Speedglas™ Welding Safety

Technical Datasheet



3M™ Adflo™ 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
- 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 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.
- The respirator's slim turbo design allows highly mobile use
- Particle filter indicator
- Battery indicator
- Robust solution

Applications

3M™ Adflo™ 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 or 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


= Read the instructions before use.


= Shall be disposed of as electronic waste.


= Recycle

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™ Adflo™ 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 specifications

Respiratory protection class	See reference leaflet
Manufacturer's minimum design flow rate	160 l/min

Nominal airflow app.	170 l/min
Airflow Plus app.	200 l/min
Belt size	75-127 cm
Operating conditions:	-5°C to +55°C, RH ≤ 90%, noncondensing conditions
Storage conditions:	-20°C to +55°C, RH ≤ 90%, non-condensing conditions
Extended period of storage:	-20°C to +35°C, RH ≤ 90%, non-condensing conditions.

Batteries need regular recharging during storage for extended periods.
Weight, 3M Adflo Powered Air Respirator (incl. P-filter, excl. battery) 705 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
83 60 10	Prefilter, pkg. of 5
83 60 80	Prefilter, pkg. of 80
83 70 00	Storage bag
83 70 10	Particle filter P SL
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 00	Gas filter kit: A1B1E1 filter and Heavy-Duty battery
83 75 42	Gas filter A2
83 76 20	Battery (standard) NiMH
83 76 21	Battery Heavy-Duty NiMH
83 76 30	Battery (standard) Li-ion
83 76 31	Battery Heavy-Duty Li-ion
83 80 20	Airflow indicator
83 80 31	Filter cover

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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