



# 3M™ Adflo™ Powered Air Purifying Respirator (PAPR)

## Product Description



- Can be used specifically for high efficient particle filtration (only) or for the filtration of both particulates and gases, depending on filter selection.
- 3M Adflo PAPR is equipped with a particle filter, spark arrestor, pre filter and a particle filter indicator that indicates particle filter clogging. A range of gas filters (optional) give additional protection against certain gaseous contaminations. Odour filter (optional) reduces unpleasant odour.
- Provides constant nominal airflow rate of either 170 lpm or 200 lpm (based on user settings).
- 3M Adflo PAPR is designed for use above sea level approximately 0-3000 m (1500 m with gas filter) and has integrated automatic altitude compensation to adjust for changes in air density.
- Battery indicator
- For protection factor, see relevant headtop technical data sheet.

## Applications


The product protects against certain airborne contaminants when used with an approved 3M™ Speedglas™ Welding Helmet or 3M™ Versaflo™ headtop and appropriate filters.

## Approvals


The PPE is marked and in conformity with the applicable National and European Regulations, Directives and Standards as listed in table below, which also contains information about the Authorised Body that has issued the type-Examination certificate for the PPE (Module B) and when applicable, the Authorised Body responsible for the surveillance of the quality system of the manufacturing of the PPE (Module D). The applicable type-examination Certificates and Declaration of Conformity are available at [www.3M.com/welding/certs](http://www.3M.com/welding/certs).

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Table 1: Approvals

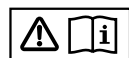
Standard	Name
EN 12941: 1998 + A2:2008	
Directive/Regulation	Name
EU 2016/425	Personal Protective Equipment (PPE) Regulation Personal Protective Equipment Regulations (Regulation 2016/425 on personal protective equipment, as amended to apply to GB)
2014/30/EU	Electromagnetic Compatibility (EMC) Directive - Electromagnetic Compatibility
SI 2016 No. 1091	Electromagnetic Compatibility Regulations 2016
2011/65/EU	Restriction of the Use of Certain Hazardous Substances (RoHS) Directive
SI 2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
Notified Body No. 2797 Module B, Module D	BSI Group, The Netherlands B.V. Say Building, John M. Keynesplein 9, 1066 EP Amsterdam, The Netherlands
Notified Body No. 0086 Module B, Module D	BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, UK
Australian/New Zealand Standard	Name
AS/NZS 1716:2012	Respiratory Protective Devices
Manufacturer	3M Svenska AB, Ernst Hedlunds väg 35, 785 30 Gagnef, Sweden
	
EU Contact Address	3M Svenska AB, Ernst Hedlunds väg 35, 785 30 Gagnef, Sweden
UK Contact Address	3M UK, Cain Rd, RG12 8HT, UK



 = Shall be disposed of as electrical and electronic waste.



 = Recycle



 = Read user instructions before use

## Limitations of Use

- Only use with original 3M spare parts and accessories listed in the reference leaflet and within the usage conditions given in the Technical Properties.

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- The use of substitute components or 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.
- 3M Adflo PAPR must not be used in the power OFF state since a rapid build-up of carbon dioxide and depletion of oxygen within the headtop may occur.
- Do not remove the headtop or turn off 3M Adflo PAPR until you have vacated the contaminated area. In the power OFF state little or no respiratory protection is expected.
- 3M Adflo PAPR system must not be used if 3M Adflo PAPR does not supply enough air (low flow alarm). Use the air flow check procedure described in the user instruction.
- 3M Adflo PAPR system must not be used in flammable or explosive environments.
- Note that the breathing tube might make a loop and get caught up by something in the surrounding area.
- If you are not sure about the concentration of contaminant, or about equipment performance, seek advice from an industrial safety engineer. The manufacturer is not responsible for injury following incorrect use or incorrect choice of equipment.
- Never modify or alter this product.
- To avoid damage to the product do not use solvents or alcohol for cleaning or disinfection. Do not immerse in water or spray directly with liquids.
- If a clean spark arrestor is not used there is an increased risk of fire in the particle filter.
- If you are not sure about the concentration of contaminant, or about equipment performance, seek advice from an industrial safety engineer. The manufacturer is not responsible for injury following incorrect use or incorrect choice of equipment.

