



Work
in a World of
Comfort



DEDICATED TO WORKER PROTECTION

3M has a long history of applying its innovative materials to the challenges of worker protection. In 1972, 3M introduced the first US government approved filtering facepiece respirator.

Today, as one of the world's leading suppliers of respiratory protection, our goal is to ensure that we satisfy your needs through exceptional leadership, expertise, quality and service. Our success begins with our ability to apply our technologies – often in combination – to an endless array of real-world customer needs, such as worker protection systems.



Credibility & Leadership

3M produces thousands of imaginative products, and we are a leader in scores of markets, including the global respiratory protection industry. With sales in nearly 200 countries, 3M has 76,000 employees worldwide. Our specialized distribution networks can help your workforce in the careful selection of, and training in, respiratory equipment.



Proven Solutions

Workers want respiratory protection equipment that is comfortable, lightweight and convenient. 3M delivers protection products that are high quality, high comfort, professional grade equipment, advanced over years of research and development, customer feedback, and customer success.

And Now: 3M™ Versaflo™ respirator systems

The new 3M Versaflo respirator systems represents an enormous effort by 3M to accomplish three major goals:

- simplify the equipment selection process
- increase system versatility
- improve user comfort every step of the way



INTRODUCING A HIGHLY VERSATILE RANGE OF RESPIRATOR SYSTEMS

Many users of half and full facepiece respirators are taking a second look at powered and supplied air systems for reasons that go beyond mere compliance.

3M™ Versaflo™ Respirator Systems are a comprehensive approach to worker protection systems based on comfortable-to-wear modules.



Integrated Protection

Safety managers can configure modules and accessories to help protect users from a variety of combined hazards.

Flexibility

Each system has three easy-to-select modules – an air delivery unit, a headtop and a breathing tube—that can be combined into dozens of system configurations. It is the ultimate in flexibility for handling changing user environments, needs, and comfort preferences.

All-Day Comfort

With 3M Versaflo Respirator Systems, pressure on the face, breathing resistance, and heat build-up are all greatly reduced when compared to non-powered and supplied air tight-fitting facepieces, creating all-day comfort for the user.

Easier To Breathe

With 3M Versaflo Respirators, flowing air is provided to the user, reducing the additional breathing effort required for half

and full facepiece respirators. This increases user comfort at all times, but is especially important during periods of strenuous labour.

Excellent Airflow

3M™ Versaflo™ Headtops direct a comfortable stream of flowing air to where workers need it most: the head and face. The moving airflow can make hot environments more tolerable while greatly reducing visor fogging. And, when using the appropriate 3M™ Versaflo™ Supplied Air Regulator, the airflow can also be made cooler or warmer when working in hot or cold environments.

Easy x Three

Easy-to-select. Easy-to-use. Easy-to-maintain. For instance: most replacement parts can be installed by hand or with common tools (like a screwdriver) in a matter of moments.

New Levels of Simplicity

- Easy to select compatible modules.
- The 3M™ Versaflo™ TR-300 turbo unit is equipped with automatic flow control, low battery alarm, and low flow alarm.
- Most user interface/adjustment-points highlighted in blue for convenience.
- QRS (Quick Release Swivel) breathing tubes allow fast and easy connection.
- Easily removable parts allow simple cleaning, maintenance and replacement.
- Many common parts across the range.
- Accessories and options to suit different applications.



New Levels of Comfort

- Lightweight, compact and well-balanced designs.
- Breathable air is provided to the wearer; reducing the additional breathing effort required.
- Adjustable airflow feature distributes airflow where the user wants.
- Quiet system with reduced motor noise and air whistling.
- Soft face seals and inner collars.
- Multiple size adjustment options allow for a comfortable fit.
- Provides excellent peripheral and downward vision.

