

PAPR: Powered Air Purifying Respirator
Sync01VP3 Q&A



Index

1. Basic information	Q1.	Is it certified to EN standard?
	Q2.	What is included as a set?
	Q3.	What is the breath responsive function?
	Q4.	Does it have the explosion protection?
	Q5.	Is it possible to use it as a gas mask attaching gas filters?
	Q6.	How do you perform a fit check?
	Q7.	Is it possible to change the facepiece?
	Q8.	Is there any way to see the wave shape of inner pressure?
	Q9.	Is it possible to replace the visor?
2. Specification	Q10.	What is the weight?
	Q11.	How many sizes are available?
	Q12.	What is the operating and storage temperature/humidity range?
3. Waterproof	Q13.	Is this product waterproofed?
4. Leakage	Q14.	How is the protection when the seal is broken between the face and the facepiece?
5. Filter	Q15.	How long can the filter be used?
	Q16.	When will the filter replacement indicator flashes?
	Q17.	What does "continuous negative pressure" means?
6. Battery	Q18.	How long can the battery be used?
	Q19.	How long does it take to charge the battery, and how many times can it be used?

1. Basic information

Q1. Is it certified to EN standard?

A. Yes, it is certified to EN12942:1998+A2 : 2008 TM3 P R SL.

Q2. What is included as a set?

A. Facepiece "FP-E01", Fan unit "FU-E01", Particle Filter "VP3", Battery "BA-L2H-E", Charger "CH-L2HAC", Filter Guard, Unit Cover, Speech Diaphragm Cover.

Q3. What is the breath responsive function?

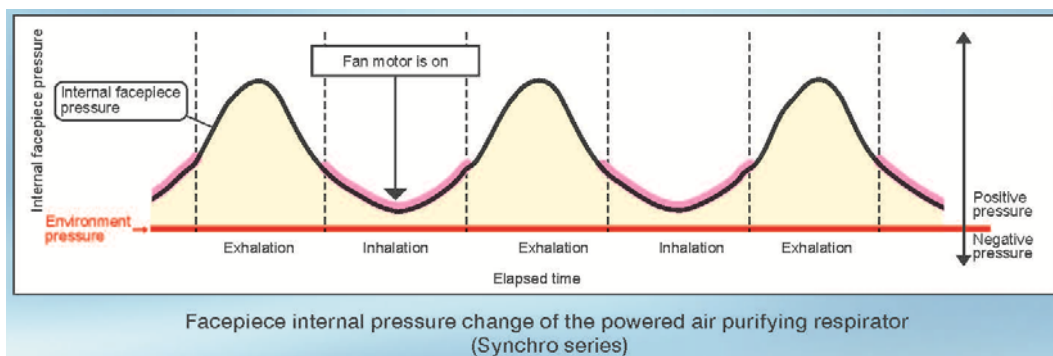
A. (1) To supply the optimum amount of air, the facepiece internal pressure is constantly monitored so that the fan motor speed is adjusted according to the rate of breathing.

- Inhalation : The fan motor speed is increased in accordance with the inhalation amount so that the amount of air is optimally supplied depending on the inhalation amount, which allows the user to breath easily with comfort.

- Exhalation : The fan motor speed is decreased in accordance with the exhalation amount to reduce wasteful air supply during exhalation, which alleviates the oppressive feeling during exhalation.

(2) Reducing the wasteful air supply during exhalation also helps to prevent clogging of the filter, which prolongs filter life and making the product more economical.

<Graph 1>



Q4. Does it have the explosion protection?

A. No.

Q5. Is it possible to use it as a gas mask attaching gas filters?

A. No, it is not possible, but it is now under development.

Q6. How do you perform a fit check?

A. Please purchase the option part “fit checker” for checking airtightness.

It is also possible to do the fit check without the “fit checker”.

After donning, please palms over the filter openings.

Inhale gently, then check that the respirator collapses slightly, and no air leaks between the face and the respirator are detected.

Q7. Is it possible to change the facepiece?

