

San Ace 60 G type

High air flow DC fan

High air flow DC fan 60mm

Features

High air flow and high static pressure

- Max. air flow : increased by approx. 33 %
- Max. static pressure : increased by approx. 94 % compared with our conventional product*1,2.

Energy-saving

Power consumption is reduced by approx. 40 % compared with our conventional fan*1,2,3.



*1: 60sq.x25mm thick. San Ace 60, Model No. 109R0612J401.
 *2: Specification of Model No. 9G0612P4S001.
 *3: When air flow and static pressure is almost identical.

60×60×25mm

Specifications

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM Duty Cycle [%] <small>(Note2)</small>	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] <small>(Note3)</small>
9G0612P4S001(0011)	12	10.2 to 13.8	100	0.67	8.04	11,000	1.4	49.4	300	1.20	53	-10 to +70	40,000/60°C (70,000/40°C)
			0	0.07	0.84	3,300	0.42	14.8	27	0.11	19		
9G0612P4H001(0011)			100	0.50	6.00	9,500	1.21	42.7	224	0.90	49		
			0	0.06	0.72	2,850	0.36	12.7	20.2	0.08	18		
9G0624P4S001(0011)	24	20.4 to 27.6	100	0.34	8.16	11,000	1.4	49.4	300	1.20	53		
			0	0.04	0.96	3,300	0.42	14.8	27	0.11	19		
9G0624P4H001(0011)			100	0.25	6.00	9,500	1.21	42.7	224	0.90	49		
			0	0.04	0.96	2,850	0.36	12.7	20.2	0.08	18		
9G0648P4S001(0011)	48	36 to 72	100	0.18	8.64	11,000	1.4	49.4	305	1.22	53		
			0	0.02	0.96	3,300	0.42	14.8	27.4	0.11	19		

Note1 : The numbers in () represent ribless models.
 Note2 : PWM Frequency : 25kHz
 Note3: Expected life at 40 degreeC ambient is just reference value.

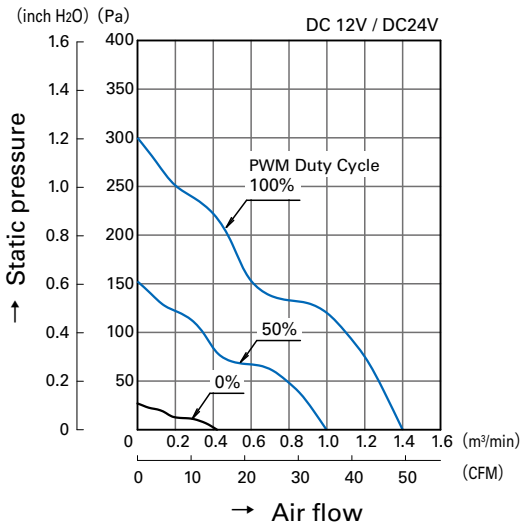
Common Specifications

- 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. 90g

60mm

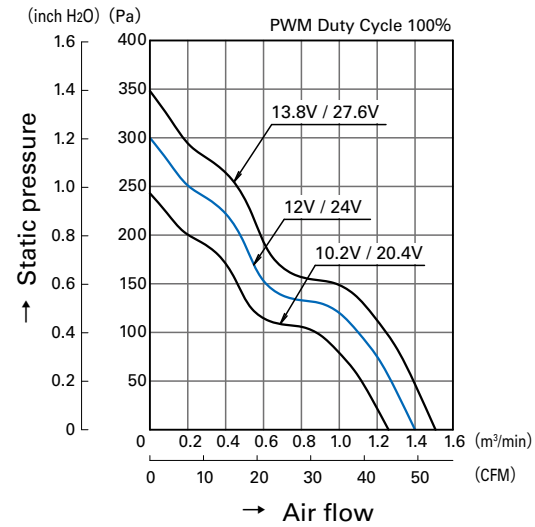
Air Flow - Static Pressure Characteristics