PROTECTION AGAINST MULTIPLE HAZARDS

Respiratory Protection



Eye, Face and Hearing Protection



Head Protection, Neck/Shoulder Coverage



Modular means versatile

3M™ VERSAFLO™ RESPIRATOR SYSTEMS ARE EASY TO SELECT

3M™ Versaflo™ S-Series Headtops



3M™ Versaflo™
S-133/333G
Integrated
Headcover



3M™ Versaflo™
S-433/533
Integrated
Hoods



3M™ Versaflo™
S655/657/757/855E
Reusable Suspension
Hoods

3M™ Versaflo™ M-Series Headtops



3M™ Versaflo™
M-106/107
Faceshields



3M™ Versaflo™
M-306/307
Helmets



3M™ Versaflo™
M-406/407
Helmets with
Shrouds

3M™ Versaflo™ BT-Series Breathing Tubes



3M™ Versaflo™ BT-20 S/L
Breathing Tube



3M™ Versaflo™
BT-30 Breathing Tube

3M™ Powered Air Respirators



3M™ Versaflo™ TR-300
Powered Air Respirator



3M™ Jupiter™
Powered Air Respirator

3M™ Versaflo™ Supplied Air Regulators



3M™ Versaflo™ V-100E
Air Cooling Unit

Available
Spring 2011



3M™ Versaflo™ V-200E
Air Heating Unit

Available
Spring 2011

Four Steps to the Right Respirator:

1. Choose your Air Delivery Unit

2. Choose your Headtop

3. Choose the appropriate Breathing Tube



3M™ HT-600 Series Welding Shields



3M™ HT-629
Welding Shield

3M™ HT-639
Welding Shield

3M™ HT-700 Series Helmets and Welding Shields



3M™ HT-707
Safety helmet



3M™ HT-748 / HT-749
Welding helmet



3M™ Versaflo™ BT-40
Breathing Tube



3M™ Versaflo™ V-500E
Regulator



Want an even easier way to select a system?

This 4 step selection process can be made even easier by choosing 3M's air delivery unit starter kits which include everything apart from your headtop.

For more details see air delivery unit section.

4. Choose your options and accessories

Furthermore, many Versaflo products will be approved for use with 3M's existing modular powered and supplied air range –contact your local 3M office for details.

INTRODUCING 3M™ VERSAFLO™ TR-300 POWERED AIR RESPIRATOR

The all-new, lightweight 3M™ Versaflo™ TR-300 Powered Air Respirator is the key to an easy-to-use, versatile, respirator system for environments with hazardous particles.

Lighter & Smaller

- The turbo has a slim profile designed for use in tight spaces.
- The weight of the turbo is only 1 095 g (including particulate filter, high-capacity battery and standard belt). It also keeps its light weight close to the user's back, reducing the leverage effect that can cause turbos to feel heavier.
- The compact shape and air inlet design helps make sitting possible without compromising the airflow intake.

Controlled Airflow

- Sophisticated electronics keep the factory-calibrated airflow at a nominal 190 l/min, eliminating the need for regular calibration by the user. Even as the battery discharges, or the filter becomes loaded with particulates, the unit delivers a steady flow of air.



Simple Yet Comprehensive Controls

- An audible and LED alarm both signal to the user when there is either low battery charge or low airflow – for example, due to a fully-loaded particle filter.
- LED lights on the battery itself indicate its charge status.

Intelligent Power

- The economy battery runs continuously for at least 5-6 hours, while the high-capacity battery runs for at least 10-12 hours (with new filter and new fully charged battery in both cases). Recharging time is less than 3 hours for the economy battery (less than 3,5 hours for the high-capacity battery).
- The lightweight lithium ion battery quickly charges and has no memory effect or heavy metals. It can be easily removed for charging.
- Intelligent chargers help maintain the optimum battery performance and are available in single-battery or four-battery stations.



Please see the data on the headtop used with the unit for information on protection factors.

