

3M™ Versaflo™ S-Series Headcovers and Hoods

Technical datasheet



Description

The 3M™ S-Series Headcovers and Hoods combine respiratory protection with head, or head, neck and shoulder coverage. Additionally, these headtops also provide eye and face protection. The headtops are designed to be used with an approved 3M air delivery unit to form a respiratory protective device.

- ▶ All S-Series headtops:
 - Meet the highest respiratory performance requirements when used with specific 3M air delivery units
 - Visors provide eye and face protection to EN 166 – liquid splash and low energy impact
 - Connect via approved breathing tubes and adaptor if required (see Approved Breathing Tubes and Adaptors table)
- ▶ Integrated head suspension headcovers and hoods:
 - Ready to use out of the box
 - Available in two adjustable sizes S/M and M/L
 - Exhalation panel vents the headtop
- ▶ Premium reusable suspension hoods:
 - Adjustable head circumference and crown size straps
 - Optional size reducing comfort pad
 - External airflow adjustment control

Applications

The S-Series headtops can be used with an air-filtering unit to form a powered air respirator system or with a regulator to form a supplied air respirator system. According to the system chosen, protection is provided against:

- ▶ Particles e.g. fine dusts, mists and metal fume
- ▶ Gases and vapours
- ▶ Particles and gases combined

Typical industries include:

- ▶ Medical and healthcare
- ▶ Pharmaceutical
- ▶ Manufacturing
- ▶ Agriculture
- ▶ Food and beverage
- ▶ Pulp and paper processing
- ▶ Surface preparation and coating
- ▶ Chemical industry
- ▶ Woodworking



Approved Breathing Tubes

	S-133	S-333G	S-433	S-533	S-655	S-657	S-757	S-855E
3M™ Versaflo™ Powered Air Turbo Unit TR-302E+	BT-20S/L, BT-30, BT-40							
3M™ Versaflo™ Powered Air Turbo Unit TR-802E								
3M™ Versaflo™ Powered Air Turbo Unit TR-602E								
3M™ Versaflo™ Regulator V-500E								
3M™ Versaflo™ Cooling Units V-100E								
3M™ Versaflo™ Heating Units V-200E								
3M™ Powered Air Turbo Unit PF-602E+	Not Approved				BT-20S/L BT-30 BT-40			

Standards and approvals

The S-Series headtops meet the performance requirements of the following European standards:

Eye and face protection to EN 166:2:F:3 (Optical class 2, low energy impact F and liquid splash 3).

Respiratory Protection to EN 12941:1998 + A2:2008 and EN 14594:2005 (see Technical Specification section for more information)

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

Limitations

- ▶ 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)
- ▶ If connected to Powered Air Turbo, when the concentration of contaminant is above 500 times the Occupational Exposure Limit (OEL)
- ▶ If connected to regulators, when the concentration of contaminant is above 200 times the Occupational Exposure Limit (OEL)

Materials

- ▶ Headtop fabric (see table below for information)
- ▶ Visor: S-133/433/655/657 – PETG
S-333G/S-533/S-757/S-855E – Polycarbonate
- ▶ Visor peel-offs – Polyester
- ▶ Integrated suspension headcovers and hoods:
 - Head suspension – Polyethylene
 - Air inlet – Polypropylene
- ▶ Premium reusable suspension hoods:
 - Head suspension – Polyethylene
 - Air channels – Polypropylene
 - Air inlet – ABS
 - Visor attachment clips – Nylon
 - Airflow adjustment cover – Nylon
- ▶ Comfort pad – Nylon scrim upper/polyurethane foam
- ▶ Size reducing comfort pad – Nylon scrim upper/polyurethane foam/nylon scrim lower
- ▶ Breathing tube BT-20S/L – Polyurethane with steel helix
- ▶ Breathing tube BT-30 – Polyurethane with acrylonitrile butadiene styrene helix
- ▶ Breathing tube BT-40 – Chloroprene
- ▶ Breathing tube cover BT-922 – Polyethylene

Note: For disposal, plastic and fabric parts can be quickly removed and separated for segregated waste streams, where facilities are available.

Materials	S-133S/L and S-433S/L	S-333SG/LG and S-533S/L	S-655	S-657	S-757	S-855E
Headtop fabric	Spun bond polypropylene laminated to polypropylene film	Polyurethane coated knitted nylon	Spun bond polypropylene laminated to polypropylene film		Spun bond polypropylene laminated to both sides of polypropylene film	Spun bond polypropylene with multilayer barrier film
Exhalation panel fabric	Spun bond polypropylene		N/A			N/A
Elastic/collar material	Nylon/elastane face seal		Knitted cotton yarn/elastic collar	Nylon/elastane elastic		Knitted polyester

Technical specifications

Nominal Protection Factor = 500:

- ▶ EN 12941 TH3 when connected to 3M™ Versaflo™ TR-802E, TR-602E and TR-302E+ Powered Air Turbos.
- ▶ S-655/S-657/S-757/S-855E: EN 12941 TH3 when connected to 3M™ PF-602E+ Powered Air Turbo

Nominal Protection Factor = 200:

- ▶ EN 14594 3A when connected to V-100E, V-200E or V-500E Regulators*

Note: The Nominal Protection Factor 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. However, 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.

*The S-Series headtops meet the lower strength (A) requirements of EN 14594.

Storage conditions: -30°C to +50°C
< 90 %RH

Operating temperature: -10°C to +55°C

Shelf life** : 3 years from date of manufacture

Weight (without breathing tube):

S-133S = 100g S-133L = 110g
 S-333SG = 125g S-333LG = 130g
 S-433S = 130g S-433L = 135g
 S-533S = 170g S-533L = 185g
 S-655 = 310g S-657 = 310g
 S-757 = 315g S-855E = 375g

**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.

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.

Personal Safety Division

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Spare parts and accessories

Part number	Description
S-605-10	Replacement fabric for S-655
S-607-10	Replacement fabric for S-657
S-707-10	Replacement fabric for S-757
S-805E-5	Replacement fabric for S-855E
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
S-955	Airflow adjustment cover
S-956	Air duct sealing ring
S-957S/L	Comfort pad – small/large (for integrated head suspension headcovers and hoods)
S-953	Comfort pad (for premium head suspension hoods)
S-954	Size reducing comfort pad (for premium head suspension hoods)
S-920S/L	Visor peel-offs – small/large (for integrated head suspension headcovers and hoods)
S-922	Visor peel-offs (for premium head suspension hoods)
BT-957	Storage plugs (for BT-20S/L, BT-30 and BT-40 breathing tubes)