

Welding Safety

### NEW

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3M<sup>™</sup> Speedglas<sup>™</sup> Heavy-Duty Respiratory Welding Helmet G5-01

## Take Control

# Adjust your welding helmet, not yourself

Based on extensive input from welders working at high amperages who need to grind frequently, the 3M<sup>™</sup> Speedglas<sup>™</sup> Heavy-Duty Welding Helmet G5-01 is created to be adaptable to an individual's needs and situation.



### Configure your cover:

Customise your protection against radiation, sparks and spatter with expanded coverage options, see pages 10-11.

### Customise your comfort:

Take complete control over the direction and movement of airflow within your welding helmet, see pages 6-7.

### Choose your colour:

View your work with new 3M<sup>™</sup> Speedglas<sup>™</sup> Variable Colour Technology, see pages

### Control your lighting:

Light up your workspace with a new helmet-mounted task light specifically designed for welding, see page 9. True-View Technology

**Speedglas True-View** 

### A more natural light state

The 3M<sup>™</sup> Speedglas<sup>™</sup> Auto-Darkening Welding Lens G5-01VC offers 3M<sup>™</sup> Speedglas<sup>™</sup> True-View Technology in the light state with your choice of colour tone in the dark state. Choose how you view your weld.

#### Speedglas welding lens G5-01VC



- New shade 14 for heavy-duty welding (shades 3/5/8-14).
- Variable Colour and True-View technology.

#### Smoother dark-light transition

The G5-01VC is also designed to minimise eye strain when switching from dark state to light state, by using an intermediate shade.

For technical specifications see page 12



### Literally see the difference

### Imagine what more realistic-looking colours and details could do for you:

- Provide better control of your weld puddle with a view that appears lighter, brighter and more realistic.
- Help you focus on your welding set-up, welding technique and inspection of just-completed welds.
- Give you a clearer view of coloured welding machine controls – even with your helmet in the safe, down position.

Variable Dark State Colours.

Dark state 8 with variable colour tone A

Dark state 8 with variable colour tone B

Dark state 8 with variable colour tone C

### "See your way" Which colour tone works best for you?

To provide better vision and more control of your weld puddle we now introduce 3M<sup>™</sup> Speedglas<sup>™</sup> Variable Colour Technology: choose between natural (A), cool (B) or warm (C) tones for your dark state. You determine which colour tone provides the best viewing contrast for your welds, and the most comfort for your eyes.

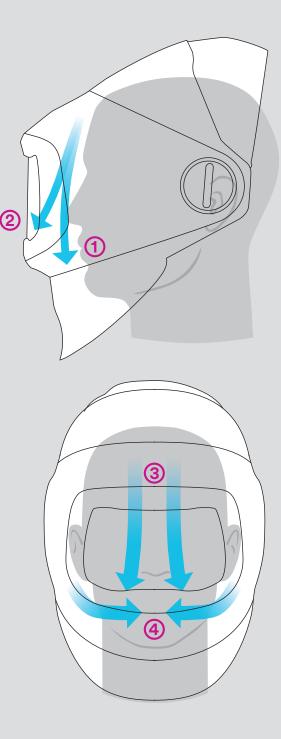
View the variable colour video www.awsi.com.au 5

### Don't go with the flow

For more control over your comfort, the innovative G5-01 helmet duct system lets you direct the airflow to either your face<sup>1</sup>, your visor<sup>2</sup>, or a combination of both.

You can even adjust the amount of air coming from the top outlet<sup>3</sup> vs. the two side outlets<sup>4</sup>, or choose a blend of both.

All airflow adjustments can be made while you're wearing the helmet, maintaining your eye, face and respiratory protection.







### Flip-up protection

Flip-up functionality allows you to seamlessly switch between welding and grinding tasks while maintaining your respiratory protection. The clear visor also allows you to set up, inspect and move around the workplace without the need to remove your face protection or break the positive pressure respiratory seal. An all-new face seal design features a locking toggle for fast, secure adjustments. Two new tabs make it easier to lift the seal over your glasses. And installation channels on the helmet make the removal and replacement of the face seal much faster.

