



San Ace 80 9HVA type

80mm x 80mm x 38mm High Static Pressure Fan

Jiro Sakamoto
General Manager for Cooling Systems Sales
Deputy General Manager
Sales Headquarters

山洋電気株式会社
www.sanyodenki.co.jp

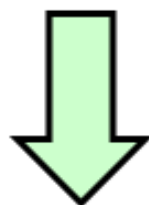
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□ Development background / Market needs

Higher static pressure is demanded in server and power supply markets as devices generate more heat.

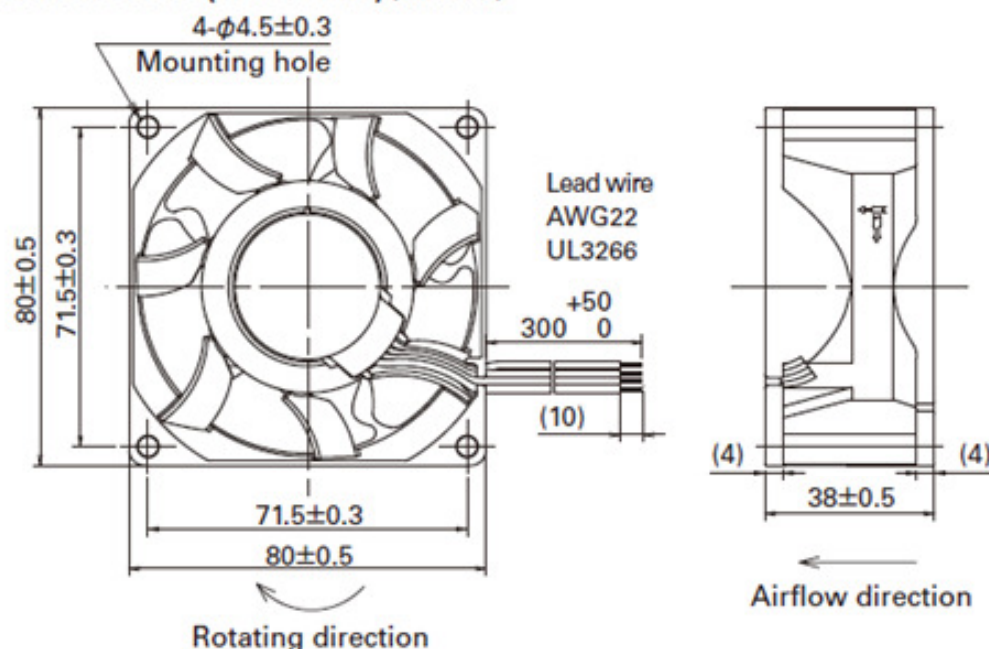
Since a major improvement of high static pressure has been required for 80 mm fans particularly in 2U high end markets (server, power supply), we developed this 80 x 38 mm High Static Pressure Fan.



Since our existing 80 x 38 mm fans cannot meet these requirements, we needed to develop 80 x 38 mm High Static Pressure Fan with industry's top performance.

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■ Dimensions (unit: mm) (with ribs)



■ Specifications

The following nos. have **PWM controls, pulse sensors**. For ribless, append "1" to the model no.

Model No.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle (Note 1,2) [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating temperature [°C]	Expected life [h]
9HVA0812P1G001	12	10.8 to 13.2	100	3.5	42	16,100	3.75 132	1,350 5.4	73	-20 to +70	40,000 / 60°C (70,000 / 40°C)
			20	0.2	2.4	4,200	0.96 33.9	105 0.42	44		

Note1: PWM frequency: 25 kHz Note2: Fan does not rotate when PWM duty cycle is 0%.

