

San Ace 80

Low Noise Low Power Consumption Fan

Features

Low Noise

Sound pressure level is reduced by 4dB(A) compared with our conventional product*.

Low Power Consumption

Power consumption is reduced by approx. 30% compared with our conventional product*.

*: Specification of Model No. 9GA0812P4J001.
Our conventional product is 80 x 80 x 25 mm "San Ace 80", Model No. 9GV0812P4K03



Low Noise Low Power Consumption Fan 80mm

80x80x25mm GA type

Specifications

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM Duty Cycle [%] ^{Note1}	Rated Current [A]	Rated Input [W]	Rated Speed [min ⁻¹]	Max. Air Flow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h] ^{Note2}
9GA0812P4J001 (0011)	12	10.8 to 13.2	100	0.6	7.2	7,400	2.07 73.0	177.6 0.7	48	-10 to +70	40,000/60°C (70,000/40°C)
			25	0.08	0.96	2,500	0.69 24.3	20.2 0.08	21		
9GA0812P4G001 (0011)			100	0.48	5.76	6,800	1.91 67.4	150 0.6	45		
			25	0.06	0.72	1,500	0.42 14.8	7.2 0.02	17		
9GA0812P4H001 (0011)			100	0.22	2.64	5,200	1.46 51.5	87.7 0.35	37		
			25	0.06	0.72	1,600	0.44 15.5	8.3 0.03	17		
9GA0824P4J001 (0011)	24	21.6 to 26.4	100	0.28	6.72	7,400	2.07 73.0	177.6 0.7	48		
			25	0.06	1.44	2,800	0.78 27.5	25.4 0.1	23		
9GA0824P4G001 (0011)			100	0.21	5.04	6,800	1.91 67.4	150 0.6	45		
			25	0.04	0.96	2,100	0.58 20.4	14.3 0.05	19		
9GA0824P4H001 (0011)			100	0.1	2.4	5,200	1.46 51.5	87.7 0.35	37		
			25	0.02	0.48	1,500	0.42 14.8	7.2 0.02	17		

To order a ribless type, replace the last digits of a model number with digits in parenthesis.

Note1 : PWM Frequency : 25kHz

Note2 : Expected life at 40 °C ambient is just reference value.

