

Welding Helmets / Auto-Darkening Filters

Speedglas™ Helmets and Auto-Darkening Filters (ADFs)

- Safety products that help increase welding performance
- Constant UV/IR protection
- Welding helmets that breathe
- Helmet option with side windows to improve visibility, safety and comfort
- Ideal for weld prep/grinding



The Speedglas™ SideWindows

Speedglas™ SideWindows helmets from 3M™ allow for peripheral vision. The two shade 5 side filters increase the peripheral viewing area by over 100%. The two side filters are designed solely for peripheral vision; the welder continues to view his own arc through the center (auto-darkening) filter.



The Speedglas™ ProTop System

3M™ has an exclusive pivot mechanism that “nests” the welding helmet down low over the hardhat, in a balanced, secure position. The lower center-of-gravity helps reduce neck strain.



The Speedglas™ FlexView System

Available from 3M™, these helmets have a big 4.7 in. x 3.6 in. (120mm x 90mm) clear polycarbonate faceshield that’s ideal for precision weld preparation work under a variety of lighting conditions. The user simply lifts up the spring-mounted Speedglas™ filter assembly for weld prep. The faceshield meets the ANSI Z87.1-2003 industrial eye and face protection standard.



Specification Chart for Speedglas™ Helmets

	9002X	9002V	9000XF	9002D	Utility
	<ul style="list-style-type: none"> • Variable Shade • Shades 9 to 13 • MIG, Stick, TIG • Large Viewing Area • 4 Sensitivity Adjustments • 3 Delay Settings • Solar Panel 	<ul style="list-style-type: none"> • Variable Shade • Shades 9 to 13 • MIG, Stick, TIG • 4 Sensitivity Settings • 3 Delay Settings 	<ul style="list-style-type: none"> • Fixed Shade • Available in Shades 10, 11, or 12 • MIG, Stick, some TIG • Large Viewing Area • Sensitivity Adjustment • Solar Panel 	<ul style="list-style-type: none"> • Dual Shades 10 and 11 • MIG, Stick, some TIG 	<ul style="list-style-type: none"> • Fixed Shade • Available in Shades 10 or 11 • MIG and Stick
Helmet System(s)	9002X	9002V	9000XF	9002D	Utility
Standard	04-0012-21	04-0012-31	04-0012-10	04-0012-15	04-0014-10U
SideWindows	04-0012-21SW	04-0012-31SW	04-0012-10XSW	04-0012-15SW	N/A
ProTop	04-0015-21	04-0015-31	04-0015-10X	04-0015-15	N/A
ProTop + SideWindows	04-0015-21SW	04-0015-31SW	04-0015-10XSW	04-0015-15SW	N/A
FlexView	04-0016-21	04-0016-31	04-0016-10X	04-0016-15	N/A
FlexView + SideWindows	04-0016-21SW	04-0016-31SW	04-0016-10XSW	04-0016-15SW	N/A
FlexView + ProTop	04-1516-21	04-1516-31	04-1516-10X	04-1516-15	N/A
FlexView + ProTop + SideWindows	04-1516-21SW	04-1516-31SW	04-1516-10XSW	04-1516-15SW	N/A

Speedglas™ Replacement Lenses

The inner lens of the filter assembly provides the same continuous UV/IR protection as a traditional shade 13 filter plate (as regulated by USA and Canadian welding safety standards). Note: Because faceshields and welding shields can be raised from the normal position, ANSI Z87.1-2003 states that safety glasses must be used in conjunction with these helmets.



Helmet Model	Outer Lens	Inner Lens (filter)
AT, APC & *APC-V	02-0270-00	02-0280-00
XL	03-0270-00	03-0280-00
Utility & 9000 series		
9000X & XF	04-0270-00	04-0280-00
9000F & V		04-0290-00

* Discontinued Helmet Model

Speedglas™ SL Welding Helmet

- State-of-the-art liquid crystal design.
- Superior optics for visual clarity and weld pool control.
- Light state of shade 3, dark shade range 8-12.
- 4 sensitivity levels for all welding processes, even extreme low amp TIG.
- Patented auto On/Off technology.
- New headband with fast-adjusting, flexible, multiple position headband.
- Factory equipped hard-coated outside protection for abrasion and spatter resistance.
- Replaceable batteries.
- Fully ANSI Z87.1-2003 compliant.

Headgear Design

- 2-size front portion of suspension fits more head sizes and face shapes.
- 4-position, back/forth slide adjustment.
- Adjustment in rear, for easy one-hand tightening and push-button adjustment.



Part No.	Description
05-0013-00	SL helmet (helmet only – does not include headband)
05-0013-41	SL helmet with auto-darkening filter, shade 8-12
05-0000-41	Auto-darkening filter, shade 8-12

Replacement Parts and Accessories for 3M™ Speedglas™ Filters and SL Helmet



Part No.	Description	Case Qty
Protection Plates		
05-0250-00	Outside protection plate	5 per case
05-0250-01	Outside protection plate (hard-coated and painted)	5 per case
Miscellaneous Parts/Accessories		
05-0370-00	Battery holder	2 per case
05-0650-00	Headband and mounting hardware	1 per case
05-0660-00	Headband assembly kit	10 per case

Air-Purification Systems

3M™ Speedglas™ with Adflo™ System

- Lightweight, compact, all-in-one system.
- Exclusive “stackable” configuration allows the Adflo™ high efficiency (HE) particulate filter to be combined with a chemical cartridge for additional protection.
- Designed for comfort within exhausting and hard-to-breathe environments which can help lead to more productive work time.



