Technical Datasheet



3M[™] Versaflo[™] V-500E Supplied Air Regulator

Product Description

The 3MTM VersafloTM V-500E Regulator is a belt-worn supplied air regulator. When combined with one of the 3M approved headtops, it forms a supplied air respiratory protection system. The V-500E Regulator can be used with the following headtops: 3MTM VersafloTM S-Series Headcovers and Hoods, 3MTM VersafloTM M-Series Faceshields and Helmets, 3MTM HT-400 Series Visors, 3MTM HT-600 Series Welding Shields, 3MTM HT-700 Series Helmets and 3MTM HT-800 Series Helmets.

- · Controlled, constant flow of air
- Locking control knob allows airflow to be adjusted to user's preference
- Integrated warning whistle warns the user of low supplied air pressure
- Integrated silencer reduces regulator's noise level to less than 65 dBA
- Integrated replaceable active carbon filter removes odours
- Auxiliary port allows air tools such as paint spray guns to be connected to the regulator without affecting airflow to the headtop
- Regulator unit can be positioned on the belt to accommodate right- and left-handed users
- Swivelling bayonet connector allows the breathing tube to move freely to the most comfortable position
- · This product does not contain silicone components

Materials

| Component | Material |
|--------------------------|---|
| Housing and belt bracket | Noryl plastic (polyphenylene oxide) |
| Warning whistle | Brass |
| Belts | Standard belt = polyester Easy-clean belt = polyurethane coated polyester |

Applications

The V-500E Regulator, when used with an approved 3M headtop, provides respiratory protection against:

- · Particles e.g. fine dusts, aerosols, paint spray or metal fume.
- Gases and vapours
- Particles, gases and vapours combined

| Application | Typical industry |
|----------------------|--|
| Spray painting | General transport Automotive & Aerospace Metal fabrication Shipbuilding |
| Powder coating | Metal fabrication |
| Material handling | Pharmaceutical Food processing Chemical Agrochemical Laboratory |
| Grinding & deburring | Metal fabrication Automotive |
| Welding | Metal fabrication Shipbuilding |

Use Limitation

The V-500E Regulator 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).



Standards and Approval

The V-500E Regulator, in combination with 3M approved headtops, has been tested and approved to EN14594.

The V-500E Regulator, when used as part of an approved 3M Respiratory system has been shown to meet the Basic Safety Requirements under Article 10 and 11B of the European Directive 89/686/EEC and is CE marked. The product was examined at the design stage by: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8PP, UK. (Notified Body number 0086).

Technical Data Specifications

| Protection Class (depends on 3M headtop used) | |
|---|--|
| EN14594 2A/2B* | Nominal Protection Factor (NPF) = 50 Assigned Protection Factor (APF) = 20 |
| EN14594 3A/3B* | NPF = 200 APF = 40 |
| Inlet Pressure | Pressure Range: 3.5 – 8 bar Maximum Pressure: 10 bar |
| Outlet Flow Characteristics | Manufacturer's Minimum Design Flow (MMDF) 170I/min Maximum Flow 305 I/min |
| Storage Conditions | -10°C to = 50°C and < 90% RH |
| Operating Temperature | -5°C to + 40°C and < 90% humidity |
| Weight | 514g |
| Inlet and auxiliary outlet port | 1/4 inch BSP thread |
| Compressed air | The compressed air used to operate the V-500E Regulator must comply with the quality requirements of EN12021 |

^{*3}M provide a range of headtops and compressed air supply tubes that meet both A and B classification.

Accessories and Spare Parts

| Article number | Description |
|----------------|--|
| 023-05-51P | Carbon filter |
| TR-325 | Standard belt |
| TR-327 | Easy-clean belt |
| 530-12-53P3 | Belt unit coupling plug - CEJN |
| 530-12-52P3 | Belt unit coupling plug - Rectus |
| 308-00-30P | 10m Standard duty CAST |
| 308-00-31P | 30m Standard duty CAST |
| 308-00-40P | 7.5m Coiled CAST |
| 308-00-72P | 10m Standard duty, anti-static, high temperature CAST |
| 530-12-81P3 | Socket and plug – CEJN |
| 530-12-82P3 | Socket and plug – Rectus |
| 312-03-01P3 | 2-way manifold |
| 312-03-00P3 | 3-way manifold |
| ACU-01 | Aircare Filtration Unit - Wall mounted |
| ACU-02 | Aircare Filtration Unit – Floor standing |
| 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 |
| | |

Important Notice

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Personal Safety Division EMEA Region

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