Technical data sheet

Product: G5-02

Manufacturer: 3M DEUTSCHLAND GMBH

Product group: ARBEITSSCHUTZ

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3M™ SPEEDGLAS™ WELDING HELMET G5-02

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Speedglas™ Welding Safety

Technical Datasheet

3M™ Speedglas™ Welding Helmet G5-02

Product Description

Part no 62 11 20

- Curved ADF
- Light state shade 2,5
- Dark state 8-12
- 3M™ Speedglas™ Natural Colour Technology
- Wide view 150 x 76mm.
- Locked dark state 8-12
- Four photo sensors
- Bluetooth™ enabled ADF
- Automatic ON/OFF
- Slim welding helmet

Applications

The 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 G5-02 is designed for:

- Most welding processes, such as: MMA (Stick), MIG/MAG and optimized for TIG, Low amp TIG

Approvals

The PPE is CE marked and in conformity with the European PPE Regulation, directives and harmonized European Standards as listed below, which also contains information about the Notified Body that have issued the EU type-Examination certificate for the PPE (Module B) and when applicable, the Notified Body responsible for the surveillance of the quality system of the manufacturing of the PPE (Module D). The EU type-examination Certificates and Declaration of Conformity are available at www.3M.com/welding/certs.
3M™ Speedglas™ Welding Filter G5-02 meets a 3M Technical Specification based on EN379:2003+AI:2009 This Technical Specification deviates from EN 379 by replacing the requirement given in 4.3.3 Variations of luminous transmittance and 4.3.7 Angular dependence, with ISO/DIS 16321-2clause 4.5.4.4 Combined uniformity and angular dependence of luminous transmittance, that refers to a test method appropriate for curved auto darkening welding filters (ISO/DIS 18526-2 clause 17.7

EN 175:1997	Personal protection – Equipment for eye and face protection during welding and allied processes
EN 166:2001	Personal eye-protection – Specifications
AS/NZS 1337.1:2010	Personal eye protection Part 1: Eye and face protectors for occupational applications
(EU) 2016/425	PPE Regulation - Personal Protective Equipment
2014/30/EU	EMC Directive - Electromagnetic Compatibility
2011/65/EU	RoHS Directive - Restriction of the use of Hazardous Substances
2014/53/EU	RE Directive - Radio Equipment
Notified Body No. 0196 Module B	DIN CERTCO Gesellschaft fuer Konformitaetsbewertung mbH, Alboinstrasse 56, 12103 Berlin, Germany
BMD-350: IC approval 12208A-05 This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le onctionnement.	
Contains ANATEL approved module # 05905-18-11156	
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

Limitations of use

- Only use with original 3M spare parts and accessories listed in the reference leaflet and within the usage conditions given in the Technical Specification
- The use of substitute components, decals, paint or other modifications not specified in these user instructions might seriously impair protection and may invalidate claims under the warranty or cause the product to be noncompliant with protection classifications and approvals.
- Eye protectors worn over standard ophthalmic spectacles may transmit impacts thus creating a hazard to the wearer.
- Toughened mineral filter oculars shall only be used in conjunction with a suitable backing ocular.
- The Speedglas welding helmet is not designed for overhead welding/cutting operations when there is a risk of burns from falling molten metal.
- This welding helmet is not suitable for grinding operations.
- Should the product fail to switch to the dark state in response to an arc, stop welding immediately and inspect the welding filter as described in the instructions. Continued use of a welding filter that fails to switch to the dark state may cause temporary vision loss. If the problem cannot be identified and corrected, do not use the welding filter, contact your supervisor, distributor or 3M for assistance.
- Use of this product in applications outside its intended use, such as laser welding/cutting, may result in permanent eye injury and vision loss.
- Materials which may come into contact with the wearer's skin are not known to cause allergic reactions to the majority of individuals. These products do not contain components made from natural rubber latex.
- This product is not a respirator. Welding may produce high levels of welding fume or other airborne contaminants which may exceed the Workplace Exposure Limit (WEL). 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 WEL. Failure to use respirators or misuse of respirators may result in overexposure to contaminants and lead to sickness or death.

- Flashing light sources (i.e. flash tube strobe lights, safety warning lights, etc.) can trigger the welding filter to start blinking even though no welding is occurring. The blinking will occur whilst in light state, the dark state will remain unaffected. This interference can occur from long distances and/or from reflected light. Welding areas should be shielded from such interference.
- Cracked, pitted or scratched filter glass or protection plates may reduce vision and can seriously impair protection. All damaged components should be replaced immediately. Ensure that your welding filter is equipped with an outer/inner protection/cover plate.
- The welding helmet is heat resistant but can catch fire or melt in contact with open flames or very hot surfaces. Keep the welding helmet clean to minimize this risk.
- To avoid damage to the product do not use solvents or alcohol for cleaning or disinfection. Do not immerse in water or spray directly with liquids.
- The used battery/worn out product parts should be disposed of according to local regulations. The welding filter should be disposed of as electronic waste.

Materials

Welding helmet:	PPA
Head band	PA, PP, TPE
Welding filter:	PA, TPE, PC, Glass
Protection/cover plate:	PC
Front frame:	PC

Technical specifications

Speedglas G5-02	
Weight:	
Welding helmet:	233 g
Welding filter:	202 g
Head band:	100 g
Viewing area:	150 x 76 mm
UV/IR protection:	According to shade number 12 (permanent)
Light state:	Shade no 2,5
Dark state:	Shade no 8-12
Switching time light to dark:	0.1 ms (+23°C)
Opening time dark to light:	50 - 1000
Battery life:	1500 hours
Battery type:	1 x CR2450 (Lithium 3V)
Head sizes:	50-64 cm
Operating conditions:	-5°C to +55°C, RH ≤ 90%, non-condensing conditions.
Storage conditions Welding filter without batteries:	-30°C to +55°C, RH ≤ 90%, non-condensing conditions.
Storage conditions Lithium batteries:	-30°C to +60°C, RH ≤ 75%, non-condensing conditions
Extended period of storage Welding filter without batteries:	-20°C to +55°C, RH ≤ 90%, non-condensing conditions.
Extended period of storage Lithium batteries:	+10°C to +25°C, RH ≤ 60%, non-condensing conditions.
Expected service life:	5 years depending on conditions of use

Spare parts, accessories and consumable

13 01 00	3M cleaning wipe
16 40 05	Ear and neck protection in leather (3 parts)
16 90 05	Head protection in fabric
16 75 20	Sweatband, towelling, purple, pkg of 2
16 76 00	Sweatband, towelling, pkg of 20
16 80 00	Sweatband, leather
16 80 10	Sweatband, fleecy cotton, pkg of 2
16 80 12	Sweatband, fleecy cotton, short, pkg of 2
16 90 01	Neck protection
16 91 00	Hood protection black/grey
17 20 20	Magnifying lens x1.5
17 20 21	Magnifying lens x2.0
17 20 22	Magnifying lens x2.5
53 62 10	Cushion part for head band
53 62 11	Large head rest
60 10 00	Battery holder
60 20 00	Battery CR2450 Lithium 3V
62 00 20	Curved welding filter G5-02, incl inner and outer protection plates
62 11 20	Helmet G5-02 with welding filter, head band, cleaning wipe and bag
62 11 95	Helmet without welding filter, without head band, without front cover
62 20 00	Front cover
62 40 00	Inner protection plate, pkg of 2
62 60 00	Scratch resistant outer protection plate, pkg of 5
70 50 20	Head band with assembly parts and sweatband
70 60 30	Assembly parts (pivots) for head band
79 01 04	Helmet storage bag

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.

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