

## 3M™ Powered Air Turbo PF-602E-ASB

### Description

The 3M™ Powered Air Turbo PF-602E-ASB is a certified belt-mounted air purifying device that is intended to be used in certain asbestos applications. When combined with an approved headtop or facepiece, it forms a power-assisted system for respiratory protection against particles and gases and vapours (depending on the filter that is approved and fitted). A range of approved breathing tubes are available depending on which headtop or facepiece is selected.



- Display shows battery status (A) and motor status (P), where P represents how hard the motor is working
- Automatic monitoring feature checks that the unit is operating as designed, warns the user of low battery and compensates for changes in filter resistance (i.e. as the filter loads with particulate)
- Audible and visual alarm
- Factory Calibrated
- Integral NiMH battery
- Suitable for cleaning by showering or water spray with filters and hose fitted (IP 65). Alternatively, decontamination plugs may be fitted in the filter ports and hose port
- Serviceable by Authorised Service Centre

### System Classifications and Protection Factors

	FF-300 / FF-600 Series (EN 12942:1998 + A2:2008)	M-200 / M-300 / M-400 (EN12941:1998 + A2:2008)
<b>Classification</b>	TM3	TH2
<b>NPF*</b>	2000	50
<b>APF (UK)**</b>	40	20
<b>VGW (Germany)***</b>	500	20

## IMPORTANT

\*The Nominal Protection Factor (NPF) is a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective device. This may not be the level of respiratory protection that can be realistically expected in the workplace by wearers. Many countries apply Assigned Protection Factors (APFs) for example UK and Germany. Employers may apply a value lower than the NPF/APF if deemed applicable. Please refer to EN 529:2005 and National workplace protection guidance for application of these numbers in the workplace. Please contact 3M for further information.

\*\*APF = Assigned Protection Factor (For information on APF's, see HSE document HSG53).

\*\*\*VGW = Protection level according to DGUV-R 112-190.

## Limitations

The 3M Powered Air Turbo PF-602E-ASB should not be used in the following conditions:







- In atmospheres containing less than 19.5% oxygen
- Confined spaces (lack of ventilation)
- When the risk is considered to be Immediately Dangerous for Life or Health (IDLH)
- Where the contaminant concentration requires a greater protection factor than that provided by the system (see relevant User Instructions for the headtop or facepiece)

## Ordering Information

**Table 1: 3M™ Powered Air Turbo PF-602E-ASB Starter Kits and Ready Kits**

Part Number	Description
PF-602E-ASB	PF-602E-ASB Powered Air Respirator, PF-930 Battery, PF-972 Airflow Indicator and PF-653 Shower Plugs
PF-619E-ASB	PF-619E-ASB Starter Kit including PF-602E-ASB Powered Air Respirator, PF-930 Battery, PF-972 Airflow Indicator, SC-327 Belt, PF-641E Battery Charger, SC-BT-56-ASB Breathing Tube, DT-1135E PF10 P Filters, SS-6601 Prefilters & Holders and PF-653 Shower Plugs
PF-600E-ASB-FF-302	PF-600E-ASB-FF-302 Asbestos Kit including PF-602E-ASB Powered Air Respirator, PF-930 Battery, PF-972 Airflow Indicator, SC-327 Belt, PF-641E Battery Charger, FF-302 Full facepiece, SC-BT-56-ASB Breathing Tube, DT-1135E PF10 P Filters, SS-6601 Prefilters & Holders and PF-653 Shower Plugs
PF-600E-ASB-FF-601	PF-600E-ASB-FF-601 Asbestos Kit including PF-602E-ASB Powered Air Respirator, PF-930 Battery, PF-972 Airflow Indicator, SC-327 Belt, PF-641E Battery Charger, FF-601 Full facepiece, SC-BT-56-ASB Breathing Tube, DT-1135E PF10 P Filters, SS-6601 Prefilters & Holders and PF-653 Shower Plugs
PF-600E-ASB-FF-602	PF-600E-ASB-FF-602 Asbestos Kit including PF-602E-ASB Powered Air Respirator, PF-930 Battery, PF-972 Airflow Indicator, SC-327 Belt, PF-641E Battery Charger, FF-602 Full facepiece, SC-BT-56-ASB Breathing Tube, DT-1135E PF10 P Filters, SS-6601 Prefilters & Holders and PF-653 Shower Plugs
PF-600E-ASB-FF-603	PF-600E-ASB-FF-603 Asbestos Kit including PF-602E-ASB Powered Air Respirator, PF-930 Battery, PF-972 Airflow Indicator, SC-327 Belt, PF-641E Battery Charger, FF-603 Full facepiece, SC-BT-56-ASB Breathing Tube, DT-1135E PF10 P Filters, SS-6601 Prefilters & Holders and PF-653 Shower Plugs