## Materials

<b>Housing</b>	PA/ABS
<b>Filter Cover</b>	PA/ABS
<b>Belt</b>	PA66/EPDM/Leather
<b>Backpack</b>	TPC-ET-CD/PA/Polyester/PVA

## Technical Properties

<b>Properties</b>	<b>Value</b>
Respiratory protection class	See reference leaflet
Manufacturer's minimum design flow rate	160 l/min
Nominal airflow	approximately 170 l/min
Airflow plus	approximately 200 l/min
Belt size	75 - 127 cm
Weight 3M™ Adflo PAPR (includes P-filter; excludes battery and belt)	705 g
Belt weight	350 g
Operating Conditions	-5 °C (23 °F) to +55 °C (131 °F), RH ≤ 90%, non condensing conditions
Storage Conditions	-20 °C (-4 °F) to +35 °C (95 °F), RH ≤ 90%, non-condensing conditions
Short-term storage temperature conditions, non-operating <1 month	-20 °C (-4 °F) to +55 °C (131 °F), RH ≤ 90%, non-condensing conditions
Expected service life	5 years depending on conditions of use

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Breathing tube compatibility	G5-01		G5-03 Pro Air			9100 Air		9100 MP		M-207 M-307		M-406 M-407			
	P	A1B1E1	A2	P (TH3)	A1B1E1	A2 (TH2)	P	A1B1E1	A2	P	A1B1E1	A2	P	A1B1E1	A2
83 40 09	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
83 40 16	✓	✗	✗	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✗	✗
83 40 17	✓	✗	✗	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✗	✗
83 40 19	✓	✗	✗	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✗	✗

Compatible Welding helmets and other 3M™ Headtops with classifications	G5-01	G5-03 Pro Air Adflo P TH3	G5-03 Pro Air Adflo P + A1B1E1/A2 TH2	9100 Air	9100 MP	M-207 M-307	M-406 M-407
EN 12941:1998 +A2:2008 TH2	✗	✗	✓	✓	✗	✓	✓
EN 12941:1998 +A2:2008 TH3	✓	✓	✗	✗	✓	✗	✗

Please note that for certain products the TH2/TH3 classification may depend upon the filters used with the helmet/headtop.

## Spare Parts, Accessories, and Consumables

Part number	Description
79 01 05	Carry bag
83 20 00	3M Adflo PAPR assembly, without filter, without filter cover
83 31 11	3M Adflo Battery Charger for Li-ion battery
83 40 09	Breathing tube with silencer and QRS connection
83 40 16	Breathing tube self adjusting QRS
83 40 17	Breathing tube heavy duty rubber QRS
83 40 19	Breathing tube long QRS
83 50 00	Belt

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Part number	Description
83 50 05	Front part, belt
83 50 10	Quick connection for belt
83 50 20	Braces
83 60 00	Spark arrestor
83 60 10	Prefilter, pkg of 5
83 60 80	Prefilter, pkg of 80
83 70 00	Storage bag
83 70 12	Particle filter P SL, pkg of 2
83 70 20	Particle filter P SL, pkg of 20
83 70 80	Particle filter P SL, pkg of 80
83 71 10	Odour filter
83 71 20	Odour filter pad
83 72 42	Gas filter A1B1E1
83 73 01	Gas filter kit: A1B1E1 filter and Heavy-Duty battery
83 75 42	Gas filter A2
83 76 30	Battery Li-ion Standard
83 76 31	Battery Li-ion Heavy-Duty
83 77 10	3M Adflo PAPR with standard battery, breathing tube QRS, airflow indicator, prefilter, spark arrestor, particle filter
83 77 30	3M Adflo PAPR with standard battery, breathing tube QRS, airflow indicator, prefilter, spark arrestor, particle filter, belt and charger
83 77 31	3M Adflo PAPR with heavy duty battery, breathing tube QRS, airflow indicator, prefilter, spark arrestor, particle filter, belt and charger
83 80 20	Airflow indicator
83 80 31	Filter cover black
BPK-HD	Backpack

## 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.



**Personal Safety Division**

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