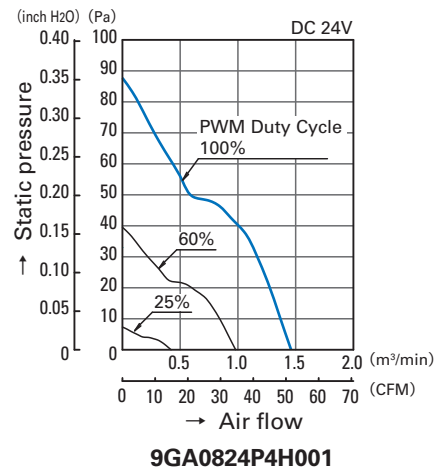
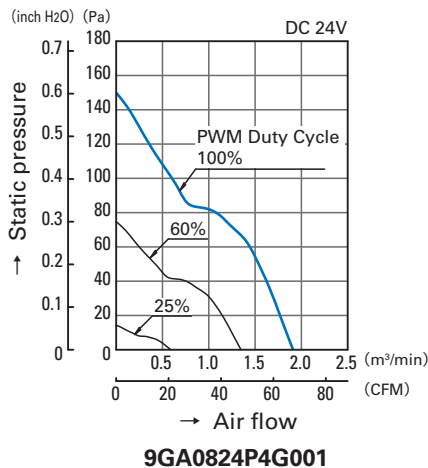
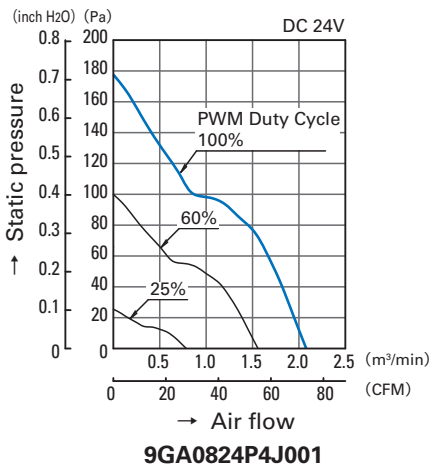
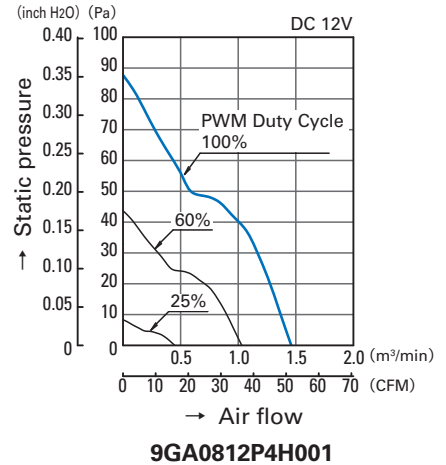
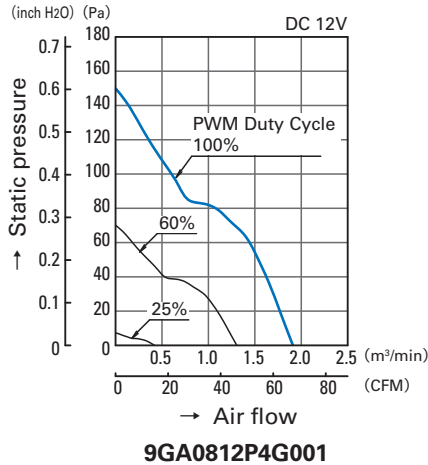
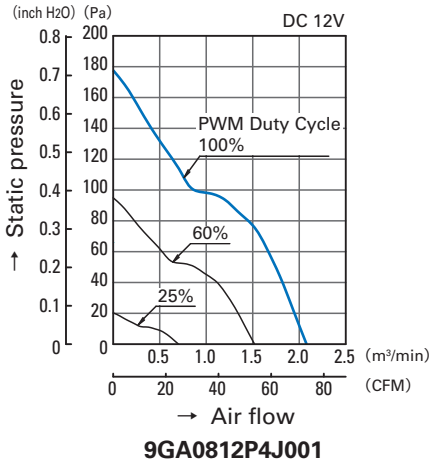
Common Specifications

- Material Frame, Impeller : Plastics (Flammability: UL94V-0)
- Expected Life Varies for each model
(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, 500VAC, 1 minute (between lead conductor and frame)
- Sound Pressure Level (SPL) Expressed as the value at 1m from air inlet side
- Operating Temperature Varies for each model (Non-condensing)
- Storage Temperature -30°C to +70°C (Non-Condensing)
- Lead Wire ⊕Red ⊖Black Sensor: Yellow Control: Brown
- Mass Approx. 110g

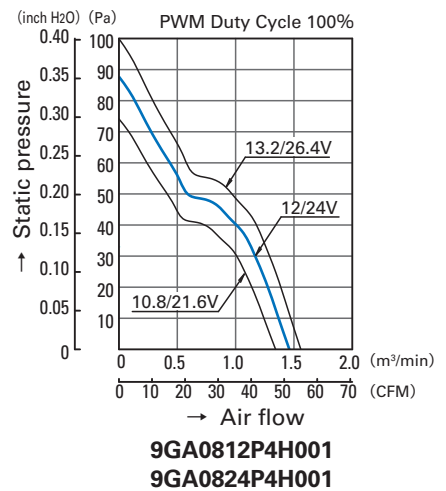
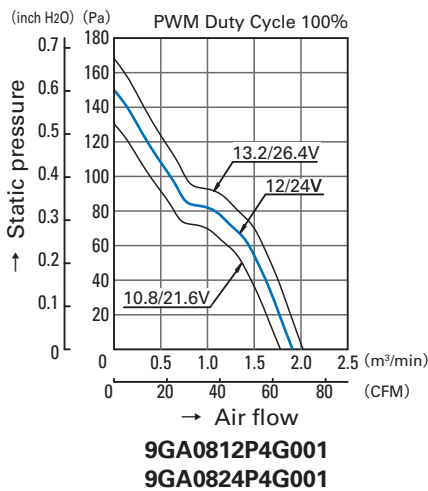
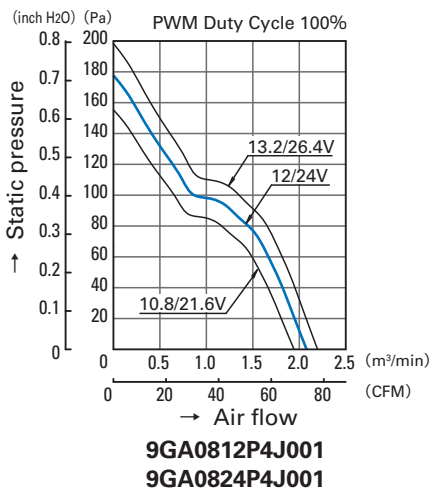
80mm

