



3M™ Versaflo™ TR-300 Powered Air Turbo

Description

The 3M™ Versaflo™ TR-300 Powered Air Turbo is a belt-mounted air purifying device. When combined with one of the 3M approved headtops, it forms a power-assisted system for respiratory protection against particles (and nuisance odour where applicable). The TR-300 Powered Air Turbo can be used with the following 3M headtops: S-Series, M-Series, HT-400 Series, HT-600 Series, HT-700 Series and HT-800 Series.

- Controlled airflow (factory-calibrated airflow at nominal 190l/min) delivers steady flow as battery discharges or filters loads with particulates.
- Audible and LED alarm signals low battery charge or low airflow
- Three filter options available:
 - Particulate only
 - Particulate plus nuisance level organic vapours*
 - Particulate plus nuisance acid gas * and offers protection against hydrogen fluoride up to 10 x Threshold Limit Value
- Lightweight lithium ion battery with LED to indicate charge status
- Battery life (with new filter and new battery)
 - Economy battery, 4.5-6 hours
 - High-capacity battery, 9-12 hours
- Battery charge time (using intelligent charger)
 - Economy battery, less than 3 hours
 - High-capacity battery, less than 3.5 hours
- Three belt options (standard, easy-clean and leather) for a range of applications
- Lightweight
- Slim profile and compact shape designed for use in tight spaces
- Suitable for use in decontamination shower (IP 53).

* Nuisance level refers to concentrations below the Threshold Limit Value

Approvals

The TR-300 Powered Air Turbo, when used as part of an approved 3M Respiratory system have been shown to meet the Basic Safety Requirements under Article 10 and 11B of the European Directive 89/686/EEC and are CE marked.

The product was examined at the design stage by: BSI, Maylands Avenue, Hemel Hempstead, Hertfordshire, HP2 4SQ, England (Notified Body number 0086).

The product complies with European EMC Directive 2004/108/EC

Standards

The TR-300 Powered Air Turbo, in combination with 3M approved headtops, has been tested and approved to EN12941.

The TR-300 Powered Air Turbo also meets the following requirements:

- Dust protection and protection against spraying water to EN60529 IP 53.

Applications

The TR-300 Powered Air Turbo, when used as part of an approved system with appropriate filters, provides protection against:

- Particles e.g. fine dusts, mists and metal fume.
- Nuisance odour levels (below the Threshold Limit Values) of organic vapours
- Nuisance odour levels (below the Threshold Limit Values) of acid gases and up to 10 x Threshold Limit Value of hydrogen fluoride.

The TR-300, when used with an appropriate 3M headtop and filters, can be used in various applications including:

- Agriculture
- Chemical Industry
- Construction and Building Renovation
- Demolition
- Food and Beverage
- Medical and Healthcare
- Metalworking
- Pharmaceutical Manufacturing
- Pulp and Paper Processing
- Smelting and Foundries
- Surface Preparation, Paint Spraying and Coating
- Woodworking

Materials

Component	Material
Turbo body	Acrylonitrile butadiene styrene (ABS)
Filter cover	Acrylonitrile butadiene styrene (ABS)
Filter cover window	Polymethylmethacrylate (PMMA)
Battery casing	Acrylonitrile butadiene styrene (ABS)
Belts	- Standard polyester web belt - Polyurethane coated polyester easy-clean belt - Leather belt

Limitations

The TR-300 Powered Air Turbo should not be used in the following conditions:

- Asbestos removal.
- 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 is above the Threshold Limit Value defined for the headtop used (see relevant User Instructions for the headtop).

Product Range

TR-300 Powered Air Turbo is available to buy as:

- TR-302E Turbo Unit (includes filter cover and airflow indicator only)
- TR-315UK/E Starter Kit (includes TR-302E turbo unit, particulate filter, standard belt, high capacity battery pack, battery charger kit, self-adjusting breathing tube and airflow indicator).



TR-302E



TR-315UK/E



Technical specifications

Nominal Protection Factor (NPF):

Depends on 3M headtop used.

Protection Class TH2

- NPF = 50
- Assigned Protection Factor (APF) = 20

Protection Class TH3

- NPF = 500
- Assigned Protection Factor (APF) = 40

Outlet Flow Characteristics

- Manufacturer's Minimum Design Flow (MMDF) 170l/min
- Nominal Flow 190 l/min

Audible Alarm

- 85dB(A) at 10cm

Battery Duration (with new filter and new battery)

- Economy battery pack (11.1V, 2.6Ah Li metal rechargeable) 4.5-6 hours
- High capacity battery pack (11.1V, 4.8Ah Li metal rechargeable) 9-12 hours

Battery Charge Time

- Economy battery pack = less than 3 hours
- High capacity battery pack = less than 3.5 hours

Storage conditions

-30°C to +50°C < 90 %RH

Operating temperature

-10°C to +55°C

Weight (including high capacity battery, belt and filter)

1082 g

Important Notice

3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

Spare parts and accessories

Part No.	Description
TR-325	Standard belt
TR-326	Leather belt
TR-327	Easy-clean belt
TR-329	Braces
BPK-01	Backpack
TR-330	Economy battery pack
TR-332	High capacity battery pack
TR-340	Battery charger cradle
TR-341E/UK	Battery charger kit (European/UK)
TR-344E/UK	4-Station battery charger kit (European/UK)
TR-362	Spark Arrestor
TR-370	Filter cover
TR-970	Airflow indicator
TR-3600	Pre-filter
TR-3710E	Particulate filter
TR-3800E	Particulate plus nuisance level (below TLV) organic vapour
TR-3820E	Particulate plus nuisance level (below TLV) acid gas and 10 x TLV hydrogen fluoride
BT-20S/L	Lightweight breathing tube (Small/Medium or Medium/Long)
BT-30	Self-adjusting breathing tube
BT-40	Heavy duty breathing tube
BT-922	Disposable breathing tube cover
BT-926	Flame resistant breathing tube cover



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