



G5-01

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Speedglas Heavy-Duty
Welding Helmet



 **Speedglas™**
Welding Safety

Adjust your welding helmet not yourself

Based on extensive input from welders working at high amperages that 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.



Protection against radiation, sparks and spatter, from a high-coverage welding helmet design that also offers expanded coverage options. See pages 8-10.

View your work with 3M™ Speedglas™ Natural Colour Technology – now available with variable colour option in the dark state. See pages 4-5.

Effective respiratory protection, offering the highest safety class for powered air (TH3) systems. See page 7.

No compromises on comfort! Individualise your helmet comfort with different accessory configurations, while you use the new helmet controls to adjust the respiratory airflow to your preferences, see page 6.



Light state 3

A more natural light state

There are two options of 3M™ Speedglas™ Auto-Darkening Filter Series G5-01 – both offering the popular 3M™ Speedglas™ Natural Colour Technology with great clarity before, during and after welding.

Smoother dark-light filter transition

Both G5-01 filters are also designed to minimise eye strain when switching from dark state to light state, by using an intermediate shade (5 or 7 depending on filter model).

Speedglas welding filter G5-01VC



- Adjustable dark shades 5 (cut) and 8 to 14.
- Variable colour technology

Speedglas welding filter G5-01TW

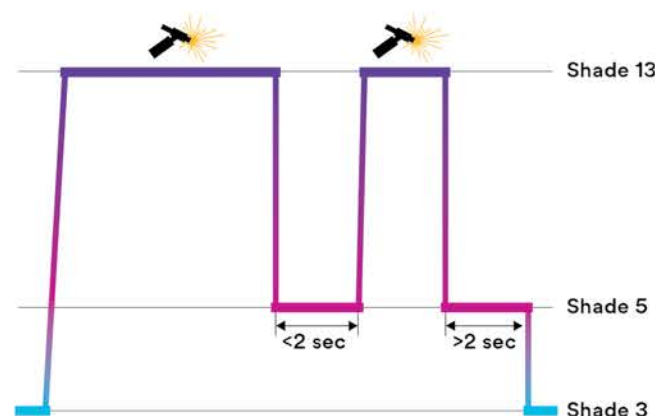


- Adjustable dark shades 5 (cut) and 8 to 13.
- Tack Welding Mode

For technical specification see page 12

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 G5-01TW welding filter uses an intermediate shade 5 light state to help minimize eye strain during extended tack welding applications. If an arc is not struck within 2 seconds the welding filter will switch back to its normal light state (shade 3).



Dark state 8 at variable colour level A



Dark state 8 at variable colour level B



Dark state 8 at variable colour level C

3M™ Speedglas™ Welding Filter G5-01VC

Which colour tone works best for you?

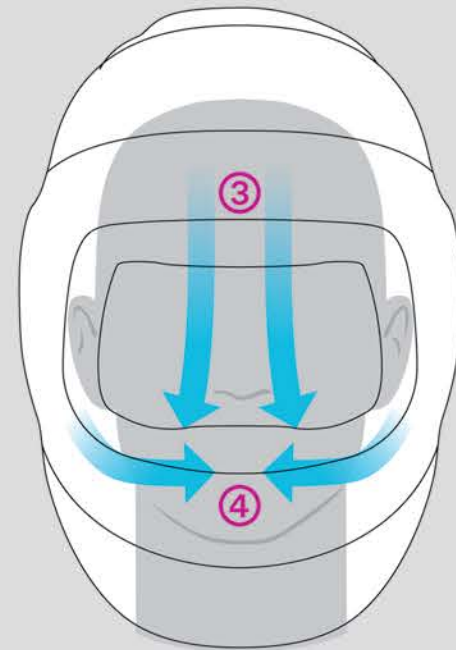
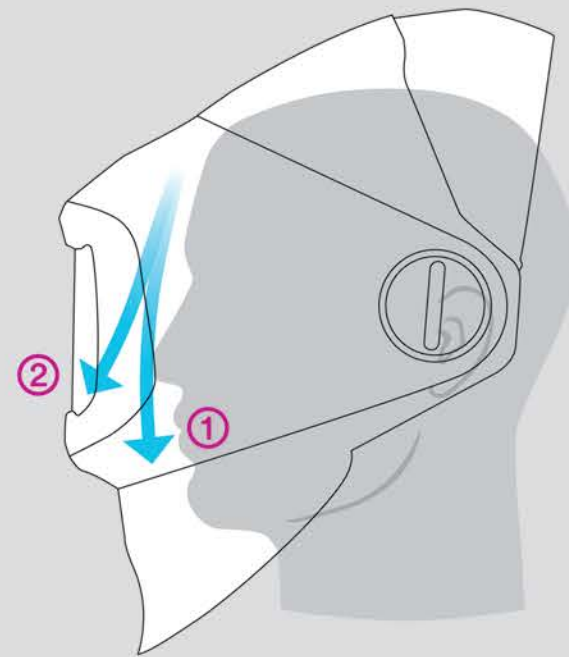
To provide even better view and control of your weld puddle we now introduce the 3M™ Speedglas™ Variable Colour Technology: you get to choose between natural (A), cool (B) or warm (C) tones for your dark state. You determine which colour tone provides the best viewing contrast for your welds, and the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