- PWM Duty Cycle

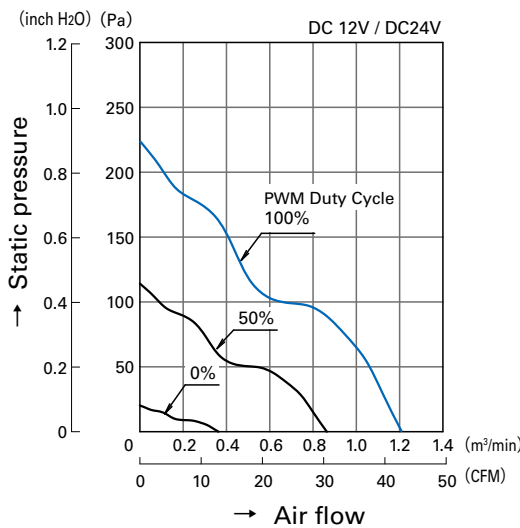


9G0612P4S001(0011)
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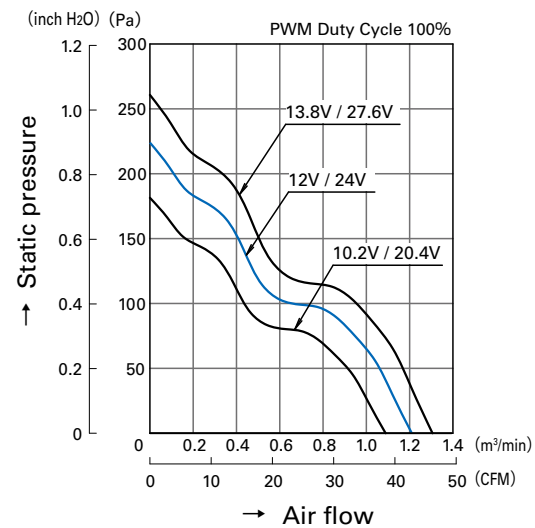
- Operating Voltage Range



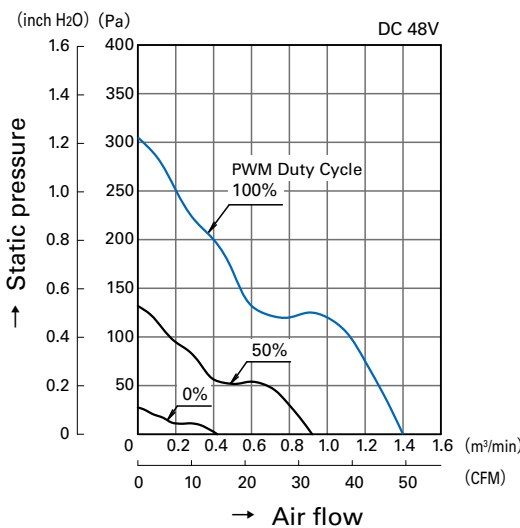
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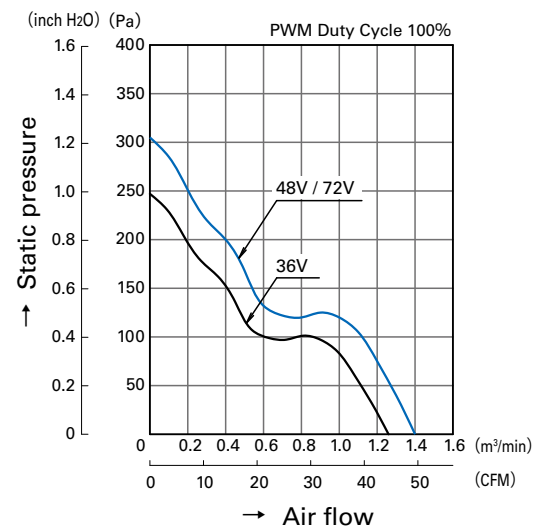
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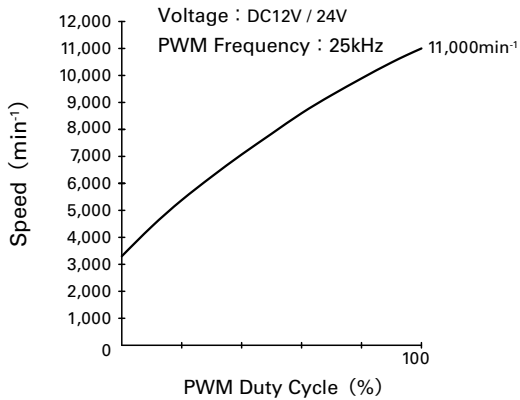


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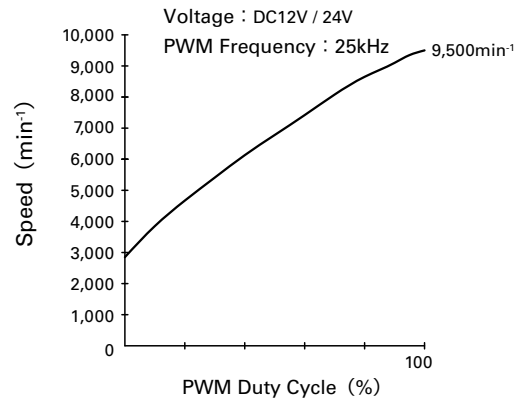


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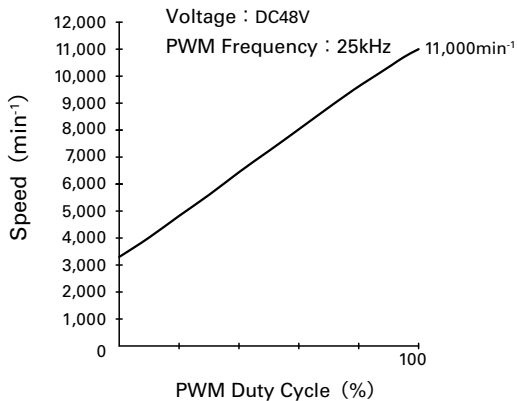
PWM Duty - Speed Characteristics Example



9G0612P4S001(0011)
9G0624P4S001(0011)