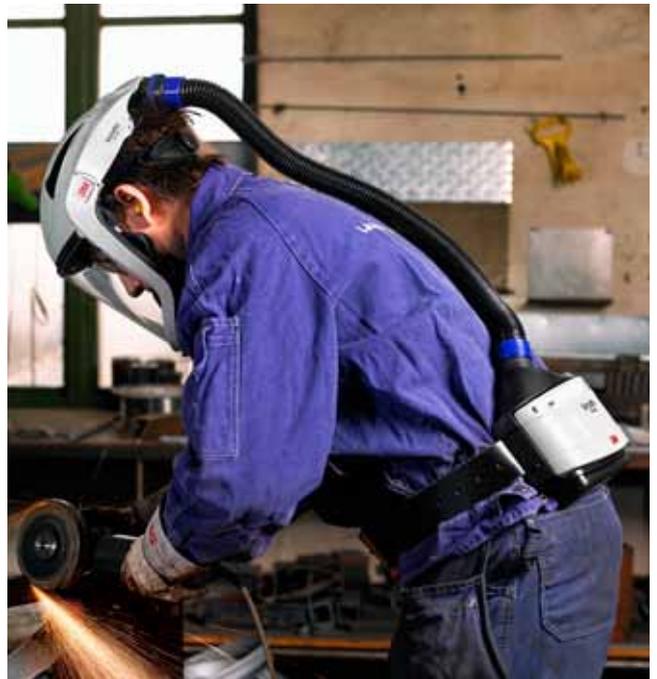
Straightforward, Minimal Maintenance

- All maintenance can be done by hand. The battery, filter and pre-filter can all be changed quickly and easily by hand.
- The belt and turbo unit have smooth surfaces with facilitating fast wipe downs for easier cleaning.
- IP53 rating. Suitable for use in decontamination shower.
- A window on the turbo allows instant identification of the installed filter.
- Durable brushless motor for superior reliability.



Options For Diverse Environments

- Filters:
 - Pre filter
 - Particulate filter
 - Particulate filter that also reduces nuisance-level organic vapours.*
 - Particulate filter that also provides protection against hydrogen fluoride with performance up to 10 x Threshold Limit Value (TLV) as well as offering nuisance-level acid gas performance*.
- For welding and grinding applications, a spark arrestor reduces the risk that sparks and other hot materials will come in contact with the filter and motor.
- Belts:
 - Standard webbing belt
 - Coated, easy-clean belt
 - Spark-resistant, leather belt for heavy-duty applications
 - Braces and a backpack are also available.
- Economy and High-Capacity battery.
- Single Charger and 4-Station Battery Charger kit.



Nuisance level refers to concentrations below the occupational exposure limit (OEL).
Regulatory submissions pending.

3M™ Versaflo™ TR-302E Turbo Unit

The 3M Versaflo TR-302E Turbo Unit comes with a filter cover and an airflow indicator only.

3M™ Versaflo™ TR-315E Starter Kit

This 3M Versaflo TR-315E Starter Kit (photo) includes the TR-300 turbo unit, particulate filter, pre-filter, standard belt, high capacity battery pack, battery charger kit (not shown), self-adjusting breathing tube and airflow indicator.

3M™ Powered And Supplied Air Delivery Units



3M™ JUPITER™ POWERED AIR RESPIRATOR

Protection from particulates and/or gases and vapours

The existing 3M™ Jupiter™ Powered Air Respirator is fully compatible with all 3M™ Versaflo™ Headtops and Breathing Tubes. The 3M Jupiter Respirator provides respiratory protection against particulate and gaseous contaminants (particulate only and combined particulate/gas and vapour filters are available).

Ergonomically designed to sit at the base of the user's back, the unit's low weight is carried mostly on the user's hips via the padded comfort belt. As a result, the 3M Jupiter Respirator is comfortable enough to wear for entire work shifts. Includes decontamination belt, airflow indicator and calibration tube.



User benefits:

- Modern, ergonomic design
- 5 filters for wide range of applications
- Decontamination comfort belt for improved fitting and easy cleaning.
- IP53 rating. Can be worn during shower decontamination.
- 3M™ Jupiter™ Intrinsically Safe Kit option
- Optional braces
- Audible and visual alarms
- Intelligent battery charger, with 10-station charger available. Economy (4 hours) or High-Capacity (8 hours) batteries.
- EN12941 TH2/TH3



3M™ Jupiter™ Powered Air Turbo Unit

3M Jupiter turbo unit includes decontamination belt and clip, air flow indicator and calibration tube.

3M™ Jupiter™ Starter Kit

3M Jupiter Starter Kit (see photo) includes a standard 3M Jupiter turbo including decontamination belt and clip, filter gaskets, air flow indicator and calibration tube as well as a pair of organic vapour and particulate (A2P) filters, pre-filters, self-adjusting breathing tube, 8 hour rechargeable battery (NiMH) and battery charger.

Please see the data on the headtop used with the unit for information on protection factors.



3M™ VERSAFLO™ V-SERIES SUPPLIED AIR REGULATORS

3M™ Versaflo™ V-500E Regulator

3M Versaflo V-500E Regulator ensures an individually-adjustable, consistently-controlled airflow. The regulator requires a working pressure of 3.5-8 bar and is extremely quiet due to the integrated silencer (<65 dBA). An integrated warning whistle warns the user of low airflow into the headtop.

