



 **Speedglas™**

Welding Safety

**NEW IN 2022**

**3M™  
Speedglas™  
Welding  
Helmet  
G5-01 TW**



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 Series is created to be adaptable to an individual's needs and situation.



### Speedglas True-View:

View your work with industry leading optics and a more natural light state, see page 4.

### Configure your cover:

Customise your protection against radiation, sparks and spatter with expanded coverage options, see page 9.

### Customise your comfort:

Take complete control over the direction and movement of airflow within your welding helmet, see pages 6-8.

### Control your lighting:

Light up your workspace with a new helmet-mounted task light specifically designed for welding, see page 7.





Speedglas True-View

# A more natural light state

The 3M™ Speedglas™ Auto-Darkening Welding Helmet G5-01 TW offers 3M™ Speedglas™ True-View Technology for more realistic colours, contrast, and control.

## Speedglas™ welding lens G5-01 TW

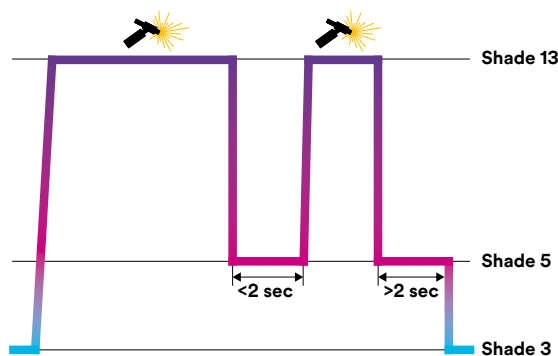


- True-View technology.
- Shade 5 (cut) / 8-13
- Tack Welding Mode (see below)

## Smoother dark-light transition

The G5-01TW is designed to minimise eye strain when switching from the dark state to the light state, by using an intermediate shade (see below).

For technical specifications see page 10



See it in action via this QR code.

## When tack welding...

Human eyes aren't designed for handling rapid transitions from dark to light to dark again – which describes tack welding perfectly! The G5-01 TW welding lens uses an intermediate shade 5 light state to help minimise eye strain during extended tack welding applications. If an arc is not struck within 2 seconds the welding lens will switch back to its TrueView light state (shade 3).

# Heavy-duty respiratory protection

Designed for heavy-duty, high-amperage welding and grinding, the G5-01 welding helmet connects to the heavy-duty 3M™ Adflo™ Powered Air Purifying Respirator (PAPR) to provide at least 50 times cleaner air than the welder would otherwise be breathing unprotected (RMPF = 50).

Since its launch, the award winning Adflo™ PAPR has become synonymous with welders' respiratory protection.

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



## 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 to reducing exposure, visit [www.awsi.com.au](http://www.awsi.com.au) and download our **Practical Guide to Welding Fume Control**.

Technical Data	Heavy-Duty 3M™ Adflo™ Powered Air Respirator
Approvals 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.

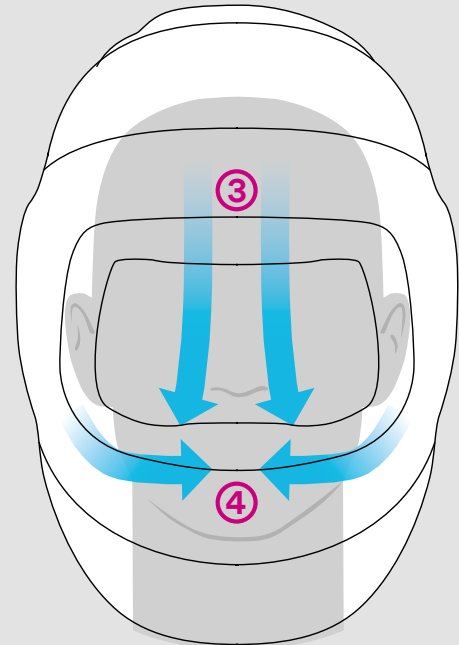
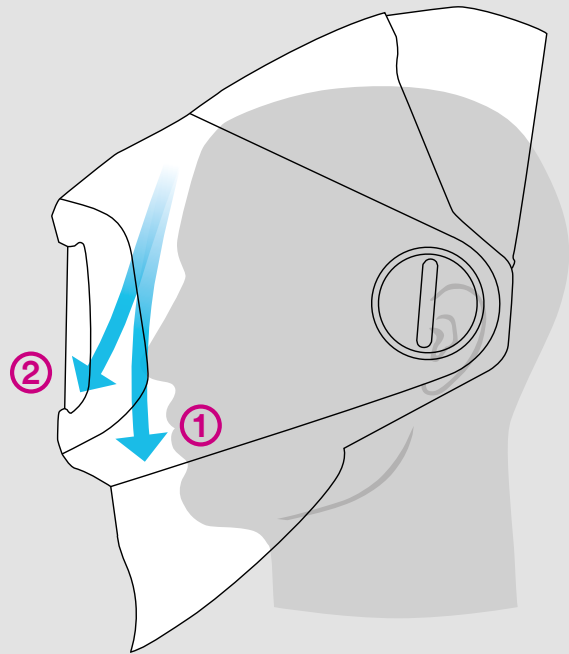
2) Heavy duty battery will be 80% charged (9.6 hours run time) in approximately one hour.

