# 3M<sup>™</sup> Adflo<sup>™</sup> **Powered Air Respirator**

### **Product Description**

- NPF of up to 500 (TH3)
- Can be used specifically for high efficient particle filtration (only) or for the filtration of both particulates and gases, depending on filter selection

**□Speedglas**™

Welding Safety

- Cannot be used to protect against substances with poor warning properties (taste/ smell)
- Provides constant nominal airflow rate of either 170 lpm or 200 lpm (based on user settings)
- The 3M Adflo Powered Air Respirator version for high altitudes is designed for use above sea level 0-3000 m (1500 m with gasfilter) and has intergrated automatic altitude compensation to adjust for changes in air density.
- The respirator's slim turbo design allows highly mobile use
- Particle filter indicator
- **Battery indicator**
- Robust solution

#### Applications

3M<sup>™</sup> Adflo<sup>™</sup> Powered Air Respirator is a breathing protection device, for increased comfort and safety during welding and allied processes when used as a system in combination with approved head tops (see reference table).

#### **Approvals**

The PPE is CE marked and in conformity with the European PPE Regulation, directives and harmonized European Standards as listed in fig below, which also contain information about the Notified Body that have issued the EU type-Examination certificate for the PPE (Module B) and when applicable, the Notified Body responsible for the surveillance of the quality system of the manufacturing of the PPE (Module D). The EU type-examination Certificates and Declaration of Conformity are available at www.3M.com/welding/certs.

European Standard	Name		
EN 12941:1998 A1:2003 + A2:2008	Respiratory protective devices – Powered filtering devices incorporating a helmet o hood		
European Directive/Regulation	Name		
(EU) 2016/425	PPE Regulation - Personal Protective Equipment		
2014/30/EU	EMC Directive - Electromagnetic Compatibility		
2011/65/EU	RoHS Directive - Restriction of the use of Hazardous Substances		
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		
Australian/New Zealand Standard	Name		
AS/NZS 1716:2012	Respiratory protective devices		
Manufacturer	3M Svenska AB. Ernst Hedlunds väg 35. 785 30 Gagnef. Sweden		

#### **Equipment marking**



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- = Read the instructions before use.
- = Shall be disposed of as electronic waste.
- = Recycle



= High altitude

Serial no

= Year, week of manufacturing

#### 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 Specification
- 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 noncompliant with protection classifications and approvals.
- 3M Adflo Powered Air Respirator must not be used in the power OFF state since a rapid build-up of carbon dioxide and depletion of oxygen within the head top may occur.
- Do not remove the headtop or turn off 3M Adflo Powered Air Respirator until you have vacated the contaminated area. In the power OFF state little or no respiratory protection is expected
- Do not use for respiratory protection against unknown atmospheric contaminants or when concentrations of contaminants are unknown or immediately dangerous to life or health (IDLH).
- 3M<sup>™</sup> Adflo<sup>™</sup> Powered Air Respiratory System must not be used if 3M Adflo Powered Air Respirator does not supply enough air (low flow alarm).
- 3M Adflo Powered Air Respiratory 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.

## **Technical Datasheet**

Technical specifications		83 60 10	Prefilter, pkg of 5
Respiratory protection class See Manufacturer's minimum design flow rate Nominal airflow app. Airflow Plus app. Belt size		83 60 80 83 70 00 83 70 10 83 70 20 83 70 80 83 71 10 83 71 20	Prefilter , pkg of 80 Storage bag Particle filter P SL Particle filter P SL, pkg of 20 Particle filter P SL, pkg of 80 Odour filter Odour filter
Operating conditions:	-5°C to +55°C, RH $\leq$ 90%, noncondensing conditions	83 72 42 83 73 00	Gas filter A1B1E1 Gas filter kit: A1B1E1 filter and Heavy-Duty
Storage conditions:	-20°C to +55°C, RH ≤ 90%, non-condensing conditions	83 75 42 83 76 20	battery Gas filter A2 Battery (standard) NiMH
Extended period of storage:	-20°C to +35°C, RH ≤ 90%, non-condensing conditions.	83 76 21 83 76 30 83 76 31	Battery Heavy-Duty NiMH Battery (standard) Li-ion Battery Heavy-Duty Li-ion
Batteries need regular recharging during storage for extended periods.		83 80 20 83 80 31	Airflow indicator Filter cover

Weight, 3M Adflo Powered Air Respirator (incl. P-filter, excl battery) 690 g Expected service life: 5 years depending on conditions of use

#### Spare parts, accessories and consumables

53 35 05	Adapter for non-QRS breathing tubes when
	using Speedglas 9100 Series welding
	shields
50 35 06	Adapter for QRS breathing tubes when
	using Speedglas 9000 Series welding
	shields
79 01 01	Product carry bag
83 31 01	Battery charger NiMH
83 31 11	Battery charger Li-ion
83 32 06	6-station battery charger NiMH
83 40 09	Breathing tube with silencer (118 cm), with
	QRS connection
83 40 16	Breathing tube, self-adjusting (52,5 to 85
	cm), with QRS connection
83 40 17	Breathing tube, heavy-duty rubber with
	(77±5 cm), QRS connection
83 40 18	Flame resistant breathing tube cover
83 40 19	Breathing tube, self-adjusting (60 to 118
	cm), with QRS connection
83 45 00	Gasket for non-QRS breathing tubes
83 50 00	Belt
83 50 05	Front part, belt
83 50 10	Quick connection for belt
83 50 20	Braces
83 60 00	Spark arrestor

#### **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.

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