

3M™ PF-600E-ASB (Proflow SC160) Powered Air Respirator

Description

The 3M™ PF-600E-ASB (Proflow SC160) incorporates a waist mounted blower unit supplying filtered air to the face piece through a breathing hose. A NiMH battery is encased in a polyurethane casing with a microcontrolled charger for charging.

Approved DT-Series (Pro2000) filters include:

- DT-1135E PAPR-P3
- DT4045E Combined Filter PAPR-B1E1K1P3

Approved Headtops / Facepieces include:

- S-333 Headtop
- S-533 Headtop
- M-200 Headtop
- M-300 Headtop
- 3M™ FF-300 (Promask Single/FM3) Full Facepiece
- 3M™ FF-600 (Vision RFF4000/FM4) Full Facepiece¹

The blower unit features a DC motor powered radial fan. A microprocessor calculates the power required to maintain the set flow rate and automatically adjusts the air supply. If the airflow rate falls below the minimum 160l/min, an audible warning sounds.

To facilitate load tracking and servicing, the 3M PF-600E-ASB (Proflow SC160) incorporates a data-logging function, which automatically records information about the usage and performance of the blower unit. Tracking of the history of each individual model and reliable product identification is available through the Service Centre.

The rechargeable battery is safely enclosed within the casing. The service life of the battery is extended by the electronic control of recharging. A single charge allows the user to work for a full shift. Operation time for the PF-600E-ASB (Proflow SC160) and approved respirator/filter, will vary dependant on the loading of the filter, the air temperature and relative humidity.

The 9.6V NiMH battery takes 6 hours to charge from flat. Recharging should always take place at a room temperature of about 20°C. The battery technology does not exhibit “memory” effect, there is no need for complete discharge before recharging.

¹. Available only in Australia



The Microprocessor-controlled charger features an automatic recharging system including signal lights. The signal lamp on the charger indicates charging status. A fully-charged battery can stay connected to the charging device without damage. The power pack can be left on standby charge and taken into use whenever needed. The charger features internal over current protection and temperature protection.

An automatic monitoring feature checks that the blower is operating correctly, warns the user of low battery and quickly compensates for changes in airflow. A self-diagnostic test on start-up shows the current status of the respirator on the digital display.

On the digital display a P number indicates the condition of the particle filter. A P9 shows that less resistance is present in the filter and a lower P number shows that the resistance in the filter has increased. An increase in resistance usually indicates the clogging of the filter medium or a throttled breathing hose.

A9 shown on the digital display indicates the battery is fully charged and A1-A0 indicates the battery capacity has dropped below the required level. There is an audible warning of battery and filter status.

Standards

The PF-600E-ASB (Proflow SC160) air powered respirator complies with AS/NZS 1716:2012.

Service/Training

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.

For training requirements in Australia, please contact 3M Training Department on Phone: 1800 445 867 or Email: anzfallprotectiontraining@mmm.com.

For training requirements in New Zealand, please contact 3M Customer Services: 0800 252 627.

All servicing must be carried out by trained personnel who have been trained and are deemed competent by the manufacturer and hold a current 3M Scott Safety technician's certificate.

For Annual Servicing requirements in Australia, please contact 3M Scott Fire & Safety Service department on Phone: 131 772 or Email: scbaservice@mmm.com.

For annual servicing requirements in New Zealand, please contact 3M Customer Services: 0800 252 627.

Specifications

The following specifications for the PF-600E-ASB (Proflow SC160) Powered Air Respirator apply to PF-619E-ASB and PF-619E-ASB-PF-949 Starter Kit:

