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

80×80×25mm 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 [m³/min]	Max. Air Flow [CFM]	Max. Static Pressure [Pa]	Max. Static Pressure [inchH2O]	SPL [dB(A)]	Operating Temperature [℃]	Expected Life Note2) [h]
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℃ (70,000/40℃)
			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		

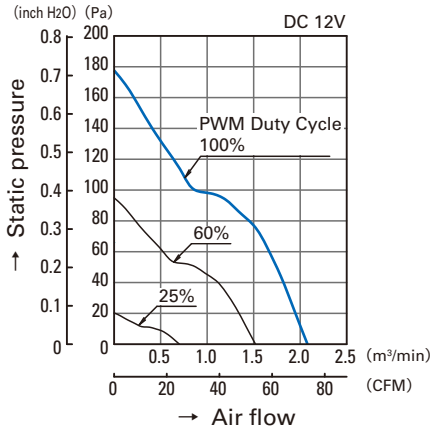
To order a ribless type, replace the last digits of a model number with digits in parenthesis.
Note1 : PWM Frequency : 25kHz
Note2 : Expected life at 40 ℃ ambient is just reference value.

Common Specifications

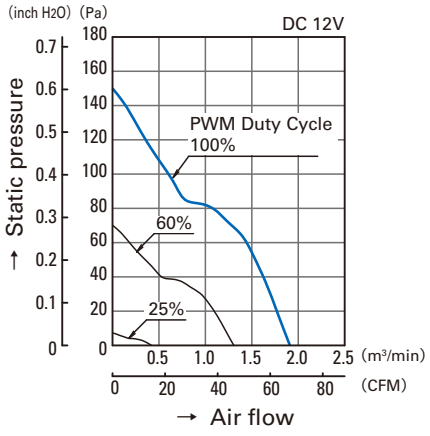
- ☐ Material ····· Frame, Impeller : Plastics (Flammability: UL94V-0)
- ☐ Expected Life ····· Varies for each model
  (L10: Survival rate: 90% at 60℃, rated voltage, and continuously run in a free air state)
- ☐ Motor Protection System ····· Current blocking function and Reverse polarity protection
- ☐ 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℃ to +70℃ (Non-Condensing)
- ☐ Lead Wire ····· ⊕Red ⊖Black Sensor: Yellow Control: Brown
- ☐ Mass ····· Approx. 110g

Air Flow - Static pressure Characteristics

・ PWM Duty Cycle



9GA0812P4J001



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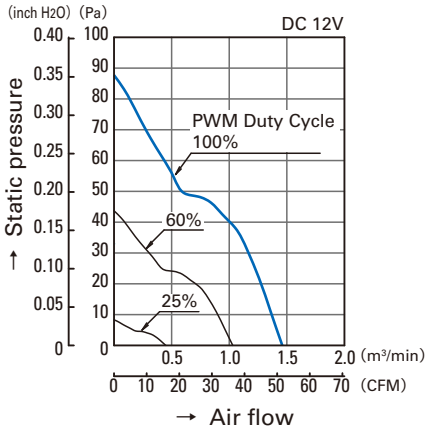

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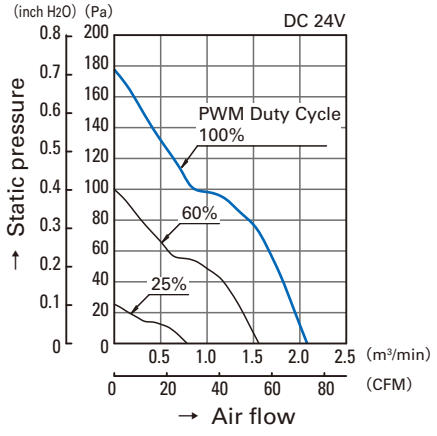
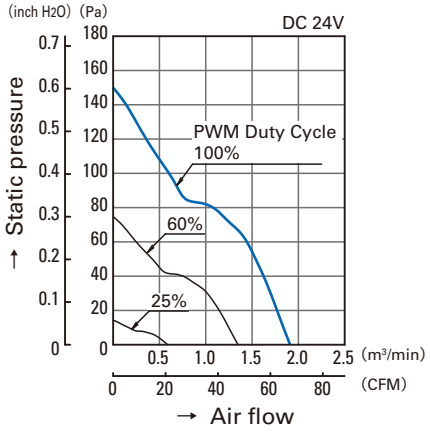