Take control of your 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 some 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 – and continuously maintaining your eye, face and respiratory protection.



Stay protected

This flip-up functionality allows you to seamlessly switch between welding and grinding tasks while maintaining powered air respiratory protection. The clear visor also allows you to set-up, inspect and move around the workplace without the need to remove the face protection or break the positive pressure respiratory seal.



A system for many needs

Designed for heavy-duty, high-amperage welding and grinding, the G5-01 welding helmet connects to the 3M™ Adflo™ Powered Air Respirator to provide TH3- rated respiratory protection (APF 4'0).

The robust Adflo respirator provides all of the features you would expect in a premium system, including easy-to-use functionality.

For conditions where supplied air is required we can offer the 3M™ Versaflo™ Series Regulators.

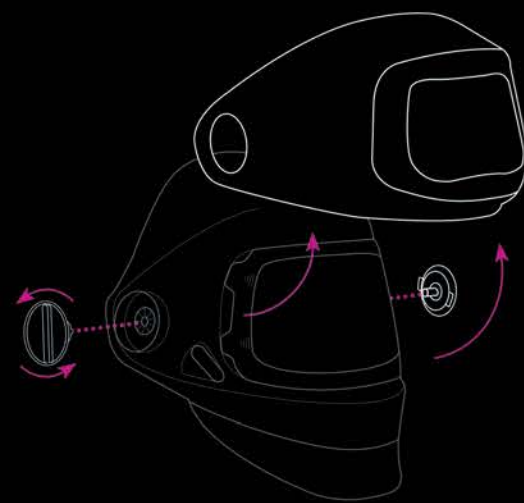


Helmet viewed from below

An all-new face seal features a locking toggle designed for fast, secure adjustments. Two new tabs make it easier to lift the seal over your glasses. And installation channels on the helmet speed the removal and replacement of the seal.

Designed to be slim,
without compromising
on heavy-duty coverage

The Speedglas welding helmet G5-01 is designed for rough conditions.



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 up to 36%.



Easy to access and use controls: all adjustable functions are imprinted 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 of 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. Also features a rotation stopper, designed to simplify donning of the helmet.

② Adjustment options

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

③ Extra-large back pad

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



Highly configurable coverage options

With a welding helmet that not only provides the right level of protection, but also increases the comfort of users in heavy-duty environments, we provide a number configurable options, so the user can optimise the helmet to individual needs and preferences.



Helmet in standard configuration with rigid neck protection and the smaller, fabric head protection.