- ▶ **Blower Body:** Polyurethane (PU) - good chemical & impact resistance
- ▶ **Motor Body:** Polyamide (PA 12) - good resistance to abrasion & impact
- ▶ **Body Tensioner:** Stainless Steel
- ▶ **Inhalation Valve Body:** Polyamide (PA)
- ▶ **Breathing Hose:** Ethylene Propylene Diene Monomer (EPDM) Rubber
- ▶ **Air flow:** Minimum 160 l/min, automatic adjustment
- ▶ **Belt:** Fully adjustable, washable PVC for easy decontamination
- ▶ **Operating Time:** 6 - 7 hours from a single charge, depending on workload
- ▶ **Battery:** NiMH 9.6V nominal 4.5Ah rechargeable battery
- ▶ **Battery Life:** About 400 charging cycles (@4h daily running time)
- ▶ **Charger:** 6-7 hours recharging time - automatic trickle charging
- ▶ **Recharging Temperature:** Recommended 20°C
- ▶ **Power Pack Status Indication:** Visual display of battery status (A) Filter Blockage (P) Audible warning of low battery and filter status
- ▶ **Sound Level:** <70dB(A)
- ▶ **Operating Temperature:** -10°C to +30°C
- ▶ **Operating Humidity:** <95%
- ▶ **Ingress Protection:** IP 54
- ▶ **Warranty:** PF-600E-ASB (Proflow SC160): 36 months or 1800 hours (excluding battery) Battery: 12 months
Warranty runs from the date of purchase by the end user and is only valid if serviced and maintained according to the manufacturers recommendations
- ▶ **Approvals:** AS/NZS 1716:2012

Filters

The 3M™ PF-600E-ASB (Proflow SC160) is approved for use with PAPR DT-Series (Pro2000) PAPR-P3 particulate filter and PAPR-B1E1K1P3 Combination filters. 3M™ PF-600E-ASB (Proflow SC160) is approved with a range of facepieces, hoods and headtops. These combinations are compliant to AS/NZS 1716: 2012. Please refer to the relevant facepiece, hood and headtop datasheet for individual technical specifications.

The following DT-Series (Pro2000) filters are approved for use with the 3M PF-600E-ASB (Proflow SC160):

Filters	Code	Description
DT-Series PF10 PAPR-P3	DT-1135E (052670)	Solid & liquid particles, radioactive & toxic particles, fumes and mists
DT-Series CF22 PAPR-B1E1K1P3	DT-4045E (042799)	Inorganic gases/vapours, acid gases/vapours, ammonia & ammonia derivatives, solid & liquid particles

Headtops/Facepieces

The 3M™ PF-600E-ASB (Proflow SC160) is approved for use with specific headtop/facepiece combinations. The manufacturer identifies the headtop combination to be tested. Each combination is compliant to AS/NZS 1716: 2012. Please refer to relevant datasheets for individual technical specifications.

Approved Combinations and PAPR Classifications

According to AS/NZS 1716:2012 an approved PAPR unit always consists of a blower + facepiece/hood + filters. The following combinations are compliant to AS/NZS 1716: 2012. The manufacturer does not accept responsibility for any other combination of components. Use of unapproved combinations may lead to ill health.

Hoods and Headtops

- S-333 Versaflo Half hood
- S-533 Versaflo Full hood
- M-200 Headtop
- M-300 Headtop

See [Figure 1](#).

IMPORTANT NOTE

M-200 & M-300 with PF-600E-ASB-PF-949 combinations are PAPR-P1 rated. Suitable for contaminants up to 10x the Workplace Exposure Standard (WES) for particulate and gas/vapour contaminants.

IMPORTANT NOTE

S-333 & S-533 with PF-600E-ASB-PF-949 combinations are PAPR-P3 rated. Suitable for contaminants up to 100x the Workplace Exposure Standard (WES) for particulate contaminants and up to 10x the WES for gas/vapour contaminants.

Facepieces

FF-300 & FF-600 with DT-1135E PAPR-P3 particulate filter combinations are PAPR-P3 rated. Suitable for particulate contaminants up to 100+ the Workplace Exposure Standard (WES) for particulate contaminants and up to 10x the WES for gas/vapour contaminants.

- FF-300 (Promask Single/FM3)
- FF-600 (Vision RFF4000/FM4)²

See [Figure 2](#).

Weight

Combination	Weight	Weight with 2 x DT-1135E Filter	Weight with 2 x DT-4045E Filters
PF-600E-ASB (Proflow SC160) with battery	1,650kg	1,750kg	2.4kg
Battery	448g		
Charger	660g		