- Meets latest standard (EN14594)
- Airflow: 170-305 l/min
- Weight: 550 g



3M™ Versaflo™ V-100E Air Cooling and V-200E Air Heating Regulators

3M Versaflo V-100E and V-200E Regulators allow users to either cool (V-100E) or heat (V-200E) the air by as much as 28°, making them a good choice for workers exposed to either uncomfortably hot or cold temperatures.

- Regulator requires a working pressure of 4-6 bar.
- Meets latest standard (EN14594)
- Airflow: 170-500 l/min
- Weight: 605 g (V-100), 499 g (V-200)

Available
Spring 2011



Please see the data on the headtop used with the unit for information on protection factors.



Comfortably Worn By More Users

Based on a computer modeling of a worldwide sampling of head sizes, new 3M™ Versaflo™ S-Series Suspensions, through their sizing and adjustment options, will comfortably fit more users than previous models. Their loose-fitting designs can mean more comfort for the entire shift when compared to tight-fitting alternatives.



Improved Shape

The new designs of 3M Versaflo S-Series Headcovers and Hoods more closely profile the user's head for improved appearance compared to some designs that tend to "peak."

Improved Visibility

The visors have an excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare.

Their new design minimises the potential for visor creasing and visual distortion.

Excellent Airflow

All 3M™ Versaflo™ S-Series Headtop users benefit from excellent airflow distribution for improved comfort, lower noise and reduced fogging.

Added Protection

3M Versaflo S-Series Headcovers and Hoods meet the highest respiratory performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units. In addition they also provide eye and face protection to EN166 – liquid splash and low energy impact.

Integrated Suspension Headcovers and Hoods

Ready to use straight out of the box. Permits fast replacement of soiled hoods
Available in two adjustable sizes: S/M and M/L



3M™ Versaflo™ S-133 Headcover
General purpose, cost-effective fabric.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-333G Headcover
Soft, quiet, more durable low-linting fabric.

Fabric material: Polyurethane coated knitted polyamide.
Visor material: Coated polycarbonate for increased chemical and scratch resistance.



3M™ Versaflo™ S-433 Hood
Includes neck and shoulder coverage.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



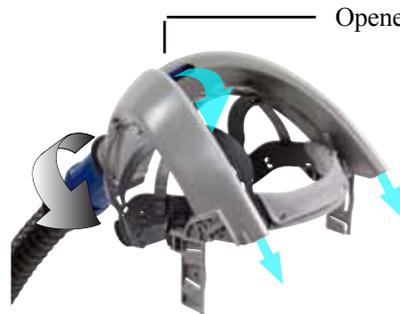
3M™ Versaflo™ S-533 Hood
Neck and shoulder coverage with soft, low-linting fabric that more readily drapes over user.

Fabric material: Polyurethane coated knitted polyamide.
Visor material: Coated polycarbonate for increased chemical and scratch resistance.

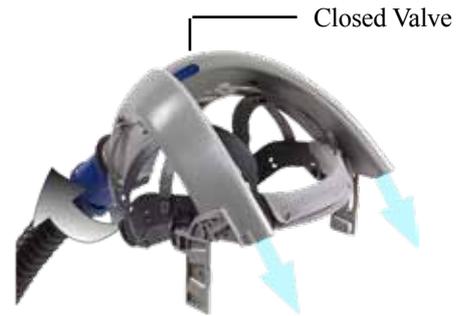


INNOVATIVE SUSPENSION WITH ADJUSTABLE AIRFLOW

The external cover lets wearers control the location of the airflow*.



Opened Valve



Closed Valve

* Reusable suspension hoods only.

3M™ Air Delivery Unit	Standards S-Series Headcovers and Hoods**	NPF***
3M™ Versaflo™ TR-300	EN12941 TH3, EN166 2:F:3	500
3M™ Jupiter™	EN12941 TH3, EN166 2:F:3	500
3M™ Versaflo™ V-500E/V-200E/V-100E	EN14594 3A, EN166 2:F:3	200

** S-Series Headcovers and Hoods meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

*** Nominal Protection Factor (NPF) - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.



reddot design award
winner 2010

Premium Hoods with Reusable Suspensions

Cost effective choice for some high disposal rate environments. Just the soiled hood fabric is replaced, while the suspension and air ducting can be reused. User control of airflow location and suspension adjustments for best comfort and custom fit.



