New Product Introduction
October 2024

San Ace 38

DC Cooling Fan (9HVA type)

38 mm × 28 mm

SANYO DENKI

SANYO DENKI AMERICA, INC.
Cooling Systems Division
www.Sanyodenki.com/america

Products Highlights

San Ace 38/ 9HVA type

- High Static Pressure
- High Airflow
- Eco Product Certified
- Target applications: High Density 1U Servers and Other Telecom Equipment

Products Highlights

San Ace 38/ 9HVA type

☐ Product Features

Developed a high-performance fan with improved cooling performance

Current model: 38x28mm
9GA type

Max. Airflow:
approx. 1.5 times
Increased

Max. Static Pressure:
approx. 2.6 times
Increased

New model: 38x28mm
9HVA type

☐ Development points

1) High efficiency of the impeller and motor reduces heat generation inside the motor, increasing cooling performance.
2) Power consumption at the same cooling performance is **10% lower** than that of the current model.

◘ Specifications

*Rated speed, SPL, Rated input are values at rated voltage in free air.
*SPL is A-weighted sound pressure level that measured at 1 meter away from air intake side of fan.

The models listed below **have a pulse sensor with PWM control.**

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min^{-1}]	Max. airflow [m^3/min]	Max. airflow [CFM]	Max. static pressure [Pa]	Max. static pressure [inchH_2O]	SPL [dB(A)]	Operating temperature [°C]	Expected life [h]
9HVA0312P3K001	12	10.8 to 13.2	100	2.1	25.2	38500	0.91	32.2	2100	8.40	69	-20 to +70	30000/60°C (53000/40°C)
			20	0.06	0.72	6000	0.14	4.9	51.0	0.204	29		
9HVA0312P3G001			100	1.1	13.2	30000	0.71	25.1	1300	5.20	64		40000/60°C (70000/40°C)
			20	0.05	0.60	5000	0.11	3.8	36.1	0.144	25		

* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

◘ Sensor

Lock sensor and without sensor can be configured as options upon request.

