

3M™ Speedglas™ Welding Helmet 9002NC

Technical Data Sheet

Speedglas™



Product Description

- Natural Color Technology
- Easy to operate and maintain
- Slim design on helmet
- Low weighted (485 g)
- Exhalation vent
- Headband designed for high comfort
- Robust solution
- Suitable for grinding
- Same spares, consumables & accessories as previous 3M Speedglas 9000/9002 series welding helmets and welding filters
- Variable shades 3/8-12, w. shade plates 4/9-13 or 5/10-14



Applications

The product helps protect the wearer's eyes and face. It gives permanent protection from sparks/spatter, UV- and IR-radiation resulting from certain arc/gas welding processes (shade 12 equivalent regardless of whether the filter is in the light or dark state or whether the auto-darkening function is operational).

The 3M Speedglas welding helmet 9002NC is designed for most welding processes, such as:

- MMA (Stick)
- MIG/MAG
- TIG
- Low amp TIG

Approvals

The product has been shown to meet the Basic Safety Requirements under Article 10 of the European Directive 89/686/EEC and is thus CE marked. The product was examined at the design state by DIN Certco Prüf- und Zertifizierungszentrum (Notified body number 0196).

Standards

The product meets the performance requirements of the following European Standards

- EN 175 Eye and face protection during welding and allied processes:
9000 welding helmet - medium energy impact B
- EN 379 Eye protection, Automatic welding filters
9002NC welding filter – shade 3/8-12 optical classification 1/1/1/2

	3 / 8-12	3M	1 / 1 / 1 / 2	EN379	CE
Light shade	_____	_____	_____	_____	_____
Dark shade(s)	_____	_____	_____	_____	_____
Manufacturer identification	_____	_____	_____	_____	_____
Optical class	_____	_____	_____	_____	_____
Diffusion of light class	_____	_____	_____	_____	_____
Variations in Luminous transmittance class	_____	_____	_____	_____	_____
Angle dependency class	_____	_____	_____	_____	_____
Certification mark or number of standard	_____	_____	_____	_____	_____

EN 166 Eye and face protection

Outer protection plates - medium energy impact at extremes of temperatures (-5°C and +55°C) BT

Inner cover plates – increased robustness S



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

Limitations of use

- Only use with original 3M branded spare parts and accessories listed in the user instructions and within the usage conditions given in the technical specifications.
- 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.

- Use of this product in applications outside its intended use, such as laser welding/cutting, may result in permanent eye injury and vision loss.
- Severe burn injuries may result if these welding helmets are used for heavy-duty overhead welding applications where there is a potential for falling molten metal.
- 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.
- 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.
- Flashing light sources (i.e. flash tube strobe lights, safety warning lights, etc.) can trigger the welding filter causing it to flash even when no welding is occurring. This is inherent with all auto-darkening filter technology. This interference can occur from long distances and/or from reflected light. Welding areas must be shielded from such interference, or replace lights with an LED strobe light.

Materials

Shield:	PA
Front cover:	PA
Head band:	PA
Welding filter:	PA
Protection/cover plate:	PC

Technical specifications

Weight welding helmet:	235g
Weight welding filter:	160g
Weight headband:	90g
Viewing area:	54 x 107 mm
Light state:	Shade no 3
Dark state:	Shade no 8-12
UV/IR protection:	According to shade number 12 (permanent)

Switching time light to dark:	0.1 ms (+23°C)
Opening time dark to light (delay):	60-400 ms
Battery type:	2 x CR2032
Battery life:	2000 hours (approx.)
Operating temperature:	-5°C to +55°C
Head sizes:	50-64 cm

Spare parts, accessories and consumables

16 40 05	Ear and neck protection in leather
16 40 09	Head protection
16 75 20	Sweatband towelling, pkg of 2
16 76 00	Sweatband towelling, pkg of 20
16 80 00	Sweatband leather
16 80 10	Sweatband, fleecy cotton (long) pkg of 2
16 90 01	Neck protection
17 10 20	Magnifying lens 1.0
17 10 21	Magnifying lens 1.5
17 10 22	Magnifying lens 2.0
17 10 23	Magnifying lens 2.5
17 10 24	Magnifying lens 3.0
16 91 00	Hood
40 13 95	Speedglas welding helmet 9000 without side windows, without front cover, without headband, without welding filter
40 00 85	Speedglas welding filter 9002NC, variable shade 8-12
42 20 00	Battery Lithium 3V CR 2032 pkg of 2
42 60 00	Outer protection plate, standard, pkg of 10
42 70 00	Outer protection plate, scratch resistant, pkg of 10
42 70 01	Outer protection plate, heat resistant, pkg of 10
42 80 10	Inner cover plate (53x103 mm) pkg of 5
42 80 30	Inner cover plate (53x103 mm) +1 shade, pkg of 5
42 80 50	Inner cover plate (53x103 mm) +2 shade, pkg of 5
43 10 00	Battery cover, pkg of 2
43 20 02	Front cover
70 50 15	Headband with assembly parts
70 60 00	Assembly parts for headband

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.