**Table 2: 3M™ DT-Series™ filter options approved with 3M™ Powered Air Turbo PF-602E-ASB**

Colour Code	Part Number	Description	Protection	For use against
	DT-1135E	3M™ Particulate Filter PF10 P3 R D DT-1135E	P R SL	Solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-1235E	3M™ Particulate Filter PFR10 P3 R D DT-1235E (reduced opening)	P R SL	Solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-4031E	3M™ Combination Filter CF22 A2P3 R D DT-4031E	A1P	Organic gases and vapours, e.g. solvents with a boiling point above 65°C, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-4032E	3M™ Combination Filter CF22 B2P3 R DT-4032E	B2P	Inorganic gases and vapours, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-4035E	3M™ Combination Filter Cartridge CF22 A2B2P3 R D DT-4035E	A1B2P	Organic, inorganic gases and vapours, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-4036E	3M™ Combination Filter CF22 A2B2E1P3 R D DT-4036E	A1B2E1P	Organic, inorganic and acid gases and vapours, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-4045E	3M™ Combination Filter CF32 A2B2E2K2P3 R D DT-4045E	A1B2E2K2P	Organic, inorganic and acid gases and vapours as well as ammonia and organic ammonia derivatives, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-4046E	3M™ Combination Filter CF32 A2B2E2K2HgP3 R D DT-4046E	A1B2E2K2HgP	Organic, inorganic and acid gases and vapours as well as ammonia and organic ammonia derivatives, mercury and mercury compounds, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.

A1 gas classification on relevant DT-Series filter. Hg filters only approved with TM3 systems. DT-4031E, DT-4032E, DT-4035E, DT-4045E, DT-4036E and DT-4046E are not approved for use with the 3M™ PF-602E-ASB Powered Air Respirator connected to 3M™ FF-600 Full Facepiece

**Table 3: Breathing Tubes approved with 3M™ Powered Air Turbo PF-602E-ASB**

Part Number	Description
SC-BT-56-ASB	Breathing Tube (80cm) for use with FF-300 & FF-600 Series
SC-BT-56-ASB-L	Breathing Tube (100cm) for use with FF-300 & FF-600 Series
BT-20S/L + PF-949*	Lightweight Breathing Tube (Small/Medium or Medium/Long) for use with PF-949 adaptor and M-200, M-300 or M-400 Headtop
BT-30 + PF-949*	Self-adjusting Breathing Tube for use with PF-949 adaptor and M-200, M-300 or M-400 Headtop
BT-40 + PF-949*	Heavy Duty Breathing Tube for use with PF-949 adaptor and M-200, M-300 or M-400 Headtop

**Table 4: Accesories for 3M™ Powered Air Turbo PF-602E-ASB**

Part Number	Description
PF-641E	Battery Charger
PF-972	Airflow Indicator
SS-6600	Pre-filters
SS-6601	Pre-filter Holder
PF-651	Protective Cover
PF-653	Shower Plugs
SC-327	Easy Clean Belt
TR-927	Easy Clean Backpack
BPK-HD	Heavy Duty Backpack
PF-945-ASB	Storage Box
PF-949*	DIN to Bayonet Adaptor (for use with BT-20S/L, BT-30 and BT-40 Breathing Tubes)

*\*Must be fitted by an Authorised Service Centre.*

## Standards and Approvals

The 3M™ Powered Air Turbo PF-602E-ASB has been tested and approved to the following standards:

- EN 12941:1998 + A2:2008 with approved headtops
- EN 12942:1998 + A2:2008 with approved facepieces

The Certificate of Declaration of Conformity are available at the following website [www.3M.com/Respiratory/certs](http://www.3M.com/Respiratory/certs).



This product also complies with the European EMC Directive 2014/30/EU

## Technical Specifications

**MMDF (manufacturer's minimum design flow rate):** 160 l/min when tested to EN 12941:1998 + A2:2008 and EN 12942:1998 + A2:2008. The PF-602E-ASB can be affected by atmospheric air density. Therefore, atmospheric conditions such as air temperature and air pressure can increase or decrease the volumetric airflow provided by the Powered Air Turbo.

**Battery Specification:** 4/3A size NiMH. 8 cells providing 9.6V/4.1Ah

**Battery Duration<sup>1</sup>:** 4 hours

**Battery Charger Specification:** Mains Operated. Primary:100-240V AC, 50-60Hz 14VA Secondary: 4.8/9.6V DC.

**Battery Charger Max:** 700mA 6.72VA

**Battery Charger Size:** 90x60x38mm

**Charge Time:** Approximately 7 hours

**IP Rating:** IP 65 - suitable for cleaning by showering/water spray with filters and hose fitted. Alternatively, decontamination plugs may be fitted in the filter ports and hose port

**Operating Range:** -10 to +30°C, < 75% RH

**Storage Conditions:** -10 to +30°C, < 75% RH

**Shelf Life<sup>2</sup>:** 5 years from date of manufacture

**Weight:** 1.6kg (Powered Air Turbo without filters)

## Material Data

**Turbo housing:** Polyurethane

**Body tensioner:** Stainless Steel

## 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. Respiratory Protection is only effective if it is correctly selected, fitted and worn throughout the time when the wearer is exposed to respiratory contaminants. 3M offers advice on the selection of products, and training in the correct fitting and usage. For more information on 3M products and services please contact 3M.

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<sup>1</sup> Battery durations are based on a fresh battery, appropriately charged with new filters being used at room temperature. Battery durations are affected by many factors, for example: Operating temperature; the age of the battery; charge status and filter clogging.

<sup>2</sup> The shelf life as defined above remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as a warranty.



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