9GA0824P4J001



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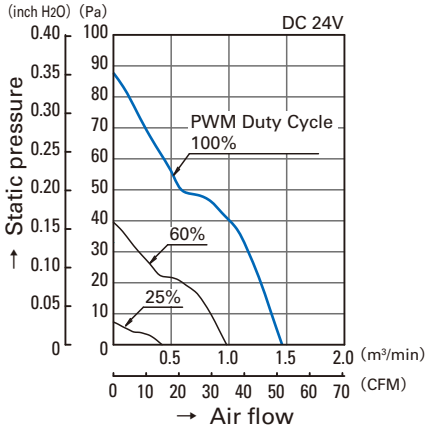
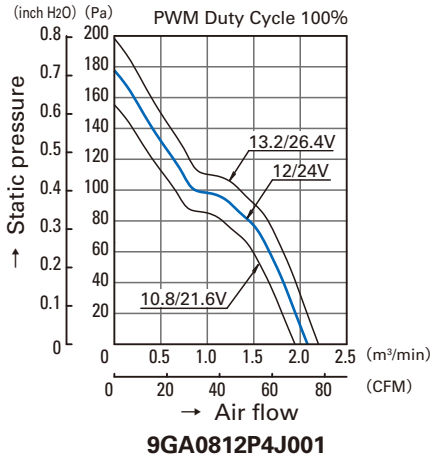


9GA0824P4H001

・ Operating Voltage Range



9GA0812P4J001
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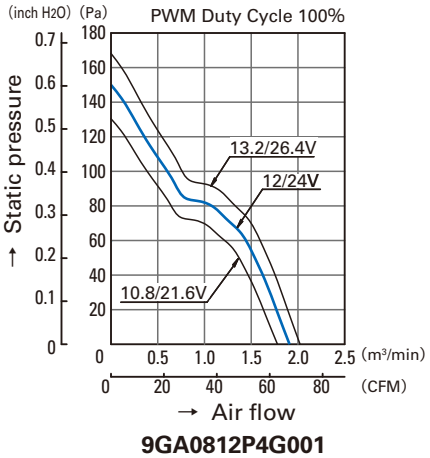

9GA0812P4G001
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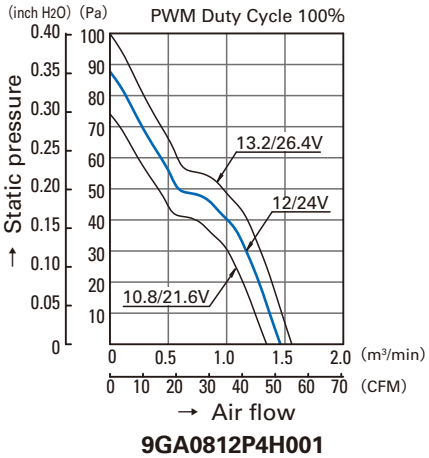
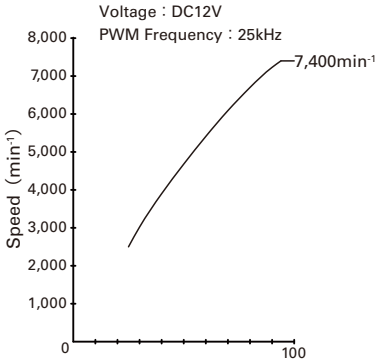


9GA0812P4H001
9GA0824P4H001

PWM Duty - Speed Characteristics Example



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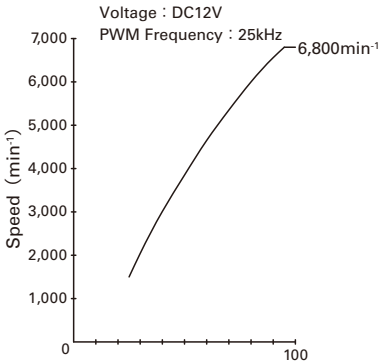

