

3M™ Speedglas™ 9100-Air and Speedglas™ 9100 FX-Air Welding Helmets



The new 3M™ Speedglas™ 9100-Air Welding Helmet Series is specially created to satisfy a wide range of welder's unique welding needs. It combines comfort with enhanced respiratory protection, wider precision viewing and increased flexibility for safer work efficiency. Designed to protect, this radical technology fundamentally changes not only how the user wears the helmet, but also how the welder experiences its fit, stability and balance.

The **9100-Air** and **9100 FX-Air** Welding Helmets with respiratory protection are the newest addition to the trusted family of Speedglas™ products. Each helmet readily connects to the 3M™ Adflo™ PAPR or the 3M™ Fresh-air III Supplied Air Regulators to help provide respiratory protection from welding particulates and certain gases while keeping users comfortable.

[3M 26-1101-10SW Adflo PAPR HE Welding Protection System](#)

[3M 26-1101-20SW Adflo PAPR HE Welding Protection System](#)

[3M 26-1101-30SW Adflo PAPR HE Welding Protection System](#)

[3M 26-1101-00SW Adflo PAPR HE Welding Protection System](#)

[3M 25-1101-10SW Adflo PAPR High Efficiency HE Filter Welding Respirator](#)

[3M 25-1101-20SW Adflo PAPR High Efficiency HE Filter Welding Respirator](#)

[3M 25-1101-30SW Adflo PAPR High Efficiency HE Filter Welding Respirator](#)

[3M 25-1101-00SW Adflo PAPR High Efficiency HE Filter Welding Respirator](#)

3M™ Speedglas™ 9100-Air Welding Helmet

The new 9100-Air is designed for enhanced comfort and protection. The helmet has a smooth up-and-down pivot action that gently locks in the 'up' position. It comes with a highly adjustable head suspension system and a well-balanced design. This helps to optimize its center of gravity, keeping the helmet closer to the user's head in both the up and down positions—making the helmet feel lighter, more stable and balanced at all times.

Plus, the revolutionary design offers more coverage of vulnerable body areas, like the ears and sides of the neck, helping to protect from sparks, metal grindings and other spatter debris.

Respiratory technology

- Air duct helps provide refreshing airflow across the entire breathing zone
- Middle air channel helps keep the ADF virtually fog free, while the two side air channels help to provide evenly distributed air to the other areas of the breathing zone

Innovative head suspension

- Back of headband is self-adjusting and swivels to fit different head shapes
- Four settings let you determine the distance between your face and the helmet for optimum viewing
- Unique 2-strap crown adjustment for increased stability and reduced pressure on the top of the head
- Smooth ratchet mechanism lets you manually tighten the helmet to your personal preference



Respiratory Protection Both helmets readily connect to two different 3M™ air delivery units.



The 3M™ Adflo™ PAPR is an ideal solution where powered air respiratory protection is desired.



The 3M™ Fresh-air III Supplied Air Regulators are available for those who seek a supplied air respiratory protection and can provide up to +/- 50°F (28°C) heating or cooling for increased productivity.

3M™ Speedglas™ 9100 FX-Air Welding Helmet

Improved air delivery system

- Front of face air delivery helps provide cooling for hot work environments, while keeping the grinding visor virtually fog free
- Adjustable breathing tube at back of helmet is made of flexible tubing, so it does not stick out rigidly and lets users work in tight spaces or when lying on their back
- Respiratory protection is maintained when outer shield (ADF) is flipped in the upward position
- Breathing tube is attached to the headband instead of the helmet, so there is less pulling on the helmet from the breathing tube

Unique helmet design

- A clear, large (approx. 8" x 4.25") view that is ideal for precision grinding and set-up tasks in low-light conditions
- Shade 5 SideWindows provide peripheral vision for increased safety when the welding shield is in place, optional covers are available to block the SideWindows for times when other welders are nearby
- Extended helmet coverage helps to protect from harmful UV rays that can contribute to skin cancer
- Clear inner grinding visor widened for increased peripheral vision enables users to work in tight spaces without turning their head

The new 9100 FX-Air combines 3M's legendary Speedglas quality and auto darkening technology (ADF) with an innovative wide-view grinding visor and improved respiratory protection system to give welders an all-in-one solution for more welding flexibility, precision and efficiency.

A smooth flip-up pivot mechanism assures effortless transition from welding to grinding modes. The exceptionally clear, wide grinding visor offers a greater field of view.



Superior optics

The 3M™ Speedglas™ 9100 Series Welding Auto Darkening Filters (ADFs) continue our tradition of outstanding optical quality, including uniform shading and minimal distortion across the entire filter viewing area.

