

## 3M Welding PPE Presentation



# Product overview Welding Helmet Options

| Options         | 3M <sup>™</sup> Speedglas <sup>™</sup> Welding Helmet 9100 Series and 3M <sup>™</sup> Headgear L-Series SG | 3M <sup>™</sup> Speedglas <sup>™</sup> 3M <sup>™</sup> Speedglas <sup>™</sup> 3M <sup>™</sup> Welding<br>Welding Helmet 100 series Helmet 10<br>SL |
|-----------------|--|--|
| Welding Filters | 9100XXi 9100XX 9100X 9100V 9100 Passive  | SL 100V 100S-10 100S-11 10V  |
| Welding Helmets |  |  |

| Options                      | With Hard Hat (Non-Air) | With 3M™ Adflo™ Powered Air Purifying Respirator | With 3M™ Speedglas™ Fresh Air III<br>Supplied Air Regulator |
|------------------------------|-------------------------|--|---|
| Welding<br>Helmet<br>Systems |                         |  |   |

#### 3M<sup>™</sup> Headgear L-Series SG / L-705 SG

Hard hat with welding shield and wideview faceshield.

Continuous airflow reduces breathing resistance and helps provide respiratory protection without the need for a tight faceseal. No fit testing required.

Meets the requirements of ANSI Z87.1-2003 and ANSI Z89.1 – 2003, Type II Class G hard hats.

Can be worn with limited facial hair, prescription eyewear or safety glasses. **NOTE:** Do not wear if facial hair comes between the face and respirator face seal.

Select from a passive welding filter\* or from 3M™ Speedglas™ Welding Filter Series 9100 with superior optical performance for continuous viewing comfort.

Wideview faceshield allows for excellent peripheral and downward vision.

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.

\* For another passive option, use L-705SG-F headgear.

#### 3M<sup>™</sup> Headgear L-Series SG / L-905 SG

Welding helmet with welding shield and wideview faceshield

Continuous airflow reduces breathing resistance and helps provide respiratory protection without the need for a tight faceseal. No fit testing required.

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.

Can be worn with limited facial hair, prescription eyewear or safety glasses.

**NOTE:** May be used with facial hair and beards that do not extend into the neck collar.

Select from a passive welding filter\* or from 3M™ Speedglas™ Welding Filter Series 9100 with superior optical performance for continuous viewing comfort.

Wideview faceshield allows for excellent peripheral and downward vision.

Meets the requirements of ANSI Z87.1-2003 and ANSI Z89.1-2003, Type II Class G hard hats. Also meets CAN/CSA Z94.1-92.

\* For another passive option, use L-905SG-F headgear.

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### 3M<sup>™</sup> Headgear L-Series SG

| Welding filter options   | 9100XXi Filter  | 9100XX Filter               | 9100X Filter                | 9100V Filter               |  |
|--|---|-----------------------------|-----------------------------|----------------------------|--|
| Viewing area welding filter (approx.)  | 2.8 x 4.2 in. (72 x 107 mm)   | 2.8 x 4.2 in. (72 x 107 mm) | 2.1 x 4.2 in. (54 x 107 mm) | 1.8 x 3.7 in. (45 x 93 mm) |  |
| Battery lifetime (approx.)   | 1800 Hours  | 2000 hours                  | 2500 hours                  | 2800 hours                 |  |
| Solarcell  | NO  | NO YES                      |                             |                            |  |
| Hard hat options   | YES   | YES                         |                             |                            |  |
| Classification (perEN379)*   | 2.8 x 4.2 in. (72 x 107 mm)   | 1/1/1/2                     |                             |                            |  |
| Dark state   | Shade 5, 8, 9,-13   | Shade 5, 8, 9-13            |                             |                            |  |
| Light state  | Shade 3   | Shade 3                     |                             |                            |  |
| UV/IR Protection   | Shade 13 (permanent)  | Shade 13 (permanent)        |                             |                            |  |
| Auto ON  | YES   | YES NO                      |                             |                            |  |
| Switching time, light -dark (approx.)  | 0.1 ms (+23°C)  | 0.1 ms (+23°C)              |                             |                            |  |
| Delay: switching time, dark-light (approx.)  | dark-light 40-1 300 ms  |                             | 40-1 300 ms                 |                            |  |
| Side windows option YES  |   | NO                          |                             |                            |  |
| Exhaust vents  | N/A   | N/A                         |                             |                            |  |
| Number of sensors (arc detection)  | 3   |                             |                             |                            |  |
| Approvals Head, Eye and Face<br>protection<br>Welding helmet, Welding filter,<br>Protection plates<br>Hard Hat | ANSI Z87.1 – 2003 / CSA Z94.3<br>ANSI Z89.1-2003 Type II Class G; (L-905SG meets CAN/CSA Z94.1) |                             |                             |                            |  |
| Approval Respiratory Protection<br>Adflo Powered Air Purifying Respirator<br>Fresh-air III supplied air valve  | APF 25 (L-705 SG); APF 1000 (L-905 SG)<br>APF 25 (L-705 SG); APF 1000 (L-905 SG)                |                             |                             |                            |  |

<sup>\*</sup> Per European Standard EN 379, auto-darkening welding filters have a four-part classification: optical class / diffusion of light / variation on luminous transmittance / angle dependence.

