

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

Technical Data Sheet



Description

The 3M™ Versaflo™ 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: 3M™ Versaflo™ S-Series Headcovers and Hoods, 3M™ Versaflo™ M-Series Faceshields.

Features

- 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
- Can be used with 3M compressed air hoses up to a maximum length of 30 m
- Regulator unit can be adjusted on the belt for right and left-handed users
- Swivelling bayonet connector allows the breathing tube to move freely to the most comfortable position
- No silicone components
- Includes TR-325 belt

Standards

The V-500E Regulator, in combination with various 3M headtops, has been tested and is compliant with AS/ NZS 1716:2012.

Operation/Cleaning

Users need to be trained in the safe operation of this equipment. Routine checks must be carried out in accordance with the user instructions. Cleaning should also only be carried out as specified in the user instructions.



V-500

Specifications

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

Protection Factors	100+ (AS/NZS 1715) against mechanically and thermally generated particulates and gases & vapours.
Inlet Pressure	Pressure range: 3.5 – 8 bar Maximum pressure: 10 bar
Outlet Flow Characteristics	Manufacturer's Minimum Design Flow (MMDF) 170l/min Maximum Flow 305 l/min
Storage conditions	-10°C to +50°C < 90 %RH
Operating temperature	-5°C to +40°C and <90% humidity
Weight	514 g
Inlet and auxiliary outlet port	¼ inch BSP thread
Housing & belt bracket	Noryl plastic (polyphenylene oxide)
Warning whistle	Brass
Belts	Standard belt = polyester Easy-clean belt = polyurethane coated polyester
Operating pressure range	3.5-8 bar
Maximum supply pressure	10 bar

Applications

The V-500E Regulator, when used with a compliant 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	Automotive & Aerospace General transport Metal fabrication Shipbuilding
Powder coating	Metal fabrication
Material handling	Agrochemicals Chemical Food processing laboratory Pharmaceutical
Grinding and deburring	Automotive Metal fabrication
Welding	Metal fabrication Shipbuilding

Limitations

The V-500E Regulator should not be used:

- In atmospheres containing less than 19.5% oxygen (3M definition).
- In confined spaces (as defined by AS 2865).
- For airborne contaminant concentrations above the rated level of protection assigned as per AS/NZS 1715. When used with a full facepiece, this respirator airline system is given a Required Minimum Protection Factor of 100+ by AS/NZS 1715
- Against unknown concentrations of contaminants or at concentrations above the immediately dangerous to life or health (IDLH) level.



Compatible Hoods and Headtops



V-500E



023-05-51P5



Ordering Information

Supplied Air Regulator

SAP ID	Legacy ID	Availability		Model #	Description
		AUS	NZ		
7100005806	XA007706675	•	•	V-500E	3M™ Versaflo™ Supplied Air Regulator V-500E, No Fitting, 1 EA/Case
7000042672	52000017831	•	•	023-05-51P5	3M™ Versaflo™ Supplied Air V-500E, Carbon Filter Pack and O-Rings 023-05-51P5, 5 Pack/Case



QR-ALVM-206E

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ALVM-206E (902-03-84)

Includes 1 x CEJN 342 fitting attached



ALVM-406E (902-03-86)

Includes 1 x CEJN 342 fitting attached



QR-ALVM-406E

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Ready to use V-500E Airline Kits

SAP ID	Legacy ID	Availability		Model #	Description
		AUS	NZ		
7012891413	AT010587783	•	•	ALVM-206E (902-03-84)	3M™ Versaflo™ Supplied Air Spray Kit ALVM-206E 902-03-84, with V-500E with CEJN 342 fitting, BT-30 breathing tube & M-206 with S1303-066 Storage Bag, 1 ea/Case
7012883633	AT010587809	•		ALVM-406E (902-03-86)	3M™ Versaflo™ Supplied Air Spray Kit ALVM-406E 902-03-86, with V-500E with CEJN 342 fitting, BT-30 breathing tube & M-406 with S1303-066 Storage Bag, 1 ea/Case



BT-20 S/L



BT-30



BT-40



QR-PSA-BT

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Breathing Tubes

SAP ID	Legacy ID	Availability		Model #	Description
		AUS	NZ		
7100296133	70071767472	•		BT-20L	3M™ Versaflo™ Breathing Tube BT-20L, Medium/Large, 1 ea/Case. Fixed length lightweight Polyurethane L=965mm
7100134625	70071533023	•		BT-20S	3M™ Versaflo™ Breathing Tube, BT-20S/37309(AAD), Small/Medium, 1 EA/Case. Short Fixed length lightweight Polyurethane L=735mm
7100006955	XA007706584	•	•	BT-30	3M™ Versaflo™ Breathing Tube, Self-adjusting, BT-30 L= 525-850
7100069524	UU003085113	•	•	BT-40	3M™ Versaflo™ Heavy Duty Breathing Tube BT-40, 1 ea/Case Fixed length Neoprene Rubber L=840mm

Supplied Air Breathing Hoses



QR-SAHOSE

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901-00-54



901-00-47

901-00-47



QR-901-00-47

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Continuous Flow Supplied Air Spare Parts & Accessories

