

San Ace 60 GA type

Low power consumption fan

Features

Energy-saving

Power consumption is reduced by approx. 15 % compared with our conventional fan*.

Low sound pressure level

Sound pressure level is reduced by 3dB(A) compared with our conventional fan*.

* Model No: 9GA0612P1K60.
When air flow is almost identical.
Our conventional model : 60 × 60 × 38 mm fan "San Ace 60" GV type.



Low power consumption fan 60mm



60 × 60 × 38mm

Specifications

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM duty cycle*[%]	Rated Current [A]	Rated Input [W]	Rated Speed [min ⁻¹]	Air Flow [m ³ /min] [CFM]	Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Life Expectancy [h]
9GA0612P1J03(031)	12	10.8 to 12.6	100	1.50	18.00	17,500	1.75 62	820 3.3	63	-10 to +60	30,000
			20	0.10	1.20	4,000	0.40 14	43 0.17	24		
9GA0612P1K03(031)		10.8 to 13.2	100	0.95	11.40	14,800	1.50 53	600 2.4	59	-10 to +70	40,000
				20	0.10	1.20	4,000	0.40 14	43 0.17		
9GA0612P1H03(031)			100	0.55	6.60	11,500	1.15 40	375 1.5	52	-10 to +60	
				20	0.06	0.72	2,600	0.27 9.5	20 0.08		
9GA0612P1K60(601)	0		0.95	11.40	14,800	1.50 53	675 2.7	59	-10 to +60		
			0	0.05	0.60	1,480	0.134 4.7	8.3 0.03		16	

The numbers in () represent ribless models.

※PWM Frequency:25kHz

Note : 9GA0612P1J03(031), 9GA0612P1K03(031),9GA0612P1H03(031) does not rotate when PWM duty cycle is 0%.

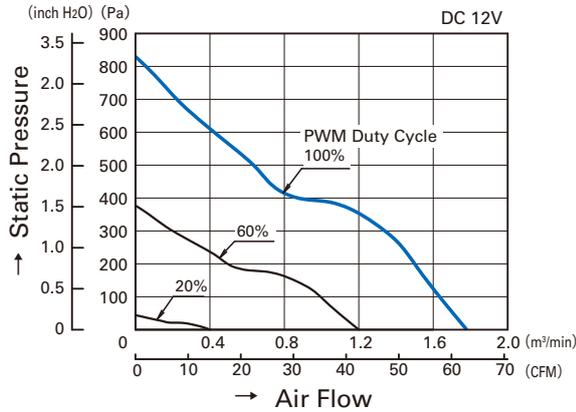
Common Specifications

- Material Frame, Impeller: Plastics (Flammability: UL94V-0)
- Life Expectancy 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. 130 g

