

3M™ Powered Air Turbo PF2-602E

Product Description

The 3M™ Powered Air Turbo PF2-602E is a certified belt-mounted air purifying device that can be combined with an approved headtop or facepiece to form 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.

- OLED display shows battery charge status and filter loading status during use
- Single controlled airflow delivers steady flow as battery discharges or filter loads with particulate
- Audible and visual warning for: Airflow; particulate filter loading; low battery; and battery temperature
- Display shows a service indicator warning (with audible and visual warning) if a fault condition occurs
- Factory calibrated
- Integral Lithium-ion battery
- Suitable for cleaning by showering with Powered Air Turbo powered on and breathing tube and filters fitted (IP X3)
- Suitable for cleaning by immersion in water with cleaning plugs fitted (temporary submersion up to 1m) (IP X7)
- Serviceable by Authorised Service Centre

System Classification and Protection Factors

	FF-300/FF-600 (EN 12942:2023)	S-133/S-333G/ S-433/S-533 (EN 12941:2023)	S-655/S-657/ S-757/S-855E (EN 12941:2023)	S-665, S-667, S-767, S-865E (EN 12941:2023)	M-200/M-300/ M-400 (EN 12941:2023)
Classification	TM3	TH3	TH3*	TH3	TH2
NPF	2000	500	500	500	50
APF** (UK)	40	40	40	40	20
VGW*** (Germany)	500	100	100	100	20
NPO**** (Italy)	400	200	200	200	20

*Systems approved for use with BT-20S and BT-20L Breathing Tubes only when used with DT-1135E and DT-1235E P filters

**APF = Assigned Protection Factor (For information on APFs, see HSE document HSG53)

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

****NPO = Protection level according to UNI 11719:2018

NOTE

The 3M™ Half Facepiece Respirators 7500 Series and 3M™ Full Facepiece Respirators 6000 Series are not approved for use with the PF2-602E Powered Air Turbo.

NOTE

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.

Limitation

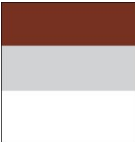
The 3M Powered Air Turbo PF2-602E should not be used in the following conditions:

- 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 for more information on protection factors)
- See relevant User Instructions for further conditions under which the system must not be used

Product Range

Part Number	Description
PF2-602E	3M™ Powered Air Respirator PF2-602E including PF2-630 Battery, PF2-641E Battery Charger, and PF2-972 Airflow Indicator
PF2-619E	3M™ Powered Air Respirator System Starter Kit PF2-619E including PF2-602E Powered Air Respirator, PF2-630 Battery, PF2-641E Battery Charger, PF2-972 Airflow Indicator; SS-626 Comfort Belt, BT-20L Lightweight Breathing Tube (Medium/Long), 2 x DT-1135E P Filters, 2 x SS-6602 Pre-Filter Holders and 6 x SS-6600 Pre-Filters
PF2-600E-LIK	3M™ Powered Air Respirator System Light Industry Ready Kit PF2-600E-LIK including PF2-602E Powered Air Respirator, PF2-630 Battery, PF2-641E Battery Charger, PF2-972 Airflow Indicator; M-206 Faceshield, SS-626 Comfort Belt, BT-30 Self-Adjusting Breathing Tube, 2 x DT-1135E P Filters, 2 x SS-6602 Pre-Filter Holders and 6 x SS-6600 Pre-Filters
PF2-600E-ECK	3M™ Powered Air Respirator System Easy Clean Ready Kit PF2-600E-ECK including PF2-602E Powered Air Respirator, PF2-630 Battery, PF2-641E Battery Charger, PF2-972 Airflow Indicator; S-433L Hood, SS-626 Comfort Belt, BT-30 Self-Adjusting Breathing Tube, BT-922 Disposable Breathing Tube Cover, 2 x DT-1135E P Filters, 2 x SS-6602 Pre-Filter Holders, 6 x SS-6600 Pre-Filters, PF-654 Cleaning & Storage Kit
PF2-600E-HKL	3M™ Powered Air Respirator System Healthcare Ready Kit PF2-600E-HKL including PF2-602E Powered Air Respirator, PF2-630 Battery, PF2-641E Battery Charger, PF2-972 Airflow Indicator; S-133L Headcover, SS-626 Comfort Belt, BT-30 Self-Adjusting Breathing Tube, BT-922 Disposable Breathing Tube Cover, 2 x DT-1135E P Filters, 2 x SS-6602 Pre-Filter Holders, 6 x SS-6600 Pre-Filters, PF-654 Cleaning & Storage Kit