Air Flow - Static pressure Characteristics

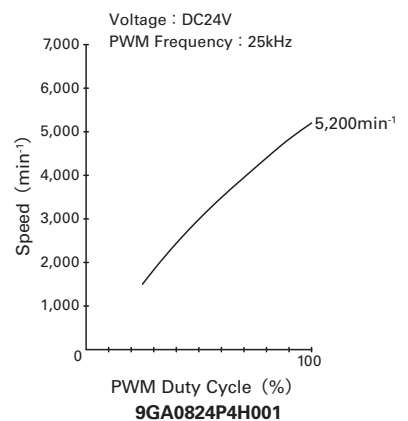
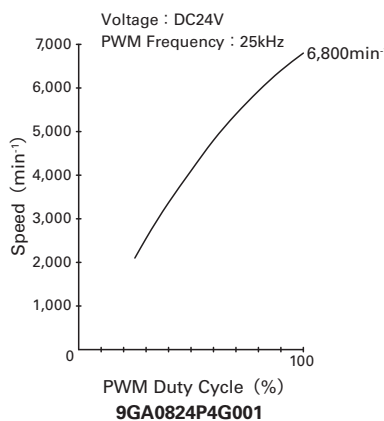
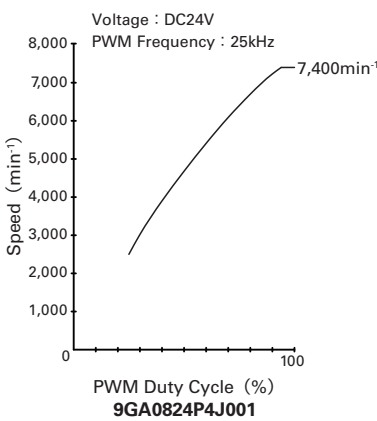
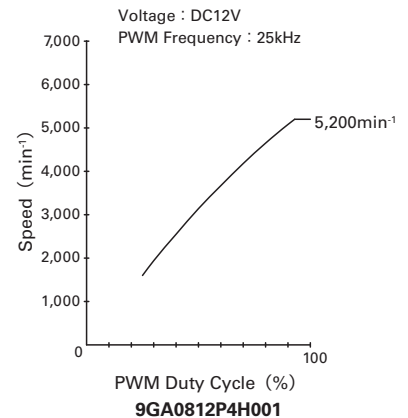
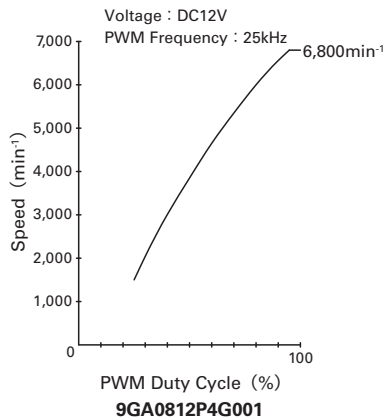
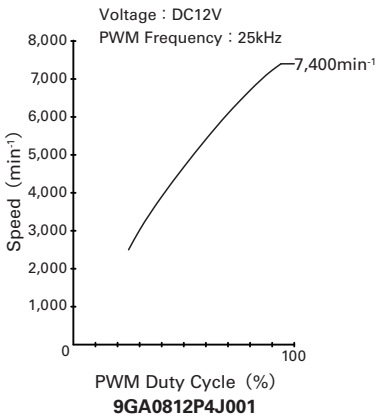
PWM Duty Cycle