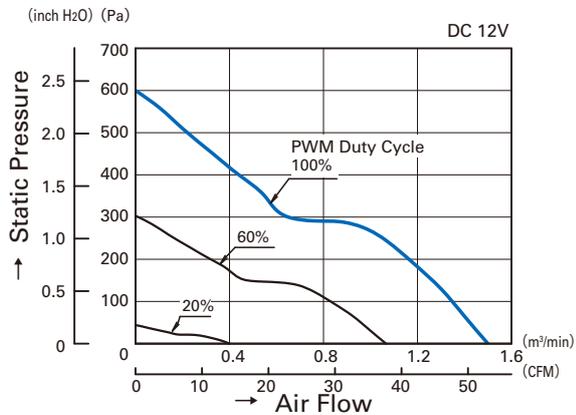
60mm

Air Flow - Static Pressure Characteristics

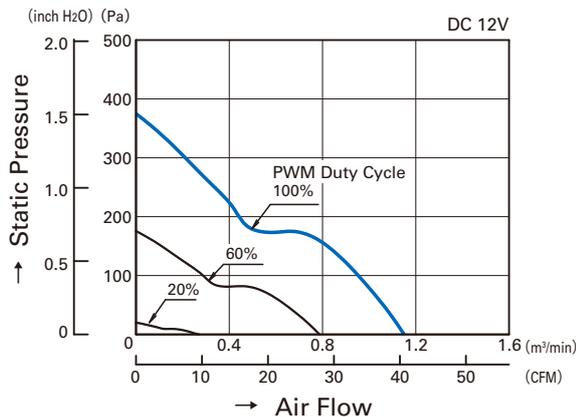
- PWM Duty Cycle



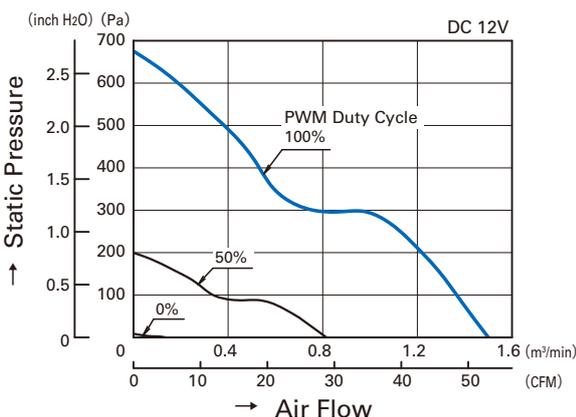
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9GA0612P1K03(031)

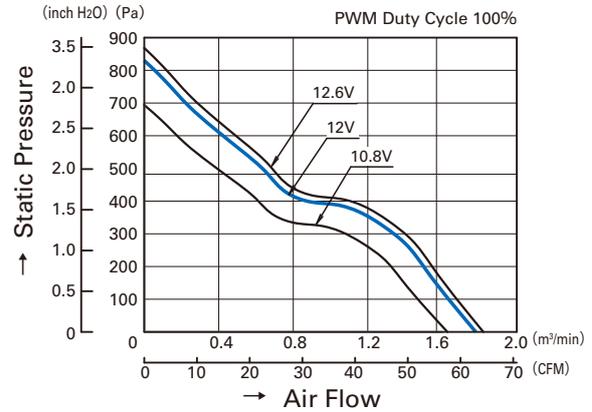


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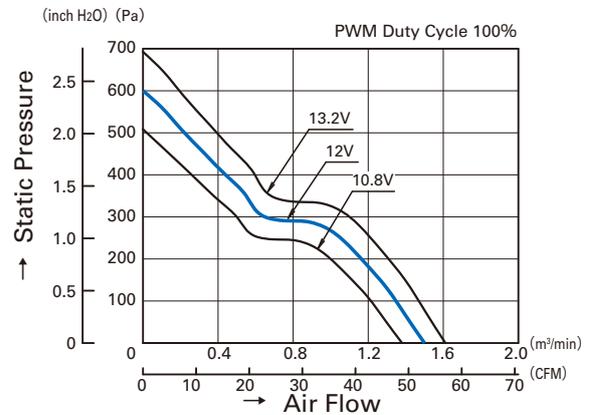


9GA0612P1K60(601)

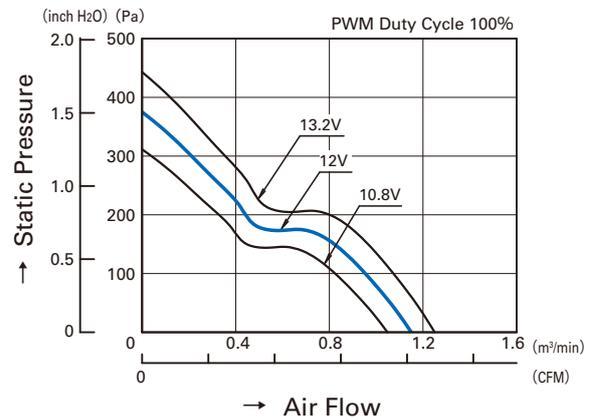
- Operating Voltage Range



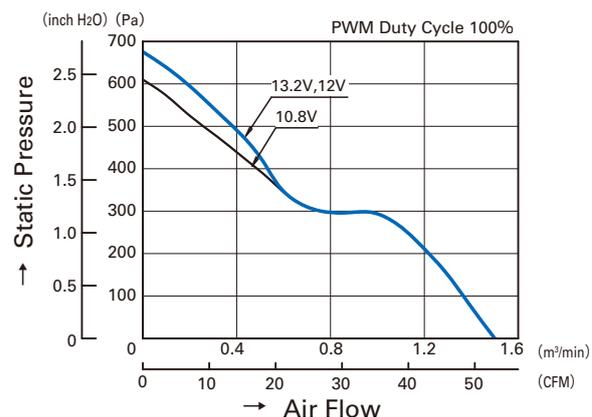
9GA0612P1J03(031)



9GA0612P1K03(031)