Available options: **Without Sensor**

■ Packaging details

1 carton: 36 units / 1 pallet: 42 cartons (1,512 units) *at the 7th layer (max. layer)

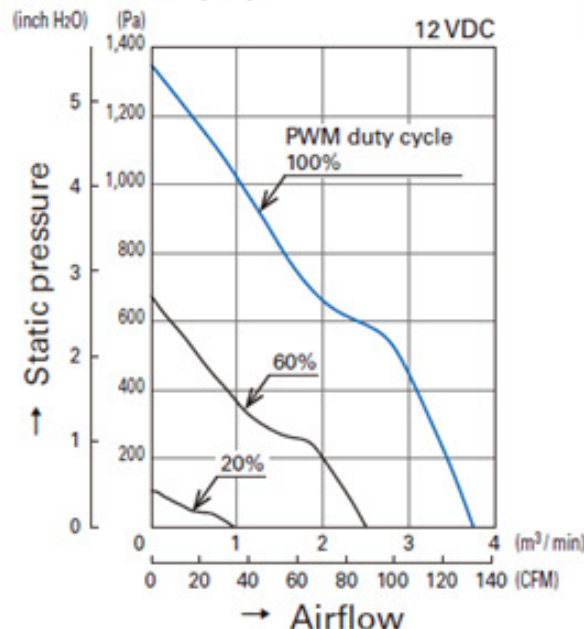
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Common Specifications

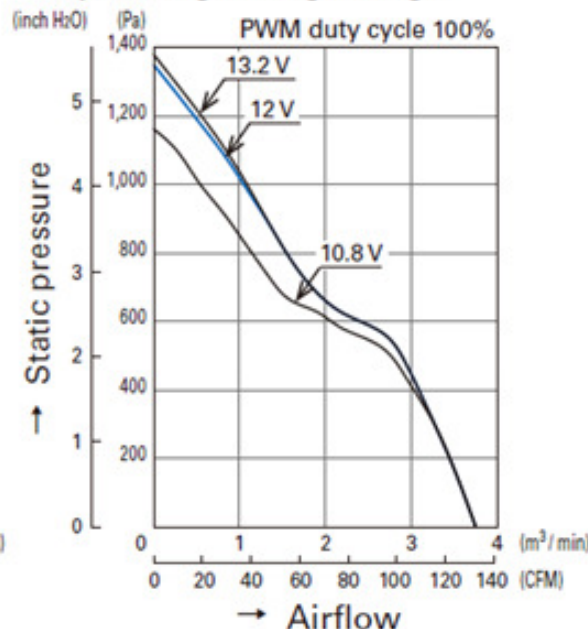
Material	Frame, Impeller: Plastics (Flammability: UL94V-0)
Expected life	Refer to specifications (L10: Survival rate: 90% at 60°C, rated voltage, and continuously run in a free air state)
Motor protection system	Current blocking function and reverse polarity protection
Dielectric strength	50 / 60 Hz, 500 VAC, 1 minute (between lead conductor and frame)
Sound pressure level (SPL)	Expressed as the value at 1 m from air inlet side
Operating temperature	Refer to specifications (Non-condensing)
Storage temperature	-30°C to +70°C (Non-condensing)
Lead wire	⊕ Red ⊖ Black Sensor: Yellow Control: Brown
Mass	220 g