#### **DID YOU KNOW?**

#### Welding fume: 'Carcinogenic to humans'

In early 2017, welding fume was reclassified from IARC classification Group 2B (Possibly carcinogenic to humans) to Group 1 (Carcinogenic to humans).

For a closer look at the dangers of welding fume and a strategic approach that can help to reduce exposure, visit www.awsi.com.au and download our **Welding Fume White Paper.** 

#### NEW

### Heavy-duty respiratory protection

Designed for heavy-duty, high-amperage welding and grinding, the G5-01 welding helmet connects to the heavy-duty 3M<sup>™</sup> Adflo<sup>™</sup> Powered Air Respirator to provide welders with air a minimum 50 times cleaner than the welder would otherwise be breathing unprotected (RMPF = 50).

Since its launch, the award winning 3M<sup>™</sup> Adflo<sup>™</sup> powered air respirator has become synonymous with welders' respiratory protection.

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

Heavy-Duty 3M <sup>™</sup> Adflo <sup>™</sup> Powered Air Respirator
Conforms to AS/NZS1716
50
170 litres/minute 200 litres/minute
12 hours Li-ion with rapid charge (0-80% in an hour) <sup>2)</sup> 5.5 hours full charge.

Gas and odour filters are available as an optional extra.

1) For mechanically and thermally generated particles.

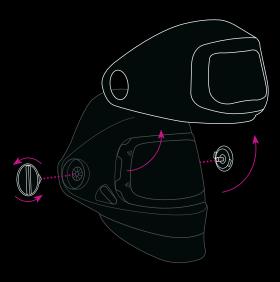
2) Heavy-duty battery will be 80% charged (9.6 hours run time) in approximately one hour.

### A slim design offers increased coverage

Streamlined profile gives more coverage for welders' ears, head and neck



### Completely remove the welding visor for non-welding applications



For extended non-welding work, just unscrew the two dials to completely remove the welding visor and re-attach the dials again, reducing the helmet weight by over 35%.



Adjustable functions are labelled on the helmet, and adjustments can be made while wearing the helmet and your gloves.

### Light up your workspace

A new, optional helmet-mounted task light provides hours of powerful lighting and runs off the Adflo battery pack, enabling welders to enter and work in poorly lit spaces.

- Task light specifically designed for welding
- Light weight powered by the Adflo battery
- Positioned to cast a wide light on the workpiece
- Designed for even light distribution at normal welding distance
- Configurable light intensity

Task light - part no. 16 92 00

### **Tailor to fit your preferences**

① **New headband design** Improved, self-adjusting comfort paddles along your forehead.

#### ② Adjustment options

Control the distance and angle from your eyes to the clear visor and welding lens.

#### ③ Extra-large back pad

Delivered with an optional extra-large back head pad for enhanced comfort.



### Configure your coverage

Built for heavy-duty welding environments, the G5-01 provides a number of configurable coverage options, so the welder can customise the helmet to their individual needs and preferences.

Build your own customised 3M<sup>™</sup> Speedglas<sup>™</sup> Heavy-Duty G5-01 Welding Helmet:

www.awsi.com.au



Helmet comes standard with rigid neck protection and fabric head protection as shown here.

For increased visibility at all times, add the fluorescent yellow extended head protection 16 90 21





To better enable you to weld when looking down, remove the rigid neck protection and replace with the smaller fabric neck protection 16 90 41

When you need the durability of leather, attach the leather head protector 16 90 22 and the leather neck protector 16 90 43





Increase coverage of your head, neck and chest by adding the larger fabric head cover 16 90 23 and/or the extended fabric neck protection 16 90 42

To maximize coverage from sparks, add the fabric shroud 16 90 30 and the extended, larger fabric head protection 16 90 23. Also available as a kit, 16 90 35