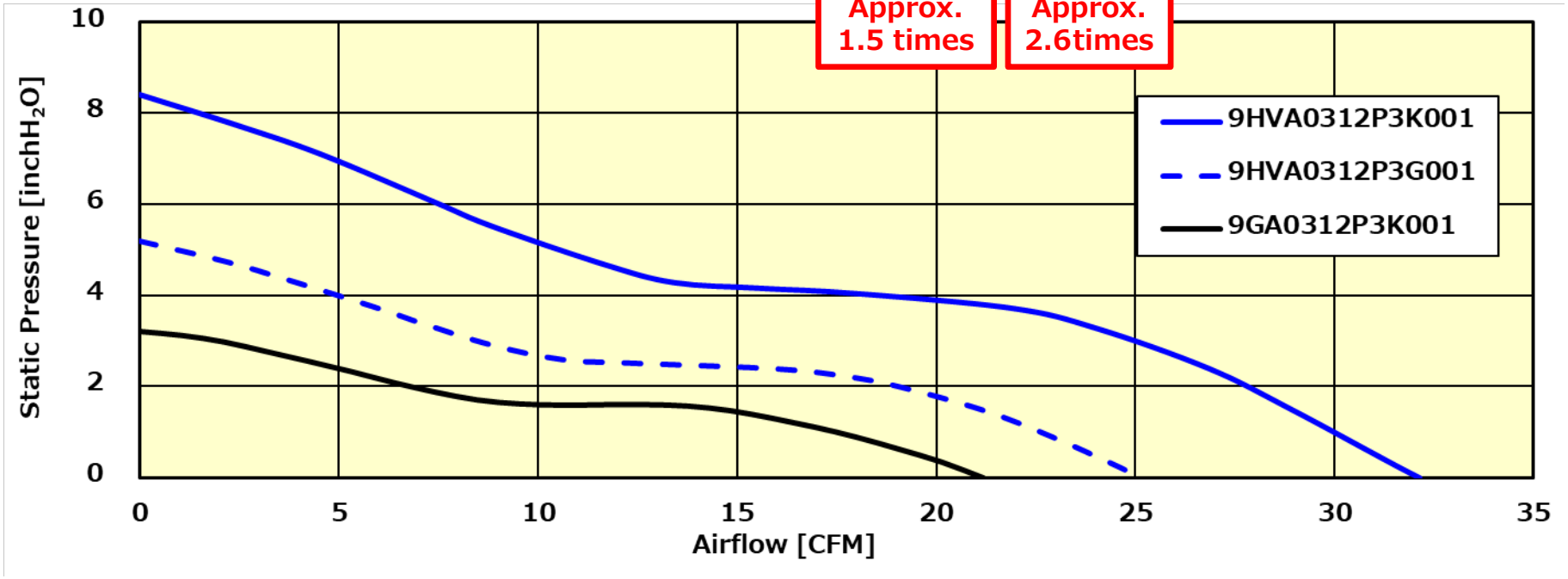
High Static Pressure & High Airflow

San Ace 38/ 9HVA type

☐ Specifications

*Rated speed, SPL, Rated input are values at rated voltage in free air.
*SPL is A-weighted sound pressure level that measured at 1 meter away from air intake side of fan.

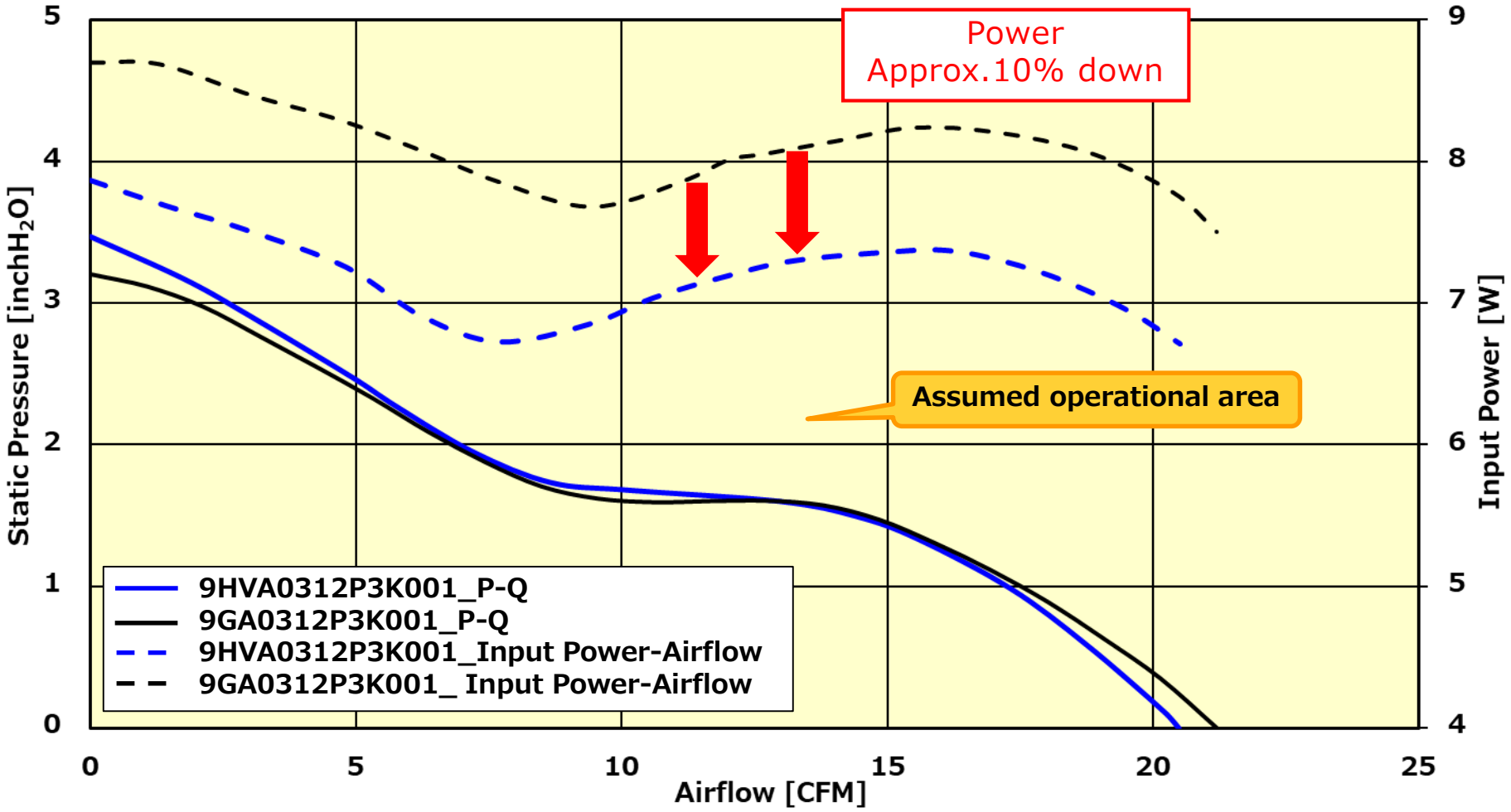
Model No.	Rated Voltage [V]	Rated Speed [min^{-1}]	Rated Input [W]	Max. Airflow [CFM]	Max. Static Pressure [inchH_2O]	SPL [dB(A)]	Expected life @60deg.C[h]
New Model 9HVA0312P3K001	**12**	**38,500**	**25.2**	**32.2**	**8.40**	**69**	**30,000**
New Model 9HVA0312P3G001	**12**	**30,000**	**13.2**	**25.1**	**5.20**	**64**	**40,000**
Current Model 9GA0312P3K001	12	25,000	7.4	21.2	3.21	59	40,000
				Approx. 1.5 times	**Approx. 2.6times**		