A. Yes, it is possible to change the facepiece “FP-E01”.

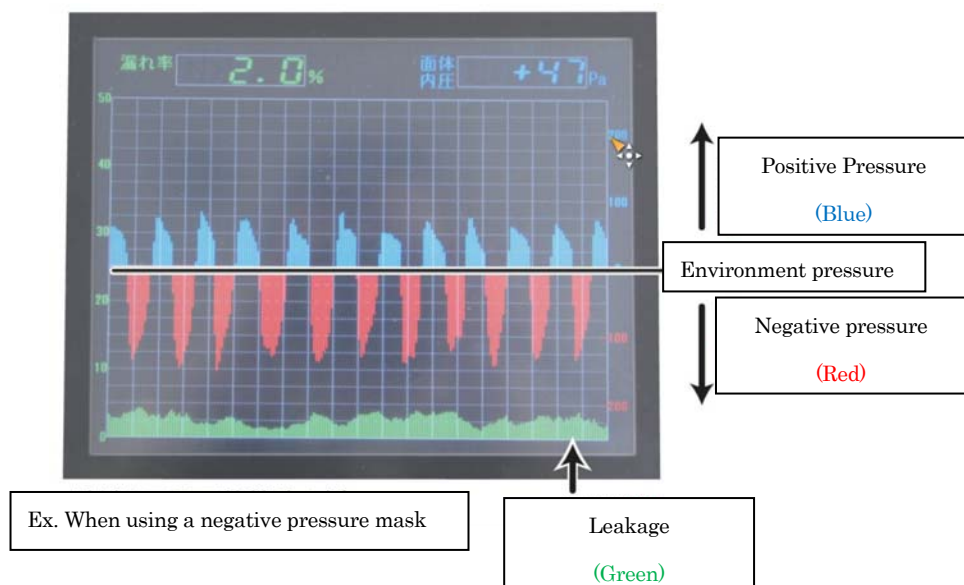
Q8. Is there any way to see the wave shape of the inner pressure?

A. Yes, it is possible to see it using tester “MNFT (Mask Inside Pressure & Fit Tester)”.



MNFT

<Display showing the wave shape>





Q9. Is it possible to replace the visor?

A. No. However, there is an optional “Visor Protection Cover” available in order to prevent from scratches.

2. Specification

Q10. What is the weight?

A. Approximately 755g (M) – 770g (L).

Q11. How many sizes are available?

A. Two sizes (M) & (L).

Q12. What is the operating and storage temperature/humidity range?

A. Operating temperature range : 5 – 40°C
Operating humidity range : 80% RH or less
Storage temperature range : 5 - 40°C
Storage humidity range : 65% RH or less

Note) To store the battery for long periods of time, charge the battery to approx. 50% and then keep in a cool, dry location.

3. Waterproof

Q13. Is this product waterproofed?

A. Yes, it is IEC 60529 : 2001 IP65 rated.

Note) Please remove the fan unit when washing (the facepiece).

4. Leakage

Q14. How is the protection when the seal is broken between the face and the facepiece?

A. When the seal is broken, the fan motor will turn ON and will be like a condition as constant air flow. Therefore, as shown in <Graph 1>, it keeps the safety while making it easy to breath with comfort.



5. Filter

Q15. How long can the filter be used?

A. Since this product is breath responsive, it will only collect the particles when inhalation like the negative pressure masks. Therefore, the filter life-span can be expected to be longer like the negative pressure masks. In addition, in case the filter gets clogged, the fan motor will assist to keep the positive pressure inside the mask, making the result to use the filter more long.

Moreover, the sensor of the filter replacement indicator monitors the pressure inside the mask. When the inner pressure drops down to “continuous negative pressure”, it begins to flash and inform the replacement period, therefore, will be possible to use the filter safe and economical.

Q16. When will the filter replacement indicator flashes?

A. When the filter collects particles and gets clogged, since it makes the air difficult to get through the filter, the fan motor will assist to keep the positive pressure inside the mask.

However, the more it gets clogged, the more it will be difficult for the fan motor to assist to keep the positive pressure inside the mask.

On the other hand, the sensor of the filter replacement indicator monitors the pressure inside the mask. When the inner pressure drops down to “continuous negative pressure”, the filter replacement indicator LED begins to flash (repeatedly flashes 5 times and turns off for three minutes, and then repeat the same procedure above).

Q17. What does “continuous negative pressure means?

A. When the negative pressure inside the mask exceeds approx. 10% of the certain period.

6. Battery

Q18. How long can the battery be used?

A. 9.0 or more hours.

Note) Time maintaining positive pressure under breathing conditions of 1.5L/breath with 20 breaths/min.

Q19. How long does it take to charge the battery, and how many times can it be used?

A. Approx. 3.5 hours to charge the battery, and it can be used at least 300 cycles.