



3M™ Speedglas™ Welding Helmet G5-03 E

Product Description



- Additional protective accessories (optional)
- Suitable for grinding and cutting
- Task light as an accessory, powered by a separate head band mounted battery
- Lightweight and well balanced
- Slim and smooth with no protruding parts

Applications

This product helps protect the wearer's eyes and face from sparks, spatter, harmful ultraviolet radiation (UV) and infrared radiation (IR) resulting from certain arc gas welding processes. The Speedglas welding helmet G5-03E is designed for:

- Most welding processes, such as: MMA (Stick), MIG/MAG, TIG, Low amp TIG
- Cutting
- Grinding

Approvals/Standards

- ANSI / ISEA Z87.1-2020, American National Standard for Occupational and Educational Personal Eye and Face Protection Devices
- CSA Z94.3-2020 National Standard of Canada, Eye and Face Protectors
- Manufacturer: 3M Svenska AB, Ernst Hedlunds väg 35, 785 30 Gagnef, Sweden

	= Auto darkening welding filters shall be disposed of as electrical and electronic waste
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Limitations of Use

1. **Severe burn injuries may result** if this welding helmet is used for heavy-duty overhead welding applications where there is a potential for falling molten metal.
2. This product is not a respirator. Welding may produce high levels of welding fume or other airborne contaminants which may exceed the Occupational Exposure Limit (OEL). As a result, users and their employer must determine the expected hazards, and if needed select appropriate respiratory protection. Properly selected, used, and maintained respirators in a full respiratory protection program help protect against certain airborne contaminants by reducing airborne concentrations in the wearer's breathing zone below the OEL. Failure to use respirators or misuse of respirators **may result in overexposure to contaminants and lead to sickness or death.**
3. The 3M™ Speedglas™ ADF G5NC, G5TW, and G5VC are not suitable for laser welding or welding processes that require filters greater than Shade 12, 13, or 14, respectively. Use of this product for these applications may result in permanent eye injury and vision loss.
4. Only operate the welding helmet system at temperatures between 23°F (−5°C) and 131°F (+55°C).
5. Do not use the welding helmet system in areas where contact with an open flame is possible.
6. The welding helmet is heat resistant but can catch fire or melt in contact with open flames or very hot surfaces. Keep the helmet clean to minimize this risk.
7. These products are not formulated with natural rubber latex.
8. Do not immerse in water or spray directly with liquids.
9. Carefully check that the product is complete, undamaged and correctly assembled. Any damaged or defective parts must be replaced before each use. Check for cracks and look for light leaks. This product meets the requirements of certain industrial eyewear standards. It does not provide complete head, eye, and face protection from significant impact and penetration and are not a substitute for good safety practices and engineering controls. **Misuse may result in serious bodily injury or death.** For correct use, consult your supervisor and *User Instructions* or contact 3M Technical Service in the U.S.A. at 1-800-243-4630. In Canada, call Technical Service at 1-800-267-4414.
10. When exposed to eye and face hazards, wear additional eye and/or face protectors appropriate to the hazard. ANSI Z87.1 – Occupational and Educational Eye and Face Protection, incorporated by reference in the OSHA Eye and Face Standard 29 CFR 1910.133, requires safety spectacles or goggles to be worn in conjunction with the welding helmet if the visor can be raised from the normal position during use. **Failure to do so may result in serious bodily injury or death.**

Materials

Helmet	Polyphthalamide (PPA)
Front frame	Polyphthalamide (PPA)
Head band	Polyamide PA, Polypropylene PP, Thermoplastic Elastomer TPE, Polyethylene PE

Technical Properties

Specification	Value
Weight welding helmet (excl. headband and welding filter)	7.8 oz, (220g)
Weight headband	3.9 oz, (110 g)
Head sizes	6 3/8 to 8 in ; 50-64cm

Specification	Value
Operating Conditions	-5 °C (23 °F) to +55 °C (131 °F), RH ≤ 90%, non-condensing conditions
Storage Conditions	-20 °C (-4 °F) to +55 °C (131 °F), RH ≤ 90%, non-condensing conditions
Short-term storage temperature conditions, non-operating <1 month	
Welding helmet	-30 °C (-22 °F) to +60 °C (140 °F), RH ≤ 90%, non-condensing conditions
Expected service life	5 years depending on conditions of use. The product may continue to be used providing all visual inspections and pre-use checks are passed

