

3M™ Adflo™ Powered Air Respirator Systems

 **Speedglas™**



Reliable Protection
and **Comfort**

made for welders

The Power to Protect Your World





“It’s Like My Own
Private Oasis”

Cooler, cleaner and more comfortable welding

The new 3M™ Adflo™ Powered Air Respirator, with the latest welding helmets and faceshields from 3M, represents a big step forward in welding protection. To improve welding comfort further, the Adflo respirator now has lithium-ion type of battery, making the complete device almost 20% lighter.

A slim, robust respirator designed specifically just for welders - and not merely carted over from some bulky industrial respirator design. Since its launch 13 years ago Adflo has become one of the most popular powered air respirators for welding. With the new turbo design, we can now offer a special version, suitable for welders working at higher altitudes.

Designed for welders

The Adflo powered air respirator is specially designed to meet your welding needs. It helps provide continuous filtered air to the wearer. By using the Adflo respirator, you get both increased protection and comfort for extended wear.

The slim profile and ergonomic design makes it easier to go into tight welding spaces and offers the quality and functions you should expect from a robust and easy-to-use respiratory protection. The new Li-ion batteries makes it even more lightweight and balanced for even greater comfort during the full shift.



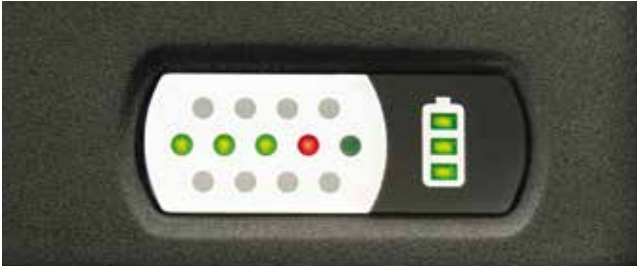
Take full advantage of our top-of-line products

The 3M™ Speedglas™ Welding Helmet Series 9100 brings the Adflo respirator systems to a new level, offering side windows, flip-up function, excellent optics and wider viewing angle. We now have helmets

and faceshields for virtually every welder's needs. To experience the difference, call your local 3M representative for a hands-on demonstration.

Green for go

As soon as you turn on your Adflo powered air respirator a display indicates the status of the filter. Green light means that the unit is working normally. Red light indicates that the filter is clogging up. As an extra security feature an audible alarm sounds when the filter is so clogged that the airflow level cannot be maintained. If this alarm is ignored the unit automatically turns off.



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.