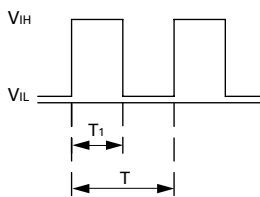
9G0612P4H001(0011)
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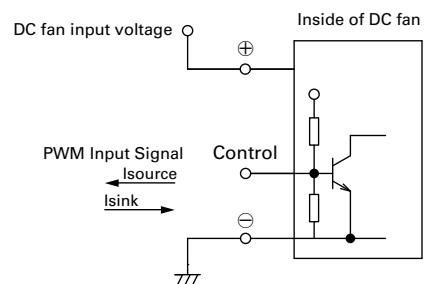
PWM Input Signal Example

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, speed is same as one at 100% PWM duty cycle.
Fan speed could be controlled by PWM input signal of either TTL input or open collector, drain input.

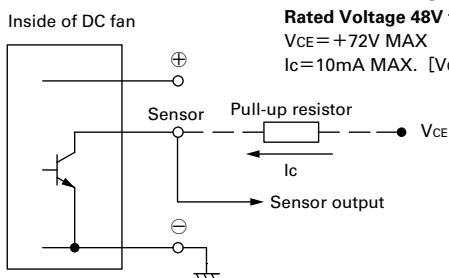
Connection Schematic



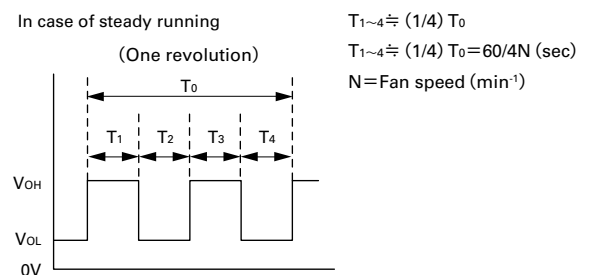
Pulse Sensor Specification

Output circuit : Open collector

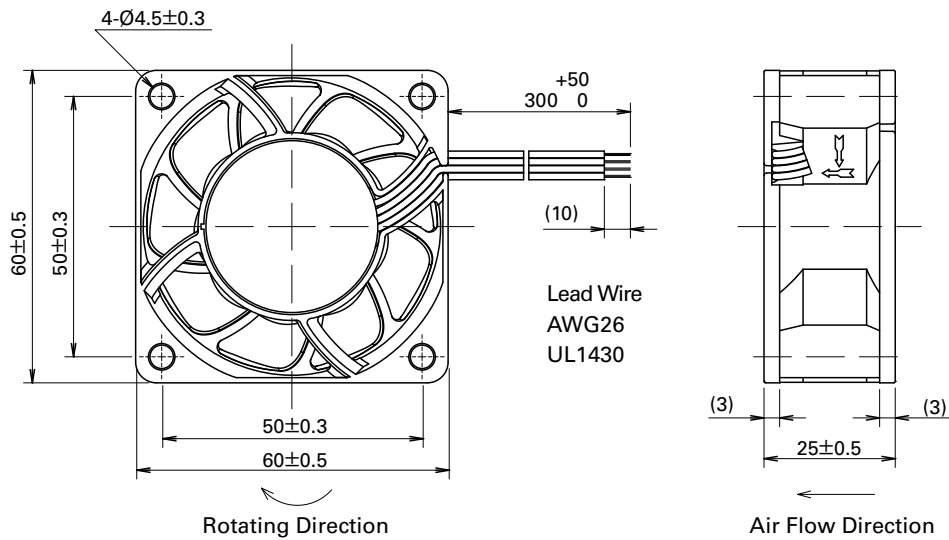
Rated Voltage 12V fan
 $V_{CE}=+13.8V$ MAX.
 $I_C=5mA$ MAX. [$V_{OL}=V_{CE} (SAT) =0.6V$ MAX.]
Rated Voltage 24V fan
 $V_{CE}=+30V$ MAX.
 $I_C=10mA$ MAX. [$V_{OL}=V_{CE} (SAT) =0.6V$ MAX.]
Rated Voltage 48V fan
 $V_{CE}=+72V$ MAX.
 $I_C=10mA$ MAX. [$V_{OL}=V_{CE} (SAT) =1V$ MAX.]



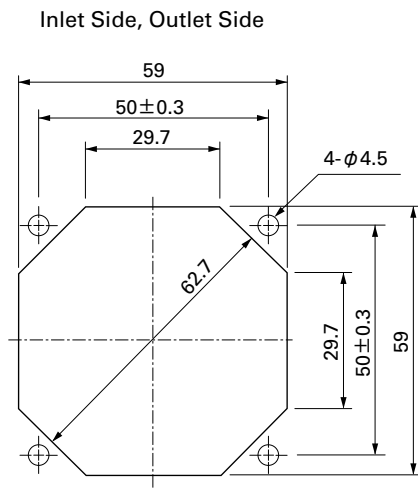
Output waveform (Need pull-up resistor)



Dimensions (unit : mm) (with rib)



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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