Airflow - Static Pressure Characteristics

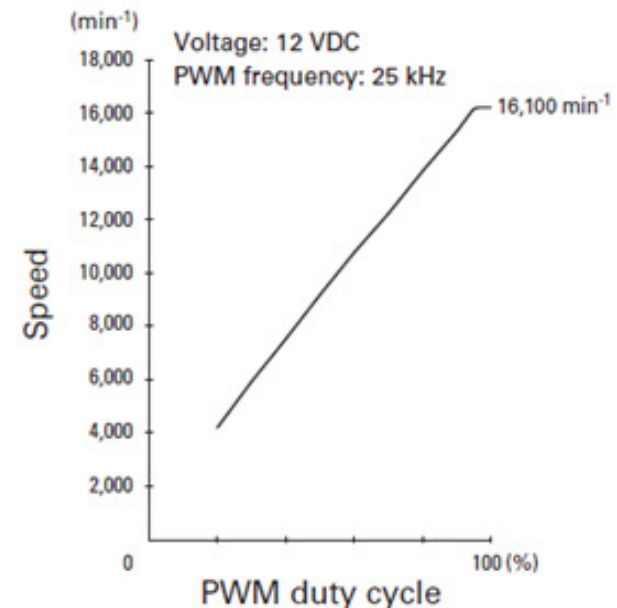
• PWM duty cycle



• Operating voltage range



PWM Duty - Speed Characteristics Example



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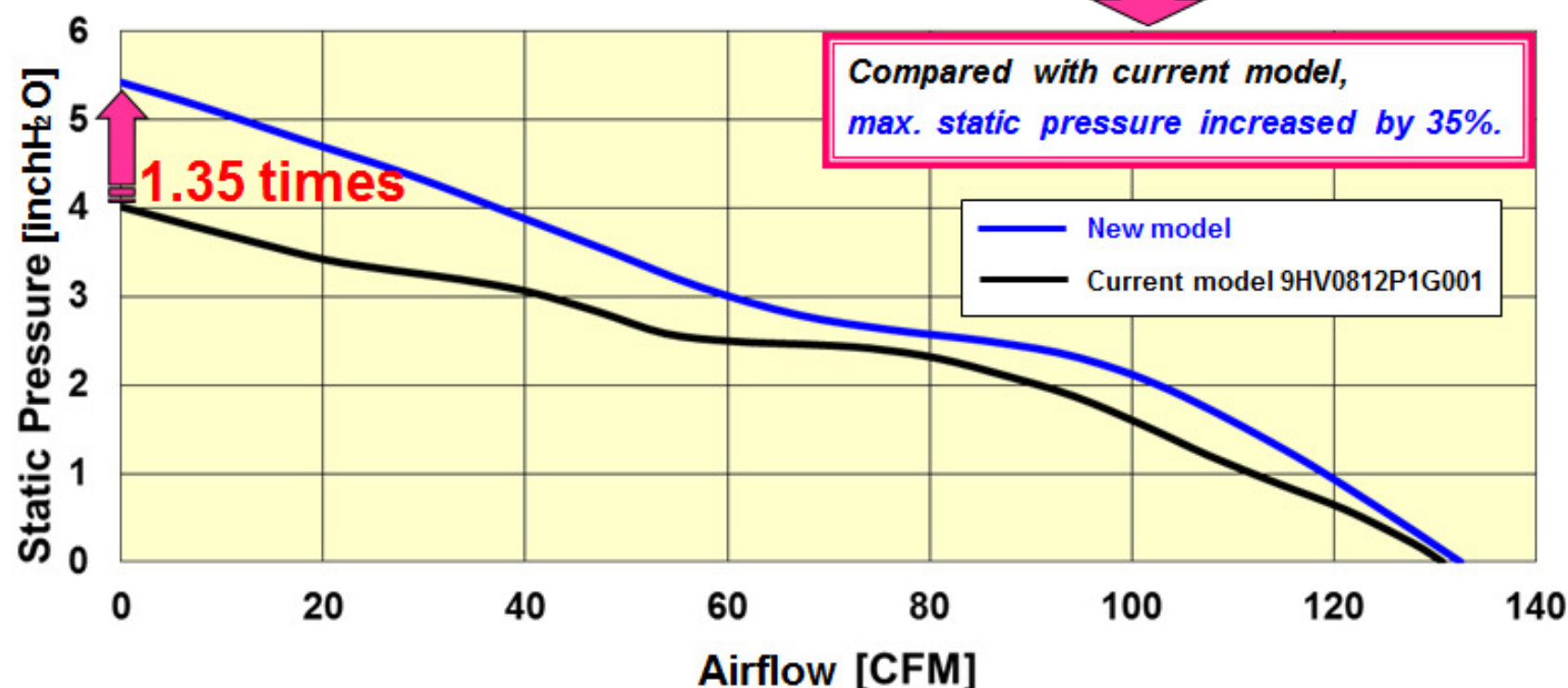
Specifications

* Rated speed, sound pressure level, power consumption are values at rated voltage in free air.

* Sound pressure level is measured at one meter from the inlet.