² Available only in Australia

Headtop/Facepiece, Hose and Filter Options

Headtop or Facepiece	Compatible Hoses	Compatible Filters
S-333 S-533 M-200 M-300 See Figure 1 .	BT-30: Self-adjustable Polyurethane Breathing Tube L=525-850mm (comes standard with PF-619E-ASB-PF-949 Starter Kit and PF-600E-ASB-M-307 Kit) BT-20S: Fixed length lightweight Polyurethane Breathing Tube L=735mm BT-20L*: Fixed length lightweight Polyurethane Breathing Tube L=965mm BT-40: Fixed length Heavy Duty Neoprene Breathing Tube L=840mm See Figure 1 .	DT-1135E (052670) DT-Series (Pro2000) PAPR-P3 DT-4045E (042799) DT-Series (Pro2000) CF32 PAPR-B1E1K1P3 See Figure 3 .
3M FF-300 (Promask Single/ FM3) Full Facepiece** FF-600 (Vision RFF4000/ FM4) Full Facepiece*** See Figure 2 .	SC-BT-56-ASB (063799) EPDM Hose (comes standard with PF-619E-ASB Starter Kit, PF-600E-ASB-FF-302 & PF-600E-ASB-FF-603 Ready-Paks) See Figure 2 .	DT-1135E (052670) DT-Series (Pro2000) PAPR-P3 DT-4045E (042799) DT-Series (Pro2000) CF32 PAPR-B1E1K1P3 See Figure 3 .
* BT-20L available only in Australia.		
** Export controlled product document required to be signed on purchase.		
*** Available only in Australia		

Figure 1: Headtops compatible with PF-619E-ASB- PF-949 Starter Kit: 1) S-333, 2) S-533, 3) M-200, 4) M-300.
Compatible hoses: 1) BT-30, 2) BT-20S/L [BT-20L available only in Australia], 3) BT-40



ⓘ IMPORTANT NOTE

M-200 & M-300 with PF-600E-ASB-PF-949 Combinations PAPR-P1 rated. Suitable for contaminants up to 10x the Workplace Exposure Standard (WES).

Figure 2: Facepieces and hoses compatible with PF-619E-ASB Starter Kit: 1) 3M FF-300 (Promask Single/FM3) Full Facepiece and 2) FF-600 (Vision RFF4000/ FM4) Full Facepiece [available only in Australia] 3) SC-BT-56-ASB. Compatible hose: UU011534342



Figure 3: Filters: 1) DT-1135E (052670) DT-Series (Pro2000) PF 10 PAPR-P3 and 2) 042799/DT-4045E DT-Series (Pro2000) CF32 PAPR-B1E1K1P3



Ready-Paks Complete Packages for PF-600E-ASB (Proflow SC160) PAPR Unit

The 3M PF-600E-ASB (Proflow SC160) Ready-Paks, provides a “ready-to-go” system containing all you need to get started.



PF- 600E-ASB-FF-602 FF-602 (Vision RFF4000) PF-600EASB (Proflow SC160) Ready-Pak³ . Comes with PF-602E-ASB blower, PF-972 Airflow Indicator, SC-BT-56- ASB Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Shower plugs, SC-327 Easy Clean Belt, 2 x DT-1135E P3 Particulate DT-Series (Pro2000) Filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters) and stackable tubs. Order ID UU012118202.

³. Available only in Australia



PF- 600E-ASB-FF-302 FF-302 (Promask Single/FM3) PF- 600E-ASB (Proflow SC1 60) Ready-Pak. Comes with PF-602E-ASB blower, PF-972 Airflow Indicator, SC-BT-56-ASB Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Shower plugs, SC-327 Easy Clean Belt, 2 x DT- 1135E P3 Particulate DT-Series (Pro2000) Filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters) and stackable tubs. Export controlled product. Document required to be signed on purchase. Order ID UU012187892.



M-307 Headtop with reflective tape PF-600E-ASB (Proflow SC160) Ready-Pak. Comes with PF-602E-ASB blower with PF-949 breathing tube adaptor attached PF-972 Air Flow Indicator, BT-30 Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Showerplugs, SC-327 Easy Clean Belt, 2 x DT-1135E PAPR-P3 Particulate DT-Series (Pro2000) Filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters) and S1303-0166 storage bag. P/N AT019501447.

Maintenance/Cleaning

Maintenance: The blower device shall be serviced at least once a year by a Service Centre. After use the respirator must be checked, cleaned and disinfected. Replace damaged parts. Replace worn filters. Always replace filters at the same time. Check that the breathing hose is undamaged. Use only original parts. Maintenance of the respirator is described in the respective instructions for use.