3M™ Versaflo™ S-655 Hood
General purpose, with knitted inner collar that is shorter and thinner than previous models.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-657 Hood
Features a double-shroud design for its respiratory seal.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-757 Painters Hood
Fabric specifically intended to help capture paint overspray.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-855E Hood
Sealed seam hood for liquid chemical splash environments.

Fabric material: Zytron® 200.
Visor material: Coated polycarbonate

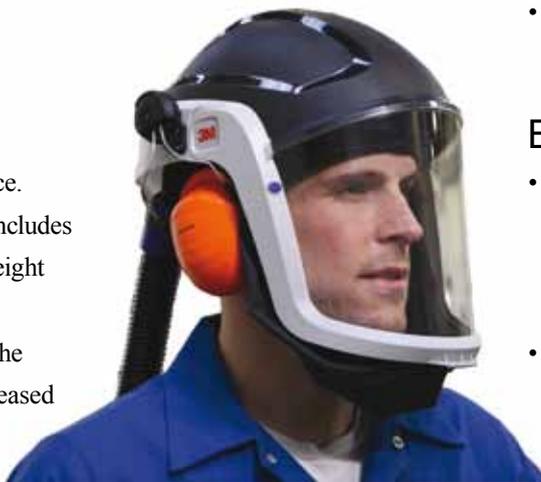
Zytron® is a registered trademark of Kappler.

HIGHLY VERSATILE RIGID HEADTOPS

- All-new 3M™ Versaflo™ M-Series Headtops feature lightweight, compact and well-balanced faceshields and helmets that can offer integrated protection from a range of respiratory, head, eye and hearing hazards, with offerings for neck and shoulder coverage.
- M-300 and M-400 Helmets meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M Air Delivery Units.

Modern, Well Balanced Comfortable Design

- Lightweight, with excellent balance.
- Fully-adjustable suspension that includes textile straps for optimal fit and weight distribution.
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort.



Versatility

- To suit a wide range of needs, industries and applications, 3M Versaflo M-Series headtops offer face seals and shrouds in various fabrics.
- Accessories include ear-muffs, peel-off's, head covers and a chin strap.

New Visor

- A new visor design combines excellent peripheral and downward vision with good optical clarity.
- Coated visors provide added chemical and scratch resistance.

Easy To Maintain

- Many parts are common to all 3M Versaflo M-Series headtops, meaning reduced inventories and downtime.
- Spare parts and accessories are quick and easy to replace; for example, visors easily slide into place and are secured by quickly snapping two buttons.



3M™ Versaflo™ M-100 Series Faceshields for respiratory, eye and face protection:

M-106 features a comfortable face seal for dusts, spraying and chemical processing. Fabric material: polyurethane coated polyamide.

M-107 features a flame resistant face seal for applications with hot particles. Fabric material: flame resistant polyester.



3M™ Versaflo™ M-300 Series Helmets for respiratory eye, face and head protection:

M-306 features a comfortable face seal for construction, chemical applications and heavy industry. Fabric material: polyurethane coated polyamide.

M-307 features a flame resistant face seal for applications with hot particles. Fabric material: flame resistant polyester



3M™ Versaflo™ M-400 Series Helmets with shrouds for respiratory, eye, face and head protection with additional neck and shoulder coverage:

M-406 features a highly durable shroud for construction applications and heavy industry. Fabric material: Cordura® nylon

M-407 features a flame resistant shroud for applications with hot particles. Fabric material: flame resistant Nomex®

FEATURED ACCESSORIES

Accessories	Ordering No.	Description	Accessories	Ordering No.	Description
	M-928	Peel-Off Visor Covers		M-958	Chin strap
	M-935	Standard face seal (white)		M-972	Flame Resistant Headtop Cover
	M-936	Comfort face seal			
	M-937	Flame resistant face seal			
	M-447	High-durability shroud		M-976	Head, Neck and Shoulder Cover, for M-100 and M-300 headtops.
	M-448	Flame-resistant shroud			
	H31P3AF 300	3M™ Peltor™ Hearing Protector Helmet Attachment, for M-100 and M-300			