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, replace the rigid neck protection with, for example, 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 Specification



| 3M™ Speedglas™ Auto-darkening Welding Filter Series G5-01 | G5-01TW | G5-01VC |
|--|----------------------------|----------------------|
| MMAW (Electrode) | ✓ | |
| MIG/MAG | ✓ | |
| TIG (>20A) | ✓ | |
| TIG (1A-20A) | ✓ | |
| Plasma (welding and cutting) | ✓ | |
| Risk for hidden arc | ✓ | |
| Tack welding | ✓ | |
| Grinding | ✓ | |
| Viewing area (welding filter) | 73 × 109 mm | |
| Viewing area (grinding visor) | 170 × 104 mm | |
| 3M™ Speedglas™ Natural Colour Technology | Yes | |
| Variable colour modes (A-B-C) | No | Yes |
| Bluetooth enabled | Yes | |
| Battery lifetime | 1500 hours | |
| Classification | 1/1/1/1 | 1/1/1/2 |
| Dark state | Shade 8-13 | Shade 8-14 |
| CUT mode | Yes shade 5 | |
| Tack welding mode | Yes | No |
| Light state | Shade 3 | |
| UV/IR Protection | Shade 13 (permanent) | Shade 14 (permanent) |
| Auto ON | Yes | |
| Switching time, light -dark | 0.1 ms (+23° C) | |
| Memory mode | Yes, via mobile device app | |
| Delay (switching time, dark-light) | 50 -1300 ms | |
| Two step recovery | Yes (shade 5) | Yes (shade 7) |
| Number of sensors (arc detection) | 4 | |
| Approvals Eye and Face protection | | |
| Welding helmet | EN175:B | |
| Welding filter | EN379 | |
| Protection plates | EN166:B | |
| Visor plate | EN166:B | |
| Approval Respiratory Protection / ADF | | |
| 3M™ Adflo™ Powered Air Respirator | EN12941 (TH3) / APF 40 | |
| 3M™ Versaflo™ Supplied Air Regulators V-100E, V-200E, V-500E | EN14594 (3B) / APF 20 | |

A new system or an upgrade?

1 Keep your Adflo PAPR and Upgrade Your Head-Top Only

The most economical way to upgrade to the new 3M Speedglas G5-01 Welding Helmet is by keeping your existing Adflo PAPR and simply **upgrade your head-top only**. If you would like to take advantage of the configurable task light then we would, however, recommend that you purchase a heavy-duty battery, as the task light draws its power from the Adflo battery.

2 Upgrade Your Complete Welding System

The second option is to upgrade your **complete kit**. The 3M Speedglas G5-01 comes equipped with an Adflo PAPR (including: Adflo power respirator, belt, breathing tube, heavy-duty battery and charger), together with your G5-01 helmet and preferred welding lens (VC or TW).



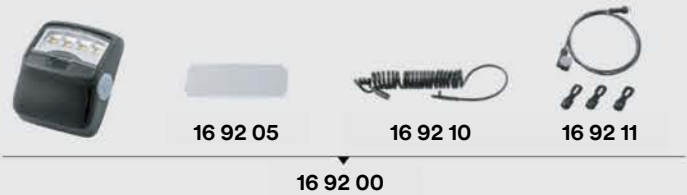
When you order a complete system, it comes with the new Speedglas storage bag. Featuring a fast, double-zipper opening top and large carry handles, the bag keeps your gear protected and clean when not in use.



For some businesses looking to buy the G5-01 for new employees, such purchases may be regarded as ‘unfair’ - particularly by those within the company who are currently using an older welding system. With this in mind, it may be appropriate to **reward** longer serving employees with the new G5-01 and offer their older system in a ‘hand-me-down’ manner to the most recent welders within the organisation.

Increase your comfort

We offer numerous accessories so you can configure your 3M™ Speedglas™ Welding Helmet G5-01 to meet your individual preferences and application needs.