### **Technical Specifications**



3M <sup>™</sup> Speedglas <sup>™</sup> Auto-darkening	
Welding Helmet G5-01	G5-01VC
MMAW (Electrode)	✓
MIG/MAG	✓
TIG (>20A)	✓
TIG (1A-20A)	~
Plasma (welding and cutting)	✓
Risk of hidden arc	~
Tack welding	✓
Grinding	✓
Viewing area (welding lens)	73 × 109 mm
Viewing area (grinding visor)	170 × 104 mm
3M <sup>™</sup> Speedglas <sup>™</sup> True-View Technology	Yes
3M <sup>™</sup> Speedglas <sup>™</sup> Variable Colour Technology	Yes
Bluetooth enabled	Yes
Battery lifetime	1500 hours
Classification	1/1/1
Dark state	Shade 8-14 with Variable Colour
Cut mode	Yes shade 5
Light state	Shade 3 with True-View Technology
UV/IR protection	Shade 14 (permanent)
Auto-ON	Yes
Switching time, light -dark	0.1 ms (+23° C)
Memory mode	Yes - 4 (via mobile device app)
Delay (switching time, dark-light)	50 – 1300 ms
Two step recovery	Yes (shade 7)
Number of sensors (arc detection)	4
Australian and New Zealand Standard Compliance (AS/NZS) Eye Protection Face Protection Powered Air Respiratory Protection Supplied Air Respiratory Protection	AS/NZS1338.1 AS/NZS1337.1 (high impact) AS/NZS1716 / RMPF <sup>1</sup> 50 AS/NZS1716 / RMPF <sup>1</sup> 100+

1) Required Minimum Protection Factor (RMPF): for mechanically and thermally generated particles.



	Speedglas Welding Helmet G5-01VC			
Complete powered	Helmet G5-01VC with welding lens and heavy-duty Adflo respirator.			
air system	<b>Part No 61 78 30</b>			
Upgrade your	Upgrade Kit: Helmet G5-01VC with welding lens.			
old system	<b>Part No 61 11 30</b>			
With supplied	Helmet G5-01VC with welding lens and V-500E supplied air regulator.			
air regulator	Part No 61 88 30			

When you order a complete G5-01 powered air system, it comes standard with our new storage bag designed specifically for welders' needs. Perfect to transport and protect the gear that protects you.

View the unpacking video www.awsi.com.au



### Increase your comfort

#### Configure your

3M<sup>™</sup> Speedglas<sup>™</sup> Welding Helmet G5-01 to meet your individual preferences and application needs online at www.awsi.com.au





837242 83 75 42

83 71 10





83 40 18

Part No





16 92 10

16 92 00

16 90 43

16 92 11

16 90 20 16 90 21	Head Protection Fabric (Small) Head Protection High Vis
	0
16 90 22	Head Protection Leather
16 90 23	Head Protection Fabric (Large)
16 90 30	Shroud
16 90 35	Extended Cover Kit (Shroud and
	Large Head Cover Fabric)
16 90 41	Neck Protection Fabric (Small)
16 90 42	Neck Protection Fabric (Large)
16 90 43	Neck Protection Leather
16 91 00	Welding Hood
16 92 00	Task Light, Inc Mounting Parts & Cables
16 92 05	Lens Cover Task Light Pk=5
16 92 10	Long Power Cable for Task Light
	· · ·
16 92 11	Short Power Cable for Task Light

Description

Part No

#### 83 40 18 Tube Breathing Cover Flame Resistant Adflo (Recommended when using Task Light) 83 71 10 Filter Odour Adflo 83 71 20 Filter Odour Replacement Pad Adflo 837242 Filter Nuis Level Organic Vapour/ Acid Gas Adflo 83 75 42 Filter Gas A1 Adflo

