



 **Speedglas™**

Welding Safety

**NEW**

3M™ Speedglas™ Heavy-Duty  
Respiratory Welding Helmet G5-01

# Take Control

3M Science. Applied to life.™

# Adjust your welding helmet, not yourself

Based on extensive input from welders working at high amperages who need to grind frequently, the 3M™ Speedglas™ 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.

### Choose your colour:

View your work with new 3M™ Speedglas™ Variable Colour Technology, see pages 4-5.

### Customise your comfort:

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

### Control your lighting:

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





**Speedglas True-View**

# A more natural light state

The 3M™ Speedglas™ Auto-Darkening Welding Lens G5-01VC offers 3M™ Speedglas™ 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™ Speedglas™ 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.

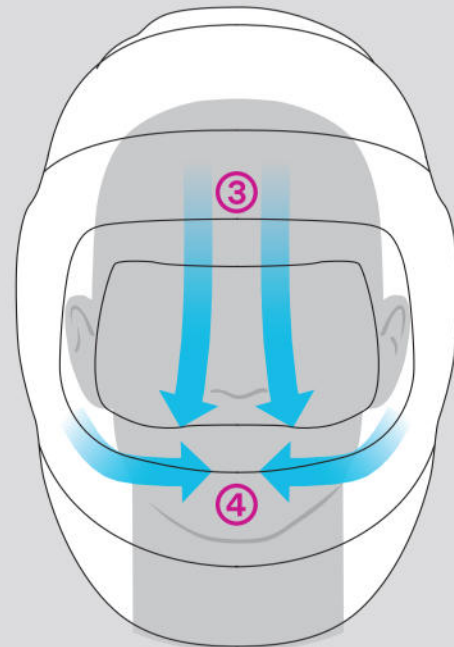
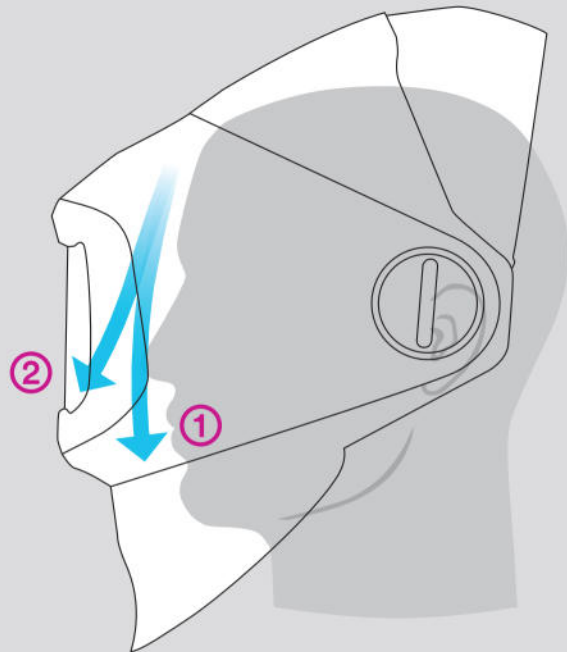
View the variable  
colour video  
[www.awsi.com.au](http://www.awsi.com.au)

# 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 ①, your visor ②, or a combination of both.

You can even adjust the amount of air coming from the top outlet ③ vs. the two side outlets ④, 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.



# Heavy-duty respiratory protection

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.

Designed for heavy-duty, high-amperage welding and grinding, the G5-01 welding helmet connects to the heavy-duty 3M™ Adflo™ 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™ Adflo™ 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.

Technical Data	Heavy-Duty 3M™ Adflo™ Powered Air Respirator
Standards Compliance Respiratory Protection	Conforms to AS/NZS1716
Required Minimum Protection Factor (RMPF) <sup>1)</sup>	50
Airflow Standard Airflow Plus	170 litres/minute 200 litres/minute
Battery Operating Hours	12 hours
Charging time	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.	

