

 **Speedglas™**



Adflo PAPR



9100



9100-Air



9100 FX



9100 FX-Air



9100 MP



Fresh-air III SAR



SL



100 Series



3M Welding Helmet 10



3M Headgear L-Series SG



3M Faceshield ClearVisor

PRODUCT OVERVIEW

# 3M Welding PPE Presentation



# Product overview

## Welding Helmet Options

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

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

## 3M™ Adflo™ Powered Air Purifying Respirator

Airflow pattern evenly distributes filtered air while the intelligent PAPR unit is designed to help keep the airflow at a constant preset level.

The optional accessory, nuisance odor pad assembly, helps reduce nuisance odors\*. Must be used with HE particle filter and must not be used alone or in combination with the OV/AG cartridge. Sold separately.

The prefilter is designed to increase the service life of the particle filter.

The filter cover holds the user-replaceable spark arrestor. (Spark arrestor not shown.)

A comfortable face seal can be worn with limited facial hair and helps provide respiratory protection. (Faceseal not shown here.)

The Filter/Battery Indicator displays the loading status of the particle filter and remaining battery life.

The lithium ion battery charges to 80% capacity in approx. 3 hours and to 100% capacity in approx. 6.5 hours, depending on its residual charge. Approximate operating time up to 13 hours with a new particle filter and new, fully charged battery.

The OV/AG cartridge captures certain organic vapors and acid gases. Sold separately.

HE Particle filter offers high efficiency particulate filtration.

Shown here: 3M™ Adflo™ Powered Air Purifying Respirator with 3M™ Speedglas™ Welding Helmet 9100 FX-Air

\* Nuisance odor refers to concentrations of organic vapors not exceeding the OSHA permissible exposure limit (PEL) or applicable occupational exposure limits, whichever is lower.

## 3M™ Adflo™ Powered Air Purifying Respirator

Technical Specifications	3M™ Adflo™ Powered Air Purifying Respirator
Filters Cartridges Nuisance Odor*	HE Particle filter OV/AG Cartridge Nuisance odor pad assembly accessory
<b>Weight</b> (approx.)	3.3 pounds (1490 grams); Weight includes blower, belt and battery, no breathing tube
<b>Battery:</b> Charging time (approx.) Operating hours** (approx.)	Lithium ion 3 hours (80% capacity), 6.5 hours (100% capacity) HE: up to 12 hours. HE + OV/AG: up to 5.5 hours (Run times will vary at higher altitudes)
<b>Belt:</b> Optional extension	Leather, 30-45 in. +26 in.
<b>Temperature range:</b> Operation Storage	23°F to 131°F -4°F to + 131°F

\* Nuisance odor refers to concentrations of organic vapors not exceeding the OSHA permissible exposure limit (PEL) or applicable occupational exposure limits, whichever is lower.

\*\* Run times are with new, fully-charged batteries and new filters / cartridges.

## 3M™ Adflo™ Turbo Assembly with High Altitude Compensation

Special respirator version for welders working in higher altitude locations (not for use at locations below sea level)

Welders can work at elevations from sea level up to approx. 10,000 feet (3000 meters) when used with HE particulate filter, and elevations up to approx. 5,000 feet (1500 meters) when used with HE filter in combination with OV/AG cartridge or nuisance odor pad assembly.

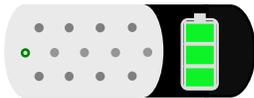
Adjusts for changes in air density.



# 3M™ Adflo™ Powered Air Purifying Respirator

## Particle filter indicator

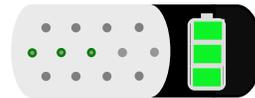
Particle Filter Indicator



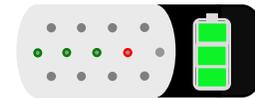
**Particle filter New**



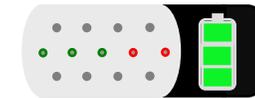
**A second indicator is lit as the filter begins to clog**



