

San Ace 120 GV type

■ Features

Large air flow and high static pressure

- Maximum airflow : increased by approx. 64%
- Maximum static pressure : increased by approx. 167% compared with our conventional product*.

* Our conventional product is the DC cooling fan :
120 mm square × 38 mm thick fan "San Ace 120" G type (9G1212G102)



120mm square × 38mm thick

■ 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 Range (°C)	Life Expectancy (h)
			100	0				6.35	224.0	360.0	1.45			
9GV1212P1J01 (011)	12	10.2 to 13.8	100	3.00	36.00	6,400	6.35	224.0	360.0	1.45	64	-10 to +70	40,000	
			0	0.19	2.28	1,500	1.49	52.6	19.8	0.08	33			

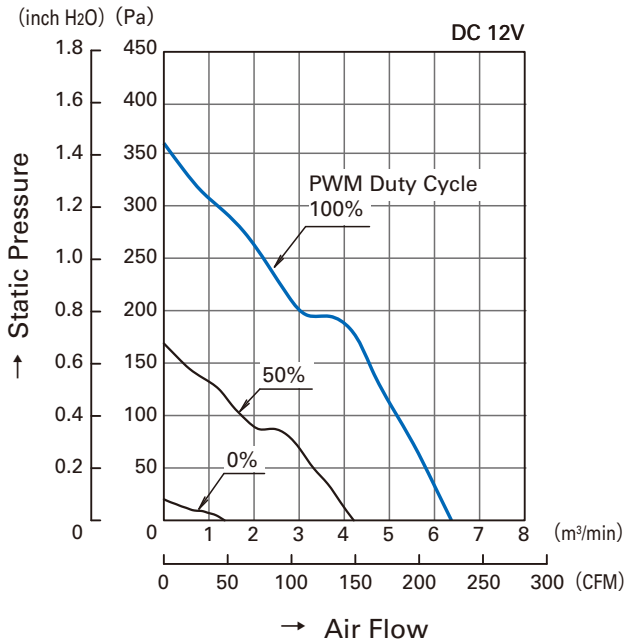
The numbers in () represent ribless models.

※PWM Frequency:25kHz

San Ace 120 GV type

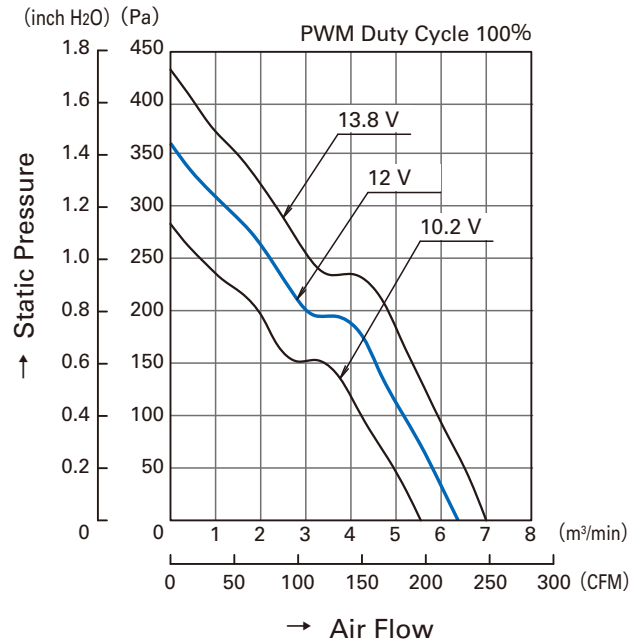
Air Flow and Static Pressure Characteristics

PWM Duty Cycle



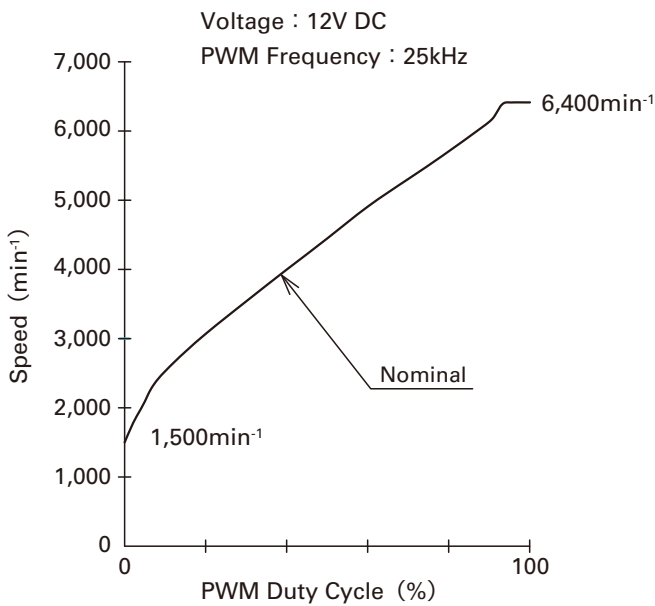
9GV1212P1J01 (011)

Operating Voltage Range



9GV1212P1J01 (011)

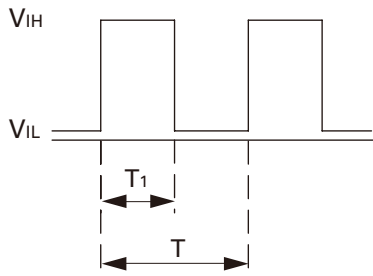
PWM Duty - Speed Characteristics Example



9GV1212P1J01 (011)