Classifications range from 1 to 3, with 1 being the best.

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#### 3M<sup>™</sup> Headgear L-Series SG



L-125-2 Welding shroud, flame retardant



L-127 Welding shroud, leather



L-184 High temperature welding shield



**06-0500-56 – 06-0500-59**Magnification plates 1.5X, 2.0X, 2.5X and 3.0X



**35-5401-02SG** 3M™ Adflo™ Turbo Assembly



**35-3499-01**3M™ Adflo™ Turbo Assembly with High Altitude Compensation (comes with battery; no belt or breathing tube)



V-100 Vortex cooling assembly
V-200 Vortemp heating assembly
V-300 Air-regulating valve
V-400 Low pressure connector assembly



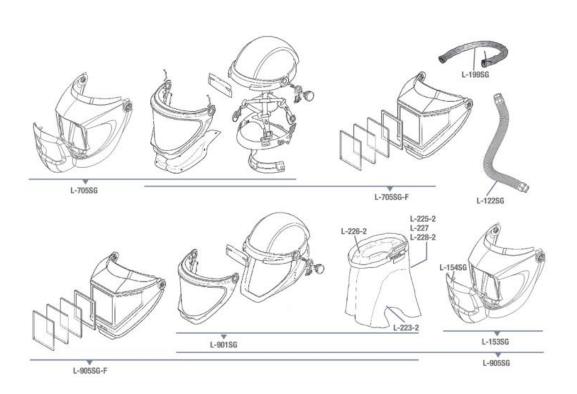
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## 3M<sup>™</sup> Headgear L-Series SG





| Part No      | Description   |  |  |
|--------------|---|--|--|
| 34-0705-SGV  | Hard Hat L-705SG wideview faceshield with Speedglas welding filter 9100V and Adflo PAPR with HE filter and lithium ion battery  |  |  |
| 34-0705-SGX  | Hard Hat L-705SG wideview faceshield with Speedglas welding filter 9100X and Adflo PAPR with HE filter and lithium ion battery  |  |  |
| 34-0705-SGXX | Hard Hat L-705SG wideview faceshield with Speedglas welding filter 9100XX and Adflo PAPR with HE filter and lithium ion battery |  |  |
| 34-0905-SGV  | Helmet L-905SG wideview faceshield with Speedglas welding filter<br>9100V and Adflo PAPR with HE filter and lithium ion battery |  |  |
| 34-0905-SGX  | Helmet L-905SG wideview faceshield with Speedglas welding filter<br>9100X and Adflo PAPR with HE filter and lithium ion battery |  |  |
| 34-0905-SGXX | Helmet L-905SG wideview faceshield with Speedglas welding filter 9100XX and Adflo PAPR with HE filter and lithium ion battery   |  |  |



**Personal Safety Division** 

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

USA

Phone 1-800-328-1667

Web www.3M.com/workersafety

3M PSD products are occupational use only.

3M Personal Safety Service & Technical Support Center

1-800-243-4630 or visit www.3M.com/workersafety

For a complete listing of parts, visit us at: www.3M.com/weldingsafety

**Note:** Welding can create a variety of harmful fumes and gases. When engineering controls are impractical, respirators may be required to help reduce exposures to these airborne welding contaminants.

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#### AWARNING

These respirators help protect against certain airborne contaminants. Before use, the wearer must read and understand the User Instructions provided as a part of the product packaging. A written respiratory

protection program must be implemented meeting all the requirements of OSHA 1910.134 including training, fit testing and medical evaluation. In Canada, CSA standards Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate. Misuse may result in sickness or death. For proper use, see packaging instructions, supervisor, or call 3M OH&ESD Technical Service in USA at 1-800-243-4630 and in Canada at 1-800-267-4414.

#### AWARNING

This product is designed to help protect the wearer's eyes and face from harmful radiation including visible light, ultra-violet radiation (UV), infra-red radiation (IR), sparks and spatter resulting from welding processes. These products must be used only by qualified persons who are properly trained in their use and maintenance. Misuse may result in permanent eye injury and vision loss. Always wear ANSI Z87.1 compliant safety spectacles in addition to any welding helmet. For proper use, see supervisor, or User Instructions or call 3M in U.S.A.1-800-243-4630. In Canada, call Technical Service at 1-800-267-4414.