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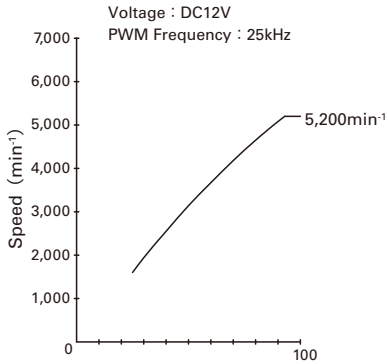

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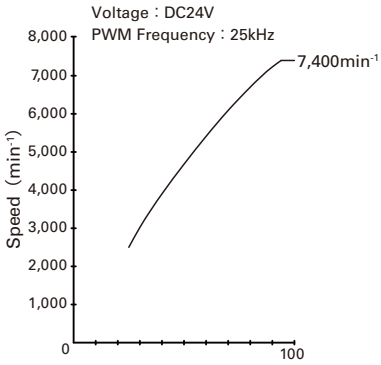

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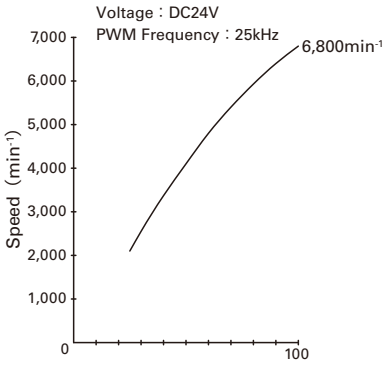

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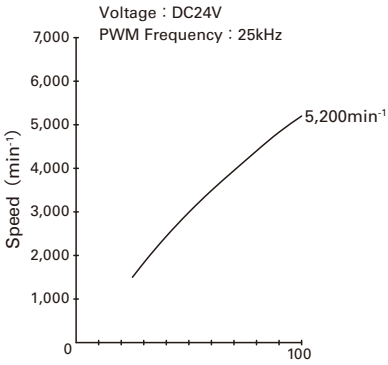
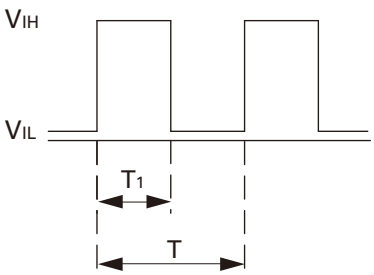


9GA0824P4H001

PWM Input Signal Example

Input Signal Wave Form



V_{IH}=4.75V to 5.25V

V_{IL}=0V to 0.4V

PWM Duty Cycle (%) = $\frac{T1}{T} \times 100$

PWM Frequency 25 (kHz) = $\frac{1}{T}$

Source Current : 1mA Max. at control voltage 0V

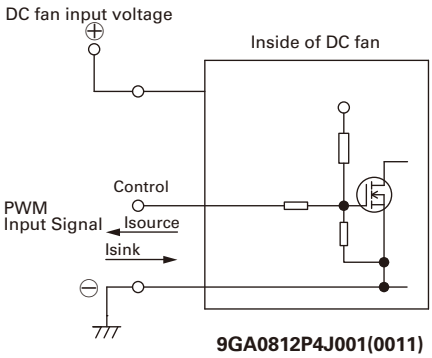
Sink Current : 1mA Max. at control voltage 5.25V

Control Terminal Voltage : 5.25V Max. (Open Circuit)

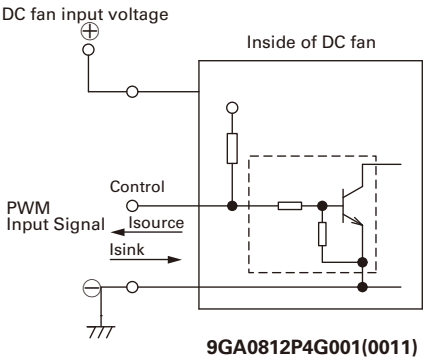
When the control lead wire is open,
the fan speed is the same as the one at a PWM duty cycle of 100% .

