

# 3M<sup>™</sup> PF-600E-ASB (Proflow SC160) Powered Air Respirator

# **Technical Data Sheet**

## Description

The 3M<sup>™</sup> 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:

- Particle filter P3
- Combined filter B1E1K1-P3
- \*for approved combination please refer to page 3

#### Approved Headtops / Facepieces include:

- S-333 Headtop PAPR P3 PAPR B1E1K1P3
- S-533 Headtop PAPR P3 PAPR B1E1K1P3
- M-200 Headtop PAPR P3 PAPR B1E1K1P3
- M-300 Headtop PAPR P3 PAPR B1E1K1P3
- 3M<sup>™</sup> FF-300 (Promask Single/FM3) Full Facepiece
- 3MTM FF-600 (Vision RFF4000/FM4 Full Facepiece

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 1601/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.



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 please contact 3M Training Department on Phone: 1800 445 867 or Email: anzfallprotectiontraining@mmm.com

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 please contact 3M Scott Fire & Safety Service department on Phone: 131 772 or Email: scbaservice@mmm.com

## **Specifications**

#### PF-600E-ASB (Proflow SC160) Powered Air Respirator

	064580
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 I/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<sup>™</sup> PF-600E-ASB (Proflow SC160) is approved for use with PAPR DT-Series (Pro2000) PF10 particulate filter and B1E1K1-P3 Combination filters. 3M<sup>™</sup> 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):

Filter	Code	Description
DT-Series Pro2000 PF10 PAPR P3*	052670 DT-1135E	Solid & liquid particles, radioactive & toxic particles, bacteria, viruses, fumes and mists
DT-Series Pro2000 CF22 PAPR B1E1K1-P3*	DT-4045E	Inorganic gases/vapours, acid gases/vapours, ammonia & ammonia derivatives, solid & liquid particles

\* Please check approval ratings for each filter and Headtop combination.

## **Headtops/Facepieces**

The 3M<sup>™</sup> 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.

#### 3M<sup>™</sup> PF-600E-ASB (Proflow SC160)

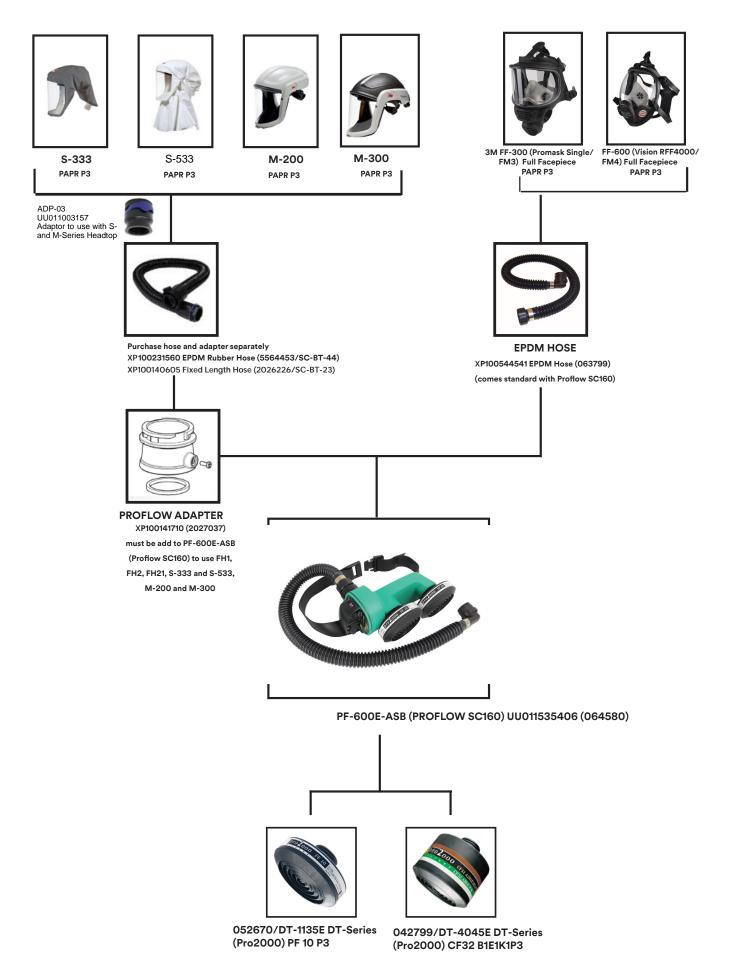
Hoods and Headtops	P3 PAPR Rating	B1E1K1P3 PAPR Rating
S-333 Versaflo Half hood	PAPR P3	PAPR B1E1K1P3
S-533 Versaflo Full hood	PAPR P3	PAPR B1E1K1P3
M-200 Headtop	PAPR P3	PAPR B1E1K1P3
M-300 Headtop	PAPR P3	PAPR B1E1K1P3
Facepiece		
FF-300 (Promask Single/FM3)	PAPR P3	PAPR B1E1K1P3
FF-600 (Vision RFF4000/FM4)	PAPR P3	PAPR B1E1K1P3

## Weight

Combination	Weight	Weight with PF10 Filter	Weight with 2 of BEKP3 Filters
PF-600E-ASB (Prof SC160) with battery		)kg 1,750kg	2.4kg
Battery	448g		
Charger	660g		

# PF-600E-ASB (Proflow SC160)

Headtop/Facepiece, Hose and Filter Options



## Ready-Paks Complete Packagesfor 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. The kit includes the PF-600E-ASB (Proflow SC160) PAPR unit, PVC belt, EPDM hose,battery, recharger, a pair of DT-Series (Pro2000) particle filters and a choice of headtops; 3M FF-300 (Promask Single/FM3) Full Facepiece and VFF-600 (Vision RFF4000/FM4) Full Facepiece. Ready-Paks are certified to AS/NZS 1716:2012.