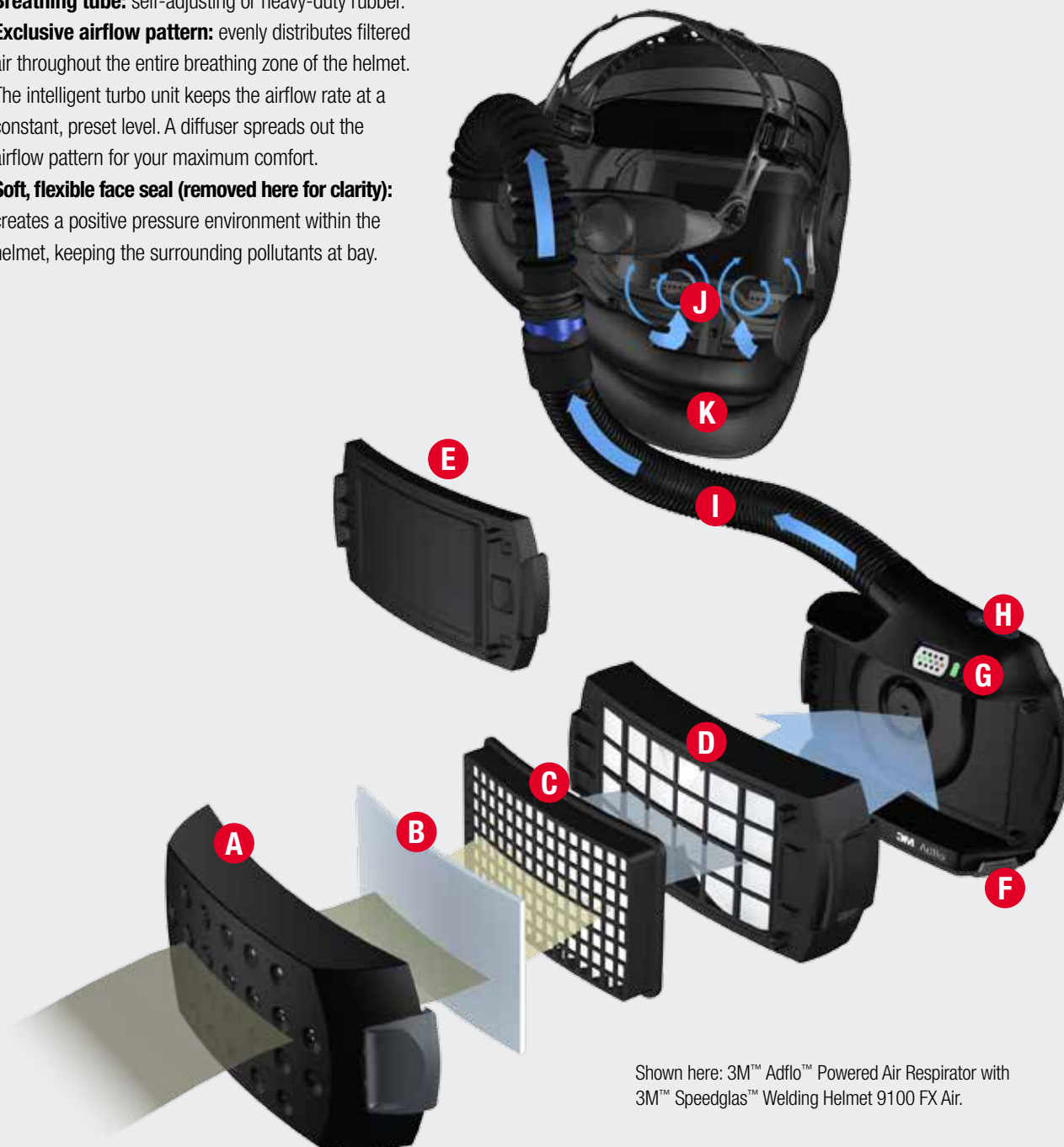
Higher altitudes

For welders working in higher altitude locations, where the regular Adflo respirator might not work properly, there is a special respirator version that adjusts for changes in air density; 3M™ Adflo™ High Altitude Powered Air Respirator. With this version you can work at altitudes between 0-3000 meters above sealevel (0-1500 meters with gas filter).



3M™ Adflo™ Powered Air Respirator System

- A Filter cover:** holds the user-replaceable spark arrestor.
- 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 Li-ion battery:** fully charges in 4,5 hours. Expected operating time is 8 hours with new particle filter, new fully-charged battery and a standard airflow.
- G Filter Indicator:** indicates the status of the particle filter.
- H 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.
- I Breathing tube:** self-adjusting or heavy-duty rubber.
- J 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.
- K Soft, flexible face seal (removed here for clarity):** creates a positive pressure environment within the helmet, keeping the surrounding pollutants at bay.



Shown here: 3M™ Adflo™ Powered Air Respirator with 3M™ Speedglas™ Welding Helmet 9100 FX Air.



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

Ergonomic auto-darkening welding protection with optimal mobility and ease-of-use.

