# Technical Datasheet

# 3M™ S-Series Headcovers & Hoods

## 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.
  - Have reduced curvature visors for reduced reflections and glare and excellent field of view. Visors also provide eye and face protection to EN166 – liquid splash and low energy impact.
  - Offer improved comfort, low air flow noise and reduced fogging.
  - Connect via the new, strengthened BT-Series breathing tubes.
- Integrated head suspension headcovers and hoods:
  - Ready to use out of the box.
  - Available in two adjustable sizes S/M and M/L to comfortably fit more users than previous models.
  - Exhalation panel vents the headtop.
- Premium reusable suspension hoods:
  - Adjustable head circumference and crown size straps to comfortably fit more users than previous models.
  - Optional size reducing comfort pad for improved fit.
  - External airflow adjustment control.

## Approvals

The S-Series headtops, 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.

These products were examined at the design stage by:
BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, UK (Notified Body number 0086).

## 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 & vapours.
- Particles & 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

## Standards

The S-Series headtops meet the performance requirements of the following European standards:
Eye and face protection to EN166:2:F:3 (Optical class 2, low energy impact F and liquid splash 3)
Respiratory protection to EN12941 TH3 when connected to the 3M™ TR-302E and Jupiter™ Powered Air Turbo.
Respiratory protection to EN14594 3A * when connected to the 3M™ V-100E, V-200E and V-500E Regulators.
*The S-Series headtops meet the lower strength (A) requirements of EN14594. 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.

## 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 TR-302E and Jupiter powered air turbo, when the concentration of contaminant is above 500 times the Threshold Limit Value (TLV).
- If connected to V-100E, V-200E or V-500E regulators, when the concentration of contaminant is above 200 times the Threshold Limit Value (TLV).

## Materials

- Headtop fabric (see table below for information)
- Visor (S-133/433/655/657/757) - PETG (S-333G/533/855E) - 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) – Neoprene
- 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 & S-433S/L | S-333SG/LG & 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<br><br>Inner Shroud: Spun bond polypropylene S-855E<br>Spun bond polypropylene with multilayer | 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 when connected to 3M™ TR-302E and Jupiter™ Powered Air Turbo.
- 200 when connected to 3M™ V-100E, V-200E or V-500E Regulators.

Minimum Manufacturer Design Flow (MMDF):
150 l/min (Jupiter), 170 l/min (TR-302E, V-100E, V-200E and V-500E)

| | |
|---|---|
| Storage conditions: | -30°C to +50°C |
| | < 90 %RH |
| Operating temperature: | -10°C to +55°C. |

Weight (without breathing tube):

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

## Spare parts and accessories

| PART | 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 | Airduct 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) |

3M

**3M Occupational Health & Safety Division**
**EMEA Region**

3M Centre
Cain Road
Bracknell
Berkshire RG12 8HT
United Kingdom
Tel: + 44 (0) 1344 858000
Web: www.3M.eu/Safety

Please recycle. Printed in United Kingdom
© 3M 2007. All rights reserved.

EU_Master_02