3M™ Air Delivery Unit	3M™ Versaflo™ M-100		3M™ Versaflo™ M-300		3M™ Versaflo™ M-400 Series	
	Standards	NPF***	Standards	NPF***	Standards	NPF***
3M™ Versaflo™ TR-300	EN12941 TH2, EN166 1:B:3 EN352-3****	50	EN12941 TH3, EN166 1:B:3, EN397** LD 440 V a.c. EN352-3****	500	EN12941 TH3, EN166 1:B:3, EN397** LD 440 V a.c.	500
3M™ Jupiter™	EN12941 TH2, EN166 1:B:3 EN352-3****	50	EN12941 TH2, EN166 1:B:3, EN397** LD 440 V a.c. EN352-3****	50	EN12941 TH3, EN166 1:B:3, EN397** LD 440 V a.c.	500
3M™ Versaflo™ V-500E/ V-200E/ V-100E	EN14594 2B*, EN166 1:B:3 EN352-3****	50	EN14594 3B*, EN166 1:B:3, EN397** LD 440 V a.c. EN352-3****	200	EN14594 3B*, EN166 1:B:3, EN397** LD 440 V a.c.	200

* The M-Series Faceshields and Helmets meet the higher strength (B) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements

** Versaflo M-300 and M-400 Series Helmets

*** Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

**** With 3M™ Peltor™ H31 P3AF 300 Hearing Protector Helmet Attachment. SNR = 28; Size designation M/L. Contact 3M for full attenuation data including octave band and H, M and L values.



3M™ Welding Shields and Safety Helmets



3M™ HT-622 Welding Shield
A super-light shield for welders wanting to maximise the benefits of the Euromaski™ system. Wide range of welding filter shade combinations available.



3M™ HT-629 Welding Shield
Welding visor with great coverage. 90x110 mm welding filter holder for fixed shade or auto-darkening welding filter.



3M™ HT-639 Welding Shield
Welding visor with great coverage. 90x110 mm welding filter holder for fixed shade or auto-darkening welding filter.



3M™ HT-707 Safety Helmet
Safety helmet, heat resistant shell. For especially hot work areas, the helmet features a heat resistant shell and it is also available with an optional radiant heat kit.



3M™ HT-748/749 Welding Helmet
Welding helmet, auto-darkening or fixed shade welding filter (90 x 110 mm for HT-748 and 3.25" x 4.25" for HT-749).

Euromaski™ is a trademark of Euromaski Oy, Finland.

3M™ Air Delivery Unit	3M™ HT-600 Series Shields	3M™ HT-707 Safety Helmet	3M™ HT-748/749 Helmets	NPF**
3M™ Versaflo™ TR-300	EN12941 TH2, EN175	EN12941 TH2, EN166 2:B:3:9, EN397	EN12941 TH2, EN166 2:B:3:9, EN397	50
3M™ Jupiter™	EN12941 TH2, EN175	EN12941 TH2, EN166 2:B:3:9, EN397	EN12941 TH2, EN166 2:B:3:9, EN397	50
3M™ Versaflo™ V-500E/V-200E/V-100E	EN14594 2A*, EN175	EN14594 2A*, EN166 2:B:3:9, EN397	EN14594 2A*, EN166 2:B:3:9, EN397	50

* 600/700 Series headtops meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

** Nominal Protection Factor - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices. The protection factor is assigned by local authorities in each European country and can therefore be different for different countries.

3M™ VERSAFLO™ BT-SERIES BREATHING TUBES



3M™ Versaflo™ BT-20 S&L Breathing Tube
Lightweight breathing tube that comes in two lengths and is easy to wipe down.
Material: Polyurethane.
Length: 735 mm (S), 965 mm (L).



3M™ Versaflo™ BT-30 Breathing Tube
Self-adjusting length for improved fit for all wearers and reduce risk of catching and snagging.
Material: Polyurethane.
Length: 525 - 850 mm.



3M™ Versaflo™ BT-40 Breathing Tube
Heavy-duty breathing tube.
Material: Neoprene.
Length: 840 mm.



Accessories
BT-922: Disposable breathing tube cover.
BT-926: Flame resistant breathing tube cover



Division Name
3M Operating Unit

Address
City, State, Postal Code
Country
Phone
Fax
Email
Web site address

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