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) = $\frac{1}{T}$

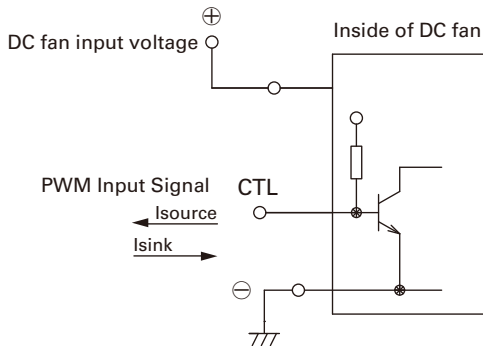
Source Current : 1mA Max. at control voltage 0V

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

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

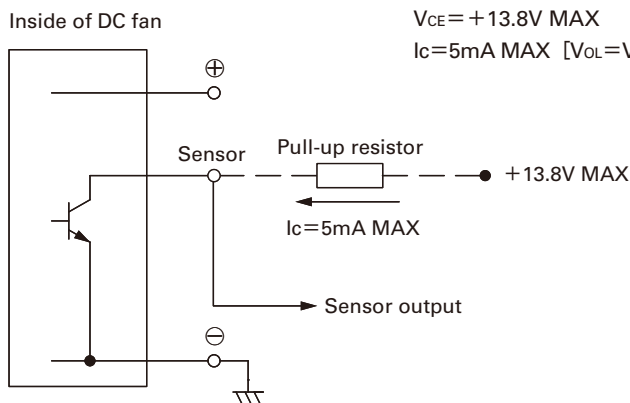
This fan speed should be controlled by PWM input signal of either TTL input or open collector, drain input.

Connection Schematic



Specifications for Pulse Sensors

Output circuit : Open collector



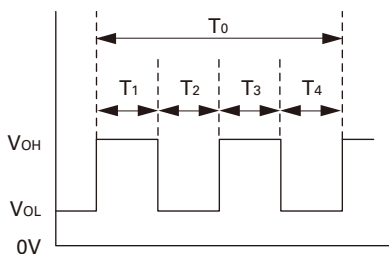
$V_{CE}=+13.8V$ MAX

$I_c=5mA$ MAX [$V_{OL}=V_{CE(SAT)}=0.6V$ MAX]

Output waveform (Need pull-up resistor)

In case of steady running

(One revolution)

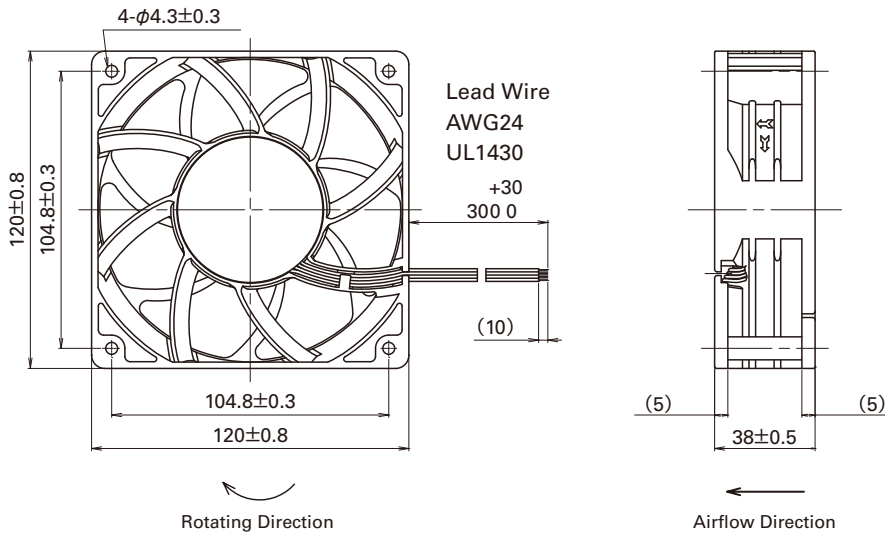


$T_{1\sim 4} \doteq (1/4) T_0$

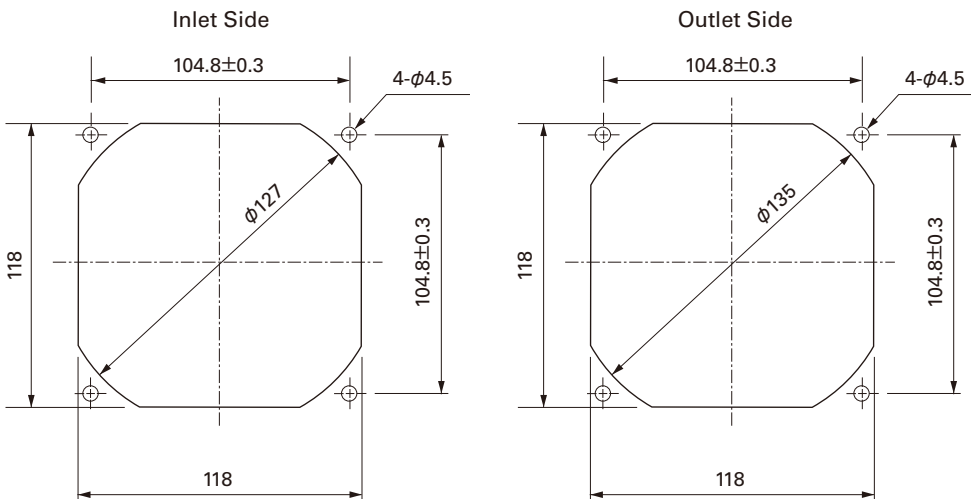
$T_{1\sim 4} \doteq (1/4) T_0 = 60/4N$ (sec)

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

Dimensions (unit : mm)



Reference dimension of mounting holes and vent opening (unit : mm)



Common Specifications

- Material Frame: Plastics (Flammability: UL94V-0) , Impeller: Plastics (Flammability: UL94V-1)
- 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 Range Varies for each model (Non-condensing)
- Lead Wire \oplus red \ominus black Sensor: yellow Control: brown
- Mass 360g

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.