## 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).

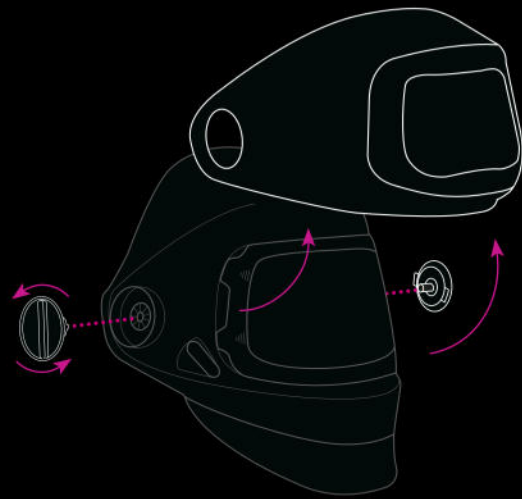
For a closer look at the dangers of welding fume and a strategic approach that can help to reduce exposure, visit [www.awsi.com.au](http://www.awsi.com.au) and download our **Welding Fume White Paper**.

# 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.







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™ Speedglas™ 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™ Speedglas™ True-View Technology	Yes
3M™ Speedglas™ 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 - 10 (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.



# Ordering Information

Order using the part numbers below



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



# Increase your comfort

Configure your  
3M™ Speedglas™ Welding Helmet  
G5-01 to meet your individual  
preferences and application needs



83 72 42  
83 75 42



83 71 10



83 71 20



95 40 15



83 40 18



16 90 21



16 90 22



16 90 43



16 90 20



16 90 41



16 90 42



16 92 05



16 92 10



16 92 11

16 92 00

16 90 35



16 90 30



16 91 00

Part No	Description
16 90 20	Head Protection Fabric (Small)
16 90 21	Head Protection High Vis
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

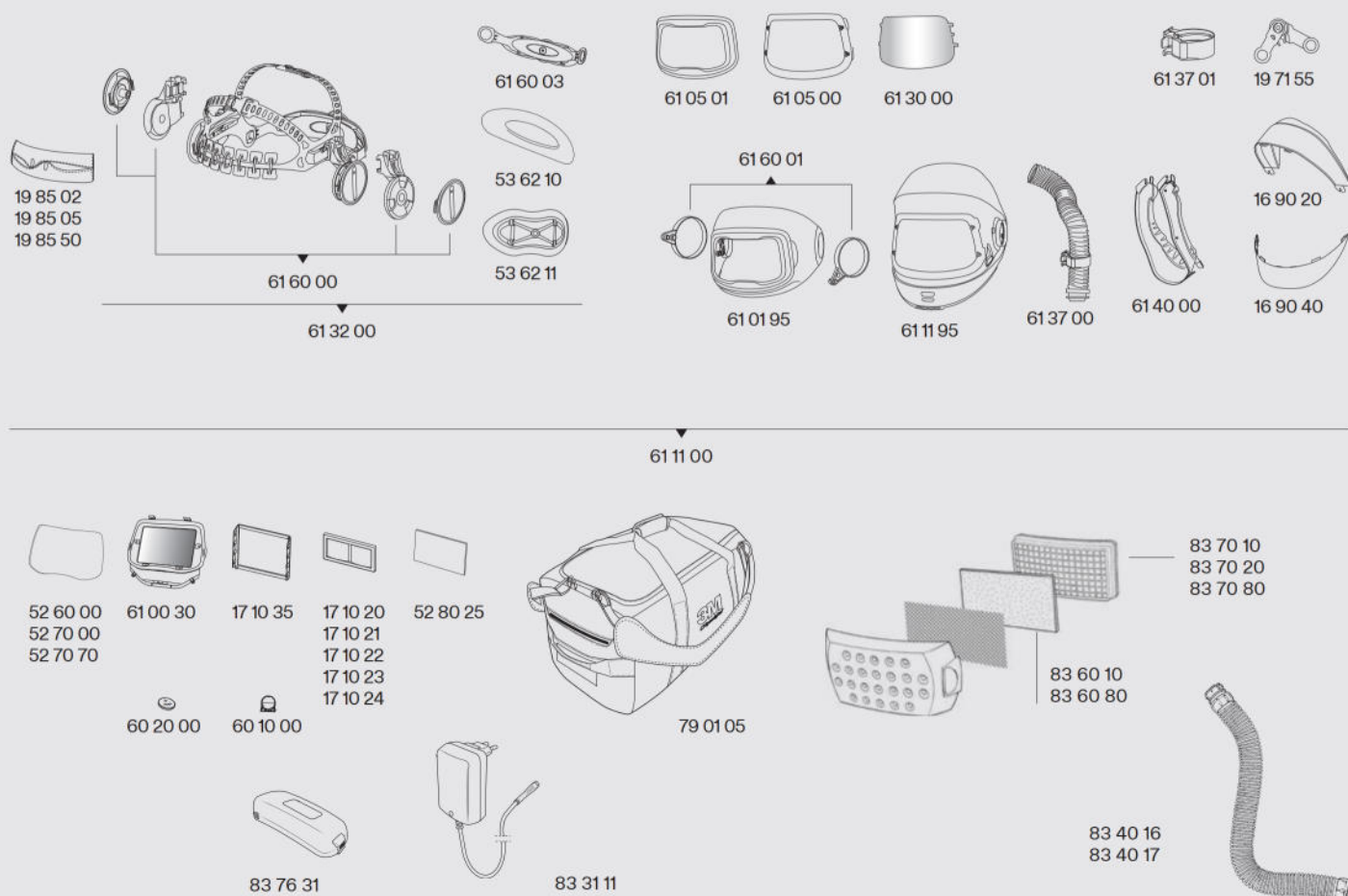
Part No	Description
83 40 18	Tube Breathing Cover Flame Resistant Adflo (Recommended when using Task Light)
83 71 10	Filter Odour Adflo
83 71 20	Filter Odour Replacement Pad Adflo
83 72 42	Filter Nuis Level Organic Vapour/Acid Gas Adflo
83 75 42	Filter Gas A1 Adflo
95 40 15	Backpack Adflo