Part no*: — Speedglas welding helmet 9100 Air, variable shade 5, 8, 9–13 and Adflo respirator with particle filter:

56 77 05 with Speedglas welding filter 9100V (45 x 93 mm)

56 77 15 with Speedglas welding filter 9100X (54 x 107 mm)

56 77 25 with Speedglas welding filter 9100XX (73 x 107 mm)



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

A flip-up combination of an auto-darkening welding helmet and a 17 x 10 cm clear visor for weld preparations. Excellent for low-light conditions and continuous eye, face TH3-rated respiratory protection.

Part no*: — Speedglas welding helmet 9100 FX Air, variable shade 5, 8, 9–13 and Adflo respirator with particle filter:

54 77 05 with Speedglas welding filter 9100V (45 x 93 mm)

54 77 15 with Speedglas welding filter 9100X (54 x 107 mm)

54 77 25 with Speedglas welding filter 9100XX (73 x 107 mm)



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 comfortable and easy-to-use system.

Part no*: — Speedglas welding and safety helmet 9100 MP, variable shade 5, 8, 9–13 and Adflo respirator with particle filter:

57 77 05 with Speedglas welding filter 9100V (45 x 93 mm)

57 77 15 with Speedglas welding filter 9100X (54 x 107 mm)

57 77 25 with Speedglas welding filter 9100XX (73 x 107 mm)



3M™ Adflo™ High Altitude Powered Air Respirator

For welders working at higher altitudes there is a special respirator version to adjust for changes in air density. Fits with all welding helmets and faceshields shown on this page.

Part no*:

83 78 30 Adflo high altitude powered air respirator with particle filter

(Headtop and welding filter must be ordered separately)



* 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 31).

3M™ Versaflo™ Faceshield and Helmet M-series



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

Part no:

84 77 20 Versaflo faceshield M-107 with Adflo respirator.*

85 77 20 Versaflo helmet M-307 with Adflo respirator.*

3M™ Protective Visor Shade 5



Eye, face and respiratory protection for bright lightning conditions, for example gas or plasma cutting.

Part no:

89 77 25 Protective visor shade 5 with with Adflo respirator.*

* 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 31).

For highly-contaminated welding environments, these welding helmets and faceshields (except protective visor shade 5) are also available as complete systems with supplied air regulator.

Technical Specification	3M™ Adflo™ Powered Air Respirator
Airflow	170 l/min (Nominal) 200 l/min (Airflow Plus Mode)
Filters	Particle filter Gas Filter (A1B1E1 or A2) Odour filter
Weight Respirator without belt	950 g
Battery Charging time Operating hours ¹	Li-ion 4,5 hours (Standard), 5,5 hours (Heavy Duty) 8 hours (Standard), 12 hours (Heavy Duty)
Belt Optional extension	Leather, 75–115 cm +25 cm
Temperature range Operation Storage	-5° C to + 55 ° C -20 ° C to + 55 ° C
Approval respiratory protection/NPF ² Speedglas welding helmet 9100 FX Air Speedglas welding helmet 9100 Air Speedglas welding helmet 9100 MP Versaflo faceshield / helmet M-series 3M protective visor shade 5	EN 12 941 (TH3) / NPF 500 EN 12 941 (TH2) / NPF 50 EN 12 941 (TH3) / NPF 500 EN 12 941 (TH2) / NPF 50 EN 12 941 (TH2) / NPF 50

1) Run times are with new, fully-charged batteries and new filters.

2) The nominal protection factor (NPF) is based on laboratory-measured performance data according to European Standards. (The assigned protection factor (APF) is assigned by local authorities in each European country and can therefore be different for each country.)

Inspired by your reality

We have a passion for welding and we know the challenges of your profession. It comes natural for us to share the pride and concern you put into your work to address the ergonomic and safety issues facing you every day. Your thoughts and opinions are the bottom line in our continuous search for innovation. Inspired by your reality, we shape the the future of welding so you can get on with the job of shaping ours.

Join the welding community at [Facebook.com/Speedglasglobal](https://www.facebook.com/Speedglasglobal).

 **Speedglas**™



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3M

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