

Release 1, January 2018

# 3M™ Headgear L- Series SG

## Description

- Easy to operate and maintain.
- Wideview faceshield allows for excellent peripheral and downward vision.
- Select from a passive welding filter or from 3M™ Speedglas™ Welding Filter Series 9100 with superior optical performance for continuous viewing comfort.
- Supplied air systems allow workers to regulate the airflow, as well as cool or heat the air entering the headgear – ideal for extreme temperature working environments.
- L-705 SG: Hard hat with welding shield and wideview faceshield.
- L-905 SG: Welding helmet with welding shield and wideview faceshield.



### **Common Applications**

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

- MMA
- MIG/MAG
- TIG
- Plasma welding

## (i) IMPORTANT NOTE

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

## Approvals/Standards

- ANSI Z87.1
- ANSI Z89.1
- CSA Z94.1-92 (L-905 SG only)

### **Equipment Markings**

#### **Additional Markings**



Shall be disposed of as electrical and electronic waste



Read the instructions before use

# 3M Personal Safety Division

#### Limitations of Use

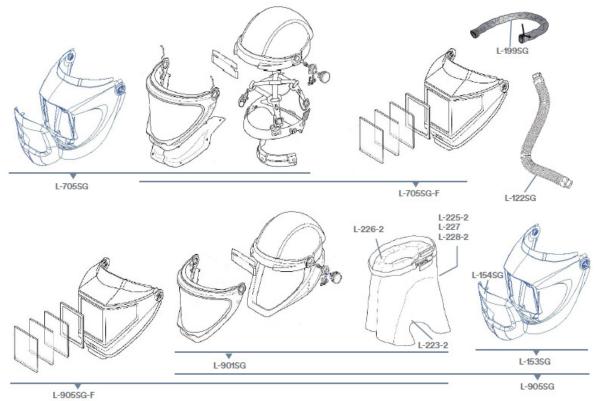
- Only use with original 3M branded spare parts and accessories listed in the user instructions and within the usage conditions given in the technical specifications.
- The use of substitute components, decals, paint or other modifications not specified in these user instructions might seriously impair 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.
- 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.

### **Technical Specifications**

Description	Value		
Viewing Area	3M™ Speedglas™ 9100V Welding Filter: 1.77 x 3.66 in (45 x 93 mm) 3M™ Speedglas™ 9100X Welding Filter: 2.13 x 4.21 in (54 x 107 mm) 3M™ Speedglas™ 9100XX Welding Filter: 2.87 x 4.21 in (73 x 107 mm) 3M™ Speedglas™ 9100XXi Welding Filter: 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, 9-13		
Fail/Safe State	Shade 5		
Battery Type	Lithium 3V Type CR2032 (2)		
Battery Lifetime	3M™ Speedglas™ 9100V Welding Filter: 2800 hours 3M™ Speedglas™ 9100X Welding Filter: 2500 hours 3M™ Speedglas™ 9100XX Welding Filter: 2000 hours 3M™ Speedglas™ 9100XXi Welding Filter: 1800 hours		
Operating Temperature	23°F to 131°F (-5°C to +55°C)		
Head Size	50 - 64 cm (6.25 - 8 in)		
Material Shield: Silver front frame: Headband: Faceseal:	PPA PA PA, PP, TPE, PE 50% Polyester, 50% Cotton		

# **Spare Parts and Accessories**

Part Number	Description	Part Number	Description		
Spare Parts					
34-0705-SGV	Hard Hat L-705SG wideview faceshield with Speedglas welding filter 9100V and Adflo PAPR with HE filter	34-0905-SGV	Helmet L-905SG wideview faceshield with Speedglas welding filter 9100V and Adflo PAPR with HE filter		
34-0705-SGX	Hard Hat L-705SG wideview faceshield with Speedglas welding filter 9100X and Adflo PAPR with HE filter	34-0905-SGX	Helmet L-905SG wideview faceshield with Speedglas welding filter 9100X and Adflo PAPR with HE filter		
34-0705-SGXX	Hard Hat L-705SG wideview faceshield with Speedglas welding filter 9100XX and Adflo PAPR with HE filter	34-0905-SGXX	Helmet L-905SG wideview faceshield with Speedglas welding filter 9100XX and Adflo PAPR with HE filter		



Accessories and Consumables				
L-122SG	Breathing tube	L-705SG	Hardhat with welding helmet and wideview faceshield, without welding filter	
L-153SG	Welding helmet kit	L-705SG-F	Hardat with welding helmet and wideview faceshield	
L-154SG	Silver front panel	L-901SG	Helmet with wideview faceshield	
L-199SG	Breathing tube cover, high temperature	L-905SG	Helmet with welding helmet and wideview faceshield, without welding filter	
L-223-2	Outer shroud standard	L-905SG-F	Helmet with welding helmet and wideview faceshield	
L-225-2	Outer shroud, flame retardant	15-0099-20	Adflo flow indicator rubber adapter for L-SG type systems (not shown)	
L-226-2	Inner shroud	15-0099-21	Adflo flow indicator for L-SG type systems (not shown)	
L-227	Outer shroud, flame retardant, leather	15-5401-02SG	Adflo PAPR assembly (not shown)	
L-228-2	Outer shroud, nylon			

# 3M Personal Safety Division



#### IMPORTANT NOTE

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

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

3M PSD products are occupational use only.

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 © 3M 2018. All rights reserved. 3M and Speedglas are trademarks of 3M Company and its affiliates. Used under license in Canada. All other trademarks are property of their respective owners. Please recycle. Release 1, January 2018