Assemblies, Accessories, and Spare Parts

3M™ Speedglas™ Complete System Assemblies	
09-0100-20	G5-03 E Helmet with filter G5NC
09-0100-10	G5-03 E Helmet with P10 passive lens
3M™ Speedglas™ Welding Helmet Shell (without Auto-Darkening Filter)	
09-0100-00	G5-03 E Helmet without filter
3M™ Speedglas™ Welding Filters	
46-0000-20	G5NC Welding ADF
46-0000-30TW	G5 Tack Welding ADF
46-0000-30VC	G5 Variable Color ADF
46-0000-P10	G5 Passive Filter Assembly, Shade 10
06-0005-P10	Passive Lens, Shade 10
06-0005-P11	Passive Lens, Shade 11
06-0005-P12	Passive Lens, Shade 12
06-0005-P13	Passive Lens, Shade 13
3M™ Speedglas™ Replacement Parts and Accessories	
06-0200-20	Inside Protection Plate, Standard, 5 EA/Bag (G5NC)
06-0200-21	Inside Protection Plate, Anti-fog 5 EA/Bag (G5NC)
06-0200-30	Inside Protection Plate, Standard, 5 EA/Bag (G5VC and G5TW)
06-0200-40	Inside Protection Plate, Anti-fog 5 EA/Bag (G5VC and G5TW)
126000	Inner cover plate for passive filter
06-0200-51	Outside Protection Plate, Standard, 10 EA/Bag
06-0200-51-B	Outside Protection Plate, Standard, 50 EA
06-0200-52	Outside Protection Plate, Anti-Scratch, 10 EA/Bag
06-0200-52-B	Outside Protection Plate, Anti-Scratch, 50 EA
06-0200-53	Outside Protection Plate, High Temp, 10 EA/Bag
06-0200-53-B	Outside Protection Plate, High Temp, 50 EA
46-0700-63	Front frame
06-0500-56	Magnification Plate 1.5x

06-0500-57	Magnification Plate 2.0x
06-0500-58	Magnification Plate 2.5x
06-0500-59	Magnification Plate 3.0x
06-0500-65	Speedglas™ Protective Bag
06-0700-83	Full Hood, FR
18-0099-68	Throat and Side Protectors in leather (3 parts)
06-0500-51	Large fabric head cover
05-0370-00	Battery Holder (G5NC)
04-0320-00	Battery CR2032 Lithium 3, pkg of 2 (G5NC)
44-0400-55	Battery Holder (G5VC and G5TW)
44-0320-00	Battery CR2450 (G5VC and G5TW)
08-0400-51	Headband with assembly parts and sweatband
08-0400-52	Assembly parts (pivots) for headband
07-0024-02	Sweatband, fleece, pkg of 2
46-0400-53	Standard Head Rest
46-0400-55	Large Head Rest
09-0300-52	Helmet shell G5-03E, no headband
3M™ Speedglas™ Task Light Parts and Accessories	
10-0500-01	G5 Task Light Kit
10-0500-03	G5 Task Light PELTOR™ Battery Holder
46-0500-04	G5 Task Light Protection Plate 5 /BAG
46-0500-06	G5 Replacement Task Light
ACK081B/1	PELTOR™ Rechargeable Battery
AL2AI/SP	PELTOR™ Charging Cable

Important Notice

The use of the 3M product described within this document assumes that the user has previous experience of this type of product and that it will be used by a competent professional. Before any use of this product, it is recommended to complete some trials to validate the performance of the product within its expected application.

All information and specification details contained within this document are inherent to this specific 3M product and would not be applied to other products or environment. Any action or usage of this product made in violation of this document is at the risk of the user.

Compliance to the information and specification relative to the 3M product contained within this document does not exempt the user from compliance with additional guidelines (safety rules, procedures). Compliance to operational requirements especially in respect to the environment and usage of tools with this product must be observed. The 3M group (which cannot verify or control those elements) would not be held responsible for the consequences of any violation of these rules which remain external to its decision and control.

Warranty conditions for 3M products are determined with the sales contract documents and with the mandatory and applicable clause, excluding any other warranty or compensation.



Personal Safety Division

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In Canada

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