a type of respira	
	to concentrations below the Occupational Exposure Limit (O ™ Fresh-air C Supplied Air Regulator.

iption	Approval	Ordering Information
00 Series Respirators are a range of ready-to-use, hance-free half masks respirators designed for effective and iable protection against a combination of many gases, vapours ticulates. For welding protection, the 4277 Respirator is ed to protect against ozone when TIG welding stainless steel.	EN 405:2001	4251 – FFA1P2D 4255 – FFA2P3D 4277 – FFABE1P3D 4279 – FFABEK1P3D
00 Series Half Mask Series has set a new standard in to for half mask respirators. With the 3M [™] 2000 Series Particle the 7500 Half Mask Respirator fits comfortably inside the 3M [™] las [™] 9100 Series Welding Helmets.	EN 140:1998	7501 – small 7502 – medium 7503 – large
28 and 2138 Series Filters offer particulate protection and lal nuisance level protection against organic vapours and acid Both filters are compatible with 3M [™] 7500 Series Half Mask tors.	EN 143:2000 P2 R EN 143:2000 P3 R	2125 – P2 R 2135 – P3 R
nance-Free Particulate Respirator for protection against fine water-based mists and metal fume. The 3M [™] Cool-Flow Valve s heat buildup to offer comfortable protection, particularly in hot mid environments.	EN 149:2001, FFP2	9925 9928
-resistant lens with anti-fog coating. Can be worn over most tion glasses.	EN 166	2890 – polycarbonate 2790A – acetate
est addition of over-spectacles — new stylish, high-end eye on for industrial applications. Optimum design that allows use -spectacles with many prescription glasses.	EN 166:2001, EN 169:2002 and EN 171:2002	2800 – clear lens 2802 – yellow lens 2805 – shade 5 lens
ing performance, design and comfort, these new lightweight pectacles feature very strong polycarbonate lenses, providing protection against lower energy impacts.	EN166:2001 and EN169:2002	2840 – clear lens 2841 – smoke lens 2842 – yellow lens 2845 – shade 5 lens
the lightest semi-aural hearing devices on the market. E-A-R wide day-long protection for workers exposed to noise and are disposable protectors for factory visitors. Replacement pods ilable.	EN352-2	EC-01-000 ES-01-300 (spare pods)
JItraFit X Ear Plugs features an ergonomic pistol grip for an better fit and maximum performance. Couple this with new ed patented materials and we have taken the proven triple- lesign to a much higher level.	EN352-2	UF-01-014
earplugs are made from a soft, energy-absorbing polymer foam. ows you to roll the plug down for easy insertion into your ear where it expands slowly to form a comfortable seal against noise.	EN352-2	PP-01-002
tor G3001 Safety Helmet is produced in high quality, illised ABS-plastic. With helmet accessories it can be ed with 3M [™] Speedglas [™] 9100, 3M [™] Speedglas [™] SL and beedglas [™] 100 Welding Helmets - further details on pages 46. The helmet lining can be turned 180 degrees (and it is roved in this position).	EN 397	G3001NUV-VI
ofile shells for easy and comfortable use together with other vices. Beam-mounted earphones that provide the least possible ince and distortion for excellent sound reproduction even in high- nvironments. Fits well with the 3M [™] Speedglas [™] 9100 Series g Helmets.	EN 352-1	XA007703797

the wide range of safety equipment from 3M. Please contact your dealer for a complete catalogue or visit our website t appropriate for arc welding, grinding and high temperature environments. Always consult your safety engineer before

I Exposure Limit (OEL). For concentrations at or above OELs, consult your 3M distributor for options using the 3M™

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Based on our extensive know-how and our long experience of welders' working conditions, we constantly emphasise innovation in developing equipment that will increase welding performance. To give us your comments, and to see our latest developments, visit www.speedglas.com.



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