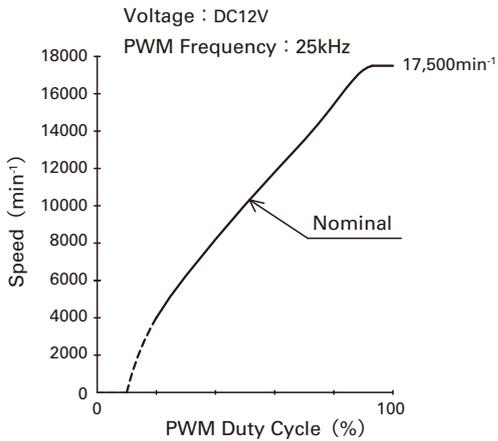


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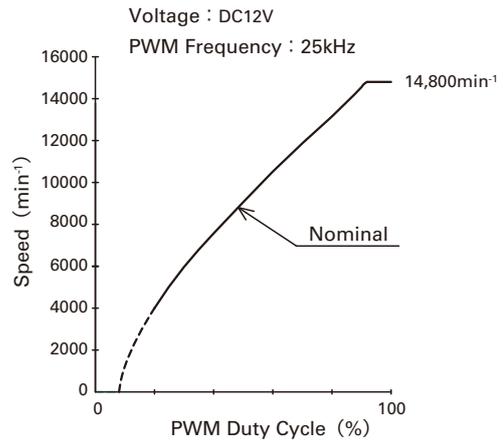


9GA0612P1K60(601)

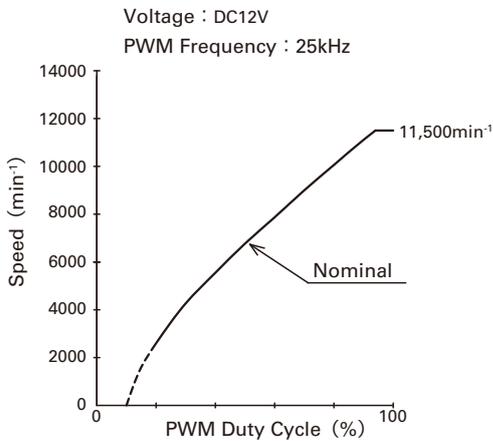
PWM Duty - Speed Characteristics Example



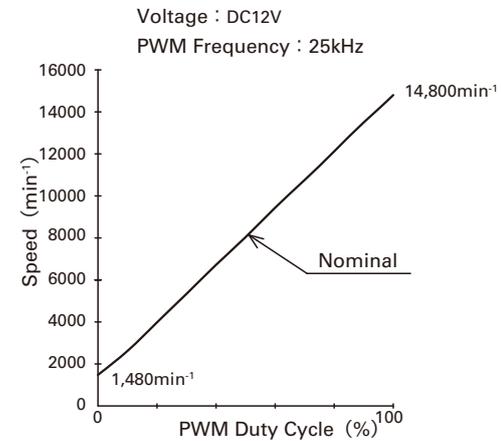
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9GA0612P1K03(031)



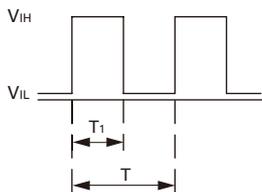
9GA0612P1H03(031)



9GA0612P1K60(601)