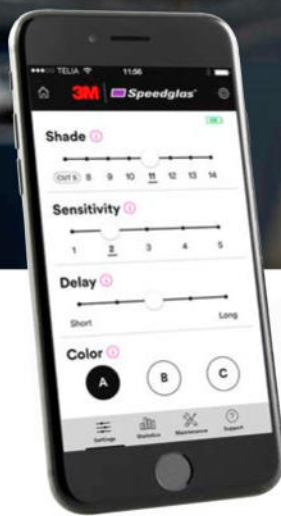
Build your own customised 3M Speedglas G5-01 Welding Helmet online by selecting the configuration options that suit you best



## 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 G5-01 (Small)	83 31 11	Charger Battery Li-ion Adflo
16 90 40	Neck Protection Rigid			83 40 16	Tube Breathing Self Adjusting QRS Adflo
17 10 20	Magnifying Lens 1.0X	53 62 11	Head Harness Back Cushion G5-01 (Large)	83 40 17	Tube Breathing Heavy Duty Rubber QRS Adflo
17 10 21	Magnifying Lens 1.5X				
17 10 22	Magnifying Lens 2.0X	60 10 00	Battery Holder	83 60 10	Pre-Filter Adflo Pk=5
17 10 23	Magnifying Lens 2.5X	60 20 00	Battery CR2450	83 60 80	Pre-Filter Adflo Pk=80
17 10 24	Magnifying Lens 3.0X	61 00 30	Speedglas Welding Lens G5-01VC	83 70 10	Filter Particle PSL Adflo
17 10 35	Magnifying Lens Holder			83 70 20	Filter Particle PSL Adflo Pk=20
19 71 55	Hinge Mechanism Pk=2	61 01 95	Outer Shield	83 70 80	Filter Particle PSL Adflo Pk=80
19 85 02	Sweatband G5-01 Pk=2	61 05 00	Front Cover for Inner Visor	83 76 31	Battery Heavy Duty Li-ion Adflo
19 85 05	Sweatband G5-01 Pk=5	61 05 01	Front Cover for Flip-up	83 76 31C	Upgrade Kit Heavy Duty Li-ion Battery & Charger
19 85 50	Sweatband G5-01 Pk=50	61 11 00	Welding Helmet G5-01, Exc Welding Filter		
52 60 00	Lens Cover Outer Standard Pk=10				
52 70 00	Lens Cover Outer Hard Coated Pk=10	61 11 95	Inner Shield with Airduct & Airflow Controls , Inc Visor Frame		
52 70 70	Lens Cover Outer High Heat Pk=10	61 30 00	Visor Plate Anti-Fog + Hard 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 Rings for Outer Shield		
		61 60 03	Head Harness Back Part G5-01		
		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 ten 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



ABN 21 060 672 979

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*We deliver on time ... EVERYTIME*

We are an Australian locally owned family business



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Welding Safety