High Static Pressure & High Airflow

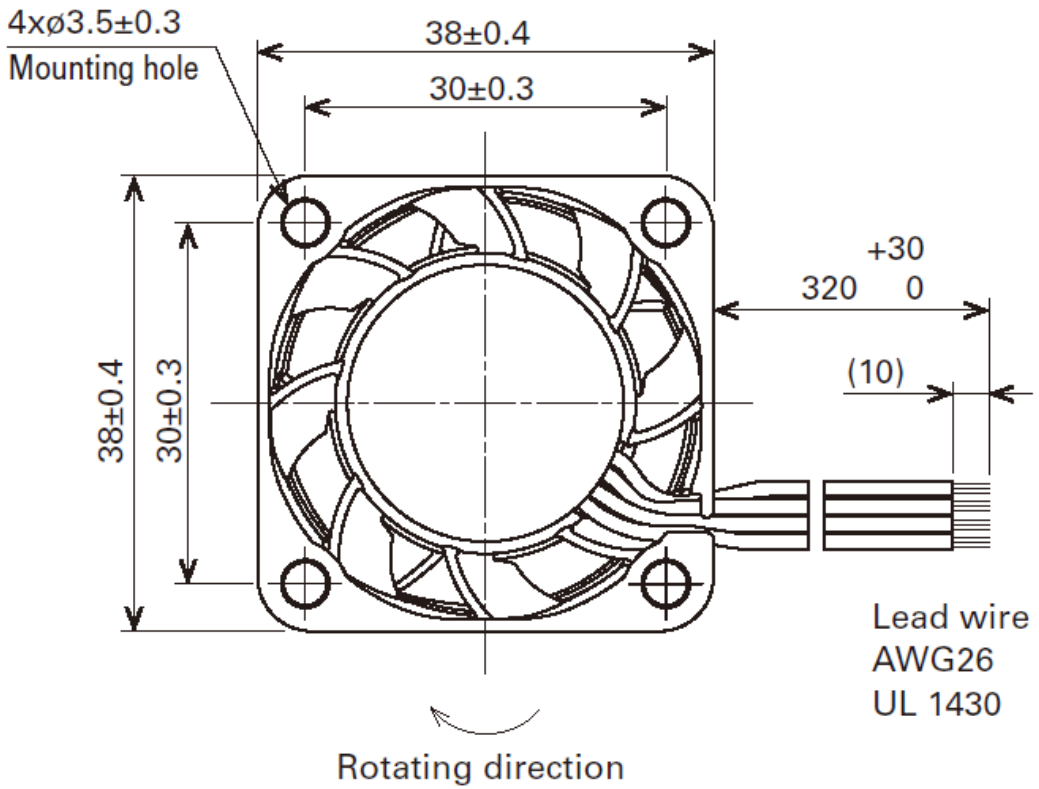
☐ Performance comparison of current and new models