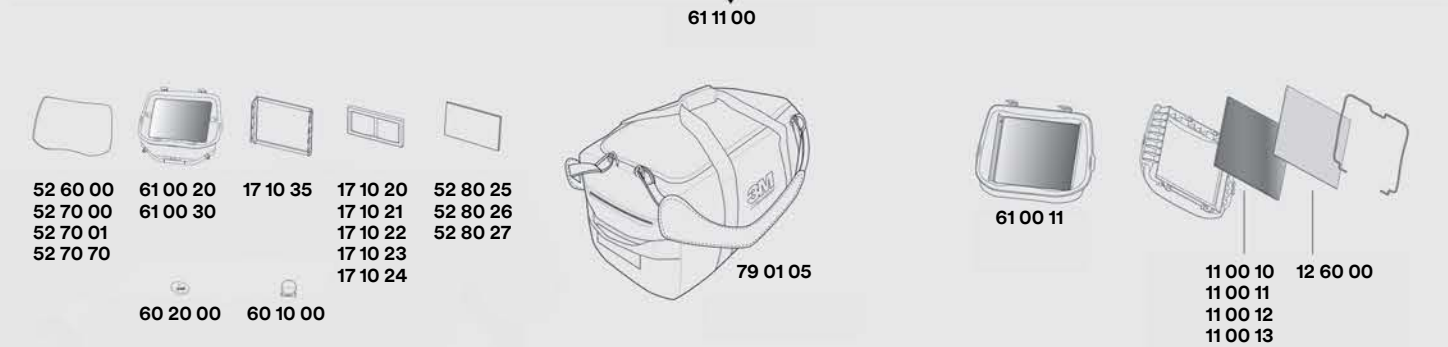
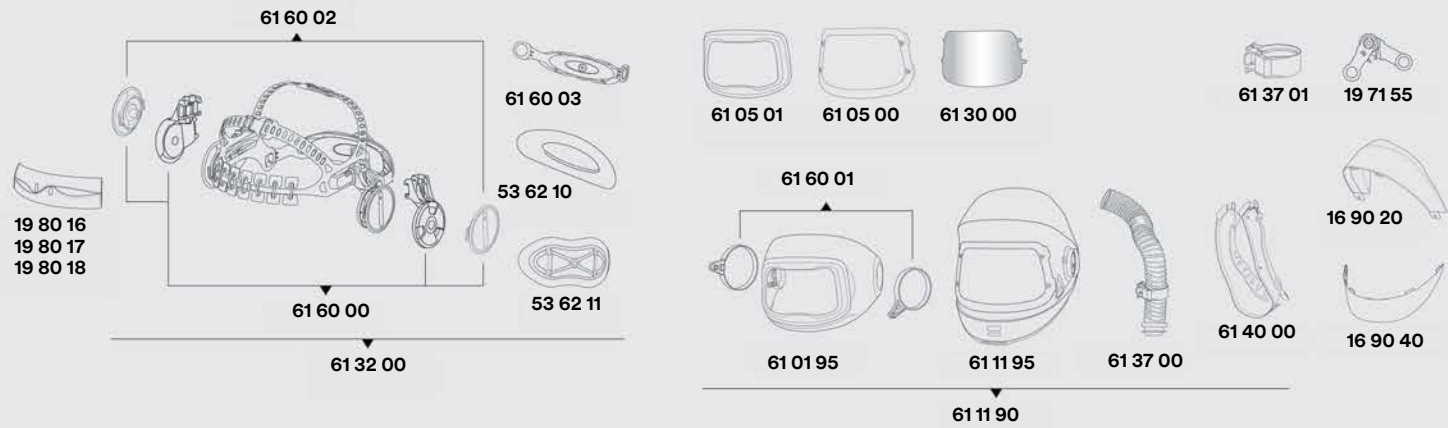
| Part No | Description | Part No | Description |
|----------|--|----------|---|
| 16 90 20 | Head protection in fabric | 83 40 18 | Flame resistant breathing tube cover (recommended when using the task light). |
| 16 90 21 | Head protection fluorescent yellow | 83 50 20 | Braces for respirator |
| 16 90 22 | Head protection in leather | 83 71 10 | Adflo odour filter |
| 16 90 23 | Head protection in fabric (large) | 83 71 20 | Odour filter pad |
| 16 90 24 | Scrape guard (not shown) | 83 72 42 | Adflo gas filter A1B1E1 |
| 16 90 30 | Shroud | 83 75 42 | Adflo gas filter A2 |
| 16 90 35 | Extended cover kit (shroud and large head cover in fabric) | BPK-01 | Back pack for respirator |
| 16 90 41 | Neck protection in fabric (small) | | |
| 16 90 42 | Neck protection in fabric (large) | | |
| 16 90 43 | Neck protection in leather | | |
| 16 92 00 | Task light, incl mounting parts and cables | | |
| 16 92 05 | Protection plate for task light, pkg. of 5 | | |
| 16 92 10 | Long power cable for task light | | |
| 16 92 11 | Short power cable for task light | | |
| 16 92 23 | Pouch with Adflo battery, for task light when using supplied air regulator (not shown) | | |