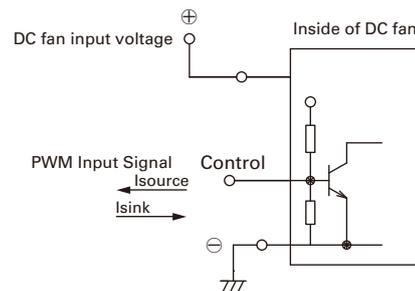
PWM Input Signal Example

Input Signal Wave Form



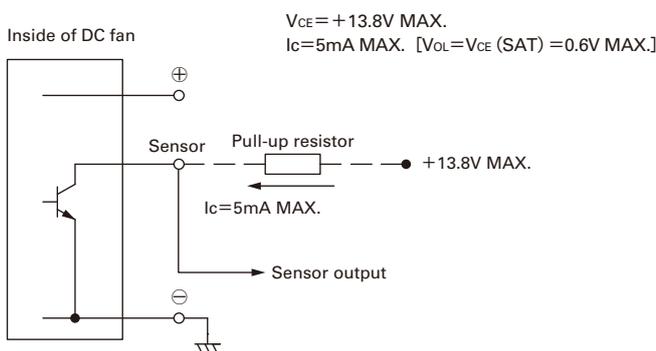
$V_{IH}=4.75V$ to $5.25V$
 $V_{IL}=0V$ to $0.4V$
 PWM Duty Cycle (%) = $\frac{T_1}{T} \times 100$
 PWM Frequency 25 (kHz) = $\frac{1}{T}$
 Source Current : 5mA Max. at control voltage 0V
 Sink Current : 5mA Max. at control voltage 5.25V
 Control Terminal Voltage : 5.25V Max. (Open Circuit)
 When the control lead wire is no connecting,
 the speed is the same speed as at 100% of PWM cycle.
 This fan speed should be controlled by PWM input signal
 of either TTL input or open collector, drain input.

Connection Schematic

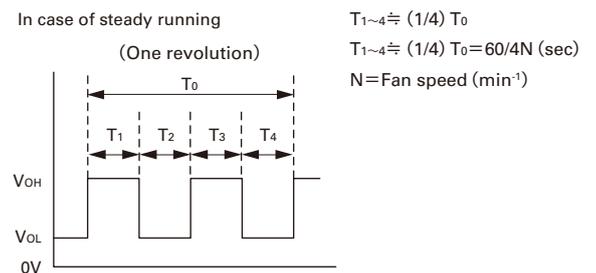


Pulse Sensor Specification

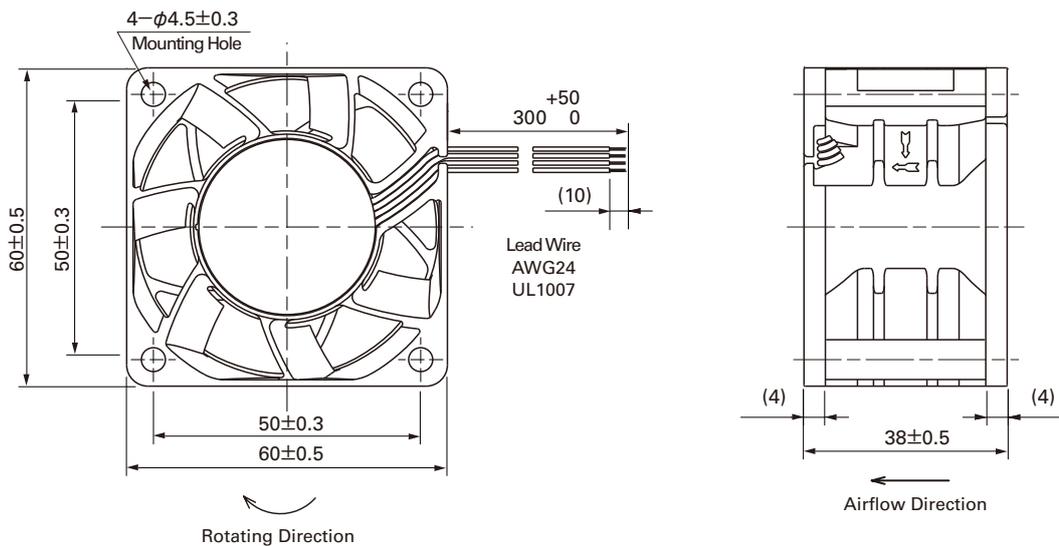
Output circuit : Open collector



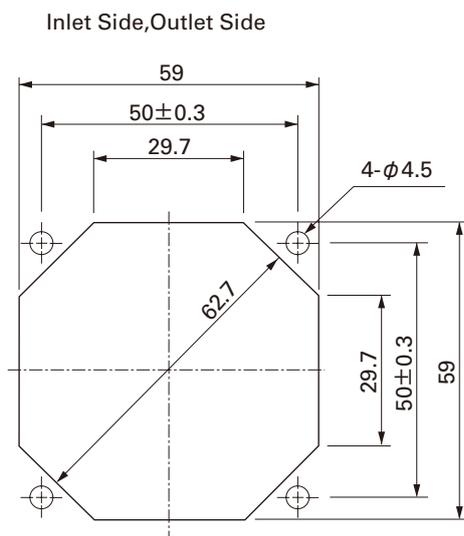
Output waveform (Need pull-up resistor)



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.

Mouser Electronics

Authorized Distributor

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