Adflo™ System	9002X	9002V	9000XF	9002D
(HE) with 9000 HWR Helmet	15-1101-21	15-1101-31	15-1101-10X	15-1101-15
(HE) with 9000 HWR Helmet SideWindows	15-1101-21SW	15-1101-31SW	15-1101-10SW	15-1101-15SW
(HE) with FlexView System Helmet	16-1101-21	16-1101-31	16-1101-10X	16-1101-15
(HE) with FlexView System Helmet SideWindows	16-1101-21SW	16-1101-31SW	16-1101-10SW	16-1101-15SW
(HE + OV/SD/CL/HC) with 9000 HWR Helmet	15-3301-21	15-3301-31	15-3301-10X	15-3301-15
(HE + OV/SD/CL/HC) with 9000 HWR Helmet SideWindows	15-3301-21SW	15-3301-31SW	15-3301-10SW	15-3301-15SW
(HE + OV/SD/CL/HC) with FlexView System Helmet	16-3301-21	16-3301-31	16-3301-10X	16-3301-15
(HE + OV/SD/CL/HC) with FlexView System Helmet SideWindows	16-3301-21SW	16-3301-31SW	16-3301-10SW	16-3301-15SW

NOTE: Not for paint spraying of flammable substances, or where intrinsic safety is required.

Because faceshields and welding shields can be raised from the normal position, ANSI Z87.1-2003 states that safety glasses must be used in conjunction with these respirators.

3M™ Fresh-air II Supplied Air System

- The NIOSH-approved supplied air (SA) 9000 system provides respiratory protection from airborne particulates and gases. The lightweight, belt-mounted valves permit the welder to adjust the temperature of the air entering the headpiece, making it ideal for very hot or strenuous jobs.
- Cool-air valve permits welder to lower the temperature of the supplied air by up to 45°F (25°C).
- Temp-air valve allows either cooling or warming of the supplied air ±45°F from the supplied air temperature.



Fresh-air II Supplied Air Systems	9002X	9002V	9000XF	9002D
Cool-air (CA) System with 9000 HWR Helmet	14-5701-21	14-5701-31	14-5701-10X	14-5701-15
Cool-air (CA) System with 9000 HWR Helmet and SideWindows	14-5701-21SW	14-5701-31SW	14-5701-10XSW	14-5701-15SW
Temp-air (TA) System with 9000 HWR Helmet	14-5801-21	14-5801-31	14-5801-10X	14-5801-15
Temp-air (TA) System with 9000 HWR Helmet and SideWindows	14-5801-21SW	14-5801-31SW	14-5801-10XSW	14-5801-15SW

NOTE: Final determination of respirator applicability and filter selection must be made by an on-site safety specialist or industrial hygienist.

Because faceshields and welding shields can be raised from the normal position, ANSI Z87.1-2003 states that safety glasses must be used in conjunction with these respirators.

Valve Model	CFM Required	CFM Delivered	Pressure Range (PSIG)	Max. # of Hoses/Length*
Cool-air	12-25	6-15	70-105	4 hoses/100'
Temp-air	12-25	6-15	85-110	4 hoses/100'***

*Indicates maximum number of hoses and maximum total length.

***Temp-air valve is approved for use with breather hose only.

Hardhat Systems for Supplied Air Cool-air and Temp-air Systems

Use the chart to the right to determine which parts are required in tailoring the hardhat air system to your specifications.



Part No.	Description
1. Helmet Assembly (choose one from the following)	
14-0099-35H	9000 HWR Helmet with Hardhat
14-0099-35HSW	9000 HWR Helmet with Hardhat and SideWindows
2. Breathing Tube, Supplied Air Control Air Valve	
18-0099-63	Breathing Tube
(plus, choose one from the following)	
18-0099-47	Cool-air Valve (CA)
18-0099-48	Temp-air Valve (TA)
3. Supplied Air Hoses (choose one from the following)	
18-0099-40	25' Breather Hose, with Couplings
18-0099-41	50' Breather Hose, with Couplings
18-0099-42	100' Breather Hose, with Couplings
18-0099-43*	25' NyCoil™ Hose, with Couplings
18-0099-44*	50' NyCoil™ Hose, with Couplings
18-0099-45*	100' NyCoil™ Hose, with Couplings
4. Belt	
18-0099-16	Comfort Belt
5. Appropriate 3M™ Speedglas™ Auto-Darkening Filter (choose one of the following)	
04-0000-15	9002D User Selectable Shades 10 and 11
04-0000-10X	9000XF Shade 10
04-0000-11X	9000XF Shade 11
04-0000-12X	9000XF Shade 12
04-0000-31	9002V Filter
04-0000-21	9002X Filter

*NyCoil™ hoses can only be used with Cool-Air valve Supplied Air (SA) Systems.