3M™ Versaflo™ Supplied Air Regulators



V-100E Air cooling regulator
V-200E Air heating regulator
V-500E Flow controlled regulator

Spare parts and consumables



| Part No | Description | Part No | Description | Part No | Description |
|----------|---|----------|---|----------|--|
| 11 00 10 | Passive welding filter lens shade 10 (90×110) | 52 70 01 | Outer protection plate (scratch +), pkg of 10 | 61 30 00 | Visor plate, anti-fog and hardcoated, pkg. of 5 |
| 11 00 11 | Passive welding filter lens shade 11 (90×110) | 52 70 70 | Outer protection plate (heat), pkg of 10 | 61 32 00 | Headband with assembly parts |
| 11 00 12 | Passive welding filter lens shade 12 (90×110) | 52 80 25 | Inner cover plate, pkg of 5 | 61 37 00 | Air duct breathing tube (short) incl. holder |
| 11 00 13 | Passive welding filter lens shade 13 (90×110) | 53 62 10 | Cushion part for headband G5-01 | 61 37 01 | Holder for breathing tube |
| 12 60 00 | Inner cover plate for passive filter | 53 62 11 | Large head rest | 61 40 00 | Face seal |
| 16 90 20 | Head protection in fabric (small) | 60 10 00 | Battery holder | 61 60 00 | Pivot and sliding mechanism, including pivot knobs |
| 16 90 40 | Neck protection rigid | 60 20 00 | Battery CR2450 | 61 60 01 | Pivot rings for outer shield |
| 17 10 20 | Magnifying lens 1.0X | 61 00 11 | Speedglas passive welding filter kit G5-01 (shade 11) | 61 60 02 | Pivot knobs |
| 17 10 21 | Magnifying lens 1.5X | 61 00 20 | Speedglas welding filter G5-01TW | 61 60 03 | Headband back part |
| 17 10 22 | Magnifying lens 2.0X | 61 00 30 | Speedglas welding filter G5-01VC | 61 78 00 | Helmet G5-01, without welding filter, with 3M™ Adflo™ Powered Air Respirator |
| 17 10 23 | Magnifying lens 2.5X | 61 01 95 | Outer shield | 61 78 09 | Helmet G5-01, without welding filter, with 3M™ Adflo™ Powered Air Respirator and consumable starter kit |
| 17 10 24 | Magnifying lens 3.0X | 61 05 00 | Front cover for inner visor | 79 01 05 | Carry Bag |
| 17 10 35 | Magnifying lens holder | 61 05 01 | Front cover for flip-up | 79 20 00 | Consumable starter kit G5-01, includes 3 different sweatbands, face seal, visor plate, inner and outer cover plates. |
| 19 71 55 | Hinge mechanism, 1 pair | 61 11 00 | Welding helmet G5-01, without welding filter | | |
| 19 80 16 | Sweatband (towelling), pkg of 3 | 61 11 90 | Welding helmet G5-01, without welding filter, without neck or head protection | | |
| 19 80 17 | Sweatband (fleecy cotton), pkg of 3 | 61 11 95 | Inner shield with air duct and airflow controls (including visor frame) | | |
| 19 80 18 | Sweatband (leather) | | | | |
| 52 60 00 | Outer protection plate (standard), pkg of 10 | | | | |
| 52 70 00 | Outer protection plate (scratch), pkg of 10 | | | | |



Speedglas™
Welding Safety



3M Connected Equipment App

- Opt-in by securely pairing your smartphone to your G5-01 welding filter using the 3M Connected Equipment App
- Program up to ten memory modes (settings for dark shades, sensitivity, delay etc) with your phone
- Easily record your welding helmet maintenance log to the App
- Instantly know statistics, including:
when your ADF 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 Parts List



For more information on the G5-01 please speak
to your **Craigmore Sales Representative**
or call **028 3833 2888**



For informational videos on the G5-01, please
scan the QR code with your Smart Phone