Description

95 40 15 Backpack Adflo

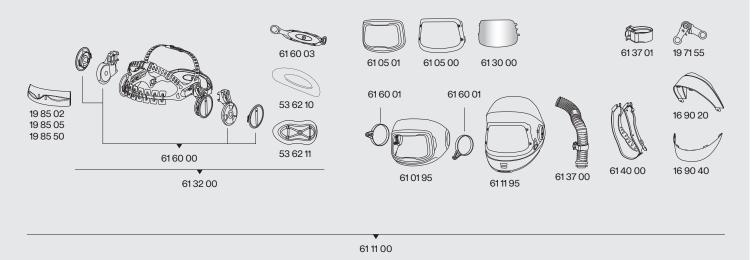


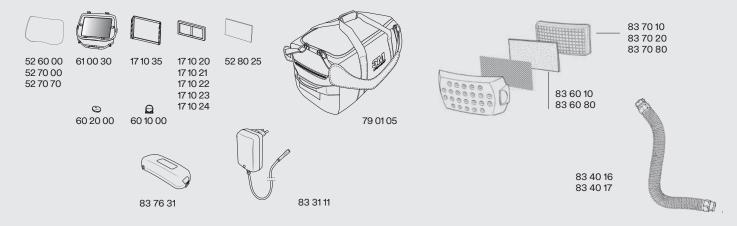
16 92 05

16 90 22

Build your own customised 3M Speedglas G5-01 Welding Helmet online by selecting the configuration options that suit you best - www.awsi.com.au

#### Spare parts and consumables





Part No	Description	Part No	Description	Part No	Description
16 90 20	Head Protection Fabric (Small)	53 62 10	Head Harness Back Cushion	83 31 11	Charger Battery Li-ion Adflo
16 90 40	Neck Protection Rigid		G5-01 (Small)	83 40 16	Tube Breathing Self Adjusting
17 10 20	Magnifying Lens 1.0X	53 62 11	Head Harness Back Cushion		QRS Adflo
17 10 21	Magnifying Lens 1.5X		G5-01 (Large)	83 40 17	Tube Breathing Heavy Duty
17 10 22	Magnifying Lens 2.0X	60 10 00	Battery Holder		Rubber QRS Adflo
17 10 23	Magnifying Lens 2.5X	60 20 00	Battery CR2450	83 60 10	Pre-Filter Adflo Pk=5
17 10 24	Magnifying Lens 3.0X	61 00 30	Speedglas Welding Lens	83 60 80	Pre-Filter Adflo Pk=80
17 10 35	Magnifying Lens Holder		G5-01VC	83 70 10	Filter Particle PSL Adflo
19 71 55	Hinge Mechanism Pk=2	61 01 95	Outer Shield	83 70 20	Filter Particle PSL Adflo Pk=20
19 85 02	Sweatband G5-01 Pk=2	61 05 00	Front Cover for Inner Visor	83 70 80	Filter Particle PSL Adflo Pk=80
19 85 05	Sweatband G5-01 Pk=5	61 05 01	Front Cover for Flip-up	83 76 31	Battery Heavy Duty Li-ion Adflo
19 85 50	Sweatband G5-01 Pk=50	61 11 00	Welding Helmet G5-01, Exc	83 76 31C	Upgrade Kit Heavy Duty Li-ion
52 60 00	Lens Cover Outer Standard Pk=10		Welding Filter		Battery & Charger
52 70 00	Lens Cover Outer Hard Coated	61 11 95	Inner Shield with Airduct &		
	Pk=10		Airflow Controls , Inc Visor Frame		
52 70 70	Lens Cover Outer High Heat	61 30 00	Visor Plate Anti-Fog + Hard		
	Pk=10		Coated Pk=5		
52 80 25	Lens Cover Inner Pk=5	61 32 00	Head Harness G5-01		
		61 37 00	Airduct Breathing Tube (Short) Inc		
			Holder		
		61 37 01	Breathing Tube Holder		
		61 40 00	Face Seal G5-01		
		61 60 00	Pivot & Sliding Mechanism Inc		
			Pivot Knobs		
		61 60 01	Pivot Ring for Outer Shield Pk=1		
		61 60 03	Head Harness Back Part G5-01		
			<b>A</b>		

79 01 05

Carry Bag



### There's an app for that...

- Opt in by securely pairing your smartphone to your G5-01 welding lens using the 3M Connected Equipment App
- · Control all your welding lens settings directly from your smart phone
- Program up to four memory modes (settings for dark shades, sensitivity and delay)
- Easily record your welding helmet maintenance log to the App
- Review statistics including: when your ADL was first activated; hours on; hours in the dark state; hours in the light state; and the number of on/off cycles
- Have instant access to User Manuals and the Parts List



#### Learn more about the G5-01



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youtube.com/awsspeedglas

#### Authorised Wholesaler





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