



3M™ Speedglas™ Welding Filter 9100V, 9100X, 9100XX, and 9100XXi

Description

- Is designed to be used together with 3M™ Speedglas™ Welding Shield Series 9100.
- Is suitable for most welding applications up to Shade 13 in the dark state.
- Has permanent protection (Shade 13 equivalent) against harmful UV- and IR- radiation, regardless of whether the filter is in the light or dark state or whether the auto-darkening function is operational.
- Is easy to operate and maintain.
- Has seven different Shade Number settings in the dark state, split into two groups 5, 8 and 9-13.
- Has seven user selectable levels of detector sensitivity to ensure a reliable arc detection.
- Can be locked in a constant dark or light state.
- Has excellent visibility in light state, shade 3, for easy welding preparation and after treatment.
- Has three optical sensors.
- Multiple adjustments for highest comfort on helmet and headband.
- Solar panel power assistance (except 3M™ Speedglas™ Welding Filter 9100XX and 9100 XXi).
- External button to reach grinding mode (3M™ Speedglas™ Welding Filter 9100XXi).



Common Applications

When used with recommended filters, are designed for most welding processes such as:

- MMA
- MIG/MAG
- TIG
- Plasma welding
- Oxyacetylene welding/cutting
- Grinding applications

IMPORTANT NOTE

Always wear ANSI approved safety spectacles as primary eye protection. Welding helmets are considered secondary eye protection.

Approvals/Standards

- ANSI Z87.1

Equipment Markings

Additional Markings



Shall be disposed of as electrical and electronic waste



Read the instructions before use

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 non-compliant 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.
- 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.

Technical Specifications

Description	Value
Approximate Weight 3M™ Speedglas™ 9100V Welding Filter 3M™ Speedglas™ 9100X Welding Filter 3M™ Speedglas™ 9100XX Welding Filter 3M™ Speedglas™ 9100XXi Welding Filter	160 g (5.64 oz.) 180 g (6.53 oz.) 200g 200g
Viewing Area 3M™ Speedglas™ 9100V Welding Filter 3M™ Speedglas™ 9100X Welding Filter 3M™ Speedglas™ 9100XX Welding Filter 3M™ Speedglas™ 9100XXi Welding Filter	1.77 x 3.66 in (45 x 93 mm) 2.13 x 4.21 in (54 x 107 mm) 2.87 x 4.21 in (73 x 107 mm) 2.87 x 4.21 in (73 x 107 mm)
Switching Time (light-dark)	0.1 ms (+23° C)
UV/IR Protection	Shade 13 (permanent)
Light State	Shade 3
Dark State	Shade 5, 8–13
Fail/Safe State	Shade 5
Battery Type	Lithium 3V Type CR2032 (2)
Battery Lifetime 3M™ Speedglas™ 9100V Welding Filter 3M™ Speedglas™ 9100X Welding Filter 3M™ Speedglas™ 9100XX Welding Filter 3M™ Speedglas™ 9100XXi Welding Filter	2800 hours 2500 hours 2000 hours 1800 hours
Operating Temperature	23°F to 131°F (-5°C to +55°C)
Material Filter: Protection plate:	PA PC

Spare Parts and Accessories

Part Number	Description	Part Number	Description
Spare Parts			
60-0000-10	Speedglas auto-darkening welding filter 9100V 5, 8, 9-13	06-0200-52	Outer protection plate scratch resistant, pkg of 10
60-0000-20	Speedglas auto-darkening welding filter 9100X 5, 8, 9-13	06-0200-53	Outer protection plate heat resistant, pkg of 10
60-0000-30	Speedglas auto-darkening welding filter 9100XX 5, 8, 9-13	06-0200-10	Inner protection plate for 9100V filter, pkg of 5 (marked 117x 50)
60-0000-30i	Speedglas auto-darkening welding filter 9100XXi 5, 8, 9-13	06-0200-20	Inner protection plate for 9100X filter, pkg of 5 (marked 117x 61)
60-0000-30i-KIT	Speedglas welding filter and silver front 9100 XXi	06-0200-30	Inner protection plate for 9100XX/ 9100XXi filters, pkg of 5 (marked 117x 77)
06-0400-55	Battery holder for Speedglas welding filter series 9100 pkg of 2	06-300-55i	Speedglas silver front 9100XXi
06-0200-51	Outer protection plate standard, pkg of 10	04-0320-00	Battery, pkg of 2
Accessories and Consumables			
06-0500-56	Magnifying lens x1.5	06-0500-58	Magnifying lens x2.0
06-0500-57	Magnifying lens x1.5	06-0500-59	Magnifying lens x2.5

IMPORTANT NOTE

Before use, the wearer must read and understand the *User Instructions* provided as part of the product packaging.

Personal Safety Division

3M Center, Building 235-2W-70
St. Paul, MN 55144-1000

3M PSD products are
occupational use only.

In United States of America

Technical Service: 1-800-243-4630
Customer Service: 1-800-328-1667
3M.com/workersafety

In Canada

Technical Service: 1-800-267-4414
Customer Service: 1-800-364-3577
3M.ca/Safety

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