**A third indicator is lit as the filter continues to clog**



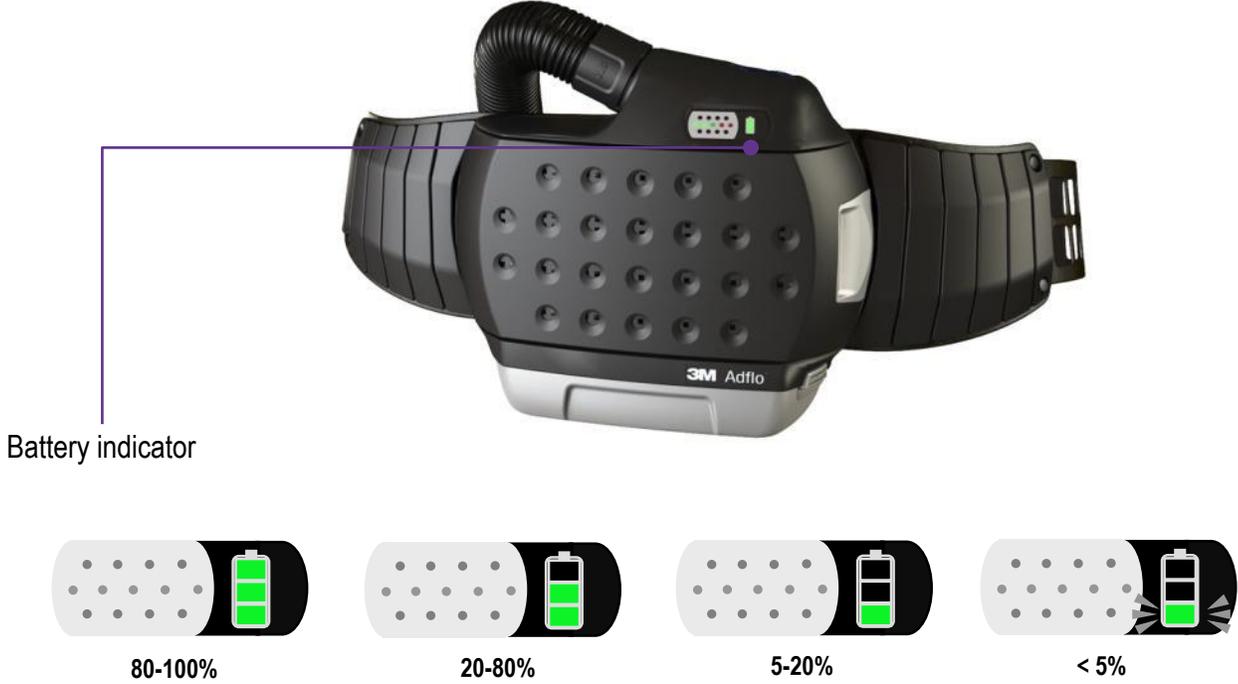
**Expect a shorter battery runtime.** Particle filter replacement is recommended



**The particle filter is clogged and needs to be replaced**

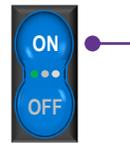
# 3M™ Adflo™ Powered Air Purifying Respirator

## Battery indicator

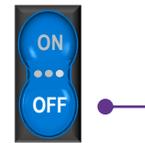


# 3M™ Adflo™ Powered Air Purifying Respirator

## ON/OFF indicator



Press 1 time  
Airflow  
approximately 7.2  
cfm/205 lpm



Press approx 1 sec  
Switch OFF



Alarm < Audible approximately 170  
l/min  
Red indicator and Audible

## 3M™ Adflo™ Powered Air Purifying Respirator



\* When using the Adflo PAPR with HE filter + OV/AG cartridge together with Speedglas welding helmet 9100-Air or 9100 MP, the SG-50W breathing tube must be used to be compliant as a NIOSH-approved system.

