

# Selection of Eye & Face Protection



A face shield is a device used to protect wearer's entire face (or part of it), in addition to the eyes, from impact hazard such as flying objects, road debris, chemical splashes (in industry), or potentially infectious fluid (in medical). On many construction sites you will find workers using face shields to protect their eyes and face from flying debris or sparks. Many tools that involve cutting and working with metal

recommend the use of a face shield. Examples would be workers that are using welding equipment or metal cutting saws.

- Face shields are required where facial skin protection is needed. They can only be used in conjunction with eye protection. The face shield is not a substitute for the safety glasses or goggles. Face shields shall be used only in conjunction with spectacles and/or goggles
- Shaded eye/face protection is required for radiant energy sources from arc and gas welding, soldering and brazing, laser, ultraviolet, and infrared. Facial injuries can be life-changing, and that's why face protection is vital in many industries. Sparks, flying debris, splashing chemicals and even dust from grinding and woodworking applications all pose a risk. From simple eye protection to face shields that cover the entire face, your workers need to stay safe on the job.



## **3M** H8A - Headgear with Ratchet 3M-82501-00000

- Ratchet headgear for use with 3M Faceshields (sold separately)
- High strength thermoplastic crown provides impact resistance
- Adjustable ratchet suspension with five position crown strap offers a customized fit
- Developed for use in metalworking, woodworking, utilities and many other industries
- Meets the high impact requirements of ANSI Z87.1-2003



## **3M** H10 Headgear with Crown Extender / Protection 3M-82516-00000

- Adjustable ratchet suspension
- Crown extender for added coverage
- Five position crown strap
- Headgear gives users a wide choice of faceshield materials, sizes, shapes and tints for task specific requirements
- Meets the requirements of ANSI Z87.1-2003



## **3M** HCP8 Ratchet Headgear with 3M™ Clear Chin Protector 3M-82521-10000

- Uses WP98 window (82543-0000), sold separately
- Five position crown strap
- Requires protective eyewear, sold separately
- Helps provide head protection to workers in metal working, utilities, wood working, and many other industries
- Meets the requirements of ANSI Z87.1-2003



## **3M** WP96 Clear Polycarbonate Faceshield 3M-82701-00000

- Molded polycarbonate faceshield provides impact protection
- Mounts quickly to 3M headgear (sold separately)
- Installation to headgear requires no tools, snaps or cams
- Developed for use in metalworking, utilities and many other industries
- Meets the high impact requirements of ANSI Z87.1-2003

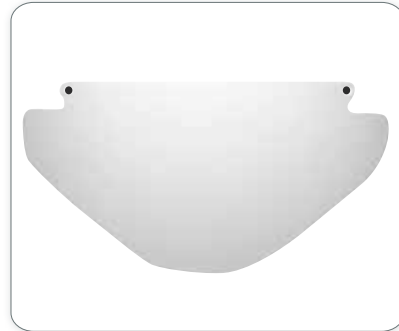




## H8A - Headgear with Ratchet 3M-82501-00000

### 3M WP96X Wide Clear Polycarbonate Faceshield 3M-82582-00000

- Flat stock
- Larger faceshield size helps provide additional coverage area
- 3M™ Easy-Change™ Faceshields mount quickly to 3M headgear
- Meets the high impact requirements of ANSI Z87.1-2003



## Visagom 3500 AL-V3733500

- Lift-front helmet attachment for face screens
- Without metal parts
- Special version for electricians
- Available with face shields in size: 345 x 200mm (fog-free)
- Meets CE EN166F
- Face shield & Helmet sold separately



## Visorama 3800 AL-V3733800

- Headgear with lift-front part
- Headband adjustable by wheel
- Available with face shields in size: 345 x 200mm (fog-free)
- Meets CE EN166F
- Face shield sold separately