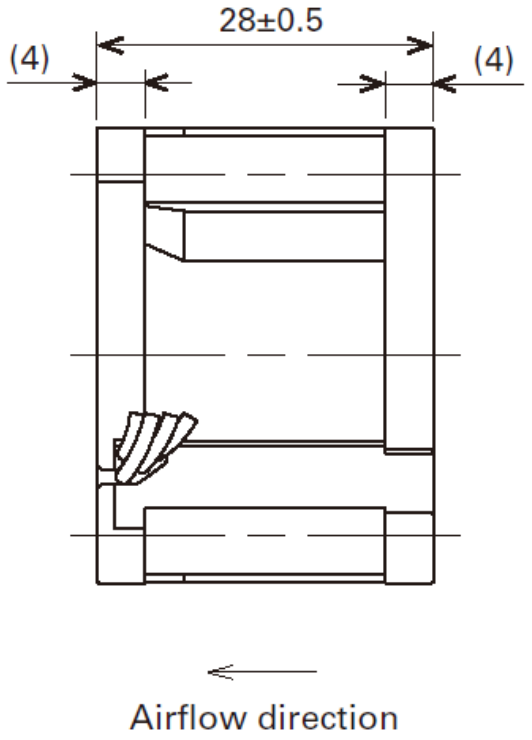
(At equivalent cooling performance)



Dimensions

☐ Dimensions



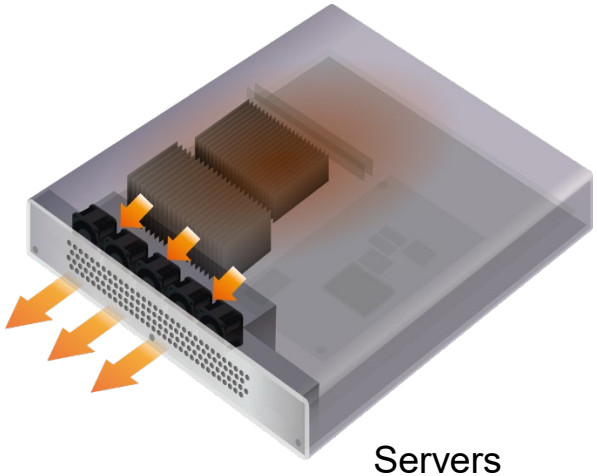


- MTBF = 3 million hours
- FIT rate = 330

Target Applications

- High Density 1U Servers
- 1U Switching Power Supplies
- Telecom Equipment

The 38 × 38 × 28 mm fan is ideal for use in servers and telecom equipment, where increasing performance demands call for higher cooling efficiency. To meet these needs, we've developed a new fan model that delivers significantly improved performance compared to our current version. This advancement not only strengthens our competitiveness but also opens opportunities to meet growing market demand.