FEATURES

TECHNICAL FACTS

FUNCTIONS

COMPATIBILITY

CARE & MAINTENANCE

ACCESSORIES

PARTS LIST

## 3M™ Adflo™ Powered Air Purifying Respirator



**SG-15**  
Flame resistant breathing tube cover



**35-0099-14**  
Belt with quick connection



**BPK-01**  
Backpack



**L-199SG**  
High temperature breathing tube cover



**35-1099-07 / 35-0099-08**  
Lithium ion battery / battery charger for Lithium ion battery



**15-0499-99X02 / 15-0499-99X06**  
OV/AG cartridge

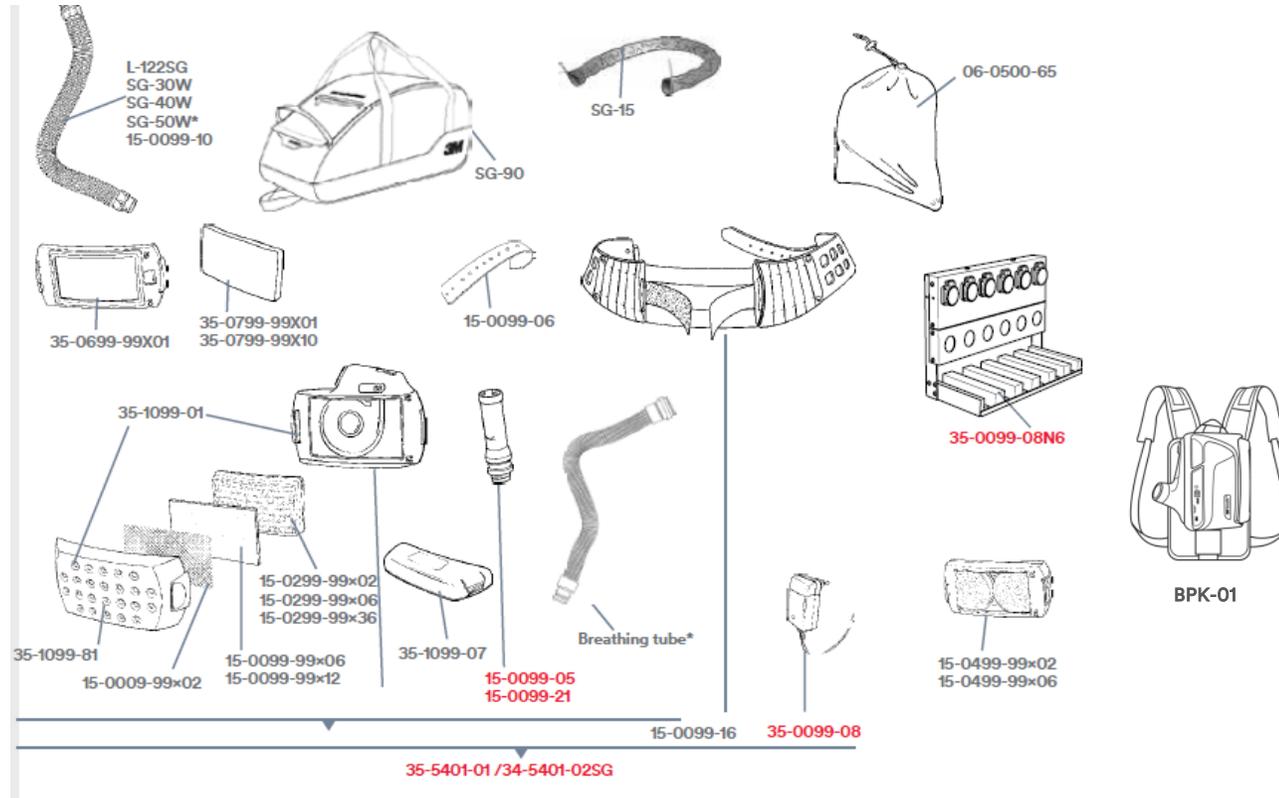


**35-0699-99X01**  
Nuisance odor pad assembly



**35-0799-99X01 / 35-0799-99X10**  
Nuisance odor pad

## 3M™ Adflo™ Powered Air Purifying Respirator



\* When using the Adflo PAPR with HE filter + OV/AG cartridge together with Speedglas welding helmet 9100-Air or 9100 MP, the SG-50W breathing tube must be used to be compliant as a NIOSH-approved system.



### 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](http://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](http://www.3M.com/workersafety)

**For a complete listing of parts, visit us at:  
[www.3M.com/weldingsafety](http://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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### **⚠WARNING**

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.

### **⚠WARNING**

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.