Operating Voltage Range

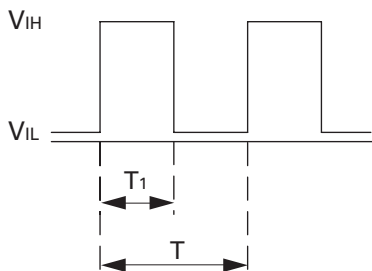


PWM Duty - Speed Characteristics Example



PWM Input Signal Example

Input Signal Wave Form

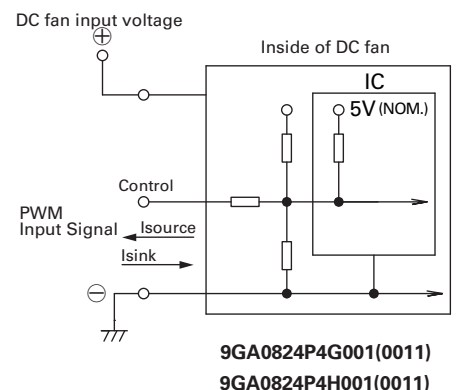
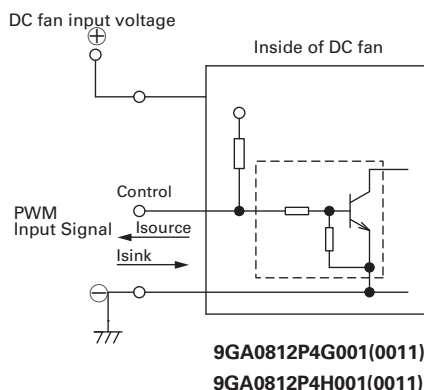
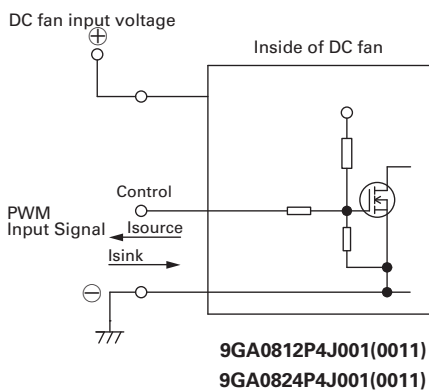


$V_{IH}=4.75V$ to $5.25V$
 $V_{IL}=0V$ to $0.4V$
 $PWM\ Duty\ Cycle\ (\%) = \frac{T_1}{T} \times 100$
 $PWM\ Frequency\ 25\ (kHz) = \frac{1}{T}$
 Source Current : 1mA Max. at control voltage 0V
 Sink Current : 1mA Max. at control voltage 5.25V
 Control Terminal Voltage : 5.25V Max. (Open Circuit)

When the control lead wire is open, the fan speed is the same as the one at a PWM duty cycle of 100% .

Either TTL input, open collector or open drain can be used for PWM control input signal.

Connection Schematic



Pulse Sensor Specification

Output circuit : Open collector

Rated Voltage 12V Fan

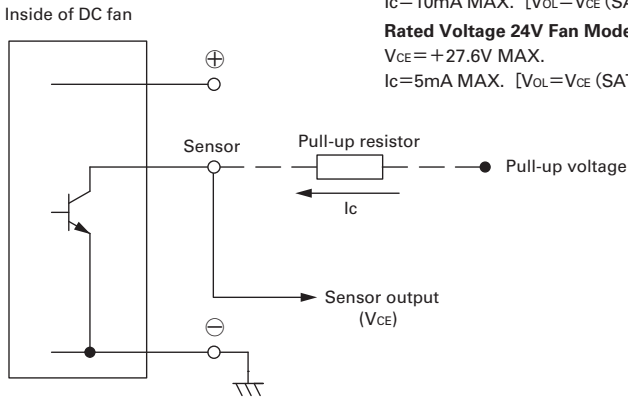
$V_{CE} = +13.8V$ MAX.
 $I_C = 5mA$ MAX. [$V_{OL} = V_{CE} (SAT) = 0.6V$ MAX.]