Servers

Performance vs Power

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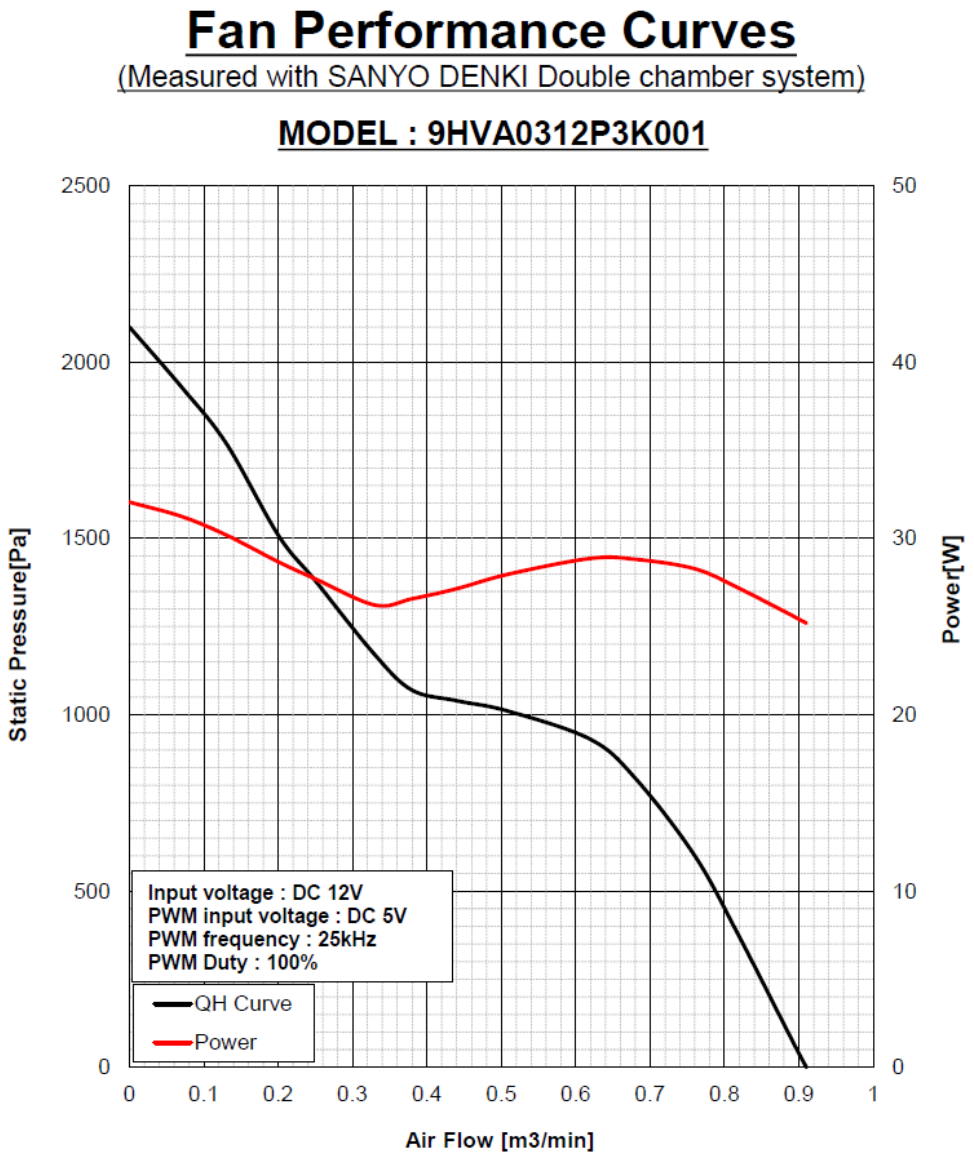

SPEED vs Sound Pressure Level (dB(A)