Filter Options

Colour Code	Part Number	Protection* (EN 12941:2023/EN 12942:2023)	For Use Against
	DT-1135E	P	Solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	DT-1235E	P	Solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	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-4035E	A1B2P	Organic, inorganic gases and vapours, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.
	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	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	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.

Breathing Tube Options

Part Number	Description
BT-20S/L	Lightweight Breathing Tube (Small/Medium or Medium/Long) for use with S-Series and M-Series Headtops
BT-30	Self-Adjusting Breathing Tube for use with S-Series and M-Series Headtops

Personal Safety Division

Part Number	Description
BT-40	Heavy Duty Breathing Tube for use with S-Series and M-Series Headtops
BT-54	Breathing Tube for use with FF-300 and FF-600 Series

Accessories

Part Number	Description
PF2-972	Airflow Indicator
PF2-641E	Battery Charger
SS-6600	Pre-filters (100)
SS-6601	Pre-filter holder (10) and pre-filters (30)
SS-6602	Pre-filter holder (10)
SS-6607	Filter Cover (10)
PF-651	Disposable protective cover
SS-625	Standard belt
SS-626	Comfort belt
BT-922	Disposable breathing tube cover (for BT-20S/L, BT-30 & BT-40 only)
BT-927	Flame resistant breathing tube cover (for BT-20S/L, BT-30 & BT-40 only)
TR-927	Easy Clean Backpack
BPK-HD	Heavy Duty Backpack
PF-654	Cleaning & Storage Kit

Standards and Approvals

The PF2-602E Powered Air Turbo has been tested to the following standards:

- EN 12941:2023 with approved headtops
- EN 12942:2023 with approved facepieces
- IEC 60529:1989+A1:1999+A2:2013

The Certificate and Declaration of Conformity are available at the following website www.3M.com/Respiratory/certs

NOTE

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

Technical Specification

Air Supply Flow Rate

EN 12941:2023 – Manufacturer's Minimum Design Flow (MMDF) of 160 l/min when tested according to the standard

EN 12942:2023 – Manufacturer's Minimum Design Condition (MMDC) is an MMDF of 160 l/min when tested according to the standard

Battery Specification

Rechargeable Li ion battery 14.4V, 46.64Wh

Battery Duration (hours)*

	G&V Filter	P Filter
Headtops	7	10.5
Facepieces	5	7.5

*Estimated system duration based on testing to the relevant standard with a new battery and new, clean filters at 20°C. Actual system duration may be extended or shortened depending on headtop, facepiece, filter, filter loading, battery condition, and environmental conditions.

Charger

Charger Input: 100-240V, 50-60Hz, max 0.7A

Charger Output: 16.4V, 1.6A

Charge Time

Less than 3 hours

IP Rating

IP X3 with filters and breathing tube fitted and Powered Air Turbo powered on, 3 = water spray up to 60 degrees from vertical

IP 65 - with filters and breathing tube fitted and Powered Air Turbo powered off. 6 = dust tight, 5 = water jets from all angles

IP 67 - with decontamination plugs fitted into filter ports and breathing tube port. 6 = dust tight, 7 = temporary submersion to a depth of 1m

Operating Range

-10 to +50°C, < 75% RH

Operating Altitude Range

0 to 1800m

Storage Conditions

-10 to +30°C, < 75% RH

Shelf Life

The battery is integrated into the Powered Air Turbo and is shipped with a partial charge. The expected shelf life* (prior to use) is 12 months from date of manufacture.

*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.

Materials

Housing – Polyurethane

Hard Cover – Polyamide

Body Tensioner – Stainless Steel

Outlet – Polycarbonate/Acrylonitrile Butadiene Styrene blend

Weight

1.07kg (Powered Air Turbo without filters)

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.