PF-600E-ASB (Proflow SC160) Ready-Pak in tub with FF-600 (Vision RFF4000/FM4) Full Facepiece & pair of P3 particle filters. P/N UU011534383 (5564593)



PF-600E-ASB (Proflow SC160) Ready-Pak in tub with 3M FF-300 (Promask Single/FM3) Full Facepiece & pair of P3 particle filters. P/N UU011534359 (5064594)

# 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. An opened 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.

**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. 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 PAPR Units

3M Code	Model #	Description
UU011535406	(064580)	PPF-600E-ASB (Proflow SC160) Includes blower, battery, charger, hose with DIN thread & easy wipe decon belt (PVC). 1601/min flow rate. Headtop& filters sold separately. Uses PAPR P3 & B1E1K1P3 DT-Series (Pro2000) Filters. AS/NZS 1716: 2012.

Ready-Paks			
3M Code	Model #	Description	
UU011534359	5064594	FF-300 (Promask Single/ FM3) PF-600E-ASB (Proflow SC160) Ready-Pak	
UU011534383	5564593	FF-600 (Vision RFF4000/ FM4) PF-600E-ASB (Proflow SC160) Ready-Pak	

#### Loose Fitting Hoods & Headtops

3M Code	Model #	Description
52000045865 52000045881	S-333SG S-333LG	S-333 Versaflo Head Cover 1/Box
52000045949 52000045964	S-533S S-533L	S-533 Versaflo Full Hood 1/box
UU009054808 UU009055615	M-206 M-207	Faceshield with Comfort faceseal Faceshield with Poly faceseal
XA007707467	M-306	M-306 Versaflo Helmet with
XA007707475	M-307	coated visor and Comfort faceseal M-307 Versaflo Helmet with coated visor and flame resistant faceseal

#### **Full Face Mask Options**

3M Code	Model #	Description
XP100544079	FF-302 (012681)	3M FF-302 (Promask Single/FM3) PAPR full face mask (M/L), no hose (PAPR P3)
XP100547205	FF-301 (012670)	3M FF-301 (Promask Single/FM3) PAPR full face mask (S), no hose (PAPR P3)
XP100544962	FF-603 (RFF4000	) 3M FF-603 (RFF4000/FM4) Silicon PAPR Side mounted full face mask (Medium/Large), no hose (PAPR P3)
XP100550118 FF	E-601 (RFF4000S)	3M FF-601 (RFF4000S/FM4) Silicon PAPR Side mounted full face mask (Small), no hose (PAPR P3)

Filters				
3M Code	Model #	Description		
XP100544418	DT-1135E ( 052670)	DT-Series (Pro2000) PF 10 P3 P3 - Solid/liquid/radioactive particulates, bacteria,viruses, fumes/mist		
UU011534342	DT-4045E (042799)	DT-Series (Pro2000) CF 32 B1E1K1P3Inorganic and acid gases/vapours, ammonia + solid & liquid particulates		

# **Ordering Information (continued)**

#### 3M PF-600E-ASB (Proflow SC160) Hose Options

3M Code	Model #	Description
XP100140605 2026226/SC-B	T-23	Fixed length PU for FH1/2/21 S-333/533, M-200, M-300
XP100231560 5564453/SC-B	T-44	EPDM Rubber hose for FH1/2/21 S-333/533, M-200/300
XP100140647	2026235	Self adjusting PU hose FH1/2/21 S-333/533, M-200, M-300
UU011534342	063799	EPDM hose (angle & DIN) 80cm for use with FM2, FM3, FM4 (comes standard with Proflow SC160)

#### 3M PF-600E-ASB (Proflow SC160) Accessories

3M Code	Model #	Description
XP100547734	063596	Shoulder harness
AT010712019	064517	Disposable dust cover
XP100548054	064527	Shower cover
XP100544442	052693	Filter covers (orange) (2pcs)
XP100544269	042507	Filter DIN end caps (black) (2pcs)
XP100547742	2023305	Proflow SC160 Accessory Pack - 1 x blower outlet cap, 2 x filter inlet plugs

#### **General PAPR Accessories**

3M Code	Model #	Description
XP100545068	VCP1000	Vision visor covers/tear offs
XP100544145	012698	Promask visor covers/ tear offs
XP100544053	011696	Sari visor cover/tear offs
XP100139458	2025641	Storage carry case PAPR, black
AT010687468	6164101E	Storage poly bag (PVC) - head tops
XP100213188	5000803	Large PAPR storage tub with lid
XP100124740	2015897	Face mask storage tub with lid

#### Spare parts & Accessories

3M Code	Model #	Description
XP100141710	2027037	PAPR Bayonet adaptor pack upgrade kit for using FH1/FH2/FH21, S-333/S-533 and M-200/M-300
UU011003157	ADP-03	Adaptor PF for M- & S-Series Headtops
XP100544590	064043	Nimh Battery Proflow SC 160 Green (3C)
XP100548070	064543	Body Tensioner Proflow SC 160 Green (5)
XP100548062	064542	Blower Body Proflow SC 160 Green (6)
XP100544533	063791	Universal Charging Kit (7)
XP100547726	063595	O-Ring PF SC 120 & 160
XP100123775	2015430	Belt With Buckle PVC

### **Important Notice**

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