Cleaning: Clean with a damp cloth or sponge. Use lukewarm water and mild detergent (neutral pH 6-8). Do not use solvents (like turpentine, acetone), hot water or bleaching agents (like Perborate, Percarbonate). Never clean with compressed air or compressed water. Do not allow water to enter the breathing hose. After cleaning disinfect. Do not use radiant heat or artificial heating for drying purposes, as this may cause damage. Allow to dry at room temperature.

Storage

The 3M PF-600E-ASB (Proflow SC160) should be protected from direct sunlight, grease and oil. The store should be dry and cool.

Storage of the respirator: -10°C to +50°C, and relative humidity (RH) under 75%. A properly stored, unused respirator stays in good condition for a long storage period.

Storage of the Blower Unit: -10°C to +30°C, and at less than 75% RH.

Storage and maintenance of a filter: The filters are sealed in plastic bags by the manufacturer. Store the filters unopened in a clean place at an even temperature. Most appropriate is 0°C to +30°C with relative humidity below 75%. Sealed filters tolerate conditions of -10°C to +50°C and below 95% RH. The storage period (month and year) for filters is marked on the filter tape. Do not try to regenerate the filters. Never clean the filters with compressed air or compressed water. An opened gas/vapour filter must be sealed tightly if they are to be reused and must be replaced within 6 months after opening at the latest, as per AS/NZS 1716:2012. After use, the filters are special refuse. Make sure that they are disposed of in accordance with current waste treatment regulations.

Disposal

If the product is to be disposed of, it should be disassembled and disposed of as solid waste. Please see local authority regulations for disposal advice and locations. Discarded batteries are hazardous waste. Make sure they are disposed of according to correct regulations.

Ordering Information

Starter Kits

3M Code	Model #	Description
UU012121842	PF-619E-ASB (064580)	PF-619E-ASB (Proflow SC160) Starter Kit. Comes with PF-602E-ASB blower, PF-972 Airflow Indicator, SC-BT-56-ASB Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Shower plugs, SC-327 Easy Clean Belt. 2 x DT-1135E PAPR-P3 particulate filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters). Compatible only with FF-300 & FF-600 tight fitting full facepieces.
AT019501454	PF-619E-ASB-PF-949	PF-619E-ASB-PF-949 (Proflow SC160) Starter Kit. Comes with PF-602E-ASB blower with PF-949 breathing tube adaptor attached, PF-972 Airflow Indicator, BT-30 Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Shower plugs, SC-327 Easy Clean Belt. 2 x DT-1135E PAPR-P3 particulate filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters). Compatible only with S-333, S-533, M-200 & M-300 headtops.

Ready-Paks

3M Code	Model #	Description
UU012187892	PF-600E-ASB-FF-302 (5064594)	FF-302 (Promask Single/FM3) PF-600E-ASB (Proflow SC160) Ready-Pak. Comes with PF-602E-ASB blower, PF-972 Airflow Indicator, SC-BT-56-ASB Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Shower plugs, SC-327 Easy Clean Belt, 2 x DT- 1135E P3 Particulate DT-Series (Pro2000) Filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters) and stackable tubs. Export controlled product. Document required to be signed on purchase
UU012118202*	PF-600E-ASB-FF-602 (5564593)	FF-602 (Vision RFF4000) PF-600E-ASB (Proflow SC160) Ready-Pak. Comes with PF-602E-ASB blower, PF-972 Airflow Indicator, SC-BT-56-ASB Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Shower plugs, SC-327 Easy Clean Belt, 2 x DT- 1135E P3 Particulate DT-Series (Pro2000) Filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters) and stackable tubs. Export controlled product. Document required to be signed on purchase.
AT019501447	PF-600E-ASB-M-307	M-307 Headtop with reflective tape PF-600E-ASB (Proflow SC160) Ready-Pak. Comes with PF-602E-ASB blower with PF-949 breathing tube adaptor attached PF-972 Air Flow Indicator, BT-30 Breathing tube, PF-630 internal battery, PF-641E battery charger, PF-653 Showerplugs, SC-327 Easy Clean Belt, 2 x DT-1135E PAPR-P3 Particulate DT-Series (Pro2000) Filters, SS-6601 Prefilter pack (2 x SS-602 Prefilter holders & 6 x SS-6600 Prefilters) and S1303-0166 storage bag.
* Available only in Australia		

Loose Fitting Hoods & Headtops

3M Code	Model #	Description
52000045865	S-333SG	S-333 Versaflo Head Cover 1/Box
52000045881	S-333LG	SG = Small LG = Large
52000045949	S-533S*	S-533 Versaflo Full Hood 1/box
52000045964	S-533L	S = Small L = Large
UU011469986	M-206*	Faceshield with Comfort faceseal
70071673779	M-207	Faceshield with flame-resistant faceseal
UU011469960	M-306*	M-306 Versaflo Helmet with coated visor and Comfort faceseal
70071562006	M-307	M-307 Versaflo Helmet with coated visor and flame resistant faceseal
* Available only in Australia.		