Rated Voltage 24V Fan Model No.: 9GA0824P4J001(0011)

$V_{CE} = +30V$ MAX.
 $I_C = 10mA$ MAX. [$V_{OL} = V_{CE} (SAT) = 0.6V$ MAX.]

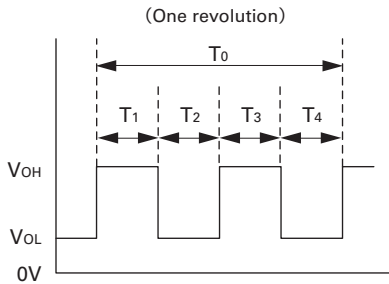
Rated Voltage 24V Fan Model No.: 9GA0824P4G001(0011) , 9GA0824P4H001(0011)

$V_{CE} = +27.6V$ MAX.
 $I_C = 5mA$ MAX. [$V_{OL} = V_{CE} (SAT) = 0.8V$ MAX.]



Output waveform (Need pull-up resistor)

In case of steady running

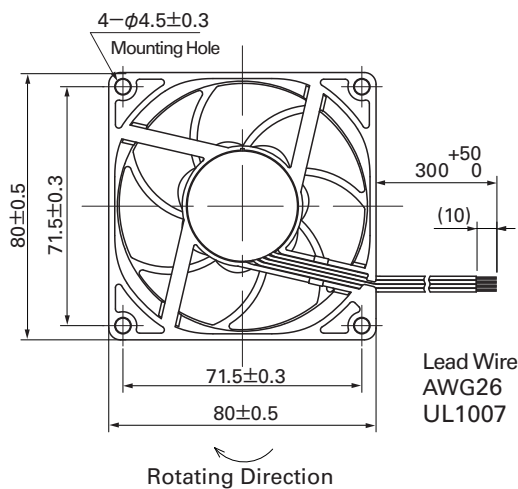


$$T_{1\sim 4} \doteq (1/4) T_0$$

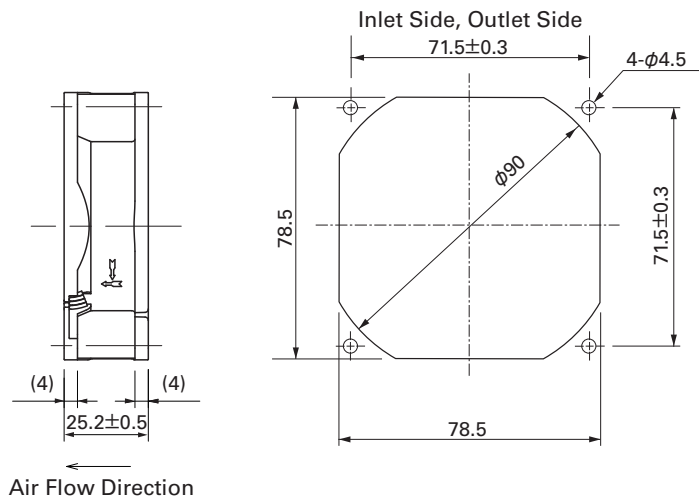
$$T_{1\sim 4} \doteq (1/4) T_0 = 60/4N \text{ (sec)}$$

$$N = \text{Fan speed (min}^{-1}\text{)}$$

Dimensions (unit : mm) (with ribs)



Reference Dimension of Mounting Holes and Vent Opening (unit : mm)



Notice

- The products shown in the catalog are subject to Japanese Export Control Law. Diversion contrary to the law of exporting country is prohibited.
- To protect against electrolytic corrosion that may occur in locations with strong electromagnetic noise, we provide fans that are unaffected by electrolytic corrosion.

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CATALOG NO. C1017B001 '12.12