Comparison with current model	Rated speed [min ⁻¹]	Max. airflow [CFM]	Max. static pressure [inchH ₂ O]	SPL [dB(A)]	Power consumption [W]
New model 9HVA0812P1G001	16,100	132	5.4	73	42
Current model 9HV0812P1G001	14,900	130.7	4.0	69	40

Airflow – static pressure characteristics



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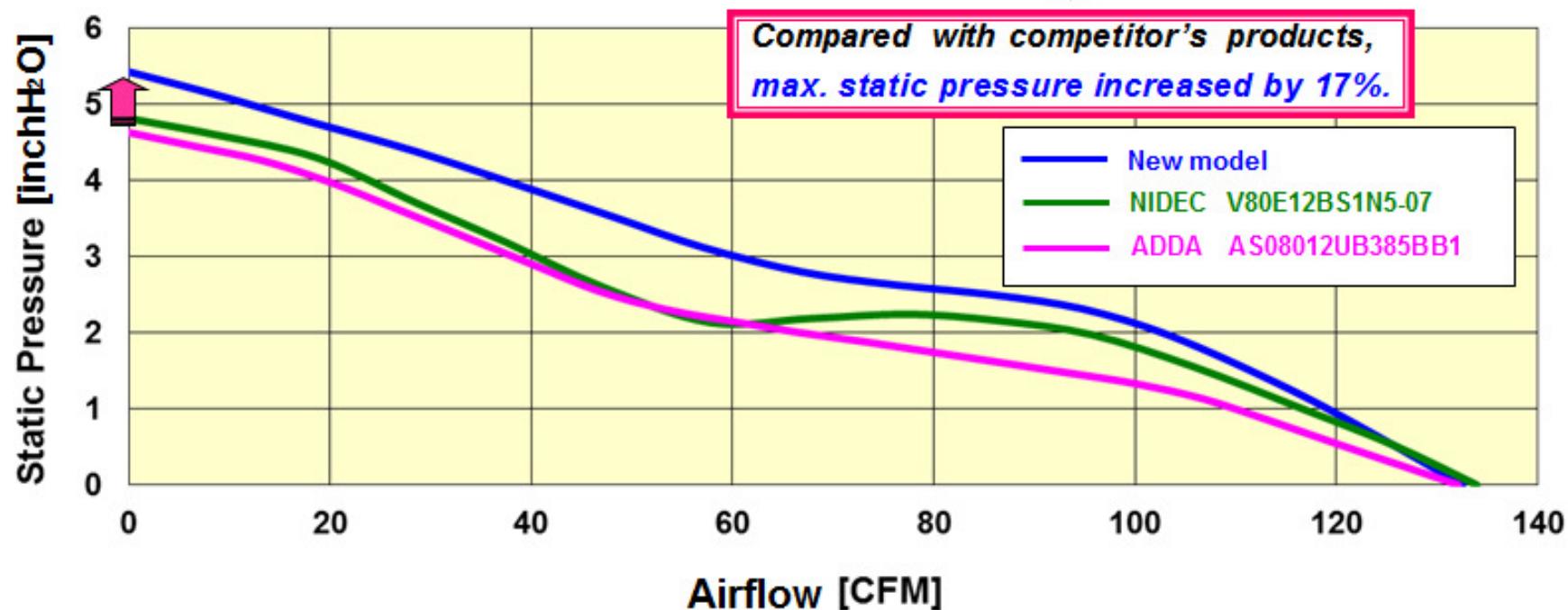
Specifications

* Rated speed, sound pressure level, power consumption are values at rated voltage in free air.

* Sound pressure level is measured at one meter from the inlet.

Comparison with competitor's products	Rated speed [min ⁻¹]	Max. airflow [CFM]	Max. static pressure [inchH ₂ O]	SPL [dB (A)]	Power consumption [W]
New model 9HVA0812P1G001	16,100	132	5.4	73	42
NIDEC (V80E12BS1N5-07)	15,000	134	4.8	69	39
ADDA (AS08012UB385BB1)	18,000	132	4.6	75	43

Airflow – static pressure characteristics



☐ Selling points

- 1) Achieved high static pressure that current 60 mm fans couldn't have reached.
 - Max. static pressure increased by 35% compared with current model.
 - Max. static pressure increased by 17% compared with competitor's products.
- 2) Able to cool high density equipment with this high static pressure.

☐ Target markets

Server, data storage systems, power supplies, etc.

☐ Safety standard

cUL and TUV are acquired.

San Ace

END