Full Facepiece Options

3M Code	Model #	Description
UU010978961	FF-301 (012670)	3M FF-301 (Promask Single/FM3) PAPR full facepiece (S), no hose Export Controlled Product Document required to be signed on purchase.
UU010978953	FF-302 (012681)	3M FF-302 (Promask Single/FM3) PAPR full facepiece (M/L), no hose. Export Controlled Product Document required to be signed on purchase.
UU010979498	FF-601 (RFF4000S)*	3M FF-601 (RFF4000S/FM4) Silicon PAPR Side mounted full facepiece (Small), no hose
UU010979480	FF-602 (RFF4000)*	3M FF-601 (RFF4000M/FM4) Silicon PAPR Side mounted full facepiece (Medium)
UU010979332	FF-603 (RFF4000)*	3M FF-603 (RFF4000/FM4) Silicon PAPR Side mounted full facepiece (Medium/Large), no hose
* Available only in Australia.		

Filters, Pre-filters, and Filter Accessories

3M Code	Model #	Description
UU011502539	DT-1135E (052670)	DT-Series (Pro2000) PF 10 PAPR-P3 - Solid/liquid/radioactive particulates, bacteria, fumes/mist
UU011534342	DT-4045E (042799)	DT-Series (Pro2000) CF 32 PAPR-B1E1K1P3 Inorganic and acid gases/vapours, ammonia + solid & liquid particulates
UU010979753	SS-6601/SC-6601	Pre-filter pack for DT-Series Filters. Includes 6 x SS-6600 pre-filters and 2 x SS-6602 pre-filter holders
UU010979779	SS-6600/SC-660	DT-Series Pre-filter 20EA/Pack
UU010979761	SS-6607/SC-6607	DT-Series Filter Covers Orange Polyethylene 2/EA/Pack

3M PF-600E-ASB (Proflow SC160) Breathing Tube Options

3M Code	Model #	Description
UU011534342	SS-BT-56-ASB (063799)	EPDM hose (angle & DIN) 80cm for use with FF-300 and FF-600 (comes standard with PF-619E-ASB Starter Kit, PF-600E-ASB-FF-302 & PF-600E-ASB-FF-603 Ready-Paks)
70071533015	BT-20L*	Fixed length lightweight Polyurethane Breathing Tube L=965mm for use with PF-600E-ASB with PF-949 adaptor
70071533023	BT-20S	Fixed length lightweight Polyurethane Breathing Tube L=735mm for use with PF-600E-ASB with PF-949 adaptor
XA007706584	BT-30	Self-adjustable Polyurethane Breathing Tube L=525-850mm for use with PF-600E-ASB with PF-949 adaptor. (Come standard with PF-600E-ASB-PF-949 starter kit)
UU003085113	BT-40	Fixed length Heavy Duty Neoprene Breathing Tube L=840mm for use with PF-600E-ASB with PF-949 adaptor
* Available only in Australia.		

3M Personal Safety Division

FF-300 & FF-600 Accessories

3M Code	Model #	Description
UU010979506	FF-600-926 (VCP1000)*	FF-600 visor covers/tear offs
XP100544145	FF-300-926 (012698)	FF-300 visor covers/ tear offs
XP100544160	FF-300-20 (0129790)	FF-300 Prescription Spectacle frame Storage poly bag (PVC) - head tops
UU010979514	FF-600-20 (2015082)*	FF-600 & FF-600F Prescription Spectacle frame

* Available only in Australia.

Spare Parts & Accessories

3M Code	Model #	Description
UU010979811	PF-641E (063791)	Universal Charging Kit
UU011535331	SC-327 (2015430)	Belt With Buckle PVC
UU010979738	PF-653 (2023305)	Shower plugs blower caps to suit PF-600E-ASB

Important Notice

To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.



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