- Both new helmets are compatible with any of the three Speedglas™ ADFs of differing sizes (9100X, 9100V, 9100XX), and feature a built-in mag plate holder
- Seven user-selectable dark shades (5, 8-13), with the option to lock-in your shade for torch and plasma cutting
- A tack welding comfort mode to help reduce eye fatigue during tacking applications, and a shade 3 grinding mode
- Outstanding low-amp TIG performance, even on settings as low as 1 amp



	Viewing area (approx.)	Battery life (approx.)
9100V	1.8 x 3.7 inch	2,800 hrs
9100X	2.1 x 4.2 inch	2,500 hrs
9100XX	2.8 x 4.2 inch	2,000 hrs

Ordering Information

3M™ Speedglas™ 9100-Air and 9100 FX-Air Welding Helmets with Adflo™ Powered Air Purifying Respirator (PAPR) Systems					
Product Description		9100V	9100X	9100XX	No ADF
9100-Air welding helmet with Adflo™ PAPR High Efficiency System, 1/cs	Product #	25-1101-10SW	25-1101-20SW	25-1101-30SW	25-1101-00SW
	UPC	00051131498198	00051131498204	00051131498211	00051131498259
9100-Air welding helmet with Adflo™ PAPR Organic Vapor/Acid Gas and High Efficiency System, 1/cs	Product #	25-3301-10SW	25-3301-20SW	25-3301-30SW	25-3301-00SW
	UPC	00051131498228	00051131498235	00051131498242	00051131498266
9100 FX-Air welding helmet with Adflo™ PAPR High Efficiency System, 1/cs	Product #	26-1101-10SW	26-1101-20SW	26-1101-30SW	26-1101-00SW
	UPC	00051131497122	00051131497139	00051131497146	00051131497184
9100 FX-Air welding helmet with Adflo™ PAPR Organic Vapor/Acid Gas and High Efficiency System, 1/cs	Product #	26-3301-10SW	26-3301-20SW	26-3301-30SW	26-3301-00SW
	UPC	00051131497153	00051131497160	00051131497177	00051131497191

3M™ Speedglas™ 9100-Air and 9100 FX-Air Welding Helmets with Fresh-Air III Supplied Air System with V-100 Vortex Air-Cooling valve				
Product Description		9100V	9100X	9100XX
9100-Air welding helmet with Fresh-Air III Supplied Air System V-100 Vortex Air-Cooling valve, 1/cs	Product #	25-5702-10SW	25-5702-20SW	25-5702-30SW
	UPC	00051131498273	00051131498280	00051131498297
9100 FX-Air welding helmet with Fresh-Air III Supplied Air System V-100 Vortex Air-Cooling valve, 1/cs	Product #	26-5702-10SW	26-5702-20SW	26-5702-30SW
	UPC	00051131372634	00051131372641	00051131372658

3M™ Speedglas™ 9100-Air and 9100 FX-Air Welding Helmets with Fresh-Air III Supplied Air System with V-200 Vortemp™ Air-Heating valve				
Product Description		9100V	9100X	9100XX
9100-Air with welding helmet with Fresh-Air III Supplied Air System V-200 Vortemp™ Air-Heating valve, 1/cs	Product #	25-5802-10SW	25-5802-20SW	25-5802-30SW
	UPC	00051131498303	00051131498310	00051131498327
9100 FX-Air welding helmet with Fresh-Air III Supplied Air System V-200 Vortemp™ Air-Heating valve, 1/cs	Product #	26-5802-10SW	26-5802-20SW	26-5802-30SW
	UPC	00051131497214	00051131497221	00051131497238

For a complete listing of related products, spare parts and accessories, contact your 3M Sales Representative, Distributor, or Technical Service.

Technical Specifications

	9100-Air	9100 FX-Air
Respiratory and head, eye & face protection	Provides respiratory (OSHA APF 25) and limited eye (ANSI Z87.1-2010) protection.	
Spark, spatter and UV protection	Comes standard with extended head protection. Optional flame-resistant full head protection and extended ear and neck protection accessories can be purchased separately.	
Grinding visor viewing angle (approx.)	n/a	170 degrees
Weight (approx.)	28.9 oz (9100V)	34.2 oz (9100V)
	29.3 oz (9100X)	34.6 oz (9100X)
	34.2 oz (9100V)	36.2 oz (9100XX)
Head sizes	6 ¼ to 8 (50-64 cm)	



⚠ WARNING

These respirators help protect against certain airborne contaminants. Before use, the wearer must read and understand the User Instructions provided as a part of the product packaging. A written respiratory protection program must be implemented meeting all the requirements of OSHA 1910.134 including training, fit testing and medical evaluation. In Canada, CSA standards Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate. Misuse may result in sickness or death. For proper use, see packaging instructions, supervisor, or call 3M OH&ESD Technical Service.

⚠ WARNING

This product is designed to help protect the wearer's eyes and face from harmful radiation including visible light, ultra-violet radiation (UV), infra-red radiation (IR), sparks and spatter resulting from welding processes. These products must be used only by qualified persons who are properly trained in their use and maintenance. Misuse may result in permanent eye injury and vision loss. Always wear ANSI Z87.1 compliant safety spectacles in addition to any welding helmet.