## FC48 Clear Visor SW-FC48-C

- Clear Polycarbonate with Aluminum Bound
- Size: 8" X 15 1/2" X 1.0mm
- For A3 & A4 Visor Holder
- For SW176 Headgear
- Headgear sold separately

*\*Picture for illustration only*

## SW-A4 Visor Holder SW-A4

- All aluminum visor bracket, assemble with safety helmet and visor





# 3M™ Speedglas™ Welding Helmets and Welding Filters

- Best\*\*\*
- Better\*\*\*
- Good\*\*\*
- Not Recommended\*\*\*



Technical specification	3M™ Speedglas™ Welding Helmets 9100, 9100 Air and 9100-QR				3M™ Speedglas™ Welding Helmet 9100 MP	
3M™ Speedglas™ Welding Filter	9100XXi	9100XX	9100X	9100V	9100XXi	9100XX
MMAW (Electrode)						
MIG/MAG						
TIG (>20A)						
TIG (1A-20A)						
Plasma (welding and cutting)						
Risk for hidden arc						
Tack welding						
Grinding (welding filter)						
Grinding (clear visor)	N/A					
Viewing area (welding filter)	73x107 mm		54x107 mm	45x93 mm	73x107 mm	
Battery lifetime	1 800 hours	2 000 hours	2 500 hours	2 800 hours	1 800 hours	2 000 hours
Solar cell	No		Yes		No	
Safety Helmet options	Yes (non air version)				Yes	
Classification	1 / 1 / 1 / 2				1 / 1 / 1 / 2	
Dark state	Shade 5, 8, 9–13				Shade 5, 8, 9–13	
Light state	Shade 3				Shade 3	
UV/IR Protection	Shade 13 (permanent)				Shade 13 (permanent)	
Auto ON	Yes	No			Yes	No
Switching time, light -dark	0,1 ms (+23° C)				0,1 ms (+23° C)	
Memory mode	Yes	No			No	
Delay (switching time, dark-light)	40–800 ms	40–1 300 ms			40–800 ms	40–1 300 ms
SideWindows option	Yes				Yes	
Exhaust vents	Yes (non air version)				N/A	
Number of sensors (arc detection)	3				3	
Approvals Eye and Face protection Welding helmet Welding filter Protection plates Visor plate	EN175:B EN 379 EN166:BT* N/A				EN175:B, EN 166 B EN 379 EN166:BT* EN166:BT*	
Approval Head protection Safety helmet	440 Vac (3M Safety Helmet H-701)				EN 397 440 Vac, LD	
Approval Respiratory Protection / NPF** Adflo Powered Air Respirator Versaflo V-500 Supplied Air Regulator	with Speedglas welding helmet 9100 Air EN 12941 (TH2) / NPF 50 EN 14594 (3B)/ NPF 200				EN12941 (TH3) / NPF 500 EN14594 (3B)/ NPF 200 N/A	

\* 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 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 therefore be different for each country.

\*\*\* The ratings (good - better - best) above refer to the products listed in this chart and should be seen as general recommendations based on differences in product comfort features and configuration when using these selected Speedglas welding helmet series.



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## 3M™ Speedglas™ Welding Helmets – sorted by features

	3M™ Speedglas™ Welding Helmet 9100							
	3M™ Speedglas™ Welding Helmet 9100-Air							
	3M™ Speedglas™ Welding Helmet 9100-QR							
	3M™ Speedglas™ Welding Helmet 9100-FX							
	3M™ Speedglas™ Welding Helmet 9100 FX-Air							
	3M™ Speedglas™ Welding Helmet 9100 FX (with hard hat)							
	3M™ Speedglas™ Welding Helmet 9100 MP							
	3M™ Speedglas™ Welding Helmet SL							
	3M™ Speedglas™ Welding Helmet 100							
	3M™ Speedglas™ Welding Helmet 100-QR							



Eye & face  
protection



Side windows



Hearing  
protection\*\*



Exhaust vents



Respiratory  
system



Graphics option



Head protection



Auto-on



Flip-up