SAP ID	Legacy ID	Availability		Model #	Description
		AUS	NZ		
7012890770	AT019165714	•		901-00-56	3M™ Supplied Air Hose & Hose Assembly, Supplied Air Breathing Hose with CEJN 342 Fittings, 7.5 m, 1 ea/Case
7012913494	AT019165698	•	•	901-00-54	3M™ Supplied Air Hose & Hose Assembly, Supplied Air Breathing Hose with CEJN 342 Fittings, 15 m, 1 ea/Case
7012886198	AT019165706	•		901-00-55	3M™ Supplied Air Hose & Hose Assembly, Supplied Air Breathing Hose with CEJN 342 Fittings, 10 m, 1 ea/Case
7012887764	AT019185233	•		901-00-63	3M™ Supplied Air Hose & Hose Assembly, Supplied Air Breathing Hose with CEJN 342 Fittings, 30 m, 1 ea/Case
7012890154	AT019184335	•		901-00-47	3M™ Supplied Air Breathing Air Panel, 901-00-47 with 3 x CEJN 342 Fittings , 1 ea/Case

3M Supplied Air Regulator and Air Regulating Valves Comparison Chart

3M™ Supplied Air Regulators and Valves provide comfortable, cost effective respiratory protection for all-day use. Supplied air respirators offer many features over traditional respiratory protection, such as cooling or heating incoming air with certain valves and low maintenance. 3M™ Supplied Air Respirators require a source of clean breathing air such as plant air systems or bottled air. This clean, breathable air can be delivered to a range of hoods and helmets

	V-100	V-200	V-300	V-500E
				
SAP Code	7100331585 (AU & NZ) 7012872248 (AU)	7100331680 (AU & NZ) 7012889455 (AU)	7100077491 (AU & NZ) 7012873867 & 7012887859 (AU)	7100005806
Legacy ID	AT019167983 (AU) AT019184244 (AU) with BT-30	AT010589466 (AU)	AT019167991 (AU) AT019184236 (AU) with BT-30 70070799161 (NZ)	XA007706675
Availability	AU & NZ	AU & NZ	AU & NZ	AU & NZ
Compatible Breathing Tubes*	BT-20S, BT-20L, BT-30, BT-40	BT-20S, BT-20L, BT-30, BT-40	BT-20S, BT-20L, BT-30, BT-40	BT-20S, BT-20L, BT-30, BT-40
Belt	TR-325	TR-325	TR-325	TR-325
Airline Hose Connection Type	7100331585 - No fitting 7100331585 (AU) - CEJN 342	7100331680 - No fitting 7012889455 (AU) - CEJN 342	7100077491 - no fitting 7012873867 & 7012887859 (AU) CEJN 342	
Approximate Weight	650g	750g	268g	514g
Inlet Pressure	62-72 psig (4 bar to 5 Bar) From an up to 30m airline hose	64 – 68 psig (4.4 – 4.7 Bar) From an up to 30m airline hose	30-35 psig (2-2.4 Bar) From an up to 30m airline hose	50-116 psig (3.5-8 Bar) Max Pressure 10 Bar From an up to 30m airline hose
Airflow outlet range	6-15 cfm (170 to 425 lpm)	6-15 cfm (170 to 425 lpm)	6-15 cfm (170 to 425 lpm)	6-10 cfm (170 to 305 lpm)
Temperature Adjustment	✓ Up to 25°C Cooling	✓ Up to 25°C Heating		
Low Pressure Warning Whistle				✓
Optional outlet to spray gun				✓
Odour filter				✓

CFM = Cubic feet minute. LPM = Litre per minute. PSI – Pounds per square Inch gauge. Bar = Atmospheric pressure

*Note: Refer to catalogue sections for further information on each product and country availability.

Note: Confirm if your compressor has sufficient free air capacity for all users, regulators, sprays guns, other equipment etc. to maintain respiratory protection for wearers of respiratory protective equipment. The more users and equipment connected to the system the greater the free air capacity required

Discussion on Respirable Air

- Many older compressed air systems may provide air that is unfit for human respiration without secondary air treatment. This is due largely to the presence of objectionable oil vapors and odours. Rules and regulations governing air quality when using compressed air for respiration are quite specific. Precautions must be observed when using compressed air for breathing purposes.
- Oil mist from the compressor lubricating oil must not be present when the air reaches the air control device. Excessive amounts of water vapour and any particulate matter should also be removed as they may affect performance of the air control devices.
- Refer AS/NZS 1716 Appendix A and/or SA/SNZ TS ISO 16975.1:2023 for further information on breathable air quality requirements.

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SCAN OR CLICK FOR:



QR-CAT-CFSA

Continuous Flow
Supplied Air
Catalogue Section



QR-CAT-FULL

Full Personal
Safety Division
Catalogue

Technical Statement

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3M Australia Pty Ltd
Personal Safety Division
Bldg A, 1 Rivett Road
North Ryde NSW 2113
Customer Service: 1300 363 565
Email: 3msupport.safety.au@mmm.com
Web: www.3M.com/au/ppesafety

3M New Zealand Ltd
Personal Safety Division
94 Apollo Drive, Rosedale
Auckland 0632
Customer Service: 0800 252 627
Email: 3msupport.safety.nz@mmm.com
Web: www.3M.com/nz/ppesafety

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