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

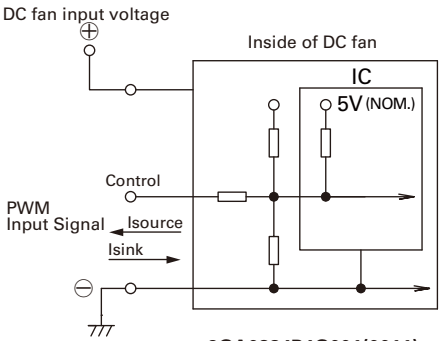
Connection Schematic



9GA0812P4J001(0011)
9GA0824P4J001(0011)



9GA0812P4G001(0011)
9GA0812P4H001(0011)



9GA0824P4G001(0011)
9GA0824P4H001(0011)

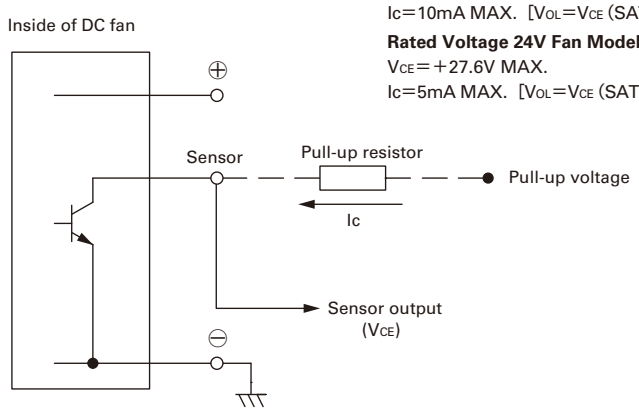
Pulse Sensor Specification

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.]

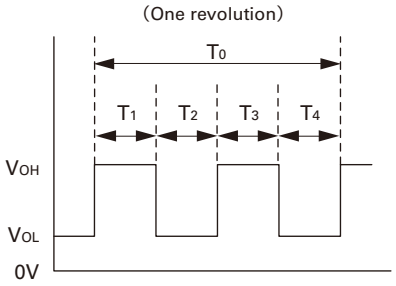
Rated Voltage 24V Fan Model No.: 9GA0824P4J001(0011)
V_{CE} = +30V MAX.
I_C = 10mA MAX. [V_{OL} = V_{CE} (SAT) = 0.6V MAX.]

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

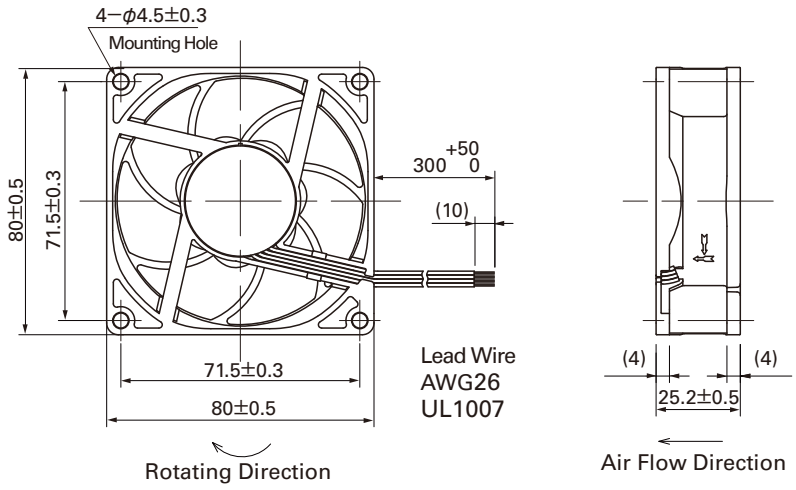


$T_{1\sim4} \fallingdotseq (1/4)\ T_0$

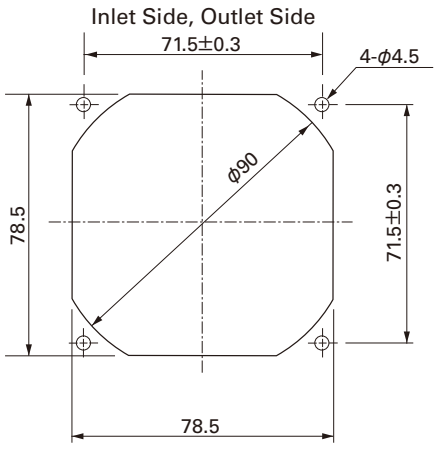
$T_{1\sim4} \fallingdotseq (1/4)\ T_0 = 60/4N$ (sec)

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

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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