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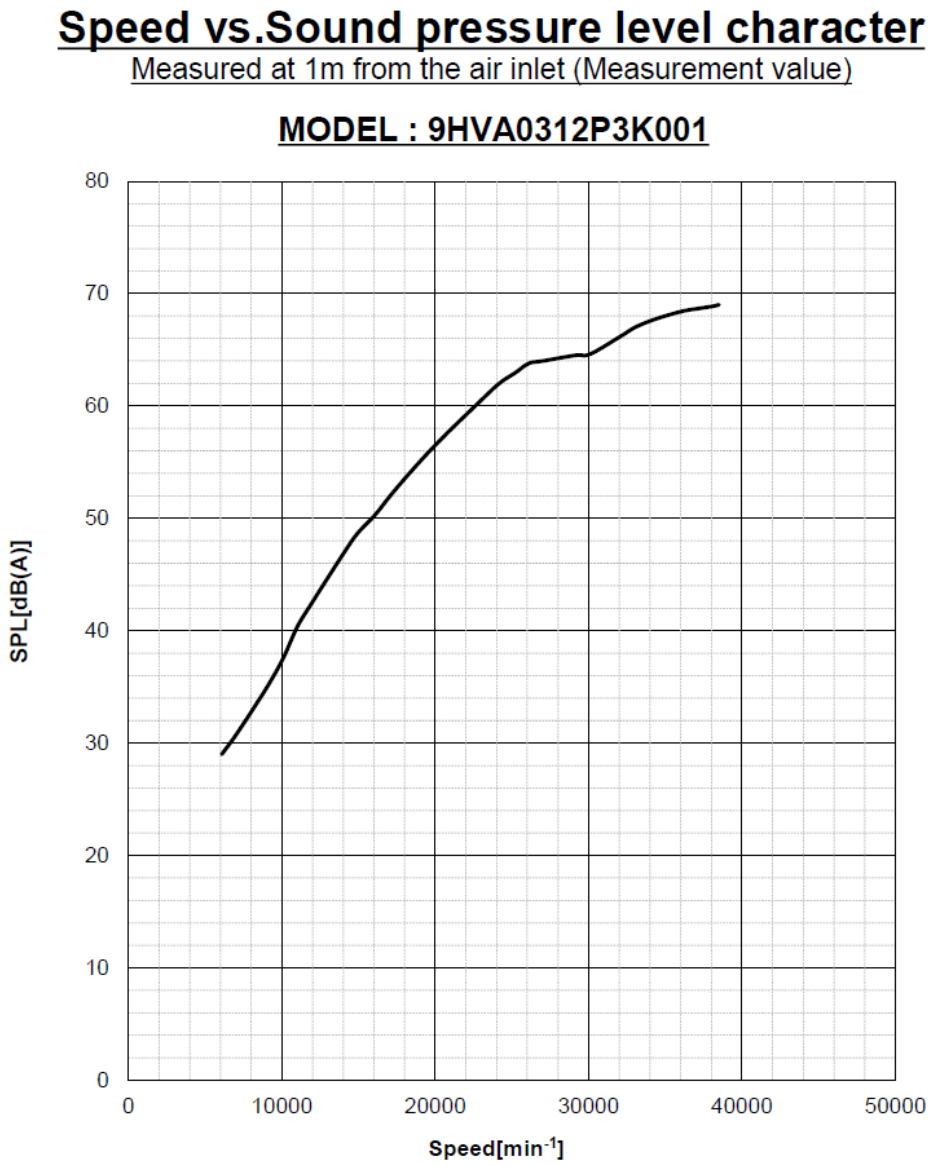

Miscellaneous

- Comes with Conformal Coating
- Customizations available
  - Harness assembly: SANYO DENKI can recommend connectors and terminals.
  - Additional conformal coating available
  - Others
- PWM Control
  - PWM control function enables to control fan speed depending on the situation and to reduce the power consumption and noise.
- cUL and TUV approved
- Eco Product

Eco Products are eco-friendly products designed to reduce the environmental impact of the product and its packaging materials compared to conventional products on the market. Our products are assessed over the product's life cycle against our own eco-design requirements including product size, weight, power consumption, and CO_2 emissions, and those meeting our standards and higher standards qualify as Eco Products and Eco Products Plus, respectively.