# 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.



Here's a video showing airflow adjustment in the Speedglas G5-01!



## 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.



# 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



# 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.

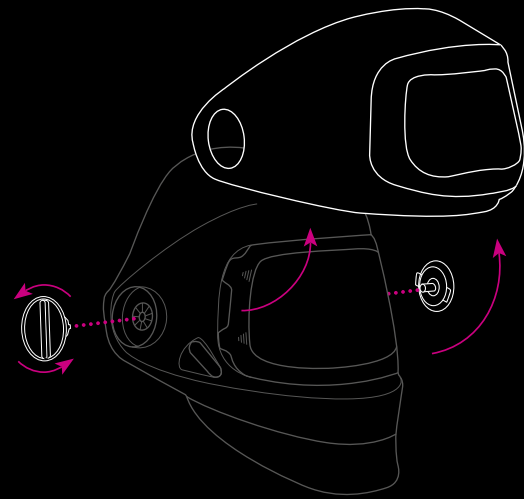


# A slim design offers increased coverage

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.





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 TW	G5-01 TW
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
Bluetooth enabled	Yes
Battery lifetime	1500 hours
Classification	1/1/1/1
Dark state	Shade 8-13
Cut mode	Yes shade 5
Light state	Shade 3 with True-View Technology
UV/IR Protection	Shade 13 (permanent)
Auto ON	Yes
Switching time, light -dark	0.1 ms (+23° C)
Memory modes	Yes - 4 (via mobile device app)
Delay (switching time, dark-light)	50 – 1300 ms
Two step recovery	Yes (shade 5)
Number of sensors (arc detection)	4
<b>Australian and New Zealand Standards Compliance (AS/NZS)</b> Eye protection Face protection Powered Air Respiratory Protection Supplied Air Respiratory Protection	AS/NZS1338.1 AS/NZS1337.1 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.



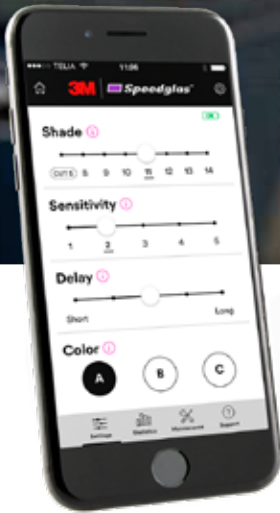
	<b>3M™ Speedglas™ Welding Helmet G5-01 TW</b>
<b>Complete powered air system</b>	Helmet G5-01 TW with welding lens and heavy duty Adflo respirator. <b>Part No 61 78 20</b>
<b>Upgrade your welding helmet</b>	Already have an Adflo PAPR and want to upgrade your helmet and lens? Upgrade Kit: Helmet G5-01 TW with welding lens (only) <b>Part No 61 11 20</b>
<b>With supplied air regulator</b>	Helmet G5-01 TW with welding lens and V-500E supplied air regulator. <b>Part No 61 88 20</b>

## More Information:

The 3M Speedglas G5-01 TW is a feature-packed, upgraded version of the 3M Speedglas 9100 FX Air, with a stack of new technology. Below is a summary of what the G5-01 TW can offer over and above the 9100 FX Air:

Feature	G5-01 TW
Superior optics	Yes (1/1/1/1)
Grinding visor viewing area	15% larger (170 × 104mm)
Tack welding mode	Yes
Heavy duty battery	Battery run time increased up to 50%
Climate control	Yes
Optional task light	Yes
Removable visor	Reduces weight by 35%
Bluetooth connectivity	Yes
Improved comfort & ergonomics	Yes
Configurable extra-protection (optional)	Yes





## 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

 [facebook.com/awsspeedglas](https://facebook.com/awsspeedglas)

 [Instagram.com/3MSpeedglas](https://Instagram.com/3MSpeedglas)

 [youtube.com/awsspeedglas](https://youtube.com/awsspeedglas)

Authorised Wholesaler



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Welding Safety



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